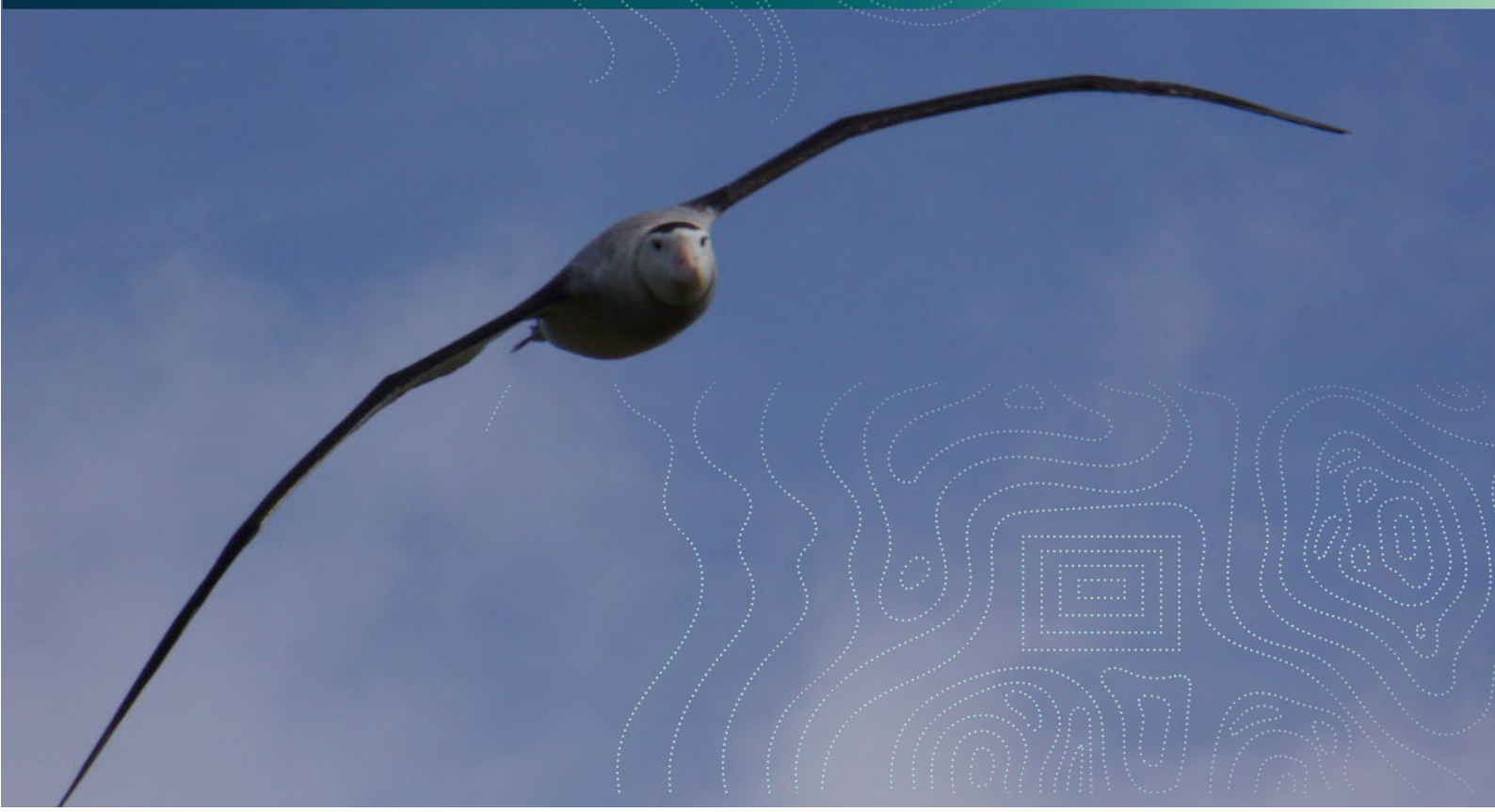
Appendix X Draft seabird management plan

BlueGreen



Hananui Aquaculture Project

Seabird Management Plan

Prepared for Ngāi Tahu Seafood Resources
8 November 2025

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Cover photograph: Antipodean Albatross in flight

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1.0 Introduction

Ngāi Tahu Seafood Resources (NTS) has applied for resource consent under the Fast Track Approvals Act (FTAA) 2024 for the Hananui Aquaculture Project, an open-ocean salmon farm located in Foveaux Strait approximately 2-6 km off the northern coast of Rakiura / Stewart Island, New Zealand. The site is approximately 1,285 ha in area (Appendix 1) and encompasses open ocean foraging habitat for a number of seabird species (refer to Appendix 2 for species list, threat classifications and estimated local populations). Factors which may contribute to the likelihood of species interacting with the salmon farm include location of breeding populations (and therefore frequency of movements across the site) and, more importantly, feeding habits (i.e. prey species, foraging zones and behaviour).

The following potential effects on those seabirds were considered through the assessment of effects for the Project (BlueGreen, 2025):

- *Entanglement*: Seabirds can become entangled in nets below and above water.
- *Habitat exclusion*: Seabirds cannot feed in the area enclosed by the pen structures and may be deterred from feeding around the structures.
- *Provision of roosts*: Farm structures can provide roosting locations for seabirds to rest between bouts of foraging.
- *Changes to food supply and prey abundance*: Feed and fish waste can change the benthic environment and change water quality, potentially altering food sources for seabirds, particularly for benthic-feeding seabirds such as penguins and shags. In addition, pelagic and benthic wild fish populations may increase around marine fish farms, attracted by uneaten pellets, or increases in plankton or small fish populations. This could attract seabirds to forage around the farm.
- *Disturbance*: vessels and people attending the farm can disturb roosting and foraging seabirds.
- *Marine litter*: Plastics and other objects lost from farm operations may be ingested by seabirds.
- *Attraction by lights*: Artificial lighting can disorientate some seabird species and attract them to the farm.
- *Boat / propellor strike*: Increased vessel traffic can result in boat/propeller strike when birds are at or close to the surface.

As such, consent condition 39 requires the preparation of this Seabird Management Plan (SBMP) for the Hananui Aquaculture project, the objectives (consent condition 40) of which are to:

a) Achieve compliance with conditions of consent;

b) Define the methodology to be used for monitoring, recording and reporting seabird interactions around the marine farms;

c) For the first two years of operation of the marine farms at the site, monitor, record and report on seabird behaviours around the marine farms.

As required by consent condition 41, this SBMP includes the following:

a) A monitoring programme with procedures for recording and reporting seabird presence in the vicinity of farm structures;

b) Mitigation and management actions and techniques to minimise seabird interactions and incidents with farm structures in order to achieve Condition 40.

c) Procedures to record, respond to and report seabird interactions / incidents with farm structures, and timeframes for reporting.

d) Procedures for the implementation of the SBMP, including training of staff;

e) A process for reviewing the effectiveness of the SBMP at achieving the objectives set out in Condition 40 and updating the SBMP if required to improve its effectiveness.

f) A management review process that has the flexibility to accommodate future advances in infrastructure and other developments in line with the evolution of the science behind best management practices for management of seabird interactions and incidents with marine farms.

1.1 Terminology

For clarity, definitions for a number of terms frequently used in this plan are provided in Table 1 below.

Table 1: Terminology used in the current

TERM	DEFINTION
Mitigation	Any action that alleviates or moderates the severity of an impact caused by something. Actions that mitigate impacts may also minimise those effects.
Interaction	Any physical contact made between a seabird and a part or structure of the farm itself, which may or may not result in an incident (as defined below).
Incident	An interaction that results in an injury (e.g. rope cut, abrasion), entrapment (e.g. live animal within farm pen), or entanglement (live or fatal) of a seabird.
Incident response	Actions taken immediately following an incident to attend to the seabird(s) involved.
Damage	In the context of the pen structure, includes holes or tears in the net

1.2 Legal & statutory responsibilities

Unlike marine mammals there is no specific legislation in New Zealand that relates solely to seabirds. Under the Wildlife Act 1953 all wildlife (including seabirds) are provided with absolute protection throughout New Zealand, with the exception of those species listed in various Schedules to the Act (some seabirds are listed in those schedules, including sooty shearwater and three species of shag). Schedule 7 of the FTAA 2024 outlines the process for wildlife

approval[1]. While the Fisheries Act 1996 also contains provisions relating to fishing-related mortality of wildlife (which would include seabirds), they are not relevant to aquaculture activities, which are managed under the Resource Management Act 1991 (RMA). Under the Conservation Act 1987 the Department of Conservation has responsibility for the preparation and implementation of any conservation management strategy in Murihiku and for advocating for the conservation of natural resources (including seabirds).

Any resource consents issued for activities in the coastal marine area under the Resource Management Act 1991 are likely to contain conditions relating to the management of the effects of activities on seabirds, to respond to the biodiversity provisions of the RMA.

In terms of responsibilities:

- the consent holder (NTS) is responsible for the implementation of the SBMP.
- the consent authority (Environment Southland) is responsible for monitoring compliance to the SBMP.
- the Department of Conservation (DOC) may be able to provide assistance and advice in relation to seabirds as noted in this SBMP but is not obligated to do so.

