

# Kōkako Report, Tiritiri Matangi Island, 2016-2017 Season



**Contractor:** Morag Fordham

## Breeding

The 2016-17 breeding season started with 17 pairs and by the end of the season we had 20 pairs of which 16 attempted to breed. A maximum of 12 chicks fledged, but four of these disappeared shortly after fledging, giving us a final total of eight for the season. Five previously successful pairs failed to fledge a chick and one long-established pair did not attempt to breed.

Sadly one of our most prolific partnerships has ended with the predation of Bariki, a seven-year-old male, shortly after his last chick fledged. His partner Lucky quickly found a new mate but unfortunately he is her brother, born last season.

A happier event was finding Rimu, who has only been seen occasionally since he arrived on the Island in 2010, paired up with Crown and Pureora's daughter Royal. This will add new genes to the population if they stay together and successfully breed.

At the beginning of January we were thrilled to discover Waipapa, who was translocated from Waipapa in 2007, with a mate Awatea and their newly-fledged chick. Waipapa was originally sexed as female but this discovery, together with the results of feather sampling in January, proves otherwise. It is hoped that his offspring will be recruited into the breeding population, which will help improve genetic diversity.

The fortunes of the pairs in 2016/17 were as follows:

**Bandit** (JM-G) and **Cloudsley Shovell** (M-O): Bandit and Cloudsley Shovell failed to hatch any eggs from the two nests she built and used. Her first nest was not accessed but the three eggs from the second nest were not viable.

**Te Hari** (M-W) and **Phantom** (BW-M): Phantom nested twice this season. By the end of November her first nest, containing two eggs, had failed. In early December she was found incubating in an old nest from a previous season. This nest produced one fledging: **Pōrutu** (male, JM-GW). Te Hari has lost his yellow band (previously he was YM-W).

**Chatters** (RG-M) and **Te Rae** (OM-JO): Te Rae didn't start nesting until the end of November. This nest produced one fledging: **Tangi** (female, G-RM).

**Parininihi** (M-Y) and **Koha** (BM-R): This was their seventh unsuccessful season as Koha didn't even attempt to build a nest. Parininihi has lost his orange band (previously he was OM-Y).

**Noel** (OM-R) and **Rehu** (OM-J): Rehu built two nests this season. The first nest produced one apparently healthy chick who disappeared a couple of weeks after fledging, presumably predated. The second nest was abandoned round about the expected hatching time.

**Crown** (GM-G) and **Pureora** (GM-R): As usual they nested in December and produced two chicks. Both fledged but the much smaller and less developed chick disappeared a few days after fledging leaving one: **Skye** (female, GM-WW). After several years without success, this pair has produced five daughters in the past three seasons.

**Kikorangi** (OM-G) and **Mawhero** (GM-W): In early December, Mawhero was discovered reusing an old nest but this was soon abandoned. Her second nest produced one chick who disappeared at around two weeks old.

**Bariki** (OM- RJ) and **Lucky** (unbanded): As usual, Lucky was one of the first birds to nest this season. The first nest produced one chick who was too big to band when the nest was visited. Shortly after this chick fledged, at the end of December, Bariki disappeared. As one of his intact colour bands has since been found, harrier predation is suspected.

**Hohaia** (RM-JR) and **Lucky** (unbanded): On 19 January Lucky was found nesting with her brother Hohaia, one of Chatters and Te Rae's offspring from last season. The nest failed.

**Takara** (OM-YB) and **Aria** (JM-Y): This season both of Aria's nests were at the edge of the cliff rather than over it. The first nest produced one chick who disappeared shortly after fledging. Her second nest failed.

**Puoho** (RM-Y) and **Terewai** (RM-G): This season they had three nesting attempts. The first two nests failed. The second nest was found to contain one cracked empty egg and a cracked egg containing a dead embryo. The third nest produced one chick who disappeared around fledging time.

**Miharo** (JM-R) and **Mere** (RM-YJ): Once again this season Mere and Miharo had four nesting attempts, but this time they all failed. When checked, the first nest contained one egg and the second nest, which was abandoned during incubation, contained three broken eggs. The third nest was abandoned during incubation but was not checked. Her fourth failed nest contained two broken eggs.

**Sarang** (W-M) and **Discovery** (GM-RY): Discovery built two nests this season. The first nest failed. The second nest produced two chicks but only the larger more developed chick, **Muso** (female, GM-WY), fledged.

**Tupoki** (RM-GW) and **Hinerau** (RM-JY): This season they had three nesting attempts. The first nest produced at least one chick who disappeared a few days after hatching. When checked, the nest contained one egg but no remains of the chick or chicks. Both her second and third nests failed. The third nest was found to contain two broken eggs.

