

Appendix J
BirdLife Tasmania Reports

**Bird species at potential risk, proposed Huon Aquaculture lease alterations
Trumpeter Bay, 2014**

**Report to Huon Aquaculture, July 2014
BirdLife Tasmania**

BirdLife Tasmania was approached by Huon Aquaculture to advise on bird species potentially at risk from the proposed lease alterations in Trumpeter Bay, Bruny Island. The proposed lease sites are to the southeast of the current lease, as shown in Figure 1. The UTM grid coordinates for the vertices of these leases were provided by Huon Aquaculture, and centroids for each lease were calculated, (Table 1).

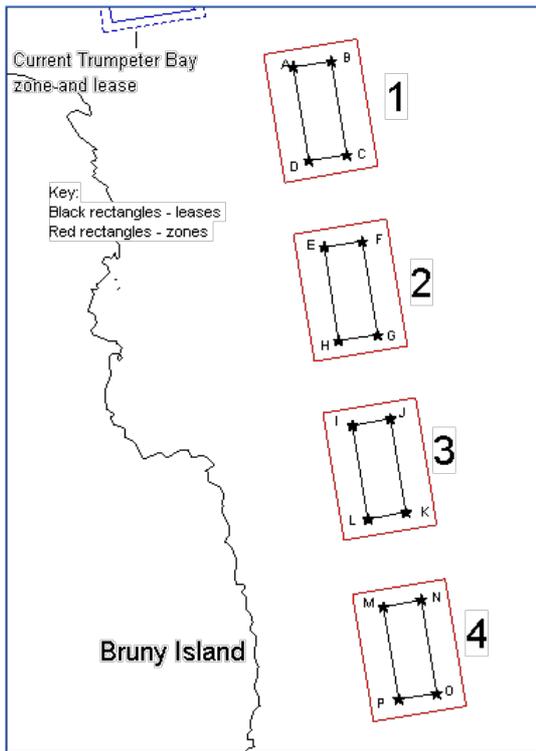


Figure 1. Map showing existing Huon Aquaculture lease in Trumpeter Bay and the locations of the four proposed leases. Map supplied by Huon Aquaculture.

| 1 | Easting | Northing | 2 | Easting | Northing | 3 | Easting | Northing | 4 | Easting | Northing |
|----------|---------|----------|---|---------|----------|---|---------|----------|---|---------|----------|
| a | 535637 | 5220781 | e | 535975 | 5218685 | i | 536302 | 5216612 | m | 536638 | 5214505 |
| b | 536086 | 5220852 | f | 536424 | 5218756 | j | 536751 | 5216683 | n | 537087 | 5214576 |
| c | 536258 | 5219766 | g | 536596 | 5217670 | k | 536923 | 5215597 | o | 537259 | 5213490 |
| d | 535809 | 5219695 | h | 536147 | 5217599 | l | 536474 | 5215526 | p | 536810 | 5213419 |
| centroid | 535948 | 5220274 | | 536286 | 5218178 | | 536613 | 5216105 | | 536949 | 5213998 |

Table 1. UTM coordinates for vertices and calculated centroids for four proposed leases, Trumpeter Bay. Coordinate data supplied by Huon Aquaculture.

Two data extraction approaches were used to identify the bird species that were potentially at risk from these lease alterations. The first involved a search of the BirdLife Tasmania database for any records from Trumpeter Bay. This resulted in a list of 41 species between 17 December 1994 and 16 January 2013 (Table 2).