2.0 Farm Design & Management

The measures outlined in the following sections have been incorporated into the Hananui Aquaculture Project design and management in order to avoid and / or minimise potential effects on seabirds.

2.1 Farm staging & stocking

The Hananui Aquaculture Project is a two-stage exposed coastal water salmon farming project:

- Stage 1 - Feed discharge of 15,000 tonnes per annum and the establishment of a block of 10 sea pens (arranged in a 5x2 configuration) at each of the four marine farm sites.
- Stage 2 - Overall feed discharge rise to 25,000 tonnes per annum with the introduction of a second set of 10 sea pens at each of the four marine farm sites.

Moving to Stage 2 would be subject to environmental monitoring over two production cycles at the Stage 1 feed input.

Farm stocking is proposed to be on a single year class rotational basis so that in general:

- One farm has stock introduced;
- One farm is at grading;
- One farm is at harvest; and
- One farm is fallow

[1] In Schedule 7 of the FTAA 2024, 'wildlife approval' means a lawful authority for an act or omission that would otherwise be an offence under any of sections 58(1), 63(1), 63A, 64, 65(1)(f), 70G(1), 70P, and 70T(2) of the Wildlife Act 1953.

2.2 Farm structures

2.2.1 Pen design

NTS is intending to use a single net system and the following management techniques will be adhered to:

- The use of predator resistant materials in the construction of nets.
- Below water nets must have a mesh size that minimises a bird's ability to penetrate the net with their head (less than 40 mm half mesh; e.g. knot to knot unstretched).
- All above water bird nets must have a mesh size[2] less than 60 mm half mesh (knot to knot)
- Bird net poles will be 5.9 m tall and seal jump fencing will be 3-3.5 m high around the pens.
- Each underwater net would also have a 'false' bottom separated from the outer net to catch dead fish or a mortality collection system that would hold/contain them away from access to marine species swimming underneath the pens.
- When not in use, nets must be lifted clear of the water, removed or kept under the same tension as when operational. Any in-water empty nets will undergo the same maintenance inspection schedule as operational nets.

Except during maintenance activities (refer to Section 2.2.2 below):

a) All nets (above and below water), ropes and mooring lines shall be kept under tension to minimise the potential for entanglement while housing fish/in use;

b) If nets are not housing fish they shall either be kept taut and weighted, or be removed from the water and stored so they are not accessible to seabirds.

2.2.2 Pen structure maintenance

During maintenance activities, if nets, ropes and mooring lines cannot be kept under tension, measures outlined in Section 4.0 shall be implemented to minimise the risk of seabird entanglement.

The following daily inspections (weather and safety protocols permitting) will be conducted to look for slack sections, areas of damage and potential entrapment pockets:

- Inspection of below water nets during feeding via the feed cameras, via net scoring assessments, via net cleaning and by divers operating in the pens during the course of their normal work;
- Visual inspections of above water parts of structures to look for slack sections, areas of damage (e.g. holes, tears) and potential entrapment pockets during the course of normal work; and

[2] The ideal mesh size should: maintain visibility for diving birds, reduce engineering loading and wind resistance, minimise the risk of entanglement, and limit the surface area available for perching birds , thereby reducing the risk of net sagging.

- Observe fish behaviour and look for any unusual fish behaviour which may suggest that a marine species has entered a net pen.

If identified, actions will be undertaken as soon as possible to re-tension the nets, repair the nets and/or remedy entrapment pockets.

Over the course of a fortnight/month (DURATION / FREQUENCY TO BE CONFIRMED IN LINE WITH OPERATIONAL ASPECTS) all net structures at the marine farms will have been subject to detailed visual inspection during net cleaning to check for damage.

If entangled birds are detected, the steps outlined below in Section 6.0 will be followed.

2.3 Waste

A Waste Management Plan has been prepared to ensure waste material and debris (e.g. net debris and other non-biodegradable waste) are collected and disposed of correctly and thereby minimise the potential for seabirds to ingest litter and become entangled in debris associated with the salmon farm.

Mortalities and organic waste will be pumped out of the cages and disposed according to the Biosecurity Management Plan.

2.4 Feed

A smart feeder system[3] will be used in order to minimise excess feed; this in turn will minimise the amount of waste feed that passes through the cages and is available in the water column beneath cages.

2.5 Disturbance to birds at breeding colonies

Efforts will be made to minimise boat traffic near the coastline (i.e. within 200 m) associated with the salmon farming for daily operations.

In terms of land access to the adjacent coastline, farm staff will only be permitted to access via existing landing sites (e.g. those currently used by tourism & charter operators), unless under specific circumstances (e.g. search and rescue, clean up, recovery of equipment, pest control, safety and procedures).

2.6 Lighting

Artificial lighting within the pens will be submerged (deployed 3–7 m below the surface) with a downward light dispersion and little horizontal diffusion.

To manage light dispersion from barges associated with the farms, all barge windows will be fitted with black-out blinds or curtains that will be closed daily before dusk. Lights will also be turned off when not in use and minimal non-navigational lighting will be used at night.

[3] Automated systems (e.g. AKVA group CCS Feed System units) that deliver the correct amounts of feed, and can be used in conjunction with cameras (e.g. SmartEye Precision HD - AKVA group) to monitor and control feed delivery systems.

Subject to approval from the Environment Southland Harbour Master, aids to navigation will be as follows:

- Four black and yellow cardinal markers, as identified by the yellow dots in Figure 1. The southern cardinal mark should be placed on or just south of Newton Rock so as to mark the general southern extremity of the proposed marine farming area whilst also indicating the hazard that is Newton Rock;
- The cardinal markers will each have a white light with different sequences.
- Special marks on the four corners of each 5x2 block of pens with two of the four being lit. The lit special marks shall be the northernmost and southernmost corners. This lighting will need to be changed between stages 1 and 2 where the special marks will be altered to mark each pair of 5x2 marine farms collectively.

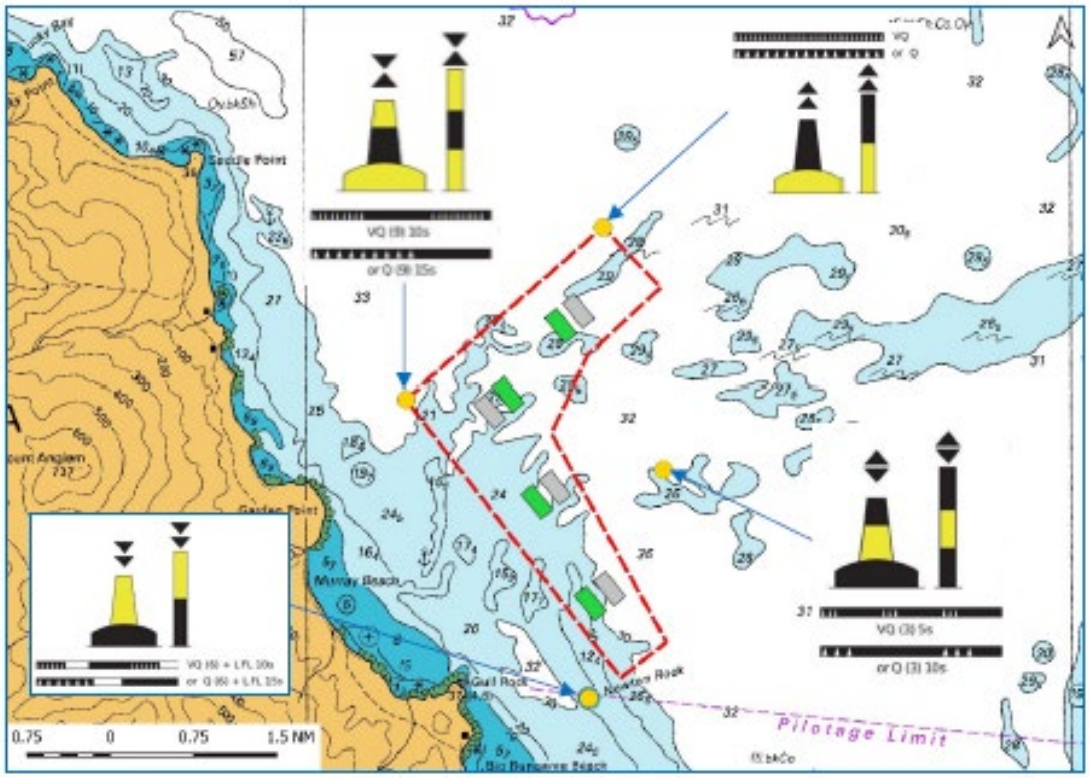


Figure 1: Proposed aids to navigation around proposed site (Source: Bermingham (2025))

2.7 Vessel traffic / speed

DOC has developed guidelines[4] relating to vessel behaviour around marine mammals, and Part 3 of the Marine Mammals Protection Regulations 1992 list the conditions governing behaviour of all vessels and aircraft around marine mammals. These requirements will be implemented at the Hananui salmon farm and as such will also act to minimise disturbance to birds that may be present in the vicinity of the farm.

