Reintroduction Specialist Group

Oceania Newsletter

May 2003

Edited by Doug P. Armstrong
Oceania Chair, Reintroduction Specialist Group

IN THIS ISSUE...

New Organisational Structure for RSG

During the Strategic Planning Workshop in Abu Dhabi last year (see last newsletter), we decided to restructure the RSG to give a greater emphasis on regional organisation and less emphasis on specialised taxonomic groups. While the Australasian Section was formerly the only regional section of the RSG, there are now 7 Regional Sections covering the globe. As part of this, the Australasian Section has been expanded to all of Oceania, hence the change to the title of this newsletter! There are still 6 taxonomic sections, but these have been reduced by combining the 5 mammal sections into one. The current structure is as follows…

Chairman - Fred Launay, ERWDA, Abu Dhabi

Program Officer - Pritpal Soorae, ERWDA, Abu Dhabi

Regional Chairs

Oceania - Doug Armstrong, Massey University, New Zealand
South & East Asia - Sanjay Mohur, Zoo Outreach Organisation, India
West & Central Asia and North Africa - Fred Launay, ERWDA, Abu Dhabi
Europe and North Asia - Mike Jordan, Chester Zoological Gardens, UK
North America & Caribean - Devra Kleiman
Meso & South America - vacant
Sub-Saharan Africa - vacant

Taxonomic Chairs

Plants - Mike Maunder, Fairchild Tropical Garden, USA
Birds - Phil Seddon, University of Otago, New Zealand
Mammals - Luke Hunter, Monash University, Australia
Fish - Heather Hall, London Zoo, UK
Reptiles & Amphibians - Pritpal Soorae, ERWDA, Abu Dhabi
Invertebrates - vacant

Other issues resolved or discussed at the RSG workshop were outlined on pages 5-10 in the last issue of Reintroduction News (January 2003).

RSG CD

In January 2003 the RSG released a CD containing:

- An introduction to the RSG
- All 22 issues of Reintroduction News
- RSG Guidelines, SSC and other conservation policies and reports
- Reintroduction Practitioners Directory, RSG Bibliography, RSG & SSC Strategic Plans

The aim of this CD is to increase access to information for reintroduction practitioners around the world, and to decrease mailing costs. I currently have 4 copies of this CD to give away to anybody who wants one.

Upcoming Reintroduction Symposium at IWMC

Richard Maloney, Phil Seddon and myself have organized a symposium on "Developing the science of re-introduction biology" for the 3rd International Wildlife Management Congress, which will take place in Christchurch, New Zealand, 1-5 December 2003. Unlike previous symposia on reintroductions, which have largely consisted of project updates, we aim to lay the platform for scientific progress in reintroduction biology. Following this aim, we organised the following set of talks and speakers…

Part 1. Where are we now?

Wildlife re-introductions as a conservation tool: a review of the taxonomic and geographic scope of current projects
Phil Seddon, Fred Launay, Pritpal Soora & Mike Maunder

Overview of research results in reintroduction biology
Thomas H. White, Jr. & Richard F. Maloney

Part 2. Where to from here?

Directions in reintroduction research: what are the key questions?
Doug Armstrong, David Saltz & Phil Seddon

Strong inference in reintroduction biology
Francois Sarrazin & Doug Armstrong

Biological invasions as models for reintroductions?
Mick Clout & Phil Cassey

Integrating reintroduction research with ecosystem restoration: beyond single species
Colin Miskelly & Dave Towns

These will be followed by a series of 5 talks on reintroduction projects selected from the contributed papers.

We have also been approached about preparing a book based on this symposium, so may be interested to hear from anybody keen to present material related to our theme of "Developing the science of re-introduction biology" the theme of the symposium.

Recent Translocations

Bird reintroductions to Karori Wildlife Sanctuary, NZ

Karori Sanctuary is 250 ha fenced mainland island in the Wellington, and several bird species have been reintroduced since introduced mammalian predators were eradicated from inside the fence. The following reintroductions have taken place in the last 2 years.