| Scientific name | Common name | Scientific name | Common name |
|---------------------------------|---------------------------|---------------------------------------|----------------------------|
| <i>Acanthiza chrysorrhoa</i> | Yellow-rumped Thornbill | <i>Criococephalus novaehollandiae</i> | Silver Gull |
| <i>Acanthiza pusilla</i> | Brown Thornbill | <i>Larus pacificus</i> | Pacific Gull |
| <i>Alauda arvensis</i> | Skylark | <i>Lichenostomus flavicollis</i> | Yellow-throated Honeyeater |
| <i>Anthochaera paradoxa</i> | Yellow Wattlebird | <i>Malurus cyaneus</i> | Superb Fairy-wren |
| <i>Aquila audax</i> | Wedge-tailed Eagle | <i>Melithreptus affinis</i> | Black-headed Honeyeater |
| <i>Carduelis carduelis</i> | European Goldfinch | <i>Morus serrator</i> | Australasian Gannet |
| <i>Charadrius ruficapillus</i> | Red-capped Plover | <i>Pardalotus striatus</i> | Striated Pardalote |
| <i>Circus approximans</i> | Swamp Harrier | <i>Passer domesticus</i> | House Sparrow |
| <i>Coracina novaehollandiae</i> | Black-faced Cuckoo-Shrike | <i>Petroica multicolor</i> | Scarlet Robin |
| <i>Corvus tasmanicus</i> | Forest Raven | <i>Petroica phoenicea</i> | Flame Robin |
| <i>Cuculus pallidus</i> | Pallid Cuckoo | <i>Phalacrocorax carbo</i> | Great Cormorant |
| <i>Egretta novaehollandiae</i> | White-faced Heron | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant |
| <i>Epthianura albifrons</i> | White-fronted Chat | <i>Phylidonyris novaehollandiae</i> | New Holland Honeyeater |
| <i>Falco berigora</i> | Brown Falcon | <i>Phylidonyris pyrrhoptera</i> | Crescent Honeyeater |
| <i>Gymnorhina tibicen</i> | Australian Magpie | <i>Rhipidura fuliginosa</i> | Grey Fantail |
| <i>Haematopus fuliginosus</i> | Sooty Oystercatcher | <i>Sterna bergii</i> | Crested Tern |
| <i>Haematopus longirostris</i> | Pied Oystercatcher | <i>Sturnus vulgaris</i> | Common Starling |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | <i>Thalassarche cauta</i> | Shy Albatross |
| <i>Hirundo neoxena</i> | Welcome Swallow | <i>Vanellus miles</i> | Masked Lapwing |
| <i>Hirundo nigricans</i> | Tree Martin | <i>Zosterops lateralis</i> | Silvereye |
| <i>Larus dominicanus</i> | Kelp Gull | | |

Table 2. List of bird species recorded from Trumpeter Bay from BirdLife Tasmania database.

The second approach involved a search of the BirdLife Tasmania database for all records within a 5km radius of each lease centroid (Figure 1, Table 1). This resulted in a list of 25 species (Table 3); the locations of these records are shown in Figure 2. The majority of the records were of Short-tailed Shearwaters from Storm Bay (Table 5).

Species of elevated conservation status listed under the *Tasmanian Threatened Species Protection Act 1995* and/or the *Federal Environment Protection and Biodiversity Protection Act 1999* present in these species extractions (Tables 2 and 3) were identified for this risk assessment. In addition, Swift Parrots, a species known to be vulnerable to collisions with human structures have been included here.

