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# **RARE BITS**

Newsletters about threatened species work

Department of Conservation publications 2000-2004 (discontinued series)

# Index to the Rare Bits Newsletters about Threatened Species Work

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#### **Introduction**

From April 2000 to December 2004, quarterly newsletters ("Rare Bits") on threatened species work with contributions from each regional conservancy were produced by the New Zealand Department of Conservation (DoC). These newsletters provide an insight into the actions DoC was taking to conserve our rare species and the success or otherwise of those efforts.

This Index of the Rare Bits newsletters is a collection of quotes from those documents which has been created to identify threats to native species, and management failures and successes, to help guide future conservation efforts.

The newsletters contain compelling evidence that much of DoC's management was having devastating effects on biodiversity, and was desperately lacking a science-based approach.

Our remaining native species need all the genetic diversity they have if they are to survive forthcoming challenges such as drought, storms, disease and habitat modification, therefore they should be managed with extreme care.

The newsletters also show that trapping pests (rather than poisoning) is entirely feasible, but that sudden alterations to the ecosystem are likely to have harmful and catastrophic results, especially if done in an unintelligent way, such as just removing stoats, or cats. Bait stations containing poison kill native species (see the Agency's Appendix O in the Environmental Risk Management Authority's review of 1080, 2007) and some traps do as well (see the "by-catch" section in the current document) so future efforts to control pests should record by-catch and continuously strive towards complete species-specificity.

## Summary of Main Points

- Stoats, rats & cats are the no. 1 introduced killers of NZ native birds
- Aerial 1080 is not effective in controlling stoats or rats on the mainland, in fact, its use is associated with rapid increases in numbers of stoats, rats and mice
- Aerial poisoning operations incur a massive cost in time spent organising, & translocating & monitoring favoured species
- Poisoning operations invariably delay pest control, allowing further genetic loss, while the operations are being organised
- Intensive, constant, simultaneous control of predators (including stoats, rats & cats) is necessary to prevent species loss. Trapping to just remove stoats has been followed by rat plagues
- Trapping is effective for catching multiple pest species (including stoats, ferrets, weasels, rats, cats, possums, hedgehogs & mice)
- Some traps (leghold, Elliot, Easiset and Fenn) harm native species including birds, lizards and giant weta
- Possums are mainly herbivores, with strong preferences for Dactylanthus & mistletoe plants, but these plants often co-exist with possums, and possum numbers have to be extremely low to prevent visible damage
- Herbivore browsing helps to keep mistletoe from killing its host plant, is natural in NZ & can enhance species diversity
- DoC has poisoned nearly all of our offshore Islands, with unknown consequences for our unique species

## Summary of Main Points (continued)

- DoC has carried out a huge number of translocations of species, with unknown ecological & genetic consequences
- Translocated birds frequently die from predation & misadventure, starvation, suffer social stress, and wander far and wide, sometimes even managing to return home
- Kakapo, on the brink of extinction, have been subjected to multiple translocations
- Radio transmitters with an aerial, attached to a harness, have been routinely fitted to our rare birds (including blue duck, takahe and kiwi), many of which have died rapidly from predation, entanglement or starvation/hypothermia or become lost with their harnesses on. This equipment has been shown to increase energy requirements
- Breeding of rare birds has been prevented, and failure of nests increased, by DoC harassment (intensively monitoring nests, banding chicks, attaching transmitters, stealing & swapping eggs and chicks, hand-feeding) Operation Nest Egg, in which eggs are taken from kiwi & blue duck nests for artificial rearing, has been responsible for massive animal stress & genetic loss through broken and dead eggs, dying chicks, failure to learn appropriate feeding & sheltering behaviour, wandering birds being killed & translocation/mixing of genetics. Studies indicate that kiwis (like many other birds) naturally stay near their home, often with their parents helping to raise chicks. One male kiwi appears to have had 5 successive eggs removed.
- Major threats to NZ species include poisoning, introduced species, intensive monitoring, translocation, livestock (feral and farm) damage, drought, flooding, storms and road, hydro & other development
- Dogs have enormous potential to help with biodiversity protection, with claims that DoC dogs can find specific animal pest species (including stoats, cats and rats), and specific plants
- Community involvement can enhance biodiversity where rare biodiversity gains were recorded during 2000-2004, volunteers had assisted (e.g. trapping, searching for species, planting, fencing, weeding & caging plants)
- New species are regularly discovered in NZ, making nonsense of claims that DoC knows what it's doing with poisoning operations
- DoC has consistently failed to scientifically monitor the ecological outcomes of its actions
- Massive biodiversity loss has occurred under DoC management, through poisoning, translocations, intensive monitoring of favourite rare species, weeds, neglect and habitat loss.

				1. Predation Quotes
				New Zealand dotterel: The early season nest predation was most likely from aerial predators and ceased when nests were
44 Apr-02	6	Waikato	birds	covered.
				Chatham Island oystercatcher: predation eventsrecorded on video2 clutches of eggs were predated by a cat and 1 clutch
37 Jun -00	13	Wellington	cats, weka	of eggs predated by a weka.
				Rakiura (Stewart Island): the hoiho may slowly be disappearing from Rakiura. Cats are suspected of playing a role here,
51 Dec -03	17	Southland	cats	possibly killing chicks before they leave the nest.
				To date we have lost eight of the 38 birds from the pateke release at Port Charles. Autopsy has confirmed that four were
51 Dec -03	3	Waikato	cats, dogs	killed by cat(s)one was killed by a dog
				North Island weka: Of the four dead birds, three were predated by stoats and the other was either predated or scavenged
		East Coast/		by a cat. From the Motu area, three juveniles are still alive. Of the other two birds, one had wandered two kilometres
44 Apr-02	9	Hawke's Bay	cats, stoats	beyond the trapped area and was predated by a stoat.
40 Mar-01	6	Wellington	cats, weka	Chatham Island oystercatchers: Predation by cats and weka, and stock trampling were the main causes of failure.
				An adult kiwi and chick died as a result of a dog attack in northern Taranaki. This is the latest in a series of deaths as a result
53 Jun -04	9	Wanganui	dogs	of dog predation
50 Sep -03	4	Waikato	dogs, cats	pateke: Four birds have been lost to predation: one likely to a dog, and the others to a cat(s).
55 Dec -04	3	Northland	dogs, mustelids	pateke: suffered losses to dogs, mustelids and unknown causes
				weka on Te Peka Karara in Lake Wanaka of the 30 birds bought over from the Chathamsone was killed by a falconNine
49 Jun -03	20	Otago	falcons, weka	other chicks were killed near the aviary by other weka.
		East Coast/		
38 Sep -00	6	Hawke's Bay	ferrets, pigs	kiwi: Mount Ruapehu: at least three deaths (ferret, pig & misadventure)
		Tongariro/		
55 Dec -04	9	Taupo	ferrets	Two kiwi were killed in August by a ferret
27 1				(Kokako) There were only 3 nesting attempts this season: 1 failed owing to a suspected harrier predation; 1 was suspected
37 Jun -00	5	Northland	harriers	to have infertile eggs (and was also suspected to have been preyed on by a harrier)
44 Apr -02	_24	Kapiti Island	harriers	kokako: One nest was apparently preyed on by an Australasian harrier hawk.
26 4 7 7 00				Kokako in Northland had a very poor breeding season: only three nesting attempts out of 14 pairs that were checked. Of
36 Apr-00	5	Northland	harriers	those, only one was successful, the others were suspected to have been preyed by harriers.
				Brown teal: About a month ago, seven captive-reared brown teal were released. Predator control had been in place for
41 Jun 01				several months by the time of release, and supplementary food was provided. A month on and six of the seven are still alive.
41 Juli -01	2	Northland	harriers	The one death is suspected to have been harrier predation
44 Apr-02	3	Northland	harriers	kokako: harriers are thought to be responsible for many nest failures in this area.
53 Jun -04	10	Wellington	harriers	Kokako: The bird whose demise was reported last issue is now thought to have been the victim of a harrier.
55 Dec -04	11	Tongariro/	harriers, spur-	New Zealand dotterel: a marked increase in numbers. However, nest failures are still unacceptably high, with harriers and

		Таиро	winged plovers	spur-winged plovers featuring highly as predators, in addition to the usual run of predators
				Central Otago Area staff have been surveying new areas on the Hawkdun Range for scree skinks, without success so far. An
44 Apr-02	21	Otago	hedgehogs	interesting find was evidence of hedgehog predation of lizards at relatively high altitude on the range
		Tiritiri Matangi		
43 Dec-01	17	Island	morepork	hihi: Two adult males have been found dead, one had no head (thought to have been preyed on by a morepork)
				Approximately 50 adults have been seen this season and 55 fledglings have been recorded. Although chick production
		Tiritiri Matangi		appears to be much the same as last season, four female have died during nesting compared with zero last year. Several
43 Dec-01	18	Island	morepork	toutouwai bands have been found underneath morepork roosts and nests
37 Jun -00	10	Wanganui	mustelids	Whio: birds have succumbed to predation from stoats or ferrets
				titi/sooty shearwater: There was no sign of any chicks alive, and four dead chicks were found inside the burrows. Their
				ripped out throats pointed to mustelid predation, confirmed by stoat scats and a small hole forced between the netting and
53 Jun -04	12	Canterbury	mustelids	fence posts.
			mustelids,	Whirinaki Forest Park: radio-tagging kereru(44.4%) have diedthe following are the assumed causes: 5 killed by cats, 6
38 Sep -00	14		falcons, harriers	killed by mustelids, 5 killed by falcon/ harrier
		Tongariro/		
36 Apr-00	11	Таиро	pigs, ferrets	The Tongariro Forest Kiwi: One bird has been killed by a pig, another by a ferret
				kiwi: We named the chick Possum, a fitting name as another nest due to be robbed on the same day was predated by a
				suspected possum! eight have returned to the forest, one of these was predated by a stoat Eight chicks successfully
		Tongariro/		hatched in the wild: four were predated by stoatsnew chicks werereleased back into their parental territory in Tongariro
49 Jun -03	9	Таиро	possums, stoats	forest. Three were predated by stoats
				Powelliphanta: numbers have decreased. An analysis of empty and damaged shells showed that mortality resulted from
			possums,	predation by song thrush, rat and possum. Populations at the other two sites were also considered to be low and damaged
54 Sep -04	13	West Coast	thrushes, rats	shells were again found.
40 Mar-01	5	Wellington	prions	Chatham Island petrels:two were killed by visiting broad-billed prions.
		Nelson/		The Mt Stokes mohua population has dropped dramaticallyPredation by ship rats is thought to be the cause of the sudden
36 Apr-00	16	Marlborough	rats	decline
		Nelson/		
37 Jun -00	15	Marlborough	rats	[Rhydita oconnori,] Although large numbers of shells were foundalmost all of them had been recently eaten by rats.
				Mohua Rat numbers are very high in the Eglinton Valley and appear to be causing heavy predation of mohua in the Eglinton
39 Dec-00	15	Southland	rats	this year.
				Placostylus ambagiosus subsp. Paraspiritus colony: Norway rats invaded a small island (Snail Rock) off Purerua Peninsula
				about six months ago and seriously depleted the snails ( <i>P. hongii</i> ) there. Instead of well in excess of 100 snails, just 15 were
43 Dec-01	1	Northland	rats	found this time
				In March 1964 muttonbirders returning to Big South Cape reported that a ship rat plague was causing immense damage to
		Big South		property and wildlife on their islandbut by the time we reached Big South Cape (five months after the first reports) many
53 Jun -04	1	Cape Island	rats	land bird populations had already been almost totally destroyed. Sadly, we were too late to save the bush wren, snipe and

				bat, all of which were quickly exterminated along with an unknown number of invertebrate taxa.
		Nelson/		Recent monitoring of plots shows Rhytida oconnori, a Nationally Endangered terrestrial snail, continues to decline and is in
55 Dec -04	12	Marlborough	rats	urgent need of protection from predators; the main culprit is likely to be rats.
		Nelson/		black-fronted terns (BFTs): all eggs destroyed within the colony. Rats appear to have been the culprit. An incubating adult
51 Dec -03	12	Marlborough	rats, cats	that was killed, probably by a cat, has also been found in another colony.
				The Mt Stokes mohua population has dropped dramatically. At the end of the 1998-99 summer there were around 90 birds,
				but now numbers are estimated at 27, of which only 6 are female. Predation by ship rats is thought to be the cause of the
		Nelson/		sudden decline. This may have occurred during winter if the birds also roost in cavities. Cuckoo parasitism was an added
36 Apr-00	16	Marlborough	rats, cuckoo	problem.
				The restoration phase of the Boundary Stream Mainland Island Project continues to gain momentum as the sustained
				reduction of pests and predators, produces visible changes to both plant and birdlifeGiven the additional pressure from
				rats this season which were implicated in the higher number of failed nests this year, a 55% nesting success is considered a
		East Coast/		favorable result. As introduced predators are displaced it would appear native predators are making the most of the
36 Apr-00	10	Hawke's Bay	rats, falcons	opportunity, e.g. a pair of NZ falcon known to have nested in the reserve.
				Kaitaia Area staff have been busy setting up a new project to protect the Te Paki flax snail (Placostylus ambagiosus)
				populations from rodent predationThere will be four treatment sites to start with; two where rats and mice will be
42 Oct -01	2	Northland	rats, mice	trapped, and two where we will trap only rats.
				After discovering a concerning number of rodent-predated frogs, Maniapoto Area Office is beginning rat control in parts of
49 Jun -03	5	Waikato	rodents	Whareorino Forest to protect Archey's frog
			rodents,	Powelliphanta traversi tarauensis : shells showing signs of rodent predation were found. Powelliphanta 'Egmont': One shell
45 Jun-02	8	Wanganui	mustelids	showed signs of predation by a mustelid (probably a stoat)
37 Jun -00	5	Auckland	stoats	The Hunua kokako project: 1 had paired with a resident male she had been killed during winter by a stoat.
37 Jun -00	7	Waikato	stoats	The kiwi chick Tester was from a 2-egg clutch, but its sibling (21 days older), was killed by a stoat about the same time.
		Nelson/		
37 Jun -00	1	Marlborough	stoats	kaka: Nelson Lakes National Park: 4 of 7 radio-tagged females were killed on the nest by predators, probably stoats.
				Karangarua and Copland Valleys: Two more birds found last week showed the cause of death was predation. Both had
37 Jun -00	16	West Coast	stoats	puncture wounds on the back of their skulls. Stoats are presumed to be the likely predator.
				Four months after an effective possum and rat knock-down by a 20,000-ha aerial 1080 operation over Tongariro Forest,
		Tongariro/		stoats reappeared in the centre of the forest and began killing kiwi chicks. So far five of the 11 chicks have been predated,
44 Apr-02	9	Таиро	stoats	and all in the centre of the treatment area.
45 Jun -02	13	West Coast	stoats	rowi: Stoats were implicated in at least 12 of the 14 kiwi chick deaths that occurred this year.
46 Sep -02	7	West Coast	stoats	Haast tokoeka: Within two weeks of hatching two chicks were predated by stoats and another was predated at 45 days old.
47 Dec -02	4	Waikato	stoats	The Pureora Field Centre is monitoring radio tagged kaka: Nine of these were probably (some certainly) killed by stoats.
48 Apr -03	11	West Coast	stoats	Haast tokoeka: Three of the chicks were subsequently killed by stoats
				The current rowi breeding season has been very disappointing. All 14 of the monitored chicks were dead by early January,
48 Apr -03	12	West Coast	stoats	with stoat predation being the major cause.

48 Apr -03	15	Southland	stoats	kiwi: three [chicks] were predated by stoats five were predated by stoats
				whio: Research in Fiordland over the last three years identified stoats preying on nesting females, chicks and eggs, as the
49 Jun -03	1		stoats	greatest threat to the species.
51 Dec -03	6	Bay of Plenty	stoats	Kiwi: One chick released into the forest at 950 grams has since been predated by a stoat
51 Dec -03	11	Wanganui	stoats	whio: An angler reported a stoat attack on a duckling.
				The Matakana Island dotterel: Stoats were responsible for the death of a number of dotterel and variable oystercatcher
				chicks and also took some dotterel eggs at Panepane Point there were 30 dotterel nests on the Maketu Spit but sadly not
52 Mar -04	8	Bay of Plenty	stoats	one chick fledged. No predator control operations took place at this site due to a lack of resources and other complications
		East Coast/		
52 Mar -04	11	Hawke's Bay	stoats	weka: 40% (n=10) and 8% (n=12) of monitored juveniles were killed by stoats in the Whitikau and Motu valleys respectively.
52 Mar -04	21	West Coast	stoats	Haast Tokoeka: four showed signs of stoat predation.
52 Mar -04	27	Southland	stoats	kiwi: Six of the seven chicks that have died were confirmed stoat kills.
				Kiwi monitoring in the stoat trapped and non-trapped blocks of the Murchison Mountains is progressing, with some chicks
				having now hatched and several birds still incubating. Last week the first sign of stoat predation was picked up with one,
55 Dec -04	17	Southland	stoats	possibly two, chicks having been preyed upon in the non-trapped area
		East Coast/		
39 Dec-00	7	Hawke's Bay	stoats, cats	The NI weka project: recorded predation events were attributed to stoats (4) and feral cats (3).
			stoats,	
			hedgehogs, black-	
			backed gulls,	NZ dotterel: Three main breeding sites were monitored in the Opotiki Areathere was 1 pair at Waiotahi, 3 pairs at
		East Coast/	spur-winged	Waioweka, and 7 pairs at Waiaua. A total of 21 nesting attempts were made by 11 pairs with 23 chicks known to have
39 Dec-00	6	Hawke's Bay	plovers	hatched from 46 eggs this season. Predatorswere stoats, hedgehogs, black backed gulls, and spur winged plover.
				Whio: A stoat destroyed one of the nests and the female survived, while the other female managed to defend her nest from
				a stoat and a possum although the stoat stole one egg. A third female was thought to have just begun incubating when she
39 Dec-00	15	Southland	stoats, possums	was killed, she was found pulled under a rock with stoat scats surrounding her.
			stoats, rats,	Eglinton Valley: This season we lost three nests, one with eggs and two with chicks, and 2 females were killed probably by a
38 Sep -00	1		falcons	stoat <i>Mohua:</i> 10 [nests]failed (female killed) - 6 rat predation - 1 probably falcon
				It was concluded that any proposed restoration programmes for land-locked koaro needs to enhance the survival of these
				life stages, and manage the combined effects of trout and common smelt in both lake and respective tributary stream
44 Apr-02	2	Northland	trout, smelt	habitats
				Powelliphanta annectens is one of the largest giant land snail species. The Heaphy subpopulation is restricted to the area
				around the Heaphy River mouth, but is abundant and increasing further due to annual ground control for possums. During
				late winter and early spring, Buller Area Office staff became aware of exceptionally high numbers of P. annectens snails
				being eaten by thrush at three localised sites on the Heaphy Track. On 15 August, 477 shells were collected from the sites.
				The majority of the snails had been killed within the previous 3–4 weeks. Over the next 2 months the sites were checked
51 Dec -03	14	West Coast	thrushes	every 2–3 weeks and the empty shells collected. By 13 October, over 1,700 snails had been killed. No decline in the rate of

				predation was found
51 Dec -03	19	Southland	weka	Whio: Two nests have been preyed on by weka so far this season
				The wild kaka population at Mt Bruce: The two natural nest sites were unsuccessful – one was breached by a stoat, which
				killed two chicksDespite predator control over 75ha, two adults, two chicks and two fledglings have been lost; stoats look
44 Apr-02	13	Wellington	stoats	to be the main culprits.

			2. Possum Effects on Biodiversity Quotes
37 Jun -00	4		Monitoring of Dactylanthus. At Te Kopia, even with low possum numbers following last winter's 1080 operation any uncaged flowers were still destroyed.
			kokako: Hunua Ranges Management Block: There were seven nesting attempts, of which five failed due to flooding and suspected harrier and
48 Apr -03	4		possum predation.
			Moturemu Island: there are a number of seedlings that have germinated from the natural seedbank on the island. These are in a natural tree
45 Jun-02	4	Auckland	gap that has been kept open by trimming back native foliage (pohutukawa and houpara). [browsing increasing biodiversity]
			Dactylanthus: where most plants are caged, flowering was average with little sign of animal activity where only a few plants are caged,
			flowering was monitored to see what effect the previous winter's 1080 operation would have on flowering success. With significant flower
			damage occurring as expected, a trapper was employed, and nine possums were removed from the area, four of which had bracts present in
			their stomachs. This possum cull enabled some of the later developing flowers to survive. On the Mamaku plateau a possum gut survey
			occurred in late March in several reserves where Dactylanthus was thought to be present. Although several possum stomachs were
41 Jun -01	7	Bay of Plenty	investigated for staining none contained Dactylanthus flowers.
			discovery of Peraxilla tetrapetala on Quintinia serrata at the northern Mamaku plateau in the Opuiaki Ecological Area (part of the Kaimai-
			Mamaku Forest Park), and in Te Kopia Scenic Reserve on the Paeroa Range near Reporoa. The Opulaki find consisted of two large healthy plants
			which were flowering profusely in late January, and were discovered by staff working in the area in preparation for laying bait stations. The Te
			Kopia find consisted of seven large plants near the main ridge. The size of these plants enabled them to be found outside the flowering season
40.4.00	_	Davie of Dianatas	in mid-March. The unusual aspect of both these discoveries is that occurred in areas with relatively high possum populations and little or no
48 Apr -03	5	Bay of Plenty	historic possum control. Despite this, all the plants seen were old and large and appeared relatively healthy with no possum browse noted.
			Okareka Mistietoe Restoration Project; a joint effort between DOC, Environment BOP, Forest & Bird and the Rotorua Botanical Society. Forest
			& Bird have been focusing on laying grided balt stations covering part of the reserve. The Rotorua Botanical Society is focused on undertaking
			weed control. DOC has been establishing Foliar Browse Monitoring for the mistietoe population. This has shown that while plants are generally
19 Apr 02	F	Bay of Dianty	In good condition in this part of the reserve, they are nightly localised. It is hoped that when the possum population is brought under control,
40 Api -05	5	bay of Plefity	Destulanthus: At Waiene (in Whitinaki) extensive transing and peicening was undertaken in the vicinity of the Destulanthus penulation during
49 Jun -03	6	Bay of Plenty	flowering. Possum damage was still noted, but probably bappened before and after control occurred
49 Juli -03	0	bay of Flefity	Ileastulus on mangeao at Oroni, near Tauranga: the lleastulus was found on two large old trees in a naddock: at least nine nossum browsed
50 Sen -03	5	Bay of Plenty	mistletoe were found on one tree, while the other tree (and mistletoe) were nearly dead
50 Sep -05		bay of Fieldy	Kabaroa Eorest was treated using feracol in bait stations for rat control, but, numbers were not reduced to the required level. Furthermore
			the kokako breeding season was very noor for a number of reasons. Onaia Ecological Area (FA) rodent results were 6% r t i (West Block) and
52 Mar -04	7	Bay of Plenty	13% r t i (Fast Block). Possum numbers were kent to the 5% threshold (ner 100 tran nights)
	, 	Day of Ficility	Dactylanthus: The northern site hadn't been checked for several years and cage maintenance was needed. Four and 14 cages were added at
			the northern and southern sites respectively. Flower monitoring showed less buds with more male and female flowers than in 2003 with low
			rates of possum and rat damage. Whirinaki Forest Park: Some good examples of flowering outside cages were found at the main site near
53 Jun -04	5	Bay of Plenty	Waione as a result of our regular intense possum control during flowering time
55 Dec -04	6	Bay of Plenty	In late September, staff spent three days in Whirinaki Forest Park monitoring existing mistletoe plants in the Rogers-Mangakahika-Moerangi

			areas of the parkof 27 Peraxilla colensoi plants monitored regularly since 1999, 20 (74%) were dead, 2 (7%) were unhealthy (<50% foliage
			cover) and 3 (11%) were missing (experience strongly suggests these are dead or nearly dead). Only 2 (7%) of plants were still healthy (>50%
			foliage cover). This widely spread sample of P. colensoi shows a 15% average annual death rate over the 5 year monitoring period. This
			monitoring shows the ongoing decline of P. colensoi throughout the silver beech forest areas of the park where there is no possum control. The
			timing of monitoring differed this year, occurring in September rather than in January as in past years. Furthermore, significantly higher rates of
			possum browse on live mistletoe plants were found when comparing the January 2002 and September 2004 survey Many monitored plants
			had also died over this period, so could not be used for this analysis. This appears to confirm that the causal agent of the decline recorded over
			the past 5 years is most likely to be possums browsing mistletoe plants, mainly during the winter months
			Periegops suteri: The primary cause of decline for this species is likely to be a reduction in suitable habitat. There are few remnants of mature
			forest remaining on Banks Peninsula and these are under considerable threat due to their small size and the impacts of weeds and pests. In
			some reserves the leaf litter layer in which it lives is regularly swept away by flooding. The spiders are also likely to be eaten by animal pests
49 Jun -03	16	Canterbury	such as hedgehogs, cats, rats, mice and possums
			Quail Island: The removal of predators including mustelids, cats, hedgehogs, possums, rats and mice from the island has provided an
53 Jun -04	14	Canterbury	opportunity to restore a number of native invertebrate species
		East Coast/	It seems this species [Tupeia Antarctica, mistletoe] is a particularly sensitive measure of possum impact. Foliar browse methodology showed
38 Sep -00	6	Hawke's Bay	that 62% of 79 plants had no leaves at all 5 years after an October 1995 aerial possum control operation.
			This was the fifth season of monitoring pirirangi (red mistletoe, Peraxilla tetrapetala) hosted on Quintinia at the Otamatuna Core Area. Pirirangi
			numbers have continued to increase, since intensive management of pests commenced in 1996. The flowering period was slightly longer in
		East Coast/	length, than previous seasons. Flowering started later than the past two seasons and was more akin to the initial two seasons of monitoring.
42 Oct -01	8	Hawke's Bay	Surveys were not conducted for pirirangi hosted on tawai (red beech), as five out of six known plants did not flower.
			North Island weka: East Cape Peninsula: The first area is in the Motu Valley, between Gisborne and Opotiki where trapping for mustelids, cats
			and possums takes place. The second area is in the Whitikau Valley about 20 km north of Motu. This area is un-trapped and serves as a control
			to measure the success of the trapping regime Only one of the Whitikau juveniles is still alive. Of the four dead birds, three were predated by
		East Coast/	stoats and the other was either predated or scavenged by a cat. From the Motu area, three juveniles are still alive. Of the other two birds, one
44 Apr-02	9	Hawke's Bay	had wandered two kilometres beyond the trapped area and was predated by a stoat.
		East Coast/	Boundary Stream's biennial [Powelliphanta] snail survey: Unfortunately this year's survey has shown a 58% decrease in numbers, although only
46 Sep -02	3	Hawke's Bay	one of the empty shells found shown signs of predation
			Boundary Stream Mainland Island staff have discovered three plants of the mistletoe Tupeia antarctica, growing on a putaputaweta
			(Carpodetus serratus) host tree. This species was not previously known to exist in the reserve, although populations are found elsewhere in the
		East Coast/	Hawke's Bay. An extensive search is in progress to determine the population size. Intensive possum control has occurred in the reserve for 8
51 Dec -03	7	Hawke's Bay	years, and mistletoes are benefiting; the yellow-flowered mistletoe (Alepis flavida) has increased from five to 50 known plants
		East Coast/	Dactylanthus taylori: Intensive trapping for rats and possums, and opportunistic stoat trapping, makes this locality a mainland island in all but
52 Mar -04	11	Hawke's Bay	name.
			Monitoring of the transplanted Carmichaelia juncea on the Kahurangi coast showed devastation wreaked by introduced slugs. Wellgrown
		Nelson/	specimens, planted into salt turf and clifftops during winter are now stumps. Browse inside mesh cages showed slugs as the culprits. Previously
43 Dec-01	11	Marlborough	similar damage was attributed to hares and possums Typical damage involves removing leaf and flower buds, chewing small shoots and stems

		Nelson/	Pittosporum patulum: Possum control and Marley <sup>™</sup> pipe protectors have allowed a return to health over the last three years for most of the
43 Dec-01	11	Marlborough	50 trees in the study area.
		Nelson/	Powelliphanta "Anatoki Range": The number of snails appears to be similar to when it was last surveyed in 1991, and it appeared that none of
52 Mar -04	16	Marlborough	the empty shells were predated by possums or rats. The main threat seems to be habitat degradation by hares and goats
			Recent monitoring of plots shows Rhytida oconnori, a Nationally Endangered terrestrial snail, continues to decline and is in urgent need of
		Nelson/	protection from predators; the main culprit is likely to be rats. On the other hand, sustained possum control through aerial applications of 1080
55 Dec -04	12	Marlborough	is starting to have a very pronounced benefit for many Powelliphanta populations in Golden Bay
			A large part of Whirinaki Forest Park has been surveyed over January in order to gain a better understanding of the distribution and threats to
			Peraxilla spp. [Mistletoe] Monitoring of existing plants showed many are in poor condition with loss of foliage that doesn't appear to be
40 Mar-01	2	Northland	possum related.
			The 2001/02 kokako breeding season was a slow one in Mataraua. Three nests were found in late November and early December; one of these
			produced two chicks, the other two nests failed, and the cause was unable to be ascertained due to safety standards involving tree climbing.
			Rodent monitoring, however, yielded satisfactory results and possum catches were low - harriers are thought to be responsible for many nest
44 Apr-02	3	Northland	failures in this area.
			The Puketi forest Dactylanthus site was visited in early April when the majority of the caged plots appeared to have new bud development with
			no evidence of disturbance. Old seed set was still observable. By early May, half the plants had flowers and buds at different stages of
45 Jun-02	3	Northland	development. Some of the flowers had been partly eaten, and some buds had been totally eaten.
			Stu Thorne in Wanaka has been back into the Dingle valley checking <i>Pittosporum patulum</i> . To his dismay 3 of the 4 young trees at one site,
			which had all been healthy last May, had been totally defoliated. Possums seem to be the most likely culprit, and a strategy for protecting the
36 Apr-00	19	Otago	site is being considered.
46 Sep -02	9	Otago	Ongoing widespread possum control in the Catlins continues to assist the recovery of <i>Tupeia antarctica</i> mistletoe.
			Whio: The productivity and survival study has just kicked off in the Clinton and Arthur Catchments (Milford Track) We are placing video
			cameras on nests (3 so far) and will continue this throughout the summer. Two of the three videoed nests have been visited by stoats and one
			also by a possum. A stoat destroyed one of the nests and the female survived, while the other female managed to defend her nest from a stoat
39 Dec-00	15	Southland	and a possum although the stoat stole one egg.
			As part of a monitoring programme to determine the impacts of white-tail deer and possums on invertebrates on Rakiura (Stewart Island), a
			pitfall trap monitoring programme has been set up. Previous studies carried out in New Zealand indicate that deer can have an impact on
			ground dwelling invertebrates through altering available habitat and food types (litter-composition). Possums are direct predators of some
50 Sep -03	17	Southland	invertebrates and significant foliage browsers of certain species.
			Outcome monitoring of threatened plants is also occurring following the aerial 1080 possum control operation in Tongariro Forest. Two possum
			palatable threatened plants have been chosen as our sensitive and moderately sensitive indicator species: the root parasite dactylanthus and
			Pittosporum turneri. During the dactylanthus surveying, two plants of the mistletoe Tupeia antarctica were discovered. Both of these were
			severely browsed by possums. If time allows we may search more thoroughly and include this species as part of our outcome monitoring.
			Pittosporum turneri has been chosen to monitor as our moderately sensitive species. This species has juvenile and adult growth forms, both of
		Tongariro/	which are browsed by possum, but the adult is far more palatable. Sixty trees have been included in the monitoring at the Kapoors Road frost-
43 Dec-01	7	Таиро	flat site. Thirty of these trees have been banded and thirty have been left unbanded. The possum density at which impacts become apparent on

			this species is not known, though it is thought to be between 5-10% residual trap catch (RTC).
		Tongariro/	two kaka nests have been detected in Rangataua Forest, both in early incubation. Staff will monitor them as they run the stoat/possum/rat
44 Apr-02	9	Таиро	gauntlet over coming months.
			'Whakapapa Survey Area' (first surveyed in 1998/99) was re-surveyed in January. The purpose of this area is to determine whether natural
			regeneration is occurring as a result of possum control. This area was resurveyed The outcome was highly successful; the abundance of red
			mistletoes has increased dramatically from 50 plants in 1999 to 97 in 2004. Of note is that most of the new plants are small and hence likely to
		Tongariro/	be new recruits as a result of our ongoing possum control. Unfortunately the yellow mistletoe abundance here is still very low, with three
52 Mar -04	9	Таиро	plants now known in this area.
			The white mistletoe (Tupeia antarctica) has again been found at Te Porere redoubt fairly close to a large population found on Mt Tongariro last
			year. The vegetation is similar, and it is likely that more plants are present throughout the adjoining Tongariro Forest. Unfortunately all of the
			plants were heavily browsed and the only shoots present were out-of-possum reach. The host species was putaputaweta. Though not
			categorised as a threatened species, a single shrub of the possum palatable and epiphytic shrub Pittosporum kirkii was found fallen to the
		Tongariro/	ground amongst perching lilies at Karioi rahui. This is perhaps another indication that the intensive possum control at the rahui is showing
39 Dec-00	5	Таиро	benefits. There have only ever been three records of this species previously in the conservancy, the last in 1976.
		Tongariro/	
48 Apr -03	7	Таиро	discovered many Tupeia antarctica on Raetihi hill during a foray to investigate likely plants to monitor for monitoring for possum control
			kiwi: We named the chick Possum, a fitting name as another nest due to be robbed on the same day was predated by a suspected possum!
		Tongariro/	eight have returned to the forest, one of these was predated by a stoatEight chicks successfully hatched in the wild: four were predated by
49 Jun -03	9	Таиро	stoatsnew chicks werereleased back into their parental territory in Tongariro forest. Three were predated by stoats
			100 Acre bush: Possum control is continuing this year to protect dactylanthus at this site from browse. Additional dactylanthus clumps have
			been located here in order to better measure the efficacy of this control. A good population of Tupeia antarctica was discovered during a
		Tongariro/	recent survey and monitoring visit, with approximately 60+ plants growing on a dense grove of lemonwood. All of these plants were fairly large
52 Mar -04	9	Таиро	and healthy, and have responded from over a decade of intensive possum control.
		Tongariro/	Pittosporum turneri: populations are healthy, which it not surprising since possum numbers are still below 2% residual trap catch. Many plants
55 Dec -04	9	Таиро	at all populations are now heavily flowering.
			North Island robins, Pureora: The fledgling success of pairs in Waipapa, an area controlled for possums and rats, was 82%. Predictably, things
44 Apr-02	6	Waikato	were not so good in the unmanaged Waimanoa with only 33% of pairs successful.
			staff are pleased with the success of recent possum control operations on Mount Pirongia, especially the spin-off benefit for the rare plant
			Dactylanthus taylorii. A team of DOC staff and three volunteers spent the last week in January on Pirongia's summit monitoring dactylanthus
			plants that had previously been caged for protection. Most of the 150 caged plants were in good health and flowering profusely, with no sign of
48 Apr -03	4	Waikato	possum or rat browse.
			Hebe speciosa: steadily increasing since monitoring began in 1999, when 41 individuals were found. In the latest survey, 388 plants were
			counted. All plants were in extremely good condition, with only one individual showing some sign of browse. Possum control and fencing out
49 Jun -03	5	Waikato	stock by the landowner are thought to be the main factors that have contributed to this increase
			Tupeia : This previously known plant has been caged and is doing well. This new find (three plants so far) may be because of the high level of
47 Dec -02	11	Wanganui	possum control at the site. In the 8 or 9 years since the aerial 1080 drop at Paengaroa, followed by ground control, the Tupeia has flourished to

			such an extent that some mistletoes are now 3 m across, and some host maire trees are looking decidedly sick
			Paengaroa is one of six mainland islands maintained by DOC and is significant because of its rare collection of divaricating plants. Divaricating
			plants have a scraggly appearance because of their profuse and tangled branches, which some scientists believe may have originally evolved as
50 Sep -03	10	Wanganui	a defence against browsing moa.
			Lepidium flexicaule:. Grazing may be an issue, but then again there aren't any plants in a fenced off section of the herbfield, where weeds seem
51 Dec -03	9	Wanganui	to be doing pretty well [grazing assisting biodiversity]
			We now know at least 1 leafy mistletoe remains on Great Barrier Island!It's more a surprise to us that this mistletoe hasn't been recorded
36 Apr-00	3	Wellington	here before, than that it has been discovered. Great Barrier should be a mistletoe haven- with no possums and plenty of habitat.
			In December white mistletoewas foundat Ketetahi in Tongariro National Park during the establishment of forest health monitoring
			plotsFurther hundreds were found in January on another monitoring line in the same forest, some plants even occurred within the 20 x 20 m
			forest plots. Most of the plants were heavily browsed. This species will now be used as an indicator of forest health for an upcoming possum
36 Apr-00	3	Wellington	control operation.
			The majority of Tongariro/Taupo Conservancy mistletoe surveying and monitoring has concentrated on Peraxilla colensoi at Rangataua
			Conservation Area, an area with 5 years of good possum control, and in a part of Kaimanawa Forest Park where possums are not controlled.
			Many large healthy plants were found flowering prolifically at Rangataua. In Kaimanawa Forest Park approximately 40 new hosts were found,
			of which about half could be banded. The health of the mistletoe here was more variable with some plants heavily browsed while others
36 Apr-00	4	Wellington	appeared untouched and were flowering well.
36 Apr-00	4	Wellington	Flowering [of mistletoe] was comparatively light this year in contrast to last year, despite insignificant possum browse being observed.
			Kokako: Monitoring of the birds released at Pukaha/Mount Bruce has commenced. The first territories have been mapped out and possum and
55 Dec -04	11	Wellington	ship rat numbers are at low densities, so we wait for the first nest reports
			Pittosporum patulum: Wanaka Area staff re-monitored three sites in the Dingleburn in January. All sites have been impacted by possums.
40 Mar -01	9	West Coast	About 25% of plants at the largest site show browsing ranging from minor to heavy.
			Powelliphanta annectens is one of the largest giant land snail species. The Heaphy subpopulation is restricted to the area around the Heaphy
			River mouth, but is abundant and increasing further due to annual ground control for possums. During late winter and early spring, Buller Area
			Office staff became aware of exceptionally high numbers of P. annectens snails being eaten by thrush at three localised sites on the Heaphy
			Track. On 15 August, 477 shells were collected from the sites. The majority of the snails had been killed within the previous 3–4 weeks. Over
			the next 2 months the sites were checked every 2–3 weeks and the empty shells collected. By 13 October, over 1,700 snails had been killed. No
51 Dec -03	14	West Coast	decline in the rate of predation was found
			Parts of South Westland remain a stronghold for the scarlet mistletoe (Peraxilla colensoi). A recent field trip to the Hope Valley, where possums
			are still in an early colonising phase, established some permanent plots for monitoring recruitment and mortality of scarlet mistletoe. Data
			collected estimated that there are on average approximately 36 scarlet mistletoe per hectare below 700 metres altitude in this valley. This
			tigure is very similar to the Thomas Valley (Haast catchment) pre-possum colonisation in the early 1990s (also 36 per hectare in silver beech-
			podocarp forest, data collected by Hamish Owen, Canterbury University), and to two possum-free islands in Lake Waikareiti, Te Urewera
			National Park in January 2003 (about 31 per hectare, Aniwaniwa Area Office). The results of this and work at other sites confirms that scarlet
			mistietoe has suffered dramatic declines in abundance throughout much of its range, and that browsing by possums is the major cause of these
51 Dec -03	15	West Coast	declines

			The Conservancy monitoring team has been measuring scarlet mistletoe condition at sites with colonising and pre-peak possum populations in south Westland. Results show declines in mistletoe populations which appear to be following the possum invasion front (in areas without current possum control). Some areas to the south of Jackson's Bay are only now being colonised by possums, and they seem to have very good populations of scarlet mistletoe (estimated to be around 36 per hectare at last count). Because there has been some doubt that possum impacts are directly causing this mistletoe decline, we decided to collect possum gut samples from these newly colonised areas. This would help confirm the link between rising possum populations and the decline of mistletoes in the south Westland area. Twenty-six possum stomachs were collected from possums trapped during surveillance monitoring between October and December 2003 from the Hope, Spoon and Gorge River catchments. The layer separation method (Sweetapple & Nugent 1998) was used to determine the individual food types eaten. Analysis was carried out by Peter Sweetapple (Landcare Research, Lincoln). The results were what we suspected (Table 1): mistletoe was the most dominant food item eaten (32.09%), and 16 of the 24 possums had evidence of mistletoe foliage in their stomachs. These results reflect the abundance of mistletoe within the Hope, Gorge and Spoon catchments and confirm its high preference as a food item by colonising possums. Muchlenbeckia australis (21.11%) and fuchsia (14.65%) were the next most commonly eaten food items, similar to previous studies on the diets of pre-peak possum populations. Pokaka (Elaeocarpus hookerianus) fruit and fuchsia flowers also made up a high proportion of the diet at 10.42% and 6.297% respectively. A relatively small number of food types dominated the diet, with the foliage of common staple foods such as kamahi absent from possum stomachs (this may reflect time of year with many other foods available). These recent diet re
			further evidence of the key threat that possums pose to beech mistletoe and add support to the conclusion that possums are a major factor behind the rapid declines recently observed within south Westland forests. Our challenge now is to keep possum densities at low levels within
			these last areas where mistletoe is still common. The plan is to carry out an intensive possum control programme over the Hope Catchment to
54 Sep -04	11	West Coast	try and keep possums below 5% RTCI. The Gorge and Spoon are to have less intensive possum control
			Powelliphanta: numbers have decreased. An analysis of empty and damaged shells showed that mortality resulted from predation by song
54 Sep -04	13	West Coast	thrush, rat and possum. Populations at the other two sites were also considered to be low and damaged shells were again found.

			Threat	3. Threats to Plant Species Quotes
				(Lepidium banksii), is stubbornly resisting all recovery attempts. Of the transplants at five sites, only one appears healthy - seeding
		Nelson/	aphids,	prolifically for the entire season. A previously unrecognised threat was identified this year: root aphids, which annihilate nursery
49 Jun -03	13	Marlborough	transplants	plants over hot summer months
			browsing,	
42 Oct -01	12	West Coast	weeds	Coprosma wallii: Browsing and competition with adventive grasses appear to be the main threats to this species on the West Coast.
				We've also been out re-surveying coastal cress (Lepidium oleraceum) sites in the northern Mokohinau Islands. All our records of
				cress are 10 years or older, so it was time to re-check them. Six individual plants were found on only one stack. Rat eradication some
49 Jun -03	4	Auckland	burrows	years ago has left the islands predator-free and now honeycombed with bird burrows
				Shore spurge (Euphorbia glauca), once widespread in the inner Hauraki Gulf, now remains only on Brown's Island. We planted 80
				new shore spurges on Brown's this winter, all were grown from the seed of cuttings taken from the one remaining natural plant on
				the island. The project has been a propagation success story. As our one plant failed to flower and produce seed, we removed
			cuttings,	cuttings from it in 1999. This was a tough decision as the plant only had a few stems. But the gamble paid off, as they flowered
50 Sep -03	3	Northland	transplants	profusely and set seed while in cultivation at the Auckland Regional Botanic Gardens
		Nelson/		A Cook's scurvy grass census of the outer Pelorus Sound islands has confirmed that it is present on 6 of the 15 islands and islets
41 Jun -01	9	Marlborough	drought	visited. This year's exceptional drought has killed most plants though.
		Nelson/		
42 Oct -01	11	Marlborough	drought	During the drought, large numbers of <i>Raoulia</i> mats died on the Cloudy Bay Foreshore
				drought has affected the vegetation on a number of islands. The most noticeable effects are on The Brothers where a number of
				large Hebe elliptica on Little (northern) Brother, the largest shrubs on the island, have died. There are also noticeable areas of die
				back on both Long Island and Motuara Island. The severity of this drought can be seen on Motuara Island, where the waterhole has
				dried up for the first time in over thirty years. This is the only permanent natural water on the island and it has been dry now for four
42 Oct -01	16	Southland	drought	months.
				A survey of the Rarangi foreshore Raoulia mats failed to find any of the Cloudy Bay mat daisy jumper, Kiwaia sp. cf. jeanae. This is the
		Nelson/		second year we have failed to detect any of these flightless moths which are known from this site only. Their habitat was severely
45 Jun-02	12	Marlborough	drought	affected by the big drought of 2000/2001 and we are unsure whether the species has survived.
			farming,	it appears the type locality of <i>Melicytus flexuosus</i> has been destroyed by the site's conversion to a dairy farmSpray treatments to
			herbicides,	remove adventive grasses have generally resulted in increased cover of broad-leaved weeds. Removing the grazing threat is clearly
39 Dec -00	12	West Coast	livestock	only a first step to restoring these communities.
			farming,	
			weeds,	
			livestock,	
			vehicles,	Sphagnum bogs are threatened by conversion to agricultural land, competition from exotic grasses, stock and wild animal damage,
44 Apr-02	21	Otago	harvesting	sphagnum harvesting and recreational vehicle use.
				Amphibromus fluitans: these plants did not reach flowering size before the latest inundation, so there was a net decrease in the seed
53 Jun -04	11	Wellington	flooding	bank following their germination

		Nelson/		Fire on Boxing Day burnt all 300 recently planted Muehlenbeckia astonii, but the plants are tenacious. Despite being in the ground
40 Mar-01	7	Marlborough	fire, neglect	for only a few months, some are showing signs of regrowth when watered by a couple of concerned individuals!
				Kowhai-ngutu-kaka: planting of this endangered shrub on road cuttings in the East Cape regionGraeme stopped by one of his
				plantings near Anaura Bay and was pleased to see some mature specimens in good health and vigour with juveniles nearby. On his
				return later that day he was devastated to discover that a mob of goats had been gobbling their way through the plants and had
		East Coast/		even ring-barked the older specimenssome of the goats paid the supreme penalty. The lesson from this is that 'extinction events'
52 Mar -04	10	Hawke's Bay	goats	can occur with disagreeable rapidity, and we must constantly be on our guard if we are to prevent them
51 Dec -03	10	Wanganui	habitat loss	Robust milfoil has suffered a huge loss of habitat over the past 150 years
				monitoring of spring annual sites in Central Otago is painting a rather bleak picture, with the apparent loss of several sites which had
				previously supported good populations of Ceratocephala pungens and Myosurus minimus subsp. novae-zelandiaeSome losses have
51 Dec -03	16	Otago	habitat loss	resulted directly from land development
				300 kakabeak propagated from one of the Area's two known wild plants: Establishment has been slow, with almost total defoliation
		East Coast/		by hares contributing to the loss of around 90% of unprotected plants over the past 3 years. Though goats and deer are present in
50 Sep -03	8	Hawke's Bay	hares	very low numbers they seem to be having little or no impact on the plants.
47 Dec -02	7	Bay of Plenty	herbicides	spraying reed sweet grass (Glyceria maxima) which is seriously threatening the fern populations.
		Nelson/		chemical control of Carex ovalis in the ephemeral tarn at Sedgemere on Molesworth, is beginning to show potential for using a
49 Jun -03	15	Marlborough	herbicides	weedwand to enable the recovery of the unique turf community there
52 Mar -04	19	Canterbury	herbicides	Heliohebe raoulii var. Maccaskillii: part of the population had been killed recently during a spray operation to control gorse
				We have continued our ongoing quest to establish the appropriate way to control the weed Plantago coronopus at inland saline
				sites. AgResearch had previously established which herbicides and concentrations are effective on buck's horn plantain in field
				conditions and aren't effective on native saline plants in the glasshouse. They recommended two herbicides (Versatill and 2,4-DB) for
				trial on natives in the field at a small scale. The targeted natives for this year were Puccinellia raroflorens, P. stricta, Selliera radicans
				and Sarcocornia quinqueflora. After being trained in how to use the spray equipment to deliver precise concentrations, the sites
				were sprayed in early December. The first vegetation re-measurement is not until March, but initial observations indicate that 2,4-DB
52 Mar -04	22	Otago	herbicides	has killed the natives but Versatill has not. Neither has affected the plantain
52 Mar -04	24	Southland	herbicides	experiment in obtaining establishment and recruitment of Olearia hectorii by using herbicides to create a suitable seedbed.
				Final checks have been made for seedling establishment at several sites where grass beneath Olearia trees were sprayed in early
53 Jun -04	17	Otago	herbicides	spring. Unfortunately we appear to have been unsuccessful this year
		Nelson/		A four day August survey for Coprosma virescens revealed only two plants. Prior to the survey, we knew of only one population in
54 Sep -04	9	Marlborough	herbicides	the Nelson region, last seen in the early 1990s in Pig Valley. They have subsequently disappeared, falling victim to barberry spraying.
				experiment on a recently fenced fragmented population of Olearia hectorii in the Matukituki Valley In October 2001 he sprayed
				rank grass beneath and downwind of mature O. hectorii trees with the herbicide "Touchdown"A visit in early February confirmed
				not only a good knockdown of the grasses but also fantastic regeneration of O.hectorii seedlings in virtually all sprayed areas. Many
				thousands of seedlings were present with many already 10 cm or more tall. Calculation of seedling density revealed an astonishing
			herbicides,	4,675 seedlings per square metre over the most dense seedling carpets Although the experiment raises many questions about
44 Apr-02	20	Otago	drought	seedling survivorship, growth rates etc., (already drier summer conditions are causing large losses)

				Most of the areas where the swamp nettle was found were protected either in Marginal Strips or Land Improvement Agreements.
			herbicides,	While this plant is able to defend itself with its stinging hairs (it is related to ongaonga, stinging nettle) it appears to be susceptible to
47 Dec -02	6	Bay of Plenty	habitat loss	herbicides and loss of habitat.
			herbicides,	Our mawhai (Sicyos australis) at Otuataua Stonefields is still there – a victory for this spiny climber - which is now the poster species
			livestock,	for the botanical values of the reserve in a brochure produced on Otuataua by the Manukau City Council. It's been deliberately
41 Jun -01	3	Auckland	weeds	sprayed and eaten by stock in the past, and is now competing madly with moth plant, but we are hoping its luck is starting to turn.
				Lepidium oleraceum: The population of this threatened plant on the Matariki Islands (near Coromandel Harbour) was visited again,
			herbicides,	and the kikiyu grass threatening its long-term viability was controlled with Gallant herbicide. This work was done using data from a
			weeds,	NIWA trial for Waikato Conservancy on the effects of grass specific herbicides on Lepidium. The sites will be visited once a year, and
			taking seeds,	the same treatment applied. Next year we also plan to take seed from these plants, and to propagate them for planting on other
39 Dec-00	5	Waikato	DoC	nearby islands.
				Monitoring of Cyclosorus interruptus in Awaiti Wildlife Management Reserve this summer has been foiled so far by high water levels
			herbicides,	which tend to kill off Cyclosorus populations. The wet weather has kept water levels high, resulting in Cyclosorus being hard to find
52 Mar -04	7	Bay of Plenty	flooding	and therefore making it difficult to monitor the impacts of a willow spraying operation undertaken last summer on the populations
46 Sep -02	2	Auckland	insects	Lepidium oleraceum: Most leaves were stripped back to the midrib, by what is assumed to be insects.
			insects,	Thelypteris confluens and Cyclosorus interruptus: The last few years have been a failure, with insects or other browsers destroying all
			browsing,	plants before flowering or seed set could occur. This year a range of protection mechanisms including slug bait and insecticide are
			pesticides,	being applied regularly to prevent browse. So far this work has paid off with two flower stalks present. Rorippa divaricata: No new
			weeds,	populations were found and several existing populations had died out with the sites being invaded by secondary native shrub species
43 Dec -01	5	Bay of Plenty	succession	and exotic grasses. Eight live plants in total were found, a decrease from 12 known plants last year
				kakabeak (Clianthus puniceus): only five of the original individuals planted in August 2001 have survived. Unfortunately the surviving
				plants were in poor health, being subject to some form of insect attackanalysis showed that plants had a significant amount of
				fungal growthThere were also at least three types of insect attack these attacks may be due to an underlying cause rather than
				being the cause of poor health. Stress from drying or root damage, increased shading from overgrowing trees, or some other sudden
			insects,	change, may alter the plant's condition and make it more attractive as a food source. Alternatively, overcrowding of a pest species on
45 Jun-02	4	Auckland	disease	some other neighbouring plants may result in a spillover effect.
			insects,	
			disease,	Lepidium oleraceum: Both insect damage and white rust infection are present at low levels, and plants appear to be in good
49 Jun -03	5	Waikato	weeds	condition. Weeds are an ongoing problem and probably the greatest threat to this population
		Nelson/		
41 Jun -01	9	Marlborough	livestock	Scutellaria novae-zelandiae: Habitat degradation by cattle is a significant threat
				Ranunculus recens: The original population is battling, with horse sign through the seepage area. There were hoof prints in the 50 x
45 Jun-02	8	Wanganui	livestock	50 cm monitoring plot.
47 Dec -02	15	West Coast	livestock	Coprosma wallii: Protection of the bulk of this population will require fencing to keep grazing cattle out.
				Simplicia laxa: conducted localised weed control of Hieracium lepidulum. There are two sites here: the 'top slot' which is not
53 Jun -04	17	Otago	livestock	accessible to stock, and the 'big slot' which had one section fenced off in 1997. Analysis of the data shows a steady decline in the

				unfenced sections, whilst the fenced section has remained pretty steady
				Six years of monitoring Simplicia laxa at Castle Rock on the Old Man Range has shown continued decline in cover within those parts
				of the site where stock have had access. This is in contrast to an area from which stock were excluded in 1997, which has maintained
54 Sep -04	13	Otago	livestock	a good cover of Simplicia.
			livestock,	Ophioglossum petiolatum: . Trampling and browsing are probably the biggest threats. Feral deer frequent the turf areas where the
49 Jun -03	7	Bay of Plenty	browsing	plant occurs, so several small cages were placed over plants as a trial to reduce any trampling or grazing effects
				Caring for around 70 plants of the annual herb Holloway's crystalwort (Atriplex hollowayi) on Far North Beaches has hopefully
				enhanced the seedbank this year. The plant is now so restricted and in such low numbers that stock, wild horses, and chance
				summer easterly storms are an extreme threat to its survival. Te Paki staff have had a summer -long struggle trying to erect horse-
			livestock,	proof temporary fences. A calm summer and vigilance by staff paid dividends with a good seedset. One hundred and fifty nursery-
45 Jun-02	3	Northland	storms	grown plants were planted out but few survived.
				Marram grass was originally introduced to Stewart Island to 'stabilise' the dunes. It has been amazingly successful, changing the
				whole nature of the dune system and driving many plant and animal communities to the brink of extinction. Dune areas are under-
			marram	represented in New Zealand's protected areas, being under pressure from farming, recreational use and housing development.
			grass,	During the last month the team sprayed marram found on over 90 hectares of dunefield for the third consecutive year. The results of
53 Jun -04	19	Southland	herbicides	the spraying are already becoming evident, with dramatic pingao growth and some dunes reverting to a pre-marram state
				Local iwihave been monitoring the progress of 300 Sebaea ovata plants which were translocated in November from plants grown
				from seed collected at Wanganui to Pouto. Most plants on their land did well, flowering and seeding before dying off in the dry
				January weather. The plants at the DOC managed site did not do as well. Bud browse at this slightly more disturbed site is being
48 Apr -03	3		moths	attributed to the gentian feeding plume moth
				The infestation on Clianthus maximus reported in the last issue turned out not to be sawfly larvae; a huge relief. The problem was
				caused by a number of species which included the relatively common kowhai moth. Caterpillar samples which had been sent to two
		Tongariro/	moths,	authorities for identification apparently did not include the single animal that was provisionally-identified here. The infected plants
55 Dec -04	11	Таиро	pesticide	were dosed with insecticide and are now recovering
			pigs,	
			livestock,	The main threats to Atriplex hollowayi are high tides, and pigs ploughing through flotsam washed ashore. Overall they have been a
48 Apr -03	2	Northland	neglect	lucky bunch of plants, with many being missed by horse hooves and pig feeding.
				The Conservancy monitoring team has been measuring scarlet mistletoe condition at sites with colonising and pre-peak possum
				populations in south Westland. Results show declines in mistletoe populations which appear to be following the possum invasion
				front (in areas without current possum control). Some areas to the south of Jackson's Bay are only now being colonised by possums,
54 Sep -04	11	West Coast	possums	and they seem to have very good populations of scarlet mistletoe (estimated to be around 36 per hectare at last count).
		Nelson/	quarrying,	Brachyscome "Ward": The plants have lost some habitat through quarrying and are potentially under threat from crumbling cliffs and
47 Dec -02	15	Marlborough	erosion, fire	fireIt is likely that grazing is helping to maintain their habitat
				Leptinella filiformis: Until 1998 it was thought to be extinct 31 plants were planted out at Medbury Reserve monitored in
				October; six had been destroyed and a further four damaged by rabbits. The rabbits were probably attracted to the plants by the
44 Apr-02	16	Canterbury	rabbits	newly disturbed ground when they were planted. Hopefully the unusually damp summer on the plains has ensured this population

				will become established enough to withstand further attention from the rabbits.
				The only population of sand tussock (Austrofestuca littoralis) on Whangapaoa Beach have been fenced off from rabbits. The large
51 Dec -03	1	Auckland	rabbits	increase in rabbit numbers this year has resulted in the sand tussock being selectively browsed back to stubby sticks
			rabbits,	
46 Sep -02	1	Auckland	weeds	Threats to puha include browsing by rabbits and competition with exotic Sonchus and other introduced species.
				The Raoul endemic karo (Pittosporum aff. crassifolium) seems to have suffered a higher degree of habitat loss than most plants on
			rats, goats,	Raoul, with the coastal habitats preferentially modified by settlers in the past. In addition it has been browsed by goats and its seed
55 Dec -04	4	Auckland	habitat loss	taken by rats
				Pterostylis cernua: SH 73 roadside ditch near Kumara. This site is very dependent on the mowing and roadside maintenance regime,
				which has the potential to both benefit the orchid (by keeping the grass sward low) and destroy it (by mowing down flowers, or ditch
39 Dec -00	12	West Coast	roading	clearance), and we are beginning to work with Opus to manage the site.
				Mistletoe: Our largest site in the Conservancy remains that currently earmarked for destruction by the future extension of State
42 Oct -01	3	Northland	roading	Highway 1
				There have been two incidents in the last year of threatened plant populations being damaged by roading contractors: green
				mistletoe (lleostylus micranthus) and pale flowered kumeraho (Pomaderris hamiltonii) have been destroyed. These incidents
				occurred despite previous contact with the council about the plants and the council agreeing to avoid damaging the plants. Our
51 Dec 02		A		people once again got together with their people to try and stop this from happening again. Some of the remedies discussed
51 Dec -03	1	Аискіапо	roading	Included better marking of the sites, more regular contact, and maps that can be given to the people driving the machinery
				star have been out with Opus Consultants who manage State Highways in Rotoruato show them the few Tupela and lieostiyus
			roading,	sites that occur hear highways. Hopefully these will be avoided during road maintenance. At the Lake Okareka Tupela site signage
			dumping	nas been erected at several access points to the two areas of conservation land hear private properties, asking the public to protect
51 Dec 02	E	Pay of Planty	uumping,	dumped at these important sites and which has been slowing the progress of opgoing wood control work
31 DEC -03	5	East Coast/	weeus	readside conservation plantings of kakabaak, had been decimated within a period of two weeks. The subrits appear to be larvae of
54 Sen -04	7	Hawke's Bay	sawfly	the willow sawfly
54 Sep-04	,	Trawke 5 bay	3000119	The flat summit plateau was found to be virtually devoid of the Hebe ellipticg shrubland and Pog gstonii tussockland previously
42 Oct -01	14	Otago	shags	recorded there. Stewart Island shags seem to be the most likely culprits
		0.0080	0.10.80	On the flipside, the heavy rainfall events in July which caused severe flooding in the Fastern Bay of Plenty also impacted on
				Moutohora. Many slips have cascaded down parts of the island's cliffs, burying most of the threatened plants planted in these
54 Sep -04	6	Bay of Plenty	slips	environments.
				Monitoring of the transplanted <i>Carmichaelia juncea</i> on the Kahurangi coast showed devastation wreaked by introduced slugs.
				Wellgrown specimens, planted into salt turf and clifftops during winter are now stumps. Browse inside mesh cages showed slugs as
		Nelson/		the culprits. Previously similar damage was attributed to hares and possums. Typical damage involves removing leaf and flower
43 Dec-01	11	Marlborough	slugs	buds, chewing small shoots and stems
			slugs, snails,	Lepidium oleraceum and Euphorbia glauca: Tuhua (Mayor Island), approximately 40 plants were established around south-east bay
47 Dec -02	6	Bay of Plenty	sparrows	in winter 2000. Recent assessments indicate approximately 50% are surviving. Slugs, snails, and sparrows are browsing plants.

				Taumaihi Island, August 2000 planting of 27 Lepidium oleraceum was assessed in 2001 with no plants found. This site was rechecked
				in April 2002 with still no plants found and only two <i>Euphorbia glauca</i> plants found.
				The one and only naturally occurring sand spurge (Euphorbia glauca) known in the Auckland Area is perched precariously on a cliff on
				Browns Island. Eighty young Euphorbias grown by the Auckland Regional Botanic Gardens were planted in the general vicinity of the
				wild plant this winter. Four months later, only 11 of the 80 are still looking good. Most of the rest seem to have succumbed to snails,
51 Dec -03	1	Auckland	snails	which defoliate the plant and eat at the stems
				the last remaining Euphorbia glauca in Auckland Areabeen seen flowering for the first time ever and had set a little seed when later
			snails,	checkedplanting more Euphorbia grown at the Botanic Gardens from material from the original lonely plant. Although the plantings
54 Sep -04	3	Auckland	drought	have been troubled by garden snails and drought, some of them have flourished. A further 120 were planted this season
				The recent heavy snowfalls in central North Island took their toll on the trees at Paengaroa. A lot of branches came down, trees have
				toppled over, and the undergrowth has been trashed in some areas. Our Korthalsella clavata monitoring on a Coprosma wallii is now
				well and truly over, with the tree having broken. Some new canopy gaps in the forest have been created, and there is a lot more
42 Oct -01	9	Wanganui	storms	light. It may well be events like this that drive the system.
				Sebaea ovata, a small gentian of ephemeral dune wetlands, has been translocated to three locations on the Pouto Penninsula near
			storms,	Dargaville. Sebaea ovata was thought to be extinct until rediscovered in the Whanganui area at Whitiau Scientific Reserve in 1989
			weeds,	with another population discovered at Hawken's Lagoon Conservation Area in 2000. They are the only known natural populations of
			vehicles,	Sebaea ovata. Unfortunately both populations are declining and are threatened by extreme weather, weeds, vehicles, and stock
47 Dec -02	10	Wanganui	livestock	damage among other things.
				A check on both the Lake Rotoiti and Blue Lake Rorippa populations in December revealed several trends. At eight sites around Lake
				Rotoiti the monitored population has declined from approximately 57 plants in 2002 to 31 plants in 2004. Many plants were young
				seedlings, indicating a continual turnover of plants on these slip sites, with some sites becoming overgrown and other successional
52 Mar -04	7	Bay of Plenty	succession	species thereby eliminating Rorippa.
				Permit workload is high with increasing numbers of research and tourist permits for the sub-Antarctic Islands (40 applications and
39 Dec-00	15	Southland	tourism	they are still coming).
				Lepidium flexicaule transfer sites on Rangitoto Island five plants reported previously as having survived from the translocated
			transplants,	population of 150, have died. However, seven seedlings were located, having germinated from the seed produced by the now
42 Oct -01	3	Northland	weeds	deceased adult plants. Exotic annual plants seem to be out-competing this native cress there.
				Ranunculus recens The transplant sites haven't fared any better. Twenty-odd seedlings were found in one 5'5 cm patch where an
				adult had been the year before. There were also two seedlings just below this clump. But that's all that's left from the original
			transplants,	plantings at four 50'50 cm sites. More of a worry is that we spotted Chilean rhubarb (Gunnera tinctoria) on the cliffs just below the
44 Apr-02	11	Wanganui	weeds	original site.
				Austrofestuca littoralis research shows a decline in the population size since the last survey several years ago. The main causes were
				erosion of some of the dune areas by tidal influences and trampling of plants by vehicles on the dune systems – especially quad bikes
41 Jun -01	7	Bay of Plenty	vehicles	and motorbikes.
				Korthalsella salicornioides: walkway passes through the middle of the population, and with no options to realign the track
41 Jun -01	6	Bay of Plenty	walkway	vegetation has been carefully trimmed to keep the track clear.

