

**FIRST TRANSFER OF WHITE-FACED STORM PETREL (*Pelagodroma marina maoriana*, Rōrō, Takahikare-Moana) CHICKS FROM
HOKOREREORO/RANGATIRA/SOUTH EAST ISLAND
TO MANA ISLAND
SUMMARY REPORT**



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Friends of Mana Island

Project Summary

The white-faced storm petrel is a small (45g) seabird with prominent nostrils encased in a tube. The legs are long and are used to skip or patter along the sea surface as the birds look for zooplankton.

In New Zealand small colonies of white-faced storm petrels (WFSP), 100 to a few thousand pairs, are present on many northern NZ islands as far south as New Plymouth, Sentinel Rock (Cook Strait), Motunua (Canterbury) and islands around Stewart Island. Approximately 10,000 pairs breed on Hongiora Island, Aldermans but their main stronghold is Hokoreora/Rangatira/South East Island (SE Island) in the Chathams where 840,000 pairs have been estimated to breed.

Mana Island Scientific Reserve has been the focus of restoration work for over 25 years. Introduction of burrow nesting seabirds has been identified as a key task, (*Mana Island Ecological Restoration Plan*, Miskelly 1999), to aid in the establishment of a fully functioning ecosystem. Seabirds contribute fertility via guano and regurgitations, impact the ecosystem by trampling and burrowing and provide microhabitat for other species such as herpetofauna and invertebrates. The restoration of seabird colonies has already commenced with previous translocations of diving petrel, fluttering shearwater and fairy prion. A remnant colony of sooty shearwater is also present on the island.

A small number of WFSP (< 4 pairs) have been found breeding on Mana Island. Recruitment rate of additional birds of this species to Mana Island is likely to be low as there are no significant colonies nearby. The waters of the Cook Strait are considered to be potentially a good feeding ground for this species which was likely to have been present in the region in the past. The current translocation aims to boost the number of WFSP present on Mana Island with the long-term goal of establishing a self-sustaining population.

It is proposed to achieve this by the transfer of up to 250 chicks over a three year period from SE Island to Mana Island. Forty-eight chicks were transferred in the first year as a trial, to ensure that the logistics of the transfer and feeding could be successfully negotiated. If successful, it is planned that this will be followed by the transfer up to 100 chicks in each of the next 2 years. This report summarises the outcome of the first chick transfer undertaken in February 2019.

Chick collection and transfer

A collection team of four personnel arrived on SE Island on February 5th. The first four days on the island were spent locating WFSP burrows, checking for the presence of chicks and measuring any chicks found (weight and wing length measured). Two flags were placed on burrows of chicks that potentially could meet the selection criteria for transfer. These short-listed chicks were re-measured the day before the planned transfer and a list of 48 chicks suitable for translocation was drawn up. Selection criteria were set to obtain chicks of good weight that were 1 – 3 weeks away from fledging.

On transfer day, February 10th, the selected chicks were collected from their burrows and placed into corflute boxes (12 boxes, each containing 4 chicks). The chicks were then transported to Chatham Island by boat (Owenga Charters) and utility vehicle (DOC). The chicks were all given fluids that evening and left in a cool, quiet place overnight.

The following day the chicks were flown to Wellington Airport (Air Chathams). From there they were flown by helicopter (Wellington Helicopters) directly to Mana Island landing close to the seabird site above the southwestern cliffs of the island.

Following a formal welcome each chick was weighed, fed and was placed in its individually numbered burrow. The burrows were blocked so that chicks were held in the burrow for a settling in period. All chicks had coped well with the transfer process and no health issues were noted on transfer day or in the days following.

Chick rearing and fledging on Mana Island

Chick rearing proceeded uneventfully. Chicks coped well with the artificial diet and weights were good. The chicks on Rangatira Island were less mature than had been predicted based on the February 2018 reconnaissance trip. Consequently the selected chicks were also less mature when they arrived on Mana Island and fledging was initially slower than anticipated. However, all chicks had fledged within 3 weeks of arrival as originally planned.



A chick is lifted from the transfer box on arrival at Mana Island.