| Lease | Scientific name | Common name |
|-------|--|------------------------------|
| TB1 | <i>Morus serrator</i> | Australasian Gannet |
| TB4 | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant |
| TB4 | <i>Coracina novaehollandiae</i> | Black-faced Cuckoo-Shrike |
| TB4 | <i>Melithreptus affinis</i> | Black-headed Honeyeater |
| TB4 | <i>Coturnix ypsilophora</i> | Brown Quail |
| TB4 | <i>Phaps chalcoptera</i> | Common Bronzewing |
| TB4 | <i>Sterna bergii</i> | Crested Tern |
| TB4 | <i>Melanodryas vittata</i> | Dusky Robin |
| TB4 | <i>Cacomantis flabelliformis</i> | Fan-tailed Cuckoo |
| TB4 | <i>Petroica phoenicea</i> | Flame Robin |
| TB4 | <i>Corvus tasmanicus</i> | Forest Raven |
| TB3 | <i>Phalacrocorax carbo</i> | Great Cormorant |
| TB3 | <i>Larus dominicanus</i> | Kelp Gull |
| TB4 | <i>Phylidonyris novaehollandiae</i> | New Holland Honeyeater |
| TB4 | <i>Larus pacificus</i> | Pacific Gull |
| TB4 | <i>Cuculus pallidus</i> | Pallid Cuckoo |
| TB4 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater |
| TB1 | <i>Chroicocephalus novaehollandiae</i> | Silver Gull |
| TB3 | <i>Haematopus fuliginosus</i> | Sooty Oystercatcher |
| TB4 | <i>Circus approximans</i> | Swamp Harrier |
| TB4 | <i>Hirundo nigricans</i> | Tree Martin |
| TB1 | <i>Aquila audax</i> | Wedge-tailed Eagle |
| TB4 | <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle |
| TB4 | <i>Epthianura albifrons</i> | White-fronted Chat |
| TB4 | <i>Calyptorhynchus funereus</i> | Yellow-tailed Black-Cockatoo |

Table 3. List of bird species recorded within 5km radii of each proposed lease centroid. The corresponding proposed leases are listed (TB1 – TB4).

| Scientific Name | Common name | Date | Count | Lat | Lon |
|-------------------------------|-------------------------|-----------|-------|----------|----------|
| <i>Aquila audax</i> | Wedge-tailed Eagle | 16-Jan-13 | 1 | -42.7813 | 147.5634 |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 25-Jan-97 | 1 | -43.1586 | 147.3936 |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 30-Jul-00 | | -43.1599 | 147.3899 |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 19-May-07 | 1 | -43.1585 | 147.3936 |
| <i>Thalassarche cauta</i> | Shy Albatross | 30-Jul-00 | 1 | -43.1599 | 147.3899 |

Table 4. Species listed under Tas TSPA 1995 and/or EPBC Act 1999 recorded from ‘Trumpeter Bay’ in BirdLife Tasmania database.

| Lease | Scientific Name | Common name | Date | Count | Lat | Lon | TSPA |
|-------|---------------------------------|-------------------------|-----------|-------|----------|----------|----------|
| TB1 | <i>Aquila audax</i> | Wedge-tailed Eagle | 6-May-00 | 1 | -43.2000 | 147.4199 | X |
| TB1 | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant | 4-Oct-91 | 1 | -43.1333 | 147.4500 | |
| TB1 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 4-Oct-91 | 1 | -43.1666 | 147.4666 | |
| TB1 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 23-Jan-96 | 20 | -43.2080 | 147.4250 | |
| TB1 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 24-Jan-00 | 1700 | -43.1658 | 147.4133 | |
| TB2 | <i>Aquila audax</i> | Wedge-tailed Eagle | 6-May-00 | 1 | -43.2000 | 147.4199 | X |
| TB2 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 4-Oct-91 | 1 | -43.1666 | 147.4666 | |
| TB2 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 23-Jan-96 | 25 | -43.2269 | 147.4319 | |
| TB2 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 24-Jan-00 | 2000 | -43.1725 | 147.4158 | |
| TB3 | <i>Aquila audax</i> | Wedge-tailed Eagle | 6-May-00 | 1 | -43.2000 | 147.4199 | X |
| TB3 | <i>Aquila audax</i> | Wedge-tailed Eagle | 31-Mar-06 | 1 | -43.2400 | 147.4199 | X |
| TB3 | <i>Phalacrocorax carbo</i> | Great Cormorant | 16-Mar-08 | 1 | -43.1800 | 147.4800 | |
| TB3 | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant | 16-Mar-08 | 1 | -43.1800 | 147.4800 | |
| TB3 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 4-Oct-91 | 1 | -43.1666 | 147.4666 | |
| TB3 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 23-Jan-96 | 20 | -43.2480 | 147.4370 | |
| TB3 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 24-Jan-00 | 1700 | -43.1866 | 147.4199 | |
| TB4 | <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 12-Oct-96 | 1 | -43.2530 | 147.4287 | X |
| TB4 | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant | 25-Jan-97 | 200 | -43.2530 | 147.4287 | |
| TB4 | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant | 6-Jan-01 | 1 | -43.2500 | 147.4300 | |
| TB4 | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant | 31-Mar-06 | 1 | -43.2536 | 147.4256 | |
| TB4 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 23-Jan-96 | 15 | -43.2680 | 147.4430 | |
| TB4 | <i>Ardenna tenuirostris</i> | Short-tailed Shearwater | 24-Jan-00 | 1200 | -43.2050 | 147.4250 | |