				Another weed control party has just returned from Cuvier, and again the weed focus was mothplant. We are beginning to see
39 Dec-00	4	Waikato	weeds	reducing returns of weeds found per unit effort, so it looks like we are getting somewhere.
		Nelson/		Ephemeral wetlands: Weeds, especially oval sedge, appears to have been brought in by waterfowl from the Cobb Valley, and are
41 Jun -01	9	Marlborough	weeds	threatening the upper turfs, which is where most of the <i>Hypsella</i> grows.
				Inland saline sites: the latest weed – Plantago coronopus - threatening these important ecosystems. It's become very invasive at
			weeds,	many sites and threatens to wipe out many of the special plants. Biodiversity funding is facilitating a multi-year research programme
41 Jun -01	12	Otago	herbicides	to test a range of herbicides, some of which we hope will prove effective control agents.
				Lepidium flexicaule transfer sites on Rangitoto Island five plants reported previously as having survived from the translocated
				population of 150, have died. However, seven seedlings were located, having germinated from the seed produced by the now
42 Oct -01	3	Northland	weeds	deceased adult plants. Exotic annual plants seem to be out-competing this native cress there.
				Search[ed] many miles of Pouto for S. ovataThe windblown, footsore team returned unrewarded. Ironically the introduced
43 Dec-01	2	Northland	weeds	Blackstonia perfoliata and Centaurium erythraea seem to think Pouto is ideal gentian habitat too
				An experiment is now underway to find a method of controlling the weedy sedge, Carex ovalis, in the ephemeral tarn at Sedgemere.
		Nelson/		The edge is overwhelming the special communities there, which contain one plant known only from that tarn (Craspedia "tarn") and
43 Dec-01	12	Marlborough	weeds	four other tiny threatened plants.
				(Sicyos australis): Both populations consisted of large individuals covering an area of 5'5 metres. Unfortunately the weed Mexican
44 Apr-02	4	Auckland	weeds	devil was found growing near to one of the sites; this will hopefully be targeted for control in the near future.
				a few clumps of Cyclosorus and Thelypteris were noted in amongst a heavy reed sweet grass infestation. It appears that numbers of
44 Apr -02	8	Bay of Plenty	weeds	both species have declinedsince early 90's, probably as a result of weed competition
		Nelson/		
44 Apr-02	15	Marlborough	weeds	pygmy button: grass competition is proving to be the main threat now
				The coastal moth Notoreas 'Taranaki' appears to be benefiting from work carried out by Jim Clarkson from the Stratford Area Office.
				Management of the coastal herbfields, where its host plant Pimelea urvillena grows, has continued with exhaustive hand weeding
45 Jun-02	8	Wanganui	weeds	occurring.
		Nelson/		Monitoring of peppercress survival was monitored on two small islands, where it was introduced, in the Moutere Inlet. Its continued
45 Jun-02	11	Marlborough	weeds	survival was surprising as recruitment has been very poor and weed competition severe.
				Invasive weed control has been underway to protect several threatened plant species around Waionui Inlet, on South Kaipara
				HeadPampas, wandering jew and black wattle have been removed from the immediate area, although the site is adjacent to
47 Dec -02	3	Auckland	weeds	several thousand hectares of pampas covered dunes and pine forest, so the work will be an ongoing task.
				Craspedia "Leatham" survey showed that the original population of plants has decreased from 67 to 36 rosettes over the last two
		Nelson/		years. On a more positive note, a second site containing 14 rosettes was discovered. The large drop in plant numbers has prompted
48 Apr -03	8	Marlborough	weeds	the setup of formal monitoring and careful weed control.
				Vegetation and weed control to allow daylight and reduce competition from kakabeak seedlings on Moturemu has just been
				completed. While the transplanted kakabeak did not survive, it has been heartening to see seedlings come up from the island seed
49 Jun -03	3	Auckland	weeds	bank for a second year, and some of last years seedlings are still growing
49 Jun -03	4	Auckland	weeds	Dense weed infestations seem to hamper establishment of the coastal shore-cress on the island. The translocation is now entering a

				re-assessment phase, during which the Conservancy will consider whether it is feasible to continue to try and establish a population
				of this cress on Rangitoto, or whether Auckland's weedy flora will win out
		Tongariro/		The Volcanic Plateau forget-me-not ( <i>Myosotis</i> aff. <i>Pygmaea</i> ): Unfortunately two of the small depressions were heavily infested by
49 Jun -03	7	Таиро	weeds	Heiracium pilosella, so it may be under immediate threat
				Lepidium banksii Weeding continuesto reduce light competitionThe peppercress and grey saltbush plantings in the Moutere Inlet
				are looking good numerous seedlings have cropped up Another interesting outcome of the exotic grass weeding here is that
		Nelson/		healthy mats of the native spinach (Tetragonia tetragonioides; ranked as Sparse) have appeared. It looks as though this is the result
50 Sep -03	11	Marlborough	weeds	of the release of a long-lived seed bank after the habitat has been opened up
				Following the initial survey/resurvey work undertaken with Waikato Conservancy staff in August, a follow-up day was held with DOC
51 Dec -03	4	Bay of Plenty	weeds	volunteers in October to "weed" Picris and Pimelea sites located to reduce the competition from other plant species
				Vegetation clearance has been occurring at Tangiwai Bog in the hope this will reduce competition and increase the abundance of
				Pterostylis micromega. All the vegetation in small areas (10 × 10 m) has been cut for the last two years. The abundance of Pterostylis
				micromega has increased annually from 43 plants in 2002, to 57 plants in 2003 and 137 plants in 2004. We have now decided to
		Tongariro/		expand this work with a more scientific method at the Paramanawera Bog; three plots will be cleared and three plots will remain un-
52 Mar -04	10	Taupo	weeds	cleared
53 Jun -04	6	Bay of Plenty	weeds	Thelypteris populations have declined in the last decade, with weed invasion being a major factor at some sites
				Kermadec groundsel (Senecio kermadecensis) appears to have been outcompeted probably by a Mexican daisy Ageratum
55 Dec -04	4	Auckland	weeds	houstonianum
			weeds,	survey using volunteers for the elusive <i>Pterostylis micromega</i> record (1984) from the Lower Kaituna wetland. No plants were found,
44 Apr -02	8	Bay of Plenty	herbicides	however several new sites for royal fern (Osmunda regalis) – a major weed threat to the wetland – were discovered and treated
				Simplicia laxa: Recent monitoring indicates this rare grass is doing well at its stronghold on Castle Rock on the Old Man Range. The
			weeds,	weed Hieracium lepidulum, which threatens its rock overhang habitat, is being successfully kept in check by periodic dabbing of
44 Apr-02	20	Otago	herbicides	herbicide (woody weed killer) on invading plants.
			weeds,	Lepidium work continues on the Matariki Islands. This is a constant battle with Kikuyu grass, but Gallant herbicide kills the grass and
51 Dec -03	3	Waikato	herbicides	not the Lepidium
			weeds,	
			livestock,	
			habitat loss,	
			mineral	Sebaea ovate: This last known New Zealand population is under severe pressure from encroaching weeds, trespassing stock, habitat
38 Sep -00	16		deficieny	degradation and possible mineral deficiencies.
				Staff have assessed threatened plants planted since 1993 at several protected areasBlackberry has proved too strong a competitor
				for some individuals Stock caused some minor losses1998 plantings were blitzed by pigs There were stock problems prior to the
				fence repair Pingao and shore spurge have struggled because of dune profile changes. Unsuccessful plantings include sowthistle
			weeds, pigs,	(Embergeria grandifolia) and Cook's scurvy grass. Chatham Island forget-me-not (Myosotidium hortensia) were destroyed by cattle
38 Sep -00	8	Wellington	livestock	and sheep
41 Jun -01	6	Bay of Plenty	flooding	Pterostylis micromega: no plants were located. The wetland habitat has changed greatly since the original discovery with much

				more water present and no grazing. While this management regime has greatly improved the functioning and quality of the wetland it may not have been so favourable for the orchid.
			wetland	
46 Sep -02	1	Northland	loss, weeds	Draining and weeds is the likely cause of dieback at the only remaining Christella aff. dentata site

			Type of	4. Threats to Animal Species Quotes
			threat	
				Dabchick: boats do appear to have a negative impact on dabchick behaviour by disturbance, and that the wash from boats impacts
50 Sep -03	7	Bay of Plenty	boats	on dabchick nests.
			community	Priorities from here are to source funding for a professional predator-proof fence. The best efforts of the landowner have not been
53 Jun -04	12	Canterbury	involvement	enough against the wily fence-cracking skills of stoats.
				Fifteen Leiopelma pakeka frogs were collected off Maud by Bruce Waldman and taken to Canterbury University to help further our
		Nelson/		understanding of frogs in general and of the chytrid fungal disease specifically. Some Maud Island frogs have been developing
48 Apr -03	9	Marlborough	disease	lesions around their eyes, and this is being investigated.
				Chytrid fungus has been positively identified from dead frogs in the main Archey's populations on the Coromandel and the King
			disease,	Country. Plans are afoot to capture 50 Archey's frogs from the King Country in April to begin a captive population as a safeguard
44 Apr-02	7	Waikato	capture	against their possible extinction in the wild.
				The latest field trip to the <i>Placostylus ambagiosus</i> subsp. <i>Paraspiritus</i> colony confirmed that there was a massive die-off there a
				couple of years back, and there are now fewer snails than when we started protection work in 1988. None of the other colonies
				have crashed. As the common garden snail also occurs here and also suffered a big die-off we are speculating that perhaps a
				disease event occurred. Norway rats invaded a small island (Snail Rock) off Purerua Peninsula about six months ago and seriously
43 Dec-01	1	Northland	disease, rats	depleted the snails ( <i>P. hongii</i> ) there. Instead of well in excess of 100 snails, just 15 were found this time
				Weka: The death of a bird from gout made us reassess the diet for the birds in the aviary. As a result, we removed all additional
49 Jun -03	20	Otago	DoC feeding	protein from the diet and replaced it with fruit.
				[Albatross]: For the 2003/04 season, 12 albatross chicks hatched from 15 eggs laid. Four chicks subsequently died; some of these
				chicks were supplementary fed. Autopsies of these chicks by Massey staff have shown that their diet lacked sufficient calcium.
				Massey is in the process of analyzing the nutritional components of proventricular oil that is obtained from sooty shearwaters and
				has been used in supplementary feeding of albatross chicks at Talaroa Head for almost 20 years. From what we have learnt so far
54 6 04			DeCfeeding	from the deaths of this season's chicks, Massey will be able to provide us with much better guidelines for the hutritional
54 Sep -04	1		Doc feeding	requirements of albatrosses
10 14-1 01	10	010.00		Oamaru 2 dogs killing large numbers of blue penguins Irresponsible dog owners and their dogs are still a threat to ground-
40 Mar-01	10	Utago Nelsen/	aogs	Nesting Dirus
12 Oct 01	11	Nelson/ Marlborough	drought	for the recently discovered mat daisy jumper meth. <i>Vivia</i> none could be found
42 000-01		Ivianborougn	arought	for the recently discovered that daisy jumper motif, <i>kiwala</i> , none could be found.
		Nolcon/		and an d'Unville Island. We are therefore repeating our appual counts, Initial results show that the decline is widespread or g. Port
12 Dec 01	12	Nelson/ Marlborough	drought	Underwood Soddle: 80 colls lost year, only one this Nevember
45 Dec-01	12	wanborougn	urougiit	After lact year's record breaking drought, we experienced the wettest spring and summer on record. This appears to have affected
		Nelson/		After last year stretch u-preaking urbught, we experienced the wettest spring and summer of record. This appears to have affected on a number of plants and birds. Eantails have taken a conservancy wide dive, and even island nonulations have been affected. On
$11 \text{ Apr}_02$	11	Marlborough	drought	Takapourewa Island, they have been found drowned in stock water troughs
$\frac{1}{14} \frac{1}{102}$	15	Nelson/	drought	Weka are having a good breeding season in the Sounds Area after being devastated by the drought in many places, including Port
HH Api-02	1.7	Neisony	urougin	were are naving a good breeding season in the sounds Area after being devastated by the drought in many places, including Port

		Marlborough		Underwood and Mt Richmond Park. Full recovery is still some time away
				A survey of the Rarangi foreshore Raoulia mats failed to find any of the Cloudy Bay mat daisy jumper, Kiwaia sp. cf. jeanae. This is
		Nelson/		the second year we have failed to detect any of these flightless moths which are known from this site only. Their habitat was
45 Jun-02	12	Marlborough	drought	severely affected by the big drought of 2000/2001 and we are unsure whether the species has survived.
				(short-jawed kokopu): spotted a freshly dead one in a dried out pool in the Eves Valley Scenic Reserve. A follow-up survey revealed
				giant kokopu, banded kokopu, inanga, upland bully, koura and long-finned eels - but no more jaws. This site is a great little stream
		Nelson/	drought,	and shows the importance of riparian native forest for sustaining suites of large galaxiids the reserve is one of the very few
49 Jun -03	14	Marlborough	forest clearing	remaining lowland alluvial forest remnants in the region
				This year's annual kereru countproduced the second lowest count seen over the 13-year period. The reasons for this year's low
			drought,	numbers are uncertain but could include: late bud-break of preferred species, perhaps due to ground water deficit; plentiful food
51 Dec -03	10	Wanganui	poaching	elsewhere; illegal hunting of kereru
			drought,	
			storms,	Pateke: The cause of this low survival rate is probably a combination of pukeko and harrier predation and lack of food resources.
47 Dec -02	1	Auckland	predation	Food availability is low due to very dry feeding areas after weeks of low rainfall and strong winds.
				A snail shell found on the outskirts of Hokitika was handed in to us by a local farmer/teacher in June and identified as
				Powelliphanta annectens. Follow-up surveys found 2 live snails in the vicinity, and a proposed burn of the area was put off
				indefinitely by the farmer The population is undoubtedly the result of a translocation (probably accidental) of the species away
				from its natural range in the Kahurangi National Park area, so it was decided that the site does not require active conservation
38 Sep -00	11	West Coast	farm burning	management. However, because few such translocations are documented, a full reportwas written.
				Area staff started discussions with landowners adjacent to the stream with the high population of short-jawed kokopu only to
36 Apr-00	13	Wanganui	farm roads	discover that one of them had bulldozed a track immediately adjacent to it.
				Takahe: Two chicks have survived to over 50 days on Maud Island, which is a good effort in a summer of massive rainfall. Eric, hung
		Nelson/		up by his leg in a sheep netting fence, would have died if Steve had not found him and administered some TLC. Fences were also
44 Apr-02	15	Marlborough	fences	responsible for Albert's death previously, fuelling debate about whether to take sheep and fences off Maud Island altogether.
				The four pairs of kokako breeding in the Auckland Regional Council Hunua Ranges Management Block produced five fledg lings this
48 Apr -03	4		flooding	season. There were seven nesting attempts, of which five failed due to flooding and suspected harrier and possum predation.
				Blue duck: A series of flood events during spring and early summer appear to be the primary cause of this high rate of chick
52 Mar -04	12	Wanganui	flooding	mortality Of the nine nests that failedseven were washed out by floods.
			flooding,	Whio: Productivity was very low this year (19 chicks from 44 pairs), primarily due to flooding in October. The monitoring and
		Tongariro/	hydro	banding will continue for two years after the water has been released. The water release is due to occur when hearings within the
53 Jun -04	6	Таиро	schemes	environment court have been resolved.
42 Oct -01	9	Wanganui	forest clearing	Twenty-eight NZ robins were transferred to Bushy Park from an area of pine plantation at Waimarino, which is soon to be milled.
			forest	Periegops suteri: The primary cause of decline for this species is likely to be a reduction in suitable habitat. There are few remnants
			clearing,	of mature forest remaining on Banks Peninsula and these are under considerable threat due to their small size and the impacts of
			flooding,	weeds and pests. In some reserves the leaf litter layer in which it lives is regularly swept away by flooding. The spiders are also
49 Jun -03	16	Canterbury	weeds	likely to be eaten by animal pests such as hedgehogs, cats, rats, mice and possums

			forestry,	Katipo: There has been concern that the population is in decline, particularly as a result of habitat alteration; sand dunes are being
			marram,	replaced by pine plantations, planted with marram grass or invaded by weeds Spiders were largely absent from areas with dense
52 Mar -04	12	Wanganui	weeds	marram, high levels of litter and sparse foredune vegetation.
			ground nest	New Zealand dotterel: Although the Aotea nest is in a good spot, with no management, it is highly likely to fail from human
47 Dec -02	5	Waikato	disturbance	disturbance over the Christmas season
			ground nest	Black-fronted terns: Four colonies are being monitored; approximately 70 pairs in total. A high turnover of nests has been
			disturbance,	observed, with in excess of 150 monitored. Nest failures were due to a range of factors including predators and abandonment.
		Nelson/	hydro	Pressures on braided river habitat are continuing to increase in Marlborough, with the proposal for a significant hydro scheme on
55 Dec -04	13	Marlborough	schemes	the Wairau
			ground nests	
41 Jun -01	8	Bay of Plenty	disturbance	NZ dotterel Thanks to Bryan Williams and his signs we've managed to get a fledgling at a beach near New Plymouth.
				New Zealand dotterel: two birds have fledged; another two were banded during late NovemberProtection for these birds has
			ground nests	included predator trapping (for cats, hedgehogs and mustelids), giving presentations to the local moto-cross club, and involving
		East Coast/	disturbance,	local school children in the protection of the area. NZ dotterel at Te Araroa has had a disappointing season yet again. Vehicles and
43 Dec-01	10	Hawke's Bay	vehicles	wandering cattle have destroyed all nesting attempts so far.
				Powelliphanta "Anatoki Range": The number of snails appears to be similar to when it was last surveyed in 1991, and it appeared
		Nelson/		that none of the empty shells were predated by possums or rats. The main threat seems to be habitat degradation by hares and
52 Mar -04	16	Marlborough	hares, goats	goats
				Central Otago Area staff have been surveying new areas on the Hawkdun Range for scree skinks, without success so far. An
44 Apr-02	21	Otago	hedgehogs	interesting find was evidence of hedgehog predation of lizards at relatively high altitude on the range
		Nelson/	hydro	black-fronted terns: The status of BFTs (Serious Decline) is not anticipated to improve if a proposal by Trustpower to develop a
51 Dec -03	12	Marlborough	schemes	hydro scheme along 50 km of the Wairau goes ahead
		Nelson/	hydro	The Wairau River provides breeding habitat for c.30% of all black-fronted tern, and hence plans for a run of the river power scheme
50 Sep -03	13	Marlborough	schemes	raised concerns
				One of two known koi carp populations was eradicated in a Nelson ornamental pond through draining of the waterway. A lot of
				floundering around in mud and co-operation from the Nelson City Council and Fish and Game assistance allowed this project to
		Nelson/	koi, mosquito	reach a successful end. The remaining population will hopefully be dealt with along similar lines in spring. And then there are the
46 Sep -02	6	Marlborough	fish	10 Gambusia populations to keep us busy.
		Nelson/		giant weta Deinacrida parva: Habitat on the river flats is being strongly impacted by cattle grazing, potentially reducing available
52 Mar -04	17	Marlborough	livestock	cover for the weta
55 Dec -04	16	Otago	livestock	another longjaw site in a spring-fed stream adjacent to the Kauru River which is heavily impacted by cattle.
				Marram invasion has caused the dunes to become steeper which in turn forces the oystercatchers to nest closer to the storm surge
39 Dec-00	8	Wellington	marram	line (the major cause of nest loss).
				attacking marram grass at Mason Bay on Stewart Island. Marram grass was originally introduced to Stewart Island to 'stabilise' the
				dunes. It has been amazingly successful, changing the whole nature of the dune system and driving many plant and animal
53 Jun -04	19	Southland	marram	communities to the brink of extinction. Dune areas are under-represented in New Zealand's protected areas, being under pressure

				from farming, recreational use and housing development
				Recent monitoring of dwarf inanga in the Kaiiwi and Pouto Lakes made the alarming discovery of Gambusia affinis (mosquito
43 Dec-01	1	Northland	mosquito fish	fish)implicated in the demise of dwarf inanga in the Kaiiwi lakes.
				Hutton's Shearwater: The impact of stoats on this species has been a concern for many years PhD research concluded that while
		Nelson/		many colonies have become extinct, including four in the last 30 years, these were all accessible to pigs. The two remaining
39 Dec-00	11	Marlborough	pigs	colonies are inaccessible to pigs and considered to be stable
				Survey work on Arapawa Island confirmed the presence of the protected, undescribed Megadromus beetle at several sites, as well
				as Wainuia and occasional Powelliphanta snails. However, in many areas these species are being heavily hit by pigs which have
		Nelson/		severely rooted large areas of forest floor, overturning large stones in the process. The invertebrates tend to be surviving where
37 Jun -00	15	Marlborough	pigs	there is substantial bedrock outcropping that curtails pig activity.
52 Mar -04	25	Southland	poaching	Stewart Island: lizard[s]: All are under threat from rats, cats and poachers.
				Whareorino fieldwork also revealed seven dead Archey's and one dead Hochstetter's. All except one of these frogs were found
				over the 15 x 15 m grid where grid counts have been carried out since November 2001. The remaining dead frog was found
				approximately 1 km away on a track. On some of the frogs there is evidence of predation, holes in the ventral surface and body
47 Dec -02	3	Waikato	predation	contents missing. The frogs will be examined for evidence of the identity of the predator
				Hochstetters Frog : An intensive survey of Otawa Forest revealed one discrete population and two small outliers each with a few
45 Jun -02	7	Bay of Plenty	quarrying	frogs. The main population lies very close to an area where a quarry exists, is potentially under threat and will require monitoring.
				Kaitaia Area staff have been busy setting up a new project to protect the Te Paki flax snail ( <i>Placostylus ambagiosus</i> ) populations
				from rodent predationThere will be four treatment sites to start with; two where rats and mice will be trapped, and two where
42 Oct -01	2	Northland	rats, mice	we will trap only rats.
55 Dec -04	3	Northland	roading	Hochstetter's frogs: Transit NZ are planning other works on the hill and every single stream there is occupied by frogs
				A combination of stormy weather and egg predation has not been good for New Zealand dotterel at Opoutere this season. In the
			storms, aerial	worst year since a fulltime ranger has been employed at Opoutere, only six chicks fledged from 20 pairs. The early season nest
44 Apr-02	6	Waikato	predators	predation was most likely from aerial predators and ceased when nests were covered.
				Permit workload is high with increasing numbers of research and tourist permits for the sub-Antarctic Islands (40 applications and
39 Dec-00	15	Southland	tourism	they are still coming).
				It was concluded that any proposed restoration programmes for land-locked koaro needs to enhance the survival of these life
44 Apr-02	2	Northland	trout, smelt	stages, and manage the combined effects of trout and common smelt in both lake and respective tributary stream habitats
			vehicles,	The pateke released at Port Charles in May are doing very well. Since the release we have lost three birds to vehicle kills, one to
55 Dec -04	4	Waikato	starvation	starvation, and two to predation
				The coastal moth Notoreas 'Taranaki' appears to be benefiting from work carried out by Jim Clarkson from the Stratford Area
				Office. Management of the coastal herbfields, where its host plant Pimelea urvillena grows, has continued with exhaustive hand
45 Jun-02	8	Wanganui	weeds	weeding occurring. Moths have been found for the first time at one of the managed sites.
				Central Otago grasshopper investigating how the reduction of ground cover (predominantly introduced thyme) affects
				grasshopper abundance. Previous research has shown that grasshopper numbers were greatest in areas of low thyme density.
48 Apr -03	14	Otago	weeds	These areas correspond with tailings which have been most recently mined. Mining ceased in the 1980s, and there is now a risk

				that weed invasion may alter the habitat and reduce grasshopper density
		Nelson/		Brown mudfish were once widespread throughout the entire region but wetland drainage and habitat modification has caused a
51 Dec -03	13	Marlborough	wetland loss	huge decline in their numbers, with the reduction of the population to just one small part of Mangarakau.

			5. Predator Plague Quotes
			Laurence services somewhere in the vicinity of 1000 bait stations and has recently completed a very thorough and comprehensive track
36 Apr-00	5		marking and mapping exercise. This summer Laurence got rats to low levels despite apparent rodent plagues in many parts of the country
			Between 1989-97 the 1400-ha Mapara Wildlife Reserve received intensive goat, mustelid, possum, and rat controlAs we expected, as soon
			as bait was removed from bait stations after the 1996/97 breeding season the rat population increased rapidly. Possum population increase
			has been predictably slower and now (after 3 years) is at 16% RTC. As we predicted, these high predator numbers have meant that very few
36 Apr-00	5		kokako nests have been successful over the past 3 years: between 0-14% (according to season) of nests successfully fledged.
			Various stoat control research projects have been carried out in the Eglinton Valley since 1990. Over the past 2 years continuous, low
			intensity stoat control has been undertaken using Mk VI Fenn traps1999 was a beech mast year, and a stoat population irruption occurred
			during the following summer in response to the huge increase in rodent numbers. Kaka: An unusual feature of this breeding season was the
			high level of predation by ship rats - unrecorded in the Eglinton in previous 6 years of intensive nest monitoring Mohua: This summer we
			may not have lost any nests to stoats, but the huge increase in rat numbers and the associated rat predation is a major concern To keep the
			stoat population at a low level with a low density of traps probably requires continual trapping. Further work is needed here on rat
			population dynamics in beech forests to determine whether lack of predators means a larger irruption in mast years or if climate is the major
38 Sep -00	1		influence.
			Mice continue to demonstrate their tenacity, or maybe toxin tolerance, by persisiting on Mokoia Island in Lake Rotorua, and Limestone Island
			in Whangarei Harbour. In both instances, it is despite two or more very determined eradication attempts. They (mice) quickly reach such low
			levels as to be impossible to detect, only to be re-detected five or six months later in the odd tracking tunnel. Normal pattern then, is for the
46 Sep -02	12		place to soon become overrun with the critters.
			We've also been out re-surveying coastal cress (Lepidium oleraceum) sites in the northern Mokohinau Islands. All our records of cress are 10
			years or older, so it was time to re-check them. Six individual plants were found on only one stack. Rat eradication some years ago has left the
49 Jun -03	4	Auckland	islands predator-free and now honeycombed with bird burrows
			A second application of Pestoff 20R (12mm diameter, 2-4 gram) Wanganui No. 7 cereal pellets containing 20ppm brodifacoum was dropped
	_		onto Mokola Island (135.5 ha) by helicopter on 18 September. This will hopefully remove mice from the island. The first drop, undertaken in
42 Oct -01	6	Bay of Plenty	August reduced mouse numbers significantly, however we know from previous experience that they will increase again without control.
			Next month, an 848 ha block within the 2,136 ha Mokaihaha E.A. is to be treated to reduce possum and rat numbers. Ground treatment is
			planned, with bait stations laid out on a 100-metre grid. Each station will have two pulses of non-toxic pre-feed, and then be followed up with
			1080-impregnated cereal baits (Wanganui No.7). Six weeks later, a top up of pindone and feratox is planned to ensure that kokako juveniles
42 Oct -01	6	Bay of Plenty	fledge before rat numbers rise substantially.
		Big South	Big South Cape ship rat plague: by the time we reached Big South Cape (five months after the first reports) many land bird populations had
53 Jun -04	1	Cape Island	already been almost totally destroyed rats are capable of inducing ecological collapse and extinction within naive island faunas.
			Mohua populations in the Hurunui Mainland Island have decreased significantly following a rat plague. In the North Branch, where up to 60
			birds were monitored in past seasons, only one pair was relocated. In the South Branch, where a section of the valley is intensively
			monitored, the number of pairs declined from about 16 to two. Over the last six seasons, mohua productivity and numbers were increasing as
44 Apr-02	17	Canterbury	a result of stoat control, however rat plagues are a new phenomenon for DOC in the South Island with swift and catastrophic impacts.
52 Mar -04	19	Canterbury	The orange-fronted parakeet (OFP) population crashed in the South Branch of the Hurunui during the rat plague of the 2000/01 summer.

			The beech mast this season has extended the breeding season for the parakeets which is fantastic, but also means that a predator plague is
53 Jun -04	13	Canterbury	likely to occur in the spring and summer.
			With rat numbers on the rise, the Hawdon predator control regime has geared up a couple of notches. Staff have been busy putting out extra
55 Dec -04	14	Canterbury	bait stations and adding extra bait bag lines to the valley, in the hope of curbing the rising rat numbers.
			The restoration phase of the Boundary Stream Mainland Island Project continues to gain momentum as the sustained reduction of pests and
		East Coast/	predators, produces visible changes to both plant and birdlife Given the additional pressure from rats this season which were implicated in
36 Apr-00	10	Hawke's Bay	the higher number of failed nests this year, a 55% nesting success is considered a favorable result.
			The Mt Stokes mohua population has dropped dramatically. At the end of the 1998-99 summer there were around 90 birds, but now
		Nelson/	numbers are estimated at 27, of which only 6 are female. Predation by ship rats is thought to be the cause of the sudden decline Intensive
36 Apr-00	16	Marlborough	trapping of stoats had been sufficient to protect the birds because rats had almost never been recorded at this altitude on Mt Stokes.
		Nelson/	The apparent loss of the Mt Stokes mohua has been devastating. Numbers increased spectacularly with stoat control over the past 10 years,
40 Mar-01	6	Marlborough	but an unprecedented irruption of ship rats during the winter of 1999 spelt their doom.
			The latest field trip to the Placostylus ambagiosus subsp. Paraspiritus colony confirmed that there was a massive die-off there a couple of
			years back, and there are now fewer snails than when we started protection work in 1988. None of the other colonies have crashed. As the
			common garden snail also occurs here and also suffered a big die-off we are speculating that perhaps a disease event occurred. Norway rats
			invaded a small island (Snail Rock) off Purerua Peninsula about six months ago and seriously depleted the snails (P. hongii) there. Instead of
43 Dec-01	1	Northland	well in excess of 100 snails, just 15 were found this time
			quarterly mouse tracking lines and beech seed fall in the Caples and Dart Valleys have been completed. Both indices are up with mouse
			tracking rates averaging 43% in the Caples Valley and 73% in the Dart. Beech seed fall in the Dart is tapering off after reaching 3968 seed per
38 Sep -00	11	Otago	square metre in March and 2336 in May this year. This is the third year that large numbers of beech seeds have been produced in the Dart.
			After the last mast event numbers of mohua in the Caples have decreased dramatically. Mice numbers have bottomed out but recent mice
47 Dec -02	16	Otago	tracking has shown a 30% tracking rate in the Caples.
			We continue to have elevated numbers of mice in tracking tunnels and traps in the Catlins mohua areas. A number of rats have also turned
50 Sep -03	15	Otago	up. As we did not have a beech seedfall event last autumn, the jury is out on what is happening and whether it will lead to a stoat eruption
			Beech seed and rat and stoat numbers are all up in the Catlins Coastal Otago staff are developing an operational plan for the Catlins to be
			able to implement control work when funds become available. The size of the operational area (12,600 ha) makes the planning phase of the
			operation just as difficult as any operational actions. Our focus is the protection of the large number of mohua found here (c. 2,000 birds).
53 Jun -04	15	Otago	The key threat to plan for is stoat irruptions, but rats are also going to be part of the plan
			funds to deal with the stoat irruption predicted in the core mohua habitat this summer. [staff are] now finding contractors and laying out
54 Sep -04	14	Otago	lines for tracks so we can get the infrastructure in place well before the stoats are about this summer
			It's all go at the Operation Ark site in the Catlins. We received money for stoat control but while in the process of preparing an operation plan,
			issues concerning rats arose; an observed doubling of rat abundance occurred between the start and end of October. Additional funds were
			secured for rat control leading to a big planning effort for a poisoning operation in two discrete areas with highest mohua densities. A team is
55 Dec -04	16	Otago	now on the ground implementing that plan and getting baits out
39 Dec-00	15	Southland	Mohua Rat numbers are very high in the Eglinton Valley and appear to be causing heavy predation of mohua in the Eglinton this year.
39 Dec-00	17	Southland	Mohua: The Blue Mountains annual counts of mohua were down by between one third and one half on what would have been expected. This

			may have been a result of weather conditions at the time and the fact that the birds were nesting. Numbers in Western Southlandwere also
			down on last year. However, the numbers of stoats caught in the August trapping was higher than the numbers last year.
			An experimental stoat control programme began in the Eglinton Valley during December 1997 Consecutive beech mast events have
			produced consecutive stoat plagues. Ship rat numbers have also reached very high numbers following these two beech mast eventsstaff
			have been monitoring kaka and mohua in the Eglinton Valley over the last few years. During the first stoat and rat plague (1999/00 summer)
			they recorded little if any predation of nesting mohua or kaka by stoats, however they recorded rats preying upon approximately 30% of
			nesting mohua. There was some concern that controlling stoats to low levels over an extended period in beech forest was contributing to this
42 Oct -01	14	Southland	increase in rat numbers.
		Tongariro/	Dactylanthus: We are expecting a lot of damage to flowers from the high numbers of rodents left over from the previous season's mast
36 Apr-00	12	Таиро	seeding.
			Four months after an effective possum and rat knock-down by a 20,000-ha aerial 1080 operation over Tongariro Forest, stoats reappeared in
		Tongariro/	the centre of the forest and began killing kiwi chicks. So far five of the 11 chicks have been predated, and all in the centre of the treatment
44 Apr-02	9	Таиро	area Rodent numbers remain surprisingly low, with the same tracking index recorded in February as in December (< 2.0%) [April 2002]
			radio tagged kaka in the Waipapa Restoration Area: A dramatic increase in fledgling mortality has been noted coinciding with a change to the
			pest control regime. Seventeen female chicks were monitored since the breeding season and excluding missing birds, eleven of fourteen
			fledglings have died. Nine of these were probably (some certainly) killed by stoats. And just to show that the predators are not targeting birds
			wearing radio transmitters, one observation included finding the remains of two untagged kaka within the same den as a dead tagged bird.
			So the results of a productive nesting season for kaka in the Waipapa has very much been let down by poor fledgling survival. The pest
			control regime was an aerial 1080 pollard operation in October. While this did offer protection during the time birds were nesting, as pest
47 Dec -02	4	Waikato	numbers increased, the level of protection decreased toward the end of the season when fledgling kaka become vulnerable.
			taiko: Cat trapping has been underway in the area since September, and 25 cats have been caught so far. Early indications are that there are
39 Dec-00	9	Wellington	high rat numbers in the areas
			Okarito Kiwi Zone: results from the rodent lines in March show that there has been a huge increase in rat abundance between March (3.5%
			tracking index) and August (80% tracking index). This correlates with our casual observations from the stoat trapping program which have
			indicated a much higher rat trapping rate than previously. We have also been noticing the capture of lactating female rat's right throughout
			the winter months. It seems that rat numbers are higher within the sanctuary (80% tracking rate) as opposed to in the two areas in which do
46 Sep -02	8	West Coast	not have stoat trapping (38.6%)
			The current rowi breeding season has been very disappointing. All 14 of the monitored chicks were dead by early January, with stoat
			predation being the major cause. A heavy rimu fruiting mast during autumn 2002, coupled with a mild winter caused a huge irruption of rats
			and stoats, coincided with the height of the rowi breeding season. Stoats completely saturated the core area during December and January,
			despite the rowi team doing extra buffer trap checks. In December 2002 and January 2003 137 and 173 stoats were caught respectively. This
			is compared with 23 and 55 for the same months the previous season. Similarly, rat numbers were 5-10 times higher this season compared
48 Apr -03	12	West Coast	with the same time last season.
			The stoat control line in the Landsborough Valley has recently been extended down to Harper Flat, just above the confluence with the Clarke
			River. There are now 189 tunnels with two traps per tunnel in the valley, with 41 of these on the recent extension. On the last few trips it has
52 Mar -04	21	West Coast	been extremely encouraging to notice that mohua are more abundant Following a beech mast in 2000 and corresponding stoat plague in

			2001, stoat numbers have steadily declined in 2002/03. Seven stoats were caught over a 10 week period this year compared with 23 from the
			same period in 2001
			Rat numbers increased following a heavy kahikatea fruiting, which in turn increased the stoat numbers in the Haast Tokoeka Sanctuary
52 Mar -04	21	West Coast	compared to previous years.

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			A stoat-trapping programme, aimed at protecting nesting takahe, was established in [3 areas] Ninety-two trap stations were serviced between
38 Sep -00	17		September and May. A total of 149 stoats were caught.
			Tartar Valley Conservation Trust is a community conservation effortVolunteers have been creating track lines and setting out possum traps since
			spring 2001 and in started using Fenn MK6 traps in February 2002. As an alternative visual lure, we placed golf balls in some tunnels, and used
			hens' eggs in others. We employ both single and double trap tunnels. Many rats (30+), nine stoats, one ferret, and one weasel, have all been
			captured in the golf ball traps. Of course we know that mustelids may even be caught in empty tunnels, and the successful traps may hold the
			scent of previous catch However we plan to increase both the number of traps and total area controlled and will maintain records of bait used
47 Dec -02	1		and resulting pests caught
			Whio: Research in Fiordland over the last three years identified stoats preying on nesting females, chicks and eggs, as the greatest threat to the
49 Jun -03	1		speciesprojects aimed at controlling predators to protect whio are already underway in several sites.
			The kiwi population in the Tuwatawata E.A continues to be managed by Rangitaiki Area staff. They monitor nine pairs and run a stoat-trapping
42 Oct -01	7	Bay of Plenty	regime around and through the block
45 Jun -02	7	Bay of Plenty	Ohope Scenic Reserve: 47 stoats and 10 cats were trapped in the reserve.
45 Jun -02	7	Bay of Plenty	NZ Dotterel: Matakana: reports trapping 50 cats, 21 stoats, 237 possums, 36 rats, 115 mice and 1 dog on the island.
			The Matakana Island dotterel: continued to control the various predators that roam the island. Generally, the number of predators killed was
			down from previous years, despite stoat numbers being up. Stoats were responsible for the death of a number of dotterel and variable
			oystercatcher chicks and also took some dotterel eggs at Panepane Pointthere were 30 dotterel nests on the Maketu Spit but sadly not one
52 Mar -04	8	Bay of Plenty	chick fledged. No predator control operations took place at this site due to a lack of resources and other complications
			Over the last six seasons, mohua productivity and numbers were increasing as a result of stoat control, however rat plagues are a new
44 Apr-02	17	Canterbury	phenomenon for DOC in the South Island with swift and catastrophic impacts
			whiteflippered penguin: At Flea and Stony bays, two neighbouring farmers have trapped cats and ferrets in the penguin colonies on their
			properties for several years. In 2001 Akaroa DOC staff set up a trapline (containing 89 Fenn and Timms traps) protecting 1150 hectares on the
			ridges surrounding both colonies. The traps are open year round and have caught numerous cats, ferrets and stoats The landowners still have
48 Apr -03	11	Canterbury	their traps inside the DOC trapline, but have commented that the catch rate of predators has dropped significantly.
			The Whinray kiwi project: making steady progress after two seasons of mustelid controlTheir immediate aim is to carry out possum control on
		East Coast/	private farmland surrounding the reserve to reduce the rate of re-invasion. Traps and bait stations have been purchased and it is hoped the trust
43 Dec-01	9	Hawke's Bay	can employ a trapper within the next two months.
			Juvenile weka (aged between 1–3 months old) are trapped in the Whitikau Valley (no stoat trapping) and in the Motu Valley (stoat trapping) each
		East Coast/	season 40% (n=10) and 8% (n=12) of monitored juveniles were killed by stoats in the Whitikau and Motu valleys respectively. This would suggest
52 Mar -04	11	Hawke's Bay	that trapping stoats does give juvenile weka a better chance of survival than otherwise
		East Coast/	North Island weka and kiwi: At Whinray Scenic Reserve we have almost completed the deployment of our new stoat tunnels and DOC 200 traps,
54 Sep -04	6	Hawke's Bay	additional to the Fenns. The season's first stoat has already been caught
			In an effort to enhance the effectiveness of predator control regimes a couple of experimental initiatives have been added to the suite. Trapping
		East Coast/	for mustelids has been supplemented with a purpose designed poison egg/trap box, which delivers 1080 injected hen eggs for stoats and a
37 Jun -00	10	Hawke's Bay	Diphacinone Ferret paste.

			The NTUERP [Northern Te Urewera Ecosystem Restoration Programme] continues to show impressive results following another season of pest
			control and outcome monitoring At Otamatuna, stoat control has resulted in 70% of monitored kiwi chicks surviving to over 1000 g (the 'stoat-
			proof' weight) during the past 4 years of management. This compares to a 5% survival rate in other unmanaged North Island sites. A
			breakthrough in stoat control developed by NTUERP may have been achieved using freeze-dried rats as a lure to trap stoats. When placed under
			a plastic cover these rats have remained effective in trapping stoats for up to 6 weeks under field conditions. Two hundred and eighty tunnels
			each containing two Fenn traps were set along 42 km of lines on ridges, spurs and streams covering 1500 ha. The tunnels were alternately lured
			with a freeze-dried rat and plastic egg (which, along with hen eggs, are currently the best longlasting stoat lure) in one tunnel, followed by a
			plastic egg in the next. Over a 3- month period 57 stoats were caught. Fifty (88%) were caught in tunnels containing the freeze-dried rats, which
		East Coast/	is significantly higher than the number caught using plastic eggs alone (p<0.001, Fischer's exact test). Kokako numbers continue to increase at a
38 Sep -00	5	Hawke's Bay	rapid rate
			weka: A grant of \$2,500 has been received. This will significantly improve the weka habitat within the enclosure by creating more wetland area.
		East Coast/	and employing a mustelid trapper. Weka are surviving within the enclosure, but considerable on-going effort is required to control cats and
43 Dec-01	9	Hawke's Bay	mustelids
			North Island weka: The first area is in the Motu Valley where trapping for mustelids, cats and possums takes place. The second area is in the
			Whitikau Valley about 20 km north of Motu. This area is un-trapped. Of the four dead birds, three were predated by stoats and the other was
		East Coast/	either predated or scavenged by a cat. From the Motu area, three juveniles are still alive. Of the other two birds, one had wandered two
44 Apr-02	9	Hawke's Bay	kilometres beyond the trapped area and was predated by a stoat.
		East Coast/	Boundary Stream: Rat and possum numbers are maintained at zero, and intensive trapping restricts mustelids and cats to outside the reserve
53 Jun -04	8	Hawke's Bay	boundaries
			specially trained dog, Tui, to search for stoat dens. then controlled using the fumigant Magtoxin. This method removes a large number of
			individuals in one action, as well as targets female stoats, which are considered to be harder to trap. It allows active searching for the predators
			rather than relying on traps that might be avoided. Fifteen dens were located but only three were successfully controlled. This was due to not all
			tunnels being located and blocked, so the fumigant wasn't effective, and the animal escaped. In total, 20 stoats were removed; as we usually
			catch 30-40 stoats a year in the Trounson Park traps, this was a significant number. This year was considered to be more of a pilot study than
43 Dec-01	2	Northland	operational, and we are hoping to continue for the next few years
		Nelson/	The Mt Stokes mohua population has dropped dramaticallyPredation by ship rats is thought to be the cause of the sudden declineIntensive
36 Apr-00	16	Marlborough	trapping of stoats had been sufficient to protect the birds because rats had almost never been recorded at this altitude on Mt Stokes.
			Kaka: Nelson Lakes National Park: Baseline research by DSIR/Landcare in Big Bush Conservation Area documented the previously appalling
			productivity of kaka there in the absence of predator control. Only 2 of 20 nesting attempts monitored over an 11-year period were successful,
			producing just 4 young. Over the same time period 4 of 7 radio-tagged females were killed on the nest by predators, probably stoats. Three
			season's data has now been collected since the beginning of predator control in the Rotoiti Nature Recovery Project (RNRP) area In the first
			season of our study a poison bait-station grid was in place to control rats and possums, but, because Fenn trap-lines for stoats were not yet in
			place, we used aluminium tree 'bands' and a ring of Fenn traps around each nest to protect these from stoats. All four nests monitored that
			season were successful, fledging 12 young. While they seemed effective, the localised nest protection measures we used that season are
		Nelson/	relatively impractical because you need to know where the nests are before you can protect them. Once Fenn traplines were established we
37 Jun -00	1	Marlborough	stopped localised nest protection so that we could evaluate this more widely applicable method of stoat control in combination with the existing

			bait-station grid. Six of the 8 nesting attempts completed since the establishment of Fenn trap-lines have been successful. The 2 nests that failed
			did so because of predation on nestlings and eggs, no female birds were killed. Even without including our first season's data, the difference
			between these results and the DSIR/Landcare data is so great that probability of it occurring by chance is only about 1 in 1000. To exclude the
			possibility that we had struck years of unusually low predator numbers we concurrently monitored kaka nesting success at Lake Rotoroa (20 km
			from the RNRP area) where there was no predator control. At the same time that most pairs were nesting successfully at Rotoiti, 9 of 10 nesting
			attempts at Lake Rotoroa failed due to predation on eggs, nestlings, or nesting females. The probability of this difference in nesting success
			between the RNRP area and Lake Rotoroa being due to chance is about 1 in 100. From the population perspective it is the predation of nesting
			females that is the most damaging. Last summer alone we lost 3 of 5 nesting females to predators at Lake Rotoroa.
		Nelson/	A local community group calling themselves the Friends of Flora have completed their first season of stoat control along 8km of the Flora Stream
45 Jun-02	12	Marlborough	with the intention of protecting all forest bird species with particular emphasis on blue duck. So far they have accounted for 17 stoats
		Nelson/	A local community group known as the Friends of Flora have established and run a stoat line over this winter along 8km of the Flora Stream with
46 Sep -02	6	Marlborough	the hope of protecting Blue Duck from stoats 13 stoats have been dispatched.
			A local initiative with commercial tourist operators and members of the Marahau community has seen the establishment of a long-term stoat
			control programme on the 87 ha Adele Island off the southern Abel Tasman NP coast. Work involved the construction of a loop track around the
		Nelson/	island, building and installing trap boxes, a month of prefeeding, and maintaining set traps. The island is within 1.2 kilometres of the mainland so
49 Jun -03	13	Marlborough	the traps will be tended indefinitely. This maintenance work will be undertaken by the local sea kayaking and water taxi companies
			Blue duck: Flora Stream: protection involves in excess of 50 kilometres of stoat lines. In addition to the work in the Flora Stream, the habitat of
			the three pairs contributing the eggs will also be protected from stoats, with the hope that they will re-nest and successfully raise their second
		Nelson/	clutch. A mountain of stoat tunnels is being created. The project builds on an existing community project with a keen group of locals calling
50 Sep -03	12	Marlborough	themselves "Friends of Flora".
		Nelson/	In order to conserve whio, 568 double stoat traps have been placed to protect 4,500 ha of the Flora Stream catchment from stoats. This involved
52 Mar -04	17	Marlborough	a massive job of trap tunnel construction and track cutting.
			The stoat trapping response in the Dart went off very well with just under 100 stoats caught. Stoat numbers were well down in the part of the
36 Apr-00	19	Otago	Catlins that was trapped. It seems possible that a recent AHB 1080 possum drop has impacted on stoat numbers.
			Between October 1999 and February 2000 mohua nest monitoring occurred in the Caples and Dart valleysThis was part of a stoat control
			studyThe Caples was used as the control site, where no predator control was carried outThere was a 69% success rate in the Caples and 80% in
37 Jun -00	17	Otago	the Dartreasons for these nest failures including floods, abandonment, predation, and long tail cuckoo parasitism
			Giant skinks: The predator control pressure at MacCraes is finally starting to have an impact with cat and ferret totals caught this year being
			substantially lower than last year. Overall we have removed at least 138 cats, 161 ferrets, 26 rats, 13 stoats, and 17 weasels from about 700 ha of
39 Dec-00	14	Otago	tussock grassland. This achievement has taken the efforts of 1.5 full time people.
			Trap lines for stoats in the Makarora Valley continue to catch stoats. Recently numbers are dropping off, and the rate of rat captures is increasing
			slightly. This work is a joint operation with the Upper Clutha Branch of Forest and Bird, which has developed a sponsorship package. For \$50
40 Mar-01	9	Otago	individuals can purchase a tunnel and trap for inclusion in the line. Stoat numbers in the Dart remain high, but rat numbers are decreasing.
40 Mar-01	9	Otago	recently renewed traps on the islands in Lake Wakatipu. A subsequent check showed that 5 stoats had been caught
			recent checks of traps on Pig, Pigeon and Tree Islands in Lake Wakatipu revealed four stoats. At about the same time the traps along the
41 Jun -01	11	Otago	lakeshore caught 13 stoats.
			Predator trapping to protect mohua at Makarora by the Upper Clutha branch of Forest & Bird has continued over the summer. Stoat numbers are
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48 Apr -03	13	Otago	well down compared with the numbers caught last year
			Beech seed and rat and stoat numbers are all up in the Catlins Coastal Otago staff are developing an operational plan for the Catlins to be able to
			implement control work when funds become available. The size of the operational area (12,600 ha) makes the planning phase of the operation
			just as difficult as any operational actions. Our focus is the protection of the large number of mohua found here (c. 2,000 birds). The key threat to
53 Jun -04	15	Otago	plan for is stoat irruptions, but rats are also going to be part of the plan
			funds to deal with the stoat irruption predicted in the core mohua habitat this summernow finding contractors and laying out lines for tracks so
54 Sep -04	14	Otago	we can get the infrastructure in place well before the stoats are about this summer
			Various stoat control research projects have been carried out in the Eglinton Valley since 1990. Over the past 2 years continuous, low intensity
			stoat control has been undertaken using Mk VI Fenn traps. Trap sites are spaced at 200 m intervals along a 45 km line that runs the length of the
			valley, with a short line across the valley at the top and bottom. Each of the 198 sites consists of a wooden tunnel with two Fenn traps. Traps are
			baited with a hen's egg or/and a piece of meat. The trapline takes 1+ days to service and is usually checked monthly The effectiveness of this
			stoat control is evaluated by monitoring breeding and survival of colour-banded mohua and radio-tagged female kaka.1999 was a beech mast
			year, and a stoat population irruption occurred during the following summer in response to the huge increase in rodent numbers. The beech
			forest seeded heavily in 1999 and in 2000, and kaka breeding was widespread. Kaka in the Eglinton Valley generally start nesting in January when
			stoats are most abundant. In 1999 two nests failed at the chick stage owing to predation by either a stoat or possumThis season we lost three
			nests, one with eggs and two with chicks, and 2 females were killed probably by a stoat. All five nests that have been lost were the most distant
			from the traplineNo mohua fledged before juvenile stoats were being caught in the Fenn traps66% of nests fledged, 37% of females were lost
			but a stoat may have killed only one of these. An unusual feature of this breeding season was the high level of predation by ship rats -
			unrecorded in the Eglinton in previous 6 years of intensive nest monitoring It appears that stoat control carried out at this low intensity provides
			sufficient protection to markedly reduce stoat predation on breeding mohua and kaka Stoat control appears to be effective for mohua breeding
			because during the 1990 stoat irruption we lost 60% of females and nests in an untrapped area. This summer we may not have lost any nests to
			stoats, but the huge increase in rat numbers and the associated rat predation is a major concern. The Te Anau area has had two mild winters and
			there is some suggestion that this results in high rat populations in beech forest. High rat numbers have been recorded elsewhere in South Island
			beech forests this past summer – in areas where no stoat control has been undertaken. If a permanently higher rat population were a result of
			continual stoat trapping, there would be serious consequences for many bird species. It could be suggested that stoat trapping be initiated only
			following beech mast years, but for kaka, at least, stoat control would need to occur during the previous summer when beech flowering initiates
			widespread breeding. If some kaka breeding occurs in all years then continual stoat control is preferable, because we knew of no successful kaka
			nests in the Eglinton Valley before we initiated stoat control. To keep the stoat population at a low level with a low density of traps probably
			requires continual trapping. Further work is needed here on rat population dynamics in beech forests to determine whether lack of predators
38 Sep -00	1	Southland	means a larger irruption in mast years or if climate is the major influence.
			Blue Mountains mohua: 12 stoats were caught in 35,280 corrected trapnights (CTN). Over the five summers that the lines have been operated
			the number of stoats caught tallied 13, 6, 12, 5, and 12 respectively. Because of the extremely heavy beech seedfall of the preceding autumn and
			the predicted consequent mouse and stoat plague, a further three trap lines were installed in and about an area with a particularly high Mohua
			population. These lines were operated over November and December only and accounted for 11 stoats in 13,556.5 CTN. Given that the mouse
38 Sep -00	13	Southland	index trapping undertaken in November 1999 resulted in a 33-fold increase in numbers caught compared with any of the preceding 5 years, the

			lack of a significant increase in the number of stoats caught was somewhat unexpected. Therefore one tends to the conclusion that for reasons
			unknown in the Blue Mountains there is a low population of stoats and/or that a stoat irruption does not necessarily follow a major beech mast
			year and a subsequent significant increase in mouse numbers.
			Te Kakahu Is: no sign of stoats was detected. The trap line on the adjacent mainland (a distance of 1100 m away) was checked again but not
			cleared and approximately 80% of the 108 traps set was still available to catch stoats. Only 5 stoats and a few rats were in the traps. This trap line
			was last cleared during February 2000. This is particularly encouraging, because even after a stoat plague year it looks as though two trap checks
			per year will be sufficient on the mainland. If no further sign of stoats has been detected on either the Passage Islands or Te Kakahu by February
			2001 we expect to be able to say with some confidence that all stoats have been eradicated. By then the project will have been through
			consecutive stoat plague years on the mainland and two stoat breeding seasons on Te Kakahu, and it will have been 20 months since the last
38 Sep -00	13	Southland	stoat sign was recorded. Trained stoat dogs are also taken on each trip to Te Kakahu and have yet to find any sign there.
			Whio: Two of the three videoed nests have been visited by stoats and one also by a possum. A stoat destroyed one of the nests and the female
			survived, while the other female managed to defend her nest from a stoat and a possum although the stoat stole one egg. A third female was
			thought to have just begun incubating when she was killed, she was found pulled under a rock with stoat scats surrounding herthe impacts of
			stoats on whio[are] probably more serious than most expected. The impact is possibly worse this year than normal because of the mild winter
			and double beech mast, but the sex imbalance suggests that this has been an ongoing problem. A stoat trap line along the same design as the
39 Dec-00	15	Southland	Eglinton programme has recently been set up in the Clinton Catchment.
			Mohua: Numbers in Western Southlandweredown on last year. However, the numbers of stoats caught in the August trapping was higher than
39 Dec-00	17	Southland	the numbers last year.
			An experimental stoat control programme began in the Eglinton Valley during December 1997. The aim was to determine if low intensity,
			continuous stoat control could protect mohua and kaka from stoat predation. Consecutive beech mast events have produced consecutive stoat
			plagues. Ship rat numbers have also reached very high numbers following these two beech mast eventsDuring the first stoat and rat plague
			(1999/00 summer) they recorded little if any predation of nesting mohua or kaka by stoats, however they recorded rats preying upon
			approximately 30% of nesting mohua. There was some concern that controlling stoats to low levels over an extended period in beech forest was
			contributing to this increase in rat numbers. If this is the case, it has serious implications for many of our stoat control programmes in beech
42 Oct -01	14	Southland	forest.
			The Anchor Island project is part of the "Evaluating a low intensity stoat control regime on large inshore islands" project. The objective is to
			determine if stoats can be eradicated from an island within stoat swimming range and then managed to a low enough level to allow threatened
			species to thrive. The eradication technique used was similar to that used on Te Kakahu but with less tracks and traps per hectare and less follow
			up checks. If this reduced level of effort is successful then it will be realistic to use this technique on much larger islands such as Secretary.
			Anchor Island lies at the mouth of Dusky Sound and is 1130 ha in size. The western end of the island is all reasonably low rolling country with
			some large tussock areas near the higher points. There is a high point rising to just over 400m at the eastern end of the island. Vegetation
			comprises of mixed podocarp and beech forest. No sign of rodents have been recorded on the island. Anchor Island is 1250 metres from
			Resolution Island, which also has stoats. However there are a number of small stepping stone islands between both Resolution, the mainland,
			and Anchor Island. All of these Islands have permanent stoat traps in place, making it very difficult for stoats to re-invade Anchor. Although long-
			term stoat free status is not the sole aim of this project, if achieved it does give us more confidence in the eradication technique. The next phase
42 Oct -01	17	Southland	of the research project will involve attempted eradication of stoats from an island much closer to the mainland (possibly Secretary) followed by

			introduction of a stoat-vulnerable species. Trapping began mid July to take advantage of the time of the year when stoats are most hungry.
			Tracks were cut on Anchor during May and June. A combination of aluminium, wire, and wooden trap tunnels were placed at 150m intervals
			along tracks, and pre-baited twice during June and July. Set Fenn traps with their safety catches on were placed in one quarter of these tunnels
			during the pre-baiting period to ensure that stoats were comfortable using the tunnels and would begin associating them with easy food. Traps
			were set in all tunnels on the 21 and 22 July, and were baited with meat or eggs. Eighteen stoats were captured in total, with seventeen of these
			captured after the first two nights. Stoat captures were spread evenly across the island. Of the eighteen stoats, twelve were females and six were
			males. At the end of this initial trapping session, all traps were left set and baited with eggs both inside and outside. A piece of beef was also left
			inside each tunnel. Traps were also left set on most of the large islands surrounding Anchor to ensure any animals living there are captured. The
			most significant difference between Anchor and Te Kakahu is the number of follow up trips. During the first year, traps on Anchor and the
			surrounding islands will be checked only twice (November and February), compared with every second month on Te Kakahu. The next check on
			Anchor will be November, when five tracking tunnel lines and trained stoat-detection dogs will be used to check for stoat presence. The results
			so far are very encouraging and a conclusive result should be available by February 2002. Although this project was primarily a research project, if
			successful it will provide another very valuable island, on which to restore some of Fiordland's wildlife. It will also have been achieved at a very
			minimal cost.
			Stoat traps were set on Anchor Island (1300 ha) in July 2001 after a three week pre-baiting period. Traps were checked twice during a six day trip
			in July. Nineteen stoats were caught during this initial trapping period. Traps were left baited and set after this first trip. A team returned to the
			island in November 2001 and found another three stoats in the traps. All of these stoats were very decomposed and had probably been caught
			for some time. The next trap service took place in February 2002 and no stoats were caught. If any females were still on the island we would have
			expected to catch some young animals. The island was checked again in May and again no stoats were caught. Anchor Island is 1250m from
			Resolution Island but there are four stepping stone islands in this stretch of water which provide resting places for stoats. Traps on Anchor Island
			and four stepping stone islands will be serviced twice annually from now. Clearing these islands of stoats is still very much experimental but
45 Jun-02	19	Southland	seems to be relatively straight-forward and low cost. However there will need to be ongoing servicing to maintain stoat free status
			This project was set up in 2001 to see if the current stoat control regime (193 trap boxes with two Mark 4 Fenn traps placed 200m apart along
			the valley floor and up two side branches) is sufficient to protect juvenile kiwi three [monitored chicks] were predated by stoats. During the
48 Apr -03	15	Southland	2002/03 breeding season five were predated by stoats For the coming season the team aim toextend the trap line
			takahe in Fiordland: The 15000 ha stoat control block had all traplines (800 double trap sets) finally completed early last summer. Over the
			summer/autumn period, 122 stoats were taken out of the area. We are monitoring kiwi, mohua and takahe to assess the effectiveness of this
49 Jun -03	22	Southland	trapping programme. Mohua counts will be carried out both inside and outside the stoat control area each October.
50 Sep -03	16	Southland	Doubtful Islands in Lake Te Anau, putting out more stoat traps on Erin Island and the mainland.
			The summer servicing of the 15,000 ha stoat control block in the southeast sector of the Murchison Mountains will be completed over February.
52 Mar -04	26	Southland	All traps will be cleared and re-baited
53 Jun -04	18	Southland	autumn re-baiting of stoat traps within the 15,000 hectare stoat control block of the Murchison Mountains.
			Kiwi monitoring in the stoat trapped and non-trapped blocks of the Murchison Mountains is progressing, with some chicks having now hatched
			and several birds still incubating. Last week the first sign of stoat predation was picked up with one, possibly two, chicks having been preyed
55 Dec -04	17	Southland	upon in the non-trapped area
43 Dec-01	7	Tongariro/	Tongariro Forest Kiwi Sanctuary: Evidence is mounting of an exceptionally good kill of possums and rats following the 20,000 ha September aerial

		Таиро	1080 operation. Stoats also appear to have been controlled. The race between kiwi chicks trying to grow to a safer weight and stoats re-invading
			the forest is now on.
		Tongariro/	North Island brown kiwi in the Tongariro Forest Kiwi Sanctuary: Planning is underway to move from one to large scale, low density stoat trapping
47 Dec -02	8	Таиро	at the site.
			Since 1 July 1999 we have caught only 26 stoats [in Kuaotunu Kiwi Sanctuary] The NZ Conibear traps, on their raised kiwi safe sets baited with
			raw fat, have been our best trap set. However, most of the stoats caught recently were in Fenn traps baited with plastic eggs. Wemay introduce
			other baits to the traps at intervals throughout the year to cater for any dietary variationsa shipment of Fenn trapswill be used to extend our
37 Jun -00	8	Waikato	trapping area to approximately 3500 ha.
			the contractor became quite enthused about kiwi protection[and] offered two of his staff for a day a week for 3 years to trap stoats for kiwi
			protection [volunteers and] key landowners then established the Whenuakite Kiwi Care Group. Waikato Regional Council has given financial
			support to purchase trap sets because the block is one of their key ecological sites. The contractor is currently working on placing trap sets
			throughout the block. The work should be completed and fully operational by the end of the year. This is a great example of what can happen in
39 Dec-00	4	Waikato	a short time when keen landowners, and regional and central government get together.
			Moehau Kiwi Zone: The first 4000 ha are underway with stoats appearing in traps from the first day of openingSummary of stoat catch this
41 Jun -01	3	Waikato	summer: November 1 December 24 January 17 February 10 March 7 April 3
			Kiwi Zone: From the 4,000 hectares under a trapping regime at Moehau so far, we have killed nearly 100 stoatsA possum hunter handed in a
			young kiwi caught in a ground-set trap near Coromandel town. This bird is being rehabilitated by Auckland Zoo and we are doing some public
42 Oct -01	5	Waikato	relations work relating to setting traps off the ground to protect kiwi
			We are fast approaching having caught 250 stoats at Moehau Kiwi Zone, but numbers are dropping off as we extend out to the full coverage
44 Apr-02	5	Waikato	intended. So far we have had three out of twelve chicks predated.
			The second kiwi breeding season since stoat trapping began in the Moehau Kiwi Sanctuary is underway. Staff are hopeful for a repeat
46 Sep -02	3	Waikato	performance of the chick survival of the previous breeding season (>75% survival).
			Port Charles Coromandel: joint effort between DOC, Ducks Unlimited, the Brown Teal Conservation Trust and the local community includes
50 Sep -03	4	Waikato	large areas of cat and stoat control
			Ten [kiwi] chicks have died this season; five from suspected mustelid (stoat or weasel) predation This is a much higher death rate than in
			previous years, despite the predator trapping catching significantly fewer stoats and extending the trapping network. We have caught more
53 Jun -04	4	Waikato	weasels, however, and they may be responsible for some of the predation.
			Moehau Environment Group's workcurrently installing about 600 stoat traps over 6,000 ha immediately adjacent to the southern boundary of
			MKS. We hope they stop all stoats from entering the Moehau area. The total area trapped will be about 25,000 ha by the end of 2004! Stoat
			catch rates have declined again at Moehau, with only 113 caught during 2003/04 (1,723 traps), compared with 383 in 2001/02 (1,000 traps) and
54 Sep -04	4	Waikato	299 in 2002/03 (1,500 traps).
49 Jun -03	12	Wanganui	Whio: Two males have been predated by stoats outside the mustelid control area.
			kiwi in Egmont National Park: action started this November with the installation of stoat traps over 4,500 ha of the park. This has been achieved
			through funding from the Wanganui Conservancy and the New Plymouth District Council. As funding allows, it is planned to expand the area of
51 Dec -03	11	Wanganui	stoat trapping to over 12,000 ha in the next 5 years.
51 Dec -03	11	Wanganui	A one-year trial predator control and monitoring study has started a line of stoat traps has been installed along one bank of the Manganui-a-te-

			ao. An angler reported a stoat attack on a duckling. Two females were killed by predators on the nestIt is hoped that further funding will be
			secures to expand stoat control to both sides of the river
			A major effort by the Stratford Area Office in January and February has seen the installation of 650 double set trap boxes over 4,000 ha of
			Egmont National Park. The project is a collaboration between the Department, the Taranaki Kiwi Trust and the Central North Island Blue Duck
52 Mar -04	12	Wanganui	Conservation Charitable Trust. The new traps are mainly DOC 200s, and a trial line of Thumper traps has also been established.
			Blue duck: Manganui-a-te-ao, a tributary of the Whanganui. Limited stoat control was put in place, with a single line of double set Fenn traps
52 Mar -04	12	Wanganui	along one side of the river. Of the nine nests that failed, two had females predated whilst incubating
54 Sep -04	7	Wanganui	kiwi in Egmont National Park: A 6,000 hectare stoat trapping operation is in place
			wild kaka Mt Bruce: The two natural nest sites were unsuccessful – one was breached by a stoat, which killed two chicks, and one nest was
44 Apr-02	13	Wellington	abandoned. Despite predator control over 75ha, two adults, two chicks and two fledglings have been lost; stoats look to be the main culprits.
			The biodiversity package has resulted in increased funding [and we can now] trial a large-scale stoat control programme over the entire known
			range of rowi (10,000 ha). Meetings with predator specialists have suggested that protecting rowi chicks over an area of this size using a
			traditional trapping regime is likely to be a challenging but realistic goal. It is intended that approximately 250 km of trap lines will be established
39 Dec -00	11	West Coast	with about 1500 tunnels containing Fenn traps at 200 m spacing along the lines.
			kiwi: 16 rodent index lines installed. Rimu seedfall is being monitored, and the track system for the stoat control project is under construction.
40 Mar -01	8	West Coast	The stoat control project will be fully operational by the first week in June in readiness for the upcoming breeding season.
			The Landsborough Valley near Haast holds the best remnant population of mohua on the West Coast. Beech seedfall counts indicated that a
			beech mast event would occur during the summer of 2000-2001. In response to this, South Westland Area established a stoat control line
			through the core mohua habitat in the valley during November 2000. The trapline consists of 93 timber tunnels with double set Mark IV Fenn
			traps, baited with a single hen egg. The line was checked monthly from November 2000 to April 2001, and again in July 2001. Over this period, a
			total of 91 stoats, three ship rats and one mouse were caught. Of the stoats caught, 41% were female, 49% were male. Approximately 60% of the
			animals caught were classed as juveniles (less than four months old) and the remaining c. 40% adults. This trapping regime will continue
42 Oct -01	12	West Coast	throughout the year.
			This is also our first breeding season with the increased project. The aim this year is to monitor the survival of 30 rowi chicks in South Okarito
			Forest in conjunction with a stoat trapping programextra funding from the kiwi zones, has given us the freedom to pursue our ultimate goal of
			kiwi protection in the wild. The stoat trapping program, which covers an area of 10,000+ ha, is now completely installed and has been running
			since early June. It was a mammoth task, involving the installation of 200 km of cut tracks and 1500 tunnels and fenn traps. The results in terms
42 Oct -01	13	West Coast	of dead stoats are certainly impressive. The first two checks yielded about 170 stoats.
			The Haast tokoeka: The stoat control is in full swing and the captures so far have been low, since 19 June 2001, 57 stoats have been caught. We
			are hopeful this low number is a reflection on the number of stoats present in the forest. We expect numbers to increase as young stoats start to
			disperse. The core stoat control area is just under 12,000 ha, and including the perimeter and buffer, there are 615 tunnels. Other monitoring
43 Dec -01	14	West Coast	currently being set up includes rodent and stoat monitoring using 15 lines with ten tunnels per line.
			Okarito Kiwi Zone: Of the 22 chicks detected, eight are still surviving in the wild Fourteen have been found dead, and 12 of these are confirmed
			predation There have been 446 stoats caught since trapping beganand there was an increase in the number of captures on the buffer during
44 Apr -02	19	West Coast	December and January that coincided with increased mortality of rowi chicks.
45 Jun -02	13	West Coast	This represents the first significant natural recruitment [of rowi] since the program began in the early 1990sIt is an indicator that the stoat

			control program, which has removed in excess of 540 stoats from the 10,000ha area, is at least partially successful Stoats were implicated in at
			least 12 of the 14 kiwi chick deaths that occurred this year. It is hoped that as the program goes on stoat numbers will continue to lower as
			trapping techniques are fine tuned
			Okarito Kiwi Zone: We are now well into the 2002/03 kiwi breeding season. Fifteen eggs have been detected to date and the first chicks are
			expected to be hatching towards the end of September. Six of last years chicks are still surviving in the forest; five of these have surpassed 1kg
			with one lagging well behind on 660g The results from the rodent lines in March show that there has been a huge increase in rat abundance
			between March (3.5% tracking index) and August (80% tracking index). This correlates with our casual observations from the stoat trapping
			program which have indicated a much higher rat trapping rate than previously. We have also been noticing the capture of lactating female rat's
			right throughout the winter months. It seems that rat numbers are higher within the sanctuary (80% tracking rate) as opposed to in the two areas
			in which do not have stoat trapping (38.6%) although this will not be confirmed until the November tracking session is completed. It will be
			interesting to see whether stoat numbers increase this summer in response to the increased rat abundance and if so how effectively the trapping
			program deals with this increase. We are still continuing to catch the odd stoat in the kiwi zone (four this month) although over half of all
46 Sep -02	8	West Coast	captures now are in the buffer lines which are just outside the kiwi zone. Since May 2001 there have been a total of 605 stoats caught.
			The current rowi breeding season has been very disappointing. All 14 of the monitored chicks were dead by early January, with stoat predation
			being the major cause. A heavy rimu fruiting mast during autumn 2002, coupled with a mild winter caused a huge irruption of rats and stoats,
			coincided with the height of the rowi breeding season. Stoats completely saturated the core area during December and January, despite the rowi
			team doing extra buffer trap checks. In December 2002 and January 2003 137 and 173 stoats were caught respectively. This is compared with 23
			and 55 for the same months the previous season. The plague of stoats has also caused the postponement of the planned February release of 50
48 Apr -03	12	West Coast	juvenile pateke (brown teal).
			Whio: staff worked long hours to establish 25 kilometres of stoat traps along the Oparara, Nimrodel and Postal rivers. To date, 59 stoats have
49 Jun -03	18	West Coast	been caught. During June 2003, an additional 16 kilometres of trap lines are going in, giving more complete coverage of the area.
			The stoat control line in the Landsborough Valley has recently been extended down to Harper Flat, just above the confluence with the Clarke
			River. There are now 189 tunnels with two traps per tunnel in the valley, with 41 of these on the recent extension. On the last few trips it has
			been extremely encouraging to notice that mohua are more abundant; the results of November's mohua monitoring confirm this abundance. We
			heard an average of 1.03 mohua per five minute bird count, a total of 183 mohua. This is a very positive result compared to the previous
			averages of 0.60 in 2002 and 0.52 in 1998. Following a beech mast in 2000 and corresponding stoat plague in 2001, stoat numbers have steadily
52 Mar -04	21	West Coast	declined in 2002/03. Seven stoats were caught over a 10 week period this year compared with 23 from the same period in 2001
			rowi chicks have hatched in the [Oakarito] Sanctuary: There has been no predation of chicks as yet and rat and stoat numbers are low compared
55 Dec -04	15	West Coast	to recent years

			7. Rat Trapping Quotes
			The Mangatutu kokako: All the pest control continues to be successfully carried out by Laurence Gordon and the odd volunteer under his
			supervision. Laurence services somewhere in the vicinity of 1000 bait stations and has recently completed a very thorough and comprehensive
			track marking and mapping exercise, which will enable volunteers and future workers to find every bait station! This summer Laurence got rats to
36 Apr-00	5		low levels despite apparent rodent plagues in many parts of the country
			Tararu Valley Conservation: Volunteers have been creating track lines and setting out possum traps since spring 2001 and in started using Fenn
			MK6 traps in February 2002. As an alternative visual lure, we placed golf balls in some tunnels, and used hens' eggs in others. We employ both
			single and double trap tunnels. Many rats (30+), nine stoats, one ferret, and one weasel, have all been captured in the golf ball trapswe plan to
47 Dec -02	1		increase both the number of traps and total area controlled and will maintain records of bait used and resulting pests caught.
45 Jun -02	7	Bay of Plenty	NZ Dotterel: Witana Murray reports trapping 50 cats, 21 stoats, 237 possums, 36 rats, 115 mice and 1 dog
			Kaharoa Forest was treated using feracol in bait stations for rat control, but numbers were not reduced to the required level. Furthermore, the
			kokako breeding season was very poor for a number of reasons. Onaia Ecological Area (EA) rodent results were 6% r.t.i (West Block) and 13% r.t.i
			(East Block). Possum numbers were kept to the 5% threshold (per 100 trap nights). To complicate matters further, the kokako started breeding late
52 Mar -04	7	Bay of Plenty	and were very sporadic, despite it being a good fruiting season.
			orange-fronted kakariki: Two nests have so far been located one in the Hawdon Valley and one in the Hurunui. Both these nests are protected
			with tin wraps and a ring of Fenn traps at their base. It is quite early in season to be having nests already, especially at the chick stage. Further
			searches will continue and all nests found in the wild will get this same nest protection treatment. With rat numbers on the rise, the Hawdon
			predator control regime has geared up a couple of notches. Staff have been busy putting out extra bait stations and adding extra bait bag lines to
55 Dec -04	14	Canterbury	the valley, in the hope of curbing the rising rat numbers.
		East Coast/	In an effort to enhance the effectiveness of predator control regimes a couple of experimental initiatives have been added to the suite. A rodent-
37 Jun -00	10	Hawke's Bay	based form of Cholecalciferol (Feracol) is being trialed in a section of the reserve as a means of achieving sustained rat control.
			The NTUERP [Northern Te Urewera Ecosystem Restoration Programme] continues to show impressive results following another season of pest
			control and outcome monitoring there are four core [intensive management] areas: Two of these areas (Otamatuna and Mangaone) used
			'Pindone' poison to control rats, whereas Onepu and Waikokopu used the novel non-poison technique of trapping rats in corflute tunnels baited
		East Coast/	with peanut butter. Surprisingly, the trapping outperformed the poisoning method, reducing rat tracking indices much faster and keeping them at
38 Sep -00	5	Hawke's Bay	very low levels for longer than the poisoning method.
		East Coast/	Kiwi: Nesting has once again started on the Puketukutuku Peninsula Unfortunately once again the spectre of pigs uprooting trapping tunnels has
50 Sep -03	8	Hawke's Bay	arisen, with one pig captured containing a large number of rats from our snap traps as well
		East Coast/	Dactylanthus taylori: Intensive trapping for rats and possums, and opportunistic stoat trapping, makes this locality a mainland island in all but
52 Mar -04	11	Hawke's Bay	name.
		East Coast/	Due to low numbers of rats, stoats and cats, we feel Boundary Stream is the ideal place to do this (release kokako). Rat and possum numbers are
53 Jun -04	8	Hawke's Bay	maintained at zero
			Te Paki flax snailpredation: Rodents at these sites were previously controlled with bromadiolone, but due to changes in the DOC pest control
			QCM process, the high level of recreational pig hunting in the area, and iwi concerns about poison use, we had to come up with an alternative
42 Oct -01	2	Northland	method. This year we received Biodiversity funding for <i>Placostylus</i> protection, so we now have the resources to trap rodents at the priority

			Placostylus sites. There will be four treatment sites to start with; two where rats and mice will be trapped, and two where we will trap only rats. If
			time and resources allow, the trapping will be extended to more sites.
			Five colonies of the Te Paki pupuharakeke (flax snail) are being managed for rodents by a trapping operation. Each operation is over a 150m
			diameter circle containing 57 trapping tunnels with two rat traps per tunnel, and four mouse traps. Tunnels are 25m apart on a 50m grid. Indexing
45 Jun-02	3	Northland	is done every three months to check the impact on rodent numbers in the trapping site.
			Mohua/predator control: Rat captures in the Makarora and Dart Valleys are up on previous years, and rodents now appear to be a permanent
39 Dec-00	14	Otago	feature of these permanent trap lines.
			Giant skinks: The predator control pressure at MacCraes is finally starting to have an impact with cat and ferret totals caught this year being
			substantially lower than last year. Overall we have removed at least 138 cats, 161 ferrets, 26 rats, 13 stoats, and 17 weasels from about 700 ha of
39 Dec-00	14	Otago	tussock grassland. This achievement has taken the efforts of 1.5 full time people.
			Trap lines for stoats in the Makarora Valley continue to catch stoats. Recently numbers are dropping off, and the rate of rat captures is increasing
			slightly. This work is a joint operation with the Upper Clutha Branch of Forest and Bird, which has developed a sponsorship package. For \$50
40 Mar-01	9	Otago	individuals can purchase a tunnel and trap for inclusion in the line. Stoat numbers in the Dart remain high, but rat numbers are decreasing.
			Taiaroa Head: Bruce has also been looking at an AEE for more intensive rat and rabbit control at Taiaroa Head. This is part of a move by the
45 Jun -02	15	Otago	Conservancy to implement a more comprehensive reserve management programme than has been the case in the past
			although it was a good beech flowering year in the Dart, there has been very little seed. He is also getting some rats turning up in the Fenn trap
54 Sep -04	14	Otago	lines even though they are not appearing in the tracking tunnels
			Te Kakahu: no sign of stoats was detected. The trap line on the adjacent mainland (a distance of 1100 m away) was checked again but not cleared
			and approximately 80% of the 108 traps set was still available to catch stoats. Only 5 stoats and a few rats were in the traps. This trap line was last
38 Sep -00	13	Southland	cleared during February 2000
		Tongariro/	
47 Dec -02	8	Таиро	A community group at Pukawa has recently started controlling possums and rats around Pukawa Township
			Tuhua: Following the air drop of bait in 2000, there has been several follow up visits to look for rats and cats. The intention being to eradicate
			Norway rat and kiore by primary and for cats to all die from secondary poisoning. Sometimes with Scott Theobald and his dogs, or simply to run
46 Sep -02	11	Tuhua Island	lines of snap traps and tracking tunnels for rats
			Chatham Island oystercatcher recovery Management includes predator control The predator control regime focused on trapping which yielded
37 Jun -00	13	Wellington	51 cats, 719 weka, 61 possums, 44 rats (despite not targeting rats), and 41 hedgehogs over 5 months
			The survival of all 6 hatched chicks through to fledging was thanks to the extremely determined effort put in by field staff to protect the breeding
37 Jun -00	14	Wellington	burrows from cats, possums, weka, and rats.
			Taiko: Thirty-five burrows Early indications are that there are high rat numbers in the areas, so lots of work will be needed controlling them
39 Dec-00	9	Wellington	around breeding burrows.
			Landsborough Valley: The trapline consists of 93 timber tunnels with double set Mark IV Fenn traps, baited with a single hen egg. The line was
			checked monthly from November 2000 to April 2001, and again in July 2001. Over this period, a total of 91 stoats, three ship rats and one mouse
42 Oct -01	12	West Coast	were caught.
			Okarito Kiwi Zone: The results from the rodent lines in March show that there has been a huge increase in rat abundance between March (3.5%
46 Sep -02	8	West Coast	tracking index) and August (80% tracking index). This correlates with our casual observations from the stoat trapping program which have

	indicated a much higher rat trapping rate than previously. We have also been noticing the capture of lactating female rat's right throughout the
	winter months. It seems that rat numbers are higher within the sanctuary (80% tracking rate) as opposed to in the two areas in which do not have
	stoat trapping (38.6%) although this will not be confirmed until the November tracking session is completed.

