Report on transfer of North Island Robin Toutouwai (*Petroica longipes australis*)

from Mokoia Island, Rotorua
to the Ark in the Park sanctuary
Waitakere Ranges, West Auckland
April 2005

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Project manager: Dr John Sumich, Chairman of the Ark in the Park committee
Team: K Owen [DoC], Y Hynson, K Holman, C Pratt, J Woodcock, K Colgan, H Tansey, M Tansey, H Holzer, L Lyon, C Major, J Sumich [Ark Volunteers], S Jack, [manager, Ark in the Park], D Pattemore Northern Conservation Officer F&B, Riki Bennett, Te Marino Linehan [ARC], A Nelson, P Glamuzina, L Edwards, D Jakings, [Auckland Zoo]

Lead Conservancy: Auckland

Affected conservancy: Bay of Plenty

Translocation approver: Rob MacCallum

Emergency translocation: N/A

Temporary translocation: N/A

Species to be transferred: North Island Robin, toutouwai [Petroica longipes australis] No threat status listed. [Molloy et al 20002] Up to 60 birds with even sex balance.

Conservation Outcome: The establishment of a self-sustaining population of toutouwai/NI robins in the Waitakere Ranges, part of its former range.

Operational targets:

- To successfully capture, translocate and release toutouwai from Mokoia Island to the Ark in the Park site, Waitakere Ranges with a less than 10% mortality.
- To monitor for successful breeding by the sighting of unbanded birds and for dispersal within the Ark site or beyond.
- To investigate possible reasons if breeding is not shown to have occurred after the first breeding season.

Results: 53 N.I.Robin were successfully transferred from Mokoia Island to the Waitakere ranges site of the Ark in the Park; 22 on Friday 15 April, the remaining 31 on Saturday 16 April. Media releases were made. There were no accidents suffered by personnel but one robin was killed outright when it collided with the descending arm of the clap-trap.

Justification: The Ark in the Park Strategic Plan [2003] prioritised several candidate species for potential re -introduction to the Waitakere Ranges with N.I.Robin being the second suitable species after whitehead. A Translocation Strategy was adopted by the Technical Advisory Group to the Ark in the Park project [Bellingham M, et al 2004] and NI Robin satisfied the criteria of forest generalists, insectivores or omnivores able to maintain a viable population in up to 1000 hectares of predator-controlled forest. Others were whitehead, stitchbird, kauri snail and possibly kaka [as they could forage beyond safe nesting in the Ark in the Park]

The Waitakere Ranges has significant remnant kauri forest and a vigorous regenerating mixed podocarp / kauri forest resulting in a very diverse flora but has lost a significant number of its avifauna compared with other lowland North Island forests. The establishment of predator control in the Ark in the Park sanctuary in the context of a Ranges-wide possum control programme maintained by the Auckland Regional Council [ARC], allows restoration of this species into a portion of its former range.

North Island Robins, although not a threatened species, have a contracting range and this transfer will return them to a part of their previous range. There is 3-400ha of excellent robin habitat in the core of the control area, where post-release monitoring would be easily achieved. Secondly, as a territorial songbird, visible frequently at ground level they can be an important advocate for eco-restoration and conservation to the visiting public. Thirdly they may as in the Northern Te Urewera mainland island, gradually displace the introduced blackbird which species is a generalist and well able to travel from nearby gardens, waste areas and other modified landscapes transporting weed seeds into the forest interior.

This translocation is appropriate as it helps achieve the goals of the ARC in maintaining and broadening the indigenous flora and fauna of the Waitakere Ranges. It is an integral part of the Ark in the Park Strategic Plan. It will return another element of the pre-European fauna and the predator –prey relationships from that time.

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Research Objectives: N/A

4**. Consultation and Community Relations**.

Tangata whenua : Approval was given by the Mokoia Island Trust Board for translocation subject to the Department of Conservation's approval regarding numbers and the adequacy of the breeding population on the island. The Trustees were asked how they wished to be involved in the transfer process. They intend to visit the Ark site in the future.

Te Kawerau a Maki have been informed of the transfer. They were invited to have representation in the catching party.

