



**Friends of Mana Island**

**THIRD TRANSFER OF WHITE-FACED STORM PETREL  
(*Pelagodroma marina maoriana*, Rōrō, Takahikare-Moana)  
CHICKS FROM HOKOREREORO/ RANGATIRA/ SOUTH EAST ISLAND  
TO MANA ISLAND IN FEBRUARY 2021**

**SUMMARY REPORT**



**A white-faced storm petrel chick, close to fledging,  
emerges from its burrow at night on SE Island – Photo Edin Whitehead**

**Prepared for Friends of Mana Island by Cathy Mitchell and John McKoy**

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## Introduction

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 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 Hokoreoro/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.

The goal was 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 2019 and 100 chicks were transferred in 2020. This report is a summary of the outcome of the third and final chick transfer undertaken in February 2021 and on the success of the translocation over the three years of the project.

## Chick collection and transfer

Measurements of 50 WFSP chicks were taken on January 23<sup>rd</sup> and 24<sup>th</sup> 2021 by Chatham Island DOC staff present on SE Island. The data collected was used to predict the peak fledging time of WFSP chicks from SE Island in the 2021 season. The ideal time for chick collection was found to be from February 15<sup>th</sup> to February 22<sup>nd</sup> and the trip timing was planned accordingly.

A collection team of five (a Chatham Island DOC staff member, the FOMI project manager and three experienced FOMI volunteers) arrived on SE Island on February 11<sup>th</sup>. The start of work was delayed until February 13<sup>th</sup> due to rain. WFSP burrows that contained a chick were located over the following three days. All chicks found were measured (weight and wing length) and those that would potentially meet selection criteria on collection day were identified by flags placed at their burrows.



**An adult white-faced storm petrel climbs a tree as it leaves SE Island after feeding its chick –  
Photo: Edin Whitehead**

Selection criteria were set to obtain chicks of good weight that were 1 – 3 weeks away from fledging. In total 380 chicks were located and 180 of these chicks were short-listed. Burrow occupancy was good with the result that sufficient chicks were located in approximately half the area searched in the two previous years. No apparent detrimental effect, due to the harvest of WFSP chicks at those sites in 2019 and 2020, was detected. In addition, chick weights were higher than those of chicks in the previous years. The short-listed chicks were re-measured the day before collection, February 17<sup>th</sup>, and a list of 100 chicks to be collected for transfer was drawn up.

On transfer day, February 18<sup>th</sup>, the selected chicks were collected from their burrows and placed into corflute boxes (25 boxes, each containing 4 chicks). The chicks were then transported to the DOC base on Chatham Island by boat (Owenga Charters) and utility vehicle (DOC). The chicks were fed that evening with assistance from the collection team and DOC staff. The chicks were then left in a cool, quiet place overnight. Several members of the local community took the opportunity to see the chicks being fed.

The following day, February 19<sup>th</sup>, 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 placed in an individually numbered burrow. The burrows were blocked at the tunnel entrance and exit so that chicks were held in the nest chamber for a settling-in period.



**The chicks in the transfer boxes arrive on Mana Island via helicopter escorted by Katelyn Whittaker-Prenderville (obscured in front seat), Dick Fernyhough and Cathy Mitchell – Photo Noah, Wellington Helicopters**



**School children and members of the community watch as a chick is fed at the DOC base on Chatham Island – Photo Edin Whitehead**

## **Chick rearing and fledging on Mana Island**

Chick rearing proceeded uneventfully. Chicks generally coped well with the artificial diet and weights were good. Burrow blockades were removed on an individual basis as the chicks approached fledging. The first blockade was removed on the third day following the arrival of the chicks, with the majority removed at 7 – 10 days after arrival.

Two chicks were euthanased on Chatham Island by a veterinarian following the discovery of a leg fracture in each of these chicks. Leg fractures have been previously identified as a risk when handling these small fragile chicks. One additional chick was found dead in its burrow the day after transfer. No cause of death has been identified on the preliminary postmortem examination and final results are still pending on this chick.

All other chicks coped well with the transfer and feeding processes and 97 chicks successfully fledged from Mana Island. Chicks fledged from 1 to 10 days after their first emergence, with a mean emergence period of 4 nights. The first chick to fledge left on the night of February 24<sup>th</sup> and the last 4 chicks to fledge left on the night of March 11<sup>th</sup>. Chicks were on Mana Island for a mean of 13 days (range 6 - 21 days). Chicks had a mean fledge weight of 47g (range 41 – 55g) and a mean fledge wing length of 148mm (range 140 – 157mm).

## **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. Representatives from Moriori (Cassidy Trafford) and Ngati Mutunga (Katelyn Whittaker-Prendeville, DOC Kaitiaki Ranger, Chatham Island,) were on the boat that collected the chicks from SE Island and Katelyn also escorted the chicks on the flights to Mana Island.

DOC Chathams kept in touch with the local schools and community on the progress of the transfer. An opportunity was given to all those interested to come and see the chicks being fed on the evening of February 18<sup>th</sup> at the DOC base. A number of school children, their parents and other interested parties took the opportunity to see the chicks, approximately 30 people in total.

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 Rangatira, Ngati Mutunga, FOMI, DOC, OMV NZ. A short welcome ceremony, led by Luke Barnsley, was followed by an opportunity for those present to see the chicks being fed and placed in their new burrows.

During the rearing period three guided groups visited Mana Island (visits and guides organised by FOMI). 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.

As with the two previous transfers, 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 included: preparation of the burrows and burrow site, ensuring that equipment was organised ready for the arrival of the chicks, chick collection, chick food preparation, chick feeding and organization, and preparation of food for the feeding team.

Updates on the progress of the translocation and the fledging of the chicks were posted regularly on the Friends of Mana Island Facebook page. These posts included [trail camera footage](#) of a chick emerging from its burrow at night, walking around, stretching its wings and, finally, 3 nights later a clip of the chick fledging.

Alison Ballance was on the island as a volunteer when the chicks arrived and she made the most of the opportunity to put together a podcast for her '*Our Changing World*' series for Radio NZ. The podcast featured interviews of some of those involved in the translocation and outlined the processes involved.

<https://www.rnz.co.nz/national/programmes/ourchangingworld/audio/2018786615/more-seabirds-for-mana-island>

## Summary

One hundred white-faced storm petrel chicks were translocated from Hokoreoro/Rangatira/South East Island to Mana Island in February 2021. 97 of these chicks (97%) fledged successfully from Mana Island, after a mean period of 11 days on the island. Chicks in 2021 fledged at similar weights and wing lengths to chicks transferred in 2019 and 2020 and also at similar weights and wing lengths to those recorded for naturally reared chicks.

This was the third transfer year and the three-year transfer programme has now been completed. The total number of chicks fledged over the three years of the programme is 243 of 248 chicks transferred (98%). The translocation processes are considered to have been very successful, achieving the safe transfer over large distances, feeding and fledging of this very small species of seabird – a first within New Zealand.

It is anticipated that the fledged chicks will result in good numbers of adult birds returning to Mana Island to breed. This in turn would then achieve the ultimate goal of the establishment of a self-sustaining population of WSFP on Mana Island.

**A comprehensive report, including technical details and recommendations for ongoing site maintenance and monitoring for returning birds, will be written and circulated to all interested parties.**



Burrow with resident/ Nearly fledged chick — Photos: Philippa Sargent