Burrows were left blockaded for the first 3 nights for the majority of chicks. One chick emerged prematurely after its blockade was removed and was not found despite a thorough search of the site. This chick will not have fledged successfully. To prevent further losses, all burrows were blocked again and then unblocked individually when it was considered that a chick was ready to fledge (once wing growth had ceased).

The majority of chicks fledged the first night that their burrow was unblocked. The first chicks to fledge left on the night of February 13th and the last chick to fledge left on the night of March 4th. Chicks were on Mana Island for a mean of 13 days (range 2 – 21 days). Chicks had a mean fledge weight of 43g (range 39 – 49g) and a mean fledge wing length of 147mm (range 135 – 158mm).



The last chick (Burrow 3) to depart from Mana Island. This photograph was taken on March 4th and the chick fledged that night

Stakeholder and community involvement

Key stakeholders for the WFSP project include Friends of Mana Island (FOMI) and Department of Conservation. FOMI secured funding, with OMV NZ as the Principal Sponsor, and has undertaken project management of the translocation.

The translocation was approved and well supported by Moriori and Ngati Mutunga of the Chatham Islands. Both groups were involved at various stages in the transfer of the chicks. The collection team was blessed before departing to SE Island, a Moriori representative (Tama Solomon) was on the boat that picked up the chicks and members of both groups were present at Owenga to welcome the chicks on arrival at Chatham Island. The chicks were farewelled by a group of approximately 15 people at Chathams Airport. The welcome and blessings on Chatham Island were led by Maui Solomon, Kathy Daymond and George Day. The chicks were accompanied on the flights from Chatham Island to Mana Island by Maui Solomon (Moriori) and Monique Croon (Ngati Mutunga).



The collection team and the group that welcomed the chicks on their arrival at Owenga, Chatham Island on February 10th.

A number of school children from the Chatham Islands took the opportunity to see the chicks while they were given fluids on the evening of February 10th at the DOC base. The children were very interested to see the chicks and had many questions!



One of several groups of local school children that came to see the chicks while they received fluids on the evening after transfer from SE Island.

On arrival at Mana Island the chicks were carried by hand and placed in a shaded area. A group of approximately 40 people were present for the occasion, including representatives from Ngati Toa, Moriori, Ngati Mutunga, FOMI, DOC, OMV NZ and media. A short welcome ceremony, led by Ta Matiu Rei (Ngati Toa), was followed by an opportunity for those present to see the chicks being fed and placed in their new burrows.



The helicopter carrying the chicks arrives on Mana Island. Monique Croon (Ngati Mutunga) carries a box of chicks to the welcome ceremony.

During the rearing period there were a number of visits to the island by members of the public. These groups included 6 guided day visits (run by FOMI) and 2 FOMI working weekends. Members of these groups were given the chance to visit the site and observe the chicks being fed and all appeared to appreciate this opportunity.

The input of volunteers from FOMI and the local community has been invaluable in ensuring the success of the project. Tasks completed with volunteer assistance include: preparation of the burrows and burrow site, ensuring that equipment was organised ready for the arrival of the

chicks, chick collection, chick food preparation and feeding and organisation and preparation food for the feeding team.

FOMI facilitated extensive media coverage of the translocation. Articles appeared in the Dominion Post, Stuff and the Whitby Newsbrief. Items were also broadcast on TV One News, Radio NZ and Stuff.



Aerial view of Mana Island. The seabird site is on the south west coast – lower left in the photograph.

Year 1 summary

Forty-eight white-faced storm petrel chicks were translocated from Hokoreoro/Rangatira/South East Island to Mana Island in February 2019. All chicks appeared to cope well with the transfer and feeding processes. It is believed that 47 of 48 WFSP chicks (98%) fledged successfully from Mana Island, after a mean period of 12 days (range 2 – 21 days) on the island. Chicks fledged at similar weights and wing lengths to those recorded for naturally reared chicks on Burgess and Whero Islands.

A debrief of the 2019 transfer will take place shortly. A comprehensive report will then be written including recommendations for future transfers.