North Island robin

40 robins from Kapiti Island were released in 2001. 9 birds of a probable 5 pairs were monitored, and 8 of these bred successfully in their first season. In total 54 fledglings were banded, 32 produced by the 9 pairs monitored, given a minimum breeding success of 3.6 fledglings/pair. In May 2002 a further 36 robins from Kapiti were released. A sample of 23 pairs (of 34 known territories) were monitored through the 2002/3 breeding season. This sample included for comparison pairs established in 2001, and new pairs established in 2002. The latter group was made up of pairs formed from youngsters bred in the Sanctuary in the previous season, pairs of newly released birds, and "mixed pairs" of locally bred and translocated birds. In the 2002/3 breeding season at least 95 fledglings were produced by the 23 pairs. Most of these (78) are banded but there are unbanded fledglings present from these and additional pairs that were not monitored. Despite the dry summer, the breeding success was good with at least 3.6 fledglings/pair. The post breeding season survey in March 2003 showed that at least 22 of the 40 robins released in 2001 are still present, at least 26 of the 36 robins releasd in 2002 are still present, and at least 24 of the 54 fledglings banded in 2001/02 are still present. This makes a total of 93 adults, most with territories inside the Sanctuary, and over 100 juveniles yet to settle and establish territories.

Whiteheads

30 whiteheads were released in the Sanctuary in August 2001, half hard released and half soft released. Nine pairs bred successfully in their first breeding season, all producing 2 clutches of 1-4 chicks each. In total at least 35 fledglings were produced (3.9 fledglings/pair). In May 2002 another 30 birds from Kapiti were released, and in August 2002 3 birds from the Akatarawas were released. In the 2002/3 breeding season 18 pairs were located inside the Sanctuary, most comprising at least 1 bird bred in the Sanctuary in 2001/2 but 9 pairs remained unchanged from the previous season. One pair was located outside the Sanctuary, in Birdwood Reserve. The habitat preferred by whiteheads in the Sanctuary appears to be mature mahoe forest with emergent trees such as pines. 17 of the 19 pairs have produced fledglings, with at least 59 fledglings produced (3.1 fledglings/pair). Most only have 1 clutch but 7 of the 9 established pairs and two new pairs had 2 clutches. The pair in Birdwood Reserve produced 2 fledglings.

Bellbirds

26 bellbirds from Kapiti Island were released in August 2001. Tail mounted transmitters were attached to 12 males to monitor dispersal and most birds remained or returned frequently to the Sanctuary during the first month after release. In 2002 a further 33 birds from Kapiti and the Akatarawas were released. The first successful breeding anywhere of a translocated bellbird population was documented in the Sanctuary during the 2002/3 breeding season (all other translocations of bellbirds, whether to offshore islands or the mainland, appear to have failed, with birds dispersing prior to breeding). The key may have been to release males later than females. Two pairs were monitored (one male transferred in 2001, the other 3 birds in 2002) during the 2002/3 breeding season. One pair had 4 clutches of 3-4 chicks/clutch. The second pair probably also had 4 clutches of

3-4 chicks/clutch but only 3 were confirmed. This is a minimum productivity of 11.5 chicks/pair!

North Island saddleback

39 birds were from Tiritiri Matangi Island were released in June 2002. Half were hard released, half soft released. 10 pairs established territories inside the Sanctuary and were monitored during the breeding season. The earliest nest was built in late August, the latest in March 2003. The most successful nests have been those built in nest boxes or tree trunks, with 100% of hatched chicks fledging successfully. Most nests have been built in flax bushes where 75% of chicks fledged successfully. Nests built on the ground or in a bank have been least successful with only 25% of chicks successfully fledging. To date 28 fledglings have been produced from 55 eggs (51% success rate). Later clutches have been more successful (42% eggs from first clutches resulted in fledglings, 45% of eggs from second clutches resulted in fledglings, and 67% of eggs from third clutches resulted in fledglings).

North Island kaka

6 captive-reared kaka were released into the Sanctuary between August and September 2002. All carried transmitters so we could monitor their whereabouts. They remained in the Sanctuary most of the time but did make some well publicised forays outside (eg. to Island Bay). One of the females has not been located since January, but the others are regularly seen in the Sanctuary. In January an unbanded male arrived and paired up with a young female from Auckland Zoo but no nesting occurred, perhaps because it was quite late in the season. However, a pair of the captive-bred birds did breed successfully and the development of the chicks is well documented on our web site (http://www.sanctuary.org.nz). These chicks have now fledged and three of them are starting to fly. One of the juveniles has been injured during this vulnerable "learning to fly" period and is currently in the care of a vet. The other three have made good progress and are now flying.