[4] https://www.doc.govt.nz/nature/native-animals/marine-mammals/sharing-our-coasts-with-marine-mammals/

3.0 Staff Training

The Hananui Aquaculture Project will have a full-time role (Wildlife Manager) dedicated to wildlife monitoring, management and reporting, and who will be trained, and train other farm staff, in the following:

- Seabird identification (Appendix 3);
- Conducting visual observations during farm maintenance works (Section 4.0);
- Routine seabird monitoring (Section 4.0);
- Safely disentangling seabirds from netting (Section 6.2.1);
- Safely checking for seabird injuries (Section 6.2.2);
- Safely handling seabirds and putting them in a carrier box (Section 6.2.3);
- Safely releasing birds (Section 6.2.4);
- Sending birds for post-mortem examination (Appendix 4); and
- Filling in the reporting registers and prepare annual reports (Sections 5.2 and 6.3).

All staff will be required to be familiar with and understand the procedures within this Seabird Management Plan as well as the Waste Management Plan.

4.0 Observations During Farm Maintenance Works

Prior to any planned major net maintenance work[5] (i.e. net removal) during which seabirds could be at risk of becoming entangled (e.g. if a net is slack or underwater sections are brought to the water's surface), a visual sighting survey for seabirds will be undertaken as follows:

- Major net maintenance work should be commenced during periods of the day that present lowest risk to seabirds becoming entangled (avoiding dawn, dusk and feeding times within the farm block the maintenance is being undertaken);
- Fifteen minutes prior to the maintenance work commencing, a designated observer will proceed to the best vantage point on the farm or vessel;
- The observer shall visually look for the presence of penguins, shags, shearwaters and diving petrel (because these species are more prone to underwater entanglement) within 200 m of the location of the maintenance works.
- If a penguin, shag, shearwater or diving petrel is observed within 50 m of the location of the maintenance works, works will not start until those birds have moved outside of the 50 m area.
- If the maintenance work has started and a penguin, shag, shearwater or diving petrel is sighted within 50 m, all practical measures will be undertaken to minimise interactions including:

[5] Excluding emergency maintenance required to avoid putting life and property at significant risk

- Continually monitoring the behaviour and location of the birds; and
- Deter birds from interacting with the open or lifted net (e.g. use of bird scaring device, shooing away etc).

All seabirds observed within 50 m of the maintenance work will be recorded in the monitoring database.

5.0 Routine Seabird Monitoring

The concept of avifauna displacement from a specific site, especially in a vast habitat such as the open ocean, and the potential impacts of any such behaviours are extremely difficult to investigate and detect. For instance, multiple abiotic and / or biotic factors may be operating at any one time which influence or cause changes in avifauna foraging distribution. Furthermore, even if a change in foraging distribution does occur, unless the individual survival and productivity rates of those birds are monitored, it is impossible to determine what effect (if any) the change in foraging distribution is actually having on those birds.

Conversely, seabird entanglement is an effect that can be directly attributed to the project. As such, the focus of the seabird monitoring at the Hananui Aquaculture Project will be to collect data that will assist with understanding seabird behaviours around the farm and thereby provide information that may identify potential issues (and solutions) before seabird incidents occur, as well as to detect any seabird interactions that may occur at the time of monitoring.

5.1 Monitoring method

PLACEHOLDER: The use of observers and/or remote technology (e.g. cameras) will be determined following an initial trial to determine the most appropriate method to obtain the data required to achieve the above purpose (Section 5.0).

Weekly dusk and dawn[6] surveys will be undertaken at each of the four farms minimum of 2 years, whichever is greatest. These times have been chosen based on the potential for increased activity of seabirds around the farms at this time as birds depart and return to their colonies.

The monitoring method will involve undertaking 30 minutes of observations from a pre-determined survey location at dusk and dawn and recording all birds out to the mooring buoys. The following information will be recorded for each seabird observation:

- Date and time of observation;
- Weather conditions at time of observation;
- Species;
- Number of birds;
- Location (e.g. on water or structure); and
- Behaviour (e.g. foraging, roosting, traversing).

[6] Dusk and dawn times as specified for Stewart Island by MetService https://www.metservice.com/rural/regions/southland/locations/stewart-island

5.2 Reporting

All records obtained from the routine seabird monitoring will be entered into a Monitoring Database and will be reported in an annual report to the consenting authority.

5.3 Review period

Following the completion of 2 years of monitoring, a review will be undertaken to determine whether the monitoring is achieving its intended purpose (refer to Section 5.0 above). Based on the review findings, a decision will be made in regard to the need for ongoing routine seabird monitoring as outlined above (Section 5.1), or any changes that are recommended to the monitoring methods.

6.0 Seabird Interactions

The potential exists for diving birds, attracted to the fish and fish feed pellets, being drowned as a result of becoming entangled in underwater nets used to contain the farmed fish and predator nets both above and below the cages (Sagar, 2013; SAMS Research Services Ltd, 2018). Species of shag, gulls and penguin have been recorded entangled in marine farms in New Zealand and Australia and as such are considered the highest risk for potential interactions with the Hananui Aquaculture Project.

6.1 Incident responses

The majority of seabird species are fully protected or partially protected under the Wildlife Act 1953. It is an offence to kill such species without a permit. The only species that is not protected is southern black-backed gull. Species that are partially protected are sooty shearwater and grey-faced petrel (exceptions for the traditional harvesting of chicks for food), and black shag, little shag and pied shag.

If an injured, entangled or dead seabird is found at a farm, the bird will be immediately attended to using the appropriate procedures outlined in the following sections of this plan.

6.1.1 Alive & entangled seabirds

If a live bird is found entangled in a net, the bird will be carefully removed from the net following the guidelines provided in Section 6.2.1 below.

Following disentanglement, the bird will be identified (an identification guide is provided in Appendix 3), photographed and checked for injuries following the guidelines provided in Section 6.2.2 below.

If the bird is **uninjured and is dry, alert (does not appear exhausted) and able to stand**, it will be put into a ventilated corflute (or other appropriate, waterproof material) pet carrier box (handling and transfer guidelines are provided in Section 6.2.3 below) lined with a towel and left

alone in a quiet, dark and cool indoor space for at least an hour to calm down prior to release away from the salmon farm following the release guidelines provided in Section 6.2.4 below.

If the bird is **uninjured but appears stressed, waterlogged and/or exhausted** (unable to stand) it will be put in a ventilated pet carrier box (handling and transfer guidelines are provided in Section 6.2.3) and left in a quiet and dark indoor space until it is dry, alert and able to stand. In the case of a heavily waterlogged bird, this will be dried using towels/paper towels to remove excess water before being placed in ventilated pet carrier box and left in a warm indoor space.

The birds should be left in the box, out of direct sunlight, for no more than 4 hours and checked on regularly over that time; this is especially important for water-logged birds to ensure they don't overheat. Once recovered, the bird will then be released away from the salmon farm following the release guidelines provided in Section 6.2.4. If after 4 hours the bird has not recovered, a Wildlife Veterinary Centre[7] (key contacts are provided in Appendix 5) will be contacted. These communications will dictate what actions are required to treat the bird (this may include transport to a veterinary facility for treatment).

If the bird is **injured** (as identified following the guidelines in Section 6.2.2), and if it is determined by a wildlife / seabird veterinarian that keeping the bird alive is humane, then it will be put in a ventilated pet carrier box lined with a towel (handling and transfer guidelines are provided in Section 6.2.3) and left in a quiet, dark and warm indoor space until further instruction is received following contact with Wildlife Veterinary Centre[7]. These communications will dictate what actions are required to treat the bird (this may include transport to a veterinary facility for treatment) (key contacts are provided in Appendix 5). If possible, photos of the injuries should be sent to the vet to aid them with treatment advice and to help determine the severity of the injury and the urgency of the situation.

If in the NTS Wildlife Manager's assessment and in consultation with a wildlife / seabird veterinarian it is determined that it is **inhumane** to keep the bird alive, it will be euthanised by staff using methods approved by the Department of Conservation. Generally, for any seabird with a broken humerus or with skin lacerations it will be inhumane to keep them alive, rehabilitation to the wild will not be practical and they should be euthanised.

6.1.2 Dead & entangled seabirds

If a **dead bird** is found entangled in a net, it will be carefully and sensitively removed from the net, photographed and identified (an identification guide is provided in Appendix 3). The reason for entanglement will be investigated by the NTS Wildlife Manager (e.g. inspection of the net to look for a lack of tension or damage) and immediately fixed and/or remedied. All other netting will then be inspected and if required, maintained, fixed and/or remedied as appropriate.

6.1.3 Alive & injured seabirds

If other live injured seabirds are found at a farm (not associated with entanglement), the bird(s) will be identified (an identification guide is provided in Appendix 3), photographed and the injuries assessed following the guidelines provided in Section 6.2.2. The bird will be put in a ventilated pet carrier box lined with a towel (handling and transfer guidelines are provided in

[7] Such centres may include Dunedin Wildlife Hospital (Otago Polytechnic), South Island Wildlife Hospital (Willowbank Wildlife Reserve, Christchurch), Wildbase (Massey University, Palmerston North)

Section 6.2.3) and left in a quiet, dark and well-ventilated indoor space until further instruction is received following contact with a Wildlife Veterinary Centre. These communications will dictate what actions are required to treat the bird (this may include transport to a veterinary facility for treatment) (key contacts are provided in Appendix 5). If possible, photos of the injuries should be sent to the vet contact to aid them with treatment advice and to help determine the severity of the injury and the urgency of the situation.