			8. Cat Control Quotes
		Auckland	Auckland Island:eradicationfor pig looks like a combination of poison, shooting, leg hold traps, and lastly dogs. For cats a combination of the
46 Sep -02	12	Island	same methods (as for pig), but probably using the same toxin in a different bait.
			Raoul and Macauley Islandsmid 1830's Europeans attempted to settle on Raoul, and it was probably at some stage around then that cats were
			introducedIn July 2002 two Bell 205 (Iroquois) helicopters flew up to Raoul and were used to apply Pestoff 20R to the entire island. Twice. The
			objective was to eradicate both species of rat, and most (though hopefully all) of the cats through secondary poisoning. Since then, laying of
52 Mar -04	28	Raoul Island	1080 bait and trapping may have resulted in the eradication of cats. The last cat to be trapped was in the middle of last year.
			the number of pateke counted in the management area of Okiwi Basin has increased by 30% since last year. Management is continuing this
46 Sep -02	2	Auckland	year with the dedication of Craig Mabey who trapped 23 cats in 21 trap nights in July
45 Jun -02	7	Bay of Plenty	Kiwi: Ohope Scenic Reserve. Forty seven stoats and 10 cats were trapped in the reserve.
45 Jun -02	7	Bay of Plenty	NZ Dotterel: Matakana: reports trapping 50 cats, 21 stoats, 237 possums, 36 rats, 115 mice and 1 dog on the island.
			white-flippered penguin: At Flea and Stony bays, two neighbouring farmers have trapped cats and ferrets in the penguin colonies on their
			properties for several years. In 2001 Akaroa DOC staff set up a trapline (containing 89 Fenn and Timms traps) protecting 1150 hectares on the
			ridges surrounding both colonies. The traps are open year round and have caught numerous cats, ferrets and stoats. The landowners still have
48 Apr -03	11	Canterbury	their traps inside the DOC trapline, but have commented that the catch rate of predators has dropped significantly.
		Chatham	taiko: The number of cats caught in and around the Tuku Nature Reserve this year is considerably less than for the last two years, possibly due
44 Apr-02	24	Islands	to a combination of wet weather, and the high number of cats previously removed (over 160 in the last two years).
		Chatham	taiko: Two cats have been caught in cage traps near the breeding burrows since the chicks started to emerge, showing how crucial it is to
45 Jun-02	19	Islands	maintain trapping pressure throughout the full breeding season.
		East	
		Coast/Hawke's	
43 Dec-01	9	Вау	Weka are surviving within the enclosure, but considerable on-going effort is required to control cats and mustelids
		East	
		Coast/Hawke's	
53 Jun -04	8	Вау	Boundary Stream: intensive trapping restricts mustelids and cats to outside the reserve boundaries
			Giant skinks: The predator control pressure at MacCraes is finally starting to have an impact with cat and ferret totals caught this year being
			substantially lower than last year. Overall we have removed at least 138 cats, 161 ferrets, 26 rats, 13 stoats, and 17 weasels from about 700 ha
39 Dec-00	14	Otago	of tussock grassland. This achievement has taken the efforts of 1.5 full time people.
			Giant skink protection: Predator trapping at Macraes Flat continues. Cat numbers have increased as a result of increased rabbit numbers. In
49 Jun -03	21	Otago	the first year of trapping (1999) 100 cats were caught. In April 2003 "Rooster" the trapper caught 114 cats
			Tuhua: Following the air drop of bait in 2000, there has been several follow up visits to look for rats and cats. The intention being to eradicate
			Norway rat and kiore by primary and for cats to all die from secondary poisoning. Sometimes with Scott Theobald and his dogs, or simply to run
46 Sep -02	11	Tuhua Island	lines of snap traps and tracking tunnels for rats, and fish baited leg hold traps for cats.
			A cat research project is about to get underway on Rakiura (Stewart Island). The Yellow-eyed Penguin Trust has underwritten a year of cat
			control and research looking into the impacts of cats on yellow-eyed penguins. This will involve monitoring nests in treatment and non-
50 Sep -03	16	Southland	treatment areas, controlling cats at selected breeding locations, and attaching radio transmitters to 10 cats.

			Rakiura (Stewart Island)So far 11 cats have been caught and collared. The aim is to see how many are killed during the possum control
			operation. This year the possum contractors are again using 1080 in bait bags. Cats have the potential to be killed by secondary poisoning after
			eating possums or rats that have eaten the bait. Feral cats feed mainly on rats, but opportunistically feed on native birds. Studies so far have
			shown a small proportion of native birds in the cat's diet. However, this may sadly be a reflection of the low number of native birds and high
			incidence of rats within these areas. Cats also eat lizards and invertebrates. This project ties in with a major study being initiated by the Yellow-
			eyed Penguin Trust to investigate the impact of cats on Rakiura's yellow-eyed penguin population hoiho may slowly be disappearing from
			Rakiura. Cats are suspected of playing a role here, possibly killing chicks before they leave the nest. The Trust is also going to trap cats around
			some of the colonies, to see if this will increase penguin breeding success. If cats are a major killer of penguins, then the possum control
51 Dec -03	17	Southland	operations using ground based 1080 may give these penguins a year of respite
			The Southern New Zealand dotterel population has increased from 60 birds in 1993, to 200 in 2004 This population growth rate is a direct
54 Sep -04	15	Southland	result of the continuing cat control
			pateke: Port Charles, Coromandel: This joint effort between DOC, Ducks Unlimited, the Brown Teal Conservation Trust and the local community
			includes large areas of cat and stoat control, and the release site is surrounded by the Moehau Kiwi Sanctuary predator control area Four birds
50 Sep -03	4	Waikato	have been lost to predation: one likely to a dog, and the others to a cat(s).
			pateke: Port Charles: No cats have been caught for the last two months, and the cat control now covers the whole Port Charles catchment
55 Dec -04	4	Waikato	(nearly 3000 ha)
			Chatham Island oystercatcher recovery In the managed territories 25 chicks fledged and reached independence from 16 pairs, and in the
			unmanaged territories no chicks fledged from 12 pairspredation eventsrecorded on video in unmanaged territories – 2 clutches of eggs were
			predated by a cat The predator control regime focused on trapping which yielded 51 cats, 719 weka, 61 possums, 44 rats (despite not targeting
37 Jun -00	13	Wellington	rats), and 41 hedgehogs over 5 months
			taiko: The survival of all 6 hatched chicks through to fledging was thanks to the extremely determined effort put in by field staff to protect the
37 Jun -00	14	Wellington	breeding burrows from cats, possums, weka, and rats. A total of 92 cats was trapped from around the taiko burrows this season.
			taiko: Cat trapping has been underway in the area since September, and 25 cats have been caught so far. Early indications are that there are
39 Dec-00	9	Wellington	high rat numbers in the areas, so lots of work will be needed controlling them around breeding burrows.

			9. Possum Trapping Quotes
			Tararu Valley Conservation Trust is a community conservation effort which aims to restore a small and long time neglected patch of
			rainforest. The 1100 acre catchmentcontains a large stand of swamp maire (Syzygium maire), Hochstetter's frog, and old forest remnants
			including large rata and kauri. Volunteers have been creating track lines and setting out possum traps since spring 2001 and in started using
47 Dec -02	1		Fenn MK6 traps in February 2002.
			NZ Dotterel: With only 4 banded adults left on Matakana it has become very difficult and frustrating to identify individuals and to determine
			where the unbanded adults and juveniles go at the end of the breeding season. Witana Murray reports trapping 50 cats, 21 stoats, 237
45 Jun -02	7	Bay of Plenty	possums, 36 rats, 115 mice and 1 dog on the island.
			kiwi: Whinray Ecological Trust has been busy applying to various trusts and other organisations for funding. Their immediate aim is to carry
			out possum control on private farmland surrounding the reserve to reduce the rate of re-invasion. Traps and bait stations have been
			purchased and it is hoped the trust can employ a trapper within the next two months. The Department removed 3,200 possums from the
		East Coast/	430-hectare block during autumn 2001. The trust aims to work with DOC to keep possum numbers at a 2-3% Residual Trap Catch both within
43 Dec-01	9	Hawke's Bay	and outside the reserve
		East Coast/	Boundary Stream: Rat and possum numbers are maintained at zero, and intensive trapping restricts mustelids and cats to outside the reserve
53 Jun -04	8	Hawke's Bay	boundaries
			Pittosporum turneri (FBI) monitoring was established at Kuratau clearing in November 1999. Many adult plants now occur at this site and the
			seed set from last year was especially prolific. Some possum damage was apparent, and increased control will be investigated next financial
			year. A visit was made to another population which occurs on the privately owned Lochinver Station in the Headwaters of the Ripia River. In
			contrast to the Kuratau site, plants found here were heavily possum browsed. Twenty-three large trees were banded in the hope that seed
			will be produced in a few years. The long-term aim is to establish a population within a nearby conservation area. Good adult foliage and
		Tongariro/	fruiting has also been recorded in the managed Erua Sanctuary and Tongariro Forest sites this year. This is a credit to the hard work of a
36 Apr-00	12	Таиро	succession of possum hunters over the past 5 years.
			Four months after an effective possum and rat knock-down by a 20,000-ha aerial 1080 operation over Tongariro Forest, stoats reappeared in
			the centre of the forest and began killing kiwi chicks. So far five of the 11 chicks have been predated, and all in the centre of the treatment
			area. Surviving kiwi chicks are being left in the wild in the hope that stoat density will not recover quickly enough to make their fate certain.
			Unfortunately only one of the 11 monitored chicks hatched early enough in the season to get the full benefit of the aerial knock-down. Its
			September hatch date has allowed it to reach well over 1000 grams now, so it is relatively safe from re-invading stoats. It is hoped that other
			unmonitored chicks from this same early (first clutch) cohort have also benefited as only 12 of an estimated 40 breeding pairs currently carry
		Tongariro/	radio transmitters in the Sanctuary. However, all other monitored chicks hatched after November are still at risk. Rodent numbers remain
44 Apr-02	9	Таиро	surprisingly low, with the same tracking index recorded in February as in December (< 2.0%).
		Tongariro/	A community group at Pukawa has recently started controlling possums and rats around Pukawa Township, in addition to DOC possum
47 Dec -02	8	Таиро	control in the scenic reserves.
			Chatham Island oystercatcher recovery: The predator control regime focused on trapping which yielded 51 cats, 719 weka, 61 possums, 44
37 Jun -00	13	Wellington	rats (despite not targeting rats), and 41 hedgehogs over 5 months
			Six taiko chicks have successfully fledged this season The survival of all 6 hatched chicks through to fledging was thanks to the extremely
37 Jun -00	14	Wellington	determined effort put in by field staff to protect the breeding burrows from cats, possums, weka, and rats

			Chatham Island oystercatcher:Twenty-two cats, 166 weka, 13 possum, and various others (harriers, hedgehogs, etc), have been caught in
39 Dec-00	8	Wellington	the two managed areas.
			The Mount Bruce forest (1000 ha) restoration project is underway. Track cutting has commenced and predator control will begin once
42 Oct -01	10	Wellington	completed. Possums, rats, mustelids, cats, goats will all be targeted.

			10. Mouse Control Quotes
			A mouse was reported in a bait station from a Polytech student replenishing the stations for us. A full SOP response was launched with 64 bait
			stations, Elliot traps, Easiset mouse traps, lures, chew sticks etc. We were not able to follow the SOP to the letter in terms of frequency of visits
			as the weather did not play ball. After six weeks we have had nothing to confirm any rodents in the area. We have removed the Elliot traps as
46 Sep -02	13	Aorangi Island	they were killing diving petrels, spotless crakes and lizards. We also removed the Easisets as they have killed lizards and giant weta.
			Auckland Island: It is not known when the mice were introduced, but may very well have been there since the pigs were released in 1807. Mice
			are the main component of cat diet, with birds and a bit of scavenging making up the remainder. The present plan is to attempt to eradicate
			both pigs and cats, but not mice. The decision to not attempt mice is based on our poor track record with mice, plus the sheer size of the island.
		Auckland	At 51,000 ha it compromises the largest eradication attempt on an offshore island yet to be made in New Zealand, or anywhere else in the
52 Mar -04	27	Island	world.
36 Apr -00	10	Bay of Plenty	A further attempt to eradicate mice from [Mokoia) island is planned for late winter if the funds become available.
			A second application of Pestoff 20R (12mm diameter, 2-4 gram) Wanganui No. 7 cereal pellets containing 20ppm brodifacoum was dropped
			onto Mokoia Island (135.5 ha) by helicopter on 18 September. This will hopefully remove mice from the island. The first drop, undertaken in
			August reduced mouse numbers significantly, however we know from previous experience that they will increase again without control. It will
42 Oct -01	6	Bay of Plenty	be a challenge to remove them completely, as earlier attempts to remove them (Sept 1996) were unsuccessful.
45 Jun -02	7	Bay of Plenty	NZ Dotterel: Witana Murray reports trapping 50 cats, 21 stoats, 237 possums, 36 rats, 115 mice and 1 dog on the island.
			Quail Island: The removal of predators including mustelids, cats, hedgehogs, possums, rats and mice from the island has provided an
53 Jun -04	14	Canterbury	opportunity to restore a number of native invertebrate species that are thought to have occupied the island.
			Kaitaia Area staff have been busy setting up a new project to protect the Te Paki flax snail (Placostylus ambagiosus) populations from rodent
			predation. Rodents at these sites were previously controlled with bromadiolone, but due to changes in the DOC pest control QCM process, the
			high level of recreational pig hunting in the area, and iwi concerns about poison use, we had to come up with an alternative method. This year
			we received Biodiversity funding for Placostylus protection, so we now have the resources to trap rodents at the priority Placostylus sites.
			There will be four treatment sites to start with; two where rats and mice will be trapped, and two where we will trap only rats. If time and
42 Oct -01	2	Northland	resources allow, the trapping will be extended to more sites.
			Five colonies of the Te Paki pupuharakeke (flax snail) are being managed for rodents by a trapping operation. Each operation is over a 150m
			diameter circle containing 57 trapping tunnels with two rat traps per tunnel, and four mouse traps. Tunnels are 25m apart on a 50m grid.
45 Jun-02	3	Northland	Indexing is done every three months to check the impact on rodent numbers in the trapping site.
			quarterly mouse tracking lines and beech seed fall in the Caples and Dart Valleys have been completed. Both indices are up with mouse tracking
38 Sep -00	11	Otago	rates averaging 43% in the Caples Valley and 73% in the Dart.
			At Cromwell an assessment of mice as a potential predator is ongoing but for the second half of October when the chafers were well and truly
39 Dec-00	14	Otago	out there was only 1 mouse caught.
			After the last mast event numbers of mohua in the Caples have decreased dramatically. Mice numbers have bottomed out but recent mice
47 Dec -02	16	Otago	tracking has shown a 30% tracking rate in the Caples.
50 Sep -03	15	Otago	We continue to have elevated numbers of mice in tracking tunnels and traps in the Catlins mohua areas.
			Twenty little spotted kiwi were transferred from Kapiti Island to Karori Sanctuary all alive and well when released within 30 hours of capture.
38 Sep -00	8	Wellington	The Karori Sanctuarywas ringed with a predator-proof fence in 1999, and all mammals were removed during an intensive trapping campaign

			and aerial application of Brodifacoum poison in 1999 (though mice have since reinvaded).
			The Landsborough Valley: stoat control line through the core mohua habitat in the valley during November 2000. The trapline consists of 93
			timber tunnels with double set Mark IV Fenn traps, baited with a single hen egg. The line was checked monthly from November 2000 to April
42 Oct 01	12	West Coast	2001, and again in July 2001. Over this period, a total of 91 stoats, three ship rats and one mouse were caught.
			aerial 1080 possum poisoning operation. Whirinaki Forest Park: The mouse index declined in the non-treatment area (30 to 14%), but increased
38 Sep -00	14		in the treatment area (23 to 30%).
			Mice continue to demonstrate their tenacity, or maybe toxin tolerance, by persisiting on Mokoia Island in Lake Rotorua, and Limestone Island in
			Whangarei Harbour. In both instances, it is despite two or more very determined eradication attempts. They (mice) quickly reach such low
			levels as to be impossible to detect, only to be re-detected five or six months later in the odd tracking tunnel. Normal pattern then, is for the
			place to soon become overrun with the critters. It is possible that they were subsequent reintroductions with people visiting the Islands, and
			this possibility can not be completely ruled out. However the actual places on both islands where mouse sign has been found does not coincide
46 Sep -02	12		with normal landing places

			11. Weasel Trapping Quotes
47 Dec -02	1		Tararu Valley Conservation Trust is a community conservation effortVolunteers have been creating track lines and setting out possum traps since spring 2001 and in started using Fenn MK6 traps in February 2002. As an alternative visual lure, we placed golf balls in some tunnels, and used hens' eggs in others. We employ both single and double trap tunnels. Many rats (30+), nine stoats, one ferret, and one weasel, have all been captured in the golf ball traps. Of course we know that mustelids may even be caught in empty tunnels, and the successful traps may hold the scent of previous catchHowever we plan to increase both the number of traps and total area controlled and will maintain records of bait used and resulting pests caught.
			For almost 50 years there has been daily predator trapping at Taiaroa Head, on the Otago Peninsula. The benefits of such a long term
			investment can be seen today, with over 10,000 seabirds now using this distinctive headland as a breeding site. Earlier this year a weasel was
54 Sep -04	1		caught in a trap at Taiaroa Head, this is only the second one caught on the headland
			Giant skinks: The predator control pressure at MacCraes is finally starting to have an impact with cat and ferret totals caught this year being
			substantially lower than last year. Overall we have removed at least 138 cats, 161 ferrets, 26 rats, 13 stoats, and 17 weasels from about 700 ha
39 Dec-00	14	Otago	of tussock grassland. This achievement has taken the efforts of 1.5 full time people.
			Ten [kiwi] chicks have died this season; five from suspected mustelid (stoat or weasel) predationThis is a much higher death rate than in
			previous years, despite the predator trapping catching significantly fewer stoats and extending the trapping network. We have caught more
53 Jun -04	4	Waikato	weasels, however, and they may be responsible for some of the predation.

			12. Ferret Trapping Quotes
47 Dec -02	1		Tararu Valley Conservation Trust is a community conservation effortVolunteers have been creating track lines and setting out possum traps since spring 2001 and in started using Fenn MK6 traps in February 2002. As an alternative visual lure, we placed golf balls in some tunnels, and used hens' eggs in others. We employ both single and double trap tunnels. Many rats (30+), nine stoats, one ferret, and one weasel, have all been captured in the golf ball traps. Of course we know that mustelids may even be caught in empty tunnels, and the successful traps may hold the scent of previous catchHowever we plan to increase both the number of traps and total area controlled and will maintain records of bait used and resulting pests caught
			whiteflippered penguin: At Flea and Stony bays, two neighbouring farmers have trapped cats and ferrets in the penguin colonies on their
			properties for several years. In 2001 Akaroa DOC staff set up a trapline (containing 89 Fenn and Timms traps) protecting 1150 hectares on the
			ridges surrounding both colonies. The traps are open year round and have caught numerous cats, ferrets and stoats The landowners still have
48 Apr -03	11	Canterbury	their traps inside the DOC trapline, but have commented that the catch rate of predators has dropped significantly.
		East Coast/	Trapping for mustelids has been supplemented with a purpose designed poison egg/trap box, which delivers 1080 injected hen eggs for stoats
37 Jun -00	10	Hawke's Bay	and a Diphacinone Ferret paste.
			Giant skinks: The predator control pressure at MacCraes is finally starting to have an impact with cat and ferret totals caught this year being
			substantially lower than last year. Overall we have removed at least 138 cats, 161 ferrets, 26 rats, 13 stoats, and 17 weasels from about 700 ha of
39 Dec-00	14	Otago	tussock grassland. This achievement has taken the efforts of 1.5 full time people.

			13. Hedgehog Trapping Quotes
			whiteflippered penguin: At Flea and Stony bays, two neighbouring farmers have trapped cats and ferrets in the penguin colonies on their
			properties for several years. In 2001 Akaroa DOC staff set up a trapline (containing 89 Fenn and Timms traps) protecting 1150 hectares on the
			ridges surrounding both colonies. The traps are open year round and have caught numerous cats, ferrets and stoats. Surprisingly over 1000
			hedgehogs have also been trapped, and they are still coming. The landowners still have their traps inside the DOC trapline, but have commented
48 Apr -03	11	Canterbury	that the catch rate of predators has dropped significantly.
			A collaborative projectsaw the translocation of two native invertebrates back to Quail IslandThe removal of predators including mustelids,
			cats, hedgehogs, possums, rats and mice from the island has provided an opportunity to restore a number of native invertebrate species that are
53 Jun -04	14	Canterbury	thought to have occupied the island.
			NZ dotterel: Opotiki Area: Predatorswere stoats, hedgehogs, black backed gulls, and spur winged plover. Five pairs were unable to rear any
		East Coast/	chicks including 1 pair, which made 3 attemptspredators were removed during the season through trapping, shooting, and poisoning. Thirty-
39 Dec-00	6	Hawke's Bay	two mustelids, 42 hedgehogs, 11 rats and 148 black backed gulls were killed
		East Coast/	New Zealand dotterel, Wherowhero Lagoon: two birds have fledged; another two were banded during late NovemberProtection for these birds
43 Dec-01	10	Hawke's Bay	has included predator trapping (for cats, hedgehogs and mustelids)
			One of our most threatened giant snails is now thriving. Powelliphanta gilliesi brunnea monitoring has shown a 2-3 fold increase on the 2001
			monitoring. Following monitoring in May, the total population (restricted to <0.5 ha of coastal forest and scrub) is thought to be 1000-1200
		Nelson/	individuals, an increase from 150-200 in the 1970s. This increase is due to a combination of factors: habitat protection and improvement which
49 Jun -03	14	Marlborough	begun two decades ago; several years of rodent control; and the construction of a rat and hedgehog proof fence in 2002
			NZ dotterel monitoring Opotiki Area: Key predators were removed during the season through trapping, shooting, and poisoning. Thirty-two
41 Jun -01	5	Waikato	mustelids, 41 hedgehogs, 15 rats and 15 black backed gulls were killed during the season.
			Chatham Island oystercatcher recovery The predator control regime focused on trapping which yielded 51 cats, 719 weka, 61 possums, 44 rats
			(despite not targeting rats), and 41 hedgehogs over 5 months Sixty seven oystercatchers have been colour banded in the last 2 seasons,
37 Jun -00	13	Wellington	including all fledglings from the managed territories in both years.
			Chatham Island oystercatcher:Twenty-two cats, 166 weka, 13 possum, and various others (harriers, hedgehogs, etc), have been caught in the
39 Dec-00	8	Wellington	two managed areas.

			14. Pig Control Quotes
46 Sep -02	12	Auckland Island	Auckland Island:eradicationfor pig looks like a combination of poison, shooting, leg hold traps, and lastly dogs.
			Pigs were first put ashore at Erebus Cove on Auckland Island in 1807, and were well established by 1840pigsare widespreadThe present
			plan is to attempt to eradicate both pigs and cats, but not mice At 51,000 ha it compromises the largest eradication attempt on an offshore
			island yet to be made in New Zealand, or anywhere else in the world. The intention is to carry out some preliminary field work this winter (June
			and July). The results of this should allow us to develop detailed costings for the work. There are two parts to this field work. First is the bait
			trials for pigs, the intention being to present nontoxic 20 mm diameter Wanganui No 7 baits containing the biomarker Rhodamine B and (a
			synthetic) anchovy lure. In the first instance to make sure pigs will eat them, and secondly to allow an estimate of what proportion of the
			population is exposed to the bait. Bait will be laid at several key places around the Port Ross area. During the following weeks a record will be
			kept of how far away marked droppings are found, and toward the end of the trip a sample of pigs will be shot. Some of this bait will be used to
			lure up to 15 pigs into traps so that a radio transmitter (tx's) can be attached to the ear. This will provide an opportunity to carry out some
52 Mar -04	27	Auckland Island	telemetry work in an attempt to gain better information regarding their pattern of movements around the island
		East Coast/	Kiwi: Nesting has once again started on the Puketukutuku Peninsula Unfortunately once again the spectre of pigs uprooting trapping tunnels
50 Sep -03	8	Hawke's Bay	has arisen, with one pig captured containing a large number of rats from our snap traps as well

Vol., Date	Page	Conservancy	15. Deer Control Quotes
			The annual harvest target (140) for deer control operations in the Murchison Mountains was achieved with 146 deer being removed in official
			control operations. Increased effort in monitoring and data collection since the 1996/1997 review of the programme has enabled the
			calculation of population estimates and harvest targets to achieve a desired level of control. The good results achieved in the 3 years since the
38 Sep -00	16		review reflect the skill and hard work of the contractors/operators involved, as well as the improved planning and increased resources.
			The deer control programme over the Murchisons has also gone well this year. An annual harvest target of 120 animals had been set based
			on a calculated/estimated maintenance harvest of 117. With the last operations for the year still underway, it appears that we will be
49 Jun -03	22	Southland	removing more than 140 animals from the area this year

Vol., Date	Page Conservancy		16. Fish Trapping Quotes
			One of two known koi carp populations was eradicated in a Nelson ornamental pond through draining of the waterway. A lot of
			floundering around in mud and co-operation from the Nelson City Council and Fish and Game assistance allowed this project to
		Nelson/	reach a successful end. The remaining population will hopefully be dealt with along similar lines in spring. And then there are the
46 Sep -02	6	Marlborough	10 Gambusia populations to keep us busy.
			The pest fish season is well under way but is being hampered by unseasonably wet and cold weather. One rotenone control
			operation to eradicate gambusia at an orchard dam has been completed. The operation to date appears to have been a success
			and after 4 days the rotenone levels had dropped to almost undetectable. Two other pest species (tench and rudd) found in the
		Nelson/	dam have also been killed by the rotenone. The netting-out of fish from two other sites is going well to date and by the end of
52 Mar -04	17	Marlborough	February we will know whether or not this is a viable method for the eradication of gambusia from some sites

			17. Trap By-Catch Quotes
			After six weeks we have had nothing to confirm any rodents in the area. We have removed the Elliot traps as they were killing diving petrels,
46 Sep -02	13	Aorangi Island	spotless crakes and lizards. We also removed the Easisets as they have killed lizards and giant weta.
		East Coast/	a kiwi was found trapped in Mahia Peninsula Scenic Reserve The captured kiwi, an adult female, was sent to Massey University Vet School for
54 Sep -04	6	Hawke's Bay	treatment but unfortunately died after surgery, we renegotiated with the contractor to change to raised sets
52 Mar -04	5	Waikato	A kiwi that had lost its foot in a trap was handed over to Project Kiwi. The bird was taken to Auckland Zoo and operated on
55 Dec -04	4	Waikato	pateke: We've found two unmonitored ducklings dead; one from predation, the other caught in a Fenn trap.
			A rehabilitated female kiwi was released into the area of stoat trapping in January. The kiwi originated from a site near Wanganui and lost two
			toes in a possum trap. Hard work by Wanganui Bird Rescue and Massey University over 5 months led to the bird recovering sufficiently to be
52 Mar -04	12	Wanganui	released.

			18. Plant Caging/Banding Quotes
			Monitoring of Dactylanthus At Te Kopia, even with low possum numbers following last winter's 1080 operation any uncaged flowers were still
37 Jun -00	4		destroyed.
			This year is an excellent fruiting season for <i>lleostylus micranthus</i> at our Lake Ngahewa site where hosts were banded and planted several years
41 Jun -01	6	Bay of Plenty	ago in an attempt to maintain the ailing population.
41 Jun -01	7	Bay of Plenty	Dactylanthus: where most plants are caged, flowering was average with little sign of animal activity
43 Dec -01	4	Bay of Plenty	Mistletoes: host trees banded to ensure the long term survival of the populations.
			Dactylanthus: Monitoring of flowering and some further caging has been undertaken over the past few months at our monitored Dactylanthus
			sites Flowering appeared to be generally pretty good at our sites on Mamakus and at Te Kopia (Paeroa Range). A low level of rat damage was
49 Jun -03	6	Bay of Plenty	present and appeared to be quite localised at Te KopiaUp to six new young Dactylanthus plants were noted inside cages at the Mamaku site.
			Pittosporum turneri. Many of the monitored trees which are banded are showing increased foliage cover, although none have shown signs of
50 Sep -03	5	Bay of Plenty	forming adult foliage after being banded for five years.
			Dactylanthus: The Minginui exclosure was checked and found to be in good condition and still functioning. Although still fairly low, we recorded
			the best seed set since the exclosure was built in 1999. The other monitored site in Whirinaki Forest Park also had increased seed set as a result
51 Dec -03	5	Bay of Plenty	of more caging.
			Dactylanthus: The northern site hadn't been checked for several years and cage maintenance was needed. Flower monitoring showed less
53 Jun -04	5	Bay of Plenty	buds with more male and female flowers than in 2003, with low rates of possum and rat damage.
			Orange-fronted kakariki: Two nests have so far been located; one in the Hawdon Valley and one in the Hurunui. Both these nests are protected
55 Dec -04	14	Canterbury	with tin wraps and a ring of Fenn traps at their base.
			The cages consist of a couple of metres of chook netting wired into a circle and staked in place with a fence batten. A couple of number 8 wire
		East Coast/	pegs holding the netting down complete the setup. Approximately 50 planted kakabeak are now protected in this way, of which 80-90% are
50 Sep -03	8	Hawke's Bay	looking vibrant and healthy, with some in their second year almost over-topping their cages
			Caging of kowhai ngutukaka plants against deer browse really works. Five year old cages constructed by the Waikaremoana Conservation Corps
		East Coast/	on the Ngamoko ridge are overflowing with ngutukaka plants in great health. Flowering and seed set has occurred and these plants can now be
50 Sep -03	8	Hawke's Bay	used as seed source for further establishment of this beautiful plant
			Monitoring of the transplanted Carmichaelia juncea on the Kahurangi coast showed devastation wreaked by introduced slugs. Wellgrown
		Nelson/	specimens, planted into salt turf and clifftops during winter are now stumps. Browse inside mesh cages showed slugs as the culprits. Previously
43 Dec-01	11	Marlborough	similar damage was attributed to hares and possums Typical damage involves removing leaf and flower buds, chewing small shoots and stems
		Nelson/	Pittosporum patulum: Possum control and Marley <sup>™</sup> pipe protectors have allowed a return to health over the last three years for most of the
43 Dec-01	11	Marlborough	50 trees in the study area.
			Pachycladon "Chalk Range": Cages fastened to the cliff face have survived the winter and are looking as good as new. Excitingly, there are a
		Nelson/	couple of new seedlings growing under them which have arrived there naturally. Attempts to seed the species into other nooks and crannies
55 Dec -04	13	Marlborough	have so far proved unsuccessful
			recently caged Dactylanthus plants at Puketi Forest had not only flowered well, but had also produced a significant display of fruit. 34% of the
42 Oct -01	3	Northland	caged clumps had heavy fruit set
45 Jun -02	3	Northland	The Puketi forest Dactylanthus site was visited in early April when the majority of the caged plots appeared to have new bud development with

			no evidence of disturbance. Old seed set was still observable. By early May, half the plants had flowers and buds at different stages of
			development. Some of the flowers had been partly eaten, and some buds had been totally eaten.
			(Lepidium oleraceum) At Taiaroa Head though rabbits discovered our carefully nurtured site and left only a few leafless stems. Fortunately the
36 Apr-00	20	Otago	plants have a great capacity for recovery (with the help of a netting cage) and are now looking good.
			Montigena novae – zelandiae: Monitoring of caged and uncaged scree pea plants on the Hawkdun Range is showing little impact on the plants
44 Apr-02	20	Otago	by browsers.
			staff are pleased with the success of recent possum control operations on Mount Pirongia, especially the spin-off benefit for the rare plant
			Dactylanthus taylorii. A team of DOC staff and three volunteers spent the last week in January on Pirongia's summit monitoring dactylanthus
			plants that had previously been caged for protection. Most of the 150 caged plants were in good health and flowering profusely, with no sign of
48 Apr -03	4	Waikato	possum or rat browse.
			Tupeia :This previously known plant has been caged and is doing well. This new find (three plants so far) may be because of the high level of
			possum control at the site. In the 8 or 9 years since the aerial 1080 drop at Paengaroa, followed by ground control, the Tupeia has flourished to
47 Dec -02	11	Wanganui	such an extent that some mistletoes are now 3 m across, and some host maire trees are looking decidedly sick
52 Mar -04	13	Wellington	Dactylanthus: The Alfredton plants were caged and have flowered

		19. Aerial Poisoning Quotes
37 Jun -00	4	Monitoring of Dactylanthus. At Te Kopia, even with low possum numbers following last winter's 1080 operation any uncaged flowers were still destroyed.
		Between the Kermadecs to the north and Campbell in the deep south there are more than 800 islands in and around New Zealand. During the
		past 15 years we have been able to eradicate rodents from most of those islands (of any size) which are included in the DoC estate. The last
		four islands on the current list are by our standards very large. Mayor Island is scheduled for this year, with the last three - Raoul, Little Barrier,
		and Campbell - during the next 4 to 5 years. The recent increase in DoC funding has provided the funds to carry out all four projects. Obtaining
37 Jun -00	22	consents and solving any technical issues that may arise are all that remains before they too become rodent free
		This project['s] objectives include determining the costsand benefitsof an aerial 1080 possum poisoning operation to kereru and kaka in
		Whirinaki Forest Park. This requires the radio-tagging and monitoring of kaka and kereru in a treatment area (Otupaka Ecological Area) and in a
		non-treatment area (Oriuwaka Ecological Area). The project began in October 1998. To date, 63 kereru have been captured and survived at
		least a fortnight after being radio-tagged. Of these, 28 (44.4%) have died, giving a mean life expectancy of just 0.9 years! Fifty-three kaka have
		been captured and survived at least a fortnight after being radio-tagged. Of these, 3 (5.7%) have died, giving a mean life expectancy of 20.5
		years The carrot-1080 aerial possum poisoning operation occurred in May 2000. The prefeed baits were distributed at 5 kg/ha by the
		contractor, Epro Ltd of Taupo, on 1 May. The poison bait (10 kg/ha, 0.08% 1080, 2435 ha treatment area) was distributed on 17/18 May.
		Monitoring of bait distribution (10 lines each of 1 km long, with the requirement that there be at least 1 bait in each 50 m segment) indicated a
		99.5% coverage. None of 17 kaka (10 male, 7 female) in the treatment area, and 20 (9 male, 11 female) in the non-treatment area died during
		the fortnight following the poison drop. Similarly, none of 15 kereru in the treatment area died after the poison drop, but 1 of 11 (9.1%) died in
		the nontreatment area. Five dead birds were found in the treatment area: 3 tomtits, 1 chaffinch and 1 hedge sparrow. Muscle samples have
		been taken from each and will be tested for 1080 in due course. Possum monitoring in the treatment and non-treatment study areas (six lines
		of 20 traps in each) during February 2000 resulted in 31.4 and 32.9 captures/100 trap nights respectively. Monitoring was repeated in the
		treatment area following the poison operation (12-16 June 2000) resulting in 4.4 captures/100 trap nights, just below the objective of 5% RTC.
		Likewise, the impact of the poison operation on rodent and mustelid populations was monitored using tracking tunnels (10 lines of 10 tunnels
		in each study area), pre-operation monitoring in April 2000 and postoperation in June, 3 weeks after the drop. The tracking index for rats went
		from 56 to 76% in the non-treatment area, but 43 to 5% in the treatment area. All rat prints were in one line of tunnels near the boundary of
		the drop zone. The mouse index declined in the non-treatment area (30 to 14%), but increased in the treatment area (23 to 30%). The mustelid
38 Sep -00	14	index declined from 2 to 0% in the nontreatment area, and 6 to 0% in the treatment area between the two monitoring sessions.
		After 5 years in the planning, more than a year in the implementation Whenua Hou Nature Reserve (Codfish Island) [is] rat free Non targets
		were the big issue with emphasis on the bats, fernbirds and kakapo. The kakapo were 'relatively' straightforward, if not easy – find another
		suitable holding island, set up a new infrastructure for the team and move the birds for the duration of the programme. This meant timing the
		eradication for a year when the birds were unlikely to breed so as to minimise disturbance. Indications were that 1999 was not going to be a
		breeding year so things were able to go anead. Ironically the birds bred on their temporary nome, with one of the most productive (egg wise)
		years every. Thats showed that the fernbirds were at significant risk from the balt, although there is debate over whether it is primary or
		secondary poisoning, so to sareguard the subspecies it was decided to establish another population on a hearby Island. The first attempt to the
20 Dec 00	20	University available island at the time railed for reasons we innever know. This meant that we had to eradicate the rats from another Island (146 ha
39 Dec-00	20	Putauninu) in order to make it suitable for fernbirds. This balt drop was carried out in conjunction with another hearby island (Rarotoka/Centre

		Island) in 1997 and proved to be an excellent training run The eradication on Putauhinu was successful, and 21 fernbird were transferred in
		November-December 1997 Back on Whenua Hou it appears that sufficient birds have survived to re-populate the island with the first post
		drop breeding recorded in 1999 we decided to hold up to 400 bats in captivity for the duration of the programme. A trial with 50 bats was
		carried out first with no loses. So before the bait was dropped 385 bats were caught and put into four purpose built aviaries (batteries). Under
		the watchful eye of a dedicated team they were feed a diet of mealworms that had been feed a nutrient supplement. This proved very
		acceptable to the bats, with most putting on weight and having to be put on a diet. They were all weighed and checked every 8 days, which was
		no small task. During the operation only 9 bats were lost up until the week of the final release in late September, when for some unknown
		reason 45 bats died during the check up, apparently from heat stress. Even with the mass mortality it was an amazing achievement to keep that
		number of bats in captivity for over 3 months. Overseas experts had indicated that we should expect a mortality rate of up to 50 percent as a
		matter of courseWhile it was planned to put on the bait at 8 kg/ha for the first drop, double ups around the cliffs meant that it went on at just
		over 9 kg/ha Unfortunately the forecast was not as accurate as hoped and it started raining, albeit lightly, shortly after the drop. While not a
		major down pour it was sufficient to justify upping the second drop from the planned 4 kg/ha to 8 kg/ha. More bait was ordered and this
		arrived in time for the second drop on 27 August. Once again the double ups mean that the bait went on at an average of just over 9 kg/ha
		The kakapo feeding has now been underway for nearly 2 months with no rat sign. Lines of kakapo food have been set out around the island in
		an attempt to get selected birds onto the artificial food
		Campbell Is: The plan is to fly the bait on at 3 kg/ha with a 50% overlap resulting in a nominal application rate of 5 kg/ha. Bait trials carried out
		2 years ago on Campbell, and about 7 years ago on Kapiti, with an application rate of 5 kg/ ha suggested this will be ample to eradicate Norway
		rats. The cliffs and shoreline will receive two doses. The contingency for overlap at the interface between the area treated one day and
		commencement the next fine day is an overlap of several swath widths. The longer we have to wait for the next fine day the greater the
		overlap. We require about 80 tonne of bait to cover the whole island once, but will take 120 tonnes. It has been confirmed that cats have died
40 Mar-01	11	out, which simplifies the project
		Raoul Island: Rat eradication is in its preliminary planning statewe are reevaluating some of the close inshore islands, particularly in Fiordland,
40 Mar-01	11	and main Auckland Island, which has pigs, mice and cats. We already have an operational plan for the pigs. The cats might take a bit longer.
		Mice continue to demonstrate their tenacity, or maybe toxin tolerance, by persisiting on Mokoia Island in Lake Rotorua, and Limestone Island in
		Whangarei Harbour. In both instances, it is despite two or more very determined eradication attempts. They (mice) quickly reach such low
		levels as to be impossible to detect, only to be re-detected five or six months later in the odd tracking tunnel. Normal pattern then, is for the
46 Sep -02	12	place to soon become overrun with the critters.
		In the Inner Hauraki Gulf, an attempt is being made to eradicate rabbits from Motuihe Island (for the second time) using 1080 on diced carrot
		as the knockdown mechanism. Poisoning the Island followed two prefeeds, and the results were an impressive high 90's kill. Follow up will be
46 Sep -02	12	with the usual arsenal of traps, gassing, guns, and dogs, not necessarily in that order
		Campbell Island: We are delighted to report that we didn't find anything to indicate that rats are still present. Other factors besides the empty
		traps, sign searching and Jak having a good sniff around, indicated the absence of rats. These included the presence of wetas, a favourite rat
		foodAnother positive sign was the presence of pipits, a species previously restricted to offshore islets and stacks In another few years the
49 Jun -03	22	island should be swarming with them
		While a lack of information on the pre-kiore eradication abundance of invertebrates on Whenua Hou prevents a direct comparison, Fred
53 Jun -04	20	believes from the circumstantial evidence that there have been substantial increases in two of the larger species—the "large" land snail Rhytida

			australis (up to 15 mm in diameter) and the stag beetle
			We've also been out re-surveying coastal cress (Lepidium oleraceum) sites in the northern Mokohinau Islands. All our records of cress are 10
			years or older, so it was time to re-check them. Six individual plants were found on only one stack. Rat eradication some years ago has left the
49 Jun -03	4	Auckland	islands predator-free and now honeycombed with bird burrows
36 Apr -00	10	Bay of Plenty	A further attempt to eradicate mice from [Mokoia) island is planned for late winter if the funds become available.
			A second application of Pestoff 20R (12mm diameter, 2-4 gram) Wanganui No. 7 cereal pellets containing 20ppm brodifacoum was dropped
			onto Mokoia Island (135.5 ha) by helicopter on 18 September. This will hopefully remove mice from the island. The first drop, undertaken in
			August reduced mouse numbers significantly, however we know from previous experience that they will increase again without control. It will
			be a challenge to remove them completely, as earlier attempts to remove them (Sept 1996) were unsuccessful. As part of the project, 25 North
			Island weka were captured from the island and transferred to Equine Farms, near Rotorua as a safeguard against the loss of this population.
			These birds will be returned to the island once the operation is completed, and post-operational monitoring of the weka population left on the
42 Oct 01	6	Bay of Plenty	island is planned.
			An aerial 1080 poison operation using carrots took place over a 440 ha area of the Pongakawa Ecological Area in October as part of a wider
			operation undertaken by Kaingaroa Timberlands in adjacent pine plantations to control possums. Jeff Hudson has been employed to monitor
55 Dec -04	7	Bay of Plenty	the adult kokako population; results so far indicate that no birds have been affected.
			In March 1964 muttonbirders returning to Big South Cape reported that a ship rat plague was causing immense damage to property and
			wildlife on their islandby the time we reached Big South Cape (five months after the first reports) many land bird populations had already
			been almost totally destroyed The Big South Cape disaster also had a massive, enduring impact in shaping future conservation policy and
			practice both within New Zealand, and on islands around the world. Refined over the decades, predator mitigation, eradication and control has
			now reached a level where, with ongoing vigilance, it is practicable to: maintain the rat-free status of islands so as to restore ecological values
		Big South	and processes, and; even reinstate predator-sensitive species such as kaka, kokako and kiwi within non predator-fenced mainland habitats! NB:
53 Jun -04	1	Cape Island	Planning is currently underway to eradicate rats from Big South Cape Island
			The tender documents have been sent out for this eradication attempt on Polynesian rats this winter. This project has been in the pipeline for
			several years, but was delayed for a variety of reasons. The way has now been cleared, but only after having to go as far as to the Environment
		Little Barrier	Court. There are no particular problems envisaged with this project, but only time will tell. As with all aerial applications of bait, weather
52 Mar -04	29	Island	patterns will be the big unmanageable.
		Nelson/	sustained possum control through aerial applications of 1080 is starting to have a very pronounced benefit for many Powelliphanta populations
55 Dec -04	12	Marlborough	in Golden Bay
			Lizard monitoring on the Chickens Islands was carried out in March. The traps used to monitor pre- and post-kiore eradication lizard abundance
			were lifted after 9 years and, will probably be continued on a 5-year cycle. The 9 years work showed that there was no significant change in
			total numbers on rocky beach sites. There were, however, significant increases in lizard captures in forest sites, and considerable differences in
			the response of different species. Species more frequently caught include ornate skinks, Duvaucel's gecko and Suter's skinks. All are crepuscular
42 Oct -01	2	Northland	or nocturnal species. The diurnal lizards did not change much.
			a survey of tuatara on Lady Alice Island. found 43% of the animals he caught were juveniles. These were born either immediately prior to the
42 Oct -01	2	Northland	kiore eradication or since. This indicates a substantial improvement in the status of tuatara on the island.
44 Apr-02	3	Northland	Following the spectacular results from Lady Alice Island (West Bay) last March (Rare Bits 42; where 43% of tuatara seen were juveniles

			compared with less than 2% prior to removal of kiore), a survey of Coppermine and Whatupuke Islands was recently carried out. Coppermine
			Island had kiore removed in 1997. Our survey revealed 15% were juveniles, which is a very good result in just 4 years. On Whatupuke Island,
			where kiore were eradicated in 1993 (8½ years ago), the result was exactly the same as Lady Alice Island: 43%. In South Cove, on Lady Alice
			Island, the result was only around 3%, which suggests that results can vary greatly over a single island
			The stoat trapping response in the Dart went off very well with just under 100 stoats caught. Stoat numbers were well down in the part of the
36 Apr-00	19	Otago	Catlins that was trapped. It seems possible that a recent AHB 1080 possum drop has impacted on stoat numbers.
			The fernbirds which were transfered to Putauhinu from Whenua Hou as part of the preparations for the eradication on Whenua Hou and as
			part of the post eradication restoration on Putauhinu have done very well and are rapidly building up numbers. While the bait drop on Whenua
			Hou certainly knocked the fernbirds they are now starting to show their heads above the manuka again and with breeding confirmed this
37 Jun -00	19	Otago	season
			Campbell Island: Lowland sites were recently surveyed for large bodied weevils There was no sign of ribbed weevil (common in the late
			1940s). Hopefully populations remain on nearby islets or possibly at higher elevations. Only remains were found of Oclandius cinereus. It is
37 Jun -00	19	Otago	likely it persists in low numbers on parts of Campbell Island and should respond well to planned Norway rat eradication.
46 Sep -02	9	Otago	Ongoing widespread possum control in the Catlins continues to assist the recovery of <i>Tupeia antarctica</i> mistletoe.
			Another successful season has ended on Te Peka Karara; the island is extremely popular with day visitors during the summer. On some
			afternoons there were up to 16 boats pulled up on the island, with picnickers providing entertainment for the weka. Plans for further
			translocations have been deferred as the preferred site is subject to an extensive ongoing possum operation as part of the Animal Health
53 Jun -04	15	Otago	Board's Tb vector control programme.
			Beech seed and rat and stoat numbers are all up in the Catlins Coastal Otago staff are developing an operational plan for the Catlins to be able
			to implement control work when funds become available. The size of the operational area (12,600 ha) makes the planning phase of the
			operation just as difficult as any operational actions. Our focus is the protection of the large number of mohua found here (c. 2,000 birds). The
53 Jun -04	15	Otago	key threat to plan for is stoat irruptions, but rats are also going to be part of the plan
			It's all go at the Operation Ark site in the Catlins. We received money for stoat control but while in the process of preparing an operation plan,
			issues concerning rats arose; an observed doubling of rat abundance occurred between the start and end of October. Additional funds were
			secured for rat control leading to a big planning effort for a poisoning operation in two discrete areas with highest mohua densities. A team is
55 Dec -04	16	Otago	now on the ground implementing that plan and getting baits out
			Raoul Island: The Polynesian rat (kiore) was probably liberated by early Polynesian voyagers several hundred years ago. It is thought that the
			Norway rat arrived in the early 1920'smid 1830's Europeans attempted to settleprobably at some stage around then that cats were
			introduced. Goats were finally eradicated in the mid 1970's after several years of concentrated effort. In July 2002 two Bell 205 (Iroquois)
			helicopters flew up to Raoul and were used to apply Pestoff 20R to the entire island. Twice. The objective was to eradicate both species of rat,
			and most (though hopefully all) of the cats through secondary poisoning. Since then, laying of 1080 bait and trapping may have resulted in the
52 Mar -04	28	Raoul Island	eradication of cats.
39 Dec-00	15	Southland	The Campbell Island eradication preparation continues.
			Tuhua (Mayor Island): In August last year, 2 applications of Talon 20 P were aerial broadcast to eradicate Norway and Pacific rats. It was
			anticipated that cats would die from secondary poisoning after eating dead or dying rats full of bait. A sample of cats were radio-tagged prior to
40 Mar-01	11	Southland	the drop. Some indication of home range was determined from those cats, but the severe topography of Tuhua made telemetry difficult. Of

			greater benefit was the ability to recover dead cats post drop, and 5 dead cats were found during the weeks following the drop. Autopsy by a
			veterinary pathologist determined 3 had all the clinical signs of anticoagulant poisoning. The other two showed none of those signs but did
			have a type of emphysema
			After years of planning, the Campbell Island rat eradication finally got under way in full on the 26 June when the five helicopters left from
			Invercargill. Two ship loads of gear and personnel (19 in total) had already gone. The equipment included 120 tonnes of bait and 210 drums of
			chopper fuel as well as enough food and supplies for three months. After unloading the Jenka one of the choppers returned to the mainland,
			leaving three Jet Rangers to drop the bait and a Squirrel to ferry bait and personnel around. After four days setting up, the first bait was
			dropped on 2 July. From past weather records, it had been estimated that even if the team stayed on the island for three months, there was a
			significant chance that we still wouldn't have had enough suitable weather to drop all the bait. Even the cliffs at up to 1000ft high did not deter
			the team, who simply did them with an onshore wind to help blow the bait onto the many ledges The weather prevented the helicopters
42 Oct -01	17	Southland	leaving until 27 July, and the last of the team and equipment came off on 22 August.
			It has been documented from a number of aerial 1080 possum control operations that tomtits are one of the more vulnerable non-target
			speciesmonitoring compared two techniques – Distance Sampling and Territory SamplingInitial indications from both monitoring methods
		Tongariro/	(re-sighting of banded male tomtits and distance sampling indexes of populations) show little, if any, impact from the 1080 drop on the tomtits
43 Dec-01	6	Таиро	monitored at the study sites. We anticipate that statistical analysis of the results will confirm this.
			Four months after an effective possum and rat knock-down by a 20,000-ha aerial 1080 operation over Tongariro Forest, stoats reappeared in
		Tongariro/	the centre of the forest and began killing kiwi chicks. So far five of the 11 chicks have been predated, and all in the centre of the treatment
44 Apr-02	9	Таиро	areaRodent numbers remain surprisingly low, with the same tracking index recorded in February as in December (< 2.0%).
			Tuhua: Following the air drop of bait in 2000, there has been several follow up visits to look for rats and cats. The intention being to eradicate
46 Sep -02	11	Tuhua Island	Norway rat and kiore by primary and for cats to all die from secondary poisoning.
			Kokako in the Mangatutu Ecological Area (one of the 14 Key Sites identified in the Kokako Recovery Plan) are to be monitored during an aerial
			1080 carrot operation being undertaken by the Animal Health Board. [3 people] have begun territory mapping kokako pairs at Mangatutu,
45 Jun-02	5	Waikato	which is the first stage of preparation for the 1080 application due later in the year.
46 Sep -02	3	Waikato	[3 people] have just finished monitoring 17 kokako pairs through an aerial 1080 carrot operation at Pureora. All 17 pairs survived the operation.
			The Pureora Field Centre is monitoring radio tagged kaka in the Waipapa Restoration Area to assess the effectiveness of pest control on a
			species sensitive to mustelid predation. Female kakas are followed to nests which are monitored. A sample of chicks have transmitters fitted to
			find out how many survived and where they disperse toA dramatic increase in fledgling mortality has been noted coinciding with a change to
			the pest control regime. Seventeen female chicks were monitored since the breeding season and excluding missing birds, eleven of fourteen
			fledglings have died. Nine of these were probably (some certainly) killed by stoats. And just to show that the predators are not targeting birds
			wearing radio transmitters, one observation included finding the remains of two untagged kaka within the same den as a dead tagged bird. So
			the results of a productive nesting season for kaka in the Waipapa has very much been let down by poor fledgling survival. The pest control
			regime was an aerial 1080 pollard operation in October. While this did offer protection during the time birds were nesting, as pest numbers
47 Dec -02	4	Waikato	increased, the level of protection decreased toward the end of the season when fledgling kaka become vulnerable.
			adult kokako at Mapara. Last year was the first season of predator control at Mapara since 1996-97, and the success of last years poison
			operation combined with a good breeding season has meant that the population has risen from thirty pairs at the end of last season to forty
47 Dec -02	5	Waikato	pairs found during this census

			staff are pleased with the success of recent possum control operations on Mount Pirongia, especially the spin-off benefit for the rare plant <i>Dactylanthus taylorii</i> . A team of DOC staff and three volunteers spent the last week in January on Pirongia's summit monitoring dactylanthus plants that had previously been caged for protection. Most of the 150 caged plants were in good health and flowering profusely, with no sign of possum or rat browse. Especially pleasing was the rare sight of healthy unbrowsed inflorescences erupting from the leaf layer, which enabled
48 Apr -03	4	Waikato	the discovery of eight new plants.
49 Jun -03	5	Waikato	Last winter 17 kokako pairs were monitored during an aerial 1080 carrot bait operation at Mangatutu. All pairs survived the operation. The 2002 spring census of kokako at Mapara found a healthy 40 pairs, an increase of 10 pairs in the six months following the post-breeding census. This followed the first pulse of pest control in four years, an exciting result and a great example of the success of pulse management. Meanwhile, the four-yearly survey of kokako at Waipapa this autumn has found 40 pairs, compared to the 16 pairs in 1999. Further testament to the benefit of pest control
			Nine young tuatara were released on to Stanley Island (Mercury Group) and eleven to Cuvier Island in May and June. These were the captive
50 Sep -03	4	Waikato	bred progeny of adults that were removed from the islands before the rat eradication in the early 1990s
48 Apr -03	8	Wanganui	Egmont National Park: Stoat numbers in the national park appear to have been low since a 1080 drop in August 2002, but with time more mustelids are turning up on trap lines
49 Jun -03	12	Wanganui	A new site for NIBK was found near Makino in the foothills of the western Ruahines. Kiwi call surveys at Ruahine Corner, subject to regular 1080 treatments, have produced a good number of calls
36 Apr-00	3	Wellington	In December white mistletoewas foundat Ketetahi in Tongariro National Park during the establishment of forest health monitoring plotsFurther hundreds were found in January on another monitoring line in the same forest, some plants even occurred within the 20 x 20 m forest plots. Most of the plants were heavily browsed. This species will now be used as an indicator of forest health for an upcoming possum control operation

			20. Delays in Pest Control Due to Poison Use
36 Apr -00	10	Bay of Plenty	A further attempt to eradicate mice from [Mokoia) island is planned for late winter if the funds become available.
			Sixteen of the 17 known populations of Gambusia (mosquito fish) have been eradicated in Tasman District using the fish poison rotenoneIf
		Nelson/	Gambusia are still present in low numbers however, they will be difficult to detectPlans to eradicate the final population have been put on
41 Jun -01	10	Marlborough	hold owing to rising water levels and cold temperatures, which hinder the use of rotenone.
			Inland saline sites: the latest weed – Plantago coronopus - threatening these important ecosystems. It's become very invasive at many sites
			and threatens to wipe out many of the special plants. Biodiversity funding is facilitating a multi-year research programme to test a range of
41 Jun -01	12	Otago	herbicides, some of which we hope will prove effective control agents.
			The five-year program to eradicate Argentine ant from Tiritiri Matangi Island began The bait is laced with 0.01% Fipronil The entire area
			was covered with 1.8 gram baits every 2–3 metres, in grid fashion Tests carried out on the birds on Tiritiri indicated there was no risk to
			them, however, just to be on the safe side, two takahe, which sometimes frequent the target zone, were removed to a pen. Eventually, after
			these birds had taken full advantage of a couple of holes in the fence, they were confined on the correct side of the enclosure! In order to
			prevent pukeko from eating the bait all open areas such as mo wed pasture and roads were baited at night. Argentine ants forage for food 24
			hours a day so night baiting is an option. A range of invertebrates could potentially be killed if they fed on the bait. However, these
			invertebrates would be the species that suffer most through competition with Argentine ants so, if the ants had been allowed to take over
			the habitat these others would have mostly died out anyway The poison was still killing ants two weeks later. Monitoring through March and
			April has shown a 99.98% kill with only very small nests or groups of ants remaining The plan is to treat the infested parts of the island again
42 Oct -01	4	Northland	next season, and hopefully achieve eradication.
		Tongariro/	Evidence is mounting of an exceptionally good kill of possums and rats following the 20,000 ha September aerial 1080 operation. Stoats also
43 Dec-01	7	Таиро	appear to have been controlled. The race between kiwi chicks trying to grow to a safer weight and stoats re-invading the forest is now on.
			An experiment is now underway to find a method of controlling the weedy sedge, Carex ovalis, in the ephemeral tarn at Sedgemere. The
		Nelson/	edge is overwhelming the special communities there, which contain one plant known only from that tarn (Craspedia "tarn") and four other
43 Dec-01	12	Marlborough	tiny threatened plants.
			(Sicyos australis): Both populations consisted of large individuals covering an area of 5'5 metres. Unfortunately the weed Mexican devil was
44 Apr-02	4	Auckland	found growing nearto one of the sites; this will hopefully be targeted for control in the near future.
		Nelson/	Three of the six known gambusia populations have yet to be treated due to a mixture of bad weather, difficulties meeting consent conditions
49 Jun -03	13	Marlborough	and landowner expectations.
51 Dec -03	1	Auckland	Attempts to carry out a rat eradication operation on Moturemu Island for kakabeak protection have been thwarted so far by continuous rain
		Nelson/	The pest fish season is well under way but is being hampered by unseasonably wet and cold weather. One rotenone control operation to
52 Mar -04	17	Marlborough	eradicate gambusia at an orchard dam has been completed.
			The tender documents have been sent out for this eradication attempt on Polynesian rats [on Little Barrier Island] this winter. This project has
			been in the pipeline for several years, but was delayed for a variety of reasons. The way has now been cleared, but only after having to go as
		Little Barrier	far as to the Environment Court. There are no particular problems envisaged with this project, but only time will tell. As with all aerial
52 Mar -04	29	Island	applications of bait, weather patterns will be the big unmanageable. Fingers crossed for a good spell of fine weather
			Beech seed and rat and stoat numbers are all up in the Catlins Coastal Otago staff are developing an operational plan for the Catlins to be
53 Jun -04	15	Otago	able to implement control work when funds become available. The size of the operational area (12,600 ha) makes the planning phase of the

	operation just as difficult as any operational actions. Our focus is the protection of the large number of mohua found here (c. 2,000 birds).
	The key threat to plan for is stoat irruptions, but rats are also going to be part of the plan