Affected and Interested parties:
Te Arawa and Te Kawerau a Maki
ARC
Forest and Bird [Rotorua and Waitakere branches]

Tangata whenua have been approached as above
The ARC are involved via their representatives on the Ark in the Park Technical Advisory Group and via the ARC /Ark in the Park meetings. Additionally 2 staff were members of the capture team and others were involved in the reception organisation. Forest and Bird members are informed via Forest and Bird publications and particularly for Auckland branches via the Auckland Naturally lift-out in the national magazine. The secretary of Rotorua F&B provided car parking for several vehicles while the party were on Mokoia.

Public participation: Volunteers from both Ark in the Park and Auckland Zoo staff made up the majority of the capture party. At the release an additional 100 members of the public, invited or otherwise, witnessed the release of the 31 birds transferred on Saturday 16th April. many of these people came to the post- release celebration held at the adjacent Karanga Camp for refreshments and speeches from ARC representatives.

Public Relations: A capture team member took video of the capture procedure on Mokoia. Another volunteer took video footage of both the Friday and Saturday releases. It is intended that these be combined and edited to form both an archival record and promotional material.
A release was distributed to all media on the Forest and Bird media list.
Interviews with reporters from both National Radio and NewstalkZB were given while on the Island on the Friday. Several of the visitors to the release came after hearing of it on National Radio.

Lessons learnt: An environmental reporter from the Herald expressed no interest in "yet another release". Interest may well be greater if the species or attendees are of greater profile. The Minister of Conservation, although a past local resident of this area and expressing interest in the release, was unable to attend. For high profile attendees the date for the release must be distributed early enough to be fitted into busy schedules. This in turn requires a greater speed in the processing of the application.

The Transfer

Composition of Transfer population: The transfer is scheduled to occur in autumn 2005, approximately mid April prior to the school holidays when the island is used by large parties in a training camp.

Approval is sought for up to 60 birds to be caught for the transfer to the Ark in the Park site with a sex ratio of 1 male to 1 female or with a slight weighting to a female excess. The measurement of tarsus length will give an additional indication of gender above colouration but identifying robin is difficult with the presence of juveniles /sub-adults with intermediate colourings to those of sexually mature males and females. Where possible, pairs should be caught and later released together at the same site.

This composition is thought most likely to produce a viable population. Releases to small islands have usually been of the order of 25-40 birds but a larger mainland site with potential for greater dispersal might need a slightly larger "innoculum" for establishment. A release at Hunua of 30 birds was divided into a set of 20 and another of 10 and from the experience there it would seem that a larger number of birds at a single release site would be advantageous.

Deviations: The final tally of 53 live birds comprising 20 adult males 16 adult females 9 juvenile males, 5 juvenile females and 3 birds of indeterminate sex is not too far from the 50:50 ideal. The male robin killed outright by the descending arm of the clap-trap has been frozen and will be sent to the Curator of Birds, Auckland Museum or where the Director-general of Conservation so directs and will be examined The decision to transfer some birds on the Friday was made on the evening after the first catching day. A boat was available and there were concerns that the feeding of up to 60 birds on the Friday night and in the early dawn before the scheduled 0800 Saturday departure would pose logistical difficulties. Only 100m, although a day apart, separated the release sites for the two groups, on either side of the Waitakere Stream. The presence of robin released on Friday at the official release on Saturday would have been incongruous but apart from some astute visitors hearing robin song no "intrusions" occurred.

Transfer Methods:

A quick capture and hard release technique from wild to wild sites is preferred for robin, with minimum handling, and birds must be held separately. [Lovegrove et al, 1994]

Capture:

A team of staff experienced in bird capture and handling techniques will be based on the island for four days and three nights. Day one will be arrival, health and safety and other briefings, setting up camp, familiarisation with the island and locating and feeding robin. Day two and day three will be capture. Day four will be camp dismantling and early departure to allow for a release at approximately 2 pm.

Boat transport to and from the island will be provided by Rotorua lakes staff.

Birds will be captured using remote controlled clap traps. If necessary mist nets and taped calls will be used along with small hand nest. If any banded robins are seen they are not to be captured.

Captured birds will be transported back to the central holding and processing site in black cloth bags. If there is a delay in transportation, bags containing robin are to be held or hung in trees to minimise risk of escape and heat exhaustion, or from being trodden on.

Processing will involve inspection of birds for health and any obvious injury, measurement of right tarsus, sexing, and attachment of metal band and individual two colour combination butt bands being to all birds for identification. The band colours will be green, yellow, red and blue. Any obviously sick or injured birds will not be translocated.