An investigation will be undertaken to try and determine the cause of any injury in order to determine if potential mitigation measures can be put in place to avoid any further similar situations.

6.1.4 Dead seabirds

If other dead seabirds are found at a farm (not associated with entanglement), the bird(s) will be photographed and identified (an identification guide is provided in Appendix 3). An investigation will be undertaken to try and determine the cause of death. If the cause of death is determined (e.g. collision with a structure), attempts will be made to remedy the issue or reduce the chance of it occurring again if possible (e.g. by installing bird deterrents such as streamers or scaring tape).

6.2 Live seabird handling protocols

At all times when handling or assessing live birds for the next step, the key test is whether such actions are humane, or whether it is in the best interests of the bird.

For human safety, keep your eyes away from birds with sharp bills that strike out at faces (shags, herons, penguins, gannets in particular need care when handling). Other species like petrels and albatrosses have sharp cutting edges on bills and hooked beaks and can rip and tear at hands and arms. Hold gently but firmly around the body and hold their neck to control the head movements while still enabling them to breathe. Don't tape up bills in case the birds escape. Support the birds body weight when holding.

6.2.1 Disentangling seabirds from nets

If a live seabird is found tangled in a net the following steps should be followed to disentangle the bird (adapted from Barrington & Prasad (2019)):

- Wearing gloves, carefully and quietly restrain the bird (do not squeeze too tightly) and use a towel or blanket to cover its eyes.
- Carefully cut the net around the bird and gently remove the bird backwards in the direction it entered the net.
- After removing the bird, check for and remove any remaining net entanglement around its wings, neck or feet (discard netting appropriately).

6.2.2 Checking for seabird injuries

To check a seabird for injuries, the following steps should be followed by two people:

- Put on gloves, then one person needs to carefully and quietly restrain the bird (do not squeeze too tightly) and use a towel or blanket to cover its eyes.
- The other person then needs to physically examine the bird while it is being restrained. This involves:
    - Checking the head for any sign of eye injury, abrasion or beak injury;
    - Checking the plumage for blood and matting;
    - Examining each wing by gently holding the wing tips one at a time and pulling them away from the body to look for blood and to feel for factures or dislocations; and
    - Extending the legs to look for blood and to feel for fractures or dislocations.

If the examination reveals any of the above, a wildlife / seabird veterinarian[7] will be contacted immediately to obtain advise on the best course of action.

6.2.3 Placing seabirds in carrier boxes

The following steps should be followed to safely handle a bird and put them in a carrier box to recover or for transport to a treatment facility:

- Wearing gloves, slowly and quietly approach the bird from behind and grasp the bird around its body, pinning its wings against its side (hold the bird firmly but do not squeeze it too tightly as you may injure it).
- Hold the bird approximately 30 cm away from your body (with its head facing away from you so it cannot bite you).
- If required (for recovery/stabilisation or for transport to a treatment facility), gently transfer the bird into a pre-prepared (assembled, open and lined with a towel) ventilated pet carrier box (one bird per box).
- Securely close the carrier box and move the box to a dark, well-ventilated quiet indoor space for recovery before release or transit before transport. When moving the box, ensure that it remains upright and steady (i.e. is not swung around).

6.2.4 Releasing seabirds

To safely release a seabird, the following steps should be followed:

- The bird should be transported in a carrier box (refer to Section 6.2.3) by boat at least 100 m away from the pens.
- If being released from a small vessel, the bird should be slowly lowered into the water and left to disperse itself. The bird may remain on the water for some time before dispersing and should be allowed to do so in its own time.
- For any small species (such as diving petrels, prions and storm petrels) don't release if giant petrels are nearby as they will predate these birds. Rather, hold on them at the farm and wait to release at nightfall.

- If being released from a large vessel where the bird cannot be lowered onto the water, the bird should be left to fly away naturally or lift and release the bird from the side of the vessel into the wind.

6.3 Protocols for handling dead birds

When a dead seabird is recovered on a farm (either through entanglements or other farm structures), contact will be made with mana whenua and DOC to determine what will happen with the body. This may include the body being returned to mana whenua or sent to a specialised wildlife pathology lab (e.g. Massey University, Palmerston North) for a post-mortem examination to determine the cause of death (refer to Appendix 4 for guidelines on sending birds for post-mortem examination).

There are agreed protocols between the Department of Conservation and Ngāi Tahu that provide a process for Ngāi Tahu to access cultural materials in the takiwā of Ngāi Tahu whānui and provide a process to enable Ngāi Tahu input into the management of cultural materials held by the Department of Conservation (Ngāi Tahu/Department of Conservation, 2007[8]). These protocols are also likely to have some influence on the disposal of dead marine wildlife found in connection with the Hananui Aquaculture Project.

6.4 Reporting

All injured, entangled and/or dead birds will be recorded in an Incidents Register. Information recorded will include the following (as appropriate):

- Date and time
- Species
- Number of birds
- Location found
- If dead or alive
- Injuries incurred
- If sent for veterinary care
- Reason for entanglement/injury
- Remediation actions undertaken
- Release site
- Photographic record of the bird and of the part of the farm that caused the injury/entanglement (e.g. loose / torn net, structures, cables / lines)
- Any other relevant details, including the fate of dead seabirds.

The Wildlife Manager will undertake a fortnightly review of the Incident Register and keep track of the number of incidents and species involved (including threat classifications), in order to determine if any thresholds are triggered which require further actions as outlined in Section 6.5 below.

[8] Ngāi Tahu/Department of Conservation 2007. *Allocation of cultural materials guideline: for the takiwā of Ngāi Tahu whānui*.

In addition to the Incidents Register, all seabird incidents during the preceding month will be loaded on to an online database which can be viewed by anyone via a dashboard on a webpage.

The information in the Incident Register will be reported in an annual report to the consenting authority.

6.5 Adaptive management

The SBMP will follow an adaptive management process for seabird incidents and death. In summary, this means that management seeks to detect issues if they arise, and then address them appropriately (refer to Figure 2 below).

Seabird incidents will be internally recorded and reported (refer to Section 6.3), with mortalities of certain species requiring notification of authorities; outlined below are specific incidents which will trigger an independent review of methods (refer to Figure 2 below).

Internal or independent reviews may recommend the modification of marine farming methods, including checking all nets for holes and tears (and fixing/repairing as appropriate) and looking for other obstacles or structures that are posing a risk to birds and taking action to reduce this risk.

Furthermore, data gathered from the routine seabird monitoring (Section 4.0 above) may also be used to inform any management changes that may be required. For example, this may include investigating changes in the mesh size of the top nets if entanglements are observed.

6.5.1 Event triggers

The following events will trigger a management response as outlined in Figure 2 below:

- *Threatened* species (refer to Appendix 2[9]) – Species with this classification are characterised by their small population sizes and / or rate of decline. As such, incidents[10] involving a single individual with a Nationally Critical or Nationally Endangered classification, or two birds with a Nationally Vulnerable classification will initiate a management response.
- *At Risk* species (refer to Appendix 2) – Species with this classification are characterised by larger populations with higher rates of decline, larger stable populations with limited distribution (be it natural or induced) or smaller populations with lower rates of decline. As such, incidents of five individuals with a New Zealand threat classification of *At Risk* within the period of 12 months will initiate a management response.
- Incidents *en masse* – Some seabird species gather in flocks or rafts (e.g. sooty shearwater) which may result in more than one individual being at risk of entanglement at any one time. As such, a single incident involving >5 birds, irrespective of their NZ threat classification, occurring at the same time, will initiate a management response.

[9] Note that the threat classifications listed in Appendix 2 were taken from the most recent listing (Robertson et al., 2021) at the time this current plan was prepared, and as such these classifications may change over the course of the operational life of the Hananui Aquaculture Project.

[10] As defined in Table 1, page 2

7.0 Ongoing Reviews

Separate to the review of seabird monitoring identified in Section 5.3 above, this SBMP shall be reviewed every 5 years for the duration of the farm. The purpose of these reviews would be to:

- Enable the adoption of new management techniques that may come available;
- Review the need for seabird monitoring at any point in time; and
- Update to include the latest DOC bird threat classifications (i.e. Appendix 2).

8.0 SBMP Amendments

As required by Consent Condition 43, any amendment to the SBMP arising from first 2-year (Section 5.3) or ongoing 5-yearly (Section 7.0) reviews set out in Condition 42 shall be submitted to Manager Resource Management, Environment Southland for certification in accordance with Condition 2.