Table 5. Species listed under the Tasmanian TSPA 1995 and/or the Federal EPBC Act 1999 recorded within 5km radii of proposed lease centroids (Table 1).

1. Potential impacts on bird species

The potential impacts on bird species arising from the proposed lease alteration comprise:

- entanglement - marine farming equipment such as predator nets, bird netting and mooring lines have the potential to entangle birds resulting in injury or death,
- habitat loss - the deployment of marine farming equipment within a lease area may degrade suitable habitat for some marine species. Fish pens restricting access (pelagic species)
- behavioural change - the presence of marine farms may cause some species to alter their behaviour, particularly foraging behaviour by seabirds and eagles,
- alteration of breeding behaviour – the presence and intensity of marine farming activities may interrupt breeding and reduce breeding success from disturbance, and
- other effects - noise, lighting, wastes and vessel movements all have the potential to impact on threatened species.

The species included below have been selected on the basis that (a) they have been recorded at Trumpeter Bay or (b) they have been recorded within 5 km radii of the centroids, based on the BirdLife Tasmania database. These are:

- White-bellied Sea-eagle
- Wedge-tailed Eagle
- Shy Albatross
- Swift Parrot

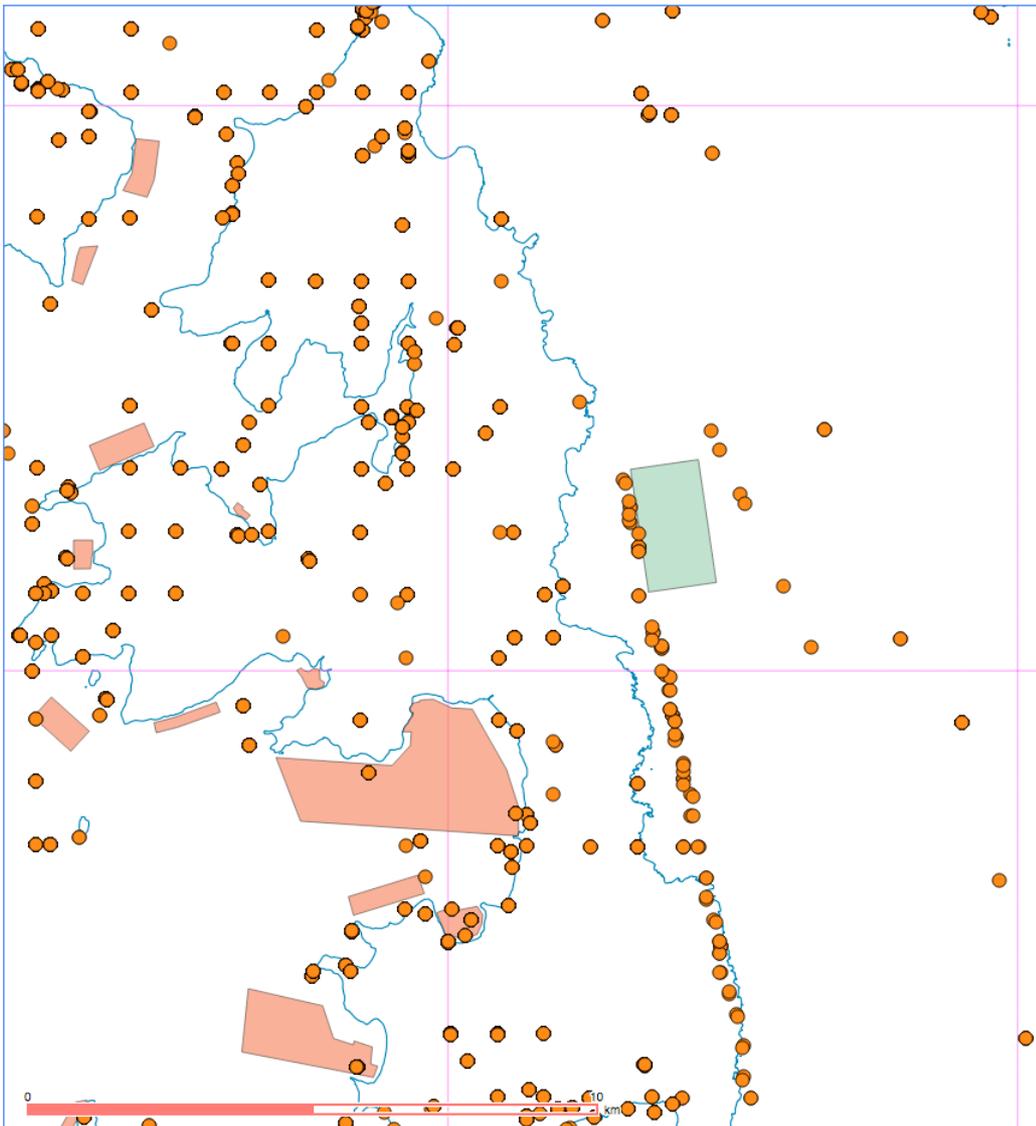


Figure 2. Map showing the locations of bird records from BirdLife Tasmania database. The existing Trumpeter Bay lease is shown as the green polygon in the centre of the map. The 10km UTM map grid is shown and the scale bar is 10km.

a. White-bellied Sea-eagle *Haliaeetus leucogaster*

The White-bellied Sea-Eagle occurs in Tasmania as a single population containing fewer than 1000 individuals and typically nests within 5km of the coast, estuaries or large inland lakes. Large estuaries and convoluted coastlines are favoured sites for both nesting and foraging as these provide a longer interface between land and water. This species is commonly observed within marine coastal waters of southeast Tasmania, and nests for this species have been recorded in close proximity to Trumpeter Bay (Figure 3).

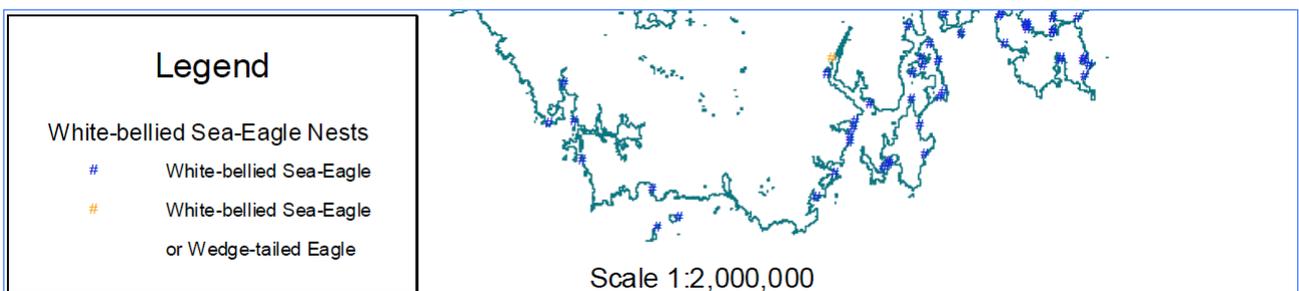


Figure 3. Map of White-bellied Sea-eagle nests (extract of map in Threatened Species Section 2006, *Threatened Tasmanian Eagles Recovery Plan 2006-2010*).