After processing and the recording of data, birds will be placed as soon as possible into individual cardboard boxes labelled with their band combinations, sex, and pair number [if any]. Box lids will be taped shut, with an entry panel cut into the side secured with file pins and string, and have a mesh ventilation / observation panel. Each box will have a

perch, water, container of mealworms and wax moth larvae. Birds will be fed as necessary during daylight hours with 20-30 mealworms per three-hour period.

The intention is to have the birds caught processed, held, transferred and released in as short a time as possible. Some birds will need to be held overnight in boxes. This should not be a problem as robin have been held for two or three nights in boxes with minimal problems. [Armstrong, 1993]

Transfer: Via vehicle to the Waitakere release site.

Release: The bird boxes will be carried to the release site approximately 200m from the Falls Road. The release will be in the early afternoon to enable sufficient time for the birds to settle before nightfall.

Deviations: John Marsh supplied boats, as Rotorua Lake staff were not available.

Lessons learnt: No problems were experienced in any phase of the capture, holding transfer and release procedures.

The size of the group [20] was optimum if only one bander was available. Greater numbers in the field with more than the 5 clap traps we had, could easily catch more birds but might overcome the capacity of the bander and his one assistant to process the birds. Groups of 3 or 4 volunteers worked well as there was always a runner available to take birds to the central processing area although at times that involved a 50 minute round trip. The designation of one person to plan the meals, purchase the food and co-ordinate food preparation was very successful owing to the calibre of the individual.

The 5 pneumatic clap traps all worked well although owing to the loss of a part some bush engineering was necessary to allow one clap trap to continue functioning which it did very well and the modification will be explained to Tony Woodroffe for consideration in the remainder.

Monitoring

Monitoring programme: Monitoring has been requested to continue for 2 years with aspects of dispersal and breeding success being recorded.

Two overseas students started observations immediately after the release and will be joined at times by a Master's student working on the dispersal and habitat preference of the N.I. robin at Wenderholm. Opportunistic observations from the volunteers who tend the bait stations, and traps throughout the Ark area will be recorded also. The banding permit issued to David Pattemore for the translocation from Mokoia is extended to allow for banding of juveniles after the first breeding season.

Deviations: N/A

Lessons learnt: N/A

Monitoring results: N/A

Other observations: An obvious need on the island is weed control; blackberry in particular is distributed very well over all parts of the island. Acacia also seems an unnecessary addition to the flora

Post Release management

Post release management: No additional management is anticipated as a result of this translocation

There will be no need to add further management for other indigenous species.

Assuming a successful establishment of robin, should it then impact unfavourably on the environment it would be difficult to remove or eradicate but this is a very unlikely scenario.

Deviations: The prolonged dry, warm autumn is extending the wasp presence at the release site. This potentially poses a threat to the invertebrate food requirements of the robins. At the release Jack Craw, ARC Biosecurity manager indicated some funding might be made available for a wasp exterminator to reduce some of the wasp nests in the general area of the release.

Lessons learnt: Wasp predation has been acknowledged as a threat, control measures should be considered for next year with perhaps the new formulation of sulfluramid currently undergoing consideration of approval. Encouragement of authorities to extend research on all methods of wasp control must be given.

Items approved	Budgeted costs	Actual costs	Additional items	Explanation
Boat	$540	$900		catch party paid
Bus	$500	Nil		[not used]
Transfer boxes	$300	Nil		donated
Food for team	$750	$600		catch party paid
Bird food	$400	$396		
Colour bands	$250			
		$250		koha
		$100		extra boat trips

Recommendations;

The re-introduction of toutouwai to restoration projects has often been taken as an early objective owing to the toutouwai being such a visible, audible and "friendly" forest bird. As such it becomes a major advocate for the whole restoration theme, allowing public awareness of possibilities now present after decades of DoC and NGO work on a range of species initially on islands and increasingly in mainland sanctuaries. The capture and transfer went well as have the many other toutouwai transfers. It may then be time to consider the transfer of toutouwai as a low- risk exercise and to have a different SOP for certainly this species [and perhaps others] as was stated in the report of the transfer from Mokoia to Tuhua,. As stated in an earlier paragraph, the presence of some of the desired important local and national figures at the release ceremonies to ensure maximum press coverage, requires early notification of dates and times and the current SOP process does not always allow that.