			21. Biodiversity Loss Under DoC Care Quotes (except whio, kiwi, kakapo)
			Whenua Hou Nature Reserve (Codfish Island) [is] rat free we decided to hold up to 400 bats in captivity for the duration of the [rat poisoning]
			programme. A trial with 50 bats was carried out first with no loses. So before the bait was dropped 385 bats were caught and put into four
			purpose built aviaries (batteries). Under the watchful eye of a dedicated team they were feed a diet of mealworms that had been feed a
			nutrient supplement. This proved very acceptable to the bats, with most putting on weight and having to be put on a diet. They were all
			weighed and checked every 8 days, which was no small task. During the operation only 9 bats were lost up until the week of the final release in
			late September, when for some unknown reason 45 bats died during the check up, apparently from heat stress. Even with the mass mortality it
			was an amazing achievement to keep that number of bats in captivity for over 3 months. Overseas experts had indicated that we should expect
39 Dec-00	20		a mortality rate of up to 50 percent as a matter of course
			A mouse was reported A full SOP response was launched with 64 bait stations, Elliot traps, Easiset mouse traps, lures, chew sticks etc. We
			were not able to follow the SOP to the letter in terms of frequency of visits as the weather did not play ball. After six weeks we have had
			nothing to confirm any rodents in the area. We have removed the Elliot traps as they were killing diving petrels, spotless crakes and lizards. We
46 Sep -02	13	Aorangi Island	also removed the Easisets as they have killed lizards and giant weta.
			The Hunua kokako: Only 2 of the 4 pairs attempted to breed and both nests were lost in incubation. Four Mapara females were transferred in
37 Jun -00	5	Auckland	last season, and although 1 had paired with a resident male she had been killed during winter by a stoat.
			A covenant within the Carter Holt Harvey managed forest at Woodhill was visited in May to inspect what was once our largest mainland
37 Jun -00	7	Auckland	population of <i>Pimelea tomentosa</i> . Unfortunately fallow deer browse was extensive, and only 4 plants were relocated.
			Our Lepidium flexicaule transfer to Rangitoto has been a little less than successful with 100 out of 150 plants still alive (66%) after 3 months, but
			only 5 out of 150 plants still alive (3.3%), after 10 months. Rangitoto is a harsh environment, and this translocation was always going to be a
41 Jun -01	3	Auckland	challenge.
			fairy tern nestsOne of the female's first clutches failed due to the single egg being buried in a sand storm, and the other female's first clutch
			contained one infertile and one fertile egg. The fertile egg was taken to Auckland Zoo to be incubated, and a replacement egg from Waipu (that
			had been incubated at the Zoo and was ready to hatch) placed in the nest. It hatched successfully but the chick was killed during the sand
			storm. The second clutches have been more successful. The female whom the male favours, has just had her fertile egg taken to the Zoo and
			has been given two fertile eggs from Waipu that are about to hatch. The other female has abandoned her second clutch and the single fertile
43 Dec-01	4	Auckland	egg is at the Zoo being incubated.
			Recent monitoring of kakabeak ( <i>Clianthus puniceus</i> ) on Moturemu Island has revealed that only five of the original individuals planted in August
			2001 have survived. Unfortunately the surviving plants were in poor health, being subject to some form of insect attackanalysis showed that
			plants had a significant amount of fungal growth There were also at least three types of insect attack these attacks may be due to an
			underlying cause rather than being the cause of poor health. Stress from drying or root damage, increased shading from overgrowing trees, or
			some other sudden change, may alter the plant's condition and make it more attractive as a food source. Alternatively, overcrowding of a pest
45 Jun-02	4	Auckland	species on some other neighbouring plants may result in a spillover effect. A planting project with more rigorous monitoring is planned.
			Vegetation and weed control to allow daylight and reduce competition from kakabeak seedlings on Moturemu has just been
49 Jun -03	3	Auckland	completedtransplanted kakabeak did not survive
			We've also been out re-surveying coastal cress (Lepidium oleraceum) sites in the northern Mokohinau Islands. All our records of cress are 10
49 Jun -03	4	Auckland	years or older, so it was time to re-check them. Six individual plants were found on only one stack. Rat eradication some years ago has left the

			islands predator-free and now honeycombed with bird burrows
			coastal shore-cress (Lepidium flexicaule) on Rangitoto: first returned to the island in 1999. All these plants died, though some flowered, seeded, and seedlings grew. Three individuals from another transfer in 2002 are still alive and have flowered. Dense weed infestations seem to hamper
			establishment of the coastal shore-cress on the island. The translocation is now entering a re-assessment phase, during which the Conservancy
			will consider whether it is feasible to continue to try and establish a population of this cress on Rangitoto, or whether Auckland's weedy flora
49 Jun -03	4	Auckland	will win out
			Kakabeak from Moturemu Island (Kaipara Harbour) has been planted at several sites on Tiritiri Matangi Island. One aim is to test results of
			planting near petrel burrows: early observations indicate that those planted round burrows are struggling compared to the other sites.
			Interference by petrels, penguins, and pukekos is proving frustrating! Attempts to carry out a rat eradication operation on Moturemu Island for
51 Dec -03	1	Auckland	kakabeak protection have been thwarted so far by continuous rain
			The one and only naturally occurring sand spurge (Euphorbia glauca) known in the Auckland Area is perched precariously on a cliff on Browns
			Island. Eighty young Euphorbias grown by the Auckland Regional Botanic Gardens were planted in the general vicinity of the wild plant this
			winter. Four months later, only 11 of the 80 are still looking good. Most of the rest seem to have succumbed to snails, which defoliate the plant
51 Dec -03	1	Auckland	and eat at the stems
			damaged by roading contractors: green mistletoe (Ileostylus micranthus) and pale flowered kumeraho (Pomaderris hamiltonii) have been
			destroyed. These incidents occurred despite previous contact with the council about the plants and the council agreeing to avoid damaging the
			plants. Our people once again got together with their people to try and stop this from happening again. Some of the remedies discussed
51 Dec -03	1	Auckland	included better marking of the sites, more regular contact, and maps that can be given to the people driving the machinery
			Despite the hard work of the tern wardens, no fairy tern chicks were fledged in the Auckland Conservancy this summer. One promising
			development was a confirmed breeding attempt at Pakiri Beach, on the east coast near Leigh, the first in 38 years at this site. A pair laid one
			egg which, because of high predator numbers in the area, was transferred to another nest at Papakanui. Unfortunately, the chick disappeared
	_		soon after hatching. Predation by a black-backed gull is suspected. After the initial removal of their egg, the Pakiri pair readily accepted a new
52 Mar -04	5	Auckland	wax-filled dummy egg. This is a hopeful sign, as the old wooden dummies used to date are frequently rejected by the birds
			Staff have recently checked on the survival of the Rorippa divaricata planted on Mokola Island last year. Because most plants had died off
20 0 - 00	_	Davie of Diameter	during winter a spring check for seedlings was necessary. Unfortunately no seedlings were found despite most of the original plantings
39 Dec -00	5	Bay of Plenty	surviving and setting seed.
20 Dec 00	-	Day of Dianty	In August, further planting and monitoring of threatened/uncommon plant species as part of the restoration project on whale Island
39 Dec -00	5	Bay OF Plenty	Continued. Monitoring of those species initially planted last year has revealed mixed survival rates
			surviving plants from 245 plants established were found, although the majority of these set soud before dving off last winter so we have that
41 Jun 01	6	Roy of Planty	further plants will re-established were round, although the majority of these set seed before dying off last whiter so we hope that
41 JUII-01	0	bay of Plenty	Diarcestulis micromega: no plants were located. The wetland babitat has changed greatly since the original discovery with much more water
			present and no grazing. While this management regime has greatly improved the functioning and guality of the wotland it may not have been
41 lun -01	6	Bay of Plenty	so favourable for the orchid
		Buy of Fichty	A second application of Pestoff 20R (12mm diameter, 2-4 gram) Wangapui No. 7 cereal pellets containing 20ppm brodifacoum was dropped
42 Oct 01	6	Bay of Plenty	onto Mokoja Island. As part of the project 25 North Island weka were cantured from the island and transferred to Equipe Farms, pear Rotorua
72 00001	0	Day of Fichty	onto motiona islandisto part of the project, 25 North island were captured from the island and transferred to Equine Family, near Notorida

			as a safeguard against the loss of this population. These birds will be returned to the island once the operation is completed
			Mistletoes: Further T. antarctica seeds have also been planted on Mokoia Island during September and October as the initial planting several
43 Dec -01	4	Bay of Plenty	years ago does not appear to have survived. Several hundred seeds were cellotaped onto fivefinger trees
			resurveying populations of Thelypteris confluens and Cyclosorus interruptuswhich have not been checked for several years. Although the
			work was undertaken in late October several of the original populations could not be found Calochilus robertsonii (Redbearded Orchid): The
			annual survey this year has revealed a large decline on last year's record of 3,268 plants with only 1,042 plants found Caleana minor (Duck
			Orchid):making a concerted effort to get some seed set on the few plants of Caleana minor which still exist at its only known New Zealand site
			in Rotorua. The last few years have been a failure, with insects or other browsers destroying all plants before flowering or seed set could
			occurRorippa divaricata: No new populations were found and several existing populations had died out with the sites being invaded by
43 Dec -01	5	Bay of Plenty	secondary native shrub species and exotic grasses. Eight live plants in total were found, a decrease from 12 known plants last year
			a few clumps of Cyclosorus and Thelypteris were noted in amongst a heavy reed sweet grass infestation. It appears that numbers of both
44 Apr -02	8	Bay of Plenty	species have declinedsince early 90's, probably as a result of weed competition
44 Apr -02	8	Bay of Plenty	survey using volunteers for the elusive Pterostylis micromega record (1984) from the Lower Kaituna wetland. No plants were found
			Lepidium oleraceum and Euphorbia glauca: Tuhua (Mayor Island), approximately 40 plants were established around south-east bay in winter
			2000. Recent assessments indicate approximately 50% are surviving. Slugs, snails, and sparrows are browsing plants. Taumaihi Island, August
			2000 planting of 27 Lepidium oleraceum was assessed in 2001 with no plants found. This site was rechecked in April 2002 with still no plants
47 Dec -02	6	Bay of Plenty	found and only two <i>Euphorbia glauca</i> plants found.
			Four live striped skinks were recovered from a dead miro tree on the Mount Te Aroha access road in late July. These were held in captivity by
			John Heaphy and later transferred to the National Wildlife Centre at Mt Bruce for research purposes on the advice of the Oligosoma Recovery
			Group. One dead striped skink was also recovered. This discovery is one of the few times over the last decade that live striped skink have been
47 Dec -02	7	Bay of Plenty	found in native forest habitat.
			North Island robin – Tuhua (Mayor Island): The opportunity was taken to monitor North Island robin (taken from Mokoia Island) for the first
			time since their release on Tuhua on 17 May 2003 Of the 42 released, a minimum total of 11 birds (26%) were located: six confirmed
51 Dec -03	6	Bay of Plenty	malesone confirmed femaletwo partially identified birdsand two unidentified birds
			Another attempt at translocating Tupeia seed to Mokoia Island was made in December. Several past attempts in recent years using Tupeia
			plants haven't established successfully to date. This latest attempt involved translocating seed onto the fivefinger hosts and covering it with a
52 Mar -04	6	Bay of Plenty	small piece of shadecloth to reduce the chances of losing the seed. A total of 483 seeds were translocated to the island.
			Red-bearded orchid: The annual survey this year has shown a concerning decline to a total of 694 plants; the lowest number recorded since
52 Mar -04	7	Bay of Plenty	1993. There are no obvious reasons for this
			In September, several hundred more Tupeia seeds were planted along the sunny northern side of Mokoia Island on fivefinger trees, in the hope
			of establishing the species on the island. A quick check on the lleostylus seed planted in July revealed that some seed had disappeared from the
55 Dec -04	6	Bay of Plenty	branches, with a few seeds dry and most likely dead
		Big South	In March 1964a ship rat plague was causing immense damage to property and wildlife by the time we reached Big South Cape (five months
53 Jun -04	1	Cape Island	after the first reports) many land bird populations had already been almost totally destroyed
			Leptinella filiformis: Until 1998 it was thought to be extinct 31 plants were planted out at Medbury Reserve monitored in October; six had
44 Apr-02	16	Canterbury	been destroyed and a further four damaged by rabbits. The rabbits were probably attracted to the plants by the newly disturbed ground when

			they were planted. Hopefully the unusually damp summer on the plains has ensured this population will become established enough to
			withstand further attention from the rabbits.
			The orange-fronted parakeet has recently been reclassified from a Category 2 specie to Category 1 – nationally critical The results of the
			2001/2002 parakeet breeding season were fairly positive. The monitored orange-fronted and yellow-crowned parakeet pairs attempted to
			raise two broodsthe first nesting attempt produced both orange-fronted and yellow-crowned parakeet fledglings in March, the second
			attempt produced only yellow-crowned parakeet fledglings in May. The orange-fronted parakeet pair was successful in fledging seven chicks
			from their first nest but unfortunately the second nest was abandoned – it contained five late development stage eggs. The cause of the
			abandonment is not known and the pair did not appear to nest again. There were two individual orange-fronted parakeets monitored. These
			two either did not breed or kept the whole affair well hidden -which this species can easily manage much to the frustration of the monitoring
			team, as neither partners or nests were seen. Further observations in the valley have indicated that breeding has now finished and the
45 Jun-02	12	Canterbury	parakeets are starting to flock for the winter period. [breeding most likely prevented by DoC disturbance]
			Because OFP were regularly seen at several sites in the Hawdon Valley, nest searches were concentrated in this area for most of Januaryvery
			few pairs were located repeatedly. One OFP nest was located when the Hurunui was visited in mid February to check on parakeet activity. The
			nest was climbed and monitored. All five eggs from the nest were removed and flown in an incubator via helicopter and plane to Invercargill
			and delivered to Te Anau Wildlife Park. After candling to determine the ages and conditions of the eggs, they were swapped with five red-
			crowned parakeet's eggs. Four of the eggs hatched and all the chicks fledged, in spite of both foster parent birds dying and the chicks requiring
			hand feeding four times a day for several weeks! The next step is to decide whether the chicks in Te Anau will get to breed in captivity or
49 Jun -03	17	Canterbury	whether they will wait till they get to Te Kakahu (Chalky Island) Lets hope more than one nest can be found next season
			The orange-fronted parakeet (OFP) population crashed in the South Branch of the Hurunui during the rat plague of the 2000/01 summer. The
52 Mar -04	19	Canterbury	species was in dire trouble and the Recovery Group had to re-think its priorities!
52 Mar -04	19	Canterbury	Above all, this work highlights the value of 'habitat' based survey as a cost effective method in dealing with multiple species
			titi/sooty shearwater: a visit in December revealed 10 eggs using a burrow scope. A follow-up visit last week by local DOC staff and Kerry-Jayne
			showed a woeful story. There was no sign of any chicks alive, and four dead chicks were found inside the burrows. Their ripped out throats
			pointed to mustelid predation, confirmed by stoat scats and a small hole forced between the netting and fence posts. The only good news is
			that there is no sign that adults were taken, so they should return to breed next year. Priorities from here are to source funding for a
53 Jun -04	12	Canterbury	professional predator-proof fence. The best efforts of the landowner have not been enough against the wily fence-cracking skills of stoats.
			A collaborative project saw the translocation of two native invertebrates back to Quail Island. A summer student investigated the feasibility of
			translocating several ground beetles (Megadromus guerinii, Holcaspis intermittans, Holcaspis suteri), native slugs (Pseudaneitea maculata) and
			Banks Peninsula tree weta (Hemideina ricta) to the island. The results of her study indicated that the source population of ground beetles and
			native slugs would not be detrimentally affected by the removal of specimens for translocation. The translocation of Megadromus guerinii
53 Jun -04	14	Canterbury	beetles and native slugs (Pseudaneitea maculata) was completed in April, 2004
			The orange-fronted kakariki: a number of the captive juveniles died. These special parakeets are certainly not easy to raise in captivity!
			Following the last Rare Bits story and a couple of bird transfers to and from Te Anau and Christchurch, the first eggs were laid by Valentine and
			Arthur in Te Anau in late August. Unfortunately after four eggs were laid, Arthur mysteriously died and the eggs had to be artificially incubated
			at Burwood Bush. The "supermum" foster parent at Isaacs Wildlife Centre (Christchurch) fortunately came to the rescue again, and her eggs
55 Dec -04	14	Canterbury	were swapped with the orange-fronted kakariki ones. But fate stepped in once more, and she abandoned the nest after three eggs hatched

			(one was infertile). The two remaining chicks are subsequently being hand-reared
		East Coast/	in Tongariro Forest 21 Operation Nest Egg birds have now been released since 1997. Despite at least three deaths (ferret, pig & misadventure)
38 Sep -00	6	Hawke's Bay	and five transmitter failures, the remaining 13 birds are doing well and all remain within various parts of Tongariro Forest.
			The 3 North Island (NI) brown kiwi released into Boundary Stream earlier in the year have had mixed fortunes. In late September the oldest (6
			months) and largest (1300 gm) kiwi was found dead in the reserve. The cause of death is thought to be exposure because the bird was located
		East Coast/	in an exposed part of the reserve. There was no evidence of predation, and a severe southerly storm had hit the reserve at the time bringing
39 Dec-00	7	Hawke's Bay	extreme winds, freezing temperatures, and snow.
			As yet genetic testing has not been done, however based on morphological differences, the Powelliphanta found in the Taraponui Covenant
			and Cashe's Bush are likely to be a species or sub-species endemic to the Maungaharuru Range. In 2000, 25 lives snails and four empty shells
			were found in the 20x25 permanent plots. This year, 53 live snails were found. Three empty shells were found, only one of these had evidence
		East Coast/	of predation. A second population inhabits nearby Cashe's Bush Scenic Reserve. Unfortunately this year's survey has shown a 58% decrease in
46 Sep -02	3	Hawke's Bay	numbers, although only one of the empty shells found shown signs of predation
		East Coast/	Urgent action was taken to save the kakabeak at Bartlett's after a recent visit (the first in several years) discovered it was being badly browsed.
47 Dec -02	10	Hawke's Bay	The tree was sprayed with 'Treepel' to deter goats.
		East Coast/	April saw the fifth anniversary of a 28 robin release into the mainland island. Twelve of these birds were female, of which only five went on to
49 Jun -03	10	Hawke's Bay	breed.
			In April 2003, two Cook's scurvy grass Lepidium oleraceum) seedlings were planted and hundreds of seeds were sown on Whanga-o-kena (East
		East Coast/	Island) near East Cape as part of the restoration plan for the island. We returned to Whanga-o-kena in October 2003 to check on the seedlings
51 Dec -03	8	Hawke's Bay	and seeds, and to plant a further 70 seedlings. Both seedlings were alive but we found no evidence that any seeds had germinated
			Kowhai-ngutu-kaka: planting of this endangered shrub on road cuttings in the East Cape region a mob of goats had been gobbling their way
		East Coast/	through the plants and had even ring-barked the older specimens The lesson from this is that 'extinction events' can occur with disagreeable
52 Mar -04	10	Hawke's Bay	rapidity
44 Apr -02	24	Kapiti Island	Twenty brown teal have been released on Kapiti over the past two years. Of these, six are known to have died
			Korapuki Island: Unfortunately, a large darkling beetle translocated from Middle Island does not seem to be doing at all well. None of the 50
		Korapuki	translocated beetles were found, and it seems likely that they met their fate in the mouths of Duvaucel's geckos, which are abundant on the
44 Apr-02	23	Island	island
			At the end of the breeding season on Mokoia Island there were 20 birds (5 males, 5 females and 10 fleglings). A decision has been made by the
			Conservator in consultation with the Mokoia Island Trust, to remove all remaining hihi from Mokoia and transfer them to Kapiti Island. The
			decision will mean that there is one less island with hihi on it. The reasons for the removal are the lack of an increase in numbers (since
			released in September 1994), the amount of staff resources needed to sustain their intensive management and the financial input required in
45 Jun -02	17	Mokoia Island	managing them. The removal will take place this winter
			Fifteen hihi (eight males and seven females) were transferred from Mokoia to Kapiti, Mt Bruce in mid August till November as a result of a
			management decision to shift them to Kapiti, Mt Bruce to improve their chances of survival. No birds now remain on Mokoia. The Kapiti birds
47 Dec -02	19	Mokoia Island	are being monitored.
			Recent monitoring of mistletoe seed (Tupeia) planting from last season and previous years has still failed to find any plants establishing on the
47 Dec -02	19	Mokoia Island	fivefinger hosts. It also appears that Rorippa divaricata has not reestablished on the island following re-introduction of plants several years ago.

			A February search for the red-throated eye-bright (Euphrasia unnamed), which appears to be confined to the Southern Arthur Range, revealed
		Nelson/	only 1 plant over an area where there were numerous individuals 5 years ago. This gives cause for concern because the reasons for decline are
36 Apr-00	16	Marlborough	not apparent.
			The Mt Stokes mohua population has dropped dramatically. At the end of the 1998-99 summer there were around 90 birds, but now numbers
			are estimated at 27, of which only 6 are female. Predation by ship rats is thought to be the cause of the sudden decline. This may have occurred
			during winter if the birds also roost in cavities. The department had successfully increased mohua numbers on Mt Stokes to a size where the
			risk could be taken to establish a second population on a predator-free island. Four birds, including 1 female, were transferred late last year to
			Nukuwaiata. Plans to move more were scrapped when it was realised there had been a sizeable drop in the population. Seven nesting attempts
		Nelson/	were made over summer but few were successful. Cuckoo parasitism was an added problem. Intensive trapping of stoats had been sufficient to
36 Apr-00	16	Marlborough	protect the birds because rats had almost never been recorded at this altitude on Mt Stokes.
			In January 1999 we transferred 4 female kaka from Whenua Hou (Codfish Island) to the RNRP area in an effort to increase our sample size. One
		Nelson/	of these nested last summer – only a year after her release. Unfortunately, her eggs and a recently hatched nestling were preyed on, probably
37 Jun -00	2	Marlborough	by rats Three of these birds left the RNRP area after their release but remained local. One subsequently died but the other 3 are alive and well.
			Survey work on Arapawa Island confirmed the presence of the protected, undescribed Megadromus beetle at several sites, as well as Wainuia
		Nelson/	and occasional Powelliphanta snails. However, in many areas these species are being heavily hit by pigs which have severely rooted large areas
37 Jun -00	15	Marlborough	of forest floor, overturning large stones in the process.
			A visit to the Matiri Plateau yielded only around 40 individuals of the indeterminate species Melicytus "Matiri", many heavily browsed,
			confirming that this species is threatened Monitoring of 5 Scutellaria novaezelandiae sites has unfortunately recorded a loss from the type
			locality. Celmisia macmahonii has been collected from the Sounds and is now being propagated for population enhancement Fire on Boxing
		Nelson/	Day burnt all 300 recently planted Muehlenbeckia astonii, but the plants are tenacious. Despite being in the ground for only a few months,
40 Mar-01	7	Marlborough	some are showing signs of regrowth when watered by a couple of concerned individuals!
		Nelson/	A Cook's scurvy grass census of the outer Pelorus Sound islands has confirmed that it is present on 6 of the 15 islands and islets visited. This
41 Jun -01	9	Marlborough	year's exceptional drought has killed most plants though
		Nelson/	During the drought, large numbers of Raoulia mats died on the Cloudy Bay Foreshore, which meant that when staff came to survey for the
42 Oct -01	11	Marlborough	recently discovered mat daisy jumper moth, <i>Kiwaia</i> , none could be found.
		Nelson/	
43 Dec-01	12	Marlborough	only one whio was seen in the whole East Branch
			We previously reported on work to measure changes in falcon numbers over 300 km2 in Marlborough. This work was repeated in November.
		Nelson/	While there is evidence of decline since baseline research in the 1970's, the significance of this trend is questionable. It is even more difficult to
43 Dec-01	12	Marlborough	assign possible causes for any decline.
			Takahe: Two chicks have survived to over 50 days on Maud Island, which is a good effort in a summer of massive rainfall. Eric, hung up by his
		Nelson/	leg in a sheep netting fence, would have died if Steve had not found him and administered some TLC. Fences were also responsible for Albert's
44 Apr-02	15	Marlborough	death previously, fuelling debate about whether to take sheep and fences off Maud Island altogether.
			The last surviving female mohua from Mt Stokes, rescued in 1999 just before ship rats wiped out the rest, has finally bred on Nukuwaiata. The
		Nelson/	27 mohua from the dart Valley also released Nukuwaiata in October 2001 have been hard to monitor. Their secretive habits and the difficult
44 Apr-02	15	Marlborough	terrain have resulted in only nine individuals being positively identified from colour bands

		Nelson/	Monitoring of peppercress survival was monitored on two small islands, where it was introduced, in the Moutere Inlet. Its continued survival
45 Jun-02	11	Marlborough	was surprising as recruitment has been very poor and weed competition severe.
			A survey of the Rarangi foreshore Raoulia mats failed to find any of the Cloudy Bay mat daisy jumper, Kiwaia sp. cf. jeanae. This is the second
		Nelson/	year we have failed to detect any of these flightless moths which are known from this site only. Their habitat was severely affected by the big
45 Jun-02	12	Marlborough	drought of 2000/2001 and we are unsure whether the species has survived.
		Nelson/	Craspedia "Leatham" survey showed that the original population of plants has decreased from 67 to 36 rosettes over the last two years The
48 Apr -03	8	Marlborough	large drop in plant numbers has prompted the setup of formal monitoring and careful weed control.
			Mohua: The highlight was two chicks produced by the one surviving Mt Stokes pair who are now over four years old. Hopefully they will
			continue to breed for a few more years. Dart Valley sourced mohua on the island showed no sign of breeding, or mixing with the Mt Stokes
		Nelson/	birds. The low survival rate of these birds (five of the original 27) is a mystery, but may be related to the dryness of the island compared to the
48 Apr -03	10	Marlborough	Dart Valley.
			(Lepidium banksii), is stubbornly resisting all recovery attempts. Of the transplants at five sites, only one appears healthy - seeding prolifically
		Nelson/	for the entire season. A previously unrecognised threat was identified this year: root aphids, which annihilate nursery plants over hot summer
49 Jun -03	13	Marlborough	months
			Also in May, Hamilton's frogs were transferred from Stephens Island to the Inner Chetwode. Native frogs have been successfully shifted on two
		Nelson/	other occasions in the Sounds and we are confident that taking 80 of the 300 animals from this small population will allow the species to
53 Jun -04	12	Marlborough	increase on both islands
			The 5 pairs [of fairy terns] that bred this season in Northland produced a total of 8 nests, including 3 infertile and 3 re-nests. Seven chicks
			hatched. At Waipu 1 chick disappeared after 3 days and 1 of a pair of chicks at Mangawhai disappeared after bad weather. Two transfers were
			carried out in an attempt to increase the number of eggs laid. A chick from a fertile egg, which was transferred to Waipu from Papakanui,
36 Apr-00	7	Northland	disappeared after 2 days. One of 2 eggs, transferred from Papakanui to an infertile nest at Mangawhai, hatched and the chick fledged.
			(Kokako) There were only 3 nesting attempts this season: [only] the third was successful. These chicks were translocated to Puketi, and were
			the only known kokako chicks to be produced in Northland this year. Unfortunately, predators killed both chicks within 2 months of their
37 Jun -00	5	Northland	release.
			Our mawhai Sicyos australis at Otuataua Stonefields is proving to be a little tricky to manage. After re-locating one plant, it was promptly eaten
			by wayward cows. Another then sprung up and was sprayed deliberately by an adjacent landowner. We are waiting and hoping another will
38 Sep -00	4	Northland	appear. Seed collected off the plants were taken to the botanic gardens, but they did not germinate.
			Mistletoe (Tupeia antarctica and Ileostylus micranthus) seed was planted on a range of host trees around the island but so far does not appear
			to have established. However the endangered native cress Rorippa divaricata has faired better with 50% of the original plantings having
38 Sep -00	5	Northland	established and set seed, although half of these have died off over winter.
			The annual brown teal trend counts in January and February were 104 and 92 respectively, a significant drop from 174 and 162 in 2000. A
			handful of birds are 'hanging in' at the southern Bay of Islands. Around Teal Bay and Mimiwhangata, the birds are just holding their own, while
40 Mar-01	1	Northland	the population around Whananaki has taken another serious drop to just 6 birds.
			Another attempt is being made to grow Asplenium pauperequitum from the Poor Knights Islands by spore. This critically endangered fern has
41 Jun -01	1	Northland	previously proved too difficult to grow in cultivation
42 Oct -01	3	Northland	Asplenium pauperequitum: If the plant can be grown in cultivation through to the sporophyte stage, it will be a huge step forward for
			safeguarding this critically endangered species, as all attempts to grow it so far have been unsuccessful.
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			Lepidium flexicaule transfer sites on Rangitoto Island five plants reported previously as having survived from the translocated population of
			150, have died. However, seven seedlings were located, having germinated from the seed produced by the now deceased adult plants. Exotic
42 Oct -01	3	Northland	annual plants seem to be out-competing this native cress there.
			The latest field trip to the Placostylus ambagiosus subsp. Paraspiritus colony confirmed that there was a massive die-off there a couple of years
			back, and there are now fewer snails than when we started protection work in 1988. None of the other colonies have crashed. As the common
			garden snail also occurs here and also suffered a big die-off we are speculating that perhaps a disease event occurred. Norway rats invaded a
			small island (Snail Rock) off Purerua Peninsula about six months ago and seriously depleted the snails (P. hongii) there. Instead of well in excess
43 Dec-01	1	Northland	of 100 snails, just 15 were found this time
			Holloway's crystalwort (Atriplex hollowayi): is now so restricted and in such low numbers that stock, wild horses, and chance summer easterly
			storms are an extreme threat to its survival. Te Paki staff have had a summer -long struggle trying to erect horse-proof temporary fences One
45 Jun-02	3	Northland	hundred and fifty nursery-grown plants were planted out but few survived. Planting methods will be reviewed next year.
			Thirty robust skinks and 41 Matapia Island geckos were transferred from Matapia Island to Motuopao Island in 1997. Monitoring was carried
			out in March 2002, nearly 5 years later. Three robust skinks were caught over 80 trap nights. Two were adults from the original release and the
			other is a juvenile born on the island. No Matapia Island geckos were seen from 2.5 hours spotlighting. This is not surprising as we have had
			very little success spotlighting for Pacific geckos on Lady Alice Island. We will now try using artificial 'gecko homes' (sunken pitfall traps filled
45 Jun-02	4	Northland	with rocks).
			The main threats to Atriplex hollowayi are high tides, and pigs ploughing through flotsam washed ashore. Overall they have been a lucky bunch
48 Apr -03	2	Northland	of plants, with many being missed by horse hooves and pig feeding.
			This year a small success can be claimed for the world's rarest tree on the Three Kings Islands. Botanists visiting the islands to remeasure
			permanent plots established in 1946 discovered that two of the seeds planted last year from fruit harvested from the single remaining wild
			Pennantia baylisiana tree had germinated. Unfortunately one of the tiny seedlings had died, so was collected and confirmed as P. baylisiana at
			Auckland Herbarium. The other seedling was looking unhealthy, so was given some water in the hope that it would survive. Whilst this is not
			exactly ground breaking work, it is significant in that it shows that it may be possible to get the plant growing from seed on the island without
49 Jun -03	3	Northland	having to resort to the risky step of bringing in plants and soil grown on the mainland.
			Shore spurge (Euphorbia glauca), once widespread in the inner Hauraki Gulf, now remains only on Brown's Island. We planted 80 new shore
			spurges on Brown's this winter, all were grown from the seed of cuttings taken from the one remaining natural plant on the island. As our one
			plant failed to flower and produce seed, we removed cuttings from it in 1999. This was a tough decision as the plant only had a few stems. But
50 Sep -03	3	Northland	the gamble paid off, as they flowered profusely and set seed while in cultivation at the Auckland Regional Botanic Gardens
			Three Kings Islands in March 2002, 21 ripe fruit were discovered on the lone surviving wild tree of Pennantia baylisiana. This plant sets very
			little seed because it is essentially a female, so this event was seen as a great opportunity to harvest and plant the seed at selected marked
			sites. During a visit in March 2003, two seeds were found to have germinated at damp sites in the mouth of Tasman Valley, though one had
			died and the other was looking very dry and unhealthy. The tiny seedling was watered. Hopes that this might be the breakthrough that the
			plant needs on the island were renewed with the discovery that the seedling was still alive and starting to form two new leaves in December
52 Mar -04	3	Northland	2003, though the seedling was still tiny and very vulnerable. Staff caged the seedling with wire to protect it
36 Apr -00	19	Otago	Stu Thorne in Wanaka has been back into the Dingle valley checking Pittosporum patulum. To his dismay 3 of the 4 young trees at one site,

			which had all been healthy last May, had been totally defoliated. Possums seem to be the most likely culprit, and a strategy for protecting the
			site is being considered.
			The ongoing situation with mohua is supported in Otago, with nest numbers in the banded population at Lake Sylvan at only two thirds of last
43 Dec-01	16	Otago	spring. Distributional work in the Catlins has revealed gaps in some areas, with the Catlins River Walk birds being right down in numbers.
			Asaphodes stinaria: This is the first Southland record since 1944, despite intensive survey work. In the last three years, a few specimens from
43 Dec-01	16	Otago	South-Westland, Queenstown, and Trotters Gorge (East Otago) have been found. The latter record included a male and female collected
			After years of planning and consultation it finally seems that the joint Ngai Tahu DOC co-management project to reintroduce buff weka into
46 Sep -02	10	Otago	Otago is about to happen. Barring last minute hitches, by the time you read this we should be in the Chatham's catching the chosen few.
			Buff weka: trapping of [30] birds on the Chathams [for translocation to Wanaka] we had one die from systemic gout Most of the birds have
			coped well Four birds have however set their sights on further horizons by swimming off the island. One is definitely still in the locality, two
			others have yet to be tracked and one was killed on the road near Lake Hawea a walk of about 10 km in a straight line but a bit longer as the
47 Dec -02	16	Otago	weka walks in two days.
			At the end of last years breeding a number of adult yellow-eyed penguins were recovered dead along the coast. Additionally during the winter,
47 Dec -02	17	Otago	numbers of YEP seemed to be lower than normal on beaches where counts have been made
			Wanaka staff had a really interesting summer with the weka on Te Peka Karara in Lake Wanaka of the 30 birds bought over from the
			Chathams one died in the aviary after two weeks from systemic gout; nine have swum off the island; two were run over on the Hawea road;
			and one was killed by a falcon. This left us with 19 of the original birds. Seven pairs attempted to breed and three pairs fledged a total of five
			chicks. Nine other chicks were killed near the aviary by other weka. This leaves a total of 24 on the island at the beginning of winter. In addition
			there are still some seven birds running around on the adjacent land. The death of a bird from gout made us reassess the diet for the birds in
49 Jun -03	20	Otago	the aviary. As a result, we removed all additional protein from the diet and replaced it with fruit.
			monitoring of spring annual sites in Central Otago is painting a rather bleak picture, with the apparent loss of several sites which had previously
			supported good populations of Ceratocephala pungens and Myosurus minimus subsp. novae-zelandiaeSome losses have resulted directly
51 Dec -03	16	Otago	from land development
			Weka: A sick chick that we had in the quarantine aviary on Te Peka Karara has died. She was taken off the island to the vet in Wanaka on 21 <sup>st</sup>
			January, returned to the quarantine aviary on the 24 <sup>th</sup> and looked like she was perking up, but then died on the 27 <sup>th</sup> . The provisional diagnosis
			for the dead chick (sent to Massey for autopsy) is that she was probably affected by bacterial peritonitis / air sacculitis, which is basically a huge
			bacterial infection in the abdominal cavity. The cause is unknown, but the symptoms may be exacerbated by stress. The other loss was a
			fledged female who recently had a transmitter attached. She got tangled in vegetation by her harness and perished. There was nothing
52 Mar -04	23	Otago	obviously wrong with the harness settings, so it is likely that it was just very bad luck that she got caught.
53 Jun -04	15	Otago	blue penguins on the Otago Peninsula went through a period of mortality during the moult period
			Final checks have been made for seedling establishment at several sites where grass beneath Olearia trees were sprayed in early spring.
53 Jun -04	17	Otago	Unfortunately we appear to have been unsuccessful this year
			Hunter Valley:. Black-billed gulls have declined dramatically from 581 in 1969 to just 12 in the last survey. This trend is also evident in the
55 Dec -04	17	Otago	nearby Makarora catchment.
			The 2002/03 season has seen a slight decline in the southern New Zealand dotterel population: from 205 birds in 2002, to 192 in 2003 Very
50 Sep -03	17	Southland	high rat numbers and corresponding high cat numbers probably contributed to the decline in the dotterel population this year

			Euphorbia glauca [at Rakiura]this once stable population is in a state of decline. Plants which in the past have had hundreds of live stems,
			now manage only a few live and several dead ones. In some cases the plant has gone. Results indicate that the number of stems for some
			plants has increased, but overall there has been a 50% reduction in live stems While the transfers to Whenua Hou are thriving, two sets of
50 Sep -03	18	Southland	transfers to Fortrose (Southland) have failed.
			The Yellow-eyed Penguin Trust has been conducting an intensive monitoring programme of yellow-eyed penguin breeding success on Stewart
			Island. The news is not fantastic, with most nests having failed. In one spot where three breeding areas are being monitored (Rollers Beach
			through to Long Harry), only two chicks remain alive. The decline appears to be due to a lack of food for chicks. Monitoring will continue until
52 Mar -04	25	Southland	either all the chicks have fledged or died.
			Post-release monitoring of 18 tieke (saddleback) and 18 toutouwai (robins) introduced from Breaksea to Erin Island in Lake Te Anau is winding
			down for the season. Sabrina Taylor (University of Otago PhD student) has been closely following the tieke since their release in early
			September last year. It is believed that at least two pairs of tieke and 5–6 single birds have survived, although no breeding has taken place this
			season. Most of the toutouwai have been re-sighted, they are continuing to breed following an earlier introduction, and some have dispersed
52 Mar -04	26	Southland	to the surrounding Doubtful Islands
		Tiritiri	Six nesting attempts were made by the three female kokako on the island [Tiritiri Matangi]. Shazbot abandoned both nests despite chicks
48 Apr -03	16	Matangi Island	hatching. Kahurangi's two nests failed.
		Tiritiri	Three takahe chicks were produced. This year was the first time Tiri takahe have managed to rear two chicks from one clutch! Another two
48 Apr -03	16	Matangi Island	chicks were produced, but only one of these survived.
			two kaka nests have been detected in Rangataua Forest, both in early incubation. Staff will monitor them as they run the stoat/possum/rat
		Tongariro/	gauntlet over coming months. This work is to monitor kaka nesting success in an area without pest control, to provide a comparison with other
44 Apr-02	9	Таиро	managed areas
			Hypericum aff. japonicum was discovered growing commonly at a temporary wetland, side by side with the common Hypericum japonicum. At
			the time, this wetland was very dry due to the drought conditions, and most wetland plants were suffering. Several plants were collected to be
			grown on for identification purposes, which unfortunately have not yet flowered. However, one plant appears to be Centipedia minima subsp.
		Tongariro/	minima (Nationally Critical), which is assumed to be extinct in Tongariro Taupo Conservancy. The other may be Isolepis basilaris (Serious
49 Jun -03	8	Таиро	Decline), which has not previously been recorded here. Fingers crossed for these discoveries
			In late August 2004, 40 saddleback were captured on Cuvier Island for translocation to Boundary Stream Mainland Island, an 800 ha intensively
			managed reserve in Hawke's Bay. The birds were screened for disease on the island; unfortunately initial results were positive for salmonella.
			Due to the difficultly in testing and treating salmonella, which could take up to 30 days, the saddleback were transferred to Auckland Zoo. The
			retested samples returned positive for citrobacter, a common harmless bacteria which mimics salmonella. The saddleback were then driven to
			Boundary Stream. Two males died through complications in transit. One male and one female were too sick to be released and kept in captivity.
			The female recovered quickly and was released nine days later, while tests showed the male had campylobacter, tapeworms and aspergillosis.
			He is currently being rehabilitated at the Massey Rescue Centre. The remaining 22 females and 14 males were released on 10 <sup>th</sup> September. Ten
			birds had tail-mounted transmitters attached and were monitored weekly. Two weeks after release, four transmittered saddleback were found
			dead following a week of extremely cold southerlies which brought snow to the higher parts of Boundary Stream. Necropsies of two birds
		Tongariro/	found they died of aspergillosis, a common fungal disease that can become fatal when the bird is under stress. One bird had a broken neck, but
55 Dec -04	10	Таиро	mammalian predation was ruled out. The fourth bird was too decomposed to necropsy, but no obvious signs of predation were found. A survey

			six weeks after release estimated 21 birds present, giving a 57% minimum survival rate.
			It was not a good season for NZ dotterel on the Coromandel. At our main management site at Opoutere, only six chicks successfully fledged
			(usually 16-20). The rest of the peninsula suffered similarly owing to a combination of successive easterly storms in November, and higher than
41 Jun -01	4	Waikato	usual egg predation. At Opoutere, only six chicks fledged from 133 eggs laid!
			out in the bush, contractors and Maniapoto Area staff are conducting a post-breeding census of kokako at Mapara, primarily to find out rates of
			female mortality over the breeding season. Over the previous few seasons of no predator management, there has been a high rate of female
44 Apr-02	6	Waikato	loss (presumably due to stoats taking nesting females).
			The Mahoenui Giant weta only have one significant population, which survives in a gorse-covered reserve in the King Country. Over the years
			the weta have been translocated to various sites in an effort to establish a second populationWeta were found at one of the four release sites
45 Jun-02	6	Waikato	visited
			At the end of July, 49 Archey's frogs were transferred from Whareorino Forest in the King Country to Canterbury University. Populations of this
			'Nationally Critical' species have dramatically crashed in some areas with amphibian chytrid fungus being a likely cause. The frogs were
46 Sep -02	3	Waikato	transferred to Canterbury University to establish a captive population
			Whareorino fieldwork also revealed seven dead Archey's and one dead Hochstetter's. All except one of these frogs were found over the 15 x 15
			m grid where grid counts have been carried out since November 2001. The remaining dead frog was found approximately 1 km away on a track.
			On some of the frogs there is evidence of predation, holes in the ventral surface and body contents missing. The frogs will be examined for
47 Dec -02	3	Waikato	evidence of the identity of the predator
			The Archey's frogs taken down to Canterbury University to establish a captive population have continued to receive media attention. Of the
47 Dec -02	4	Waikato	forty-nine frogs taken down, three unfortunately died. The cause of death is not known
			Planning is now in full swing for a second transfer of Archey's frog, this time from representative sites from the Coromandel. Auckland Zoo is
47 Dec -02	4	Waikato	hoping a purpose built facility may be ready early next year to house the three Coromandel sub-populations separately
			monitoring radio tagged kakato assess the effectiveness of pest control on a species sensitive to mustelid predation. Female kakas are
			followed to nests which are monitored. A sample of chicks have transmitters fitted to find out how many survived and where they disperse
			toA dramatic increase in fledgling mortality has been noted coinciding with a change to the pest control regime. Seventeen female chicks
			were monitored since the breeding season and excluding missing birds, eleven of fourteen fledglings have died. Nine of these were probably
			(some certainly) killed by stoats. And just to show that the predators are not targeting birds wearing radio transmitters, one observation
			included finding the remains of two untagged kaka within the same den as a dead tagged bird. So the results of a productive nesting season for
			kaka in the Waipapa has very much been let down by poor fledgling survival. The pest control regime was an aerial 1080 pollard operation in
			October. While this did offer protection during the time birds were nesting, as pest numbers increased, the level of protection decreased
47 Dec -02	4	Waikato	toward the end of the season when fledgling kaka become vulnerable.
			Lepidium oleraceum: Three-monthly monitoring of the Matariki Island population of nau continued last month. The population appears to have
			stabilised again after suffering a net loss detected on the previous visit. Both insect damage and white rust infection are present at low levels,
49 Jun -03	5	Waikato	and plants appear to be in good condition. Weeds are an ongoing problem and probably the greatest threat to this population
			Maniapoto and Waikato Area offices are combining forces to survey the southern Waikato for the last remaining King Country kiwi. It is likely
			that any kiwi remaining will be captured and transferred temporarily to captivity until a suitable predator controlled Waikato site is ready for
49 Jun -03	6	Waikato	their release

			To date we have lost eight of the 38 birds from the pateke release at Port Charles. Autopsy has confirmed that four were killed by cat(s), one
			died from Aspergilosis, one was run over by a car, one was killed by a dog, and one was killed by a cat or stoat. The birds are now dispersing
			some distance from the release site and many have paired with other released birds, or with wild birds. A number of nesting attempts have
			been observed, and nesting is ongoing. The eggs from one nest which was abandoned by mum were taken into 'captivity' (a bantam hen) as a
			short-term measure. However, our hatch window calculations were slightly out, and one hatched. The other eggs either died before hatching or
			were not fertile. The duckling is now in the capable hands of the Otorohanga Zoo, where it will be raised for release back to Port Charles during
51 Dec -03	3	Waikato	the next release of 50 birds in April 2004
			We now have 14 dead pateke from the original 38 released at Port Charles, Coromandel Peninsula. It doesn't sound that great, but this 65%
			survival rate (to date) is above our 50% target for the year. The breeding season is now over and we've seen a few nesting attempts. Only one
			of these attempts produced a fledged duckling, the rest were killed or "disappeared" before they were old enough for us to attach transmitters.
			We are currently redesigning our cat control regime, which should increase survival, especially after the next release of birds on 13 May this
52 Mar -04	5	Waikato	year
			A member of the public recently handed in a Mahoenui giant weta found washed up on a Coromandel beach adjacent to Mahurangi Island. This
			is the first evidence for almost 10 years that a giant weta population is still present on the island. In 1993, almost 300 Mahoenui giant weta
			were translocated from the King Country to Mahurangi Island. However, no weta were found on the island when it was searched in 1999 and it
53 Jun -04	4	Waikato	was assumed that the translocation had failed.
			Re-monitoring of 35 plots of dactylanthus seed planted in 2000 revealed that no plants have as yet established. Likewise with the mistletoe
53 Jun -04	5	Waikato	(Tupeia) seed planting from December 2003.
			The pateke released at Port Charles in May are doing very well. Since the release we have lost three birds to vehicle kills, one to starvation, and
			two to predation; leaving 37 of the 43 released alive and well. We've found two unmonitored ducklings dead; one from predation, the other
55 Dec -04	4	Waikato	caught in a Fenn trap.
36 Apr-00	13	Wanganui	(Celmisia aff gracilenta) Unfortunately Robyn couldn't get any of the seed to germinate
			(Sebaea ovata) Jim Campbell created some new habitat at WhitiauPlants were transplanted to the three newly created scrapes. Then the
36 Apr-00	13	Wanganui	place got flooded and most of the plants died.
			New Zealand dotterelsout on a limb: The pair of dotterels nesting in South Taranaki produced eggs that subsequently disappeared and no
36 Apr-00	13	Wanganui	chicks were observed.
			Whio: Some of the captive-reared birds have been lost through starvation, not from a lack of food resource. We assume the birds starved
			because they did not know how to forage for aquatic invertebrates. Other birds have succumbed to predation from stoats or ferrets, and one of
37 Jun -00	10	Wanganui	the wild caught birds was run over by a car (can you believe it!)
			Stratford Area staff have now taken to earth-moving techniques to create more mudfish habitat! Unfortunately last year's fry transfers were
39 Dec-00	8	Wanganui	not successful, but we hypothesise that the size of fish transferred may be influential.
			Euphorbia glauca ; the transplant site at Cape Egmont was blitzed by a storm early last year, and is battling to recover. Some plants have
39 Dec-00	8	Wanganui	survived, but the good soaking by the sea killed most of the population that had been establishing well.
			Blue duck in Egmont National Park: The planned transfer of further wildhatched and captive-raised birds has been postponed owing to poor
			productivity of both wild and captive populations this season. Survivors from last year's release are still encountered, but the birds had
40 Mar-01	3	Wanganui	transmitters removed because of weight loss problems so monitoring is much more labour intensive.

			Brachyglottis turnerii: Colin Ogle (retired) and I (Graeme) tried in vain to get to the Sugar Loaf Islands again to check weeds and Cooks scurvy
40 Mar-01	4	Wanganui	grass. It's obviously not meant to be.
			Ranunculus recens The transplant sites haven't fared any better. Twenty-odd seedlings were found in one 5'5 cm patch where an adult had
			been the year before. There were also two seedlings just below this clump. But that's all that's left from the original plantings at four 50'50 cm
44 Apr-02	11	Wanganui	sites. More of a worry is that we spotted Chilean rhubarb (Gunnera tinctoria) on the cliffs just below the original site.
			Mt Taranaki: Whilst data are still being analysed, 'walk-though' surveys of North Island brown kiwi in Egmont National Park have produced
			worrying results. Areas known to hold several pairs of birds from previous surveys have revealed only the odd bird. Of key concern was the
45 Jun -02	9	Wanganui	absence of any birds on the western side of the mountain where 10 km of track were walked with no birds recorded.
			Whio: Results of this years translocation efforts to Mt. Taranaki are promising with seven of the ten birds released between January and March
			this year known to be alive. Two birds were killed by stoats. Captive-bred birds have largely remained on the release river whilst wild-bred birds
46 Sep -02	4	Wanganui	have wandered widely around the mountain.
			Following last year's exciting discovery of four live striped skinks (Oligosoma striatum) at Te Aroha (BoP) last year, another specimen has been
			found in TaranakiUnfortunately this animal was deadDespite attempts with a number of trap designs, the elusiveness of this species has
48 Apr -03	8	Wanganui	made survey work impossible. Work with captive animals is ongoing to trial new traps and baits
			Staff have assessed threatened plants planted since 1993 at several protected areasIn Nikau Bush CA, Barkers koromiko (Hebe barkeri -
			planted in 1995), Chatham Island (CI) kakaha (Astelia chathamica) and rautini (Brachyglottis huntii, 1998)Blackberry has proved too strong a
			competitor for some individuals. At Chudleigh CA, Barkers koromiko (1995), CI ribbonwood (Plagianthus chathamicus, 1995 & 1999), CI kakaha
			(1999), rautini (1998) and toetoe (Cortaderia turbaria, 1997 and 1999) have generally done very well. Stock caused some minor losses. At
			Wharekauri CA Chatham Island speargrass (Aciphylla traversii) has been introduced 1998 plantings were blitzed by pigs At Tangepu CA
			results range from excellent to poor. There were stock problems prior to the fence repairUnsuccessful plantings include sowthistle
			(Embergeria grandifolia) and Cook's scurvy grass. Chatham Island forget-me-not (Myosotidium hortensia) were destroyed by cattle and sheep,
			although some individuals have grown well and produced seedlings. CI kowhai (Sophora chathamica) planted in 1994 at Smiths Private Reserve
38 Sep -00	8	Wellington	has done well only on steep lagoon banks.
			Many hundreds of cuttings from the other 3 single trees of O. gardnerii were taken in July 2000. Cuttings from only one of these trees (Te
39 Dec-00	10	Wellington	Kowhai station) have formed roots.
			The single and only known Wairarapa Pimelea tomentosa could not be found during a site inspection in February and is believed to have died.
40 Mar-01	4	Wellington	Three seedlings from last year's seed collection are being grown at Otari
			It was only an average year for Chatham Island oystercatchers with 19 chicks fledging from managed areas and 4 from unmanaged areas. The
			settled weather over the Chathams during the breeding season meant that no nests were lost to storms, however, several chicks died during or
			soon after hatching, which may be a reflection of the very dry conditions. Predation by cats and weka, and stock trampling were the main
			causes of failure. Some good video footage was obtained, especially of 1 bird valiantly defending its nest against a small mob of very inquisitive
40 Mar-01	6	Wellington	sheep
			Hihi: The installation of nest-cam and temperature probes will provide us with more information about hihi incubation and brooding. We will
			be attempting to hand-rear chicks from six days, and if further information is obtained, also from the egg. Due to some adult mortality over
			winter, and for genetic diversity, more birds are required for future seasons. Young chicks taken from Tiritiri Matangi nests will be transferred
42 Oct -01	10	Wellington	to Mount Bruce to be hand-reared. Handreared birds are easier to manage and provide better viewing opportunities for the public, as they are

			less wary.
			Seven pairs of NZ Shore Plover are held for breeding this season. Their offspring will continue to be released onto a predator-free (privately
42 Oct -01	10	Wellington	owned) island in the North Island. Thirteen juveniles from last season were released in May 2001 with at least nine still present in September.
			Six striped skinks (1 pair and 4 males) have recently arrived for research purposes. The research will involve trialing bait types and trap designs
			for use in the field. Striped skinks have rarely been seen in the wild and it is thought they are arboreal and current trapping methods are
42 Oct -01	10	Wellington	insufficient.
			Euphorbia glauca (sourced from captive breeding populations Mana Island) have been planted on Matiu/Somes Island last winter. Forty
44 Apr-02	13	Wellington	individuals were planted and 10 were still surviving as of December 2001
			National Wildlife Centre (Mount Bruce): After a very slow start to the season, 15 shore plover chicks were produced. Two clutches were
			removed for artificial rearing to boost production. These juveniles will soon be released onto Portland Island. The 10 pairs of Campbell Island
			teal have had an enforced break from breeding, while Hihi (stitchbird) have had a difficult season, with four adults succumbing to aspergillosis.
			However, three locally bred chicks survive, along with three "orphaned" chicks from Tiritiri Matangi that have been hand-reared. Surplus birds
44 Apr-02	13	Wellington	not required for breeding stock will be released onto Kapiti Island to boost numbers.
			The resident kokako pair (a captive bred female and Taranaki male) made two unsuccessful nest attempts this season before the female died of
			age related conditions in December (at 15 years old). Five other kokako from Mangatutu were caught and brought to the NWC in August. These
			birds, plus our resident single male make up three pairs for the 'breed on site and release into Mt Bruce forest' programme. Not surprisingly, no
44 Apr-02	13	Wellington	offspring were produced from these pairs as they had new mates and captive life to get used to.
			The wild kaka population at Mt Bruce continues to grow. As the one captive pairs' genes were over-represented among the releasees, they
			were transferred to Wellington Zoo and a new pair brought in All juveniles will join the wild population once they are independentDespite
44 Apr-02	13	Wellington	predator control over 75ha, two adults, two chicks and two fledglings have been lost; stoats look to be the main culprits.
			Six striped skinks were transferred to the NWC in August to allow experiments to guide recovery actions - mainly bait preference and trap
44 Apr-02	14	Wellington	design. Only one female is held at NWC, and no breeding occurred this season.
			A team from the KWST spent up to a week on Kapiti Island mist-netting passerines for transfer to the Sanctuary in Wellington in May. Thirty
45 Jun-02	10	Wellington	bellbirds, 36 North Island robins and 30 whiteheads were released at the sanctuary to boost the numbers transferred last year.
			Kokako are once again flying free in the Mount Bruce Scenic Reserve, following the first-ever release of pairs to the mainland. Two pairs of
			kokako and a large male named "Whakatere," after an ancestor of the donor iwi, Ngati Rereahu, were taken from Mangatutu ecological area in
			the Pureora Forest Park, a stronghold of the species, and released at the Mt Bruce Scenic Reserve. Rereahu iwi from Te Kuiti handed over the
			birds to Rangitaane O Wairarapa at a ceremony at Mt Bruce attended by over 100 people. This is a first step towards re-establishing a new
			North Island population in the wild. Kokako became extinct in the lower North Island some 60 years ago, with the last sighting reported by Mt
			Bruce takahe recovery pioneer Elwyn Welch in the mid-1940s. Once wide-spread throughout the North Island, the species has now vanished
			from the southern part of its former range with just 1200 birds remaining. Over the past 15 years, remnant populations of kokako have been
			managed and have recovered to become viable. DOC Biodiversity Ranger Tony Silbery said to restore kokako to its original geographic range,
			new populations have to be established in areas from which they have vanished. "Even where they are currently surviving, there are
50 Sep -03	10	Wellington	populations on the verge of extinction that need an infusion of new birds. We want to spread the population out more."
			A spring/summer census of Chatham Island shag and Pitt Island shag breeding colonies has revealed an alarming decline since the 1997 census:
52 Mar -04	15	Wellington	Chatham Island shags have dropped by 67%, while Pitt Island shags have dropped by 25%.

			The bird whose demise was reported last issue is now thought to have been the victim of a harrierit is a blow to lose a bird from such a small
			population under any circumstances. Another kokako release, this time two pairs of Mangatutu-sourced birds held at Mount Bruce since 2001,
53 Jun -04	10	Wellington	is planned for late May.
			Possum control is occurring in parts of the Karangarua and Copland Valleys; both of these valleys hold the southernmost populations on the
			mainland of western weka in the conservancy. As part of ongoing monitoring of the effects of 1080 on non-target species 15 adult weka were
			captured in the Copland Valley and had mortality transmitters fitted in December 1999. Pre 1080 weka monitoring has been carried out every
			month to date. Four dead birds have been found in recent months. The first 2 birds found near the Welcome Flat hut were too decomposed to
			establish their cause of death. Two more birds found last week showed the cause of death was predation. Both had puncture wounds on the
43 Dec-01	16	Otago	back of their skulls. Stoats are presumed to be the likely predator.
			A recent check has been made on the status of several threatened plants re-introduced to the island in recent times. Re-monitoring of 35 plots
			of dactylanthus seed planted in 2000 revealed that no plants have as yet established. Likewise with the mistletoe (Tupeia) seed planting from
53 Jun -04	5	Waikato	December 2003 Rorippa divaricata has not been seen on Mokoia for some yearsno sign of Rorippa was found
			Possum control is occurring in parts of the Karangarua and Copland Valleys; both of these valleys hold the southernmost populations on the
			mainland of western weka in the conservancy. As part of ongoing monitoring of the effects of 1080 on non-target species 15 adult weka were
			captured in the Copland Valley and had mortality transmitters fitted in December 1999 Four dead birds have been found in recent months. The
			first 2 birds found near the Welcome Flat hut were too decomposed Two more birds found last week showed the cause of death was
37 Jun -00	16	West Coast	predation.
			Kiwi: Although 1 bird has died from unknown causes the remaining 7 seem to be doing okay despite some weight loss. Only 1 egg, diagnosed as
39 Dec -00	11	West Coast	an early dead embryo or infertile, has been lost since the beginning of artificial incubation in mid August.
			Lepidium flexicaule: the viability of seed was tested by placing 238 seeds in petrie dishes back at the office. Germination has now tailed off,
39 Dec -00	13	West Coast	with 70% of seeds germinating. This confirms that seed viability is not a limiting factor in establishing new sites.
			The Haast tokoeka breeding season started with the first nest detected in July 2002, and ended when the last of the season's 17 nests (from 26
			potential breeding pairs) was abandoned and a broken egg retrieved on 14 January 2003. Seven (41%) nests produced chicks, which were
			caught and fitted with radio transmitters. Three of the chicks were subsequently killed by stoats, one drowned, one is missing (suspected
			transmitter failure) and two are still being monitored: Huia, 600 grams at 100 days old, and Mischief, 570 grams at 89 days old. To date this
			season's chick survival is 29%, compared with 33% in 2001/02. Three times as many stoats were caught during December 2002 and January
			2003 as the same months last year. In total, 222 stoats were caught in the sanctuary during the 2002/03 breeding season compared with 98 in
			2001/02. Unlike the Okarito Kiwi Sanctuary, this increase has not noticeably impacted on chick survival. Kahu, the one remaining monitored
			chick from the 2001/02 breeding season, was 468 days old at his last check He is still living within his parental territory, but spending more
			time in the sub-alpine scrub and beech forest at the bush line. We currently have transmitters on 48 Haast tokoeka: 44 adults (19 female and
			25 male), 2 sub-adults (1 female and 1 male) and 2 juveniles (sex unknown). This equates to 24% percent of the estimated population (200
			birds) within the sanctuary. A comprehensive survey is underway to get a more accurate estimate of the Haast tokoeka population within the
			sanctuaryPlanning is also underway for trialling Operation Nest Egg (ONE) with Haast tokoeka in 2003/04. Our aim is to assess whether ONE
			techniques (used successfully with North Island brown kiwi and rowi) can be implemented with Haast tokoeka. This will provide us with systems
			and experience to draw upon if <i>in-situ</i> management is unsuccessful or threatened in any way, and alternative management options are
48 Apr -03	11	West Coast	necessary

			tawaki (Fiordland crested penguin): The mark-recapture technique is being utilised whereby individual birds are marked for identification, and
			subsequent marked and unmarked birds that are caught are recorded, enabling survivorship calculations to be made for the population. Flipper
			bands were initially used in the study (1994-2001) at both the Jackson Head and Monro Beach colonies. Indications for this work were that
			adult survivorship figures were far lower than expected (70% in 1998), suggesting that bands are either detrimental to survival, or that they are
			falling off. To test these theories, subcutaneous transponders were implanted into a control population of birds at Jackson Head (1998-present)
			to see if survivorship figures differed. Recent survivorship calculations (2003) using a sex-based model suggest that adult and chick survivorship
			is approximately 98% and 44% respectively. These figures are typical of survival in seabirds such as penguins and petrels. It appears that on
50 Sep -03	14	West Coast	average, birds with transponders have a higher survivorship, suggesting that perhaps both theories are true
			shore plover: The reintroduction programme shifted site in mid 1998 following the wind up of large-scale releases on Motuora Island after
			further clear evidence of morepork predating and scaring released birds from this island. The new site, a privately owned island free of
			significant introduced predators and morepork, has subsequently seen three annual releases of shore plover since 1998. (The island is not being
38 Sep -00	15		named to respect the owner's wishes.) In contrast to Motuora, post-release survival and residency has been high at the new site.
			Sebaea ovate: This last known New Zealand population is under severe pressure from encroaching weeds, trespassing stock, habitat
38 Sep -00	16		degradation and possible mineral deficiencies.
			Whenua Hou Nature Reserve (Codfish Island) [is] rat free Non targets were the big issue with emphasis on the bats, fernbirds and kakapo. The
			kakapo were 'relatively' straightforward, if not easy – find another suitable holding island, set up a new infrastructure for the team and move
			the birds for the duration of the programme. This meant timing the eradication for a year when the birds were unlikely to breed so as to
			minimise disturbanceTrials showed that the fernbirds were at significant risk from the bait, although there is debate over whether it is primary
			or secondary poisoning, so to safeguard the subspecies it was decided to establish another population on a nearby island. All the likely islands
			were owned by iwi, most of them being muttonbird islands The first attempt to the only available island at the time failed for reasons we'll
			never know. This meant that we had to eradicate the rats from another island (146 ha Putauhinu) in order to make it suitable for fernbirds. The
			eradication on Putauhinu was successful, and 21 fernbird were transferred in November-December 1997 and have, after some initial concern
			from some people, thrived, rapidly spreading around the island. Back on Whenua Hou it appears that sufficient birds have survived to re-
			populate the island with the first post drop breeding recorded in 1999. The bats were another story, trials indicated that transferring to another
			island was not an option. Eventually we decided to hold up to 400 bats in captivity for the duration of the programme. A trial with 50 bats was
			carried out first with no loses. So before the bait was dropped 385 bats were caught and put into four purpose built aviaries (batteries). Under
			the watchful eve of a dedicated team they were feed a diet of mealworms that had been feed a nutrient supplement. This proved very
			acceptable to the bats, with most putting on weight and having to be put on a diet. They were all weighed and checked every 8 days, which was
			no small task. During the operation only 9 bats were lost up until the week of the final release in late September, when for some unknown
			reason 45 bats died during the check up, apparently from heat stress. Even with the mass mortality it was an amazing achievement to keep that
			number of bats in captivity for over 3 months. Overseas experts had indicated that we should expect a mortality rate of up to 50 percent as a
			matter of course now everybody must play their part in ensuring that rats and other predators do not make it on to the island or any other
39 Dec-00	20		island where they can upset the natural balance.
			staff combined forces, and were assisted by Ngai Tahu and volunteers, in mid October to catch 27 mohua from the Rock Burn area of the Dart
			Riverthe 27 birds were all caught that day. An overnight trip was made to Nukuwaiata on November 7th to check up on the transferred
43 Dec-01	18		populations. In two days of concerted searching using recordings from Mt Stokes and the Dart, only three Mt Stokes birds could be located, all

		adults from the original transfer. No Dart birds could be attracted by the taped calls, and equally disappointing, no sign of breeding by the Mt
		Stokes birds was detected. Since then, ten of the Dart birds have been seen: a group of eight, and another of two. They were both seen near
		the central ridge and quickly flew off to the Western Cliffs, which may be where they are all hiding
		International Ornithological Congress: I almost got sick of hearing the letters "DNA". Nevertheless, nuclear and mitochondrial DNA analyses are
		clearly transforming understanding of phylogeny, mating systems, population structure, dynamics and evolution, and resource use. I left
		bemused that DOC seems to be one of the few major conservation agencies worldwide not to have significant inhouse capability in this
		ubiquitously applicable field of science. Concern for genetic diversity: Many papers reported on the nature and extent of genetic diversity
		within and between existing taxa. A focus on describing and preserving biological diversity at the genetic level was apparent, just as we chart
		our conservation management towards higher and less diverse realms. Many countries are establishing tissue banks to facilitate analyses of
		genetic diversity. Conservation management as experiments: Many papers reported conservation management actions within a distinctly
		experimental framework and with clearly made predictions or hypotheses. What I found so appealing was the way this approach allowed the
		managers to conduct their work in a way that allowed them to draw unambiguous conclusions, they had removed potential ambiguity at the
47 Dec -02	12	design stage.
		The fairy terns haven't had such a good breeding season this year, with only two chicks fledging. They had a run of misfortunes during the
		summer : the first few nests were lost to high tides and predation; one of the first-time breeding pairs abandoned the nest; then one of the
		older breeding females at Waipu disappeared after their first chick hatched, and then the male disappeared also; finally, a storm in early
		January wiped out three of the four remaining nests a newly-hatched chick was accepted and reared by foster parents, though it disappeared
48 Apr -03	3	in a storm a week later.
		In October 2002 the World Conservation Union upgraded the conservation status of whio from Vulnerable to Endangered, while the
		Department of Conservation ranks whio as Nationally Endangered. The Blue Duck Recovery Group predicts that if the present rate of decline in
		whio populations is not addressed, the species will be functionally extinct from much of its present range within the next 10 years. In terms of
		what should be done at each site to protect whio, we are in the all-to-familiar situation of not knowing the answer, but unfortunately not
49 Jun -03	1	having the luxury of time to wait before starting work.

		22. Translocations (except kiwi, whio and kakapo)
48 Apr -03	3	fairy terns: The chicks have now fledged and left their natal site with their parents [eg of family staying together]
37 Jun -00	3	Auckland tree weta have recently been released on Limestone Island; a 40-ha scenic reserve in the upper Whangarei Harbour
		The Middle Island tusked weta (MITW), previously only found on Middle Island (Mercury Island Group), now has two new homes. Over a 2-week
37 Jun -00	3	period, 150 4th instar MITW were released onto Red Mercury and Double Islands
		shore plover: The reintroduction programme shifted site in mid 1998 following the wind up of large-scale releases on Motuora Island after further
		clear evidence of morepork predating and scaring released birds from this island. The new site, a privately owned island free of significant
38 Sep -00	15	introduced predators and morepork, has subsequently seen three annual releases of shore plover since 1998.
		teal were bought back to New Zealand [from Dent Island] Unfortunatelyall the current birds originate from one female. The option of a direct
		transfer from Dent to Campbell was rejected, because the most recent survey (1997) of the island indicated that the population may well be
		below the 30 bird minimum previously believed to be present, and hence sufficient birds are not availableTwelve birds (8 female and 4 male)
		were released in March 1999monitored using backpack transmitters, and all have survived, although we have lost track of a couple that decided
		to go walk-about around the island's rugged southwestern coast. Last summer 5 nests were made with 14 eggs laid, 9 of which hatched but
		unfortunately only 2 ducklings fledged, both from the same clutch. This low survival may have resulted from a dry summer reducing the potential
		duckling feeding areas, or from the sex imbalance, because as soon as a female went down on the nest she became a 'solo mum' as her mate
		moved off to find another female. This is not normal for sub-Antarctic teal where the male usually guards the territory. In May this year12 teal
		were released, 8 males and 4 females All the birds have settled in, although 2 males that went walk-about soon after release have proved
		elusive to track down. This founder stock, when combined with birds direct from captivity, will hopefully provide sufficient birds for the release on
		Campbell, which is planned for 2003. The balt drop is planned to take place in the winter of 2001. If it is successful the main island will see the
20 0 00	1	return of not only teal but also shipe, pipit, and a range of small seabirds that have long been restricted to the small outlying islands. As well, the
39 Dec-00	1	Also losing control of the contine perulation increases the rick of hubridication with Dreven teel
39 Dec-00	2	Also losing control of the captive population increases the risk of hybridisation with Brown teal.
		whenua Hou Nature Reserve (Courish Island) [IS] rat freeand has a unique range of species and habitats, as well as the potential for the
		reintroduction/introduction of many more The eradication on Putauninu was successful, and 21 fembrid were transferred for safety during
20 Dec 00	20	poisoning of whena Houj in November-December 1997 and have, after some initial concern from some people, thrived, rapidly spreading around
39 Dec-00	20	The Island.
41 Jun 01	12	programmes. One of the major positive outcomes of the workshop was strengthening the networks between species recovery group leaders.
41 Jun -01	12	27 mohus from the Pock Burn area of the Dart Piver, the 27 birds were all caught that day. All the birds were colour banded with a unique
		combination so they could be accurately monitored at their new home. The birds were held overnight in transfer hoves in family groups of three to
		six They were fed meal worms and water. Early on the morning of October 17th they were flown to Queenstown Airport, from where they were
		freighted to Christchurch, then Nelson. During the short stop -over in Christchurch they were cared for by Canterbury Conservancy staff. At Nelson
		Airport, a Powhiri was performed as Ngai Tahu handed over the birds to Ngati Kuja. Then they were flown by helicopter to Nukuwajata Island in
		the Chetwodes Group, outer Pelorus Sound. The birds were all apparently unaffected by the rigours of travel, and flew off up the hill from the
		beach, all except one, which hid in the back of its box, waiting for the trip back home. It was obviously unaware that the boxes belonged in Picton
43 Dec-01	18	and wouldn't be going anywhere near Wakatipu for a while. The hidden bird surfaced half way back to Maud Island on the boat when the boxes

			were being cleaned of leftover mealworms, so a quick 180 was performed and the bird made a safe landing on its new home. These birds joined a
			small resident population of Mt Stokes mohua that had been rescued from destruction in December 1999, just prior to the remaining birds in that
			population succumbing to a ship rat irruption (a common theme in many mohua populations recently). An overnight trip was made to Nukuwaiata
			on November 7th to check up on the transferred populations. In two days of concerted searching using recordings from Mt Stokes and the Dart,
			only three Mt Stokes birds could be located, all adults from the original transfer. No Dart birds could be attracted by the taped calls, and equally
			disappointing, no sign of breeding by the Mt Stokes birds was detected. Since then, ten of the Dart birds have been seen: a group of eight, and
			another of two. They were both seen near the central ridge and quickly flew off to the Western Cliffs, which may be where they are all hiding until
			they settle in.
			International Ornithological Congress: Concern for genetic diversity: Many papers reported on the nature and extent of genetic diversity within
			and between existing taxa. A focus on describing and preserving biological diversity at the genetic level was apparent, just as we chart our
47 Dec -02	12		conservation management towards higher and less diverse realms.
			For the third consecutive year, Pycroft's petrel (Pterodroma pycrofti) chicks were transferred from Red Mercury Island to Cuvier Island. The
			purpose of these transfers are two-fold: (1) to re-establish Pycroft's petrel to its former breeding range; (2) to use Pycroft's petrel as an analogue
			species on which to refine transfer and artificial feeding methods, with the aim of later applying them to two endangered seabird species in the
48 Apr -03	1		Chatham Islands, the Magenta petrel, (Pterodroma magentae) and the Chatham petrel (Pterodroma axillaris)
			Local iwihave been monitoring the progress of 300 Sebaea ovata plants which were translocated in November from plants grown from seed
			collected at Wanganui to Pouto. Most plants on their land did well, flowering and seeding before dying off in the dry January weather. The plants
48 Apr -03	3		at the DOC managed site did not do as well. Bud browse at this slightly more disturbed site is being attributed to the gentian feeding plume moth
48 Apr -03	3		Monitoring of McGregor's skinks released onto Lady Alice Island in 1997/98 was carried out for the first time in January.
			In August 2002, 11 Placostylus hongii were released onto Limestone Island in Whangarei Harbour. Monitoring conducted in November and January
			revealed that one snail had died, while the other ten had survived an extremely dry period from August to December. Since early January
			Northland has had an abundance of rain which should ensure their continued survival. The Coppermine Island Placostylus hongii population was
			also surveyed in November. Four 20 sq.m quadrates established in 1997 just prior to the eradication of kiore were resurveyed. The total number
			found had increased from six to seven snails, though there was no evidence of breeding. Other research has shown that they do not breed every
48 Apr -03	3		year and we therefore need to await a 'good' breeding year before a revival is evident.
			Forty two North Island robin (Petroica australis longipes) were released onto Tuhua on 17 <sup>th</sup> May 2003. This is the first release of any animal on to
			the island since it was declared pest-free following the eradication of Norway rats, kiore, cats and pigs three years ago. A team of 18 DOC staff and
49 Jun -03	23		volunteers spent a day on Mokoia Island (in Lake Rotorua) capturing robins in clap traps.
			On the kakapo front 2003/04 has been quiet so far, with no kakapo breeding activity on either Whenua Hou or Te Kakahu. Planning is underway
			to translocate (early July) the majority of the 2002 cohort of juveniles from Whenua Hou to Te Kakahu so that they can become familiar with
			feeding in beech forest and recognise beech (and rimu) masts as stimulus for breeding. In addition, the translocation will structure the population
53 Jun -04	21		to maximise Richard Henry's chance of mating and making a genetic contribution to the next generation of kakapo
			The Hunua kokako: Only 2 of the 4 pairs attempted to breed and both nests were lost in incubation. Four Mapara females were transferred in last
37 Jun -00	5	Auckland	season, and although 1 had paired with a resident male she had been killed during winter by a stoat.
			Our Lepidium flexicaule transfer to Rangitoto has been a little less than successful with 100 out of 150 plants still alive (66%) after 3 months, but
41 Jun -01	3	Auckland	only 5 out of 150 plants still alive (3.3%), after 10 months.