Brown teal

18 captive bred juveniles were released between November 2000 and April 2001. Two pairs have now bred, one one pair hatching 5 ducklings in November and a second pair produced 6 ducklings in March. We are investigating supplementary feeding to help monitor and catch birds, as well as to see if productivity can be increased. However, we need to ensure that sparrows don't have the opportunity to spread salmonella to the teal so we are training the teal to take the supplementary food (grain) over water. We are also installing nest boxes to encourage birds to nest in safe sites that won't get flooded, because this has happened previously.

New Zealand scaup

2 juveniles from Wellington Zoo were released in May 2002. These paired, and produced 6 ducklings in early December. 4 more scaup from Wellington Zoo (2 males, 2 females) were released in March 2003. Given that there were no lakes in Wellington historically, this is probably the first time that scaup have ever bred in the wild in Wellington (the nearest natural populations of scaup are in the Horowhenua or the Wairarapa).

Volunteers have made a significant contribution to the successful translocation of all of these birds to the Sanctuary, and their support of staff and students in supplementary feeding and follow-up monitoring of the birds has been critical.

From Raewyn Empson (raewyn@sanctuary.org.nz)

Kaki releases in 2002–03, NZ

The largest ever release of sub-adults of kaki (black stilt, *Himantopus novaezelandiae*) took place in September 2002, with 39 sub-adults being liberated. A further 18 juveniles and one adult were released in January 2003. Releases were supplementations of existing populations in two sites within their current range. Standard pre-release health screens were conducted on all birds, all birds receiving 3-5.5 weeks of supplementary feeding after released. No predator control was undertaken at release sites. Releases were attended by local school groups, and farmer and representatives from local Maori, and these releases are now an important focus for advocacy about kaki and the threats they face. A minimum of 69% (N = 27) of sub-adults were alive 6 weeks after release even though 10% were found dead within 17 days of release. At least 78% of juveniles were alive 6 weeks after release, and 2 were found dead. One death was caused by a mammalian predator, but the cause of mortality of other birds was unknown, because they had been preyed upon or scavenged prior to our finding the bodies. As a result of captive-rearing and releases the number of wild adult kaki increased from 47 to 67 in the last year, and is predicted to continue to rise as more young birds reach 2 years of age and begin to breed.

From Richard Maloney (rmaloney@doc.govt.nz)

South Island Robins to Doubtful Islands, NZ

19 robins were reintroduced to the smallest (ca. 30 ha) of the three Doubtful Islands, in the middle fiord of Lake Te Anau, Fiordland, in March 2002. The birds were taken from Breaksea Island (Fiordland), where they were captured with mistnets and handnets. Part of restoration of Doubtful Island group, involving eradication of stoats and control on adjacent mainland areas.

From Murray Willans (mwillans@doc.govt.nz).

Brown Teal to Tiritiri Matangi Island, NZ

11 brown teal were released on Tiritiri Matangi in June and July 2002 to supplement the existing population. 7 captive-bred birds (5 male, 2 female) were released on 22 June, and a further 4 on 23 July. Brown teal is a species that is struggling on islands where they have been released, as well as in the few mainland locations left. They breed well in captivity, but reintroductions have had poor success with most populations disappearing shortly after reintroduction. Brown teal were reintroduced to Tiritiri Matangi in 1989, and have hung on but with low numbers. At the time of the supplementation only 6 teal (4 female, 2 male) were known to remain. Two of the 11 teal recently released were preyed on (probably by harrier hawks) soon after release, and it remains to be seen how the others will fare.

Edited from Dawn Chorus, Bulletin of the Supporters of Tiritiri Matangi, No. 50.

Translocations of Kakapo in 2001-2002, NZ

5 kakapo were moved between islands from July 2001 - June 2002, either to maximise breeding potential or to remove them from hazards. In July 2001 the remaining adult female on Maud Island was moved to Whenua Hou (Codfish Island) in anticipation of a major rimu mast fruiting event there in early 2002. Four males were moved from Whenua Hou, 2 in July 2001, one in February 2003, and one in April 2003. One of these had a fused hock joint that was likely to prevent him mating successfully, one was seen entering a nest on several occasions are threatening the nestling, one had developed a habit of visiting the hut each night and roosting nearby by day, putting him at risk, and one began frequenting nest-minder camps, also putting him at risk.

