Reintroduction Specialist Group
Oceania Newsletter
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Visit the RSG Oceania Website at:
http://www.massey.ac.nz/~darmstro/rsg.htm
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Upcoming International Reintroduction Conferences

The first two international reintroduction conferences will take place in 2008. The first conference will be held 14-16 April 2008 at Lincoln Park Zoo, Chicago, and will be co-hosted by the zoo and the IUCN Reintroduction Specialist Group (RSG). Topics covered at this conference will include experimental design and adaptive management, captive-born animals and behavioural issues, disease, use of RSG guidelines, and methodological tools. The second conference be held at the London Zoo from 8-9 May 2008, and will focus on the science and management of bird reintroductions. Topics covered will include reintroduction site selection, development of sensible strategies for pathogen and genetic management, and post-release monitoring and modelling. See http://www.reintroduction.org or contact Carrie Schloss (cschloss@lpzoo.org) for further information on the Chicago conference. See http://www.zsl.org/zsl-london-zoo/whats-on/avian-reintroduction-biology-symposium.215.EV.html or contact John Ewen (John.Ewen@ioz.ac.uk) at the London Zoological Society for further information on the London conference.

Updates to Standard Operating Procedures for New Zealand Translocations

The Standard Operating Procedures for New Zealand Translocations put in place in 2002 have been undergoing revision throughout 2007, and there will soon be extensive changes to the formats used for the Translocation Proposal and Translocation Reporting Instructions. The revision process has been led by Rose Collen (rcollen@doc.govt.nz) and Pam Cromarty (pcromarty@doc.govt.nz) from the New Zealand Department of Conservation with input from Doug Armstrong (D.P.Armstrong@massey.ac.nz) and Tim Lovegrove (tim.lovegrove@arc.govt.nz) from the Reintroduction Specialist Group. The changes are designed to make the procedures more accessible to the range of groups now instigating translocations, but also to prompt reintroduction practitioners to consider a set of key questions when planning their translocations. These questions are closely aligned with those proposed in a paper on “Directions in reintroduction biology” by Doug Armstrong and Phil Seddon that will be published in Trends in Ecology and Evolution in January 2008.

Reintroduction Contractors

While diverse groups of people are now instigating translocations, the level of procedural, technical and ecological knowledge needed can be extremely daunting, sometimes even to seasoned professionals. Consequently, some groups are now contracting people with the necessary experience to help them plan and execute translocations. Two people that I recommend are Kevin Parker (k.parker@massey.ac.nz) and Joanne Thorne (jothorne@xtra.co.nz), both of whom have done planning, execution and monitoring of bird translocations as part of their postgraduate work at Massey University. If there are other people with the necessary experience that are interested in contract work, let me know and I will list them on our website.
Recent Pacific Island Reintroductions

Click HERE for previous reintroductions!

Rimatara Lorikeets to Atiu, Cook Islands

Rimatara Lorikeets, also called ‘ura, kura or Kuh’s Lorikket (Vini kulii) were reintroduced to Atiu Island, 215 km north-east of Rarotonga, on 24 April 2007 when 27 birds arrived by plane from Rimatara in the Austral Islands of French Polynesia. The Rimatara birds were previously the only population left in the species historic range, although there are also two introduced populations in the Line Islands of Kiribati. The kura was previously found throughout the southern Cook Islands but appears to have been extirpated from the region by 1820 due to demand for its small red feathers that were used for ceremonial adornments. It probably survived on Rimatara due to a tapu put in place by Queen Tamaeava Arii Vahine around 1900 and due to the absence of ship rats (Rattus rattus) on the island. Atiu was chosen as a reintroduction site due to the absence of ship rats there, and a key part of the project will be to ensure it remains free of ship rats. The planning for the project took place over a 15 year period, and was complex due to crossing of cultures, languages and national boundaries. See Forest & Bird 326: 30-33, contact Al Lieberman (alanlieberman@earthlink.net) or Anne Gourni (sop@manu.pf) or visit the project MANU website (http://www.manu.pf).

Recent New Zealand Reintroductions

Click HERE for previous reintroductions!