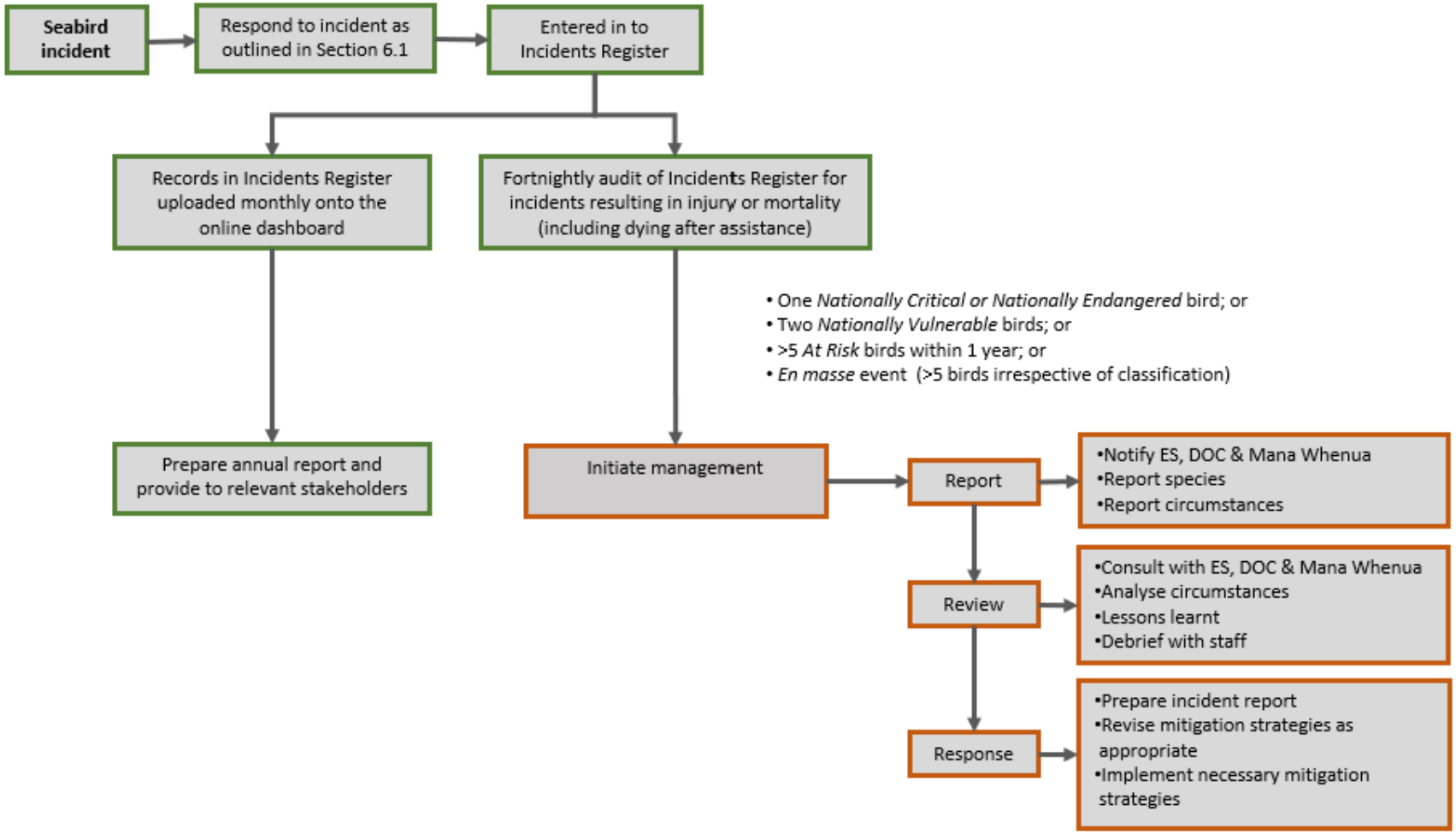


Figure 2: Seabird incident reporting and adaptive management requirements

9.0 References

Barrington, J. H. S., & Prasad, S. S. (2019). Guide on removing entangled seabirds from nets. *Ninth Meeting of the Seabird Bycatch Working Group, Florianópolis, Brazil, 6 - 8 May 2019*, Agenda item 22.1.

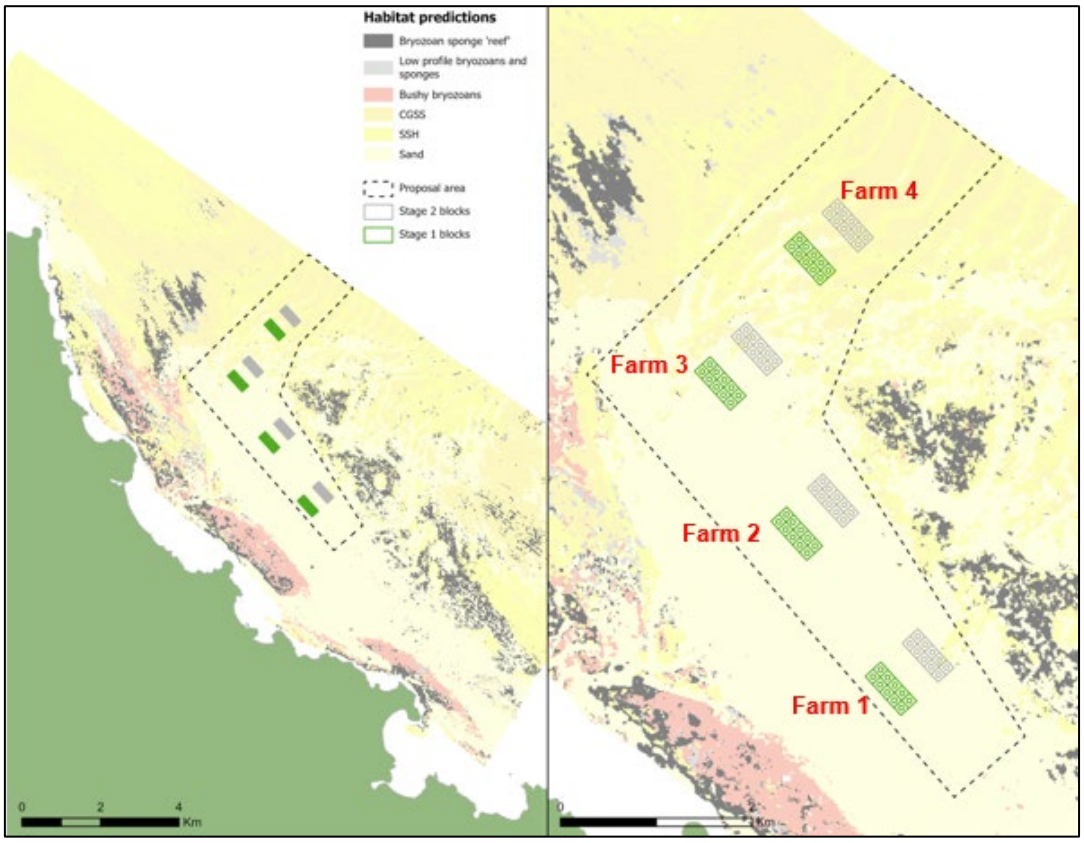
BlueGreen. (2025). *Hananui Aquaculture Project: Coastal & Marine Avifauna Assessment – Fast Track Approvals.* [Report prepared by BlueGreen Ecology Ltd for Ngāi Tahu Seafood Resources].

Robertson, H. A., Baird, K. A., Elliott, G. P., Hitchmough, R. A., McArthur, N., Makan, T. D., Miskelly, C. M., Sagar, P. M., Scofield, R. P., Taylor, G. A., & Michel, P. (2021). *Conservation status of New Zealand birds, 2021* (New Zealand Threat Classification Series 36). Department of Conservation.

Sagar, P. (2013). *Literature review of ecological effects of aquaculture: Seabird interactions*. Prepared by Cawthron Institute and NIWA for the Ministry of Primary Industries.

SAMS Research Services Ltd. (2018). *Review of the environmental impacts of salmon farming in Scotland*. Report for the Environment, Climate Change and Land Reform (ECCLR) Committee, The Scottish Parliament.

Appendix 1: Location and Layout of the Hananui Project



Appendix 2: Hananui Seabird Species

The table below provides a list of seabird species recorded, or potentially occurring, within close proximity to the Hananui site (BlueGreen, 2025). Note that the threat classifications listed were taken from the most recent listing at the time this current plan was prepared (i.e. Robertson et al. (2021)), and as such these classifications may change over the course of the operational life of the Hananui Aquaculture Project.