From Don Merton (DMerton@doc.govt.nz)

Updates on Previous Translocations

Hihi relocated from Mokoia Island

The remaining 15 hihi on Mokoia Island (135 ha, Lake Rotorua) were translocated to Kapiti Island (2023 ha, offshore near Wellington). Hihi had been reintroduced to Mokoia in 1994, and were subject to an experimental management programme involving supplementary feeding and nestbox management. These experiments, in combination with population viability analysis suggested that the population might persist with supplementary feeding and nest box management during the breeding season, but would be extinct in less than 5 years if this management were discontinued. Removal from Mokoia was decided by the Bay of Plenty Conservator due to lack of resources to continue managing the population on this basis. The Kapiti Island population appears to have equally tenuous viability, but there is a greater commitment in place to manage the population. The first group of 12 (7 male, 5 female) were translocated in August 2002, and the remaining 3 birds (all female) were translocated in November 2002 (check). Birds were captured in mistnets beside sugar-water feeders on Mokoia, held in a temporary aviary on Mokoia for a maximum of 3 days, then translocated by road to Paraparauma and by boat to Kapiti.

From Keith Owen (kowen@doc.govt.nz) and Doug Armstrong (D.P.Armstrong@massey.ac.nz).

First monitoring of McGregor's skinks reintroduced to Lady Alice Island, NZ

39 McGregor's skinks (*Cyclodina macgregori*) were released onto Lady Alice in the Chickens group in December 1997 and March 1998. The first monitoring was done in January 2003, and 3 skinks were caught. One was an adult male when released; it was caught 5 times in the same trap and had increased in snout-vent length and weight. Another had been released as a un-sexed sub-adult and also increased in SVL and weight. It was sexed as a female. The third skink was a 90mm sub-adult, probably male. It was caught three times in the same trap. This skink must have been born on the island as it would have been around 54 mm when born and would have grown around 10mm per year, hence about 3-4 years old. We also caught a female Pacific gecko (*Hoplodactylus pacificus*) released in 1997 as an adult. It has been captured twice since release, continues to grow, and was gravid on both occasions.

From Richard Parrish (rparrish@doc.govt.nz)

Breeding by reintroduced Tusked Weta in Mercury Islands, NZ

This giant weta (*Motuweta isolata*) was formerly found only on Middle Island in the Mercury Group (off NE of the North Island), but they were reintroduced to Red Mercury Island (225 ha) and Double Island (33 ha) in the same group in 2001. These weta are extremely difficult to monitor, making it difficult to assess the success of the reintroduction. However, in March 2003 a large female nymph was found on Double Island and 8 medium- to large-sized nymphs were found on Red Mercury. This confirms that breeding is taking place on both islands.

From Ian Stringer (istringer@doc.govt.nz).

Southern Emu-wrens in Cox Scrub Conservation Park, South Australia

Mount Lofty Ranges Southern Emu-wrens *Stipiturus malachurus intermedius* were reintroduced to Cox Scrub Conservation Park (540 ha), South Australia, during 2001–2003 (see September 2001 and April 2002 newsletters). The aim was to establish a viable population at the site from which the endangered bird was extirpated by wildfire in 1983. 46 emu-wrens (24 males, 22 females) were taken from Deep Creek CP, approximately 50 km SW of Cox Scrub CP, and hard-released, mostly on the day of capture — 30 in 2001 and 16 in 2002. Monitoring during the first spring–summer breeding season revealed establishment of at least 8 breeding pairs and successful reproduction, with at least 10 young produced. Monitoring during the second breeding season revealed up to 14 pairs, persistence of several founder-group pairs formed during the 2001–2002 breeding season and further successful reproduction including breeding by some founder-group progeny. At least 13–16 fully-grown young were produced in 2002–2003. Emu-wrens are small (~ 7g), secretive birds that can hardly fly. Radio tracking is not feasible, so monitoring involves fairly arduous transect and area search methods in dense scrub, meaning that the population is probably larger than the number of birds detected.

From Marcus Pickett (marcus_pickett@bigpond.com).