**Poutama** (OM-W) and **Tiara** (RM-WJ): Tiara's first nest failed and when inspected later was found to contain one broken egg. She then reused her successful nest from last season and this nest produced one fledging: **Jenny** (female, J-RM).

**Taitoko** (RM-JG) and **Freedom** (RM-YG): This was their second season together and Freedom built one nest which produced one fledging: **Shelly** (female, RM-RJ). A few weeks later on 18 January, Freedom was seen on her own with a swollen injured right leg. A week later she was seen again on her own but moving well and her leg was less swollen. She has not been seen since and Taitoko appears to have paired up with one of last year's unbanded fledglings.

**Hotu** (MR-J) and **Aquarius** (RM-GJ): Last season this pair appeared to establish a territory in between Chatters and Te Rae and Takara and Aria but did not attempt to nest. Although they are still in this area they again did not attempt to breed. Hotu's red band has slipped below his metal band (previously he was RM-J).

**Flieder** (RM-W) and **Narangi** (RM-WG): This brother-sister pair is very difficult to follow as their territory is on steep, seaward-facing slopes at the north end of the Island. Again there is no evidence that they bred.

**Rimu** (GM/-) and **Royal** (GM-JY): They formed a small territory in regenerating bush round the Cable Track area. Royal built a nest and incubated but the nest failed. After Bariki's disappearance the pair extended their territory into the top of Bush 3. At the end of the breeding season Royal was seen first with Sapphire and then with Maui, but more recently appears to have resumed her partnership with Rimu.

**Waipapa** (GM-Y) and **Awatea** (RM-YW): Their territory incorporates the Bush 12 / Emergency Landing area. Since this was assumed to be a female-female pairing, no nest search was attempted. **Rakataura** (male, GM-WJ) was found as a fledgling accompanying his parents, and was caught and banded. His father Waipapa was also caught and a feather sample taken to confirm his sex.

**Kahu** (RM-YY) and **Parirau** (RM-RY): Kahu (Chatters and Te Rae's son) is from the 2014/15 season and Parirau (Bariki and Lucky's daughter) is one of last year's fledglings. For most of the season they have been seen together round the Visitor Centre and upper Lighthouse Valley area. They are both young birds and did not attempt to breed this season.

### Single Birds

After the 2015-16 report had been finalised, two of the 20 fledglings from that season died: **Lydia Ko** disappeared, possibly due to predation, and **Wynter** who was found in a poor state and taken to Auckland Zoo for treatment, but died of fungal meningitis, probably aspergillus. Her body was returned to the Island for burial.

Of the remaining 18 fledglings, only **Haata** and **Wainene** were not seen during the 2017-18 season, and Hohaia, Parirau and one of the unbanded birds have formed partnerships (see above). The remaining banded fledglings from 2015-16 have remained single and have been seen in various parts of the Island during the 2016-17 season. They are **Carter**, **Hastie**, **Hemi**, **Indigo**, **Kanti**, **Korihi**, **Maui**, **Sapphire**, **Te Kaiwaiata**, **Tioriori** and **Wairua** (see table below for band combinations). We do not know at this stage whether two further unbanded fledglings from 2015-16 have survived, and will be able to confirm this if and when they form partnerships.

The two Waipapa males, **Slingshot** (GM-WR) and **Tawa** (GM-J) remained together in Bush 21.

Unfortunately, **Te Koha Waiata** (male, Y-RM) has not been seen this season. Hatched in November 1996 at Mount Bruce, he was the Island's oldest bird, a status now presumed to be occupied by his former partner Cloudsley Shovell.

### Summary of transfers to/from the Island

There have been no transfers to or from Tiritiri Matangi this season. The translocation to Parininihi, which had been planned for August 2016, now looks likely to take place in May-June 2017.

## Population summary

As far as we can tell, at the beginning of April 2017, we had 32 males and 30 females on the Island. This figure includes Freedom, who has not been seen since January, and the unbanded bird who replaced her as Taitoko's partner. The eight fledglings from 2016-17 include one unbanded bird, gender unknown. There may also be two unbanded fledglings (gender unknown) from 2015-16. This gives us a likely maximum total of 64, listed below.