			Things are going according to plan on Hauturu (Little Barrier Island), where 13 juvenile tuatara have been returned after hatching at Victoria
43 Dec-01	4	Auckland	University. This years eggs have just gone down to be incubated
			The Tiritiri Matangi Island kokako population has finished breeding now, after two of the three breeding pairs produced three chicks. Two of these
			(females) went to Puketi Forest and were raised in an aviary there. Next week, one of them will go to Auckland Zoo and the other to Hamilton Zoo
			where they will be paired with Puketi males, which will be caught later. The aim of this is to preserve the Puketi gene pool as much as possible, as it
44 Apr-02	5	Auckland	is believed that there are no longer any female Puketi birds left in the wild.
			There were 71 hihi nests on Tiritiri this year producing 103 fledglings. [staff were] kept extremely busy with cross fosterings, mite infestation
			control and supplementary feedingThe first fourth clutch on Tiritiri was recorded as well as a clutch of six eggs. Five chicks were taken to Mt
44 Apr-02	5	Auckland	Bruce to continue the captive breeding for release programme there.
			Rakitu (Arid) Island. Weka were released on the previously weka free island in 1951, comprising of thirteen adults, all coming from the East Cape.
			The last two wet years appear to have provided a favourable breeding environment. Numbers have increased to a minimum of one hundred and
47 Dec -02	2	Auckland	82 adults, the highest count that has been observed since release and there is potential for a higher number as the birds are currently breeding
			Our translocated population of coastal shore-cress (Lepidium flexicaule) on Rangitoto has been re-visited too. This cress, last seen on Rangitoto
49 Jun -03	4	Auckland	100 years ago, was first returned to the island in 1999. All these plants died, though some flowered, seeded, and seedlings grew.
			In April, Tim Lovegrove successfully transferred 40 popokatea (whiteheads) from Tiritiri Matangi to the Hunua kokako management block. The
			birds were extremely easy to catch and will be monitored by Auckland Regional Council staff. Three unbanded matata (fernbirds) have been seen
			on Tiritiri Matangi, indicating breeding of the birds released in 2001. Recently released pateke on Tiritiri Matangi appear to be doing well, with
49 Jun -03	4	Auckland	ducklings being produced and wife swapping occurring regularly
			Kakabeak from Moturemu Island (Kaipara Harbour) has been planted at several sites on Tiritiri Matangi Island. One aim is to test results of planting
			near petrel burrows: early observations indicate that those planted round burrows are struggling compared to the other sites. Interference by
			petrels, penguins, and pukekos is proving frustrating! Attempts to carry out a rat eradication operation on Moturemu Island for kakabeak
51 Dec -03	1	Auckland	protection have been thwarted so far by continuous rain
			Another booming year of hihi breeding has kept Sandra Jack and Su Sinclair frantic on Tiritiri Matangi, with 155 fledglings expected by the end of
			the season. The birds are perhaps a little too frantic, with an interesting but traumatic observation by Sandra of a female pecking her chick to
			death in the nest! Hihi numbers have increased from the 37 birds first translocated there in 1995 to 109 adults counted at the beginning of this
			season. The two takahe chicks on Tiritiri are continuing to grow and learn their parent's bad habits of cruising the beach looking for visitor's picnics.
			There are four fledgling kokako on Tiritiri (produced from three pairs), and two of three breeding females are currently onto their second clutch.
			There are now six female kokako (including the two juveniles so far from this season) on Tiritiri. A record 12 pateke ducklings have been produced
			on Tiritiri last season and all are still surviving! The 60 tuatara released on Tiritiri last October continue to be seen by visitors during both the night
52 Mar -04	4	Auckland	and day. Eggs have also been found!
			During April, 32 tomtits were taken from the Hunua Ranges and released on Tiritiri Matangi Island. Interestingly, one of the transferred tomtits was
			found in June back in his territory in the Hunua ranges. The distance in a straight line from Tiritiri to Hunua is 63 km. No other birds have appeared
			back at their territories and it is to be hoped that no more will appear back there; the tomtit population are much safer on the predator-free island
54 Sep -04	3	Auckland	of Tiri than the Hunua Ranges
			31 eggs have been laid in the tuatara enclosure and sent off to Victoria University for incubation. Seven of these were laid by one of the first babies
F4 Con 04	1	Auckland	to be produced by these captive adults 10 years ago. Unfortunately, Sue Keall (Victoria University) has reported that all of these seven have failed

36 Apr -00	10	Bay of Plenty	The 40 tieke (saddleback) released onto Moutohora last Marchhave dispersed widely on the island.
			Staff have recently checked on the survival of the Rorippa divaricata planted on Mokoia Island last year. Because most plants had died off during
			winter a spring check for seedlings was necessary. Unfortunately no seedlings were found despite most of the original plantings surviving and
39 Dec -00	5	Bay of Plenty	setting seed.
			In August, further planting and monitoring of threatened/uncommon plant species as part of the restoration project on Whale Island continued.
			Monitoring of those species initially planted last year has revealed mixed survival rates. At the same time another 340 plants of eight species were
39 Dec -00	5	Bay of Plenty	planted this year.
			Nine of the 15 shore plovers transferred to Mangere in January were still present in April. There is some movement of these birds, possibly to Pitt
41 Jun -01	8	Bay of Plenty	Island. A further transfer of up to a further 20 birds is planned for next season.
			Moutohora (Whale Island) threatened plants. This project is a joint initiative between Wildland Consultants Ltd, Naturally Native NZ Plants Ltd and
			Ngati Awa. On a recent trip in September, we planted a further 120 individuals of the ten species previously reintroduced to the island over the last
			two years, and continued to monitor the survival and growth rates of the existing plantings. These include NZ spinach, NZ cress (Rorippa
			divaricata), pingao, hinarepe (sand tussock, Austrofestuca littoralis), tawapou, Cook's scurvy grass, sea spurge and mawhai. Results to date suggest
42 Oct 01	6	Bay of Plenty	that tawapou, parapara, sea spurge, NZ spinach, hinarepe, pingao and Pimelea tomentosa are likely to establish long term viable populations.
			A second application of Pestoff 20R (12mm diameter, 2-4 gram) Wanganui No. 7 cereal pellets containing 20ppm brodifacoum was dropped onto
			Mokoia Island (135.5 ha) by helicopter on 18 September. As part of the project, 25 North Island weka were captured from the island and
			transferred to Equine Farms, near Rotorua as a safeguard against the loss of this population. These birds will be returned to the island once the
42 Oct 01	6	Bay of Plenty	operation is completed
			Mistletoes: Further <i>T. antarctica</i> seeds have also been planted on Mokoia Island during September and October as the initial planting several years
			ago does not appear to have survived. Several hundred seeds were cellotaped onto fivefinger trees with planting locations on each tree being
43 Dec -01	4	Bay of Plenty	carefully marked.
			A census of the introduced tuatara population on Moutohora (Whale Island) took place in February 2002. Thirty-two adults (20 females/12 males)
			were released there in October 1996 from nearby Moutoki Island. The recent census located 8 adults (25% of the released population) and 3
45 Jun -02	6	Bay of Plenty	juveniles. This was the first record of any offspring since the introduction some 5 years ago
			Lepidium oleraceum and Euphorbia glauca: Tuhua (Mayor Island), approximately 40 plants were established around south-east bay in winter 2000.
			Recent assessments indicate approximately 50% are surviving. Slugs, snails, and sparrows are browsing plants. Taumaihi Island, August 2000
			planting of 27 Lepidium oleraceum was assessed in 2001 with no plants found. This site was rechecked in April 2002 with still no plants found and
47 Dec -02	6	Bay of Plenty	only two <i>Euphorbia glauca</i> plants found.
			Four live striped skinks were recovered from a dead miro tree on the Mount Te Aroha access road in late July. These were held in captivity by John
			Heaphy and later transferred to the National Wildlife Centre at Mt Bruce for research purposes on the advice of the Oligosoma Recovery Group.
			One dead striped skink was also recovered. This discovery is one of the few times over the last decade that live striped skink have been found in
47 Dec -02	7	Bay of Plenty	native forest habitat.
			In August, staff spent several days on the Moutohora Island monitoring threatened plant sites established over the last few years. Success is now
			being had, with Sicyos australis, Pimelea tomentosa and Lepidium oleraceum in some of the more sheltered environments on the southern side of
			the island. The coastal tree species parapara and tawapou have been very successful overall. This year, 60 additional plants of previously planted
51 Dec -03	5	Bay of Plenty	Lepidium oleraceum, Austrofestuca littoralis, Sicyos australis and Euphorbia glauca were established at a range of sites across the island

			All six North Island brown kiwi on Moutohora Island are doing well. The latest update is that four of the single birds have now paired up into two
51 Dec -03	5	Bay of Plenty	pairs, and the other two single birds are tending to still roam around. An 18 month old male is incubating an egg
			North Island robin – Tuhua (Mayor Island): The opportunity was taken to monitor North Island robin (taken from Mokoia Island) for the first time
			since their release on Tuhua on 17 May 2003 Of the 42 released, a minimum total of 11 birds (26%) were located: six confirmed males one
51 Dec -03	6	Bay of Plenty	confirmed femaletwo partially identified birdsand two unidentified birds
			Another attempt at translocating Tupeia seed to Mokoia Island was made in December. Several past attempts in recent years using Tupeia plants
			haven't established successfully to date. This latest attempt involved translocating seed onto the fivefinger hosts and covering it with a small piece
52 Mar -04	6	Bay of Plenty	of shadecloth to reduce the chances of losing the seed. A total of 483 seeds were translocated to the island.
			Two female chicks (sexed from pin feathers using DNA techniques) were removed in late January from nests at Kaharoa and taken to Hamilton
			Zoological Society to raise as part of the Puketi Forest kokako population restoration. When they are older, the two kokako will be transferred to
			Mauimua (Lady Alice Island) in the Marotere (Hen and Chicken) Islands group where adult males from Puketi forest will join them Further chick
52 Mar -04	7	Bay of Plenty	capture is unlikely this season as no recent nests have been found, but attempts will continue next breeding season
			Monitoring of the four kiwi released onto Mokoia Island continues; all are doing well. There are no planned releases to the island this year, but
52 Mar -04	9	Bay of Plenty	further survey work this autumn will attempt to locate wild birds in the local district. The future of these birds will be determined after this
			Several hundred further seeds of Ileostylus have been put onto several host trees on Mokoia Island by volunteer John Hobbs. Seed was available
54 Sep -04	5	Bay of Plenty	on the mainland and it is several years since there has been an attempt to establish Ileostylus on the island
			In September, several hundred more Tupeia seeds were planted along the sunny northern side of Mokoia Island on fivefinger trees, in the hope of
			establishing the species on the island. A quick check on the lleostylus seed planted in July revealed that some seed had disappeared from the
55 Dec -04	6	Bay of Plenty	branches, with a few seeds dry and most likely dead
			Big South Cape reported that a ship rat plague: We successfully saved the saddleback through transferring the remnants to neighbouring pest-free
			islands (Kaimohu and Big Stage) The Big South Cape disaster had a massive, enduring impact in shaping future conservation policy and practice
			both within New Zealand, and on islands around the world. Refined over the decades, predator mitigation, eradication and control has now
			reached a level where, with ongoing vigilance, it is practicable to: maintain the rat-free status of islands so as to restore ecological values and
		Big South Cape	processes, and; even reinstate predator-sensitive species such as kaka, kokako and kiwi within non predator-fenced mainland habitats! NB:
53 Jun -04	1	Island	Planning is currently underway to eradicate rats from Big South Cape Island
			The release of 50 Campbell Island teal back onto Campbell Island: Approximately half the birds are "wild-bred" from Whenua Hou (Codfish
			Island), where they were released in 2000 as a holding measure pending the removal of the rats from Campbell. The other half are from Mt Bruce
			and Peacock Springs. The birds will be held on Campbell for approximately two weeks while they regain any weight lost during the transfer, then
54 Sep -04	15	Campbell Island	monitored for two weeks post-release
			OFP nest was located when the Hurunui was visited in mid February to check on parakeet activity. The nest was climbed and monitored. All five
			eggs from the nest were removed and flown in an incubator via helicopter and plane to Invercargill and delivered to Te Anau Wildlife Park. After
			candling to determine the ages and conditions of the eggs, they were swapped with five red-crowned parakeet's eggs. Four of the eggs hatched
			and all the chicks fledged, in spite of both foster parent birds dying and the chicks requiring hand feeding four times a day for several weeks! The
			next step is to decide whether the chicks in Te Anau will get to breed in captivity or whether they will wait till they get to Te Kakahu (Chalky Island).
49 Jun -03	17	Canterbury	continues. Lets hope more than one nest can be found next season
52 Mar -04	19	Canterbury	The orange-fronted parakeet (OFP) population crashed in the South Branch of the Hurunui during the rat plague of the 2000/01

			summerestablishing a population on predator-free Te Kakahu (Chalky) Island became [a] main focus for the 2003/04 seasonIn May 2003 a
			survey of the Poulter Valley discovered a new population of OFPsIn the third week of December 2003 a clutch of seven eggs was flown from the
			Hurunui to Isaac's Wildlife Trust in Christchurch, and placed in the care of a pair of yellow-crowned parakeets. All seven hatched, but one nestling
			died shortly after. The remaining six successfully fledged and have been transferred to a separate, larger aviary with dense native foliage. All six
			birds are healthy, active and noisy! Recently, a nest with nine eggs was found in the Hawdon Valley 8 m off the ground in a mountain beech tree.
			On the 12 <sup>th</sup> of February it contained two eggs and a mass of fluffy young nestlings. One egg had been externally pipped, but the chick had died in
			the egg. The other was close to hatching. Both eggs were flown by helicopter in a portable incubator to Isaac's Wildlife Trust where the live egg
			hatched on Valentine's Day. A second trip was made on the 17 <sup>th</sup> of February to collect the remaining nestlings. Seven nestlings were carefully
			removed from the nest hole and flown to Isaac's to join their recently hatched sibling in the care of the same vellow-crowned pair that raised the
			last OFP clutch. The female accepted the new nestlings without hesitation and appears to be feeding them.
			The 2003/04 breeding season was a very successful one for the kaki team: 15 pairs were located in the wild. Thirteen of these 15 pairs produced
			eggs 109 of which were collected and brought back to the Twizel captive rearing unit. A further 54 eggs were laid by captive pairs, bringing the
			total number of eggs artificially incubated to 163. Of these 123 batched and 101 fledged. Most of these chicks were raised in cantivity for release
			in January/February as juveniles, or in Sentember as sub-adults. In Sentember 2003 45 sub-adults were released into the wild, and in January 2004
			28 juveniles were released. Sixty-three sub-adults are currently held in cantivity: 49 in Twizel and 14 at Peacock Springs (Christchurch). All of these
			sub-adults will be released in Sentember 2004. Overall, releases have resulted in 88% of the wild nonulation being raised in cantivity, and with the
			exception of three wild-hatched birds, all wild pairs now consist of captive-reared adults. There are no obvious differences between captive-reared
			and wild-raised kaki. Future management includes the continuation of intensive cantive-rearing to increase the wild nonulation via releases, and
53 Jun -04	12	Canterbury	from 2005 intensive predator control in the Tasman Valley to reduce adult mortality and increase nost-release survival of released bird
55 Juli -04		Canterbury	another nest has been located in the Hawden valley and five chicks successfully transferred to cantivity at loages Wildlife Trust. There are new a
			total 20 parakoets (12 males and eight females) in captivity. The two Hurupui males in To Apau will seen be joined by a pair of girls from the
			Local 20 parakeets (12 males and eight remales) in captivity. The two Hurdhur males in Te Anau will soon be joined by a pair of girls from the
			really have no evenue of the kakeriki in continity bread successfully a transfer to Chally Island could accur as early as this summer. Further
			really have no excuse! If the kakariki in captivity breed succession, a transfer to charky island could occur as early as this summer. Further
52 Jun 04	12	Contorburg	searches to find the elusive fields in the Poulter valley will continue and preparations for Operation Ark are well underwaysearches for any further
53 Jun -04		Canterbury	nests will continue throughout the winter or for as long as the parakeets continue breeding.
			A collaborative projectsaw the translocation of two native invertebrates back to Quail Island. The trust aims to restore not only native plants, but
			also the invertebrate, bird and lizard communities. Invertebrates provide the greatest biodiversity to any terrestrial community and play critical
			roles in pollination, nutrient cycling, seed dispersal and are an important food source for birds and lizards. A summer student investigated the
			feasibility of translocating several ground beetles (Megadromus guerinii, Holcaspis intermittans, Holcaspis suteri), native slugs (Pseudaneitea
			maculata) and Banks Peninsula tree weta (Hemideina ricta) to the island. The results of her study indicated that the source population of ground
			beetles and native slugs would not be detrimentally affected by the removal of specimens for translocation. The translocation of <i>Megadromus</i>
53 Jun -04	14	Canterbury	guerinii beetles and native slugs (Pseudaneitea maculata) was completed in April, 2004
			In September 2004, 57 sub-adult kaki were released into the wild as three groups consisting of 18, 19 and 20 birds. Each group was released at
			different locations in the Mackenzie Basin, the first two groups on 8 September and the latter group four days later. The birds quickly settled in and
			most were still at the release sites in the following week. They will be provided with supplementary food for the next month or so to make the
54 Sep -04	11	Canterbury	change of lifestyle less abrupt and hopefully increase their chances of survival in the wild

			The orange-fronted kakarikiafter a few rough winter months during which a number of the captive juveniles died. These special parakeets are
			certainly not easy to raise in captivity! Following the last Rare Bits story and a couple of bird transfers to and from Te Anau and Christchurch, the
			first eggs were laid Unfortunately after four eggs were laid, Arthur mysteriously died and the eggs had to be artificially incubated at Burwood
			Bush. The "supermum" foster parent at Isaacs Wildlife Centre (Christchurch) fortunately came to the rescue again, and her eggs were swapped
			with the orange-fronted kakariki ones. But fate stepped in once more, and she abandoned the nest after three eggs hatched (one was infertile).
55 Dec -04	14	Canterbury	The two remaining chicks are subsequently being hand-reared by Darren Page, Isaacs' resident hand-rearing expert
			Mangere Island shore plover transfer: Of the 15 juveniles transferred, five remain on the island and one pair bred successfully. Another 15 birds
44 Apr -02	23	Chatham Islands	were transferred in January 2002.
			Chatham petrel transfer Forty-one Chatham petrel chicks were transferred from natal burrows on South East Island to an artificial colony in a
45 Jun -02	18	Chatham Islands	predator-proofed covenant (Caravan Bush) on Pitt Island.
			Chatham petrel: About 52 of the chicks fledged on Rangatira while another 49 were transferred to Pitt Island before fledging. The chicks were
			transferred before they emerged from their burrows for the first time. They were supplementary fed in their new artificial burrows on Pitt and all
			fledged successfully from there. This was the second Chatham petrel transfer to the 40 hectare predator-fenced portion of Ellen Elizabeth Preece
50 Sep -03	2	Chatham Islands	Conservation Covenant on Pitt Island. Forty-one chicks were transferred last year, and a third transfer is planned for April 2004.
		East Coast/	Boundary Stream: efforts are underway to re-establish a population of NI brown kiwi within the reserve. Over the next 3-5 years eggs will be
36 Apr-00	11	Hawke's Bay	sourced from the Eastern Kaweka ranges with the aim of establishing 10 breeding pairs within this time.
			The first step in the reintroduction of North Island kokako to Boundary Stream has now taken place with the transfer of five pairs from the
		East Coast/	Otamatuna study site in Northern Te Urewera to five aviaries in the Reserve. Six birds were caught on 26 May and transferred to Boundary
42 Oct -01	7	Hawke's Bay	StreamA further four kokako were caught and transferred on 24 July
		East Coast/	April saw the fifth anniversary of a 28 robin release into the mainland island. Twelve of these birds were female, of which only five went on to
49 Jun -03	10	Hawke's Bay	breed
			In April 2003, two Cook's scurvy grass Lepidium oleraceum) seedlings were planted and hundreds of seeds were sown on Whanga-o-kena (East
		East Coast/	Island) near East Cape as part of the restoration plan for the island. We returned to Whanga-o-kena in October 2003 to check on the seedlings and
51 Dec -03	8	Hawke's Bay	seeds, and to plant a further 70 seedlings. Both seedlings were alive but we found no evidence that any seeds had germinated
			Following the success of Mt Bruce's translocation of wild kokako, Boundary Stream's three non-breeding pairs were released in late February, as
			these birds had not bonded after three seasons Forty saddleback will be taken from Cuvier Island off the Coromandel, and released in to the
			reserve in late August. With the exception of a population in the predator-proof fenced Karori Wildlife Sanctuary (Wellington), this will be the first
		East Coast/	mainland population of saddleback. There is an abundance of saddleback on offshore islands and many people agree that now is the time to
53 Jun -04	8	Hawke's Bay	attempt to re-populate the mainland.
		East Coast/	Lepidium oleraceum: More than 70 plants were planted on Whangaokena (East Island) as part of the restoration project there. More than two
54 Sep -04	6	Hawke's Bay	thirds of them have survived and grown, and many have flowered.
44 Apr -02	24	Kapiti Island	Twenty brown teal have been released on Kapiti over the past two years. Of these, six are known to have died
			monitoring the progress of brown teal released on Kapiti Islandnine birds on Kapiti [were found]. All birds appeared to be in good condition.
45 Jun -02	18	Kapiti Island	An unbanded female caught on Kapiti indicates that breeding has occurred here in a previous season.
			Korapuki Island: A recent trip showed populations of reintroduced Whitaker's, robust and Suter's skinks were breeding and slowly colonising new
44 Apr -02	23	Korapuki Island	areas of the island. Tree weta transferred from a neighbouring island are also doing well and making good use of the hundreds of artificial weta

			homes on the island. Unfortunately, a large darkling beetle translocated from Middle Island does not seem to be doing at all well. None of the 50
			translocated beetles were found, and it seems likely that they met their fate in the mouths of Duvaucel's geckos, which are abundant on the island
45 Jun -02	18	Mana Island	monitoring the progress of brown teal released onMana Island. Eighteen birds were located on Mana including a recent brood of ducklings
			At the end of the breeding season on Mokoia Island there were 20 birds (5 males, 5 females and 10 fleglings). A decision has been made by the
			Conservator in consultation with the Mokoia Island Trust, to remove all remaining hihi from Mokoia and transfer them to Kapiti Island. The
			decision will mean that there is one less island with hihi on it. The reasons for the removal are the lack of an increase in numbers (since released in
			September 1994), the amount of staff resources needed to sustain their intensive management and the financial input required in managing them.
45 Jun -02	17	Mokoia Island	The removal will take place this winter.
			Fifteen hihi (eight males and seven females) were transferred from Mokoia to Kapiti, Mt Bruce in mid August till November as a result of a
			management decision to shift them to Kapiti, Mt Bruce to improve their chances of survival. No birds now remain on Mokoia. The Kapiti birds are
47 Dec -02	19	Mokoia Island	being monitored.
			Recent monitoring of mistletoe seed (Tupeia) planting from last season and previous years has still failed to find any plants establishing on the
47 Dec -02	19	Mokoia Island	fivefinger hosts. It also appears that Rorippa divaricata has not reestablished on the island following re-introduction of plants several years ago.
			OSNZ have a trip to Motuora coming up to band and record grey faced petrels. A 38 year old grey faced petrel has been found on Tiritiri Matangi
			Island, originally from Motuora. Three kiwi have been released on to predator-free Motuora from Northland to grow big and strong before being
45 Jun -02	17	Motuora Island	returned to Northland
			The Mt Stokes mohua population has dropped dramatically. At the end of the 1998-99 summer there were around 90 birds, but now numbers are
			estimated at 27, of which only 6 are female. Predation by ship rats is thought to be the cause of the sudden decline. This may have occurred during
			winter if the birds also roost in cavities. The department had successfully increased mohua numbers on Mt Stokes to a size where the risk could be
			taken to establish a second population on a predator-free island. Four birds, including 1 female, were transferred late last year to Nukuwaiata.
			Plans to move more were scrapped when it was realised there had been a sizeable drop in the population. Seven nesting attempts were made over
		Nelson/	summer but few were successful. Cuckoo parasitism was an added problem. Intensive trapping of stoats had been sufficient to protect the birds
36 Apr-00	16	Marlborough	because rats had almost never been recorded at this altitude on Mt Stokes.
		Nelson/	In January 1999 we transferred 4 female kaka from Whenua Hou (Codfish Island) to the RNRP area. One subsequently died but the other 3 are alive
37 Jun -00	2	Marlborough	and well.
		Nelson/	
39 Dec-00	11	Marlborough	Over 600 <i>Carex inopinata</i> plants have been planted at three new sites.
		Nelson/	
40 Mar-01	7	Marlborough	Twenty yellow crowned parakeet have been transferred from the Outer Chetwode (Te Kakaho) to Long Island in Queen Charlotte Sound
		Nelson/	In the Sounds, 86 flax weevil (Anagotus fairburni) and 92 Cook Strait giant weta (Deinacrida rugosa) have been moved from Maud Island to Titi
40 Mar-01	8	Marlborough	Island
			It has been a couple of years, and a drought, since the Leiopelma pakeka transferred from Maud Island to Motuara Island have been checked, so in
		Nelson/	August a team of two visited Motuara Island. They were to spend ten days on the island but returned after just five, having monitored their quota
42 Oct -01	11	Marlborough	of frogs
		Nelson/	The last surviving female mohua from Mt Stokes, rescued in 1999 just before ship rats wiped out the rest, has finally bred on Nukuwaiata. The 27
44 Apr-02	15	Marlborough	mohua from the dart Valley also released Nukuwaiata in October 2001 have been hard to monitor. Their secretive habits and the difficult terrain

			have resulted in only nine individuals being positively identified from colour bands
		Nelson/	Monitoring of peppercress survival was monitored on two small islands, where it was introduced, in the Moutere Inlet. Its continued survival was
45 Jun-02	11	Marlborough	surprising as recruitment has been very poor and weed competition severe.
			Fifteen Leiopelma pakeka frogs were collected off Maud by Bruce Waldman and taken to Canterbury University to help further our understanding
		Nelson/	of frogs in general and of the chytrid fungal disease specifically. Some Maud Island frogs have been developing lesions around their eyes, and this is
48 Apr -03	9	Marlborough	being investigated.
		Nelson/	Mohua: Dart Valley sourced mohua on the island showed no sign of breeding, or mixing with the Mt Stokes birds. The low survival rate of these
48 Apr -03	10	Marlborough	birds (five of the original 27) is a mystery, but may be related to the dryness of the island compared to the Dart Valley.
			In February seven giant weta (Deinacrida rugosa) were taken from Stephens Island with a view to raising their young for release on
			Whakaterepapanui, an island which has been predator-free for four years. In addition, 30 green geckos (Naultinus manukanus) were taken from
		Nelson/	Stephens Island to Victoria University for approved research on comparative energetics of geckos, before being transferred to the island. It is
48 Apr -03	10	Marlborough	hoped the transfer will take place in spring along with Cook Strait tuatara that were displaced by the expansion of frog habitat on Stephens Island.
			A day was spent on Whakaterepapanui Island searching for potential transfer sites for Cook Strait tuatara, Cook Strait giant weta and Marlborough
		Nelson/	green gecko, all from Stephens Island. Excellent sites were found and we hope to move the animals in October 2003. Tuatara fodder, in the form of
49 Jun -03	15	Marlborough	common gecko, was locally abundant.
			Maud Island's 45 year association with kakapo came to an end on 23 May, with the five remaining birds being airlifted to Chalky Island. Richard
			Henry, the only known Fiordland bird, was one of the first kakapo to go to Maud. He was subsequently moved to Little Barrier with a number of
			other birds, in the hope that he would breed successfully. This didn't happen, so in 1998 he was returned to Maud with Flossie. They mated almost
		Nelson/	immediately and produced three chicks. This was the first and last time that kakapo bred on Maud. It is hoped that Fordland's islands will provide
49 Jun -03	15	Marlborough	more of what kakapo need to breed successfully.
			Seventy-seven tuatara were captured inside the newly extended Hamilton's frog area on Stephens Island. The tuatara, along with 44 Marlborough
			green geckos and 44 Cook Strait giant weta, were transferred to nearby Whakaterepapanui. The tuatara were captured from the 900 sqm fenced
			off area over four nights by DOC staff, iwi and volunteers. Victoria University researchers then PIT tagged, blood sampled, weighed and measured
			the tuatara prior to their transfer Twenty-nine of the 44 green geckos were adults collected last summer and taken to Victoria University for lab-
			based researchThe tuatara transfer was largely motivated by the need to remove them from frog habitat, in order to protect the Critically
		Nelson/	Endangered frog from being preyed upon by tuatara. However the timing of the transfer was perfect for the restoration of Whakaterepapanui.
51 Dec -03	13	Marlborough	Another release of tuatara is planned for next year, when around 400 captive-reared juveniles are due to be transferred from Nga Manu Sanctuary
			Wellington conservancy raided the Sounds in early May to take yellow-crowned parakeet and flax weevils for the restoration of Mana Island. Our
		Nelson/	own plans to transfer some of the kakariki to Maud were stalled as once again the island has been requested as a possibility for orange-fronted
53 Jun -04	12	Marlborough	parakeet
		Nelson/	In mid-May great spotted kiwi were translocated from Gouland Downs to Nelson Lakes National Park. This is a first for the species and is seen as
53 Jun -04	12	Marlborough	experimental, with the hope of developing conservation techniques for future use.
			Also in May, Hamilton's frogs were transferred from Stephens Island to the Inner Chetwode. Native frogs have been successfully shifted on two
		Nelson/	other occasions in the Sounds and we are confident that taking 80 of the 300 animals from this small population will allow the species to increase
53 Jun -04	12	Marlborough	on both islands
54 Sep -04	8	Nelson/	With the help of BRU funding, we are embarking on an exciting project to set up a new population of brown mudfish at Puponga near Farewell

		Marlborough	Spit. Currently there is only one known mudfish population in the entire Conservancy, confined to a small part of nearby Mangarakau wetland. The
			population is vulnerable and genetically distinct from brown mudfish elsewhere. The aim is to translocate Mangarakau mudfish fry to a Puponga
			wetland. Before release, they will be given a head start by being "fattened up" in a specially set up tank
			A year after approximately 80 tuatara were translocated from Stephens Island to Whakaterepapanui, we were able to check on some of these
			animals; most were in good condition with some adults having increased significantly in weight. This trip also saw the release elsewhere on the
			island of the 350 juvenile tuatara that had been raised from eggs at Victoria University and as youngsters at Nga Manu Sanctuary Half of the 40
		Nelson/	Hamilton's frogs transferred from Stephens Island to Nukuwaiata in May have been recaptured; all of which were in good condition. We aren't so
55 Dec -04	13	Marlborough	sure about the success of a tit transfer to Maud Island; it's early days and they can be difficult!
36 Apr-00	5	Northland	Kokako: Both chicks from the successful attempt (at Tutamoe) were moved, as late stage nestlings, to a 6-m tall bush aviary in Puketi forest
			fairy terns: A chick from a fertile egg, which was transferred to Waipu from Papakanui, disappeared after 2 days. One of 2 eggs, transferred from
36 Apr-00	7	Northland	Papakanui to an infertile nest at Mangawhai, hatched and the chick fledged.
			3 female and 1 (lucky) male kukupa (New Zealand pigeon) have been released onto Great Island, Three Kings Islands. The birds were soft-released
36 Apr-00	7	Northland	after being held in captivity at the Whangarei Native Bird Recovery Centre for several months, following rescue owing to injury.
			(Kokako) There were only 3 nesting attempts this season: [only] the third was successful. These chicks were translocated to Puketi, and were the
37 Jun -00	5	Northland	only known kokako chicks to be produced in Northland this year. Unfortunately, predators killed both chicks within 2 months of their release.
			The transfer of 30 McGregor's and Mokohinau skinks to Whatupuke Island in the Hen and Chickens Islands was completed in December when 14
			McGregor's and 8 Mokohinau skinks were captured on Sail Rock and Middle Stack respectively and released onto Whatupuke. This completes
			phase two of the planned releases onto the islands. The third phase (releases onto Coppermine Island) is on hold until we determine the fate of
40 Mar-01	1	Northland	those released onto Lady Alice (Morotere) and Whatupuke Islands.
			transfers of Mokohinau skinks to Coppermine Island were on hold until the fate of those released onto Lady Alice and Whatupuke islands was
			determined. Those on Whatupuke (beach release) were captured easily in March while there still has been no sign of those released on Lady Alice
			(forest release). The recommendation, therefore, has been made to proceed with the Coppermine release into a beach site. This will commence in
42 Oct -01	2	Northland	December.
			Lepidium flexicaule transfer sites on Rangitoto Island five plants reported previously as having survived from the translocated population of 150,
			have died. However, seven seedlings were located, having germinated from the seed produced by the now deceased adult plants. Exotic annual
42 Oct -01	3	Northland	plants seem to be out-competing this native cress there.
			The first steps toward a captive rearing programme for the recovery of Puketi kokako is now well on its way, with the chicks from Tiritiri Matangi
			now moved from their Puketi Forest aviary home of the last two months, to Hamilton and Auckland Zoos. They will each be joined at the zoo by a
			male kokako from Puketi. The Kokako Recovery Group and Iwi have sanctioned this work in an attempt to breathe new life and blood into an all
44 Apr-02	3	Northland	male population in Puketi Forest.
			In mid March, two adult male kokako were caught in Puketi Forest and each has joined a hand-reared juvenile female kokako being held at
			Auckland and Hamilton Zoosplacement of any offspring from these pairs. Sites identified as potential options are; Hen Island, Motukawanui
45 Jun-02	3	Northland	Island, and Puketi Forest in descending order of priority.
			Thirty robust skinks and 41 Matapia Island geckos were transferred from Matapia Island to Motuopao Island in 1997. Monitoring was carried out in
			March 2002, nearly 5 years later. Three robust skinks were caught over 80 trap nights. Two were adults from the original release and the other is a
45 Jun-02	4	Northland	juvenile born on the island. No Matapia Island geckos were seen from 2.5 hours spotlighting.

			New Zealand fairy terns had the most productive season on record with a total of eight chicks fledged (six in Northland and two in Auckland). To
			maximise productivity, eggs were swapped between nests at Papakanui Spit in the Auckland Conservancy and the two Northland Conservancy sites
			of Mangawhai and Waipua hectic summer cross-fostering eggs between and within the three breeding areas. Auckland zoo provided incubation
45 Jun-02	4	Northland	facilities for the eggs. The end result was three fledglings at Waipu, three at Mangawhai and two at Papakanui Spit
			Eleven Placostylus hongii snails were released onto Limestone Island recently. These snails originated from Poor Knights Islands in 1992 and were
			kept at Massey University as part of a research programme to see if they could be raised and bred in captivity. The breeding programme was
			successful and the experiment finished, so these snails were surplus and are now part of another experiment to see if they can be successfully
46 Sep -02	1	Northland	established in the wild. One was a survivor from the original collection whereas the other ten are all captive bred animals.
			North Island wekas are being released onto the Russell Peninsula by a group of private individuals to re-establish them in the area. A population
46 Sep -02	1	Northland	existed in the general area from the late 1960's through to the early 1990's when they died out.
			Sebaea ovata, a little gentian which used to grow at coastal wetlands throughout the country, was translocated from seed taken from the last
47 Dec -02	18	Northland	remaining two small sites at Wanganui to a new home on the Pouto Penninsular recently.
			On 13th August, we checked the Placostylus hongii translocated on to Matakohe/Limestone Island in August last year. Nine of the 10 remaining
50 Sep -03	3	Northland	snails were found and all were alive One newly hatched juvenile was found underneath a leaf on a karaka sapling, indicating the snails have bred
			The Critically Endangered annual gentian Sebaea ovata translocated as seed from its home in Wanganui (where it is failing) to the dune wetlands at
			Pouto during summer 2002, surprised everyone by seeding and producing a healthy little population of wild plants in just one year. Te Uri o Hau
			Iwi are particularly proud because having put a lot of time and effort into the project, along with staff, the plant is growing on their land and they
			are now kaitiaki. Once widespread in New Zealand, sebaea seems to be finding its new home much to its liking in the remote and unmodified
			wetlands at Pouto. Jim Campbell (Wanganui Area Office) brought several more trays of seedlings grown in Wanganui north to supplement the wild
52 Mar -04	3	Northland	plants at Pouto
			The fernbirds which were transfered to Putauhinu from Whenua Hou as part of the preparations for the eradication on Whenua Hou and as part of
37 Jun -00	19	Otago	the post eradication restoration on Putauhinu have done very well and are rapidly building up numbers.
			Transfers of Stewart Island robins to Putauhinu and Meeweka (banded rail) to Kundy Island both as part of the ongoing restoration of those islands
37 Jun -00	19	Otago	appear to have been successful
			Another 12 Campbell Island teal have been released onto Whenua Hou and appear to be settling in well despite some boundary disputes with the
37 Jun -00	19	Otago	locals.
			been busy collecting seed of Inland Lepidium species and dispatching them to 'safe havens' around the country. The plan is for ex-situ collections of
44 Apr-02	20	Otago	known provenance to be maintained at several locations and for surplus plants to be available for restoration needs.
			Buff weka: Stu Thorne and Bruce McKinlay are continuing to get ready for this translocation which is programmed for the first half of September.
45 Jun-02	15	Otago	Recent tasks have included developing a disease screening protocol.
			After years of planning and consultation it finally seems that the joint Ngai Tahu DOC co-management project to reintroduce buff weka into Otago
46 Sep -02	10	Otago	is about to happen. Barring last minute hitches, by the time you read this we should be in the Chatham's catching the chosen few.
			Buff weka: trapping of [30] birds on the Chathams [for translocation to Wanaka] we had one die from systemic gout Most of the birds have
			coped wellFour birds have however set their sights on further horizons by swimming off the island. One is definitely still in the locality, two others
			have yet to be tracked and one was killed on the road near Lake Hawea a walk of about 10 km in a straight line but a bit longer as the weka walks
47 Dec -02	16	Otago	in two days.

			buff weka translocated to Te Peka Karara in Lake Wanaka: staff are currently preparing a scoping paper for next year's programme which is likely
48 Apr -03	13	Otago	to include transfers elsewhere. Hands up if you've got a suitable large predator free island in the eastern South Island!
			Wanaka staff had a really interesting summer with the weka on Te Peka Karara in Lake Wanaka of the 30 birds bought over from the Chathams
			one died in the aviary after two weeks from systemic gout; nine have swum off the island; two were run over on the Hawea road; and one was
			killed by a falcon. This left us with 19 of the original birds. Seven pairs attempted to breed and three pairs fledged a total of five chicks. Nine other
			chicks were killed near the aviary by other weka. This leaves a total of 24 on the island at the beginning of winter. In addition there are still some
49 Jun -03	20	Otago	seven birds running around on the adjacent land.
			Buff weka: we regularly meet with members from the Runanga to reach joint agreement on aspects of the project. At this latest meeting we
50 Sep -03	15	Otago	agreed on directions for a second translocation site
51 Dec -03	16	Otago	Weka: one of the larger chicks was observed helping its parents with the care of some smaller chicks [e.g. of family staying together]]
52 Mar -04	23	Otago	This year we have also experimented with translocating propagated Lepidium sisymbrioides into a conservation area near Alexandra.
			Te Peka Karara; the island is extremely popular with day visitors during the summer with picnickers providing entertainment for the weka. Plans
			for further translocations have been deferred as the preferred site is subject to an extensive ongoing possum operation as part of the Animal
53 Jun -04	15	Otago	Health Board's Tb vector control programme.
			Mercury Island Tusked Weta:the discovery of a juvenile Mercury Island Tusked Weta (MITW) on Red Mercury Island. MITW were only found on
		Red Mercury	Middle Island, but over the last two years, captive reared MITW from Auckland Zoo have been released on neighbouring Red Mercury and Double
45 Jun-02	17	Island	Islands. The juvenile found in May is the first sign that MITW are successfully breeding at either site.
36 Apr-00	21	Southland	Six adult brown teal remain alive following capture from southern Fiordland earlier this summer
			Campbell Island teal on Whenua Hou - all 12 birds released in March 1999 are believed to be alive. Four females nested this season producing 14
			eggs from which 9 ducklings hatched. Unfortunately only 2 ducklings have survived possibly because of the very dry season. A further 12 teal will
36 Apr-00	21	Southland	be released this May
			reviewing the six departmental mainland restoration projectsa draft report containing 13 recommendations was submitted in NovemberIn
			particular, the need for strategic policy to guide ecological restoration activities was reinforced. review has been completed and policy is in
			placeOther more far-reaching recommendations – including the establishment of a national restoration experimentare on hold pending
			completion of ecosystem management policy. On the ground, important progress and significant new advances continue to be made at Mainland
36 Apr-00	22	Southland	Islands. Recent reintroductions include robins to the Paengaroa reserve, and kiwi to Boundary Stream.
			Euphorbia glauca is still limited to Cow Island and Masons Bay. A transplant from the precarious Cow Island population has been put on Ulva Island
39 Dec-00	16	Southland	to ensure its future (a storm destroyed the habitat on Cow Island).
42 Oct -01	16	Southland	An update on our Tiritiri translocated populations: we have 33 adult and 66 juvenile hihi and all 10 kokako have been sighted recently
			Mohua: Transferring this species to predator free islands to safeguard it from extinction In October 2001, mohua were transferred from the Blue
44 Apr-02	22	Southland	Mountains, in Otago, to predator-free Ulva Island in Paterson Inlet, Stewart
48 Apr -03	14	Southland	In February 30 rifleman were transferred from Whenua hou (Codfish Island) to Ulva Island Paterson Inlet, Stewart Island
			The decline of mohua (yellowhead) throughout the South Island has prompted a series of transfers to predator-free islands. The most recent
			transfer took place in March when 39 mohua were transferred from Breaksea Island in Fiordland to Whenua Hou (Codfish Island) off the coast of
			Stewart Island. The birds on Breaksea were sourced from the Blue Mountains in 1995. The Breaksea population has thrived in the predator-free
48 Apr -03	15	Southland	environment and has been used as a source population for at least two transfers. Of note was the recapture of four of the original Blue Mountain

			birds, making them at least eight years old. Mohua are expected to do well on Whenua Hou as this island also free of rats and stoats
			The Te Anau biodiversity team recently spent two days at the Doubtful Islands in Lake Te Anau, putting out more stoat traps on Erin Island and the
			mainland. This work was in preparation for a tieke and tautouwai transfer to be undertaken in mid SeptemberThe kiwi that were transferred to
50 Sep -03	16	Southland	the Doubtful Islands last year were also checked during this trip
			Euphorbia glauca [at Rakiura]this once stable population is in a state of decline. Plants which in the past have had hundreds of live stems, now
			manage only a few live and several dead ones. In some cases the plant has gone. Results indicate that the number of stems for some plants has
			increased, but overall there has been a 50% reduction in live stems While the transfers to Whenua Hou are thriving, two sets of transfers to
50 Sep -03	18	Southland	Fortrose (Southland) have failed.
			Fourteen yearling takahe were released from Burwood into the Murchison Mountains on 24 October, and another two birds will be released on 10
51 Dec -03	19	Southland	November.
			Several rock wren pairs in the Mystery Burn and Point Burn of the Murchison Mountains have been monitored over the last few weeks, with the
52 Mar -04	26	Southland	aim of lining up birds for transfer to Anchor Island. This transfer should take place in February, weather permitting
			Post-release monitoring of 18 tieke (saddleback) and 18 toutouwai (robins) introduced from Breaksea to Erin Island in Lake Te Anau is winding
			down for the season. Sabrina Taylor (University of Otago PhD student) has been closely following the tieke since their release in early September
			last year. It is believed that at least two pairs of tieke and 5–6 single birds have survived, although no breeding has taken place this season. Most
			of the toutouwai have been re-sighted, they are continuing to breed following an earlier introduction, and some have dispersed to the surrounding
52 Mar -04	26	Southland	Doubtful Islands
			Dr Brett Gartrell (Massey University) has spent four days on Stewart Island disease screening skinks. This is preliminary work toward a skink
			transfer to Ulva Island in January 2005. Ten common skinks were caught at the Old Sand Neck and screened. Brett has confirmed the presence of a
55 Dec -04	18	Southland	new species of protozoa from two of the skinks
			Thanks to sponsorship from the Ulva Island Trust and lots of hard work by DOC, a new population of Stewart Island fernbird/mätä have been
			established on Ulva Island. Two DOC teams caught 30 fernbirds from around the freshwater area at Mason's Bay and transferred them by
			helicopter to Ulva Island. This is the fifth species to be transferred to predator-free Ulva Island, and hopefully will result in a breeding population
			establishing on Ulva. Stewart Island fernbird/mätä are listed as Nationally Endangered; establishing safe island populations of this species will help
55 Dec -04	18	Southland	guarantee its future on Stewart Island.
			Gunnera hamiltonii Material from the two female plants from the Invercargill area have been translocated to Fortrose Spit. This translocation will
55 Dec -04	19	Southland	improve the security of these populations by providing another site in a managed Crown Reserve
			To date, 180 adult frogs have been identified and tagged in the frog bank on Stephens IslandWe need to know whether frogs are evenly
			distributed across the frog bank if we are to get an accurate enough estimate of numbers to make a translocation to another site. We are looking
			at methods to allow the population to spread naturally outside the present rock scree/bank, and continuing to look for the ultimate translocation
45 Jun -02	18	Stephens Island	site in the Marlborough Sounds.
		Tiritiri Matangi	
43 Dec-01	17	Island	Hihi: Three chicks were removed from nests by staff from the National Wildlife Centre (Mt Bruce) for the captive management programme
		Tongariro/	Several plants were collected to be grown on for identification purposes, which unfortunately have not yet flowered. However, one plant appears
49 Jun -03	8	Таиро	to be Centipedia minima subsp. minima (Nationally Critical), which is assumed to be extinct in Tongariro Taupo Conservancy
55 Dec -04	10	Tongariro/	In late August 2004, 40 saddleback were captured on Cuvier Island for translocation to Boundary Stream Mainland Island, an 800 ha intensively

		Taupo	managed reserve in Hawke's Bay. The birds were screened for disease on the island; unfortunately initial results were positive for salmonella. Due
			to the difficultly in testing and treating salmonella, which could take up to 30 days, the saddleback were transferred to Auckland Zoo. The retested
			samples returned positive for citrobacter, a common harmless bacteria which mimics salmonella. The saddleback were then driven to Boundary
			Stream. Two males died through complications in transit. One male and one female were too sick to be released and kept in captivity. The female
			recovered quickly and was released nine days later, while tests showed the male had campylobacter, tapeworms and aspergillosis. He is currently
			being rehabilitated at the Massey Rescue Centre. The remaining 22 females and 14 males were released on 10 <sup>th</sup> September. Ten birds had tail-
			mounted transmitters attached and were monitored weekly. Two weeks after release, four transmittered saddleback were found dead following a
			week of extremely cold southerlies which brought snow to the higher parts of Boundary Stream. Necropsies of two birds found they died of
			aspergillosis, a common fungal disease that can become fatal when the bird is under stress. One bird had a broken neck, but mammalian predation
			was ruled out. The fourth bird was too decomposed to necropsy, but no obvious signs of predation were found. A survey six weeks after release
			estimated 21 birds present, giving a 57% minimum survival rate. There are five known pairs that are courtship feeding, but none are known to have
			attempted to nest.
36 Apr-00	8	Waikato	Over the past 10 or so years weta have been transferred to 4 sites. Survival at these sites appears not to have been good
			Time has been spent recently on Middle Chain Island (Alderman Group) surveying lizards. Middle Chain is the only one of the five islands in the
37 Jun -00	7	Waikato	group to have had rodents present, and we are working to identify what species are missing so they can be reintroduced.
			Project Kiwi applied for a transfer permit to release weka from Pakatoa Island into the core area of Kuaotunu in the Coromandel. Weka were
37 Jun -00	8	Waikato	present there as recently as 15 years ago and would be a welcome addition to the species list at Kuaotunu.
			Middle Island tusked weta: Ian Stringer has completed another stint on Middle Island, continuing his MITW research. The 150 young weta released
39 Dec-00	4	Waikato	on Red Mercury and Double Islands seem to be doing well.
39 Dec-00	5	Waikato	Lepidium oleraceum: Next year we also plan to take seed from these plants, and to propagate them for planting on other nearby islands.
			Kikuyu grass control on the Matariki Islands has been undertaken to protect the Cook's scurvy grass population occurring there. This population
42 Oct -01	5	Waikato	appears to be expanding. Seed is to be collected and propagated for transfers to nearby islands.
42 Oct -01	5	Waikato	The transfers of Middle Island tusked weta from the captive population to Red Mercury and Double Islands were a major success
			Pycroft's petrel Graeme Taylor and team (BRU) are due to return in April from Cuvier Island where they have been releasing Pycrofts petrels. This
			is year two of a three-year project to take petrels from Red Mercury to re-populate the sea-bird depleted Cuvier. This years release of 100 birds
			has been a success with 95% survival of translocated birds. The team will return to Cuvier next year to release some more petrels and monitor the
44 Apr-02	6	Waikato	success of the project.
			Chytrid fungus has been positively identified from dead frogs in the main Archey's populations on the Coromandel and the King Country. Plans are
			afoot to capture 50 Archey's frogs from the King Country in April to begin a captive population as a safeguard against their possible extinction in
44 Apr-02	7	Waikato	the wild
			The Mahoenui Giant weta only have one significant population, which survives in a gorse-covered reserve in the King Country. Over the years the
45 Jun-02	6	Waikato	weta have been translocated to various sites in an effort to establish a second populationWeta were found at one of the four release sites visited
			At the end of July, 49 Archey's frogs were transferred from Whareorino Forest in the King Country to Canterbury University. Populations of this
			'Nationally Critical' species have dramatically crashed in some areas with amphibian chytrid fungus being a likely cause. The frogs were transferred
46 Sep -02	3	Waikato	to Canterbury University to establish a captive population
47 Dec -02	4	Waikato	The Archey's frogs taken down to Canterbury University to establish a captive population have continued to receive media attention. Of the forty-

			nine frogs taken down, three unfortunately died. The cause of death is not known			
			Middle Island tusked weta are breeding on both Red Mercury and Double Island. A previous trip to Red Mercury found weta breedingconfirming			
			that the translocations from nearby Middle Island have been successful. Mahoenui Weta have been found breeding at a private gorse reserve in			
48 Apr -03	5	Waikato	the King Country, where they were transferred several years ago.			
			Pateke (brown teal) previously destined for Okarito are soon to be released at Port Charles, Moehau Kiwi Zone. The original transfer plan had to be			
			re-routed due to the high numbers of stoats at the Haast kiwi zone. The Moehau Kiwi Zone is a safer option for the release of the captive-bred			
48 Apr -03	5	Waikato	birds.			
			On 26 July 38 pateke were released at Port Charles, in the northeast CoromandelSo far we have lost signal from two of the 38 transmitters,			
50 Sep -03	4	Waikato	although the birds are still around. Four birds have been lost to predation: one likely to a dog, and the others to a cat(s).			
			Nine young tuatara were released on to Stanley Island (Mercury Group) and eleven to Cuvier Island in May and June. These were the captive bred			
50 Sep -03	4	Waikato	progeny of adults that were removed from the islands before the rat eradication in the early 1990s			
			pateke release at Port Charles The eggs from one nest which was abandoned by mum were taken into 'captivity' (a bantam hen) as a short-term			
			measure. However, our hatch window calculations were slightly out, and one hatched. The other eggs either died before hatching or were not			
51 Dec -03	3	Waikato	fertile. The duckling is now in the capable hands of the Otorohanga Zoo, where it will be raised for release back to Port Charles			
51 Dec -03	4	Waikato	Sixty tuatara were successfully transferred from Middle Island (off the Coromandel coast) to Tiritiri Matangi in October			
			We now have 14 dead pateke from the original 38 released at Port Charles, Coromandel Peninsula. It doesn't sound that great, but this 65%			
			survival rate (to date) is above our 50% target for the year. The breeding season is now over and we've seen a few nesting attempts. Only one of			
52 Mar -04	5	Waikato	these attempts produced a fledged duckling, the rest were killed or "disappeared" before they were old enough for us to attach transmitters			
			A member of the public recently handed in a Mahoenui giant weta found washed up on a Coromandel beach adjacent to Mahurangi Island. This is			
			the first evidence for almost 10 years that a giant weta population is still present on the island. In 1993, almost 300 Mahoenui giant weta were			
			translocated from the King Country to Mahurangi Island. However, no weta were found on the island when it was searched in 1999 and it was			
53 Jun -04	4	Waikato	assumed that the translocation had failed.			
			A recent check has been made on the status of several threatened plants reintroduced to the island in recent times. Re-monitoring of 35 plots of			
			dactylanthus seed planted in 2000 revealed that no plants have as yet established. Likewise with the mistletoe (Tupeia) seed planting from			
53 Jun -04	5	Waikato	December 2003 Rorippa divaricata has not been seen on Mokoia for some yearsno sign of Rorippa was found			
			Pateke: In the first month post-release, four birds lost their transmitters through the weak link in the new harnesses failing. This seems to be due			
			to the wrong thread type being used, which has been rectified. No more harnesses have failed, and four birds are still being seen regularly at the			
			release site, so all are alive and well. Three birds have been killed so far this season; two to vehicle strikes, and one to apparent starvation (wing fat			
			analysis showed no wing fat) although it was found minus its head. Either this bird died from starvation and was scavenged, or was caught due to			
54 Sep -04	4	Waikato	being slow from starvation. Three release/release pairs and two release/wild pairs are almost certainly breeding.			
			The pateke released at Port Charles in May are doing very well. Since the release we have lost three birds to vehicle kills, one to starvation, and			
			two to predation; leaving 37 of the 43 released alive and well. We've found two unmonitored ducklings dead; one from predation, the other			
55 Dec -04	4	Waikato	caught in a Fenn trap.			
36 Apr-00	13	Wanganui	(Sebaea ovata) Some plants have also been transplanted to Hawken's Lagoon.			
			Besides the S. ovata the following species of national or local importance have also established in the scrapes: Isolepis basilaris, Mazus			
36 Apr-00	13	Wanganui	novaezeelandiae subsp. impolitus, Selliera rotundifolia, Myriophyllum votschii, and Limosella lineata.			

38 Sep -00	7	Wanganui	If habitat enhancement proves successful further trials of translocating [mudfish] fry will follow					
			Euphorbia glauca ; the transplant site at Cape Egmont was blitzed by a storm early last year, and is battling to recover. Some plants have survived,					
39 Dec-00	8	Wanganui	but the good soaking by the sea killed most of the population that had been establishing well.					
			Captive striped skinks Oligosoma striatum have been transferred from the Stratford Area Office to the National Wildlife Centre at Mt. Bruce. The					
			striped skink captive management plan is largely completed and will be coordinated by the National Wildlife Centre. If breeding is successful, the					
			maximum population required is about 20 animals. The object of the breeding will be to have a self-sustaining population in captivity. In the short					
			term, animals will be used for palatability trials for baits in various trap designs. Further attempts will be made over the spring and summer to					
42 Oct -01	9	Wanganui	locate a wild population.					
			A recent census of the reintroduced New Zealand robin population at Paengaroa Mainland Island revealed that the eight known breeding females					
44 Apr-02	11	Wanganui	survived the breeding season with a further female being located at the end of the season.					
47 Dec -02	10	Wanganui	Sebaea ovata, a small gentian of ephemeral dune wetlands, has been translocated to three locations on the Pouto Penninsula near Dargaville.					
36 Apr-00	4	Wellington	Ileostylus micranthus grown from seed (from Benge Park, Wellington) translocated to Te Marua Bush					
			Eight takahe on Kapiti Island comprise 2 pairs, each with 1 chick and 2 singles who failed to pair and live at opposite ends of the island. The					
36 Apr-00	16	Wellington	introduction of Green (from Burwood) was successful					
			Staff have assessed threatened plants planted since 1993 at several protected areas. Eighteen species (of several provenances) have been planted.					
38 Sep -00	8	Wellington	Plants were raised from seed collected locally and grown at Motukarara Nursery and then at the Chatham DoC nursery					
			Brown teal: bred through the Ducks Unlimited network Ten female and 5 male birds will be released on Kapiti Island at three sites: Okupe Lagoon,					
38 Sep -00	9	Wellington	Rangatira and Wharekohu. On Mana Island, 5 female and 3 male birds will be released in the newly created Waikoko wetland.					
39 Dec-00	9	Wellington	The pygmy button daisy (Leptinella nana) has been translocated to Mana Island, and the first assessment shows they are surviving quite well.					
			Dean Baigent-Mercer, a member of the Wellington Plant Conservation Network, has collected and grown a number of rare plants for introduction					
39 Dec-00	10	Wellington	to Matiu/ Somes Island					
			Mana Island staff are delighted to report that the Wellington drought has not deterred the brown teal released there in August from realising their					
40 Mar-01	5	Wellington	fitness Unfortunately, the dry conditions have resulted in the ducklings having an unsavoury upbringing - on the island's sewerage pond!					
			transfer of 15 juvenile shore plover from South East Island to Mangere Island Ten individuals are regularly present on Mangere 1 month post-					
			release. The birds were held in a temporary aviary for 2 weeks before being released. One bird died, probably from starvation, while in the aviary.					
			The remains of another released bird were found on adjacent Pitt Island in association with cat signThe fate of the 3 other birds is unknown. No					
40 Mar-01	5	Wellington	released birds have returned to South East Island.					
			Kokako Only one of the two Taranaki males left, and the captive-bred female produced one male chick last season. This juvenile was transferred to					
			another captive institute to pair with their single female. Any offspring produced from these two pairs will be released onto Tiritiri Matangi to					
			maintain the Taranaki line. Five kokako caught from Mangatutu were brought into captivity in beginning of August. These birds, plus our resident					
42 Oct -01	10	Wellington	single male, make up the three pairs to be used in the "breed on site and release" into Mount Bruce forest project.					
			Hihi: Due to some adult mortality over winter, and for genetic diversity, more birds are required for future seasons. Young chicks taken from Tiritiri					
42 Oct -01	10	Wellington	Matangi nests will be transferred to Mount Bruce to be hand-reared. Juveniles produced this season will be released onto Kapiti Island.					
			Seven pairs of NZ Shore Plover are held for breeding this season. Their offspring will continue to be released onto a predator-free (privately					
42 Oct 01	10	Wellington	owned) island in the North Island. Thirteen juveniles from last season were released in May 2001 with at least nine still present in September.					
44 Apr-02	13	Wellington	Euphorbia glauca (sourced from captive breeding populations Mana Island) have been planted on Matiu/Somes Island last winter. Forty individuals					

			were planted and 10 were still surviving as of December 2001				
			National Wildlife Centre (Mount Bruce): After a very slow start to the season, 15 shore plover chicks were produced. Two clutches were removed				
			for artificial rearing to boost production. These juveniles will soon be released onto Portland Island. The 10 pairs of Campbell Island teal have had				
			an enforced break from breeding, while Hihi (stitchbird) have had a difficult season, with four adults succumbing to aspergillosis. However, three				
			locally bred chicks survive, along with three "orphaned" chicks from Tiritiri Matangi that have been hand-reared. Surplus birds not required for				
44 Apr-02	13	Wellington	breeding stock will be released onto Kapiti Island to boost numbers.				
			The wild kaka population at Mt Bruce continues to grow. As the one captive pairs' genes were over-represented among the releasees, they were				
			transferred to Wellington Zoo and a new pair brought in. This pair has produced four fledglings and a second brood of three young chicks. All				
44 Apr-02	13	Wellington	juveniles will join the wild population once they are independent				
			Six striped skinks were transferred to the NWC in August to allow experiments to guide recovery actions - mainly bait preference and trap design.				
			Striped skinks are dubbed New Zealand's most elusive skink as they are so hard to find in the wild, possibly as a result of inadequate trapping				
44 Apr-02	14	Wellington	techniques. Only one female is held at NWC, and no breeding occurred this season.				
			Fairy prion chick transfer: Forty fairy prion chicks were transferred from Takapourewa (Stephens Island) to Mana Island in January, to develop and				
44 Apr-02	14	Wellington	test techniques for larger transfers planned for the next two years.				
			A team from the KWST spent up to a week on Kapiti Island mist-netting passerines for transfer to the Sanctuary in Wellington in May. Thirty				
45 Jun-02	10	Wellington	bellbirds, 36 North Island robins and 30 whiteheads were released at the sanctuary to boost the numbers transferred last year.				
			Kokako are once again flying free in the Mount Bruce Scenic Reserve, following the first-ever release of pairs to the mainland. Two pairs of kokako				
			and a large malewere taken from Mangatutu"Even where they are currently surviving, there are populations on the verge of extinction that				
50 Sep -03	10	Wellington	need an infusion of new birds. We want to spread the population out more."				
			Olearia gardneri seed was collected at Koromiko, Kowhai Bush and Tyneside, and sent to Otari/Wilton Bush. Plants grown in previous years were				
52 Mar -04	13	Wellington	planted at Springhill and at Kaumingi Stream, where the landowner is keen to protect the species.				
			Translocations of a number of species to new sites has occurred including Olearia gardneri, Urtica linearifolia and Coprosma pedicellata planted at				
			Carter Scenic Reserve, Olearia gardneri, Coprosma wallii and C. pedicellata planted at Lowes Bush, and a new population of Muehlenbeckia astonii				
52 Mar -04	13	Wellington	planted at Cape Palliser				
			The Campbell Island teal currently have 17 ducklings, three females are incubating a further seven eggs between them, and two eggs are in an				
			incubator. These ducklings are intended for release on Campbell Island later this year. We have five shore plover fledglings to date. The big news is				
			that our Western Reef male has produced a chick. This bird was brought into captivity in June 2003, when he was the last remaining bird from a				
			recently discovered population that had declined from 21 birds for unknown reasons. He paired with one of our resident females, and they				
			produced three clutches of eggs: the first was infertile, the second had one fertile egg which didn't hatch and the third clutch had two fertile eggs,				
			one of which hatched in mid-February. We currently have two fledgling hihi (stitchbird) ready for release onto Kapiti Island. In addition, one female				
			is raising her second brood, and a second female incubating two eggs. It is another busy season for kaka, with 15 chicks in Mount Bruce Scenic				
			Reserve (Pukaha restoration project) and another two in our aviary. Three females are re-laying, and two females that haven't been seen for quite				
			a while have turned up again, and so may have chicks as well. Our captive kokako pair has not bred this season, but we are delighted to announce				
			that two of the six kokako released into the reserve in July/August 2003 paired up and produced two fledglings. Unfortunately one of the other				
			kokako was killed by an as yet unidentified predator Six captive-reared brown kiwi were also released into the reserve in December 2003, and all				
52 Mar -04	13	Wellington	appeared to be thriving until one was found drowned during recent floods.				

			A team is currently on Rangatira selecting juvenile black robins for transfer to Pitt Island. This time the transfer will be conducted in February			
52 Mar -04	15	Wellington	(rather than September) and we will be transferring juveniles rather than adults.			
			The third and final transfer of fairy prion chicks from Takapourewa (Stephens Island) occurred on 17 January 2004. All 100 chicks thrived on a diet			
			of sardine smoothies, and all had fledged by 6 February. The 100% fledging success for 240 chicks over the period of 2002–04 is a tribute to the			
52 Mar -04	15	Wellington	dedicated contractors and volunteers organised and funded by the Friends of Mana Island Society			
			Also from the 17 January Takapourewa (Stephens Island) transfer, 48 speckled skinks were transferred and released on Mana Island, bringing lizard			
52 Mar -04	16	Wellington	diversity on the 217 ha island to 10 species			
			The bird whose demise was reported last issue is now thought to have been the victim of a harrierit is a blow to lose a bird from such a small			
			population under any circumstances. Another kokako release, this time two pairs of Mangatutu-sourced birds held at Mount Bruce since 2001, is			
53 Jun -04	10	Wellington	planned for late May.			
			Preparations are underway to capture pregnant short-tailed bats from the Tararua Ranges so that their offspring can form the basis of a new			
55 Dec -04	11	Wellington	population on Kapiti Island			

			23. Risks to Translocated Animals Quotes
			shore plover: Eighteen months after the first release, residency was 53%. In October 1999 territorial aggression levels rose noticeably,
			particularly amongst the first release birds. Three birds dispersed to the mainland between September 1999 and February 2000 following this
			increase in social pressure. Over the last month shore plover at the second release site have began squabbling and drawing boundary lines on
38 Sep -00	15		their patches for the coming season.
			4 teal Twelve birds (8 female and 4 male) were released in March 1999. These were monitored using backpack transmitters, and all have
			survived, although we have lost track of a couple that decided to go walk-about around the island's rugged southwestern coast. In May this
			year12 teal were released, 8 males and 4 females All the birds have settled in, although 2 males that went walk-about soon after release
39 Dec-00	1		have proved elusive to track down.
			Over the next two months conservancies can expect to be invaded by a couple of vets obsessed with wildlife disease. The Wildlife Health SOP
			roll-out is imminent and coming to a conservancy near you! Kate McInnes (Kakapo Vet & Wildlife Health Co-ordinator) will be running a
			morning session on how to use the SOP, followed by a team effort in the afternoon with Richard Jakob-Hoff (Auckland Zoo vet and media
			star) demonstrating techniques for collecting health samples. Kate is hoping that some of the fame will rub off on her, but failing that, the
53 Jun -04	21		session promises to be educational and enlightening anyway
			Kiwi: Of the 28 viable eggs Seventeen of the successfully hatched chicks have, or are being, raised at Warrenheip Two chicks died of
			unknown causes. To date, eight of the 2002/03 juvenile kiwi have been released back into the Tongariro Forest One chick released into the
			forest at 950 grams has since been predated by a stoat. One of the newly released kiwi, at only 8 months old, made its way across the
51 Dec -03	6	Bay of Plenty	Whanganui River and was found 2 km north of the river.
			kaki: In September 2003 45 sub-adults were released into the wild, and in January 2004 28 juveniles were releasedfuture management
			includes the continuation of intensive captive-rearing to increase the wild population via releases, and from 2005, intensive predator control
53 Jun -04	13	Canterbury	in the Tasman Valley to reduce adult mortality and increase post-release survival of released birds
		East Coast/	in Tongariro Forest 21 Operation Nest Egg birds have now been released since 1997. Despite at least three deaths (ferret, pig &
38 Sep -00	6	Hawke's Bay	misadventure) and five transmitter failures, the remaining 13 birds are doing well and all remain within various parts of Tongariro Forest.
			The 3 North Island (NI) brown kiwi released into Boundary Stream earlier in the year have had mixed fortunes. In late September the oldest (6
		East Coast/	months) and largest (1300 gm) kiwi was found dead in the reserve. The cause of death is thought to be exposure because the bird was located
39 Dec-00	7	Hawke's Bay	in an exposed part of the reserve.
			Monitoring of kiwi in the Kaweka Forest Park for Operation Nest Egg In September, after weeks of searching on foot and a good fly over in a
		East Coast/	fixed wing, we suspect that the transmitter on Raina (the oldest female in Boundary Stream) has failed. Seven of the ten kiwi, which were
43 Dec-01	8	Hawke's Bay	released in the Reserve are currently being monitored.
			The kokako captive breeding: Bird health has remained good over the past year with only one bird getting worms where he lost some excess
			weight and then got healthier. This was until the end of July when one pair contracted what we think was avian pox, they went off their food,
			developed lesions and then scabs around their eyes and on their wattles and became very irritated and scratchy to the extent that they
		East Coast/	rubbed the top of their beaks to the bone. We caught one of the birds and took lots of samples but nothing came out positive. A week later
46 Sep -02	4	Hawke's Bay	another bird in a different aviary also began to show the same symptoms, but her partner didn't.
		East Coast/	April saw the fifth anniversary of a 28 robin release into the mainland island. Twelve of these birds were female, of which only five went on to
49 Jun -03	10	Hawke's Bay	breed.