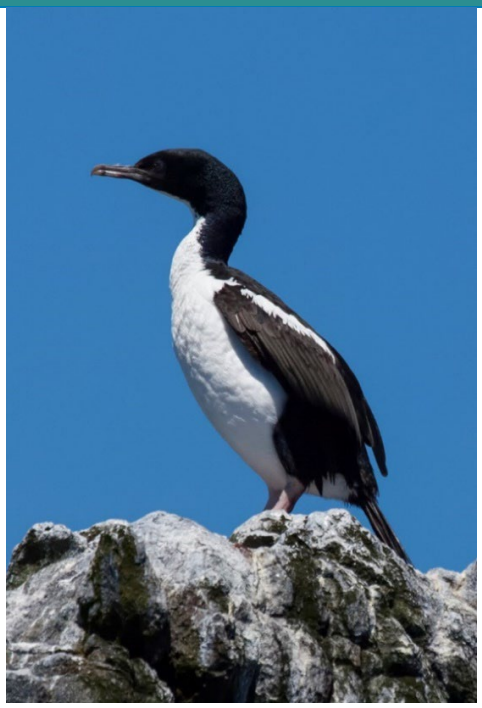
SPECIES		ESTIMATED POPULATION SIZE		NZ THREAT CLASSIFICATION	
		Local	National		
Antipodean wandering albatross	*Diomedea antipodensis antipodensis*	-	~3,700 pairs	Threatened	Nationally Critical
Gibson's wandering albatross	*Diomedea antipodensis gibsoni*	-	~3200 pairs		Nationally Critical
Salvin's mollymawk	*Thalassarche salvini*	-	~41,000 pairs		Nationally Critical
Whenua Hou diving petrel	*Pelecanoides whenuahouensis*	~200 birds	~200 birds		Nationally Critical
Hoiho	*Megadyptes antipodes*	~30 pairs	~1,700 pairs		Nationally Endangered
Black petrel	*Procellaria parkinsoni*	-	~38,000 birds		Nationally Vulnerable
Foveaux shag	*Leucocarbo stewarti*	~1,000 pairs	<5,000 pairs		Nationally Vulnerable
Grey-headed mollymawk	*Thalassarche chrysostoma*	-	~7,800 pairs		Nationally Vulnerable
Hutton's shearwater	*Puffinus huttoni*	-	~590,000 birds		Nationally Vulnerable
Light-mantled sooty albatross	*Phoebetria palpebrata*	-	~7000 pairs		Nationally Vulnerable
Northern royal albatross	*Diomedea sanfordi*	-	~7,000 pairs		Nationally Vulnerable
Southern royal albatross	*Diomedea e. epomophora*	-	~8,500 pairs		Nationally Vulnerable
Spotted shag	*Stictocarbo p. punctatus*	~1,000 pairs	>18,000 pairs		Nationally Vulnerable
Buller's shearwater	*Puffinus bulleri*	-	~79,000 pairs	At Risk	Declining
Fiordland crested penguin	*Eudyptes pachyrhynchus*	>500 pairs	~2,500 – 3,000 pairs		Declining
NZ white-capped albatross	*Thalassarche cauta steadi*	-	>120,000 pairs		Declining
Red-billed gull	*Larus novaehollandiae scopulinus*	>500 pairs	~28,000 pairs		Declining
Sooty shearwater	*Puffinus griseus*	>1,000,000 pairs	~21,300,000 birds		Declining
Southern Buller's mollymawk	*Thalassarche b. bulleri*	~5,000 pairs	~13,500 pairs		Declining
Southern little penguin	*Eudyptula minor*	>500 pairs	~10,000 pairs		Declining
White-fronted tern	*Sterna striata striata*	<200 pairs	~20,000 pairs		Declining
Northern giant petrel	*Macronectes halli*	-	~2,570 pairs		Recovering
Pied shag	*Phalacrocorax varius varius*	~1,000 pairs	~6,400 pairs		Recovering
Variable oystercatcher	*Haematopus unicolor*	>100 pairs	~4,000 birds		Recovering
Campbell Island albatross	*Thalassarche impavida*	-	~21,000 pairs		Naturally Uncommon
Chatham Island mollymawk	*Thalassarche eremita*	-	~5,300 pairs		
Snares Cape petrel	*Daption c. capense*	-	~10,000 pairs		Naturally Uncommon
Snares crested penguin	*Eudyptes robustus*	-	~30,000 pairs		Naturally Uncommon

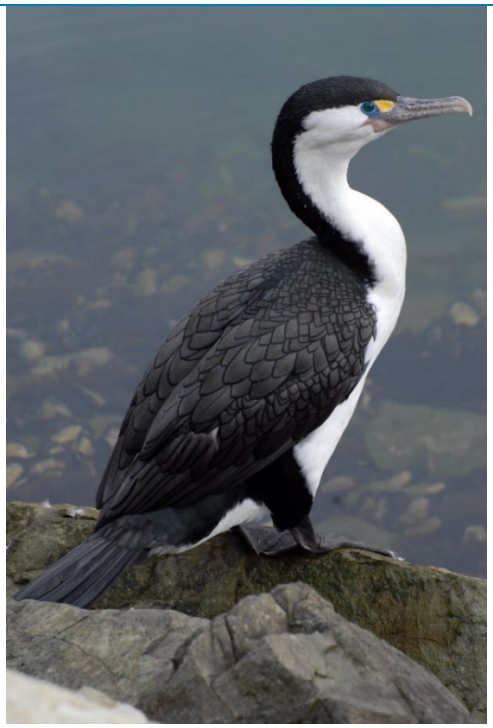
SPECIES		ESTIMATED POPULATION SIZE		NZ THREAT CLASSIFICATION	
		Local	National		
Westland petrel	*Procellaria westlandica*	-	~4,000 pairs		Naturally Uncommon
Black shag	*Phalocrocorax carbo novaehollandiae*	<200 pairs	50,000 - 100,000 pairs		Relict
Broad-billed prion	*Pachyptila vittata*	~5,000 birds	>600,000 pairs		Relict
Cook's petrel	*Pterodroma cookii*	~5,000 pairs	~300,000 pairs		Relict
Fairy prion	*Pachyptila turtur*	>2,000 birds	~4,000,000 pairs		Relict
Flesh-footed shearwater	*Puffinus carneipes*	-	~10,000 – 15,000 pairs		Relict
Fluttering shearwater	*Puffinus gavia*	-	~100,000 pairs		Relict
Grey petrel	*Procellaria cinerea*	-	~53,000 pairs		Relict
Grey-backed storm petrel	*Garrodia nereis*	-	~30,000 pairs		Relict
Little shag	*Phalacrocorax melanoleucos*	>200 pairs	~10,000 pairs		
Mottled petrel	*Pterodroma inexpectata*	>20,000 breeding pairs	>30,000 pairs		Relict
Southern diving petrel	*Pelecanoides urinatrix chathamensis*	>1,000 pairs	>1,000,000 pairs		Relict
White-faced storm petrel	*Pelagodroma marina*	-	>1,000,000 pairs		Relict
Australasian gannet	*Morus serrator*	~60 pairs	~46,000 pairs	**Not Threatened**	Not Threatened
Black-bellied storm petrel	*Fregetta tropica*	-	50,000 - 100,000 pairs		Not Threatened
Grey-faced petrel	*Pterodroma macroptera gouldi*	-	~200,000 pairs		Not Threatened
Southern black-backed gull	*Larus d. dominicanus*	>1,000 pairs	>1,000,000 birds		Not Threatened
White-chinned petrel	*Procellaria aequinoctialis*	-	>200,000 pairs		Not Threatened
White-faced heron	*Egretta novaehollandiae*	>100 pairs	Abundant		Not Threatened
White-headed petrel	*Pterodroma lessonii*	-	>100,000 pairs		Not Threatened
Black-browed albatross	*Thalassarche melanophris*	-	~150 pairs	**Non-Resident Native**	Coloniser
Southern giant petrel	*Macronectes giganteus*	-	-		Migrant
Wandering albatross	*Diomedea exulans*	-	-		Migrant

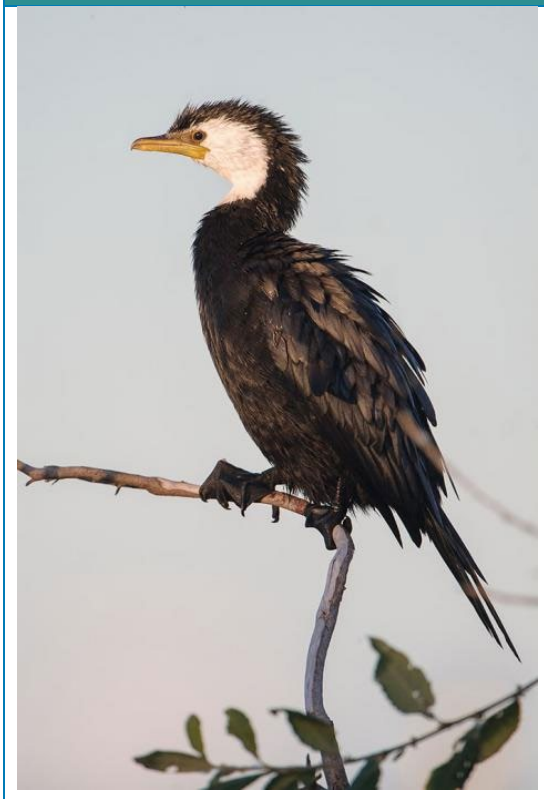
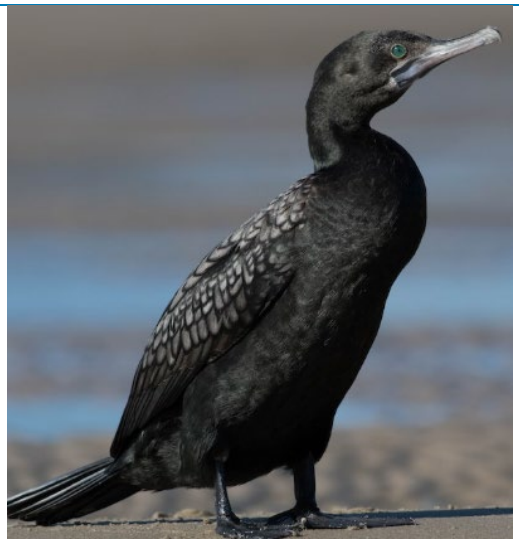
Appendix 3: Seabird Identification Guide