### Birds assumed to be present at the finish of the breeding season (March 2017)

Pairs					
Males	Bands	Females	Bands	2016-17 fledglings	Bands
Bandit	JM-G	Cloudsley Shovell	M-O	no offspring	
Te Hari	M-W	Phantom	BW-M	Pōrutu (m)	JM-GW
Chatters	RG-M	Te Rae (T1)	OM-JO	Tangi (f) (T2)	G-RM
Parininihi (T1)	M-Y	Koha	BM-R	no offspring	
Noel (T2)	OM-R	Rehu (T2)	OM-J	no offspring	
Crown (W)	GM-G	Pureora (W)	GM-R	Skye (f) (W)	GM-WW
Kikorangi (T2)	OM-G	Mawhero (W)	GM-W	no offspring	
Hohaia (T2)	RM-JR	Lucky (T2)	Unb.	1 x unbanded (father Bariki, deceased)	
Takara (T2)	OM-YB	Aria	JM-Y	no offspring	
Puoho (T2)	RM-Y	Terewai (T2)	RM-G	no offspring	
Miharo	JM-R	Mere (T2)	RM-YJ	no offspring	
Sarang	W-M	Discovery (W)	GM-RY	Muso (f) (W2)	GM-WY
Tupoki (T2)	RM-GW	Hinerau (T2)	RM-JY	no offspring	
Poutama (T1)	OM-W	Tiara (f) (T2)	RM-WJ	Jenny (f) (T2)	J-RM
Taitoko (T2)	RM-JG	Freedom (T2)	RM-YG	Shelly (f) (T2)	RM-RJ
Hotu (T2)	MR-J	Aquarius (W/T)	RM-GJ	no offspring	
Flieder (T2)	RM-W	Narangi (T2)	RM-WG	no offspring	
Rimu (W)	GM/-	Royal (W)	GM-JY	no offspring	
Waipapa (W)	GM-Y	Awatea (T2)	RM-YW	Rakataura (m) (W2)	GM-WJ
Kahu (T2)	RM-YY	Parirau (T2)	RM-RY	no offspring	
Single Birds				<b>Key</b> (T1) = 50% Taranaki (T2) = 25% Taranaki (W) = Waipapa (W2) = 25% Waipapa W/T Waipapa/Taranaki	
Males	Bands	Females	Bands		
Slingshot (W)	GM-WR	Kanti (W)	GM-RW		
Tawa (W)	GM-J	Te Kaiwaiata (W)	GM-RJ		
Carter (T2)	RM-JJ	Wairua (W/T)	RM-RG		
Hastie (T2)	RM-GG	1 x Unbanded			
Hemi (T2)	RM-WR				
Korihi (T2)	RM-YR				
Indigo (W)	GM-RG				
Mauī (T2)	RM-RW				
Sapphire	JM-WW				
Tīoriori	JM-WY				
Up to two unbanded birds of unknown gender					

## **Future actions**

We shall continue to manage the population to optimise its genetic composition, for the benefit of the Taranaki birds and the long-term Tiritiri Matangi population.

It is anticipated that, providing the levels of pest species at Parininihi in Taranaki remain low, and the permit is approved, we will be moving kōkako off Tiritiri Matangi to that site during May and June 2017. This would be followed up with a 1080 drop at Parininihi before the breeding season starts.

There is also the possibility of moving a few kōkako containing Pirongia genes to Mount Pirongia once the necessary permit has been approved.

There has been no progress with the captive programme proposed by the Zoo Association, under which the island/captive population will be managed as a single unit. Consequently, any planned actions relating to that programme are currently on hold.

In the longer term, it remains important to find ways of increasing the genetic diversity of the Tiritiri Matangi population. In our view, egg swaps are the best way of doing this if they can be arranged.

## **Acknowledgements**

It was a great help having our trained volunteers available again. With so many pairs to monitor we were rather stretched.

A special thank you to Kay Milton who has given up so much time, not only to do the field work and training of new volunteers, but to attend meetings and help with the paperwork and to John Stewart for banding of chicks.

Many thanks to all our other volunteers who helped out on Tiritiri Matangi Island this season – Yvonne Clarke, Gina Wilson, Alison and Roger Bray, Alison Forbes, Karin Gouldstone, Geoff and Terri Beals, Chris Hannent, Yukiko Kojima, Hester Cooper, Val Lee, Kathryn Jones, Julie Scott and Rose Coveny. Getting out of bed before dawn to follow these wonderful, if somewhat elusive, birds through the bush and scrub of the Island can be a challenge, but it is rewarding when we do find those nests which sometimes produce fledged chicks.

We are also grateful to Ian Fraser from Auckland Zoo who maintains the Tiritiri Kōkako Studbook for us.

Thanks to our DOC rangers, Dave Jenkins and Matt Mold and, more recently, Kata Tamaki and Vonny Sprey, for the use of vehicles and equipment when needed this season.

We appreciate having Conrad and Kirsten O'Carroll and their whanau from Ngati Tama, Taranaki, provide us with a list of the names we use for the Taranaki chicks.

Special thanks to the Joyce Fisher Charitable Trust for, once again, funding the kōkako management on Tiritiri Matangi Island.