			Mohua: The highlight was two chicks produced by the one surviving Mt Stokes pair who are now over four years old. Hopefully they will
		Nelson/	continue to breed for a few more years. Dart Valley sourced mohua on the island showed no sign of breeding, or mixing with the Mt Stokes
48 Apr -03	10	Marlborough	birds. The low survival rate of these birds (five of the original 27) is a mystery
			Following the March release of 10 whio into the Flora catchment, six have died from apparent starvation. Due to their poor condition, the
			remaining four birds were taken back into captivity until spring. The starvation problem is possibly due to too little food being available and
		Nelson/	poorly developed feeding behaviour in the captive-raised birds. Interestingly, despite low invertebrate numbers recorded in a recent survey
54 Sep -04	9	Marlborough	of the Flora, wild whio are currently surviving there.
•			These chicks were translocated to Puketi, and were the only known kokako chicks to be produced in Northland this year. Unfortunately,
37 Jun -00	5	Northland	predators killed both chicks within 2 months of their release.
			Since October 1997 we have had six kiwi returned to Trounson as part of Operation Nest Egg: one was found dead in 1999 at 12 months old,
			cause unknown but suspected to be a mustelid; one had a tx failure at 14 months old; two have left Trounson, and one of these birds was
41 Jun -01	2	Northland	found 20 km into Waipoua forest.
			Brown teal About a month ago, seven captive-reared brown teal were released at a small flock site near Whananaki. About five wild teal were
			present around the time of the release, and it was hoped that the released birds would assimilate into the wild population. Predator control
			had been in place for several months by the time of release, and supplementary food was provided. A month on and six of the seven are still
			alive. The one death is suspected to have been harrier predation, because no other sign was evident on the skeleton. After initially being
			pushed out by the resident birds, two birds, a male and a female, have rejoined the flock and are looking much more settled. The other birds
41 Jun -01	2	Northland	remain close to adjoining feeding areas.
	-		
			This year a small success can be claimed for the world's rarest tree on the Three Kings Islands: it may be possible to get the plant growing
49 Jun -03	3	Northland	This year a small success can be claimed for the world's rarest tree on the Three Kings Islands: it may be possible to get the plant growing from seed on the island without having to resort to the risky step of bringing in plants and soil grown on the mainland.
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		Matangi Island	of a bad limp. Unfortunately his group have rejected him since his return (despite his being the 'Alpha' bird in this group for the previous
			three years).
			Out in the field the news is not so good. Of the 13 Operation Nest Egg releases put back into Tongariro Forest, only 5 to date still carry
			functioning transmitters. One chick dropped its transmitter and 4 have had gear failure meaning we have lost track of them. One bird has
			been killed by a pig, another by a ferret, and 1 died from a ruptured liver after what we can only describe as misadventure because the bird
		Tongariro/	was in perfect health otherwise – there were no visible sign of predation. Although the total of confirmed deaths from the 13 released chicks
36 Apr-00	11	Taupo	is only 3, there is the possibility of more among the 5 'missing' birds.
			The 2002/03 breeding season started well with the hatching of Rainbow, our first 2nd generation chick from Te Aukaha and Koha, an
			Operation Nest Egg pair. Sadly, Rainbow died at Warrenheip Two Tongariro kiwi chicks died at Warrenheip: one due to poor health and the
			other drowned The kiwi chicks are released into Tongariro Forest when they are around 1200 grams in weight. To date, eight have returned
			to the forest, one of these was predated by a stoat. The others are doing well and gaining weight. Six eggs were taken to Rainbow due to nest
		Tongariro/	abandonment and were hatched successfully. The new chicks were then released back into their parental territory in Tongariro forest. Three
49 Jun -03	9	Таиро	were predated by stoats, one died of hypothermia and two are still alive.
			In late August 2004, 40 saddleback were captured on Cuvier Island for translocation to Boundary Stream Mainland Islandunfortunately initial
			results were positive for salmonella retested samples returned positive for citrobacter, a common harmless bacteria which mimics
			salmonella. The saddleback were then driven to Boundary Stream. Two males died through complications in transit. One male and one female
			were too sick to be released and kept in captivity. The female recovered quickly and was released nine days later, while tests showed the
			male had campylobacter, tapeworms and aspergillosis The remaining 22 females and 14 males were released on 10 <sup>th</sup> September. Ten birds
			had tail-mounted transmitters attached and were monitored weekly. Two weeks after release, four transmittered saddleback were found
			dead following a week of extremely cold southerlies Necropsies of two birds found they died of aspergillosis, a common fungal disease that
		Tongariro/	can become fatal when the bird is under stress. A survey six weeks after release estimated 21 birds present, giving a 57% minimum survival
55 Dec -04	10	Таиро	rate.
			Following three years of aviary confinement, the last two captive kokako pairs were released in AugustThere are four known pairs, two
		Tongariro/	juvenile females, and one un-paired female. There have been no further losses after an adult male and juvenile female were found dead in
55 Dec -04	10	Таиро	July, immediately after heavy snowfall, with signs consistent with predation/scavenging by a rat or stoat.
			The kiwi chick rearing enclosure was formally opened on 19 February, and Tester, a 2-week old chick, was liberated into the enclosure to test
			the 'kiwi-proofing' of the internal subdivision fences. Unfortunately, Tester died in strange circumstances several weeks after release. Tester
37 Jun -00	7	Waikato	was from a 2-egg clutch, but its siblingwas killed by a stoat about the same time.
			To date we have lost eight of the 38 birds from the pateke release at Port Charles. Autopsy has confirmed that four were killed by cat(s), one
			died from Aspergilosis, one was run over by a car, one was killed by a dog, and one was killed by a cat or stoat. The birds are now dispersing
			some distance from the release site and many have paired with other released birds, or with wild birds. A number of nesting attempts have
			been observed, and nesting is ongoing. The eggs from one nest which was abandoned by mum were taken into 'captivity' (a bantam hen) as a
			short-term measure. However, our hatch window calculations were slightly out, and one hatched. The other eggs either died before hatching
			or were not fertile. The duckling is now in the capable hands of the Otorohanga Zoo, where it will be raised for release back to Port Charles
51 Dec -03	3	Waikato	during the next release of 50 birds in April 2004
55 Dec -04	4	Waikato	The pateke released at Port Charles in May are doing very well. Since the release we have lost three birds to vehicle kills, one to starvation,

			and two to predation; leaving 37 of the 43 released alive and well. We've found two unmonitored ducklings dead; one from predation, the
			other caught in a Fenn trap.
			At Moehau Kiwi Sanctuary, 12 chicks have hatched since 1 October. Four of those are Operation Nest Egg (ONE) birds which were released at
			four weeks of age. One chick was found dead from an unknown nest (cause of death unknown) and one has dropped a transmitter. All others
55 Dec -04	5	Waikato	are OK.
			Twelve blue ducks have been released in Egmont National Park over three separate releases (1986, 1989, and 1991). Of these, 7 were captive-
			reared juveniles and 5 were wild adult birds from the Manganui-a-te-ao River. Over the past couple of years 3 male birds were known to have
36 Apr-00	13	Wanganui	survived including a captive raised bird from the first release.
			shore ploverout on a limb: A shore plover was seen at the Waiongana estuary, some 14 km north of New Plymouth. The bird was bred at
36 Apr-00	13	Wanganui	NWC – hatched on 30/11/98 and transferred to Portland Island on 12/7/99.
			Whio: Intensive monitoring of the released birds has been regularly undertaken. Some of the captive-reared birds have been lost through
			starvation, not from a lack of food resource. We assume the birds starved because they did not know how to forage for aquatic invertebrates.
			Other birds have succumbed to predation from stoats or ferrets, and one of the wild caught birds was run over by a car (can you believe it!).
37 Jun -00	10	Wanganui	All the captive birds lost weight initially, which resulted in transmitter harnesses becoming loose.
			Results of this years translocation efforts to Mt. Taranaki are promising with seven of the ten birds released between January and March this
			year known to be alive. Two birds were killed by stoats. Captive-bred birds have largely remained on the release river whilst wild-bred birds
46 Sep -02	4	Wanganui	have wandered widely around the mountain.
			The translocation of whio to Egmont National Park continued in April with the release of this year's crop of captive-bred juveniles. Ten of the
			11 birds released were males. This necessitated the release of some males outside the current area of mustelid control Two males have
49 Jun -03	12	Wanganui	been predated by stoats outside the mustelid control area.
			Whio: sixteen captive-bred whio were released in Egmont National Park in August The birds were older and heavier than in previous releases
54 Sep -04	7	Wanganui	and proved very mobile, some birds travelling over 10 km in the week after release
42 Oct -01	10	Wellington	NZ Shore Plover: Thirteen juveniles from last season were released in May 2001 with at least nine still present in September.
44 Apr-02	13	Wellington	National Wildlife Centre (Mount Bruce): Hihi (stitchbird) have had a difficult season, with four adults succumbing to aspergillosis.
			two of the six kokako released into the reserve in July/August 2003 paired up and produced two fledglings. Unfortunately one of the other
			kokako was killed by an as yet unidentified predator Six captive-reared brown kiwi were also released into the reserve in December 2003,
52 Mar -04	13	Wellington	and all appeared to be thriving until one was found drowned during recent floods.
			kokako: The bird whose demise was reported last issue is now thought to have been the victim of a harrier. Another kokako release, this time
53 Jun -04	10	Wellington	two pairs of Mangatutu-sourced birds held at Mount Bruce since 2001, is planned for late May.
			Kiwi: The birds released in December are still staying close to home; a couple have wandered (briefly) just beyond the ridge behind the NWC,
53 Jun -04	10	Wellington	but pretty quickly came back.
			Kiwi: Another release of three birds into Pukaha / Mount Bruce has been undertaken, to complement the five residents. The new birds are
			behaving in much the same way as those that were released last year. Monitoring of the first release shows that the birds have still not
55 Dec -04	11	Wellington	moved more than a few hundred metres from the release sites
			Five Okarito brown kiwi on Motuara Island were returned to Okarito Forest"Albi", the famous white kiwi, was left on the island several
36 Apr -00	17	West Coast	months longer because he was younger and smaller. We have since found he has had Ascarid worms, which is thought to have slowed his

			weight gain. He has recently been released to the wild.
			kiwi: Three ONE birds have died during the year. Bobbit and Claudette died as a result of territorial confrontations. Bobbit was almost
			certainly killed by another ONE bird while her parents killed Claudette. Cuba was hit by a car and killed. Two other juveniles lost their
37 Jun -00	16	West Coast	transmitters during the year because of harness failure.
			Okarito brown kiwi (rowi): A ONE male paired with a wild bird is incubating an egg, and this is the first confirmed record of an Okarito ONE
			bird breeding. The first 8 of the 14 chicks taken for ONE last year were returned to Okarito on 11 October. Although 1 bird has died from
			unknown causes the remaining 7 seem to be doing okay despite some weight loss This season's chicks have been released on Motuara 2 to 4
			weeks old and are doing well. Six of the 14 juveniles from last season's releases remain on the island and will be transferred to Okarito Forest
			in December. Fortunately observations indicate that non territorial juvenile rowi on Motuara are tolerant of young chicks and will share
39 Dec -00	11	West Coast	burrows with them without harm.
			Fourteen Operation Nest Egg (ONE) juveniles returned from Motuara during October and December. One of these died within a week or so
40 Mar -01	8	West Coast	of transfer from unknown causes, however, the remaining 13 are alive and thriving in the wild.
			Operation Nest Egg (ONE) kiwi Fourteen of the previous season's juveniles were birds released in Okarito Forest in two batches. Of the first
			eight released on 11 October one subsequently died of a suspected beating by another bird. These birds were released near five juveniles
			from 1999/2000 (previous) year's release. The second release of six on 6 December has been successful so far. They were released on a ridge
			where a largely unsuccessful early release of captive raised, non-Motuara birds had occurred. All 2000/01 birds have dispersed widely, far
			more widely than previously released juveniles and have travelled through known adult territories. On 2 April, one was found camped up with
			a wild, unbanded bird, which was summarily banded but did not have a transmitter attached and has never been seen again. Of other ONE
			birds, a male, Inca, paired up with a wild bird and successfully incubated an egg. No other breeding activity with the other ONE birds has
			occurred although several have formed 'pairs', some with wild birds Motuara Island sanctuary: Of the 21 chicks released, three are dead,
			one transmitter has dropped, and three are missing. Release back to Okarito is planned for January 2002. Some positive disease screens
41 Jun -01	11	West Coast	delayed planned releases until clear screens were obtained.
			Three pairs of O.N.E. juveniles have laid eggs this season although there were no successful outcomes. Of the juveniles recently returned from
44 Apr -02	19	West Coast	Motuara Island at the end of January, one has been found dead of a suspected kiwi beating and two are currently AWOL.
			kiwi: One of the chicks died 10 days after release two chicks were transferred to Burwood Reserve due to the high numbers of stoats in the
52 Mar -04	21	West Coast	sanctuary. One of these chicks has subsequently died. An adult male was found dead and we are waiting for the necropsy results.

			Animal	24. Radiotransmitter Quotes
				Twenty-six people attended a bat skills training workshop in the Eglinton Valley. Wecaught both species of bats All participants
				were trained in trapping bats (harp trapping and mist netting), handling bats (including measuring and weighing, banding (long-
37 Jun -00	20		bats	tailed bats only), attaching transmitters and taking wing biopsies)
				Tuhua (Mayor Island): 2 applications of Talon 20 P were aerial broadcast A sample of cats were radio-tagged prior to the drop.
				Some indication of home range was determined from those cats, but the severe topography of Tuhua made telemetry difficult. Of
40 Mar-00	11	Southland	cats	greater benefit was the ability to recover dead cats post drop
				Some of this bait will be used to lure up to 15 pigs into traps so that a radio transmitter (tx's) can be attached to the ear. This will
				provide an opportunity to carry out some telemetry work in an attempt to gain better information regarding their pattern of
				movements around the island. Follow up telemetry work can be carried out during the summer period if the opportunity to get
				people down to the island arises. The second part of the field work will involve trapping 15 cats and attaching tx collars.
				Monitoring of these cats during the following months will provide useful information about cat distribution and density. Our
		Auckland		game plan for the eradication has not yet been finalised, but will probably be to poison the pigs, and hopefully most of the cats
52 Mar -04	27	Island	cats	with the one bait.
		Chatham	Chatham	Chatham petrel: A big telemetry effort, to fit in with good moon conditions and the expected return of larger numbers of known
50 Sep -03	2	Islands	petrel	fledglings, is planned for 2005/06
		Nelson/	Hutton's	A concerted effort is going to be made to determine the flight paths of the shearwater to the colony. Transmitters will be put on
42 Oct -01	12	Marlborough	shearwater	birds and their routes tracked each evening.
		Nelson/		
37 Jun -00	1	Marlborough	kaka	kaka: 4 of 7 radio-tagged females were killed on the nest by predators, probably stoats.
				kaka: Excluding last season's fledglings which are still at risk of predation and those that we can't find, 17 (61%) of the 28
				fledglings radio-tagged at Rotoiti in the previous two breeding seasons are still alive at present. Although about a third of the
		Nelson/		young fledged have been lost to predators, more than enough have survived to compensate for adult mortality which is low (1 of
37 Jun -00	2	Marlborough	kaka	5 radio-tagged females at Rotoiti has died in 3 years, apparently of natural causes).
				This stoat control research is a joint project between Science & Research and Te Anau Area Office staff. The effectiveness of this
				stoat control is evaluated by monitoring breeding and survival of colour-banded mohua and radio-tagged female kaka2 females
				were killed probably by a stoat. We have recorded no mortality of 17 fledglings that have been radio tagged over the past 2 years
38 Sep -00	1		kaka	(35% mortality has been recorded for Rotoiti fledglings).
		Tongariro/		
43 Dec-01	7	Таиро	kaka	Annual monitoring of nine radio tagged, adult female kaka has just begun on southern Mt Ruapehu.
				monitoring radio tagged kaka in the Waipapa Restoration Area to assess the effectiveness of pest control Female kakas are
				followed to nests which are monitored. A sample of chicks have transmitters fitted to find out how many survived and where
				they disperse toA dramatic increase in fledgling mortality has been noted coinciding with a change to the pest control regime.
				Seventeen female chicks were monitored since the breeding season and excluding missing birds, eleven of fourteen fledglings
				have died. Nine of these were probably (some certainly) killed by stoats. And just to show that the predators are not targeting
47 Dec -02	4	Waikato	kaka	birds wearing radio transmitters, one observation included finding the remains of two untagged kaka within the same den as a

				dead tagged bird. So the results of a productive nesting season for kaka in the Waipapa has very much been let down by poor
				fledgling survival. The pest control regime was an aerial 1080 pollard operation in October. While this did offer protection during
				the time birds were nesting, as pest numbers increased, the level of protection decreased toward the end of the season when
				fledgling kaka become vulnerable.
51 Dec -03	3	Waikato	kaka	kaka: One nest has been found so far from a radio-tagged female
				kaka: Nests are located by monitoring transmittered adult females. Due to transmission failure of some units in the field and the
				need to maintain a sample of birds for future monitoring, work was undertaken during the season to recapture and refit new
				transmitters on all adult female birds. Eight of nine birds with working transmitters were re-captured, old transmitters were
				removed and new transmitters attached. This follows on from the 1999-2000 work where four of four adult females were re-
		Nelson/		captured and re-transmittered. Techniques differed from initial capture and required considerably more effort. It is possible to
54 Sep -04	10	Marlborough	kaka	remove transmitters from kaka at the end of the project, provided working transmitters are maintained on all sample birds
				determining the costs and benefits of an aerial 1080 possum poisoning operation to kereru and kaka in Whirinaki Forest Park.
				This requires the radio-tagging and monitoring of kaka and kereru in a treatment area (Otupaka Ecological Area) and in a non-
				treatment area (Oriuwaka Ecological Area) To date, 63 kereru have been captured and survived at least a fortnight after being
				radio-tagged. Of these, 28 (44.4%) have died, giving a mean life expectancy of just 0.9 years! Although the cause of death or
				species of predator involved is not always obvious, the following are the assumed causes: 1 died on a nest, 2 collided with
				vehicles, 5 killed by cats, 6 killed by mustelids, 5 killed by falcon/ harrier, 2 killed by poachers, and 8 killed by unknown
				predatorsOne of the birds had been caught by a cat while feeding a couple of metres above the ground. Fifty-three kaka have
				been captured and survived at least a fortnight after being radio-tagged. Of these, 3 (5.7%) have died, giving a mean life
				expectancy of 20.5 years. All 3 kaka that died were females killed by unknown predatorsNone of 17 kaka (10 male, 7 female) in
				the treatment area, and 20 (9 male, 11 female) in the non-treatment area died during the fortnight following the poison drop.
38 Sep -00	14		kaka, kereru	Similarly, none of 15 kereru in the treatment area died after the poison drop, but 1 of 11 (9.1%) died in the nontreatment area.
				Over the summer several kereru have dispersed to distant parts of Southland. Recently, in an attempt to locate missing radio-
				tagged kereru, the Kereru-Tui team chartered a light plane. The following was found: A male kereru was located about the
				Pourakino Valley on the eastern approaches of the Longwoods Range; 36 km from its capture site in Invercargill city. This bird has
				subsequently returned to the city. A female caught in the city has been located in the Longwoods forest not far from Otautau.
				This bird has since disappeared into the ether. A female has been tracked to near Paua Beach at Paterson's Inlet on Stewart
				Island; 65 km from her capture site in Invercargill. A male kereru captured near the city which gave us a signal from the Port
				William area on the northern coast of Stewart Island over the Xmas break, has since returned to its capture site back on the
				outskirts of Invercargill (a 57 km one-way flight) and then flown on to parts unknown. At this point we still have five kereru
				unaccounted for. Thus, at this early stage of the radio-tracking phase of the project, it looks like we are dealing with a Southland
53 Jun -04	18	Southland	kereru	population, not a localised Invercargill one.
		East Coast/		
36 Apr-00	11	Hawke's Bay	kiwi	kiwi: Five transmitted males currently form the source population
		Tongariro/		Kiwi: Of the 13 Operation Nest Egg releases put back into Tongariro Forest, only 5 to date still carry functioning transmitters. One
36 Apr-00	11	Таиро	kiwi	chick dropped its transmitter and 4 have had gear failure meaning we have lost track of them. One bird has been killed by a pig,

				another by a ferret, and 1 died from a ruptured liver after what we can only describe as misadventure because the bird was in
				perfect health otherwise – there were no visible sign of predation.
37 Jun -00	16	West Coast	kiwi	[kiwi]Two other juveniles lost their transmitters during the year because of harness failure.
		East Coast/		
38 Sep -00	6	Hawke's Bay	kiwi	kiwi: The number of transmitted birds has been increased from 5 to 8.
		East Coast/		in Tongariro Forest 21 Operation Nest Egg birds have now been released since 1997. Despite at least three deaths (ferret, pig &
38 Sep -00	6	Hawke's Bay	kiwi	misadventure) and five transmitter failures, the remaining 13 birds are doing well
				Haast tokoeka: When the chick was seen leaving the nest, staff prepared themselves to catch it the following night and attach a
40 Mar -01	8	West Coast	kiwi	transmitter.
				Kiwi: Of the surviving kiwi chicks, 78% are over 1000 gm and are 8 months old. Four chicks were lost to predators early in the
41 Jun -01	1	Northland	kiwi	season, and we have had one tx failure.
				Kiwi: we lost contact with one soon after release from the enclosureWe have only monitored one chick loss to predation this
				season. We have been monitoring three young kiwi since 1997, part of an original group of six (three of which we have lost
				contact with). In the past year all three appear to have paired and are living in the project area. The annual transmitter change for
				some of the adult kiwi began a month earlier to coincide with their capture for blood sampling by the Kiwi Recovery Group for
				DNA work. Project Kiwi staff took Maryann Burbidge to the kiwi, and she sucked their blood and took feather samples. Local iwi
				(Ngati Hei) were involved in the sampling. The birds sampled were in mediocre shape, looking worse for wear because they were
41 Jun -01	3	Waikato	kiwi	in the middle of a heavy moult. This is normally the only time of the year we come into contact with or handle the adults.
				Operation Nest Egg (ONE): On 2 April, one was found camped up with a wild, unbanded bird, which was summarily banded but
				did not have a transmitter attached and has never been seen againMotuara Island sanctuary: Of the 21 chicks released, three
41 Jun -01	11	West Coast	kiwi	are dead, one transmitter has dropped, and three are missing.
		Tongariro/		
43 Dec-01	7	Таиро	kiwi	Kiwi: Up to eight nests are now being monitored, with three radio tagged chicks already on the ground.
				kiwi: In September, after weeks of searching on foot and a good fly over in a fixed wing, we suspect that the transmitter on Raina
		East Coast/		(the oldest female in Boundary Stream) has failed. Seven of the ten kiwi, which were released in the Reserve are currently being
43 Dec-01	8	Hawke's Bay	kiwi	monitored.
				kiwi: project (near Motu) is making steady progress after two seasons of mustelid control. An adult male who went missing earlier
				in the year after a transmitter failed was found again. This bird was sitting on two eggs at the time. These were transported to
		East Coast/		Rainbow Springs but were found to be infertile. The second clutch from this bird has also been removed for artificial incubation to
43 Dec-01	9	Hawke's Bay	kiwi	Rainbow Springs.
				kiwi: So far five of the 11 chicks have been predated, and all in the centre of the treatment area. Surviving kiwi chicks are being
				left in the wild in the hope that stoat density will not recover quickly enough to make their fate certain. Unfortunately only one of
				the 11 monitored chicks hatched early enough in the season to get the full benefit of the aerial knock-down. Its September hatch
				date has allowed it to reach well over 1000 grams now, so it is relatively safe from re-invading stoats. It is hoped that other
		Tongariro/		unmonitored chicks from this same early (first clutch) cohort have also benefited as only 12 of an estimated 40 breeding pairs
44 Apr-02	9	Таиро	kiwi	currently carry radio transmitters in the Sanctuary. However, all other monitored chicks hatched after November are still at risk.
				rowi: We have had relatively low hatching success with just 24 chicks observed to hatch. 20 of these chicks had transmitters fitted
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				and were monitored for survival (four vanished prior to fitting transmitters). Six of the chicks are still alive and doing well in the
				wild We are nearing the end of the massive job of changing in excess of 120 kiwi transmitters and readying ourselves for the
45 Jun -02	13	West Coast	kiwi	next breeding season.
				Haast tokoeka: Six chicks hatched successfully and all had radio transmitters fitted. Within two weeks of hatching two chicks were
				predated by stoats and another was predated at 45 days old. With 50% of the chicks surviving, we were hopeful that predator
				control was making a difference to chick survival. However since then we have lost track of two further chicks, one due to
				transmitter failure at 70 days old and the other dropped its transmitter at 231 days old. Although the oldest of these chicks had
				passed the 'safe weight' of 1000 grams their fate is unknown. The remaining chick, 'Kahu', is living in the sub-alpine scrub and is
46 Sep -02	7	West Coast	kiwi	getting very difficult to catch. When caught in early July, Kahu weighed 810 grams.
				tokoeka: 26 adult pairs are being monitored The TL Creek pair both dropped their transmitters in 1998. This year the TL Creek
46 Sep -02	8	West Coast	kiwi	male was recaptured and is paired with a new female. We do not know the fate of TL Creek female.
				tokoeka: Seven (41%) nests produced chicks, which were caught and fitted with radio transmitters. Three of the chicks were
				subsequently killed by stoats, one drowned, one is missing (suspected transmitter failure) and two are still being monitored: Huia,
				600 grams at 100 days old, and Mischief, 570 grams at 89 days old. To date this season's chick survival is 29%, compared with
				33% in 2001/02 We currently have transmitters on 48 Haast tokoeka: 44 adults (19 female and 25 male), 2 sub-adults (1 female
				and 1 male) and 2 juveniles (sex unknown). This equates to 24% percent of the estimated population (200 birds) within the
48 Apr -03	11	West Coast	kiwi	sanctuary.
48 Apr -03	12	West Coast	kiwi	rowi: All 14 of the monitored chicks were dead by early January, with stoat predation being the major cause.
				kiwi: nine adult male kiwi with transmitters were monitored. Seven of these nine birds made nesting attempts, and four chicks
				were reared. One of these chicks survived, while the other three were predated by stoats. During the 2002/03 breeding season,
				nine of the 11 adult male kiwi that were monitored made nesting attempts. A total of 10 chicks hatched, two of these drowned
				before they left the natal burrow, one had a failed transmitter, five were predated by stoats, and two survived. For the coming
48 Apr -03	15	Southland	kiwi	season the team aim to catch another 10 adult kiwi to increase the sample size
				The kiwi chicks are released into Tongariro Forest when they are around 1200 grams in weight. To date, eight have returned to
				the forest, one of these was predated by a stoat. The others are doing well and gaining weight. Last season we monitored 14 kiwi
				chicks. This work was to measure chick survival in the wild after a very effective 21,000 ha aerial 1080 operation. Eight chicks
				successfully hatched in the wild: four were predated by stoats, one dropped its transmitter at 1370 g and three are still being
				monitored. Six eggs were taken to Rainbow due to nest abandonment and were hatched successfully. The new chicks were then
		Tongariro/		released back into their parental territory in Tongariro forest. Three were predated by stoats, one died of hypothermia and two
49 Jun -03	9	Таиро	kiwi	are still alive. We currently have 39 birds with transmitters: 13 adult male, 14 adult female, five sub adults, and seven juveniles.
				In 2002, 21 kiwi were heard calling, 13 or which were radio tagged. In 2003, 31 kiwi were heard calling, of which 12 were radio
				taggedOf the juveniles monitored, two were tracked eight kilometres from Puketukutuku and both have subsequently walked
				back. One kiwi was found due to its mortality signal, the transmitter was found on the ground. Another kiwi was located 10
		East Coast/		kilometres away from its start point, and we subsequently lost this bird. Two other mortality signals have been picked up, one 16
49 Jun -03	10	Hawke's Bay	kiwi	kilometres away from Puketukutuku. The rest (five) have disappeared.

				Kiwi: In May, Te Anau Area staff took two Bank of New Zealand managers to view the transmitter change on this chick. We hope
				to provide more opportunities like this to our sponsors next season. Recently, five new adult male kiwi were caught in the Clinton
				Valley as well as the beginning of the North Branch and the Neale Burn. This increases the monitored kiwi in the Clinton Valley
49 Jun -03	21	Southland	kiwi	study to a total of 19 adults
				Ten male kiwi were fitted with transmitters (five alpine, five forest habitat) during May, with the aim of monitoring nesting
49 Jun -03	22	Southland	kiwi	activity and chick production.
50 Sep -03	4	Waikato	kiwi	18 kiwi chicks monitored, one died of natural causes, two transmitters/harnesses failed, and 14 chicks are known to still be alive
51 Dec -03	2	Waikato	kiwi	So far in the 2003/04 season, the Moehau Kiwi Sanctuary monitoring team have placed transmitters on 15 kiwi chicks.
				Kiwi: This year, 12 adult male kiwi and their mates were monitored for breeding. Eleven of the males are wild-caught birds fitted
				with transmitters; one was an Operation Nest Egg (ONE) bird released in 1995 that has mated with an ONE female released in
51 Dec -03	6	Bay of Plenty	kiwi	1996. Ten of the 12 pair monitored had nests, and laid a collective total of 41 eggs.
				Unfortunately some of the kiwi chicks' transmitters failed this season. Of the 25 kiwi chicks that did not suffer from transmitter
				problems, 15 are still alive Ten chicks have died this season; five from suspected mustelid (stoat or weasel) predation, two as a
53 Jun -04	4	Waikato	kiwi	result of being entangled in mangemange fern, and three for unknown reasons.
		Tongariro/		
53 Jun -04	7	Таиро	kiwi	Kiwi: While we are currently monitoring 11 breeding males, our target is to have up to 30.
54 Sep -04	7	Wanganui	kiwi	Kiwi: To date nine males have been fitted with transmitters
55 Dec -04	5	Waikato	kiwi	Kiwi: Sanctuary, 12 chicks have hatched since 1 OctoberOne chick was found deadand one has dropped a transmitter.
				Two of the four kiwi on Mokoia Island have dropped their transmitters, and will be re-caught in early 2005 to attach transmitters.
55 Dec -04	7	Bay of Plenty	kiwi	The two that have been monitored are looking healthy and seem to be holding territories.
				tokoeka: There are seven chicks with transmitters on them being checked once a weekAt night, staff are using cameras set up at
55 Dec -04	15	West Coast	kiwi	burrow entrances to watch for chicks to emerge from several nests; transmitters are to be attached to these chicks.
				Fieldwork to catch kiwi in the two Murchison Mountain monitoring sites finished recently; unfortunately not all the required birds
				were caughtA second attempt to complete this transmitter fitting work will be carried out in May. takahe chicks: As many of the
				chicks as possible will be banded before winter. Transmitters on several of the adult takahe being monitored in the area will also
53 Jun -04	18	Southland	kiwi, takahe	be changed.
				pateke: Transmittered females (n=29) will be followed through the breeding season and nesting attempts, hatching rates, and
				duckling survival at fledging time monitored. Survival rates of all transmittered birds (n=38) will be an outcome measure of
45 Jun-02	3	Northland	pateke	intensive predator control.
				Transmitters are currently being fitted to brown teal on Great Barrier Island with great support from Northland Conservancy, so
45 Jun-02	5	Auckland	pateke	that information on nests and mortality can be investigated.
				pateke:research on a proportion of adults wearing transmitters will investigate factors affecting duckling recruitment into the
46 Sep -02	2	Auckland	pateke	breeding population.
				Pateke have been intensively monitored for breeding success and survival information Transmitters were attached to thirty adult
				pateke in March and May this year. By July a few transmitters had fallen off via their weak link, a couple of birds went missing,
47 Dec -02	1	Auckland	pateke	and a few birds died leaving eighteen females to be followed through the breeding season and three males followed for survival

				information. Twelve of these birds were known to nest and nine of them successfully hatched chicks (75%). Two nests were lost
				to abandonment and one to predation, possibly pig However duckling survival has been very low at 14% with only five ducklings
				out of thirty-five known hatchlings surviving to fledging age. The cause of this low survival rate is probably a combination of
				pukeko and harrier predation and lack of food resources. Food availability is low due to very dry feeding areas after weeks of low
				rainfall and strong winds. Transmitters have been put on nine juveniles and hopefully this sample will increase over the next
				couple of weeks, this will entail a lot of night wandering in the farm paddocks with a couple of hand nets. Recently five of these
				nine juveniles died. The cause of death is still being investigated, from the remains we know harriers had a meal but we are
				unsure whether it was scavenged or from a planned attack. Adult pateke survival has been relatively good with the loss of five of
				the initial thirty transmitted birds between March to the end of November.
				Pateke: An adult population of 27 to 37 birds with transmitters attached have been closely monitored from May to October, and
				all nesting attempts and hatching rates recorded. Harness failures and transmitters malfunctioning prematurely have caused the
				sample size to fluctuate and many headaches for staff. With just one unfledged brood left on the ground produced from radio
				tagged adult females, there have been a total of 41 fully feathered juvenile pateke at the banding age of 8 weeks. Set monitoring
47 Dec -02	19	Northland	pateke	targets have been met with 20 of those juveniles having transmitters attached.
				Pateke/brown teal: less than half of the sample radio-tagged females (n=29) have nested. A couple of females have lost young
				broods, others are raising just one or two through to fledging. Survival of all radio-tagged birds (n=39) are an outcome measure
				of intensive predator control. A trial of Canadian-brand Holohil transmitters has been initiated in response to the poor
				performance of Sirtrack transmitters. An unacceptable number have failed well before their programmed "life", resulting in a
				frustrating reduction of information from monitoring. Now, if birds go missing from the area, it is equally likely that their
50 Sep -03	2	Northland	pateke	transmitter has failed as it is they have dispersed. Indicator dog work is the only way to recover these birds
				pateke: we have lost signal from two of the 38 transmitters, although the birds are still around. Four birds have been lost to
50 Sep -03	4	Waikato	pateke	predation: one likely to a dog, and the others to a cat(s).
				pateke: the capture of 37 fledglings to band, with 20 of those having radio-transmitters attached as well. Four radio-tagged
				juveniles have already dies, with carcasses showing mammalian sign and kahu scavenging. A radio-tagged sample adult
				population (maximum 44 birds) has been monitored over the year for adult survival, mortality and breeding data. The premature
				failure of batteries inside the transmitter units has caused the sample size to fluctuate over the months and to never reach the
				set target. "Missing" birds are often identified by band combinations or dog survey in later months, carrying dead transmitters.
				Canadian brand 'Holohil' transmitters will soon be exclusively used in this recovery programme to achieve confidence in annual
52 Mar -04	2	Northland	pateke	outcome monitoring
				We now have 14 dead pateke from the original 38 releasedOnly one of these [nesting] attempts produced a fledged duckling,
52 Mar -04	5	Waikato	pateke	the rest were killed or "disappeared" before they were old enough for us to attach transmitters.
				Pateke: In the first month post-release, four birds lost their transmitters through the weak link in the new harnesses failingThree
				birds have been killed so far this season; two to vehicle strikes, and one to apparent starvation (wing fat analysis showed no wing
54 Sep -04	4	Waikato	pateke	fat)
				Northland pateke: The radio-tagged adult female sample suffered losses to dogs, mustelids and unknown causes in May, August
55 Dec -04	3	Northland	pateke	and September; reducing the sample from 26 to 21 birds. There have been 28 breeding attempts from 27 pairs; of which 15 have

	1			a radio-tagged female. It is still a little too early to evaluate overall brood survival from these breeding attempts; many of them
				are still making it through the 10 week phase until fledging, at which time they will be banded and 20 of them targeted for
				attaching transmitters. As a snapshot, five nests produced 32 chicks, with six of those surviving to fledging.
42 Oct -01	17	Southland	rats	Campbell Island rat eradication: Radio transmitters were put on four rats , which all died within 5 days of having accessed bait.
				saddleback: Ten birds had tail-mounted transmitters attached and were monitored weekly. Two weeks after release, four
				transmittered saddleback were found dead following a week of extremely cold southerlies which brought snow to the higher
				parts of Boundary Stream. Necropsies of two birds found they died of aspergillosis, a common fungal disease that can become
				fatal when the bird is under stress. One bird had a broken neck, but mammalian predation was ruled out. The fourth bird was too
				decomposed to necropsy, but no obvious signs of predation were found. A survey six weeks after release estimated 21 birds
		Tongariro/		present, giving a 57% minimum survival rate. There are five known pairs that are courtship feeding, but none are known to have
55 Dec -04	10	Taupo	saddleback	attempted to nest.
				Area staff have been working with Brian Lloyd learning the finer points of monitoring short-tailed bats on the southern flanks of
		Tongariro/	short-tailed	Mt Ruapehu. The technique involves catching and radio tracking bats to find communal roosts, then video monitoring them
43 Dec-01	7	Таиро	bats	under infra red light to assess numbers as they leave at night to forage.
				taiko: Transmitters were attached to all chicks before fledgingso that chicks could be monitored and relocated if they did not
				make the 4-6 km journey to sea One chick however failed to fledge twice. The second time it was found its weight (390 g) was
				below the previous lowest known fledging weight (400 g) and well below expected fledging weight (470-480 g). This chick was
37 Jun -00	14	Wellington	taiko	taken to the coast that evening and placed on a hill side, from which it confidently departed
		Chatham		The breeding season is also progressing well for taiko, with seven chicks confirmed to date. Three new non-breeding burrows
44 Apr-02	24	Islands	taiko	were found this year: two by telemetry
		Chatham		
45 Jun-02	19	Islands	taiko	taiko: All chicks were banded and had transmitters attached to allow their departure to be monitored (and assisted if necessary).
52 Mar -04	14	Wellington	taiko	the eighth taiko telemetry operation, to search for new taiko burrows
				Between 30 and 45 takahe were monitored using radio transmitters in the Murchison Mountains over the 1999/2000 year. This
				work is aimed at assessing survival and productivity differences between captive reared and wild reared takahe and determining
				causes of mortality. We have recently changed our transmitter design following an energetics study that showed significant cost
				for the birds in wearing transmitters. Egg and chick production from 9 pairs in the McKenzie block of the Murchison Mountains,
				was intensively monitored for the third year running. We have been using temperature data logger eggs, time lapse video, and
38 Sep -00	16		takahe	small chick transmitters.
				When the Takahe Recovery Group was approached with a proposal to conduct an energetics study to compare habitat quality
				between the Murchison Mountains and island sites the group was very hesitant. It felt that the research was of a low priority and
				that the results were unlikely to influence management decisions. Also, the study would be very invasive because takahe are not
				always easily caught. In fact we considered the number of repeated captures needed would not be possible to achieve in the
				Murchison Mountains. A compromise arrangement was negotiated. The energetics researchers were approved access to takahe
				at the Burwood Bush Rearing Unit and Mana Island in exchange for completing a trial investigating the energy cost to a takahe of
39 Dec-00	18		takahe	wearing a transmitter. We have been monitoring a sample of radio-tagged takahe in the Murchison Mountains since 1991 to

				compare the success of captive reared birds and wild-reared birds. That sample has numbered more than 30 birds over recent
				years and we were keen to see if the transmitters may be compromising the birds' survival in any way. Jason Godfrey
				measure[d] the free-living energy expenditure of the 8 birds at BurwoodThe scale of increase in expenditure due to tags might
				be sufficient to compromise survival and/or reproductive success. the principal cost of tag-bearing derived from increased
				thermoregulatory costs consequent on feather disruption by the tag and/or harness and heat loss transfer via tag itself. Increased
				energy demands due to tag-bearing can be expected to peak in montane winter conditionsHeat loss via the long external
				antenna was considered as [a] potential factorWe are happy with the backpack harness design so only looked to make changes
				in transmitter packageThe results of Jason's research have identified an issue that will have relevance for other transmitter
				studies in New Zealand.
		Nelson/		After a brief hiccup with the takahe transmitters all the female takahe on Maud Island have working back packs. This will enable
42 Oct -01	12	Marlborough	takahe	us to monitor more closely the nesting and especially the very early chick stage, when the greatest loss occurs.
				Tawaki: The annual banding return study (both RH metal flipper bands and transponders) at Monro Beach (MB) and Jackson Head
				(JH), tawaki colonies was again repeated in July this year. One hundred and five birds were captured Transponders were
				implanted into all unbanded birds caught at JH. These have been used since 1999 and provide a comparison of tawaki
47 Dec -02	15	West Coast	tawaki	survivorship with the commonly used metal flipper bands
				tawaki: Flipper bands were initially used in the study (1994-2001) at both the Jackson Head and Monro Beach colonies.
				Indications for this work were that adult survivorship figures were far lower than expected (70% in 1998), suggesting that bands
				are either detrimental to survival, or that they are falling off. To test these theories, subcutaneous transponders were implanted
				into a control population of birds at Jackson Head (1998-present) to see if survivorship figures differed. Recent survivorship
				calculations (2003) using a sex-based model suggest that adult and chick survivorship is approximately 98% and 44% respectively.
				These figures are typical of survival in seabirds such as penguins and petrels. It appears that on average, birds with transponders
50 Sep -03	14	West Coast	tawaki	have a higher survivorship, suggesting that perhaps both theories are true
				4 teal: Twelve birds (8 female and 4 male) were released in March 1999. These were monitored using backpack transmitters, and
				all have survived, although we have lost track of a couple that decided to go walk-about around the island's rugged southwestern
39 Dec-00	1		teal	coast.
				As part of ongoing monitoring of the effects of 1080 on non-target species 15 adult weka were captured in the Copland Valley
				and had mortality transmitters fitted in December 1999. Pre 1080 weka monitoring has been carried out every month to date.
				Four dead birds have been found in recent months. The first 2 birds found near the Welcome Flat hut were too decomposed to
27 1	10	Mast Cast		establish their cause of death. Two more birds found last week showed the cause of death was predation. Both had puncture
37 Jun -00	10	West Coast	weka	wounds on the back of their skulls. Stoats are presumed to be the likely predator.
				The NI weka project is about to commence a third year of radio telemetry and video monitoring of adult breeding pairs and
				juveniles at MotuSince September 1997 we have captured and radio transmitted 36 fledgling weka within the two study areas.
				Each bird carries a transmitter for 13 months and is tracked at weekly intervals. Post fledging survival of weka in the broader
				Motu area so far appears to be high. In the Whitikau non-treatment area a mean survival rate of 71% has been recorded for
		East Coast/		juvenile weka in their first year. The recorded predation events were attributed to stoats (4) and feral cats (3). One predation
39 Dec-00	7	Hawke's Bay	weka	contained evidence of interference from both cats and stoats. To date, we have not recorded any predation by ferrets. This

				season we have introduced feeder stations to selected breeding pairs and installed an infra red beam switch to our time lapse
				camera equipment which should allow for more efficient monitoring. We hope we can bring the adults and their chicks to us
				instead of us chasing them. The Whinray Scenic Reserve predator treatment block also contains kiwi. Mustelid control should also
				benefit the kiwi in the block, and we will be monitoring this through a radio telemetry study of chicks and sub-adult kiwi. At this
				stage we have one adult male kiwi incubating in an area populated by NI weka. We have a time lapse camera filming the burrow
				entrance and hope to record any interaction between the two species.
-				Transmitters were attached to six female weka from each study block, which enabled nesting activity to be monitored with
				minimal disturbance to the birds. To date all of the female weka have made at least one nesting attempt. Eleven of these 12 nests
				have produced between one and three chicks. The twelfth pair has made two known attempts at nesting, but the first was
				abandoned due to a disturbance event and second was abandoned during heavy rain. Presence and absence of individual chicks
				from each nest has been monitored using a combination of several methods. Video surveillance was used at feeding stations,
				chick sign - including chick prints and down – was searched for, and calls between parent birds and chicks were listened for.
				Depending on the area it was also sometimes possible to scope the birds from a distance. Occasionally these methods provided
				data on the number of chicks present in each nest, but more usually they only reliably provided presence and absence. Very
				rarely, they provided information on cause of death. In an attempt to further ascertain causes of chick mortality several chick
				transmitters were purchased. These will be attached to chicks after the next round of breeding. When the chicks are a few
				months old, they are usually large enough to carry adult-style transmitters. Six chicks from each study block are currently being
				caught and will have these transmitters attached to them. The transmitters have a battery life of 14 months and chick survival will
				be monitored throughout this time. Last season, five juveniles from the Whitikau and six from the Motu area had transmitters
				attached to them. Only one of the Whitikau juveniles is still alive. Of the four dead birds, three were predated by stoats and the
				other was either predated or scavenged by a cat. From the Motu area, three inveniles are still alive. Of the other two birds, one
		East Coast/		had wandered two kilometres beyond the trapped area and was predated by a stoat. The signal from the other bird has never
44 Apr-02	9	Hawke's Bav	weka	been picked up and I suspect that the transmitter was faulty.
· · ·		,		Juvenile weka (aged between 1–3 months old) are trapped in the Whitikau Valley (no stoat trapping) and in the Motu Valley
				(stoat trapping) each season. Transmitters are attached and the weka monitored until they reach 12 months of age. Each weka is
				monitored weekly to determine status and causes of death. Almost all of last season's inveniles have now reached 12 months of
		East Coast/		age. Results to date show that 40% (n=10) and 8% (n=12) of monitored juveniles were killed by stoats in the Whitikau and Motu
52 Mar -04		Hawke's Bay	weka	valleys respectively.
-				Weka: The other loss was a fledged female who recently had a transmitter attached. She got tangled in vegetation by her harness
				and perished. There was nothing obviously wrong with the harness settings, so it is likely that it was just very bad luck that she
52 Mar -04	23	Otago	weka	got caught.
		-		Late last year Middle Island tusked weta were transferred from captivityto Red Mercury and Double Islands. Ian Stringer and
41 Jun -01	3	Waikato	weta	team have used harmonic radar transponders and radio transmitters to follow them around on Red Mercury Island
	1			Whio: Intensive monitoring of the released birds has been regularly undertaken. Some of the captive-reared birds have been lost
				through starvation. Other birds have succumbed to predation from stoats or ferrets All the captive birds lost weight initially,
37 Jun -00	10	Wanganui	whio	which resulted in transmitter harnesses becoming loose. Without harnesses monitoring of the birds required significantly more

				effort. All the casualties occurred within the first 4 weeks of release
				Blue duck [Whio]: Survivors from last year's release are still encountered, but the birds had transmitters removed because of
				weight loss problems so monitoring is much more labour intensive. We plan to refit modified transmitters on birds based on
40 Mar-01	3	Wanganui	whio	findings from the takahe energetics study
44 Apr-02	10	Wanganui	whio	Whio (blue duck): All the birds are fitted with radio transmitters and are regularly monitored on foot and from a fixed wing plane
49 Jun -03	12	Wanganui	whio	Whio: Three females were also fitted with radio transmitters.
				Whio: The only results of searching the rivers again in April were the same two pairs, so their radio transmitters were
				replacedAugust 2002, staff from the Buller Area Office, along with Dave Barker and his dog Gus, searched the Oparara River and
				its tributaries for blue duckonly two pairs were found during the survey. Radio transmitters were attached to both females in
				order to monitor their breeding success. The blue ducks were monitored during the 2002/03 breeding season. One pair raised
49 Jun -03	18	West Coast	whio	four chicks, all of which fledged during mid-January. The other pair showed no signs of breeding
		Nelson/		Blue duck: Conservation efforts have kicked off with transmitters placed on three females of pairs located on the edge of
50 Sep -03	12	Marlborough	whio	Kahurangi National Park.
				Whio: A major effort has been made to colour and metal band birds and fit several females with radio transmitters.
51 Dec -03	11	Wanganui	whio	Unfortunately three out of four transmitters failed following fitting.
				Release of the captive-reared whio juveniles back into the Clinton Valley is planned for 23 <sup>rd</sup> February. Wild ducklings from this
52 Mar -04	26	Southland	whio	season are being fitted with radio transmitters so as to monitor their dispersal and survivorship through the winter
		Nelson/		
54 Sep -04	9	Marlborough	whio	The study of whio juvenile dispersal is ongoing, and to date has shown juveniles dispersing up to 6 km from their natal territory.
				The Yellow-eyed Penguin Trust has underwritten a year of cat control and research looking into the impacts of cats on yellow-
			yellow eyed	eyed penguins. This will involve monitoring nests in treatment and non-treatment areas, controlling cats at selected breeding
50 Sep -03	16	Southland	penguins	locations, and attaching radio transmitters to 10 cats.
				remote monitoring gadgetry for threatened species This work is still carried on in our laboratory by myself and with our new
				electronics engineer, Stuart CockburnStuart is currently busy upgrading our predator video systems so that we can manufacture
				the various configurations more easily. I have been improving the standard Automatic Bat Monitors (ABM) for similar reasons.
				New designs: Predator video: a time-lapse video system About \$4000. • Nest viewer: a small waterproof "bullet camera" with
				infra red LEDs. For use with either the predator unit, cavity inspection unit or for long cable installations such as at kaka or
39 Dec-00	17			shorebird nestsAbout \$1000 for a monitor and \$300 per camera.

		25. Other Interference
48 Apr 03	3	The fairy terns haven't had such a good breeding season this year, with only two chicks fledging. They had a run of misfortunes during the summer : the first few nests were lost to high tides and predation; one of the first-time breeding pairs abandoned the nest; then one of the older breeding females at Waipu disappeared after their first chick hatched, and then the male disappeared also; finally, a storm in early January wiped out three of the four remaining nests. Fortunately two chicks hatched from the last nest at Mangawhai. The chicks have now fledged and left their natal site with their parents. There was some encouraging news from this season: two of the six breeding pairs were first-timers; three pairs attempted to breed at Waipu for the first time since 1994; and a newly-hatched chick was accepted and reared by foster parents, though it disappeared in a storm a week later.
40 / (p) 00		A national project to collect vital information is currently underway on Southern right whales (SRW) around NZ mainland coasts. Nathalie
49 Jun -03	25	Patenaude (University of Auckland)was able to identify 23 individual SRWs photographed around NZpreliminary information suggests that the mainland and subantarctic group may be separate populations. If this is the case, then the mainland group is very rare and should be afforded maximum protection . especially with the major increase in marine farming that's coming. SRWs appear to be particularly vulnerable to human-related threats. Ship strikes and incidental entanglement in fishing gear or marine developments have been identified as the most significant cause of mortality. Other threats include: loss of habitat from coastal development, especially large marine farms in their feeding, breeding and migration routes, and being harassed by people Because SRWs show strong site-fidelity (when animals return to their natal site to breed), these threats can have significant implications in the survival of SRWs. If we lose the handful of females currently breeding around NZ (either to entanglement or loss of habitat etc.) the survival of this group of whales will be threatened due to there being little or no recruitment into these areas by other adult females. It would be a great loss to our marine biodiversity if we lose these groups of whales. We may not see them around New Zealand againOur committed DOC team will be out responding to SRW sightings and collecting important data to help us clarify the status of the SRW population This information includesbiopsy sampling to determine sex of the animal and the relatedness of the population
		Southern right whales: As of the first week of August, we have collected eight photo id's and three biopsy samples. Two of the biopsy samples have been from reproductive female whales, and one sample from a calf. All of these samples have been from whales in the East Coast/Hawke's Bay Conservancy. Another biopsy on an adult around the Otago Peninsula could not be recovered. Thanks to Science &
		Research New Plymouth Area Office. University of Auckland, and the International Whaling Commission, we now have six Paxarm bionsy guns
50 Sep -03	19	at SRW hot spots around the country. This will give us a greater opportunity to be on site and obtain a biopsy sample from these whales
53 Jun -04	20	Southern right whales around NZ mainland: Last year a total of 66 sightings were reported from around the mainland. This number includes re- sights of the same animals; therefore it in no way reflects population size. Good quality identification photos were obtained for many of the individuals seen, and a total of 12 genetic samples were obtained (11 from biopsies and one from a sloughed skin sample
54 Sep -04	1	For the 2003/04 season, 12 albatross chicks hatched from 15 eggs laid. Four chicks subsequently died; some of these chicks were supplementary fed. Autopsies of these chicks by Massey staff have shown that their diet lacked sufficient calcium. Massey is in the process of analyzing the nutritional components of proventricular oil that is obtained from sooty shearwaters and has been used in supplementary feeding of albatross chicks at Taiaroa Head for almost 20 years. From what we have learnt so far from the deaths of this season's chicks, Massey will be able to provide us with much better guidelines for the nutritional requirements of albatrosses
·	1	Southern Right Whales: Last winter (2003) DOC staff obtained 12 biopsy samples from nine individuals, and 66 sightings and photos. This winter
55 Dec -04	19	(2004) has been a flop in comparison; only one biopsy sample has been obtained, and only half as many whales sighted compared to 2003. In

			2003, most sightings were in East Cape, Otago, Southland and the West Coast. In 2004 sightings seemed to focus on Nelson and Northland
			The Hunua Ranges kokako population currently has five breeding pairs. Four chicks have been banded, two nests have failed, but one of these
43 Dec-01	4	Auckland	pairs is now re-nesting.
44 Apr-02	5	Auckland	Takahe: There were three chicks produced this season and all are ready to be banded.
			Tiritiri Matangi Island: dodging rain showers and high winds chasing the elusive kokako. So far there is one active nest and one still being built
51 Dec-03	2	Auckland	on Tiritiri Matangi Island, and also one nest in the Hunuas.
			The 2001/02 orange-fronted parakeet work commenced in September. Very few were seen All previous nest sites were inspected for nesting
			activity each month. No nests were found to be active parakeet numbers are well down overall on last season's. This may be either part of a
			normal population drop following a mast season, a consequence of parakeets being very quiet after the frenetic activity of last season when the
			population was boosted by a large pulse of beech mast babies, or it may result from rat predation. Since January, nine parakeet nests have
			been located, but only one belongs to an orange-fronted parakeet pair. Of these nests, one failed (revealing a dead female, which may have
			become eggbound), and the remainder has nestlings at the moment. The orange-fronted parakeet nest is significant for more than its valuable
			contents. It is the first nest recorded in the wild for which the final clutch size is known. (The only other orangefronted parakeet nest
44 Apr-02	18	Canterbury	discovered (from the Hope Valley) had the adults and eggs shifted into captivity before the clutch was completed.)
			The orange-fronted parakeet pair was successful in fledging seven chicks from their first nest but unfortunately the second nest was
			abandoned – it contained five late development stage eggs. The cause of the abandonment is not known and the pair did not appear to nest
			again. There were two individual orange-fronted parakeets monitored. These two either did not breed or kept the whole affair well hidden -
			which this species can easily manage much to the frustration of the monitoring team, as neither partners or nests were seen. Further
45 Jun-02	12	Canterbury	observations in the valley have indicated that breeding has now finished and the parakeets are starting to flock for the winter period.
			Because OFP were regularly seen at several sites in the Hawdon Valley, nest searches were concentrated in this area for most of January.
			However, only 2-3 YCP nests at the prospecting/laying stages were found. Searches continued while there were signs of breeding activity in
			YCPs. Most OFPs appeared to be single birds or in flocks with YCPs, or just flying through quickly in the canopy. Some OFPs were displaying
49 Jun -03	10	Canterbury	breeding behaviours, but very few pairs were located repeatedly.
			Stony Bay (Banks Peninsula) titi/sooty shearwater: a visit in December revealed 10 eggs using a burrow scope. A follow-up visit last week by
			local DOC staff and Kerry-Jayne showed a woeful story. There was no sign of any chicks alive, and four dead chicks were found inside the
			burrows. Their ripped out throats pointed to mustelid predation, confirmed by stoat scats and a small hole forced between the netting and
53 Jun -04	12	Canterbury	fence posts.
			A seabird population monitoring programme has begun as part of an ecological skills project. The first monitoring trip took place during
			November 2001. A series of permanent monitoring quadrats and transect lines were established in November with assistance from Graeme
		East Coast/	Taylor, BRU, to record burrow density and population changes over time. Over 150 birds were banded during the trip and they included a mix
43 Dec-01	9	Hawke's Bay	of Fluttering and Sooty Shearwater, grey-faced petrel and black winged petrels.
		East Coast/	
43 Dec-01	10	Hawke's Bay	New Zealand dotterel: two birds have fledged; another two were banded during late November
			Hihi (stitchbird) feeders were kept open through the winter in an attempt to increase survival. At the end of last season nine adults (7f, 2m) and
			eight fledglings were sighted. In the Oct 01 survey, a total of 13 birds (9f, 4m) was identified. All seven of the females seen regularly this season
44 Apr -02	24	Kapiti Island	have attempted to breed. Six nest sites (all natural) were monitored (including three new sites). The nest site for one female was not located

			but her behaviour suggested that she attempted to nest twice. Overall eight nesting attempts were monitored, including two second attempts.
			At least 19 fledglings from six nests have been sighted post-fledging, of which 12 have been banded.
			Takahe: The number of breeding pairs on Maud has re-stabilised to five. The season looks good, with two chicks already hatched and four eggs
		Nelson/	incubating. Supplementary feeding of adults and chicks, extra water catchments and additional staff time are factors contributing to the
43 Dec-01	12	Marlborough	success of the project. Torrential on-going rain is, however, affecting chick survival with one lost and a number of fertile eggs failing to hatch
			A brood of three New Zealand falcon chicks were banded inside Rotoiti Nature Recovery Project area early this year. One of the two females
			failed to fledge, and her partially -developed primaries were all that could be found The remaining female's carcass was discovered on
		Nelson/	farmland near Lake Rotoiti in mid August. We suspect that she did not develop the hunting skills she needed to survive through the winter.
46 Sep -02	7	Marlborough	Only one other nest was monitored last season, outside the Mainland Island, and the nest failed before hatching.
			Fifteen Leiopelma pakeka frogs were collected off Maud by Bruce Waldman and taken to Canterbury University to help further our
		Nelson/	understanding of frogs in general and of the chytrid fungal disease specifically. Some Maud Island frogs have been developing lesions around
48 Apr -03	9	Marlborough	their eyes, and this is being investigated
			This year saw a first ever on Maud: two sets of takahe twins were produced by two breeding pairs. This is the first time twins have fledged
		Nelson/	successfully since 1993. Supplementary feeding of these pairs appears to have been crucial to the survival of the twins, as it reduces the need
48 Apr -03	10	Marlborough	for the birds to travel away
		Nelson/	
50 Sep -03	13	Marlborough	research proposalsinclude: homing ability of native frogs, chemical communication in frogs the role of scent in predation of reptiles
			Black-fronted terns: Four colonies are being monitored; approximately 70 pairs in total. A high turnover of nests has been observed, with in
			excess of 150 monitored. Nest failures were due to a range of factors including predators and abandonment. Time lapse video will be used to
		Nelson/	gain some insight into the causes of nest disturbance. One of the four colonies is also receiving predator control and is being monitored to
55 Dec -04	13	Marlborough	gauge if the trapping results in an increase in fledging success.
		Nelson/	
		Marlborough	Hutton's shearwater: led a crew into the colony in early spring to mark a large sample (two thousand birds) of all ages while they were still
47 Dec -02	13	Wanborough	sitting on the snow waiting for the thaw to reveal their burrowsthese birds were marked across their white fronts with spray paint
			Placostylus snails A visit to Motuopao Island off Cape Maria van Diemen on 8 February found 22+ live snails, including 17+ juvenilesthe
40 Mar-01	1	Northland	population now appears to be on a growth spurt. In 1996, 10 snails were put together to allow mating. Maybe that had the desired effect.
			The 2001/02 kokako breeding season was a slow one in Mataraua. Three nests were found in late November and early December; one of these
44 Apr-02	3	Northland	produced two chicks, the other two nests failed, and the cause was unable to be ascertained due to safety standards involving tree climbing.
			fairy terns: Six chicks have fledged from six breeding pairs: four pairs bred at Mangawhai (an increase from a stable three pairs since 1995) and
			two pairs at Waipu. There were two birds breeding for the first time this season, both paired with an older bird. One was an older male that
			disappeared after the first of their two eggs hatched; unfortunately the female couldn't care for the chick on her own and it too disappeared.
			The other bird and her older partner fledged two chicks. Of the other ten eggs (from the total of 14): four were infertile; one chick of two that
			hatched at Waipu disappeared without trace, possibly taken by a black-backed gull; one fertile egg failed to hatch; and the remaining six eggs
			hatched and chicks fledged. These six chicks have now left their natal sites and will be flocking up with the adults and moving over to the West
52 Mar -04	2	Northland	Coast. Overall the results were pleasing, certainly an improvement on the two chicks that fledged last year due to bad weather
37 Jun -00	17	Otago	Between October 1999 and February 2000 mohua nest monitoring occurred in the Caples and Dart valleysThis was part of a stoat control

			studyThe Caples was used as the control site, where no predator control was carried outAfter a couple of weeks of ropes and mist net
			hauling, we managed to band around 120 birds. Nest finding provided more challenges because several pairs of birds were found building up to
			4 different nests on the same day! Eventually 72 nests were closely monitored, 37 spread over two sites in the Caples and 35 throughout four
			areas in the Dart. Whenever possible trees were climbed to monitor nesting stages and measure nest holes. Of the total 54 breeding females,
			all survived the seasonThere was a 69% success rate in the Caples and 80% in the Dartreasons for these nest failures including floods,
			abandonment, predation, and long tail cuckoo parasitism. All-in-all a thoroughly interesting and eniovable season was had by all involved.
			Asaphodes stinaria: This is the first Southland record since 1944, despite intensive survey work. In the last three years, a few specimens from
			South-Westland, Queenstown, and Trotters Gorge (East Otago) have been found. The latter record included a male and female collected. The
			female laid eggs that hatched into caterpillars, which were reared through to adults on wetland Ranunculus species and established for the first
43 Dec-01	16	Otago	time, the host plant for the moth
	-	U	The last of the 12 albatross eggs is in the process of hatching and has been placed under a foster pair of albatross. An albatross chick that we
			were hand-feeding has died. This chick was not fed at all by parents so it is hard to know if it was missing something important in its diet. or
			possibly died from ingested food/liquid into lung cavities which can cause pneumonia-related problems. Two other chicks are receiving some
			feeding from us too, both of which would have died without assistance. All other chicks are doing well with no fly strike problems this year. At
			another nest the male has so far failed to return from sea. The female has been on the nest for 10 days now compared to the usual change over
52 Mar -04	22	Otago	every second or third day!! She is readily taking fish fillets without us having to restrain and force feed her
	-		vellow-eved penguin: nest numbers were generally about the same or slightly up on last season on the Peninsula and in North Otago, but
			approximately 13% down in the Catlins. Some monitored areas have had egg infertility/early chick deaths but generally productivity has been
			good, with high mean weights at the February monitoring. From 152 nests, 218 chicks fledged. This average of 1.43 chicks per nest is
			considered to be a very good. Average weight for chicks on the peninsula and the Catlins was 5.49 kg which is also very good. Kevin Pearce
			notes that the mean weight for the individual North Otago areas ranges from 4.7–6.4 kg. Twenty chicks were banded at Katiki Point. 12 at
52 Mar -04	24	Otago	Barracuda Bay. 10 at Wajanakarua. 10 at Bushy Beach. 3 at Tayora, one at Beach Road and one at Katiki Beach
1			During the 2003/04 season 15 albatross eggs were laid, from which 12 chicks hatched. Four chicks subsequently died, some of which were
			supplementary fed. This supplementary feeding of very small chicks was new for staff; in the past large chicks have been fed, but dealing with
			chicks less than a week old was a real challenge. Autopsies of these chicks by Massey University staff have shown that their diet lacked
53 Jun -04	16	Otago	sufficient calcium
			Takahe: The takahe-nesting season is underway with field teams now in the Murchison Mountains. A few pairs have nested early, but it
39 Dec-00	15	Southland	appears that most will be laving a bit later than normal owing to the snowfalls and cooler weather over October.
			In December a survey trip to Rose Island (northern Auckland Islands) will take place. The survey will develop and refine census/monitoring
			techniques with Auckland Island snipe to guide management for the recently discovered Campbell Island snipe as part of the recovery
39 Dec-00	15	Southland	programme objectives
39 Dec-00	15	Southland	Southern NZ dotterel: It appears to be a good season with many nests and some early chicks. A survey of all potential nesting sites has started.
			Powelliphanta spedeni spedeni (giant land snail): This rare species lives in the mountains of northern Southland. Monitoring is needed to detect
			potential decline in numbers[5 people and] Two methods of sampling were used. Three monitoring plots in tussock were established, and 1.5
			plots were searched. Live snails were recovered and a number of shells also. The second method is to search discrete patches of the plant
39 Dec-00	16	Southland	Astelia nervosa for snails. The snails have been marked and released. We hope to learn about life history and home range from this study.