No.	Combination	Band No.	Age	Sex	Tarsus (mm)	Comments
1	M - R	B84236	Juv	M?	35.3	dusky, tail points, white allula
2	M - B	B84237	Ad	M	35.6	Slaty, fiesty, greyish allula
3	M - W	B84238	Ad	F	34.9	Dusky, greyish allula
4	M - G	B84239	Juv	M?	35	dusky, fiesty, whitish allula
5	M - Y	B84240	Ad	M	35.5	slaty, fiesty
6	R - M	B84241	Ad	M	36.2	slaty black
7	B - M	B84242	Juv	F?	34.5	tail points, greyish allula
8	W - M	B84243	Juv	M	36.1	dusky, white allula, tail points
9	G - M	B85866	Ad	M	36.3	slaty black
10	Y - M	B84244	Juv	?	35.2	dusky brown, greyish allula, tailpoints
11	RM -	B84245	Ad?	F	32	dusky
12	BM -	B84246	Ad	F	34.2	greyish allula, dusky
13	WM -	B84247	Juv	F?	34.5	dusky, tail points, greyish allula
14	GM -	B84248	Ad	F	34.5	dusky, fiesty (whitish allula?)
15	YM -	B84249	Juv	M?	35.5	Dusky, greyish allula
16	- RM	B84250	Ad	F	34	dusky
17	- BM	B84251	Ad	M	35.3	dark, greyish allula
18	- WM	B84252	Juv	F?	34.6	whitish allula, tail points, dusky
19	- GM	B84253	Ad	M	35.3	slaty black
20	- YM	B84254	Ad	F	34.3	Dusky
21	M - RR	B84255	Ad	F?	34.5	darkish
22	M - RB	B84256	Ad	M	37	slaty black
23	M - RW	B84257	Ad	M	37.5	slaty black
24	M - RG	B84258	Juv	M?	35.3	tail points
25	M - RY	B84259	Juv	M	36.8	tail points, whiteish allula, dusky
26	RR - M	B84260	Juv	M	35	Lg swelling right 'knee': old injury/gall, whitish allula, dusky
27	RB - M	B84261	Ad	M	36	slaty black
28	RW - M	B84262	Ad	F	34.4	grey with brownish tinge
29	RG - M	B84263	Ad	M	36.6	slatey black
30	RY - M	B84264	Ad	F?	35	dusky plumage, but strong white chest
31	R - GM	B84265	Ad?	F?	35.3	dusky plumage, very orange gape and feet
32	B - GM	B84266	Juv	M?	36.5	dusky, whitish allula
33	W - GM	B84267	Juv	?	35.5	dusky, whitish allula, some tail points, orange gape
34	G - GM	B84268	Ad	M	36	Darkish
35	Y - GM	B84269	Ad	M	35.8	slatey black
36	GM - R	B84270	Juv	F?	34.8	tail points, whiteish allula, dusky
37	GM - B	B84271	Ad	M	36.2	slatey black
38	GM - W	B84272	Ad	M	36.4	dark plumage
39	GM - G	B84273	Ad	M	37.1	slatey colour
40	GM - Y	B84274	Ad	M?	35.1	darkish plumage
41	BR - GM	B84275	Ad	F?	34.5	darkish plumage
42	BB - GM	B84276	Ad?	F	33	dusky brown, greyish allula, no tailpoints
43	BW - GM	B84277	Ad?	F?	35.3	browny grey, greyish allula
44	BG - GM	B84278	Ad	F	32.6	dusky, grey
45	BY - GM	B84279	Ad?	M	35.8	orange gape & feet, no tail points, dusky brown, greyish allula
46	WR - GM	B84280	Ad	F?	35.1	screeched, fiesty, darkish brown, lightish allula
47	WB -GM	B84281	Ad?	M	36.5	dark plumage, greyish allula
48	WW - GM	B84282	Ad	M	34.8	dark, slaty plumage, greyish allula
49	WG - GM	B84283	Juv	F?	34.6	dusky brown, greyish allula, tail points
50	WY - GM	B84284	Juv	M	36	dusky, tail points, greyish allula
51	GR - GM	B84285	Ad	F	34.4	Darkish, greyish allula, docile
52	GB - GM	B84286	Juv	?	35.1	dusky, few tail points, greyish allula
53	GW - GM	B84287	Ad	M	36.5	Dark (matthew's bird)