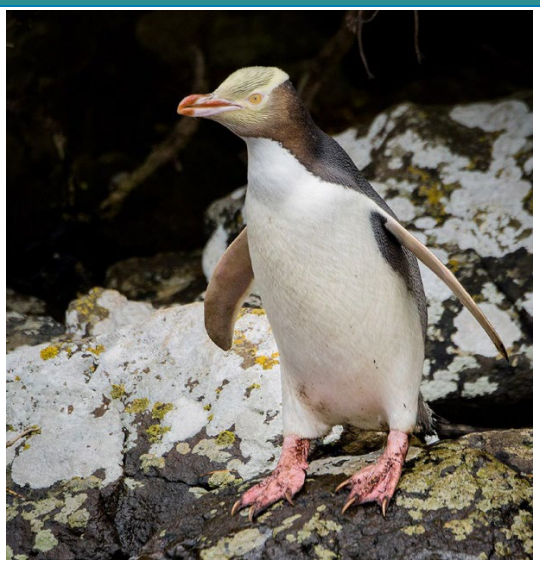
In addition to the information provided below, several other useful guides which may assist with species identification, including:

- A fisher's guide: New Zealand coastal seabirds
  https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/fishing/fishers-guide-nz-seabirds.pdf
- A fisher's guide to New Zealand seabirds
  https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/fishing/fishers-guide-to-nz-seabirds/fishers-guide-to-new-zealand-seabirds.pdf
- New Zealand Birds Online
  https://www.nzbirdsonline.org.nz/

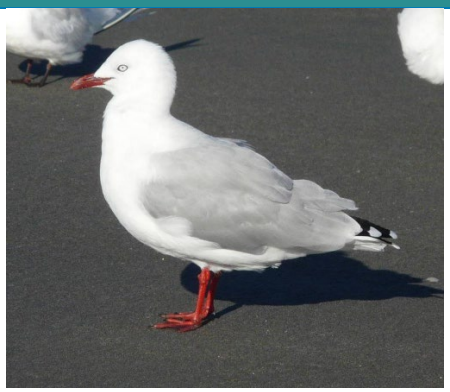
SHAGS	
	**Foveaux shag / mapo *(Leucocarbo chalconotus)*** • Threatened – Nationally Vulnerable. • Large (~68 cm length) pink-footed shag with two plumage morphs: bronze and pied. • The bronze morph is entirely brown-black with a green sheen on the wings and a blue sheen on the body. • The pied morph has a dark head, a white belly and throat and white patches on otherwise black wings (these appear as a white bar when the wings are folded). The back feathers are black with a blue sheen and the tail is black. • Birds of both morphs have a brown iris and pale brown, pink or grey bill with a dark culmen ridge. • Breeding birds of both morphs have two orange caruncles (growths) at the base of the bill. • Juveniles are duller with pale facial skin and no caruncles.

SHAGS	
	**Spotted shag / Kawau tikitiki (*Stictocarbo punctatus*):** • Threatened – Nationally Vulnerable. • Slim, medium-sized, blue-grey shag (~64-74 cm length) with a long, slender orange-brown bill, blue eye ring, dark brown iris, yellow-orange feet and distinctive curved broad white stripe that runs from above the eye down both sides of the neck to the base of the wing. • Breeding birds have small black spots on their wings. • Distinctive black, decurved double crest grows erects on the forehead and nape. • Bare facial skin between the eye and bill turns green-blue before the breeding season. • Non-breeding birds are duller, lack crests, have a neck stripe obscured by dark feathers, yellowish facial skin and paler underparts. • Immature birds are paler, browner and lack distinct head or neck markings.
	**Pied shag / kāruhiruhi (*Phalacrocorax varius*):** • At Risk – Recovering. • Large (~65-85 cm length), relatively slim shag with a white face, breast and throat, black feet, blue eye-rings (breeding adults), green iris, hooked grey beak, yellow facial skin (breeding adults), and black back, nape and upperwings. • Non-breeding adults have paler skin colours than breeders. • The upperparts of juveniles and immatures have dark and pale brown tones.

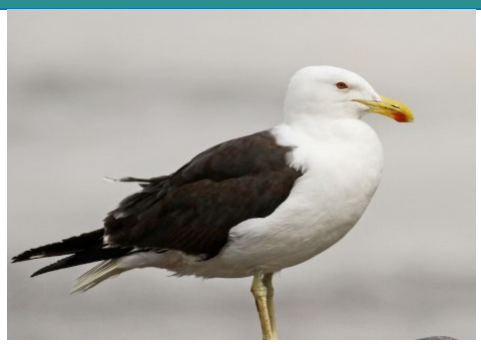
SHAGS	
	**Little shag / kawaupaka (*Phalacrocorax melanotus*):** • At Risk - Relict • Small (~56 cm length) shag with a short yellow bill (dark on the ridge), brown eye, yellow facial skin, black feet and legs, a relatively long tail. • Multiple colour variations but generally three colour morphs: black with white cheeks and throat, black with completely white underparts, or intermediate. All three morphs develop a head crest during the breeding season. • The first plumage of juveniles is either white-breasted or entirely black.
	**Black shag / Māpunga (*Phalacrocorax carbo*):** • At Risk – Relict • Large (~85 cm length) shag with black-brown wings and tail, and white-cream feathering over cheeks and throat. Skin about the eyes and base of bill is yellow, feet and legs black, bill grey, and eyes green. • Juveniles and immatures have black-brown plumage, which fades to sandy brown, and have variable amounts of white on foreneck, breast and abdomen, from none to extensive. Their facial skin is yellow, and eyes grey-brown turning to green.

PENGUINS	
	**Yellow-eyed penguin / hoiho (*Megadyptes antipodes*):** • Threatened – Nationally Endangered. • A tall (~65 cm length), portly penguin with yellow eyes, a pale-yellow band of feathers extending from each eye around the nape, a long straight red-brown and pale cream bill, pink and black feet, white breast, belly, front sides and uppersides of the flippers, and slate blue neck and dorsal feathers. • Juveniles lack the pale yellow band and have a paler eye and paler back of the head.
	**Southern little penguin / kororā (*Eudyptula minor minor*):** • At Risk – Declining. • Small (~33 cm length), stocky dark blue and white penguin with a long, robust, dark hooked bill, blue-grey eyes, relatively short flippers and pink-white legs and feet. • Recently fledged birds are bright blue dorsally and markedly smaller than adults.
	**Fiordland crested penguin / tawaki (*Eudyptes pachyrhynchus*):** • At Risk – Declining. • A tall (~60 cm length), portly crested penguin with a dark head and upperparts, white underparts, a broad yellow eyebrow stripe (crest) extending from the base of the bill to well past the eye that droops down the neck, large orange bill with a thin strip of black skin at the base, brown-red eyes, and pink-white legs and feet. • Juveniles have short, thin pale-yellow eyebrow stripes and a mottled white chin and throat. • Dorsal plumage of newly fledged chick is distinctly bluish and fades to black with wear, then mid-brown before moulting.

TERN	
	**White-fronted tern / tara (*Sterna striata striata*):** • At Risk – Declining. • A medium-sized (~42 cm length) tern that is pale grey above and white below, with a long white forked tail, dull red-brown legs and when breeding a black cap separated from the long pointed black bill by a white bank. • Non-breeding adults have a reduced cap leaving the forehead white. • The length of the tail and depth of the fork decreases in size outside of the breeding season. • Recently fledged birds have fine blackish barring (striations) over the back and wing coverts.

GULL	
 	**Red-billed gull / tarāpunga (*Larus novaehollandiae*):** • At Risk – Declining. • Medium-sized (~37 cm length) predominantly white gull with a pale grey mantle, back and wing coverts, black main flight feathers with white tips, white iris and a bright red bill, eyelids and legs. • The bill, eyelids and feet are duller in colour outside of the breeding season. • Immature birds are similar to adults but have brown patches on the mantle, brownish primary feathers and a dark brown iris, bill and legs (bottom photo).

GULL



Southern black-backed gull / karoro (*Larus dominicanus*):

- Not Threatened
- Large-sized (~60 cm) gull throughout New Zealand.
- Adults (top photo) have white head and underparts with black back, yellow bill with red spot near tip of lower mandible, and pale green legs.
- Juveniles (bottom photo) are dark mottled brown with black bill and legs; their plumage lightens with age until they moult into adult plumage at 3 years old.