Plant Reintroductions for Restoration of a Dolomite Quarry

All over the world plant species have adapted to the high concentrations of calcium and magnesium in dolomitic limestone. At Mt Burnett in NW Nelson, New Zealand, several “dolomitophilic” endemics occur, including two forest small trees (Myrsine argentea, Melicytus aff. obovatus), a forest fern (Hymenophyllum aff. flexuosum), a sedge (Carex dolomitica), and a variety of bluff shrubs and herbs (e.g., Hebe albicans). Alternatively, many more widespread species take on unusual forms on the dolomite, such as a dwarf flax (Phormium cookianum). The dolomite outcrop covers less than 10 ha of land adjacent to Kahurangi National Park and there has been public pressure to limit quarrying. The owners have agreed to a restoration plan involving the progressive closure of quarried benches as the dolomite is removed. The primary focus is on the endemic species, varieties and forms, and fortunately most are happy on exposed bluffs. These will be left with as great a range of habitat diversity as possible, given a need for long-term safety and stability. The plants are propagated from seed and cuttings, grown on in a nursery then replanted in prepared ground along each bench. Trials over 6 years indicate that the rare plants can be grown and returned to the site. Planting begins in earnest this year. From Philip Simpson (philipsimpson@xtra.co.nz).

Reintroductions to Maungatautari

The Maungatautari project is a major restoration initiative in the Waikato region of the North Island. The entire 3400-ha Maungatautari mountain is now enclosed by a predator-proof fence, and eradications of introduced mammals and reintroductions of native species are well underway.

14 western North Island brown kiwi have been released so far, and the plan is to release at least 60 in total. Kiwi appear to have disappeared from the mountain about 100 years ago.
Most of the birds are coming from “Operation Nest Egg” programmes, where eggs are taken from the wild in areas where stoats are abundant and juvenile survival therefore low, and the remainder are from captive breeding. All released birds are currently being monitored by radio telemetry. Breeding is closely monitored, and the first chick hatched in early December 2007.

Two Takahe have been released so far, and the plan is to have about 5 pairs on the mountain. Takahe were not found on the North Island historically, but the rationale for the introduction is that they are the closest analogue to the extinct North Island takahe, or moho. The takahe are contained within a separately-fenced wetland site, and have had 4 breeding attempts over the last 2 seasons. The most recent attempt (their second this season) finally resulted in a fertile egg, but unfortunately the chick died in the shell shortly before hatching.

Seven Kaka have been released so far. Kaka were originally found throughout forests of the North Island, so this is a reintroduction. Captive-bred young birds are held in an on-site aviary for a period, then given access to the outside where outdoor feeders are deployed with the aim of keeping them from dispersing. The 4 females in the first group of 7 were radio-tagged, and those birds have gone further afield than expected following release and have not shown much interest in the feeders.

10 Short-jawed Kokopu, 40 Giant Kokopu and 200 Banded Kokopu were released into the southern enclosure and the Tautari wetland in April 2007. The fish were sourced from Charlie Mitchell's whitebait farm at Raglan. It is unclear whether any of these species were found on the mountain historically, so unclear whether the releases are reintroductions or introductions. Some fish have been seen, but systematic monitoring has yet to start.

Contact Chris Smuts-Kennedy (smuts@hnpl.net).

Hihi to Ark in the Park

The hihi (stitchbird, *Notiomystis cincta*) was reintroduced to the Ark in the Park area of the northern Waitakere Ranges when 59 birds (9 adult males, 25 juvenile males, 25 juvenile females) from Tiritiri Matangi Island were released in February 2007 and June 2007. Ark in the Park is a 1100 ha predator control area within a contiguous 27,000 ha of podocarp-broadleaf forest. The project is the first attempt to reintroduce hihi back to unfenced habitat on the North Island. Hihi were extirpated from everywhere except Little Barrier Island by the late 19th century, and the reintroductions to date have been to a series of islands and to the predator-fenced Karori Sanctuary in Wellington. The habitat in Ark in the Park appears to be superior to that of other reintroduction sites in terms of forest maturation and diversity, and the big questions are whether hihi can co-exist with low numbers of exotic mammalian predators (rodents, possums, mustelids, cats, pigs, dogs) and whether sufficient numbers will remain in the managed area. Birds were captured using cages at feeding stations and using mist nets. They were held for up to 14 days in the aviary on Tiritiri Matangi awaiting disease screening results, and were then transported to the release site by boat and van on the day of release. Half were released immediately and the other half were held in an on-site aviary for 2-3 days. There is monitoring in place, including an MSc project by Kate Richardson from Massey University, and chicks have recently fledged from the first nest found. Contact Sandra Jack (arkinthepark@paradise.net.nz) and/or see [http://www.forestandbird.org.nz/ark](http://www.forestandbird.org.nz/ark).