Key potential threats to the species from activities associated with the proposed alteration may include:

- nest disturbance,
- marine debris,
- modification of foraging behaviour, and
- reduction in habitat quality and quantity.

Nest Disturbance

Disturbance to nests can impact on White-bellied Sea Eagles. The Recovery Plan includes buffers of 500m and 1000m line of sight to protect nests from disturbance arising from human activities during the breeding season. Nesting sites have been recorded close to Trumpeter Bay (Figure 3).

Marine Debris

White-bellied Sea-eagles may potentially be affected by marine farming-derived debris located within the water column or on shorelines around Storm Bay. White-bellied Sea-eagles may become entangled in marine debris resulting in injury or death. It is possible that the proposed leases in Trumpeter Bay may result in an increase in marine debris in surrounding waters and along the foreshore. However, the potential scale of any increase in marine debris is not expected to pose any significant risks to White-bellied Sea-eagle populations within Trumpeter Bay and surrounding areas.

Foraging habitat

White-bellied Sea-eagles are attracted to fish farms and will extend their foraging range to include fish farms, although they rarely exploit fish directly due to the large size of the fish and the aerial netting deployed on all sea cages. The presence of leases within potential foraging habitat is not expected to significantly impact on the foraging behaviour or capacity of White-bellied Sea-eagles to source an adequate supply of marine prey.

Depletion of habitat

Marine farms pose a potentially threat to White-bellied Sea-eagles through the reduction of available habitat and a reduction in habitat quality. It is unlikely that the proposed alteration in Trumpeter Bay would result in a significant loss of habitat for the White-bellied Sea-eagles present close to Trumpeter Bay.

b. Wedge-tailed Eagle *Aquila audax*

The Tasmanian Wedge-tailed Eagle is an endemic subspecies is listed as Endangered under the TSPA and the EPBC Act. The Wedge-tailed Eagle occurs as a single population in Tasmania of fewer than 1000 individuals. Wedge-tailed Eagles are landscape hunters with a wide distribution throughout Tasmania. Nesting sites for this species have been recorded within 5km of Trumpeter Bay (Figure 4).

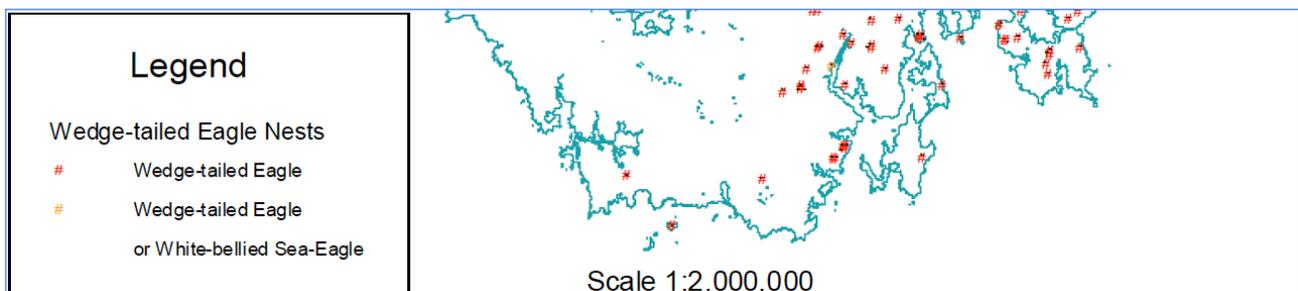


Figure 4. Map of Wedge-tailed Eagle nests (extracted from map in Threatened Species Section 2006, *Threatened Tasmanian Eagles Recovery Plan 2006-2010*).

Key potential threats to the species from activities associated with the proposed alteration may include:

- nest disturbance,
- marine debris,
- modification of foraging behaviour, and
- depletion of habitat.