PETRELS

Sooty shearwater / tītī (*Puffinus griseus*):

- At Risk – Declining.
- A large (~40-46 cm length) dark shearwater with long narrow wings, a long slender black bill, a narrow short tail, dark grey leys, sooty brown upperparts, slightly greyer underparts and silver-grey flash on the outer area of the underwings.

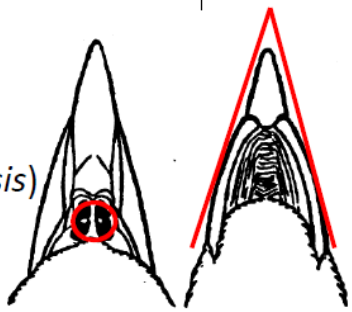
PETRELS	
	**Fairy prion / tītī wainui (*Pachyptila turtur*):** • At Risk – Relict. • A small (~25 cm length) prion with blue-grey plumage above and white plumage below, a blackish M-shape across the back from wingtip to wingtip, a black tip to the upper tail, a blue bill, legs and feet, a chunky bill (lacking comb-like lamellae along the margins of the upper mandible) and a broader black tip to the upper tail compared to other prion species.
	**Cook's petrel / tītī (*Pterodroma cookii*):** • At Risk – Relict. • A small (~28 cm length) petrel with narrow wings, a pointed tail in flight, black bill, dark eyes, blue-grey legs, a grey head that is speckled on the forehead and crown, a grey upper surface contrasting with the darker brown-black feathers running across the upper wings and rump in an M-shape, mostly white undersides and a thin dark patchy line on the leading edge of the outer underwing.
	**Southern diving petrel / kuaka (*Pelecanoides urinatrix chathamensis):*** • At Risk – Relict. • A small (~20 cm length) chunky petrel with black upper plumage and grey-white lower plumage, a short neck, wings and tail, stubbly black bill, blue feet and a variable amount of white on the throat and underwing.
Refer to DOC's identification sheet below to assist with identifying Whenua Hou diving petrel	**Whenua Hou diving petrel / kuaka Whenua Hou (*Pelecanoides whenuahouensis)*** • Threatened - Nationally Critical

PETRELS	
	• A small black-and-white petrel with very short rounded wings and a short (forked) tail. • The undersides including underwings are white. • The short bill (13-16 mm long) is black with pale blue edges. • The legs and feet are mostly blue with some black margins.

Identifying Diving Petrels in Aotearoa

Whenua Hou Diving Petrel (*Pelecanoides whenuahouensis*)

Breeds on Whenua Hou

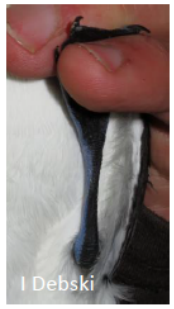


Murphy & Harper 1921

- Septum in nostrils placed **in the middle**
- Bill sides **converging** at base

- **Clean white** underwings
- **Always** light-grey ear coverts (behind eye)
- **Almost entire** lower mandible light-blue

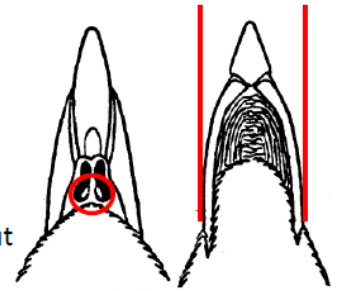
Slightly forked tail with **light-grey** outer tail feathers



Always a continuous black line on underside of tarsus (leg)

Common Diving Petrel (*Pelecanoides urinatrix ssp.*)

Breeds throughout Aotearoa and the subantarctic



Murphy & Harper 1921

- Septum in nostrils placed **near skull**
- Bill sides **parallel** at base

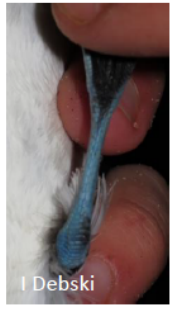
(However, subspecies *exsul* can have converging bill sides)

- **Grey** underwings

(However, subspecies *exsul* can have white underwings)

- **Sometimes** light-grey ear coverts (behind eye)
- **Limited extend** of light-blue on lower mandible

Rounded Tail with **dark-grey** outer tail feathers



Interrupted black line or black spots on underside of tarsus (leg)

However, juveniles do have a continuous black line on the underside of leg.

Appendix 4: Guidelines for Sending Birds for Post-Mortem Examination

PLACEHOLDER: Will update with relevant information once contract has been secured with specific wildlife vet.

At the Hananui site, any dead birds to be sent for post-mortem should be kept in a fridge until on land when it can be processed as outlined below.

The following is information provided by Wildbase Pathology[11] on how to submit specimens for post-mortem examination. This information should be adhered to.

How to submit specimens:

The three important points to consider when submitting an animal for post-mortem are:

- Preservation;
- Documentation; and
- Packaging

Preservation:

To be of most benefit, post-mortem examination should be performed as close to the time of death as possible. If this isn't possible, place the animal in a refrigerator (approximately 4°C) as soon after death as possible, and then send as soon as possible (please don't send over the weekend). Freezing the body interferes with results and should be a last resort. Fixing a body whole in formalin or 70% alcohol, or field dissection and submission of fixed tissues for histopathology, are alternatives that can be used in some circumstances.

If you are collecting material into fixatives, remember skin contact and inhalation of formalin is hazardous. The volume of fixative needed is 10 times the amount of tissue you are fixing; for example, 100 g of tissue needs 1 L of formalin. The smaller the piece of tissue the better the fixation; ideally, pieces of tissue should be no thicker than 1 cm to allow for rapid fixation. It is surprising how much information can be gleaned even from fairly decomposed specimens, so do not let a rotten carcass discourage you from submitting it for post-mortem.

Documentation:

Proper documentation is essential to get the most benefit from the post-mortem. The Huia database submission form (PDF file) should be sent with the body or faxed to 06 350 5636. If this isn't possible, please include the following information:

- Animal, tissue or specimen identification (including species, individual's ID).
- Geographical location where animal was found, time of collection (who, what, where, when).
- Any history you think relevant; for example, previous signs of ill-health, use of toxins/baits in the area. The more history you provide the better.

[11] https://www.massey.ac.nz/massey/learning/departments/centres-research/wildbase/wildbase-pathology/how-to-submit-a-specimen.cfm

- Any other special requests; our routine practice is to try to establish a cause of death and other intercurrent diseases when a whole body is submitted. You may want to know something else instead of or in addition to these things.
- Let us know what you would like us to do with the remains of the body; would you like it returned or disposed of? Let us know if you would like the animal returned for taxidermy purposes as we will need to modify the post-mortem technique

Packaging:

To prevent contamination of people and equipment with potentially infectious or hazardous substances, a suitably sized polystyrene foam chilly bin is best. Alternatives can include a cardboard box with newspaper and bubble-wrap protecting the well-wrapped and bagged body. Freezer blocks can be improvised using 500 mL plastic PET drink-bottles—don't quite fill them and put them in your freezer. To contain the body and prevent any leakage, use multiple tear- and puncture-resistant sealed plastic bags, or plastic containers with firmly screwed down tight-fitting lids; don't use glass. Place the submission form in a separate plastic bag.

Send to:

Att: Stuart Hunter

Wildlife Post-Mortem Service
School of Veterinary Science
Massey University
Tennent Drive
Palmerston North 4410

It is important to:

- Mark the package: Urgent, Perishable or Keep Cool, Do Not Freeze.
- Inform us by email, phone or fax so we know to expect a parcel
    - **Email: wildbase@massey.ac.nz**
    - **Phone** [redacted]
    - **Fax 06 350 5636**
- The Huia database submission form (PDF file) can be included with the animal's body and/or emailed/faxed to the above contacts

The following courier companies are recommended:

- NZ Couriers
- Tranzlink

In summary:

- Chill and dispatch as soon as possible;
- Identify and specify what you want in the documentation; and
- Contain, preserve and protect in transit by appropriate packaging.

Appendix 5: Key Contacts

Department of Conservation – Stewart Island
Address: Rakiura National Park Visitor Centre, Main Road, Halfmoon Bay, Stewart Island
Phone: 03 219 002

Department of Conservation – Generic
Phone: 03 477 0677 or 0800 DOC HOT (0800 362 468) (after hours)

Wildbase (Hospital and Pathology)
Address: Veterinary Science Building, University Ave, Massey University, Palmerston North, 4442
Phone: 06 350 5329 or 0800 738 363 (after hours)

Dunedin Wildlife Hospital
Address: Otago Polytechnic, Forth Street, Dunedin
Phone: DOC to be called first and they will advise if the bird is to be transferred to Dunedin Wildlife Hospital (if so, DOC will advise them than an injured bird is on its way).

South Island Wildlife Hospital
Address: Willowbank Wildlife Reserve, 60 Husssey Road, Northwood, Christchurch
Phone: 0222 1060170

BlueGreen

About BlueGreen

Over the last 20 years we have gathered a high level of knowledge and expertise working on a number of large scale projects of national significance, right from pre-consenting investigations through to Environment Court and Board of Inquiry Hearings. As such we are able to offer our clients proven expertise to assist with a range of ecological challenges, both simple and complex, across various ecosystems.

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