North Island Robins and Whiteheads to Tawharanui

Tawharanui Open Sanctuary is a 588-ha predator-fenced mainland reserve on a peninsula 90 km north of Auckland. About 150 ha of the reserve is forested, the remainder being pasture, wetland, and regenerating scrub. The reintroductions taking place are part of the restoration
programme for the reserve, and follows eradication of exotic mammals and ongoing control of mammals that may reinvade around the edges of the fence.

North Island robins (toutouwai) were reintroduced to Tawharanui when 21 birds (13 adult males, 5 adult females, 2 juvenile males, 1 juvenile female) from Tiritiri Matangi Island were released on 16 March 2007. These were caught with clap traps on 11-12 March, and held in individual cardboard transfer boxes on the island until 15 March while disease screening samples were processed. The birds caught were individually targeted, so that we taking avoided banded juveniles (needed for survival analysis), old birds (> 6 years), and birds from patches with public access. This was the fourth “harvest” of robins from the Tiritiri Matangi population, and part of a long-term research program on adaptive harvesting of this small population (see paper by Dimond & Armstrong (2007) in reference list). The birds were provided with invertebrate food (mealworms, waxmoth larvae) and water while in the boxes. The birds were transported via ferry and van on 15 March, kept overnight, then released into Ecology Bush at Tawharanui the next morning.

Whiteheads (popokatea) were reintroduced to Tawharanui when 45 birds (22 males, 23 females) from Tiritiri Matangi were released in on 31 March 2007. These were caught with mistnets on 25-26 March, and kept in the aviary on Tiritiri Matangi while disease screening samples were processed. The birds were fed on mealworms and waxmoth larvae, and small quantities of natural fruit (mainly mahoe, Muehlenbeckia and karo). They were also provided saddleback cake, complan, jam mix and soaked black currents, but ate little of these other foods. Water was provided in two large planter bases that were large enough for the birds to bathe in. Birds were caught from the aviary with handnets on 30 March, and transported via ferry and van in 4 wooden transfer boxes, and held overnight in the boxes. One bird did not settle, and 4 exhausted birds were removed from its box and placed into black bags at 04:00. These birds recovered and were later returned to their transfer box. The birds were released simultaneously at two points in the Ecology Bush about 700 m apart. Those at the western end of the bush were set free near an array of 4 speakers (sound anchors) placed at 100 m intervals across the valley, and whitehead calls were played from these speakers for 14 days. The release is being monitored by Nora Leuschner as part of her MSc project.

Contact Tim Lovegrove, Auckland Regional Council (Tim.Lovegrove@arc.govt.nz).

North Island Robins and Tomtits to Ocean Beach Wildlife Preserve

The Ocean Beach Wildlife Preserve is a 2200-ha area on Cape Kidnappers Peninsula in the Hawkes Bay region of the North Island. A 9.5 km predator-proof fence across the peninsula is due to be completed soon, and predator trapping and poison bait stations are being used to reduce densities of rats, cats, mustelids and hedgehogs. The reserve is on private land (Cape Kidnappers Station, Haupouri Station and Ocean Bay Wilderness), so the restoration is being done in conjunction with farming, a golf course and other recreation activities.

North Island robins were reintroduced to the reserve when 35 birds from nearby Maungataniwha Pine forest were released in June 2007. Tomtits (miromiro) were translocated during the same operation, when 14 birds (9 males, 5 females) being released. There were still some tomtits in the reserve, so the tomtit translocation constitutes re-stocking (or supplementation) rather than a reintroduction. Disease screening or quarantine procedures were not required, so the birds could be released the same day or the next day after they were caught.