			A small group of Hector's dolphinstake up residence in Porpoise Bay each summer and autumnThe increasing visitor numbers and attempts
			to swim with the dolphins off the beach, the establishment of a commercial boat viewing operation, and concern at possible behavioural
			change amongst the dolphins led the department to initiate a study The dolphins formed significantly tighter pods when the dolphin-viewing
			boat was present in the bay. The presence of swimmers also increased the probability of dolphins remaining in a tight state considering the
			importance of Porpoise Bay to the animals, the potential for increased disturbance through an increase of tourism to the area, was cause for
			concernThe then level of impact should be acknowledged as being the cause of the limit of acceptable change. Those disturbance levels
			should therefore not be exceededSince [the] study there have been fewer dolphins recorded in the bay – a maximum of 10 in 1999/2000, 12
			in 2000/2001, and 15 in 2001/2002. Last year it was recognised that up to date informationwas neededthe New Zealand Whale and Dolphin
			Trust was contracted to study dolphin abundance and movements at Porpoise Bay over the 2001/2002 summer. The study involved: The
			compilation of a photographic identification database; Mark -recapture analysis of the animals photographed to determine population size;
			Theodolite observations from the land overlooking the bay to track dolphin groups with and without boats and/or swimmers present; Analysis
45 Jun-02	15	Southland	of dolphin movement patterns with and without boats and/or swimmers present
			There has been much activity recently in Southland with regard to collating information on southern right whalesSouthland has one of the
			two nationally important sites located at Te Waewae Bay near Tuatapere. This location has had as many as 10 whales visiting at once, with
			groups often staying for a week at one time. The other important site is Hawke's Bay, where mother and calf pairs are often seenThe team in
			Southland had a particularly successful whale season with biopsy samples and ID photos collected from six whales in two separate incidences
51 Dec -03	19	Southland	(25 August and 15 September)
			The Yellow-eyed Penguin Trust has been conducting an intensive monitoring programme of yellow-eyed penguin breeding success on Stewart
			Island. The news is not fantastic, with most nests having failed. In one spot where three breeding areas are being monitored (Rollers Beach
			through to Long Harry), only two chicks remain alive. The decline appears to be due to a lack of food for chicks. Monitoring will continue until
52 Mar -04	25	Southland	either all the chicks have fledged or died.
			Takahe chick rearing at the Burwood Bush captive rearing unit is continuing to go well, there are now 17 chicks and one egg from a late re-nest
52 Mar -04	26	Southland	due to hatch shortly.
			yellow-eyed penguin chicks: This year the Trust monitored all of the nests along the northern coast of Stewart Island looking for evidence of cat
			predation. Instead, they found that most chicks appeared to have died of starvation. The Trust and DOC will continue to monitor these birds
53 Jun -04	19	Southland	over the next few years to determine if this is normal or a one-off event.
			Thirty-two first clutch hihi nests have been recorded to date, with 54 chicks having fledged so far. A further 19 second clutches have been laid.
			Two adult males have been found dead, one had no head (thought to have been preyed on by a morepork) and the other died of aspergilosis.
			Forty - two chicks of various ages have died in nests and where possible, their carcasses have been preserved for future pathology. A total of 15
		Tiritiri Matangi	nests have been treated or changed in response to mite infestations and unfortunately the new pre-egg laying mite treatment using
43 Dec-01	17	Island	diatomaceous earth has not yielded very promising results.
			There are currently three pairs of kokako on Tiri and although the season began promisingly (after some 'soap-opera-like' partner swapping and
			red herrings) there is currently only one active nest with one chick. The Wattle Valley pair began incubating on or about October 30.
			Unfortunately the nest was empty when staff went to band the (approximately) 16-day old chicks. A kahu was seen in the valley the following
		Tiritiri	day, and in the absence of any mammalian predators this species is strongly implicated in the nesting failure. A one-year old female paired up
43 Dec-01	17	Matangi Island	with one of the lone males and nested in the middle of the island. Unfortunately her mate was found dead (killed by trauma to the head and

			neck by an unidentified assailant) just before her eggs were due to hatch. Her incubation pattern became somewhat erratic immediately after
			her mates death but the decision was made not to pull the eggs and attempt to hand-rear the chicks (as this has never been successfully
			achieved for kokako). Although she appears to have quickly bonded to the neighbouring male and settled down to a more regular
			incubation/brooding pattern her nest was found to contain a dead chick and a dead or infertile egg a few days later. Hopefully she will nest
			again soon. The Bush 1 female has traded in her old mate for a new model this year, and hopefully this pairing will be more successful than last
			year (no fledglings from two attempts).
			Four pairs/groups of takahe are currently rearing one chick each. Three hatched early November with the other hatching in the first week of
		Tiritiri	December. One takahe had to be removed to Auckland Zoo for six days for treatment of a bad limp. Unfortunately his group have rejected him
43 Dec-01	17	Matangi Island	since his return (despite his being the 'Alpha' bird in this group for the previous three years).
		Tiritiri	Six nesting attempts were made by the three female kokako on the island [Tiritiri Matangi]. Shazbot abandoned both nests despite chicks
48 Apr -03	16	Matangi Island	hatching. Kahurangi's two nests failed.
		Tiritiri	
48 Apr -03	16	Matangi Island	Three takahe chicks were produced. Another two chicks were produced, but only one of these survived.
			Area staff have been working with Brian Lloyd learning the finer points of monitoring short-tailed bats on the southern flanks of Mt Ruapehu.
		Tongariro/	The technique involves catching and radio tracking bats to find communal roosts, then video monitoring them under infra red light to assess
43 Dec-01	7	Таиро	numbers as they leave at night to forage. Local staff will be picking up this work and continuing it annually.
			two kaka nests have been detected in Rangataua Forest, both in early incubation. Staff will monitor them as they run the stoat/possum/rat
		Tongariro/	gauntlet over coming months. This work is to monitor kaka nesting success in an area without pest control, to provide a comparison with other
44 Apr-02	9	Таиро	managed areas
			An impressive number of bats - somewhere in the region of 500 - have been banded and processed over the past three summers. These 10-day
			trips have given Maniapoto staff wonderful opportunities to learn about bats, handle, band, and measure them. Everyone concerned has
			greatly appreciated this opportunity to be involved in hands-on research with a species that many people rarely see! The Bat Team has also
			started bat catching/monitoring at Ruakuri Natural Tunnel cave at Waitomo. This cave also appears to house a sizeable bat population, and
36 Apr-00	9	Waikato	several hundred have already been captured and marked.
			A combination of stormy weather and egg predation has not been good for New Zealand dotterel at Opoutere this season. In the worst year
44 Apr-02	6	Waikato	since a fulltime ranger has been employed at Opoutere, only six chicks fledged from 20 pairs.
			Michael Crossland (Northern Region Frog Ecologist) is piloting a new monitoring technique for Hochstetter's frog in Northland and Auckland
			conservancies. Michael is recording the presence or absence of frogs on repeated visits to selected sites. The site-occupancy technique allows a
50 Sep -03	4	Waikato	probability of frog detection to be calculated
			An inventive frog stagea digital camera and the natural pattern markings of Archey's frog will be used in a mark-recapture pilot over the next
			few months at Whareorino. All going well, we will be able to monitor individuals through time without having to resort to the usual method of
51 Dec - 03	4	Waikato	toe-clipping
			Over the last few months, Jessica Wallace (Waikato University) has been trialling the frog stage in the field. The stage was especially created to
			aid individual photo identification of Archey's frogs for mark-recapture and the trials have been funded by MWH. Although there are still a few
			problems to work through in the field (e.g. how to stop the frogs from trying to escape and leaving dirty footprints all over the mirrors), the
52 Mar-04	6	Waikato	stage will hopefully reduce the number of photos that are required to be taken of each frog. The photo identification technique has been

			working well during the mark-recapture pilot and will be used in monitoring the effects of rodent control on frogs
			over the next 6 months, trialling the use of site-occupancy to monitor weta populations in their gorse habitat. The technique involves making
52 Mar -04	6	Waikato	repeated visits to sites searching for weta, and recording presence and absence.
			Short-jawed kokopu: Two years' data from tagging a population of short-jawed kokopu is being analyseda number of fish have not been
			recaptured, and we were intrigued to find out where they had disappeared to. However, a thorough search 100 m upstream and downstream
40 Mar-01	4	Wanganui	from the study reach found only 2 tagged fish, so we are no wiser.
			Forbes parakeet received serious attention this season on Mangere Island with the start of a combined field ecology and nuclear DNA study on
			the species and its hybridisation with Chatham Island red crowned parakeet. Efforts concentrated on capture and banding for mark/recapture
			research, erecting nest boxes, location and monitoring of natural and artificial nests, collection of genetic material for the DNA work, and
			collecting baseline morphometrics and photographic records of plumage variations (hybrid index) from Forbes, red-crown, and hybrid
			parakeets. Sixtysix adults and 39 nestlings were individually colour banded and the above information collected. Nest monitoring revealed a
			very low hatch rate (30%) but high fledging success (chicks fledged from eggs hatched) at 47% compared to other parakeet species. Nest boxes
37 Jun -00	11	Wellington	in the revegetating Douglas Basin shrubland recorded a second year of very high egg infertility at over 50%.
			[black robin] The established intensive monitoring technique (following all breeding attempts/banding all fledglings) on South East was down-
			scaled Productivity of 14 pairs was monitored from 3 selected habitat types with results of 18 fledglings reaching independence. Productivity
			was 64% (chicks fledged from eggs laid) from the monitored sample. On Mangere Island intensive monitoring continues. The population started
			the season on par with previous years with 48 birds in the available robin bush habitat. However, productivity was only 16% with 8 fledglings
			reaching independence. Egg and chick failure was very high, clutch sizes small, and the season finished early with moult underway by late
37 Jun -00	11	Wellington	December/early January. introduced predators and disease was not apparent. Perhaps a crash in food supply is responsible?
			[Shore plover] It was an average season on South East Island where storm events were responsible for failure of a significant number of
			nests14 pairs associated with a colour-band trial on the northern coast [had] 31-38% fielding success. The trial of double wrap-around colour
			bands sealed with solvent (tetranydraturan) has successfully completed 3 seasons. One problem. Was related to the habitat in whalers Bay
			where mineral deposits on the rock terraces began 'growing' inside the band, sealing them to the legs. Bands were removed and will not be
			as notantial denors of shields for reintroduction to Mangere Island. Unfortunately the reintroduction had to be postponed a week prior to
			as potential donors of chicks for reintroduction to Mangere Island. Onfortunately the reintroduction had to be postponed a week prior to
			consus on South East has shown a significant soy imbalance in favour of males for a second season running. The handing programme over the
37 Jun -00	12	Wellington	next 3 seasons will aim to identify which theory on the bottleneck for females is evident
57 Juli -00	12	Weinington	Chatham Island ovstercatcher recovery. Management includes predator control stock exclusion, and pest manipulation (protection from high
			seas) In the managed territories 25 chicks fledged and reached independence from 16 pairs, and in the unmanaged territories no chicks
			fledged from 12 pairs, predation events, recorded on video in unmanaged territories – 2 clutches of eggs were predated by a cat and 1 clutch of
			eggs predated by a weka. Several nests were lost to high seas in the managed territories despite shifting nests away from the wave zone.
			Numerous 'close calls' were recorded on video including cattle and sheep trampling, weka, and harrier disturbance. The predator control
			regime focused on trapping which yielded 51 cats, 719 weka, 61 possums. 44 rats (despite not targeting rats), and 41 hedgehogs over 5
			months Sixty seven ovstercatchers have been colour banded in the last 2 seasons, including all fledglings from the managed territories in both
37 Jun -00	13	Wellington	years.

39 Dec-00	9	Wellington	mist-netting and banding Forbes' parakeets. They took plumage descriptions, measurements, photographs, feather and blood samples for DNA analysisand faecal samples and blood smears for disease identificationA total of 46 birds was caught.
			It's shaping up for another good taiko season. Thirty-five burrows have had taiko activity to date, and 6-8 should breed. Graeme Taylor from
			BRU has been in the Chathams catching birds to take blood samples and band with black and white colour combinations. The colour bands will
39 Dec-00	9	Wellington	enable identification of individuals during video monitoring at the burrows. Graeme caught 13 birds, 8 banded and 5 unbanded.
			Grey faced petrels: Mt Bruce is trialing rearing these birds as practice for more threatened species. Six of the original 12 birds are doing well
			with some very impressive weight gains. Several of them are now well feathered on the belly. We also received another abandoned bird from a
39 Dec-00	9	Wellington	researcher.
			Hihi The installation of nest-cam and temperature probes will provide us with more information about hihi incubation and brooding. We will be
			attempting to hand-rear chicks from six days, and if further information is obtained, also from the egg Handreared birds are easier to manage
42 Oct -01	10	Wellington	and provide better viewing opportunities for the public, as they are less wary. Juveniles produced this season will be released onto Kapiti Island.
			Six kokako nests have been found on Kapiti Island, and another six pairs may be nesting out of a maximum possible 15 pairs. Four chicks have
			been banded, and another two have fledged. Twenty-eight nesting attempts of 18 female hihi have been monitored, producing about 40
			fledglings. It has been a record year for takahe on Kapiti, with four chicks from four breeding groups (including one set of twins); unfortunately
52 Mar -04	15	Wellington	one chick has since died. A brown teal pair that had four ducklings in November is now down to one.
55 Dec -04	11	Wellington	Kokako: Monitoring of the birds released at Pukaha/Mount Bruce has commenced.
			Five giant kokopu and 31 shortjaw kokopu were tagged in the last 12 months in order to monitor a population of each as part of the Large
52 Mar -04	20	West Coast	Galaxiid Recovery Plan.

			26. Kiwi Management Quotes
			Beaky is an Operation Nest Egg (ONE) kiwi who hatched at Auckland Zoo on 8 January 1997 from an egg collected from Hodges Bush in Northland. He was released into Hodges Bush in July 1997, and this year made his first nesting attempt - a 1-egg clutch, which hatched
			successfully. The week-old chick was found in the nest with Beaky on 25 October. This is the first known successful breeding of an ONE
			bird anywhere in the country, so is quite a milestone for the project. Because of its importance to the ONE project, a decision was made to
			transfer the chick to Motuora Island, which is being used as a kiwi creche. The chick was removed from the nest and delivered to Auckland
39 Dec-00	3		Zoo where it will live for a week or two pending its transfer to Motuora.
			A North Island brown kiwi translocation proposal for Operation Nest Egg (ONE) and wild birds onto Mokoia Island has been prepared by
			the Mokoia Island Trust Board. Moana, a juvenile male (ex Whirinaki Forest) raised from an egg at Rainbow Springs in Rotorua, was the
			first of the founder population to be released on to the island on Waitangi Day Other ONE juvenile kiwi will be released onto Mokoia
49 Jun -03	23		over the next few months
			A kiwi chick and an egg were recovered from Ohope Scenic Reserve near Whakatane last November and were raised on at Rainbow
			Springs in Rotorua. The egg hatched and both chicks are female. As part of the restoration project for Whakatane kiwi the two chicks were
			released on Moutohora (Whale Island) in mid AprilSurveys for other kiwi in local Whakatane reserves will hopefully allow additional kiwi
			to be released onto the island. There will be ongoing kiwi management at Ohope Scenic Reserve, and in the medium term progeny from
41 Jun -01	5	Bay of Plenty	Moutohora will be returned to the reserve.
			Kiwi: a call rate of 2 per hour was recordedseem to indicate a population of 110 to 160 in the 16 km2 surveyed it should be possible to
			obtain a sufficient sample size to test in situ management. For large tracts of back country this could be a feasible alternative to the
41 Jun -01	8	Bay of Plenty	captive bred programmes currently being undertaken.
			In the Whakatane District, kiwi surveys undertaken by staff/contractors show that there are a number of isolated groups of birds in
42 Oct -01	7	Bay of Plenty	several of the reserves. The future of these has yet to be decided, and some may possibly join the Moutohora birds.
			The kiwi population in the Tuwatawata E.A continues to be managed by Rangitaiki Area staff. They monitor nine pairs and run a stoat-
42 Oct -01	7	Bay of Plenty	trapping regime around and through the block
			Three adult males and 1 juvenile bird are being monitored at Ohope Scenic Reserve. Forty seven stoats and 10 cats were trapped in the
			reserve. Both female kiwi released onto Moutohora (Whale I) from the reserve are doing well. Surveys show kiwi at Waiotane S.R (5
			males/3 females) and Awakeri Forest (2 males/1 female). Whirinaki Forest Park The kiwi work is progressing well in Tuwatawata E.A and
45 Jun-02	7	Bay of Plenty	10 pairs are being monitored. A 1ha predator proof enclosure is being built for release of juveniles.
			In early May 2003 Tumanako, a male North Island brown kiwi chick, was released onto Moutohora to join two adult females released
50 Sep -03	7	Bay of Plenty	there in 2000.
			A further release of three sub-adult North Island brown kiwi (Tutanekai, Hinemoa and Tiki) took place on Mokoia Island on 22 July 2003.
			The three birds (raised under the Operation Nest Egg programme at Rainbow Springs) were from Whirinaki Forest Park, and join Moana
50 Sep -03	7	Bay of Plenty	nui a kiwa, a wild-hatched male from Ohope Scenic ReserveThere are now three males and one female (Hinemoa) on Mokoia.
			Two juvenile North Island brown kiwi (Honu and Whakapono) were released into the reserve on 9 August 2003. These birds came from
50 Sep -03	7	Bay of Plenty	eggs collected from the reserve and were hatched and raised at Rainbow Springs.
			All six North Island brown kiwi on Moutohora Island are doing well. The latest update is that four of the single birds have now paired up
51 Dec -03	5	Bay of Plenty	into two pairs, and the other two single birds are tending to still roam around. An 18 month old male is incubating an egg

			We should see 20 juvenile kiwi being placed back into the forest, all of which have come from nine breeding pairs. This year, 12 adult male
			kiwi and their mates were monitored for breeding. Eleven of the males are wild-caught birds fitted with transmitters; one was an
			Operation Nest Egg (ONE) bird released in 1995 that has mated with an ONE female released in 1996. Ten of the 12 pair monitored had
			nests, and laid a collective total of 41 eggs. Twenty-eight of the eggs were viable; the remaining 13 were either rotten or infertile The first
			eggs hatched at Rainbow Springs in early September, and the majority of eggs had hatched by mid February. A single egg is still being
			incubated as we speak. Of the 28 viable eggs, 20 successfully hatched. Six of the eggs were either cracked resulting in chick death, or
			hatched but the chicks failed to survive; and two chicks are still fighting for their life. Seventeen of the successfully hatched chicks have, or
			are being raised at Warrenhein a predator-free enclosure in the Waikato which is privately owned. Two chicks died of unknown causes
			Using Warrenhein as a crèche site in which to raise our chicks prior to their return to the wild has taken some of the pressure for space
			off of Rainbow Springs and enabled our kiwi chicks to grow in a semi-natural environment. Due to some concerns over human induced
			disturbance at Warrenbein and the effect this may have on the birds, plans are in place to reduce the numbers of kiwi kent in the
			anclosure at any one time next season, and to control the traffic through the site. To date, eight of the 2002/02 inventile kiwi have been
			released back into the Tangarira Faract. All of these shicks seem to have thrived at Warrenhein; they were transferred to the site from
			Peiebased back into the folgarilo folest. All of these clicks seen to have thrived at warrenneip, they were transferred to the site from
			starts and possume, and were then released back into the forest. One shick released into the forest at 050 grams has since been predated
			stoats and possums, and were then released back into the forest. One chick released into the forest. One of the neurly released kind at
			by a stoat, resulting in a requirement that juveline kiwi must be 1200 g phor to release into the forest. One of the newly released kiwi, at
			only 8 months old, made its way across the whangahul River and was found 2 km north of the river. This is only the second time a bird has
54 Dec 02	c	Davie of Diamater	been recorded crossing the river from the longariro forest; start are eageny waiting to see whether the bird attempts to return to the
51 Dec -03	6	Bay of Plenty	Torest
			Wonitoring of the four kiwi released onto wokola Island continues; all are doing well. There are no planned releases to the Island this
52.14 04			year, but further survey work this autumn will attempt to locate wild birds in the local district. The future of these birds will be determined
52 Mar -04	9	Bay of Plenty	after this
			Two of the four kiwi on Mokola Island have dropped their transmitters, and will be re-caught in early 2005 to attach transmitters. The two
	_		that have been monitored are looking healthy and seem to be holding territories. We hope to release a kiwi chick or two on Waitangi Day
55 Dec -04	7	Bay of Plenty	2005, if they can be sourced from Whirinaki Forest
			an auspicious date for Boundary Stream with the release of 'Ari' - the first of the captive reared kiwi chicks into the reserve. Under the
			Operation Nest Egg programme efforts are underway to re-establish a population of NI brown kiwi within the reserve. Over the next 3-5
			years eggs will be sourced from the Eastern Kaweka ranges with the aim of establishing 10 breeding pairs within this time. Five
		East Coast/	transmitted males currently form the source population, from which a further 2 kiwi will be released into Boundary Stream in coming
36 Apr-00	11	Hawke's Bay	weeks.
			The 3 Operation Nest Egg kiwi released into Boundary Stream from March 2000 to May 2000 have responded positively to their new
			surroundings. Progressive weight gains having been made among all three with the first of the released birds now at 1300 g and the latter
			two at 975 g. The birds' movements have been largely confined to the reserve, although one foray was made some 2 km from the reserve
			onto the other side of the range. Monitoring of adult male kiwi within the eastern Kawekas has resumed. The number of transmitted birds
		East Coast/	has been increased from 5 to 8. With incubation having started amongst some of these kiwis, it is hoped a larger number of juveniles will
38 Sep -00	6	Hawke's Bay	be released into Boundary Stream over the coming season.

			Four sub-adult kiwi have recently been released into the Karioi Rahui on the southern slopes of Mount Ruapehu. These birds were
			removed as eggs from nearby Waimarino Pine Forest and raised as part of Operation Nest Egg. Together with integrated pest control over
			an increasing area at the Rahui it is hoped these birds will seed a kiwi population recovery. Meanwhile in Tongariro Forest 21 Operation
		East Coast/	Nest Egg birds have now been released since 1997. Despite at least three deaths (ferret, pig & misadventure) and five transmitter failures,
38 Sep -00	6	Hawke's Bay	the remaining 13 birds are doing well and all remain within various parts of Tongariro Forest.
· ·			Mustelid control should also benefit the kiwi in the block, and we will be monitoring this through a radio telemetry study of chicks and
		East Coast/	sub-adult kiwi. At this stage we have one adult male kiwi incubating in an area populated by NI weka. We have a time lapse camera filming
39 Dec-00	7	Hawke's Bay	the burrow entrance and hope to record any interaction between the two species.
			The 3 North Island (NI) brown kiwi released into Boundary Stream earlier in the year have had mixed fortunes. In late September the
			oldest (6 months) and largest (1300 gm) kiwi was found dead in the reserve. The cause of death is thought to be exposure because the
			bird was located in an exposed part of the reserve. There was no evidence of predation, and a severe southerly storm had hit the reserve
			at the time bringing extreme winds, freezing temperatures, and snow. The remaining 2 birds have continued to gain weight and remain
			within the 800 ha area of the reserve. A further 2 chicks are being raised as Operation Nest Egg (ONE) birds for release into the reserve.
			With the potential to collect additional kiwi eggs from the Eastern Kawekas this season it is hoped further releases will be possible. The
			trial of a rodent-based formulation of Cholecalciferol (Feracol) to maintain rat numbers at low levels of activity over a c.250 ha area
		East Coast/	appeared effective. The use of tracking tunnels to evaluate rat activity between June and August detected no rats in the area where
39 Dec-00	7	Hawke's Bay	'Feracol' was available.
			Since March 2001 an additional five North Island brown kiwi, raised at Rainbow and Fairy Springs, have been released into Boundary
			Stream Scenic Reserve. All new arrivals are doing well. The total released is now ten with eight being monitored (five females and three
			males). One was lost to hypothermia and the another to predation in late August 2001. This bird (1100 grams) was found dead down a
			deep burrow just outside the Reserve. The culprit appears to be a ferret, although this is yet to be confirmed. The oldest kiwi in Boundary
			Stream are now approximately 17 months and still wandering. Raina (female) was retrieved from Waitere Kiwi Conservation Area
		East Coast/	recently, almost 6 km away. She is now back and weighs 1750 grams . Kohu (male) has settled after his long distance escapades in March,
42 Oct -01	7	Hawke's Bay	and is also around 1750 grams.
		East Coast/	Kiwi: Nest monitoring in the Kaweka Range for this season began in June. Five eggs from three nests have been transferred to Rainbow
42 Oct -01	8	Hawke's Bay	and Fairy Springs with the first egg hatching 5 September. Another three males in the Kaweka Range are currently sitting
			Monitoring of kiwi in the Kaweka Forest Park for Operation Nest Egg is in full swing. From first clutches this season, three chicks and nine
			eggs have been removed from nests. This has resulted in a total of eight healthy chicks now at Rainbow Springs in Rotorua. Of the eggs
			removed, five hatched and one is still incubating. The remainder were either rotten or died hatching (one had it's leg tangled around the
			umbilical cord and the other had also become excluded from it's yolk sac). All first clutches are now over and three of the six males are
			currently sitting on second clutches. In September, after weeks of searching on foot and a good fly over in a fixed wing, we suspect that
		East Coast/	the transmitter on Raina (the oldest female in Boundary Stream) has failed. Seven of the ten kiwi, which were released in the Reserve are
43 Dec-01	8	Hawke's Bay	currently being monitored.
			The Whinray kiwi project (near Motu) is making steady progress after two seasons of mustelid control. An adult male who went missing
		East Coast/	earlier in the year after a transmitter failed was found again. This bird was sitting on two eggs at the time. These were transported to
43 Dec -01	9	Hawke's Bay	Rainbow Springs but were found to be infertile. The second clutch from this bird has also been removed for artificial incubation to

			Rainbow Springs. Two more sub-adult males have been heard calling in recent weeks and a new adult female (now with transmitter) has
			also been found. A local interest group, the Whinray Ecological Trust, has been busy applying to various trusts and other organisations for
			funding. Their immediate aim is to carry out possum control on private farmland surrounding the reserve to reduce the rate of re-
			invasion. Traps and bait stations have been purchased and it is hoped the trust can employ a trapper within the next two months. The
			Department removed 3 200 possums from the 430-bectare block during autumn 2001. The trust aims to work with DOC to keep possum
			numbers at a 2-3% Recidual Tran Catch both within and outside the reserve
			In May we conducted the second consecutive kiwi call survey of the Puketukutuku Peninsula. Steat control has been undertaken for eight
			In May we conducted the second consecutive Rivi can survey of the Pukelukutuku Pennisula. Stoat control has been undertaken for eight
			years. The call rate on Puketukutuku has <u>increased</u> from 1.52 calls/fir in 2002 to 2.55 calls per hour in 2003. In 2002, 21 kiwi were heard
			calling, 13 or which were radio tagged. In 2003, 31 kiwi were heard calling, of which 12 were radio tagged. Population estimates indicate
			the number of calling kiwi on Puketukutuku in 2002 and 2003 were 34 and 44 respectively. The ability of juvenile kiwi to disperse over a
			considerable distance can limit the effectiveness of our conservation efforts. We have kept track of a proportion of wandering juveniles
			with the help of some Kiwi Recovery Trust funding. Of the juveniles monitored, two were tracked eight kilometres from Puketukutuku and
			both have subsequently walked back. One kiwi was found due to its mortality signal, the transmitter was found on the ground. Another
			kiwi was located 10 kilometres away from its start point, and we subsequently lost this bird. Two other mortality signals have been picked
			up, one 16 kilometres away from Puketukutuku. The rest (five) have disappeared. The erection of a fence funded by Bank of New Zealand
			Kiwi Recovery Trust and the Sanderson Trust at Lake Waikaremoana is about to be embarked on. This fence is to inhibit juvenile kiwi
			leaving the Peninsula. We anticipate that this will result in a greater number of breeding pairs producing more chicks. When carrying
			capacity is reached the fence will be relocated to the adjacent Whareama Peninsula and predator control started. Juvenile kiwi will then
		East Coast/	be cropped from Puketukutuku and put on Whareama. It is hoped that in 30 years time the hills of Lake Waikaremoana between these
49 Jun -03	10	Hawke's Bay	two peninsulas will be full of kiwi again
		East Coast/	Kiwi: Nesting has once again started on the Puketukutuku Peninsula. Unfortunately once again the spectre of pigs uprooting trapping
50 Sep -03	8	Hawke's Bay	tunnels has arisen, with one pig captured containing a large number of rats from our snap traps as well
			The first kiwi nest was discovered in Boundary Stream in early September this year. The nest is a result of the pairing of two kiwi. Manu-iti
			(female) and Kohu (male), who were released into Boundary Stream in June 2000 as juveniles using ONE. The kiwi had been sourced as
			eggs from the Kaweka Forest Park (KFP), and then hatched and reared at Westshore Reserve. Napier. The nest is a real milestone for the
			kiwi reintroduction project. Female kiwi need to be around 2.5 to 3 years old before they are sexually mature, so these two haven't
			wasted any time. Unfortunately, one of the two eggs in the nest is rotten, but there is still hope for the second (and Kohu seems to fully
			understand the commitments of parenting). There are currently 14 kiwi being monitored and two other known kiwi pairs in the reserve
		Fast Coast/	This season 12 eggs have been transferred from the KEP to Rainbow Springs in Rotorua for incubation and rearing. Fight of the 12 eggs
51 Dec -03	8	Hawke's Bay	have already batched. Seven naired adult male kiwi are currently being monitored in the KEP for second clutches
51 500 05		Hanke 5 Bay	Staff and a nossum contractor got quite a surprise recently, when a kiwi was found tranned in Mahia Peninsula Scenic Reserve. Kiwi ware
			thought to have been extinct here for more than 50 years: a number of previous surveys had failed to reveal any sign of kiwi. The cantured
		Fast Coast/	kiwi an adult female was sent to Massey University Vet School for treatment but unfortunately died after surgery we renegotiated
54 Sen -04	6	Hawke's Bay	with the contractor to change to raised sets
54 5cp-04	0	Fast Coast/	North Island weke and kiwi: At Whinray Scenic Reserve we have almost completed the deployment of our new steat tunnels and DOC 200
E4 Son 04	c		trans, additional to the Conner. The season's first stort has already been sought. All our menitored hirds are present
54 Sep -04	ь	нажке з вау	traps, additional to the Fenns. The season's first stoat has already been caught. All our monitored birds are present

		Motuora	
45 Jun-02	17	Island	Three kiwi have been released on to predator-free Motuora from Northland to grow big and strong before being returned to Northland
			Every year we seem to get a clutch of kiwi call reports in the Sounds. This year we have made a concerted effect to follow up those that
		Nelson/	seem the most positive, and a couple do look very promising. As yet nothing definite but a few more nights on the hill may finally get a
42 Oct -01	12	Marlborough	positive result.
		Nelson/	Re-surveys of great spotted kiwi at Saxon (on the Heaphy Track) and Kahurangi Point:. The great spots appear to be holding their own
53 Jun -04	12	Marlborough	against the onslaught of predators, with territory sizes remaining stable and juveniles and sub-adults found.
		Nelson/	In mid-May great spotted kiwi were translocated from Gouland Downs to Nelson Lakes National Park. This is a first for the species and is
53 Jun -04	12	Marlborough	seen as experimental, with the hope of developing conservation techniques for future use.
		Nelson/	Over half the kiwi on Motuara Island have gone back to Okarito. Our programme may be on the back burner while the birds are managed
39 Dec-00	11	Marlborough	down there with the extra dosh!
			Kiwi: Chick survivorship in Trounson mainland island for the year 2000-2001 stands at 64% (n=14). This is comparable to survivorship over
			the last few years: 30% in 1996-97 and 1997-98, 58% in 1998-99, and 69-85% in 1999-2000. The upward trend and flattening off period
			coincides with the fine tuning of our predator control, and possibly also with carrying capacity factors. Survivorship in Trounson may
			stabilise around 60-70%, although it may peak as high as 80% in non stoat plague years under the current predator control regime. Of the
			surviving kiwi chicks, 78% are over 1000 gm and are 8 months old. Four chicks were lost to predators early in the season, and we have had
41 Jun -01	1	Northland	one tx failure.
			Since October 1997 we have had six kiwi returned to Trounson as part of Operation Nest Egg: one was found dead in 1999 at 12 months
			old, cause unknown but suspected to be a mustelid; one had a tx failure at 14 months old; two have left Trounson, and one of these birds
41 Jun -01	2	Northland	was found 20 km into Waipoua forest. The remaining two birds are still living in Trounson.
			Kiwi: Our kiwi crèche on Motuora Island is keeping staff busy. Eggs taken from the wild in Northland are hatched in captivity at Auckland
			Zoo, and then the are chicks released into artificial burrows on predator free Motuora until they weigh 1200 grams. They are then taken
42 Oct -01	3	Northland	back to Northland, released into the Kiwi sanctuary and monitored post release
			This project was set up in 2001 to see if the current stoat control regime (193 trap boxes with two Mark 4 Fenn traps placed 200m apart
			along the valley floor and up two side branches) is sufficient to protect juvenile kiwi. In the first breeding season (2001/02), nine adult
			male kiwi with transmitters were monitored. Seven of these nine birds made nesting attempts, and four chicks were reared. One of these
			chicks survived, while the other three were predated by stoats. During the 2002/03 breeding season, nine of the 11 adult male kiwi that
			were monitored made nesting attempts. A total of 10 chicks hatched, two of these drowned before they left the natal burrow, one had a
			failed transmitter, five were predated by stoats, and two survived. For the coming season the team aim to catch another 10 adult kiwi to
48 Apr -03	15	Southland	increase the sample size, and extend the trap line
			Kiwi: To date we have two surviving chicks from this season. One has reached 1.2 kg, and it's a boy! He answered a taped call of a male
			which was played near him when trying to call new adult males in. The other chick is now 700g. In May, Te Anau Area staff took two Bank
			of New Zealand managers to view the transmitter change on this chick. We hope to provide more opportunities like this to our sponsors
			next season. Recently, five new adult male kiwi were caught in the Clinton Valley as well as the beginning of the North Branch and the
49 Jun -03	21	Southland	Neale Burn. This increases the monitored kiwi in the Clinton Valley study to a total of 19 adults, 15 (possibly 17) of which are known pairs
49 Jun -03	22	Southland	We are monitoring kiwi, mohua and takahe to assess the effectiveness of this trapping programme Ten male kiwi were fitted with

			transmitters (five alpine, five forest habitat) during May, with the aim of monitoring nesting activity and chick production.
50 Sep -03	16	Southland	The kiwi that were transferred to the Doubtful Islands last year were also checked during this trip
			One new kiwi chick hatched over Waitangi weekend in the Clinton valley and was subsequently named 'Waitangi'. There are two chicks
			presently in the study site. Six of the seven chicks that have died were confirmed stoat kills. Two of the Haast kiwi chicks at Burwood Bush
			Reserve were found dead recently. The causes of the deaths are unconfirmed to date, but starvation is the suspected cause of at least
52 Mar -04	27	Southland	one. The remaining two kiwi chicks were weighed last week and both are good weights.
			Fieldwork to catch kiwi in the two Murchison Mountain monitoring sites finished recently; unfortunately not all the required birds were
			caught. For some reason the birds were being very quiet and were quite elusive. A second attempt to complete this transmitter fitting
53 Jun -04	18	Southland	work will be carried out in May.
			Kiwi monitoring in the stoat trapped and non-trapped blocks of the Murchison Mountains is progressing, with some chicks having now
			hatched and several birds still incubating. Last week the first sign of stoat predation was picked up with one, possibly two, chicks having
55 Dec -04	17	Southland	been preyed upon in the non-trapped area
			The Tongariro Forest Kiwi programme has had mixed success this season. There are currently 13 kiwi chicks from the programme at
			Rainbow Springs in Rotorua and 1 more fertile egg is still to hatch. Nine of these chicks are from Tongariro Forest, with the remaining
			chicks (and the last egg) from Waimarino Forest near Raetihi (actually in Wanganui Conservancy). There have been remarkably few losses
			at Rainbow Springs this year with just 3 fertile eggs lost, although there were a few dead eggs taken from the field also. The first chicks to
			hatch back in October are doing very well and we expect to start releasing in May. Out in the field the news is not so good. Of the 13
			Operation Nest Egg releases put back into Tongariro Forest, only 5 to date still carry functioning transmitters. One chick dropped its
			transmitter and 4 have had gear failure meaning we have lost track of them. One bird has been killed by a pig, another by a ferret, and 1
			died from a ruptured liver after what we can only describe as misadventure because the bird was in perfect health otherwise – there were
		Tongariro/	no visible sign of predation. Although the total of confirmed deaths from the 13 released chicks is only 3, there is the possibility of more
36 Apr-00	11	Taupo	among the 5 'missing' birds.
			After a slow start, the kiwi breeding season has finally kicked in within the Tongariro Forest Kiwi Sanctuary. Up to eight nests are now
			being monitored, with three radio tagged chicks already on the ground. Evidence is mounting of an exceptionally good kill of possums and
		Tongariro/	rats following the 20,000 ha September aerial 1080 operation. Stoats also appear to have been controlled. The race between kiwi chicks
43 Dec-01	7	Taupo	trying to grow to a safer weight and stoats re-invading the forest is now on.
			Four months after an effective possum and rat knock-down by a 20,000-ha aerial 1080 operation over Tongariro Forest, stoats reappeared
			in the centre of the forest and began killing kiwi chicks. So far five of the 11 chicks have been predated, and all in the centre of the
			treatment area. Surviving kiwi chicks are being left in the wild in the hope that stoat density will not recover quickly enough to make their
			fate certain. Unfortunately only one of the 11 monitored chicks hatched early enough in the season to get the full benefit of the aerial
			knock-down. Its September hatch date has allowed it to reach well over 1000 grams now, so it is relatively safe from re-invading stoats. It
			is hoped that other unmonitored chicks from this same early (first clutch) cohort have also benefited as only 12 of an estimated 40
		Tongariro/	breeding pairs currently carry radio transmitters in the Sanctuary. However, all other monitored chicks hatched after November are still at
44 Apr-02	9	Таиро	risk. Rodent numbers remain surprisingly low, with the same tracking index recorded in February as in December (< 2.0%).
		Tongariro/	A productive breeding season is being recorded for North Island brown kiwi in the Tongariro Forest Kiwi Sanctuary. Twelve monitored
47 Dec -02	8	Taupo	pairs have produced 10 first clutch nests with 17 eggs, from which 14 chicks have hatched. The second clutch is underway. Chicks are

InterpretationInterpretationImage: State of the state				being raised at "Warrenheip", a private predator proof enclosure near Cambridge. Planning is underway to move from one to large scale,
Figure 10The Tongariro Forest Kiwi Sanctuary has had a good year: 10 of the 11 breeding pairs monitored this season nested. From a total of 15 nests monitored, two nests were destroyed (causes undetermined), and two with rotten eggs (n = 4) were abandoned. A total of 24 eggs were removed from 11 nests and taken to Rainbow Springs: three of the eggs were infertile, two had early embryonic death (occurred in nest), and 19 hatched. Of the 19 chicks, 11 are at Warrenheip, five are still at Rainbow, one is at Massey (physical complications), one die at a vets in Rotorua and one died at Warrenheip (cause of death unknown, autopsy results inconclusive). This season we will be looking to release 17 juveniles back into Tongariro Forest. One wild-hatched chick was accidentally caught as part of a big effort to capture more breeding males. This chick is currently at Warrenheip. While we are currently monitoring 11 breeding males, our target is to have up to 353 Jun -047Taupoup to 40 juvenile back into Tongariro Forest.				low density stoat trapping at the site.
<ul> <li>nests monitored, two nests were destroyed (causes undetermined), and two with rotten eggs (n = 4) were abandoned. A total of 24 eggs were removed from 11 nests and taken to Rainbow Springs: three of the eggs were infertile, two had early embryonic death (occurred in nest), and 19 hatched. Of the 19 chicks, 11 are at Warrenheip, five are still at Rainbow, one is at Massey (physical complications), one die at a vets in Rotorua and one died at Warrenheip (cause of death unknown, autopsy results inconclusive). This season we will be looking to release 17 juveniles back into Tongariro Forest. One wild-hatched chick was accidentally caught as part of a big effort to capture more breeding males. This chick is currently at Warrenheip. While we are currently monitoring 11 breeding males, our target is to have up to 3 Since February we have caught an additional 14 wild kiwi, of these seven are paired males. Our targets for next season include releasing up to 40 juvenile back into Tongariro Forest.</li> </ul>				The Tongariro Forest Kiwi Sanctuary has had a good year: 10 of the 11 breeding pairs monitored this season nested. From a total of 15
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53 Jun -04       7       Taupo       at a vets in Rotorua and one died at Warrenheip (cause of death unknown, autopsy results inconclusive). This season we will be looking to release 17 juveniles back into Tongariro Forest. One wild-hatched chick was accidentally caught as part of a big effort to capture more breeding males. This chick is currently at Warrenheip. While we are currently monitoring 11 breeding males, our target is to have up to 3         53 Jun -04       7       Taupo       up to 40 juvenile back into Tongariro Forest.				nest), and 19 hatched. Of the 19 chicks, 11 are at Warrenheip, five are still at Rainbow, one is at Massey (physical complications), one died
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53 Jun -04 7 Taupo up to 40 juvenile back into Tongariro Forest.			Tongariro/	Since February we have caught an additional 14 wild kiwi, of these seven are paired males. Our targets for next season include releasing
	53 Jun -04	7	Taupo	up to 40 juvenile back into Tongariro Forest.
The 2002/03 breeding season started well with the hatching of Rainbow, our first 2nd generation chick from Te Aukaha and Koha, an				The 2002/03 breeding season started well with the hatching of Rainbow, our first 2nd generation chick from Te Aukaha and Koha, an
Operation Nest Egg pair. Sadly, Rainbow died at Warrenheip. However, Rainbow's sibling, Putiputi, was released into Tongariro forest on				Operation Nest Egg pair. Sadly, Rainbow died at Warrenheip. However, Rainbow's sibling, Putiputi, was released into Tongariro forest on
the 31/3/03, and was last caught on 12/5/03. What we thought was our final egg for the season was taken to Rainbow Springs on the				the 31/3/03, and was last caught on 12/5/03. What we thought was our final egg for the season was taken to Rainbow Springs on the
7/5/03. We named the chick Possum, a fitting name as another nest due to be robbed on the same day was predated by a suspected				7/5/03. We named the chick Possum, a fitting name as another nest due to be robbed on the same day was predated by a suspected
possum! We assumed that the single egg that Doug, the male kiwi, was incubating was the fifth and final egg for this season for him and				possum! We assumed that the single egg that Doug, the male kiwi, was incubating was the fifth and final egg for this season for him and
his partner (Lass). To our surprise Lass was found a week later, simultaneously incubating a sixth egg at another nest site. This is our first				his partner (Lass). To our surprise Lass was found a week later, simultaneously incubating a sixth egg at another nest site. This is our first
record of a female North Island brown kiwi incubating an egg independently of the male. From our 10 monitored breeding pairs, 30 fertil				record of a female North Island brown kiwi incubating an egg independently of the male. From our 10 monitored breeding pairs, 30 fertile
eggs were taken to the wonderful crew at Rainbow Springs. Twenty two hatched successfully at Rainbow, with two chicks still at Rainbow				eggs were taken to the wonderful crew at Rainbow Springs. Twenty two hatched successfully at Rainbow, with two chicks still at Rainbow
under surveillance. We have had a few cracked eggs this year, kicked by the male during robbing; this is something we are going to				under surveillance. We have had a few cracked eggs this year, kicked by the male during robbing; this is something we are going to
address for next season. After hatching, the kiwi chicks were all taken to Warrenheip, a 14 ha privately owned predator-free enclosure				address for next season. After hatching, the kiwi chicks were all taken to Warrenheip, a 14 ha privately owned predator-free enclosure
near Cambridge. Two Tongariro kiwi chicks died at Warrenheip: one due to poor health and the other drowned. The death due to poor				near Cambridge. Two Tongariro kiwi chicks died at Warrenheip: one due to poor health and the other drowned. The death due to poor
health have taught us that the capacity of the Warrenheip site for kiwi chicks is less than one bird per hectare, at least in the dry summer				health have taught us that the capacity of the Warrenheip site for kiwi chicks is less than one bird per hectare, at least in the dry summer
months. The kiwi chicks are released into Tongariro Forest when they are around 1200 grams in weight. To date, eight have returned to				months. The kiwi chicks are released into Tongariro Forest when they are around 1200 grams in weight. To date, eight have returned to
the forest, one of these was predated by a stoat. The others are doing well and gaining weight. Last season we monitored 14 kiwi chicks.				the forest, one of these was predated by a stoat. The others are doing well and gaining weight. Last season we monitored 14 kiwi chicks.
This work was to measure chick survival in the wild after a very effective 21,000 ha aerial 1080 operation. Eight chicks successfully hatche				Inis work was to measure chick survival in the wild after a very effective 21,000 ha aerial 1080 operation. Eight chicks successfully hatched
In the wild: four were predated by stoats, one dropped its transmitter at 1370 g and three are still being monitored. Six eggs were taken i				In the wild: four were predated by stoats, one dropped its transmitter at 1370 g and three are still being monitored. Six eggs were taken to
Rainbow due to nest abandonment and were natched successfully. The new chicks were then released back into their parental territory i				Rainbow due to nest abandonment and were natched successfully. The new chicks were then released back into their parental territory in
Tongarito forest. Three were predated by stoats, one died of hypothermia and two are still ande. We currently have 39 birds with				Tongariro forest. Three were predated by stoats, one ded of hypothermia and two are still alloe. We currently have 39 birds with
Tansmitters. 13 adult male, 14 adult female, five sub adults, and seven juveniles. we are planning to capture another two of three adult			Tongoriro/	transmitters. 13 dout male, 14 dout remaie, live sub douts, and seven juveniles. We are planning to capture another two or three dout
10 Igan 0/ males this year to increase our breeding sample size. We are currently discussing the ments of keeping transmitters on our single addit	40 Jun 02	٥	Toligariro/	fomales
The Waikare means kiw increases is a way to flying start this season, with nine monitored hirds laving 17 ergs between them in their first	49 Juli -05	2	Taupo	The Walkaremoana kiwi project is away to flying start this season, with nine monitored hirds laving 17 eggs between them in their first
clutches Because of nest desertions, six kiwi eggs or chicks were being cared for at the Westshore Kiwi Eacility in Napier. All are doing				clutches Because of nest desertions six kiwi eags or chicks were being cared for at the Westshore Kiwi Eacility in Napier. All are doing
Tongariro/ well anart from one chick, which upon batching was highly disfunctional: it would not feed unless force-fed, and was hyperactive both			Tongariro/	well apart from one chick which upon batching was highly disfunctional: it would not feed upless force-fed, and was hyperactive both
55 Dec -04 9 Taupo day and night. Unfortunately it died very young and in an anorexic state. In addition, one chick was preved upon prior to it being brought	55 Dec -04	9	Taupo	day and night. Unfortunately it died very young and in an anorexic state. In addition, one chick was preved upon prior to it being brought

			into the fold of our 1500 ha stoat trapping area. However, the remaining 10 eggs or chicks that we know about are doing well, with five
			chicks running about happily in the forests of Puketukutuku Peninsula. There have been five nesting attempts from kiwi pairs in Boundary
			Stream this season. Four of these nests were from "first time" pairs, but none have been successful so far. Two kiwi were killed in August
			by a ferret; one was an adult male who was killed in his nest containing two eggs (one fertile but died later, and one fertile but died later,
			and one already dead).
37 Jun -00	7	Waikato	Good news on the Kiwi Zones' front with the release of new funding for the five proposed Kiwi Zones
			The kiwi chick rearing enclosure was formally opened on 19 February, and Tester, a 2-week old chick, was liberated into the enclosure to
			test the 'kiwi-proofing' of the internal subdivision fences. Unfortunately, Tester died in strange circumstances several weeks after release.
37 Jun -00	7	Waikato	Tester was from a 2-egg clutch, but its sibling (21 days older), was killed by a stoat about the same time.
			Moehau kiwi zone: The end of September saw the completion of the baseline kiwi survey for the Kiwi Zone. Our team of contractors
			completed surveys at 80 sites covering 13,250 ha of private and DoC managed land. This totalled about 450 hours of listening, and gave
39 Dec-00	4	Waikato	143 confirmed kiwi, a great result that exceeded our estimates.
			After a possum control operation at Whenuakite (over 1100 ha of private and DoC land north of Tairua), the contractor became quite
			enthused about kiwi protection. The contractor (Keith Driver of Wildlife Management Services) then offered two of his staff for a day a
			week for 3 years to trap stoats for kiwi protection. Adele Smaill (Kiwi Recovery Advocate) Hauraki Area staff, landowners, and volunteers
39 Dec-00	4	Waikato	undertook a kiwi survey, which identified about 20 individual kiwi in the block.
			Moehau Kiwi Zone Phase 1 of the predator control programme is operating at Moehau. The first 4000 ha are underway with stoats
			appearing in traps from the first day of opening. Five adult kiwi have been caught for monitoring, and we hope to get 15 over the next few
			weeks. • Whenuakite Our newest kiwi protection site has 500 of the total 1500 ha so far under predator control, with the remainder to be
			completed in the next 6 months. Waikato Regional Council and Kiwi Recovery Group have funded a baseline kiwi survey, which is now
			underway. Community support for this project is very strong (about half the area is on private land), resulting in the formation of the
			Whenuakite Kiwi Care Group to manage the project. Project Kiwi-Kuaotunu All the chicks are doing well although we lost contact with
			one soon after release from the enclosure. The smallest chick has grown from 220-410 gm. The older ex-enclosure chicks are nearing the
			800-gm mark, and all the wild monitored chicks have exceeded 800 gm. We have only monitored one chick loss to predation this season.
			We have been monitoring three young kiwi since 1997, part of an original group of six (three of which we have lost contact with). In the
			past year all three appear to have paired and are living in the project area. The annual transmitter change for some of the adult kiwi began
			a month earlier to coincide with their capture for blood sampling by the Kiwi Recovery Group for DNA work. Project Kiwi staff took
			Maryann Burbidge to the kiwi, and she sucked their blood and took feather samples. Local iwi (Ngati Hei) were involved in the sampling.
			The birds sampled were in mediocre shape, looking worse for wear because they were in the middle of a heavy moult. This is normally the
			only time of the year we come into contact with or handle the adults. We have been contacted by several other kiwi projects intending to
41 Jun -01	3	Waikato	follow Project Kiwi's lead and invest in kiwi chick enclosures. One is due to be constructed very soon.
			Kiwi Zone From the 4,000 hectares under a trapping regime at Moehau so far, we have killed nearly 100 stoatsA possum hunter handed
			in a young kiwi caught in a ground-set trap near Coromandel town. This bird is being rehabilitated by Auckland Zoo and we are doing
42 Oct -01	5	Waikato	some public relations work relating to setting traps off the ground to protect kiwi
			We are fast approaching having caught 250 stoats at Moehau Kiwi Zone, but numbers are dropping off as we extend out to the full
44 Apr-02	5	Waikato	coverage intended. So far we have had three out of twelve chicks predated, and have had two eggs from an abandoned nest hatched by

			Rainbow SpringsOne was released back in Moehau in March and the other is due for release soon and will add to our monitored chick
			pool. Meanwhile, in the middle of rural Waikato, kiwi chicks from Tongariro Forest are thriving. Warrenheip is 14 ha of regenerating bush
			enclosed by the latest in predator -proof fencing. The Exclosure fence was developed by the landowner and has proved effective at
			keeping out mammalian predators. Over the past few months, three abandoned kiwi eggs have been hatched at Rainbow Springs and the
			chicks transferred to Warrenheip. The chicks will be returned to the Tongariro Forest once they have reached the target release weight.
			The second kiwi breeding season since stoat trapping began in the Moehau Kiwi Sanctuary is underway. Staff are hopeful for a repeat
46 Sep -02	3	Waikato	performance of the chick survival of the previous breeding season (>75% survival).
			Moehau Kiwi Sanctuary is celebrating the last of last season's chicks cracking the 1 kg target weight. The "official" result is now 66% chick
47 Dec -02	5	Waikato	survival, a great credit to all staff involved.
49 Jun -03	5	Waikato	The Moehau Kiwi Sanctuary is still topping the kiwi competitions with 100% known survival rate from predation with this year's 18 chicks.
			Maniapoto and Waikato Area offices are combining forces to survey the southern Waikato for the last remaining King Country kiwi. It is
			likely that any kiwi remaining will be captured and transferred temporarily to captivity until a suitable predator controlled Waikato site is
49 Jun -03	6	Waikato	ready for their release
			The results at the end of the season at Moehau are: of the 18 kiwi chicks monitored, one died of natural causes, two
			transmitters/harnesses failed, and 14 chicks are known to still be alive. These results indicate a success rate of 78%. Five of these birds are
50 Sep -03	4	Waikato	presently over the target weight of 1 kg. All nine of last seasons chicks that survived to 1 kg are still on the go, wandering far and wide
			So far in the 2003/04 season, the Moehau Kiwi Sanctuary monitoring team have placed transmitters on 15 kiwi chicks. We still have
			another seven eggs in four nests remaining, so we are hopeful of getting our target of 20 chicks for the season from the first clutch. To
			date, all the chicks from the 2001/02 and 200/03 seasons that reached 1 kg (nine and 20 respectively) are still going strong. Several have
51 Dec -03	2	Waikato	made large wandering trips, with one now at Papa Aroha, nearly 20 km from where it hatched
			Of the 18 chicks from the first clutch at Moehau Kiwi Sanctuary, five have been lost to predation and one to natural causes. The second
			clutch is due to start hatching in mid-February, and we have another 10 or so nests that should yield another 20 eggs. It's looking good so
			far for reaching our targeted number of chicks monitored for the season. A kiwi that had lost its foot in a trap was handed over to Project
			Kiwi. The bird was taken to Auckland Zoo and operated on It is doing well and should be released into Project Kiwi's predator control
52 Mar -04	5	Waikato	area in a month
			The 2003/04 breeding season is drawing to a close with the last eggs hatching in April. We have found a total of 32 chicks this season,
			which is our highest number by far for the three years of monitoring. Unfortunately some of the kiwi chicks' transmitters failed this
			season. Of the 25 kiwi chicks that did not suffer from transmitter problems, 15 are still alive. That gives us roughly 60% survival, but does
			not take into account the fact that some of these birds were not monitored from birth (dog finds) and that two are still in the safety of
			Rainbow Springs. Ten chicks have died this season; five from suspected mustelid (stoat or weasel) predation, two as a result of being
			entangled in mangemange fern, and three for unknown reasons. This is a much higher death rate than in previous years, despite the
			predator trapping catching significantly fewer stoats and extending the trapping network. We have caught more weasels, however, and
53 Jun -04	4	Waikato	they may be responsible for some of the predation.
			Moehau Kiwi Sanctuary (MKS) is progressing well with about 10 males suspected nesting (early August). Exciting news here is the Moehau
			Environment Group's work – this active community group is currently installing about 600 stoat traps over 6,000 ha immediately adjacent
54 Sep -04	4	Waikato	to the southern boundary of MKS. We hope they stop all stoats from entering the Moehau area. The total area trapped will be about

53 Jun -04	10	Wellington	NWC, but pretty quickly came back.
			Kiwi: The birds released in December are still staying close to home; a couple have wandered (briefly) just beyond the ridge behind the
52 Mar -04	13	Wellington	thriving until one was found drowned during recent floods.
		- 0	Mount Bruce Scenic Reserve: Six captive-reared brown kiwi were also released into the reserve in December 2003, and all appeared to be
38 Sep -00	8	Wellington	capture.
			Twenty little spotted kiwi were transferred from Kapiti Island to Karori Sanctuary all alive and well when released within 30 hours of
54 Sep -04	7	Wanganui	iuveniles in Egmont National Park this season, should the ONE work be successful
			property at Purangi and six hirds in collaboration with the Rushy Park Trust in the Waitotara Valley. The plan is to release up to 10
			(ONE) project to boost the kiwi population under protection. To date nine males have been fitted with transmitters: three birds on private
			the conservancy is working closely with the Taranaki kiwi Trust (TKT) to conserve kiwi in Egmont National Park. A 6,000 nectare stoat
55 Jun -04	9	vvanganui	The Conservency is working closely with the Terapaki Kiwi Truct (TKT) to conserve kiwi in Egment National Park
52 Jun 04	0	Manganui	An adult kiwi and chick died as a result of a dog attack in northern Taranaki. This is the latest in a series of deaths as a result of dog
52 Mar -04	12	wanganui	sufficiently to be released.
52 Ma 04	40		two toes in a possum trap. Hard work by Wanganui Bird Rescue and Massey University over 5 months led to the bird recovering
			A rehabilitated female kiwi was released into the area of stoat trapping in January. The kiwi originated from a site near Wanganui and lost
51 Dec -03	11	Wanganui	parkThe Bank of New Zealand Kiwi Recovery Trust has also provided seed funding for an Operation Nest Egg programme to begin
			the edge of extinction in the park. Conservation action started this November with the installation of stoat traps over 4,500 ha of the
			dense leatherwood scrub. Like all unmanaged mainland kiwi populations, Egmont's has suffered a serious decline which has brought it to
			range of that population. Kiwi are now largely confined to higher altitude areas of the park including steep subalpine slopes cloaked in
			The Taranaki Kiwi Trust and the Wanganui Conservancy: plan to halt the decline of the park's kiwi population and enhance the size and
49 Jun -03	12	Wanganui	1080 treatments, have produced a good number of calls
			A new site for NIBK was found near Makino in the foothills of the western Ruahines. Kiwi call surveys at Ruahine Corner, subject to regular
45 Jun-02	9	Wanganui	the absence of any birds on the western side of the mountain where 10 km of track were walked with no birds recorded.
			worrying results. Areas known to hold several pairs of birds from previous surveys have revealed only the odd bird. Of key concern was
			Mt Taranaki: Whilst data are still being analysed, 'walk-though' surveys of North Island brown kiwi in Egmont National Park have produced
55 Dec -04	5	Waikato	transmitter. All others are OK.
			released at four weeks of age. One chick was found dead from an unknown nest (cause of death unknown) and one has dropped a
			At Moehau Kiwi Sanctuary, 12 chicks have hatched since 1 October. Four of those are Operation Nest Egg (ONE) birds which were
			or she has since travelled over 30 km across roads and the main range, and is now in Kennedy Bay.
			100% survival to $1.000$ g; n = 13 known fate birds). One of our birds (Kahiwi) was caught in November last year as a 1 480 g sub-adult. He
			caught in 2001/02 are still alive (cf. 75% survival to 1 000 g· n = 11 known fate hirds) and 85% of the 2002/03 cohort are still alive (cf. 75% survival to 1 000 g· n = 11 known fate hirds).
			2003/04 (1.723 trans) compared with 383 in 2001/02 (1.000 trans) and 299 in 2002/03 (1.500 trans). Sixtu-four percent of the chicks
			20 known rate birds are still alive, with only a couple still under 1,000 g. Call count monitoring during May-June revealed a mean nouny rate of 2.2, compared with 2.5 over the last two years. Stoat catch rates have declined again at Moehau, with only 113 caught during
			25,000 ha by the end of 2004! Thirty-live kiwi chicks of juveniles were caught during the 2003/04 breeding season. At present, 15 of the
	1		25,000 ha by the and of 20041 Thirty five kiwi chicks or inveniles were caught during the 2002/04 breeding season. At present, 15 of the

			Kiwi: Another release of three birds into Pukaha / Mount Bruce has been undertaken, to complement the five residents. The new birds are
			behaving in much the same way as those that were released last year. Monitoring of the first release shows that the birds have still not
			moved more than a few hundred metres from the release sites and that over the past months all but one have developed distinct home
55 Dec -04	11	Wellington	ranges. Another release (a single male) is planned for December
			community fundraising and sponsorship have raised \$558,700 for the Pukaha project. So far kaka, kiwi and kokako have returned to
55 Dec -04	12	Wellington	Pukaha/Mount Bruce forest
			Approximately 8 of the required 20 new pairs of kiwi have been caught, and 16 rodent index lines installed. Rimu seedfall is being
			monitored, and the track system for the stoat control project is under construction. The stoat control project will be fully operational by
			the first week in June in readiness for the upcoming breeding season. It is hoped that the extra kiwi being caught at the moment will boost
			the number of chicks monitored each year to 30 plus. The breeding season is now over. It has been a bumper season for rowi with a total
			of 38 eggs detected and 21 chicks successfully transferred to Motuara Island. Fourteen Operation Nest Egg (ONE) juveniles returned from
			Motuara during October and December. One of these died within a week or so of transfer from unknown causes, however, the remaining
			13 are alive and thriving in the wild. The biggest single event of recent times on the rowi programme is probably the first breeding attempt
			by an ONE bird in Okarito. Inka, a 4-year-old male, has paired with a wild female and successfully produced a chick. This is a great
40 Mar-01	8	West Coast	milestone for the project and all bodes well with 30 other younger ONE birds in the forest already and 20 or so more to follow.
			Breeding success of Haast tokoeka has been studied for several years by the monitoring of 13 nests. Three chicks have been observed over
			this time but subsequently were never seen again (usual story). The last nest for this season at 1200 m altitude had a video camera
			operating via UHF link to Okuru 17 km away. A stoat has been observed on video on one occasion at the nest. When the chick was seen
			leaving the nest, staff prepared themselves to catch it the following night and attach a transmitter. Biodiversity Strategy funds will allow
			predator control to be undertaken over 16,000 ha next breeding season. The contract for establishing the predator control lines has been
40 Mar-01	8	West Coast	let and control will be in operation by 30 June 2001.
			Five Okarito brown kiwi on Motuara Island were returned to Okarito Forest in October 1999 at the age of 1 year. All weighed over 1.2 kg.
			They were released into the centre of the forest near territorial adults. All have done well and are behaving like wild kiwi. "Albi", the
			famous white kiwi, was left on the island several months longer because he was younger and smaller. We have since found he has had
			Ascarid worms, which is thought to have slowed his weight gain. He has recently been released to the wild. Eleven eggs have been
			incubated in captivity from 30+ days, and 7 have survived. Two eggs were infertile or dead on arrival, 1 died during hatching (it had cracks
			in the eggshell), and 1 hatched successfully but died several weeks later. Additionally, 7 chicks were collected from the wild giving 14
			chicks this year. While in captivity the birds have picked up ascarid worms and coccidia. Two young chicks were sent to Motuara Island at
36 Apr -00	17	West Coast	c.2-3 weeks old to trial transfers at a young age. We hope the birds will benefit being on the island longer and adapt to the wild quickly.
			The last remaining nest of Haast Tokoeka for the 1999/2000 breeding season failed. Five nests were monitored in this season, and of
			these one possibly may have hatched. The breeding pair on Thirsty Ridge were found in a nest in September, which had failed by
			November, when they were discovered to be sitting on their second egg of the seasonwe did not get any success in terms of known
36 Apr -00	18	West Coast	definite hatching of chicks
			[kiwi] A total of 20 adult pairs were monitored during the previous season, and we had the options of removing either eggs or chicks for
			Operation Nest Egg (ONE). Twenty-four eggs were detected and 11 removed for artificial incubation. Of the remaining 13 eggs, 8 hatched
37 Jun -00	16	West Coast	in the wild, and 5 failed to hatchThis has been a successful year for released ONE birds. Currently a total of 17 ONE birds are now being

			monitored. Two ONE birds are sheltering with wild birds of the opposite sex, and there seem to be some other potential pairings between
			ONE birdsThe oldest ONE bird (Moonshine) is now 4+ years old and has been in the wild for 3 years & 4 months. Three ONE birds have
			died during the year. Bobbit and Claudette died as a result of territorial confrontations. Bobbit was almost certainly killed by another ONE
			bird while her parents killed Claudette. Cuba was hit by a car and killed. Two other juveniles lost their transmitters during the year
			because of harness failure.
			Okarito brown kiwi: This season 20 pairs are being monitored for Operation Nest Egg and 10 pairs in the 'study area'. Eleven eggs have
			been laid so far, and 3 of these were collected for incubation in August. Two Operation Nest Egg chicks are paired with wild birds and 4
			Operation Nest Egg chicks are also paired up with each other, no eggs have been laid by these birds, yet. Two wild chicks from 1998 are
			both still alive 1 is still with its parents. These are the first wild chicks of known age in the forest since this project began. In October the
38 Sen -00	11	West Coast	13 chicks on Motuara Island will be reintroduced to the forest
50 Scp 00		West coust	Okarita brown kiwi (rowi): increased funding, opening up many new opportunities for the programme. The most exciting of these is the
			ability to trial a large scale steat control programme over the entire known range of rowi (10,000 ba). Two extra permanent and two
			ability to trial a large-scale stoat control programme over the entire known range of rown (10,000 ha). Two exits permanent and two
			summer starr are being employed to more than double our starring level. This will allow the capture and monitoring of 20 more pairs of
			rowi and the extra Operation Nest Egg (ONE) birds returning later in the year. The breeding season is well and truly in full swing. We have
			located a total of 30 rowi eggs to date: 10 of these have been taken for ONE and have hatched successfully. The 17 ONE birds being
			monitored in Okarito forest have continued to do well. Three of them have wild mates, and a number of others seem to be establishing
			pairs with other ONE birds. A ONE male paired with a wild bird is incubating an egg, and this is the first confirmed record of an Okarito
			ONE bird breeding. The 2 wild chicks that hatched in February 1999 have continued to thrive; one is still living with its parents. The other
			has been travelling throughout the forest over the last few months and has ranged up to 4 km from its home territory. The first 8 of the 14
			chicks taken for ONE last year were returned to Okarito on 11 October. Although 1 bird has died from unknown causes the remaining 7
			seem to be doing okay despite some weight loss. As at 1 November, there are 6 rowi chicks on Motuara Island and 3 due for transfer
			there. Only 1 egg. diagnosed as an early dead embryo or infertile, has been lost since the beginning of artificial incubation in mid August.
			This season's chicks have been released on Motuara 2 to 4 weeks old. Six of the 14 juveniles from last season's releases remain on the
			island and will be transferred to Okarito Forest in December. Fortunately observations indicate that non-territorial juvenile rowi on
39 Dec -00	11	West Coast	Motuara are tolerant of young chicks and will share burrows with them without harm
35 Dec 00		West coust	Okarito brown kiwi: Twenty-seven breeding pairs are actively monitored. Thirty-seven eggs were detected. One egg came from a new
			hird caught in February as part of the programme to expand the number of breeding pairs by 20. Twenty-one chicks were produced, and
			all have been taken to sanctuary at Motuara Island. There was a period of high egg mortality for eggs detected between late August/ end
			of Sentember. The cause of mortality is unknown, but the losses occurred during a period of noor weather including lightning storms. The
			for september. The cause of mortality is unknown, but the losses occurred during a period of poor weather including lightning storms. The
			was video taned to oncure insubation was taking place, however, the female was banded in by a member of the public the fellowing
			was video taped to ensure incubation was taking place, nowever, the remain was nanded in by a member of the public the following
			morning, so the egg was removed and successfully incubated in captivity. The remaie suffered fractures to both femurs but was still able
			to wark. The pair was sitting on an egg that was estimated to be between 8 and 22 days old. Normally eggs are taken for incubation when
			at least 40 days old. Two eggs were detected late in season, after end of January. Both hatched in the wild, and the last chick was removed
41 Jun -01	10	West Coast	on 1 March.
41 Jun -01	11	West Coast	Operation Nest Egg (ONE) kiwi Fourteen of the previous season's juveniles were birds released in Okarito Forest in two batches. Of the

			first eight released on 11 October one subsequently died of a suspected beating by another bird. These birds were released near five
			iuveniles from 1999/2000 (previous) year's release. The second release of six on 6 December has been successful so far. They were
			released on a ridge where a largely unsuccessful early release of cantive raised, non-Motuara hirds had occurred. All 2000/01 hirds have
			dispersed widely, far more widely than previously released juveniles and have travelled through known adult territories. On 2 April, one
			was found camped up with a wild upbanded hird, which was summarily banded but did not have a transmitter attached and has never
			was found camped up with a wild, unbanded bird, which was summarily banded but did not have a transmitter attached and has never
			been seen again. This mystery bird was an old bird with bill measurement in the grey area just under 100 mm. This bird will be followed up
			with a catching trip to the area. Of other ONE birds, a male, Inca, paired up with a wild bird and successfully incubated an egg. No other
			breeding activity with the other ONE birds has occurred although several have formed 'pairs', some with wild birds. ONE birds in Okarito
			Forest now total 29. Motuara Island sanctuary: Of the 21 chicks released, three are dead, one transmitter has dropped, and three are
			missing. Release back to Okarito is planned for January 2002. Some positive disease screens delayed planned releases until clear screens
			were obtained. Wild juveniles: The two wild juveniles from 1998, which were in Okarito Forest when aerial 1080 for possum control was
			sown, are doing well. One is still with the parents, who have since produced three eggs and the other has moved off at least 2 km from her
			parents' territory. Both chicks are female.
			The aim this year is to monitor the survival of 30 rowi chicks in South Okarito Forest in conjunction with a stoat trapping program. To
			enable us to get the target of 30 chicks, we had to catch 20 new nairs of kiwi. This was completed just prior to the breeding season
			bringing the total number of wild rowinairs monitored to just over 50. To date, we have detected 25 eggs, and the first of these are due to
			bringing the total number of what four pairs monitored to just over 50. To date, we have detected 25 eggs, and the first of these are date to begin batching in about mid Sontombor. Twolve of the twenty new pairs have already produced eggs. This is more than we would have
			initially supported which will increase our charges for reaching our terrest of 20 chicks. Future slating from last year's results suggest the
			initially expected, which will increase our chances for reaching our target of 30 chicks. Extrapolating from last year's results suggests we
			will be slightly ahead of target. The decision to leave the chicks in the forest represents a major turning point in the rowi programFifteen
			young juveniles from last years breeding season are still doing well on Motuara Island, and are scheduled for return to Okarito in January.
			The 30 'ONE' juveniles monitored in Okarito Forest (from previous releases) are all doing well. One pair of 'ONE' birds, both aged just
			under five, have just produced our most exciting news for some time by laying an egg. The egg was found yesterday afternoon so we have
			about 75 days of anticipation before it hatches, if successful. This egg represents a significant milestone for the program as it is the first
			time a 'ONE' female has produced an egg (she is one of the oldest birds) and only the second time that a male has been part of a breeding
42 Oct 01	13	West Coast	pair.
			The Haast tokoeka breeding season is in full swing at the moment with fourteen breeding attempts been recorded to date. Five nests
			were successful in producing chicks although a stoat has since killed one. Two nests are currently in their hatch window and another hatch
			window starts on 19 December. Two late development embryos were found dead along with three infertile eggs. In the remaining nest it
			was not possible to confirm what the outcome of the breeding attempt was because pest monitoring is non-invasive to reduce the
			disturbance to the birds. Egg shall fragments were found outside the pest. A consequence of nep invasive monitoring is that it is not
			disturbance to the birds. Egg shell hagments were found outside the nest. A consequence of non-invasive monitoring is that it is not
			always possible to confirm beyond doubt that breeding has occurred The kiwi team is alming to catch another ten pairs of tokoeka
			before the next breeding season to increase the number of chicks being monitored within the Sanctuary. This will help to determine if the
43 Dec -01	14	West Coast	trapping is successful in increasing the number of kiwi chicks in the forest.
			Okarito Kiwi Zone: Rowi breeding season has finished; this season 54 eggs were laid so far this year (with 22 successful hatches = 40%),
			which is very poor, normally rowi achieve 60 % hatch rate out of monitored eggs Egg laying normally ceases in early January but this
44 Apr -02	19	West Coast	season six eggs have been laid after this time with the latest one due to hatch May 14. Of the 22 chicks detected, eight are still surviving in

			the wild, aged between two weeks and four months. Fourteen have been found dead, and 12 of these are confirmed predation events.
			The biggest chick now weighs 942 grams and two others are greater than 700 grams. Three pairs of O.N.E. juveniles have laid eggs this
			season although there were no successful outcomes. Of the juveniles recently returned from Motuara Island at the end of January, one
			has been found dead of a suspected kiwi beating and two are currently AWOL. There have been 446 stoats caught since trapping
			beganand there was an increase in the number of captures on the buffer during December and January that coincided with increased
			mortality of rowi chicks.
			We have finally finished the 2001/02 rowi breeding season with the last chick detected in late May. It has been a mixed year with 55 eggs
			detected from the 48 adult pairs monitored. We have had relatively low hatching success with just 24 chicks observed to hatch. 20 of
			these chicks had transmitters fitted and were monitored for survival (four vanished prior to fitting transmitters). Six of the chicks are still
			alive and doing well in the wild. Three are well past the 1000g mark and three are nearing it. This represents the first significant natural
			recruitment since the program began in the early 1990s and represents a major turning point for the program. It is an indicator that the
			stoat control program, which has removed in excess of 540 stoats from the 10,000ha area, is at least partially successful. Stoats were
			implicated in at least 12 of the 14 kiwi chick deaths that occurred this year. We are nearing the end of the massive job of changing in
45 Jun -02	13	West Coast	excess of 120 kiwi transmitters and readving ourselves for the next breeding season
45 Juli 62		West coust	At completion of the 2001/02 Haast tokoeka breeding season, 13 eggs had been detected from 20 monitored adult nairs. Six chicks
			hatched successfully and all had radio transmitters fitted. Within two weeks of hatching two chicks were predated by stoats and another
			was predated at 45 days old. With 50% of the chicks surviving, we were honeful that predator control was making a difference to chick
			was predated at 45 days old. With 50% of the clicks surviving, we were hopeful that predator control was making a difference to click
			its transmitter at 221 days old. Although the oldest of those shields had passed the 'safe weight' of 1000 groms their fate is welcown. The
			its transmitter at 231 days old. Although the oldest of these chicks had passed the safe weight of 1000 grains their fate is unknown. The
16 6	_	Mart Crast	remaining chick, Kanu , is living in the sub-alpine scrub and is getting very difficult to catch. when caught in early July, Kanu weighed 810
46 Sep -02	/	west coast	grams.
			Okarito Kiwi Zone: We are now well into the 2002/03 kiwi breeding season. Fifteen eggs have been detected to date and the first chicks
			are expected to be natching towards the end of September. Six of last years chicks are still surviving in the forest; five of these have
			surpassed 1kg with one lagging well behind on 660g. Three Operation Nest Egg birds are incubating eggs already this year. A pair of older
			birds which produced their first egg last year and a male which is just under three years old, this is a year younger than we have previously
			detected breeding. The results from the rodent lines in March show that there has been a huge increase in rat abundance between March
			(3.5% tracking index) and August (80% tracking index). This correlates with our casual observations from the stoat trapping program which
			have indicated a much higher rat trapping rate than previously. We have also been noticing the capture of lactating female rat's right
			throughout the winter months. It seems that rat numbers are higher within the sanctuary (80% tracking rate) as opposed to in the two
			areas in which do not have stoat trapping (38.6%)it will be interesting to see whether stoat numbers increase this summer in response to
			the increased rat abundance and if so how effectively the trapping program deals with this increase. We are still continuing to catch the
			odd stoat in the kiwi zone (four this month) although over half of all captures now are in the buffer lines which are just outside the kiwi
46 Sep -02	8	West Coast	zone. Since May 2001 there have been a total of 605 stoats caught.
			As we head into the 2002/03 breeding season, 26 adult pairs are being monitored. At the time of writing (19/8/02), ten pairs were nesting
			with the first chicks due to hatch in late September. As monitoring of Haast tokoeka intensifies we continue to learn more about their
46 Sep-02	8	West Coast	ecologyUsually roost in a different burrow/shelter every day. Large territories with some in the alpine area exceeding 100 hectares.