See Forest and Bird (326:10) or contact Tamsin Ward-Smith (Cape.Kidnappers@xtra.co.nz).
Recent Australian Reintroductions
Click HERE for previous reintroductions!

Eastern Barred Bandicoots to Hamilton Community Parklands, Victoria
On 25 June 2007, 24 (16 female, 8 male) captive-bred Eastern Barred Bandicoot’s (*Perameles gunnii*) were released into the Hamilton Community Parklands, Victoria, Australia. The Parklands are a 100-ha grassy woodland reserve surrounded by a predator barrier fence. A population of bandicoots was previously present here, but it is thought that it became extinct a few years ago due to difficulties in predator control. Prior to release, the predator barrier fence was upgraded and regular fence checks, maintenance and predator control now occurs; no fox incursions have been made since the release. A second release of 6 (2 female; 4 male) captive bred bandicoots occurred on 12 November 2007. These releases occurred due to confidence in keeping the reserve fox free, the presence of good quality habitat and to study habitat preference. Monitoring occurs by trapping and forms part of Amy Winnard’s PhD project on habitat suitability. During the last trapping in November, bandicoots had spread throughout the majority of the Parklands and were in good condition. Most females had pouch young and/or were weaning; for most, this was the second known litter since June 2007. From Amy Winnard (a.winnard@pgrad.unimelb.edu.au).

Updates on Pacific Island Reintroductions

Laysan Teal in Midway Atoll National Wildlife Refuge
The Laysan Teal or Duck (*Anas laysanensis*) is endemic to the Hawaiian Islands, where it was restricted to Laysan Island (land area ca. 4 km$^2$; 25º 46’N, 171º 44’W) for the last 150 years. In 2004 and 2005, teal were translocated to two islands of Midway Atoll National Wildlife Refuge (land area ca. 6 km$^2$; 28º 12’ N and 177º 22’ W), part of their presumed prehistoric range, to reduce high risk of extinction. Post-release monitoring with the aid of radio telemetry was used to determine the success of the re-introduction attempt during October 2004-2007. The population has increased after three breeding seasons from forty-two founders caught and transported directly from Laysan. 150 independent F1 and F2 juveniles were marked with unique colour band combinations July-November 2007. Laysan Island, the only source population, currently supports approximately 600 Laysan Teal. From Michelle Reynolds (michelle_reynolds@usgs.gov) and J. H. Breeden Jr. See Reynolds et al. (2007) below and/or http://biology.usgs.gov/pierc/Native_Birds/Laysan_ducks.htm.

Updates on Previous New Zealand Reintroductions

Mahoenui Giant Weta at Warrenheip
287 Mahoenui giant weta were reintroduced to the 16-ha Warrenheip reserve at Cambridge, North Island, in 2001, two years after erecting an Xcluder predator-proof fence around the reserve. There have now been several sighting of young giant weta, giving evidence that they are breeding, and the weta appear to have spread over much of the reserve. See Forest & Bird 323:4 and/or contact David Wallace (davidwallace@clear.net.nz).

Leaf-vein slugs on Quail Island
Quail Island is off the Banks Peninsula in the Canterbury Region of the South Island. The island’s restoration program (Norton et al. 2003, *Otamahua/Quail Island Restoration Plan*) has included revegetation, rat and hedgehog eradication, and mouse control, and inventory (Bowie et al. 2003, *New Zealand Natural Sciences* 28: 81-109) and restoration of the
invertebrate community. This included reintroduction of the Leaf-vein slug *Pseudaneitea maculata*. A total of 25 slugs and 32 eggs (laid by slugs in incubators) were released at the centre of a 3500m² patch of 6-year-old native vegetation in April 2004 and December 2004. The slugs were collected from rotten logs, weta motels and wooden discs placed at Orton Bradley Park, held in ice-cream containers with leaves covered with sooty mould, maintained in incubator at 10°C, and released under wooden discs on Quail Island. Predator-proof weta motels were put out as a safe refuge, and a mouse eradication is planned. Predator-proof weta motels have been put out as a safe refuge. Monitoring of slug and egg numbers to date suggests that that the population is at least stable. From Mike Bowie (bowie@lincoln.ac.nz).

**North Island Kokako at Boundary Stream Mainland Island**

The reintroduction is part of the species recovery/restoration program at Boundary Stream Mainland Island (BSMI), which consists of 800 ha of lowland broadleaf-podocarp forest surrounded by farmland in the Hawke’s Bay region of the North Island. Since 1996 introduced predators have been managed, including the principal threats to kokako (possums, rats, mustelids and cats) which are kept at consistently low levels in the reserve. This has been achieved through an initial 1080 application, poisoning using bait stations, and mustelid trapping. BSMI is within the known historic range of the North Island kokako, which was once common in the area but extirpated by the late 1800s.

North Island kokako were initially brought into captivity at BSMI in 2001, when 10 birds (5 males, 5 females) from Otamatuna (Te Urewera National Park) were placed in 5 aviaries (14 x 7 x 5 m each, one pair per aviary). The main objective was to release progeny of these pairs after fledging, with the hope that they remain in the managed area and establish a population. The first fledglings were produced when two pairs bred in the 2003/04 breeding season, and these were released in May 2004. It was also decided to release the adults in the hope that the would remain in the area after having been held in captivity for so long, hence the 3 pairs that had never bred were released in February 2004 and the 2 remaining pairs released in August 2004. All released kokako remained within the reserve, although the fate of two males is unknown. 8 fledglings were produced in 2004/05 season, 5 in 2005/06 and 5 in 2006/07.

In August-September 2007, a further 10 kokako (5 males, 5 females) were translocated from Otamatuna and released immediately into the reserve. The aim of this follow-up translocation was to increase the genetic diversity of the population.

Contact Kahori Nakagawa (knakagawa@doc.govt.nz), Denise Fastier (dfastier@doc.govt.nz), or John Adams (jadams@doc.govt.nz).

**Hutton’s Shearwater at Kaikoura Peninsula**

Rifleman (*fitipounamu, Acanthisitta chloris*) were reintroduced to Ulva Island when 30 birds from Codfish Island were released in February 2003. There was high mortality during holding and translocation. However, all founder pairs (i.e. those surviving to the breeding season) bred in the first year, and both founders and offspring bred in the second season. A simple deterministic matrix model indicated positive annual population growth ($\lambda = 1.33$), and low risk of short-term extinction, suggesting a successful reintroduction. See paper by Leech et al. (2007) listed below or contact Brent Beaven (bzbeaven@doc.govt.nz).

**Hutton’s Shearwater at Kaikoura Peninsula**

100 Hutton’s shearwater chicks were translocated to purpose-built burrows on the Kaikoura Peninsula in March 2007 in the third phase of an attempt to reintroduce the species to the peninsula. 80 translocated chicks fledged in 2006 and 10 translocated chicks fledged in 2005. The chicks were taken from the Te Uërau Nature Reserve colony, one of the two
extant colonies in the seaward Kaikoura range. See Forest and Bird 324:10 or contact Steve Cranwell (scranwell@doc.govt.nz).

**Fairy Prions on Mana Island**

Two of the 240 fairy prions translocated to Mana Island as chicks from 2002-2004 have returned to the island and attempted to breed. Last year a pair of unbanded fairy prions bred at Mana. Contact Colin Miskelly (cmiskelly@doc.govt.nz).

**Recent Reintroduction Publications from Oceania**


[study due to suggestion that individuals should be translocated between these populations maintain genetic diversity, and concludes inappropriate strategy since haplotype divergence at least 1.5 mya]

[study movements of reintroduced bettongs with spool-and-line tracking in relation to vegetation structure etc and uses to make recommendation for future reintroduction sites]


[study structuring of mitochondrial sequences, and conclude that ducks should not be mixed between N. and S. Islands and the translocations should be restricted to neighbouring catchments]


[potential reintroduction site rejected based on habitat analysis]