			Distributed from the lowland forest to the alpine tops of the Haast Rangeour monitored population of 47 birds are now mostly in the forested ridges and valleys They lay one egg per clutch, and few second nesting attempts have been observedMale and female Haast tokoeka share incubation of the egg. The male incubates during the day and for the first part of the evening when the female takes over until just before sunrise. Newly hatched chicks return to the nesting burrow daily for 2-4 weeks and then, although staying pretty close to the nesting burrow, they start finding their own roosting sites. We do not know when chicks leave their parents' territory. Since monitoring began, we have observed one situation where three adult birds, one female and two males, lived in the same territory. As we haven't followed a bird's progress from hatching to adulthood we are unable to say at this stage whether Haast tokoeka form family groups like southern tokoeka on Stewart Island. We have observed the first repairing of Haast tokoeka. The TL Creek pair both dropped their transmitters in 1998. This year the TL Creek male was recaptured and is paired with a new female. We do not know the fate of TL Creek female.
48 Apr -03	11	West Coast	The Haast tokoeka breeding season started with the first nest detected in July 2002, and ended when the last of the season's 17 nests (from 26 potential breeding pairs) was abandoned and a broken egg retrieved on 14 January 2003. Seven (41%) nests produced chicks, which were caught and fitted with radio transmitters. Three of the chicks were subsequently killed by stoats, one drowned, one is missing (suspected transmitter failure) and two are still being monitored: Huia, 600 grams at 100 days old, and Mischief, 570 grams at 89 days old. To date this season's chick survival is 29%, compared with 33% in 2001/02. Three times as many stoats were caught during December 2002 and January 2003 as the same months last year. In total, 222 stoats were caught in the sanctuary during the 2002/03 breeding season compared with 98 in 2001/02. Unlike the Okarito Kiwi Sanctuary, this increase has not noticeably impacted on chick survival. Kahu, the one remaining monitored chick from the 2001/02 breeding season, was 468 days old at his last checkHe is still living within his parental territory, but spending more time in the sub-alpine scrub and beech forest at the bush line. We currently have transmitters on 48 Haast tokoeka: 44 adults (19 female and 25 male), 2 sub-adults (1 female and 1 male) and 2 juveniles (sex unknown). This equates to 24% percent of the estimated population (200 birds) within the sanctuaryPlanning is also underway for trialling Operation Nest Egg (ONE) with Haast tokoeka in 2003/04.
48 Apr -03	12	West Coast	The current rowi breeding season has been very disappointing. All 14 of the monitored chicks were dead by early January, with stoat predation being the major cause. A heavy rimu fruiting mast during autumn 2002, coupled with a mild winter caused a huge irruption of rats and stoats, coincided with the height of the rowi breeding season. Stoats completely saturated the core area during December and January, despite the rowi team doing extra buffer trap checks. In December 2002 and January 2003 137 and 173 stoats were caught respectively. This is compared with 23 and 55 for the same months the previous season. Similarly, rat numbers were 5-10 times higher this season compared with the same time last season. The high number of stoats being caught has prompted the rowi team at Franz Josef <i>Waiau</i> Area to switch back to ONE techniques, using Motuara Island in the Marlborough Sounds as a crèche for the rest of the season. Two chicks were released in early March. The plague of stoats has also caused the postponement of the planned February release of 50 juvenile pateke (brown teal).
49 Jun -03	19	West Coast	A kiwi survey was carried out to assess the abundance and distribution of the Haast tokoeka within the 11,500 ha Haast Tokoeka Sanctuary in south Westland. Throughout the sanctuary, 88 sites were surveyed, which involved listening for two hours at each site and using call playback to solicit responses. A minimum of 77 new kiwi were heard, providing a total estimate of 129 known Haast tokoeka within the sanctuary: 39 confirmed pairs, 58 males, 66 females, and 4 possible juveniles and subadults detected. This is likely to be an underestimate as the entire area of the sanctuary was not covered, and not all kiwi will call during the survey. Very few kiwi were found

			on the lowland flats, and the highest densities were on the northwestern faces of the Haast Range, from the base up to the low alpine
			tussock zone.
			Rat numbers increased following a heavy kahikatea fruiting, which in turn increased the stoat numbers in the Haast Tokoeka Sanctuary
			compared to previous years. Twenty nests were detected from 34 potential breeding pairs. As part of the Operation Nest Egg trial, three
			eggs were taken and incubated at the Kiwi and Birdlife Park in Queenstown. Two successfully hatched and were released into Burwood
			Reserve, Te Anau. The third egg failed due to an unformed umbilicus. One of the chicks died 10 days after release while the oldest chick
			weighed 575 gm on 12/1/04. Out of the remaining 18 nests: one is still being incubated; eight produced chicks, two of which died
			naturally; and four showed signs of stoat predation. The remaining two chicks were transferred to Burwood Reserve due to the high
			numbers of stoats in the sanctuary. One of these chicks has subsequently died. An adult male was found dead and we are waiting for the
			necropsy results. Kahu, a chick from the 2001/02 season was found this year with a female mate in a burrow lined with vegetation
52 Mar -04	21	West Coast	(suggesting a nest) though no sign of egg or chick was found
			The 2004/05 Haast tokoeka breeding season is well underway and rather busy, with 10 chicks known to have hatched from 20 confirmed
			nesting attempts (some nests are still underway). There are seven chicks with transmitters on them being checked once a week. The other
			three chicks can be accounted for as follows: one Operation Nest Egg (ONE) chick and two which have died, possibly from predation. At
			night, staff are using cameras set up at burrow entrances to watch for chicks to emerge from several nests; transmitters are to be
			attached to these chicks. Daytime breeding checks continue in order to detect any further breeding attempts. It is expected that all
			nesting will have finished by the end of January. Tracking tunnel lines and trap catches suggest stoat numbers within the sanctuary are
			relatively low. However, the annual rise in stoat numbers is yet to occur and only time will tell whether the current trapping regime can
			keep predators to a low enough level this season to allow survival of sufficient chicks to sustain the population. This year's ONE
			component of the project targeted five specific pairs. We hope these pairs will produce five viable eggs for transfer to the Kiwi and Birdlife
			Park in Queenstown. So far we have had mixed results. The first successful 'lifting' was of a chick which was taken to the park in early
			October. The second pair produced a healthy egg and this has been transferred to the park for hatching. The third pair bred in a very deep
			burrow and the egg could not be retrieved, instead it will be transferred when it has hatched. No signs of breeding have been detected
			from the fourth and fifth pairs. This year Centre Island in Lake Te Anau was chosen as a crèche site for Haast tokoeka; the first chick was
			taken there in mid-November. The chick weighed 400 g and was described as feisty. Te Anau staff will monitor this bird and it will stay
55 Dec -04	15	West Coast	there until it is over 1 kg, at which time it will be big enough to defend itself against stoats in the Haast Tokoeka Sanctuary
			This breeding season nine rowi chicks have hatched in the [Oakarito] Sanctuary and there are six nests still going, with possibly more to
			come depending on whether many renest. Four of the chicks have been taken to Motuara Island in the Marlborough Sounds as part of
			Operation Nest Egg (ONE). This year five pairs have been selected for ONE and the plan is to take a maximum of five chicks up to Motuara
			Island. The chicks will then be returned to the Okarito Sanctuary once they reach over 1 kg. The five chicks in the sanctuary range from 4–
55 Dec -04	15	West Coast	6 weeks old. There has been no predation of chicks as yet and rat and stoat numbers are low compared to recent years

			27. Blue Duck (Whio) Management Quotes
			In October 2002 the World Conservation Union upgraded the conservation status of whio from Vulnerable to Endangered, while the
			Department of Conservation ranks whio as Nationally Endangered. The Blue Duck Recovery Group predicts that if the present rate of decline
			in whio populations is not addressed, the species will be functionally extinct from much of its present range within the next 10 years. We
			therefore find ourselves in almost the 11 <sup>th</sup> hour for yet another unique taonga Through the 1990.s several populations were monitored, with
			the vast majority showing systematic decline, while the best that any of them did was to hold their own. Anecdotal and survey evidence
			through the same period indicates that whip are missing from vast tracts of country in which they were once relatively common. On top of
			this, a closer look at remaining whio populations shows they are invariably in poor health, highly fragmented and mainly comprised of lonely
			adult males. So what is behind this decline? Research in Fiordland over the last three years identified stoats preving on nesting females, chicks
			and eggs, as the greatest threat to the species. Other projects are also now being established to test if this is the case throughout a range of
			habitats. At the same time, research is being undertaken to establish how to best protect whip on the nest so they can breed safely and their
			populations recover. Meanwhile, projects aimed at controlling predators to protect whip are already underway in several sites. These include
			the Clinton, Arthur, Cleddau and Murchison catchments in Fiordland; the Oparara and Flora catchments of Kahurangi; the Tewajiti in Te
			Urewera: the Takapotahi in the Motu catchment: in the Egmont national park and on the Manganui a-Te-Aoa workshop hosted by the Blue
			Duck Recovery Group last year determined that a minimum of 30 pairs need to be protected in each of eight broad geographical regions. In
			terms of what should be done at each site to protect whio, we are in the all-to-familiar situation of not knowing the answer, but
49 Jun -03	1		unfortunately not having the luxury of time to wait before starting work.
			Blue duck monitoring continued in the Opotiki Area at the two national monitoring sites: the Takaputahi in the Motu catchment, and the Te
			Wajiti River in the Te Urewera National Park. The Takaputahi population has been monitored for the past twelve years and without predator
			management up until last year. In comparison, the Te Wajiti population has been monitored for the past four years and has had predator
			management associated with the Te Urewera mainland island. The Takaputahi represents a population within a modified catchment system
			but with intact riparian area, and the Te Waiiti an un-modified North Island podocarp forested river system. These two river systems have had
			very contrasting results over the period of monitoring. Over the past twelve years the Takaputahi whio population has steadily declined. In
			1993 a total of 36 whio were counted within 26 kilometres of river. The 2003 survey found only seven birds within the same survey area. Only
			one of 21 adults banded over a five year period remains, and there has been a 91% reduction of territorial pairs over the past ten years. The
			recruitment of juveniles has also been poor, with only two out of 26 fledglings returning to their natal river. The cause for this decline is
			suspected to be predation. The predator controlled Te Waiiti whio population is trending in the opposite direction. In 1999/00, 34 birds were
			found in 18 kilometres of river: 8 pairs and 18 juveniles. This season (2002/03) a total of 77 whio were encountered in the same sample area:
			15 pairs, one single and 46 juveniles. In the past four years territory size has decreased from to 2.25 to 1.2 kilometres per pair. Fledgling
			success has increased by 155% since 1999. Juvenile recruitment into their natal river has been minimal due to lack of space through pairs
			maintaining their territories. Banded juveniles have been found up to 20 kilometres away from their natal river. The monitoring of these two
		East Coast/	populations indicates that predator control is required for continued blue duck population viability. Predator management in both areas has
49 Jun -03	11	Hawke's Bay	been funded with help from Environment BOP.
		Nelson/	Flora stream is being done with the help of a bunch of keen locals who have banded together as an incorporated society, Friends of Flora, and
42 Oct -01	11	Marlborough	will help out a host of bush birds and whio.
43 Dec-01	12	Nelson/	only one whio was seen in the whole East Branch

		Marlborough	
		Nelson/	Two community sponsored stoat control operations, one on Adele Island off Abel Tasman NP, the other at Flora Stream in Kahurangi NP start
43 Dec-01	13	Marlborough	in late December. Designed to protect blue penguin and blue duck respectively, they are funded in part by Community Relations money.
		Nelson/	A local community group calling themselves the Friends of Flora have completed their first season of stoat control along 8km of the Flora
45 Jun-02	12	Marlborough	Stream with the intention of protecting all forest bird species with particular emphasis on blue duck.
			Blue duck: Conservation efforts have kicked off with transmitters placed on three females of pairs located on the edge of Kahurangi National
			Park. The hope is to conduct an Operation-Nest-Egg-type experiment, where clutches will be borrowed from birds, raised in captivity and the
			chicks released back into protected habitat once they have fledged. The protected habitat in this instance is Flora Stream, and the protection
		Nelson/	involves in excess of 50 kilometres of stoat lines. In addition to the work in the Flora Stream, the habitat of the three pairs contributing the
50 Sep -03	12	Marlborough	eggs will also be protected from stoats, with the hope that they will re-nest and successfully raise their second clutch.
			In order to conserve whio, 568 double stoat traps have been placed to protect 4,500 ha of the Flora Stream catchment from stoats. This
			involved a massive job of trap tunnel construction and track cutting. Eleven fertile eggs were harvested in October from two whio nests on
		Nelson/	the fringes of Kahurangi National Park, and as a result we have 10 healthy ducklings to release into the protected area on 27 <sup>th</sup> March. One of
52 Mar -04	17	Marlborough	the pairs from which eggs were taken has successfully renested and is raising four young.
			The release of whio into the Flora catchment was successful and birds are now feeding well and distributing widely. There are however
		Nelson/	doubts about whether they are thriving: two of the 10 birds have died, one at least having apparently starved. We are still confident that the
53 Jun -04	12	Marlborough	eight survivors will fully adapt in time
			Following the March release of 10 whio into the Flora catchment, six have died from apparent starvation. Due to their poor condition, the
			remaining four birds were taken back into captivity until spring. The starvation problem is possibly due to too little food being available and
			poorly developed feeding behaviour in the captive-raised birds. Interestingly, despite low invertebrate numbers recorded in a recent survey
			of the Flora, wild whio are currently surviving there. Changes to husbandry are also being looked at to help improve feeding behaviours
			developed during captivity. In the Wangapeka, the four wild hatched juveniles from last season are doing well. A juvenile female from this
			clutch has recently paired with an adult male who is a new arrival in the area. The study of whio juvenile dispersal is ongoing, and to date has
			shown juveniles dispersing up to 6 km from their natal territory. Whio nest monitoring for the 2004/05 season is due to start soon. Two pairs
		Nelson/	will be monitored, and their first clutches harvested for captive rearing. The aim is to secure another 10 whio juveniles for release early next
54 Sep -04	9	Marlborough	year
			Whio: The productivity and survival study has just kicked off in the Clinton and Arthur Catchments (Milford Track) We are placing video
			cameras on nests (3 so far) and will continue this throughout the summer. Two of the three videoed nests have been visited by stoats and one
			also by a possum. A stoat destroyed one of the nests and the female survived, while the other female managed to defend her nest from a
			stoat and a possum although the stoat stole one egg. A third female was thought to have just begun incubating when she was killed, she was
			found pulled under a rock with stoat scats surrounding her. The sex imbalance, particularly in the Clinton Study site, is also concerning,
			containing 14 males (2 male/male pairs) and now, only 2 females. This is alarming evidence of the impacts of stoats on whio and probably
			more serious than most expected. The impact is possibly worse this year than normal because of the mild winter and double beech mast, but
			the sex imbalance suggests that this has been an ongoing problem. A stoat trap line along the same design as the Eglinton programme has
			recently been set up in the Clinton Catchment. We hope that this will provide protection, not only to kaka and mohua but also whio and kiwi
39 Dec-00	15	Southland	next year.

	I		Whio are well into nesting: three nests in the Arthur, one in the Clinton and one in the Cleddau. Five eggs were removed from a nest in the
			Clinton last week and taken to Burwood as the nest was situated on top of fresh avalanche debris and likely to get wiped out. Three eggs are
			fertile and they will be hatched at Burwood and then transferred to the Wildlife Park to be released next year. Two nests have been preyed
51 Dec -03	19	Southland	on by weka so far this season
			Release of the captive-reared whio juveniles back into the Clinton Valley is planned for 23 <sup>rd</sup> February. Wild ducklings from this season are
52 Mar -04	26	Southland	being fitted with radio transmitters so as to monitor their dispersal and survivorship through the winter
			The first of this season's whio ducklings have hatched in the Operation Ark site; 10 ducklings have hatched from two broods in the Clinton and
55 Dec -04	17	Southland	Arthur Valleys. A further three nests are currently being monitored in the Arthur and Cleddau. At least two juveniles from last year are nesting
			Whio: Annual monitoring has shown significant breeding has occurred on all monitored rivers within the Tongariro/Taupo Conservancy in the
			1999/00 season, unlike the poorest breeding season on record last year where there were only 2 broods seen on one-off catchment-wide
			surveys of four major river systems. Some early moulting adults may not have been detected on the monitored Whakapapa reach this year,
			but 4 chicks from a brood of 6 were transferred from here to Mt Taranaki as part of the National Blue Duck Recovery Programme. On a recent
			walk of the lower reaches of the Mangaturuturu River field staff saw 2 pairs of blue ducks. This is the first time blue duck have been recorded
			in this river. Although the Mangaturuturu River is very close to other blue duck inhabited waterways its headwaters are filled with the ash
		Tongariro/	laden lahar path known as the Mangaturuturu Glacier. As a result the river has had little or no aquatic life and has previously been deemed
36 Apr-00	11	Таиро	unsuitable blue duck habitat.
			Whio: Regular monitoring of the Tongariro, Whakapapa, Okupata/Mangatepopo confluence, Makatote and Mangaui-a-te-ao rivers was
		Tongariro/	undertaken in December and January of 2002/03. The preliminary resultsindicates a relatively stable population when compared to previous
49 Jun -03	8	Таиро	years. A male/male pair was observed on the Whakapapa, and they have even tried to nest
			Department of Conservation, Genesis Power Ltd and the Royal Forest & Bird Protection Society Inc. entered into a formal agreement to
			establish a Trust. Its purpose would be to provide ongoing operations to enhance, protect and promote blue duck populationsprojects
		Tongariro/	approved are a predator control pilot study on the Manganui-a-te-ao in the Central North Island, and secondly, to establish a new blue duck
49 Jun -03	8	Таиро	population on Mount Taranaki in the Egmont National Park
			A complete survey of the Whanganui/Whakapapa and Mangatepopo rivers was undertaken in December 2003 by Enviroresearch and DOC,
			with the primary aim of measuring the impacts of increased water flow released by Genesis on the whio population. The sections of river
			running through Tongariro Forest were surveyed and thereafter birds banded. A total of 44 pairs, 11 single adult males, 15 single birds sex
			unknown and 19 chicks were counted. An estimate of the total number of individuals in Tongariro Forest Conservation Area is around 140.
			Only a third of those were banded. The number of pairs per kilometre was 0.74 on the Whanganui, 0.52 on the Whakapapa, and 0.71 on the
			Mangatepopo. These figures are similar to counts done in the past. Productivity was very low this year (19 chicks from 44 pairs), primarily due
			to flooding in October. The monitoring and banding will continue for two years after the water has been released. The water release is due to
			occur when hearings within the environment court have been resolved. The Department has secured internal and external (Central North
		Tongariro/	Island Blue Duck Conservation Charitable Trust) funds to measure nesting success and female mortality with and without predator control on
53 Jun -04	6	Таиро	the Whakapapa and Whanganui over a 5-year period. Detailed planning is underway and work is set to begin in August.
			Whio: We are in full swing, monitoring 32 pairs and 21 single birds on the Whakapapa, Whanganui and Mangatepopo rivers, situated within
		Tongariro/	Tongariro Forest. Pairs have started nesting and are either incubating eggs or have young chicks on the river. The season has been 2–3 weeks
55 Dec -04	8	Taupo	later this year; 17 pairs have been found nesting to date, however we expect to find more this month. We are monitoring nine pairs and two

			single birds on the Whakapapa; surveys last year counted 10 pairs. Six of the currently monitored pairs have nests. One of these nests has
			recently been deserted or the female has been lost on the nest, this is unconfirmed at present. Egg shell fragments have been sent away in an
			attempt to understand what happened to the egg. The female has not been seen for sometime and it appears the male has adopted a
			paradise shelduck chick. The other five nests have vet to be located. On the Mangatepopo we are monitoring nine pairs and five single birds:
			seven of these pairs are nesting. Four nests have been located to date. We are still searching for the other three. Of those four nests found,
			one nest has seven eggs, and three pairs have class one ducklings. The Whanganui has 14 pairs and 14 singles. Of the hirds we have been able
			to visit, four pairs are nesting, however we have yet to find actual nest sites
			Blue duck in Egmont National Park: The planned transfer of further wildhatched and captive-raised birds has been postponed owing to poor
			productivity of both wild and captive populations this season. Survivors from last year's release are still encountered, but the birds had
			transmitters removed because of weight loss problems so monitoring is much more labour intensive. We plan to refit modified transmitters
40 Mar-01	3	Wanganui	on birds based on findings from the takahe energetics study
			Twelve blue ducks have been released in Egmont National Park over three separate releases (1986, 1989, and 1991). Of these, 7 were captive-
			reared juveniles and 5 were wild adult birds from the Manganui-a-te-ao River. Over the past couple of years 3 male birds were known to have
			survived including a captive raised bird from the first release. He was last seen in November 1999 aged 13 years. In December 1999 and
			January 2000 4 wild-caught birds from the Whakapapa and 11 captive-raised birds from Palmerston North Aviaries, Staglands Wildlife Park,
36 Apr-00	13	Wanganui	and Hamilton Zoo were released into the park. Considerable effort is being invested in monitoring the birds.
			Intensive monitoring of the released birds has been regularly undertaken. Some of the captive-reared birds have been lost through starvation,
			not from a lack of food resource. We assume the birds starved because they did not know how to forage for aquatic invertebrates. Other
			birds have succumbed to predation from stoats or ferrets, and one of the wild caught birds was run over by a car (can you believe it!). All the
			captive birds lost weight initially, which resulted in transmitter harnesses becoming loose. Without harnesses monitoring of the birds required
			significantly more effort. All the casualties occurred within the first 4 weeks of release, and there have been no further losses since then. This
			implies that the remaining birds are true survivors, although the threats to adult birds from introduced and native predators remain. Despite
			the losses to date the results are encouraging. The knowledge gained from the experiment enables us to refine future releases to significantly
37 Jun -00	10	Wanganui	increase survival chances, which will ultimately assist in re-establishing a population of blue ducks.
			Whio (blue duck): it was decided, in consultation withlocal iwi, that up to five juveniles could be removed to Mount Taranaki. The plan was
			to supplement these birds with five from the Whakapapa River and also with captive-reared ducks. In the end a poor breeding season
			prevented any birds from being taken from the Whakapapa. However three juveniles were caught on the Manganuioteao in early January and
			were released on Mount Taranaki. These birds have been joined by seven captive-bred juveniles released on 27th February. All the birds are
44 Apr-02	10	Wanganui	fitted with radio transmitters and are regularly monitored on foot and from a fixed wing plane
			Whio: Results of this years translocation efforts to Mt. Taranaki are promising with seven of the ten birds released between January and
			March this year known to be alive. Two birds were killed by stoats. Captive-bred birds have largely remained on the release river whilst wild-
			bred birds have wandered widely around the mountain. The blue duck recovery group recently reviewed the translocation work and has
46 Sep -02	4	Wanganui	recommended that releases continue for a further five years but that mustelid control is put in place in key catchments
			Two more blue duck were transferred to Egmont National Park as part of ongoing attempts to reestablish a population there. The birds were
			sourced as juveniles from the Manganui-a-te-ao. Both birds were females and join existing captive-bred and wild-caught birds in the park. A
48 Apr -03	8	Wanganui	further 8-10 captive-bred ducks will be released at the end of March. Unfortunately, all but one of these captive-bred birds are male, when

			the Egmont population is in need of females. The programme is being enhanced by funding from the Central North Island Blue Duck
			Conservation Charitable Trust. The Trust is funding a programme of stoat control in two key release catchments, and for the source
			population in the Manganui-a-te-ao. Stoat numbers in the national park appear to have been low since a 1080 drop in August 2002, but with
			time more mustelids are turning up on trap lines
			Whio: As part of a predator control trial and increased monitoring on the Manganui-a-te-ao, a team from the Whanganui Area Office,
			Wanganui Conservancy and Ohakune Field Centre spent four days colour banding whio on the Manganui-a-te-ao. Twenty nine birds were
			caught, including two old adults originally banded by Murray Williams 11 years ago on the same river. Three females were also fitted with
			radio transmitters. Breeding success will be closely monitored over the coming breeding season. The translocation of whio to Egmont
			National Park continued in April with the release of this year's crop of captive-bred juveniles. Ten of the 11 birds released were males. This
			necessitated the release of some males outside the current area of mustelid control. Encouragingly, all birds seemed to cope with a move into
			the wild despite some wild Taranaki weather. Two males have been predated by stoats outside the mustelid control area. The release
49 Jun -03	12	Wanganui	programme carries on for another four years
			A one-year trial predator control and monitoring study has started a line of stoat traps has been installed along one bank of the Manganui-a-
			te-ao. A major effort has been made to colour and metal band birds and fit several females with radio transmitters. Unfortunately three out
			of four transmitters failed following fitting. The number of pairs present in the 9.5 km study stretch of river has varied from 16 to 18 since
			monitoring began. As of early November, five pairs had hatched 25 ducklings, 14 of which were still alive as class I ducklings. An angler
			reported a stoat attack on a duckling. Two females were killed by predators on the nest and another two nests were flooded out. Five to six
51 Dec -03	11	Wanganui	females were still incubating.
			Egmont National Park: Over the next 4 years there will be ongoing releases of blue duck in to the park. A Bank of New Zealand Operation Nest
52 Mar -04	12	Wanganui	Egg programme is underway.
			Blue duck have been intensively monitored through the 2003/04 season along a 9.5 km stretch of the Manganui-a-te-ao, a tributary of the
			Whanganui. Limited stoat control was put in place, with a single line of double set Fenn traps along one side of the river. A total of 19 nesting
			attempts occurred: 18 pairs making a single attempt and one pair nesting a second time following the loss of the first nest to flooding. Ten
			successful nesting attempts resulted in 43 chicks hatching and reaching the river. The latest hatching date was 12/12/03. Of these 43 chicks,
			only 13 survived to fledge ( <u>NB</u> includes four birds currently one week away from fledging). A series of flood events during spring and early
			summer appear to be the primary cause of this high rate of chick mortality. Of the nine nests that failed, two had females predated whilst
			incubating, and seven were washed out by floods. A major effort was put in through January to band this year's juveniles, catch unbanded
			adults, and check bands on existing birds. Over 30 birds were caught, with 18 having bands fitted for the first time. Only one unbanded pair
52 Mar -04	12	Wanganui	remains on the study stretch of river. Four juveniles remain to be banded
			A translocation of captive-bred blue duck to Egmont National Park has been postponed as a result of heavy flooding in the park which
			stripped the rivers of invertebrate prey. The ducks will be kept at Peacock Springs in Christchurch and will be released in the spring once
			conditions in the rivers improve. Wanganui Conservancy has combined with Tongariro / Taupo Conservancy to produce a 'Conservation
			Strategy for the blue duck (whio) in the central North Island 2004–2009.' The goal of the strategy is 'to maintain, expand existing, and
			establish new self-sustaining blue duck populations on key central North Island river systems.' The plan has four key objectives : secure a
			minimum of 40 interrelating pairs in prescribed management sites ; monitor change in blue duck populations on three key central North
53 Jun -04	9	Wanganui	Island rivers; develop translocation tools for population recovery work with iwi and local communities to further blue duck conservation
			Whio: The monitored population on the Manganui-a-te-ao has changed significantly since last season. In 2003, 22 pairs in a 10 km study
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			stretch of river made 19 nesting attempts. This year the population of territorial adults has declined to 12 pairs and as yet no nesting
			attempts have been made. Reasons for this change are unclear. Sixteen captive-bred whio were released in Egmont National Park in August
			as part of an ongoing programme to test translocation techniques for the species and establish a new secure population in the site. The
			release was delayed from March to allow river invertebrate populations to recover following February's devastating floods. The birds were
54 Sep -04	7	Wanganui	older and heavier than in previous releases and proved very mobile, some birds travelling over 10 km in the week after release
			Following the research conducted on the shore plover diet, NWC is planning trials on an insectivore mix, which Massey University has
			formulated and Unifeeds has produced (in close conjunction with Massey researchers). Takahe, blue duck, and teal pellets have already been
			formulated and are now commercially available. Initially this feed will replace the imported insectivore mix from Australia, which is very
			expensive, and requires the addition of cat biscuits. The aim is to perfect an insectivore mix resulting in a formulated/balanced diet, requiring
			only the addition of minced heart and waterThis research will take the guess work out of the captive diet, which is the primary building
			block to producing viable eggs with good hatchability and healthy stock. It may not be widely known that NWC has the expertise to
			investigate diet issues. The value of a balanced diet will rectify 'the-cart-before the- horse' situation we are currently in with captive diets for
36 Apr-00	15	Wellington	our insectivorous species.
			Blue duck: One territorial dispute was also observed. This was a source of major stress for the birds, with lots of whistling and flying which
45 Jun -02	14	West Coast	continued for over 5 minutes.
			Whio: The only results of searching the rivers again in April were the same two pairs, so their radio transmitters were replaced. We are sure
			that there are more ducks on the river. Observations during trap line checks and from helicopters indicate that there may be as many as two
			more pairs and one single duck in an area of the Oparara River that is very difficult to check. It is hoped that these elusive ducks will be caught
			prior to the 2003/04 breeding season. Meanwhile, four other staff worked long hours to establish 25 kilometres of stoat traps along the
			Oparara, Nimrodel and Postal rivers. To date, 59 stoats have been caught. During June 2003, an additional 16 kilometres of trap lines are
			going in, giving more complete coverage of the area. In August 2002, staff from the Buller Area Office, along with Dave Barker and his dog
			Gus, searched the Oparara River and its tributaries for blue duck. Historically, the Oparara catchment is thought to have supported one of the
			largest populations in the Buller, but only two pairs were found during the survey. Radio transmitters were attached to both females in order
			to monitor their breeding success. The blue ducks were monitored during the 2002/03 breeding season. One pair raised four chicks, all of
49 Jun -03	18	West Coast	which fledged during mid-January. The other pair showed no signs of breeding

			28. Kakapo Management Quotes	
			Maud Island's 45 year association with kakapo came to an end on 23 May, with the five remaining birds being airlifted to Chalky Island.	
			Richard Henry, the only known Fiordland bird, was one of the first kakapo to go to Maud. He was subsequently moved to Little Barrier with a	
			number of other birds, in the hope that he would breed successfully. This didn't happen, so in 1998 he was returned to Maud with Flossie.	
		Nelson/	They mated almost immediately and produced three chicks. This was the first and last time that kakapo bred on Maud. It is hoped that	
49 Jun -03	15	Marlborough	Fordland's islands will provide more of what kakapo need to breed successfully.	
			At least three male kakapo are now booming on Whenua Hou (Codfish Island). Booming is the way that male kakapo "advertise" to the	
			females that they are ready for a breeding season. Although rimu is not masting this year, the kakapo are in top physical condition. A number	
52 Mar -04	26	Southland	of males caught in the last couple of months have had well developed boom sacs	
37 Jun -00	23		There was also a disease risk associated with kiore defecating in and about the [supplementary] feeding site [for kakapo]	
			Whenua Hou Nature Reserve (Codfish Island) [is] rat free Non targets were the big issue with emphasis on the bats, fernbirds and kakapo.	
			The kakapo were 'relatively' straightforward, if not easy – find another suitable holding island, set up a new infrastructure for the team and	
			move the birds for the duration of the programme. This meant timing the eradication for a year when the birds were unlikely to breed	
			to minimise disturbance. Indications were that 1999 was not going to be a breeding year so things were able to go ahead. Ironically the birds	
			bred on their temporary home, with one of the most productive (egg wise) years ever ! Sometimes you just can't pick it. The kakapo feed	
			has now been underway for nearly 2 months with no rat sign. Lines of kakapo food have been set out around the island in an attempt to get	
39 Dec-00	20		selected birds onto the artificial food, which we are satisfied would have detected any rats present.	
			On the kakapo front 2003/04 has been quiet so far, with no kakapo breeding activity on either Whenua Hou or Te Kakahu. Planning is	
			underway to translocate (early July) the majority of the 2002 cohort of juveniles from Whenua Hou to Te Kakahu so that they can become	
			familiar with feeding in beech forest and recognise beech (and rimu) masts as stimulus for breeding. In addition, the translocation will	
53 Jun -04	21		structure the population to maximise Richard Henry's chance of mating and making a genetic contribution to the next generation of kakapo	

			29. New Species & Genetic Diversity Quotes
			genetic work has confirmed that it is a new species of freshwater fish unique to New Zealand. This fish is now known as the bignose galaxias but
49 Jun -03	17	Canterbury	is yet to be formally described
			Boundary Stream's biennial snail survey has shown a dramatic and surprising increase in Powelliphanta "Maungaharuru" snail numbers found
			in the Taraponui Snail Covenant on the Maungaharuru Range. As yet genetic testing has not been done, however based on morphological
		East Coast/	differences, the Powelliphanta found in the Taraponui Covenant and Cashe's Bush are likely to be a species or sub-species endemic to the
46 Sep -02	3	Hawke's Bay	Maungaharuru Range
		East Coast/	
47 Dec -02	9	Hawke's Bay	Pimelea prostrata var. erecta", or P. arenaria. Recent work seems to indicate that it is a separate taxon
		Nelson/	
36 Apr-00	16	Marlborough	A more recent find is an unnamed forget-me-not tag-named Myosotis "Flora".
		Nelson/	A gecko caught on alpine marble in the Cobb valley, Kahurangi National Park, is apparently similar to Hoplodactylus "Marlborough mini", with
44 Apr-02	16	Marlborough	the closest record being on the Nelson Boulder Bank. Genetic work may shed light on its distinctiveness
		Nelson/	Alpine geckos captured recently on stable scree slopes in Kahurangi National Park have herpetologists excited. They have an unusual feature, a
48 Apr -03	8	Marlborough	slit rostral scale, which is previously unrecorded. Specimens have been sent to Wellington for taxonomic and genetic analyses
		Nelson/	
47 Dec -02	15	Marlborough	newly discovered hebe, which appears to be confined to the alpine tops of Mt. Murchison in southern Nelson
		Nelson/	The population of mudfish is considered genetically distinct from other populations - reflecting about a 700,000 year separation time from the
51 Dec -03	13	Marlborough	nearest population to the south.
36 Apr-00	8	Northland	invertebrate investigations carried out at Waipu and Abbey Cavesrevealeda new genus of carabid quite unlike any other in New Zealand.
			Field inspection of 12 pastoral lease properties over the last summer turned up several exciting new species discoveries and extended our
			knowledge of the distribution of many others Two new species of spider were discovered near Lake Hawea An undescribed species of galaxias
50 Sep -03	15	Otago	(Galaxias sp. D) was recorded at two new locations south-east of Alexandra and also near Tarras
39 Dec-00	16	Southland	a new Peripatus record was made It may be a new species.
50 Sep -03	17	Southland	newly discovered genus of caddis The genus belongs in the Hydrobiosidae family (a predominantly Gondwanian family)
			Dr Brett Gartrell (Massey University) has spent four days on Stewart Island disease screening skinks Brett has confirmed the presence of a new
55 Dec -04	18	Southland	species of protozoa from two of the skinks
			Planning is now in full swing for a second transfer of Archey's frog, this time from representative sites from the Coromandel. Auckland Zoo is
47 Dec -02	4	Waikato	hoping a purpose built facility may be ready early next year to house the three Coromandel sub-populations separately
36 Apr-00	12	Wanganui	An adult tree with alternate leaves on one branch was found at Paengaroa. So we're thinking of describing another new species.
38 Sep -00	8	Wellington	A new plant species has been confirmed from the northern Wairarapa.
			A small brotula fish was unexpectedly collected from Seal Island (Paparoa coast). It is either outside the known range of the brotulas (NE North
36 Apr -00	18	West Coast	Island & Fiordland) or is a previously undescribed species.
			'Cascade forest geckos': thought to be a previously undescribed member of the Hoplodactylus granulatus complexcould be a new species
52 Mar -04	20	West Coast	related to geckos found at Takitimu and/or Esperence Valley, Fiordland. It was first found during a skink survey of Cascade Plateau in 1999
54 Sep -04	13	West Coast	Powelliphanta: Of special interest is confirmation that snails collected at two, possibly three, of the sites are new species.

			Dog type	30. Dog Use Quotes
		Chatham		
44 Apr-02	24	Islands	bird dog	taiko: breeding burrows were found this year: two by telemetry and one by ground searching with a dog.
				Twenty brown teal have been released on Kapiti over the past two years. Of these, six are known to have diedA
44 Apr -02	24	Kapiti Island	bird dog	survey for brown teal using a trained dog will be carried out within the next few months
49 Jun -03	18	West Coast	bird dog	Whio: Dave Barker and his dog Gus, searched the Oparara River and its tributaries for blue duck.
52 Mar -04	14	Wellington	bird dog	taiko: located using a combination of telemetry and searching with a dog
53 Jun -04	4	Waikato	bird dog	kiwi: some of these birds were not monitored from birth (dog finds)
				Scott Theobald spent the best part of November and December 2003 on Raoul with two dogs searching specifically for
52 Mar -04	28	Raoul Island	cat dog	cat sign, and failed to find anything definite.
				Tuhua (Mayor Island): In October the entire island was searched by the cat dog In January both [a] cat dog and a rat
				dog went to the island, when sign of neither was detected A further trip with the dogs is intended for November.
40 Mar-01	11	Southland	cat dog, rat dog	Meantime the tracking tunnels will be maintained.
				Tuhua: Following the air drop of bait in 2000, there has been several follow up visits to look for rats and cats. The
				intention being to eradicate Norway rat and kiore by primary and for cats to all die from secondary poisoning.
				Sometimes with Scott Theobald and his dogs, or simply to run lines of snap traps and tracking tunnels for rats, and fish
46 Sep -02	11	Tuhua Island	cat dog, rat dog	baited leg hold traps for cats.
				At the moment Arab (with Sally the black lab), Nick Torr, and Steve Allen are doing the follow up cat work through to
				mid October. In early October Scott Theobald goes up to Raoul with his hairy muts hopefully to confirm that he place is
46 Sep -02	11	Raoul Island	cat dog, rat dog	rat and cat free.
				Last year the team tracked down the first ever record of a koaro spawning site which fuelled the enthusiasm to crack
38 Sep -00	7	Wanganui	fish dog	the elusive shortjawed kokopu. A new recruit to the team (Jazz, the dog) may have been the secret!
				Stewart Island hosted a team of lizard-seeking experts, including one canine version. Mandy Tocher and Puti Puti
52 Mar -04	25	Southland	gecko dog	Rapua (gecko dog in training)
				Kiwi have been given further protection in the Tongariro Forest Kiwi Sanctuary this year, with the gazettal of Tongariro
				Forest as a Controlled Dog Area and the introduction Avian Aversion training for hunting dogs run by local contractor
			kiwi aversion	Jim Pottinger. The effectiveness of the dog training is unproven, but there is no doubting the value of the opportunity it
51 Dec -03	6	Bay of Plenty	dog	creates in getting a kiwi safe message through to the dog's owners.
		Auckland		Auckland Island:eradicationfor pig looks like a combination of poison, shooting, leg hold traps, and lastly dogs. For
46 Sep -02	12	Island	pig dog, cat dog	cats a combination of the same methods (as for pig), but probably using the same toxin in a different bait.
				On Great Barrier Island (GBI) we have no known sites of Dactylanthus but tantalising reports from the locals that it
				does grow there. We were lucky enough to be able to borrow Graeme Atkins from ECHB Conservancy for a week, who
49 Jun -03	3	Auckland	plant dog	along with his dog Mohiti, helped us scour parts of the northern bush on GBI. We didn't find any Dactylanthus
				In the Inner Hauraki Gulf, an attempt is being made to eradicate rabbits from Motuihe Island (for the second time)
				using 1080 on diced carrot as the knockdown mechanism. Poisoning the Island followed two prefeeds, and the results
46 Sep -02	12		rabbit dog	were an impressive high 90's kill. Follow up will be with the usual arsenal of traps, gassing, guns, and dogs, not

				necessarily in that order
				Campbell Island rat eradication: Now it is a case of sit back and wait for two years, to give any rats that may have
				survived a chance to breed to detectable numbers, before a check using dogs and traps can hopefully declare the
42 Oct -01	17	Southland	rat dog	operation a success.
40 Jun 02	22			A team of six DOC staff, along with Jak the rat dog, recently returned to Bluff after a month searching for rats on
49 Jun -03	22		rat dog	Campbell Island.
38 Sep -00	13	Southland	stoat dog	Te Kakahu: Trained stoat dogs are also taken on each trip to Te Kakahu and have yet to find any sign there.
				The next check on Anchor will be November, when five tracking tunnel lines and trained stoat-detection dogs will be
42 Oct -01	17	Southland	stoat dog	used to check for stoat presence.
43 Dec-01	2	Northland	stoat dog	specially trained dog, Tui, to search for stoat densthen controlled using the fumigant Magtoxin
		Nelson/		Two mustelids have turned up on Maud Island: a stoat trapped in February and a weasel in March. Upgrading the
48 Apr -03	9	Marlborough	stoat dog	detection systemand a visit from Scott Theobald and his stoat dog Tui, failed to find evidence of further animals.
				Pateke/brown teal: Now, if birds go missing from the area, it is equally likely that their transmitter has failed as it is
50 Sep -03	2	Northland	transmitter dog	they have dispersed. Indicator dog work is the only way to recover these birds
				At Mimiwhangata Coastal Park: pateke: "Missing" birds are often identified by band combinations or dog survey in
52 Mar -04	2	Northland	transmitter dog	later months, carrying dead transmitters.

			Type of Community Involvement	31. Community Involvement Quotes
				Successful predator control work carried out by the Kaharoa Kokako Trust this breeding season in the Kaharoa
36 Apr-00	5		pest control	Forest has resulted in a good breeding season for kokako.
				On-going monitoring of breeding success will consist of artificial roost sites, built by science students from
37 Jun -00	3		schools	Whangarei Boys High School
				Tararu Valley Conservation Trust is a community conservation effort which aims to restore a small and long time
				neglected patch of rainforest Volunteers have been creating track lines and setting out possum traps since spring
47 Dec -02	1		trapping	2001 and in started using Fenn MK6 traps in February 2002.
				Austrofestuca littoralis (sand tussock) has been located at Pakiri Beach on Auckland's mainland. It's the first time
				we have seen this tussock on the mainland for 100 years. Luckily the tussock is now within a fenced off area that
				the local landowners are looking after. The chances of this species surviving and prospering at Pakiri are now
41 Jun -01	3	Auckland	landowner cooperation	greatly enhanced.
				Black mudfish (Neochanna diversus) have been located in a privately owned wetland Auckland – the only site we
				know of in the Auckland Region. The owners have been protecting their wetland and are very happy about the
52 Mar -04	4	Auckland	landowner cooperation	discovery
				Fairy terns have once again commenced nesting at Papakanui and Pakiri. Wardens and local volunteers are
				undertaking trapping to protect nesting birds. The local school pupils have produced signs to educate visitors about
55 Dec -04	4	Auckland	trapping, schools	not disturbing the birds, and are actively taking an interest in what is happening on the beach
				The annual volunteer day at this site was held in February. Volunteers spent the day combing the gullies with many
36 Apr -00	9	Bay of Plenty	searching	more plants being found
				MistletoesA further part of the picnic area was fenced off and planted with potential <i>lleostylus</i> host species by
42 Oct 01	6	Bay of Plenty	planting, fencing	volunteers in August
44 Apr -02	8	Bay of Plenty	searching	survey using volunteers for the elusive <i>Pterostylis micromega</i> record (1984) from the Lower Kaituna wetland.
				Kokako : 1080 in bait stations were laid in the Mokaihaha Ecological Area This work is largely carried out by the
				Kaharoa Kokako TrustManawahe Kokako Trust: Since the Trust started this project, kokako numbers have
47 Dec -02	7	Bay of Plenty	pest control, trusts	increased each year to about twelve pairs.
47 Dec -02	8	Bay of Plenty	financial assistance	New Zealand dotterel: We are fortunate to have considerable financial assistance from non-DOC sources.
				Okareka Mistletoe Restoration Project; a joint effort between DOC, Environment BOP, Forest & Bird and the
				Rotorua Botanical SocietyForest & Bird have been focusing on laying grided bait stations covering part of the
48 Apr -03	5	Bay of Plenty	weeding, poisoning	reserve. The Rotorua Botanical Society is focused on undertaking weed control.
				Aerial spraying of willows in the wetland was undertaken in March. Staff and volunteers spent several days
				constructing small plastic covers over the Cyclosorus plants to protect them from the glyphosate spray and to
48 Apr -03	6	Bay of Plenty	caging plants	ensure the survival of these populations.
				Dactylanthus: Volunteers and staff discovered a total of 37 new plants during several visits and added 24 new
49 Jun -03	6	Bay of Plenty	searching, caging	cages.

				Kokako had another productive breeding season in Kaharoa Forest and the adjacent Onaia Ecological Area, north of
				Rotorua, due mainly to the dedicated work of over 100 members of the Kaharoa Kokako Trust. Over 100 birds are
				now resident, compared to just 24 birds six years ago when the Trust started supporting the DOC management
49 Jun -03	7	Bay of Plenty	trusts	efforts.
				discussing management of a <i>P. turneri</i> population there with the new land manager who is keen to start managing
50 Sep -03	5	Bay of Plenty	landowner cooperation	and monitoring the population.
				Following the initial survey/resurvey work undertaken with Waikato Conservancy staff in August, a follow-up day
				was held with DOC volunteers in October to "weed" Picris and Pimelea sites located to reduce the competition
51 Dec -03	4	Bay of Plenty	weeding	from other plant species
				Dactylanthus: A big effort was put in by one of DOC's regular volunteers (Murray Foster) who made up nearly 200
				cages for Rangitaiki Area Office in time for flowering season regular intense possum control during flowering
				timelate March with a good turnout of volunteers and staff. Despite intensive searching, less than 20 new plants
			caging, trapping,	were found and caged. This reflects the tremendous amount of effort previously put into searching and caging at
53 Jun -04	5	Bay of Plenty	searching	this site, with the total population now well over 200 plants
				reserves are currently being actively managed by the Rotorua Botanical Society and Forest & Bird, who are into a
				second year of plant and animal pest control in conjunction with DOC and Environment BoP. The focus of this work
				is on protecting the significant Tupeia populations. Finding further Ileostylus in these areas, in addition to the large
				populations of Tupeia, further strengthens the justifications for undertaking the community restoration
54 Sep -04	5	Bay of Plenty	pest control, searching	programmes already occurring in these areas.
				At Flea and Stony bays, two neighbouring farmers have trapped cats and ferrets in the penguin colonies on their
48 Apr -03	11	Canterbury	trapping	properties for several years.
				mainland titi/sooty shearwater: The colony was in decline, hovering around four breeding pairs, until the
				landowner erected a predator fence around the colony. The fence, combined with landowner/DOC predator
				trapping, led this to be the only mainland colony to increase in numbers. A follow-up visit last week by local DOC
				staff and Kerry-Jayne showed a woeful story. There was no sign of any chicks alive, and four dead chicks were found
				inside the burrows. Their ripped out throats pointed to mustelid predation, confirmed by stoat scats and a small
			landowner	hole forced between the netting and fence posts Priorities from here are to source funding for a professional
			cooperation, fencing,	predator-proof fence. The best efforts of the landowner have not been enough against the wily fence-cracking skills
53 Jun -04	12	Canterbury	trapping	of stoats.
				White-flippered penguin: Banks Peninsula: The landowners at the bays had been trapping predators within the
54 Sep -04	10	Canterbury	landowner cooperation	colonies for many years but predation had still been occurring on a regular basis.
	1			The first step in the reintroduction of North Island kokako to Boundary Stream has now taken place with the
				transfer of five pairs from the Otamatuna study site in Northern Te Urewera to five aviaries in the Reserve. Six birds
				were caught on 26 May and transferred by helicopter to Boundary Stream where they were gifted and welcomed
		East Coast/	lwi, sponsorship,	by Iwi from the Waimana Valley and local IwiMembers of Forest and Bird, OSNZ and other volunteers have been
42 Oct -01	7	Hawke's Bay	labour	instrumental (financially and physically) in the progress so far of the project helping with aviary construction and

				participating in the regular kokako feeding roster
		East Coast/		With assistance from volunteers from the DOC nursery in Ahuriri there have also been approximately 100 new
42 Oct -01	8	Hawke's Bay	planting	plantings of kakabeak (Clianthus puniceus) along the new 'Interpretation Track' and other areas of the Reserve
				kiwi: A local interest group, the Whinray Ecological Trust, has been busy applying to various trusts and other
				organisations for funding. Their immediate aim is to carry out possum control on private farmland surrounding the
				reserve to reduce the rate of re-invasion. Traps and bait stations have been purchased and it is hoped the trust can
				employ a trapper within the next two months. The Department removed 3,200 possums from the 430-hectare
		East Coast/		block during autumn 2001. The trust aims to work with DOC to keep possum numbers at a 2-3% Residual Trap
43 Dec-01	9	Hawke's Bay	trusts, fundraising	Catch both within and outside the reserve
				A grant of \$2,500 has been received from the HB Williams Trust. This will significantly improve the weka habitat
		East Coast/		within the enclosure by creating more wetland area, and employing a mustelid trapper. Weka are surviving within
43 Dec-01	9	Hawke's Bay	donation	the enclosure, but considerable on-going effort is required to control cats and mustelids
				kokako held in aviaries at Boundary Stream have settled in well, and are maintaining healthy weights. Members of
		East Coast/		the Forest and Bird Society and other volunteers have greatly supported the project by helping out with the daily
43 Dec-01	9	Hawke's Bay	labour	feeding and care routine
		East Coast/		
43 Dec-01	10	Hawke's Bay	schools	New Zealand dotterel: involving local school children in the protection of the area.
		East Coast/		With the help of community volunteers, approximately 300 kakabeak propagated from one of the Area's two
50 Sep -03	8	Hawke's Bay	planting	known wild plants have now been planted
				There are only three Shine Falls kakabeak with their distinctive pink flowers left holding on to the bluff beside Shine
				Falls in Boundary Stream Mainland Island. However, with the help of the Taupo Native Plant Nursery and the
		East Coast/	planting, fencing,	volunteers at the Ahuriri nursery, 45 seedlings have been planted along the top of the bluffs and fenced off to stop
51 Dec -03	8	Hawke's Bay	propagating	any hare or goat browse
		Nelson/		Populations of giant kokopu have also been discovered. Excellent co-operation of local landowners has helped
40 Mar-01	7	Marlborough	landowner cooperation	facilitate the survey.
		Nelson/		talks about the threatened plants and animals of South Marlborough have been very well received and have lead
41 Jun -01	10	Marlborough	searching	to the reporting of new localities for several species, especially wiggy bush
		Nelson/		The Adele Island project is being done in association with local Iwi and tourist operators at Marahau, and will
42 Oct -01	11	Marlborough	Iwi, businesses	protect a large colony of little blue penguin and kereru.
				A local community group calling themselves the Friends of Flora have completed their first season of stoat control
		Nelson/		along 8km of the Flora Stream with the intention of protecting all forest bird species with particular emphasis on
45 Jun-02	12	Marlborough	trapping	blue duck. So far they have accounted for 17 stoats and a cat a very unlucky cat.
				A local community group known as the Friends of Flora have established and run a stoat line over this winter along
		Nelson/		8km of the Flora Stream with the hope of protecting Blue Duck from stoats. So far an unlucky cat and 13 stoats
46 Sep -02	6	Marlborough	trapping	have been dispatched.
49 Jun -03	13	Nelson/	landowner cooperation	Olearia polita: discovery of five new populationsall the landowners have been very keen to preserve the plants

		Marlborough		and their habitat. Three sites are being signed up as conservation covenants, and half a kilometre of fencing has
				been erected
				Blue duck: CThe protected habitat in this instance is Flora Stream, and the protection involves in excess of 50
				kilometres of stoat lines. In addition to the work in the Flora Stream, the habitat of the three pairs contributing the
				eggs will also be protected from stoats, with the hope that they will re-nest and successfully raise their second
				clutch. A mountain of stoat tunnels is being created, beech trees are becoming adorned with pink tags and there
				has been much fretting over maps and spreadsheets. It is hoped that the traps will be on the ground by the end of
		Nelson/		September. The project builds on an existing community project with a keen group of locals calling themselves
50 Sep -03	12	Marlborough	trapping	"Friends of Flora".
				In order to conserve whio, 568 double stoat traps have been placed to protect 4,500 ha of the Flora Stream
				catchment from stoats. This involved a massive job of trap tunnel construction and track cutting. The project is a
		Nelson/		partnership with a local community group named Friends of Flora and has been generously supported by the
52 Mar -04	17	Marlborough	trapping, trusts	wonderful folk at Isaacs Wildlife trust in Christchurch
				Stephens Island: The nursery produces 10,000 plants each year; most of them are ngaio, taupata, kohuhu, tauhinu
		Nelson/		and wharariki. They are planted during two 7 day trips each winter, where volunteers brave the elements to each
54 Sep -04	8	Marlborough	planting	get 5,000 trees planted in the time available.
		Nelson/Nelson		Rhytida: Volunteers enjoyed participating in the survey, and the large group size allowed us to search eleven sites
47 Dec -02	14	/ Marlborough	searching	relatively intensively and swiftly.
				<i>Christella dentata</i> : The planting was a community effort including many of the people and children from the marae,
38 Sep -00	3	Northland	planting	Conservation Corps students, DoC staff and volunteers from Bushlands Trust.
38 Sep -00	4	Northland	planting	Forty eager volunteers planted around 900 shrubs.
38 Sep -00	4	Northland	caging	Eightyfive standard and 5 custom cages were added at the Oropi site with the help of volunteers.
				North Island wekas are being released onto the Russell Peninsula by a group of private individuals to re-establish
			landowner	them in the area. A population existed in the general area from the late 1960's through to the early 1990's when
46 Sep -02	1	Northland	cooperation, trapping	they died out. The area where they are being released is being managed and predators are being trapped.
				Sebaea ovata translocated as seed from its home in Wanganui (where it is failing) to the dune wetlands at Pouto
				during summer 2002, surprised everyone by seeding and producing a healthy little population of wild plants in just
				one year. Te Uri o Hau Iwi are particularly proud because having put a lot of time and effort into the project, along
52 Mar -04	3	Northland	lwi	with staff, the plant is growing on their land and they are now kaitiaki.
				Trap lines for stoats in the Makarora Valley continue to catch stoats. Recently numbers are dropping off, and the
				rate of rat captures is increasing slightly. This work is a joint operation with the Upper Clutha Branch of Forest and
				Bird, which has developed a sponsorship package. For \$50 individuals can purchase a tunnel and trap for inclusion
40 Mar-01	9	Otago	sponsorship	in the line. Stoat numbers in the Dart remain high, but rat numbers are decreasing.
			landowner co-	Carmichaelia Holloway: The site is private land and it is through the good will of the landowner that we are able to
46 Sep -02	9	Otago	operation	work here. All plants were protected by wire cages to keep rabbits and sheep at bay.
48 Apr -03	13	Otago	trapping	Predator trapping to protect mohua at Makarora by the Upper Clutha branch of Forest & Bird has continued over

				the summer.
	10			Once again we have had volunteers assisting us with tree planting on Stephens Island. So far 7,000 of this year's
42 Oct -01	16	Southland	planting	quota of 10,000 trees have been planted. After ten plus years of planting we now almost have a "new forest".
				The Yellow-Eyed Penguin Trust has been working in conjunction with DOC to find out what is happening to yellow-
				eyed penguins on Stewart Island This year the Trust monitored all of the nests along the northern coast of Stewart
53 Jun -04	19	Southland	monitoring, trusts	Island looking for evidence of cat predation.
				Volunteer involvement with protecting and managing threatened plants is now occurring regularly with weekend
				field trips. So far groups have been involved with propagating mistletoes as well as caging dactylanthus at
		Tongariro/	trapping, propagating,	numerous locations. A community group at Pukawa has recently started controlling possums and rats around
47 Dec -02	8	Taupo	caging	Pukawa Township, in addition to DOC possum control in the scenic reserves.
				Department of Conservation, Genesis Power Ltd and the Royal Forest & Bird Protection Society Inc. entered into a
		Tongariro/	trusts, business	formal agreement to establish a Trust. Its purpose would be to provide ongoing operations to enhance, protect and
49 Jun -03	8	Taupo	sponsorship	promote blue duck populations
		Tongariro/		members of the Tongariro Natural History society helped DOC cage dactylanthus at two sites in the Tongariro
48 Apr -03	7	Taupo	caging plants	Forest. Both sites now have over 40 caged clumps.
		Tongariro/		With the help of the Tongariro Natural History Society, the Ruapehu team spent a day caging approximately 60+
55 Dec -04	9	Taupo	caging	dactylanthus plants in Tongariro Forest. Over 300 plants have been caged in this forest in the last 3 years.
				The contractoroffered two of his staff for a day a week for 3 years to trap stoats for kiwi protection. Adele Smaill
				(Kiwi Recovery Advocate) Hauraki Area staff, landowners, and volunteers undertook a kiwi survey, which identified
				about 20 individual kiwi in the block. Adele, Fin Buchanan, and key landowners then established the Whenuakite
				Kiwi Care Group. Waikato Regional Council has given financial support to purchase trap sets because the block is
				one of their key ecological sites. The contractor is currently working on placing trap sets throughout the block. The
				work should be completed and fully operational by the end of the year. This is a great example of what can happen
39 Dec-00	4	Waikato	searching, trapping	in a short time when keen landowners, and regional and central government get together.
				NZ dotterel monitoring Opotiki Area Thisrepresents one of the best breeding seasons known to date for these
				three breeding sites. This result can be attributed to successful predator control, community support and
41 Jun -01	5	Waikato	support	favourable weather conditions.
				New Zealand dotterel:partnership deal with Newmont MiningThis gives us significantly more resources to
				protect New Zealand dotterel all over the Coromandelfledging success at our main site (Opoutere) increased 30%,
				and the predator catch per unit effort increased over 40%. These results are directly linked to the increased effort
47 Dec -02	5	Waikato	business sponsorship	and focus provided by the Partnership
				Hebe speciosa: steadily increasing since monitoring began in 1999, when 41 individuals were found. In the latest
				survey, 388 plants were counted. All plants were in extremely good condition, with only one individual showing
				some sign of browse. Possum control and fencing out stock by the landowner are thought to be the main factors
49 Jun -03	5	Waikato	landowner cooperation	that have contributed to this increase
50 Sep -03	4	Waikato	pest control	On 26 July 38 pateke were released at Port Charles, in the northeast Coromandel. This joint effort between DOC,

				Ducks Unlimited, the Brown Teal Conservation Trust and the local community includes large areas of cat and stoat
				control
				An increase in the level of sponsorship from Newmont Gold mine at Waihi has facilitated the expansion of the NZ
50 Sep -03	5	Waikato	business sponsorship	dotterel project on the Coromandel this season.
				New Zealand Dotterel Watch project on the Coromandelis a partnership with Newmont Mining, who operate the
				Martha Hill Mine at Waihi and have NZ dotterel nesting on their mine site. This season we have expanded away
				from our traditional site at Opoutere, and are putting more management effort into supporting the Coromandel
			monitoring, advocacy,	New Zealand Dotterel Watch Network, a group of dedicated community members who look after their individual
			nest protection,	sites. We provide support, information, materials and intensive predator trapping by a professional contract
51 Dec -03	3	Waikato	business sponsorship	trapper at priority sites. The minders do the monitoring, public advocacy and nest protection at each of their sites
				Kiwi: the Moehau Environment Group's work – this active community group is currently installing about 600 stoat
				traps over 6,000 ha immediately adjacent to the southern boundary of MKS. We hope they stop all stoats from
				entering the Moehau area. The total area trapped will be about 25,000 ha by the end of 2004! Thirty-five kiwi
54 Sep -04	4	Waikato	trapping	chicks or juveniles were caught during the 2003/04 breeding season.
				We have had major progress with Olearia gardneri - a thousand seedlings require a home! Yes, we had a great
				strike rate from seed collected at the Railcorp land site. Thanks to Robyn (Percy's Reserve) and the Taihape
40 Mar-01	4	Wanganui	propagation	horticultural group for this success.
				Twenty-eight NZ robins were transferred to Bushy Park from an area of pine plantation at Waimarino, which is soon
				to be milled. A team of DOC staff and members of Bushy Park Trust spent 4 dayscatching the birds using clap-traps
				baited with mealworms. The birds were colour-banded and transferred to Bushy Park, a privately run reserve which
42 Oct -01	9	Wanganui	trusts, labour	has undertaken a successful predator control campaign in recent years.
				Olearia gardneri : Tim ran a campaign for Arbor Day along the lines of Taihape being the centre for this, the third
			landowner	rarest tree in the country. Farms in the district with suitable habitat were targeted, as well as local residents. All 500
46 Sep -02	5	Wanganui	cooperation, trapping	plants had found a home within 3 hours, and there were orders for more
				The Taranaki Kiwi Trust and the Wanganui Conservancy have signed a Memorandum of Understanding and have
				jointly produced a 5-year conservation plan for kiwi in Egmont National Park. By working together, the two
				organisations plan to halt the decline of the park's kiwi population and enhance the size and range of that
				populationConservation action started this November with the installation of stoat traps over 4,500 ha of the
				park. This has been achieved through funding from the Wanganui Conservancy and the New Plymouth District
				Council. As funding allows, it is planned to expand the area of stoat trapping to over 12,000 ha in the next 5 years.
			trusts, trapping,	The Bank of New Zealand Kiwi Recovery Trust has also provided seed funding for an Operation Nest Egg programme
51 Dec -03	11	Wanganui	business sponsorship	to begin
				A major effort by the Stratford Area Office in January and February has seen the installation of 650 double set trap
				boxes over 4,000 ha of Egmont National Park. The project is a collaboration between the Department, the Taranaki
			trapping, universities,	Kiwi Trust and the Central North Island Blue Duck Conservation Charitable TrustHard work by Wanganui Bird
52 Mar -04	12	Wanganui	rehabilitation	Rescue and Massey University over 5 months led to the [injured] bird recovering sufficiently to be released.

				The Conservancy is working closely with the Taranaki Kiwi Trust (TKT) to conserve kiwi in Egmont National Park. A
				6,000 hectare stoat trapping operation is in place and funding has been provided to the TKT to start a Bank of New
			trusts, landowner	Zealand Kiwi Recovery Operation Nest Egg (ONE) project to boost the kiwi population under protection. To date
			cooperation, trapping,	nine males have been fitted with transmitters; three birds on private property at Purangi and six birds in
54 Sep -04	7	Wanganui	business sponsorship	collaboration with the Bushy Park Trust in the Waitotara Valley.
38 Sep -00	9	Wellington	breeding	Brown teal, bred through the Ducks Unlimited network were transferred to Kapiti and Mana Islands on 14 August.
				The Coprosma occurs in an amazing shrubland dominated by divaricates and a substantial proportion of this
				community has now been fenced and a management agreement is being drawn up with the landowner. Some of
				the Olearia also grow on the same property, and these have had small individual fences put around them, while
46 Sep -02	5	Wellington	landowner cooperation	another six grow in an area where a covenant to cover the entire group is possible.
				Dactylanthus taylorii: Nine of the 11 known plants have been caged and future searches are planned in both this
				and other likely sites. The population is in an RAP and with a keen and cooperative landowner, its future looks
46 Sep -02	5	Wellington	landowner cooperation	assured.
				Looking to the future, the "sponsor a hectare" project to support the restoration of the Mount Bruce Reserve and
				the eventual rebuilding of its flora and fauna has been a huge success, with all the 942 hectares now sponsored for
46 Sep -02	6	Wellington	sponsorship	an average of two years.
				The Mount Bruce (Pukaha) restoration project, supported by local iwi, Rangitaane O Wairarapa, the National
				Wildlife Centre Trust and the Department of Conservation, is making it possible for kokako and other endangered
				species to thrive in their former home. The 942 hectare Mount Bruce Scenic Reserve is now criss-crossed by a
				network of trails that contain traps and bait stations needed to support the intensive pest control operation
50 Sep -03	10	Wellington	pest control, Iwi	underway in the forest
				Olearia gardneri seed was collected at Koromiko, Kowhai Bush and Tyneside, and sent to Otari/Wilton Bush. Plants
				grown in previous years were planted at Springhill and at Kaumingi Stream, where the landowner is keen to protect
52 Mar -04	13	Wellington	landowner cooperation	the species. A fencing/weed control/covenant funding proposal is with the Nature Heritage Fund
				The third and final transfer of fairy prion chicks from Takapourewa (Stephens Island) occurred on 17 January 2004.
				All 100 chicks thrived on a diet of sardine smoothies, and all had fledged by 6 February. The 100% fledging success
				for 240 chicks over the period of 2002–04 is a tribute to the dedicated contractors and volunteers organised and
52 Mar -04	15	Wellington	labour	funded by the Friends of Mana Island Society
				community fundraising and sponsorship have raised \$558,700 for the Pukaha project. So far kaka, kiwi and kokako
				have returned to Pukaha/Mount Bruce forest, and dactylanthus has been found growing naturally. All these will
55 Dec -04	12	Wellington	fundraising	benefit greatly from the levels of pest control that the project has been able to achieve