Nest Disturbance

Nesting sites for this species have been recorded within 5 km of Trumpeter Bay (Figure x). High and medium levels of disturbance during nesting have been known to adversely affect the success of breeding birds. The proposed lease alteration is unlikely to adversely affect the breeding success of Wedge-tailed Eagles within Trumpeter Bay and surrounding areas.

Marine Debris

Wedge-tailed Eagles may potentially be affected by marine farming-derived debris located on the shorelines around Trumpeter Bay. Wedge-tailed Eagles may become entangled in marine debris resulting in injury or death. It is possible that the proposed leases in Trumpeter Bay may result in an increase in marine debris in surrounding waters and along the foreshore. However, the potential scale of any increase in marine debris is not expected to pose any significant risks to Wedge-tailed Eagle populations within Trumpeter Bay and surrounding areas.

Foraging habitat

Wedge-tailed Eagles may be attracted to fish farms, however they are generally known to favour hunting in open areas and have been recorded hunting over most terrestrial Tasmanian habitat types. The presence of leases within potential foraging habitat is not expected to significantly impact on the foraging behaviour or capacity of Wedge-tailed Eagles to forage and obtain adequate levels of prey.

Depletion of habitat

Marine farms pose a potential threat to Wedge-tailed Eagles through a reduction of available habitat and a reduction in habitat quality. It is unlikely that the proposed alteration in Trumpeter Bay would result in a significant loss of foraging and nesting habitats for Wedge-tailed Eagles present close to Trumpeter Bay.

c. Shy Albatross *Thalassarche cauta*

The Shy Albatross is the only albatross species endemic to Australia and Tasmania, with colonies present on three islands: Albatross Island off Tasmania's north west, and the Mewstone and Pedra Branca off the Tasmanian south coast. The Shy Albatross is listed as Vulnerable under the EPBC Act (and as a Marine and a Migratory Species) and the TSP Act.

The total breeding population is currently around 14 000 birds. Adults remain close to their breeding colonies year-round, whereas juvenile birds – predominantly from the Mewstone have been recorded foraging at sites as distant as southern Africa. Key potential threats to the species from activities associated with the proposed alteration may include:

- collisions with anthropogenic structures, and
- entanglement in marine farming equipment, and ingestion of marine debris.

Collisions with anthropogenic structures

The foraging range of Shy Albatrosses is extensive, and it is likely that Trumpeter Bay would be included within this foraging range. Shy Albatrosses feed in waters over the continental shelf, including bays and readily follows fishing vessels. Marine farming activities may attract Shy Albatrosses during foraging and feeding activities in Storm Bay; the most likely scenario is that albatrosses would be attracted to the area to scavenge food, and so there is potential for

interaction between the albatrosses and fish farms. It is considered unlikely that incidental mortality events would occur within the waters of the proposed alteration, but the likelihood would increase if large vessels (with artificial deck lighting) were attending the leases during night-time, hours of low light or during foggy/misty conditions when illumination can result in disorientation of the birds.

Entanglement in fishing equipment, and ingestion of marine debris

Shy Albatrosses may potentially be affected by marine farming-derived debris around Trumpeter Bay, or may become entangled resulting in injury or death. An additional cause of incidental mortality occurs through the ingestion of fishing equipment and marine debris. The incidental mortality of Shy Albatrosses from entanglement and ingestion of fishing equipment has been identified as a key threat to the species. The proposed lease alteration that entanglement and ingestion of marine farming equipment could potentially be considered as an additional threat to this species.

d. Swift Parrot *Lathamus discolor*

The swift parrot is a small fast-flying parrot that occurs in eucalypt forests in southeastern Australia and is listed as Endangered on the EPBC Act and TSP Act. The swift parrot breeds only in Tasmania and migrates to mainland Australia in autumn. The breeding season of the swift parrot coincides with the flowering of blue gum and the nectar of this eucalypt is the main source of food for the parrots during breeding. The breeding distribution varies inter-annually, reflecting food availability and quality of flowering gums. The swift parrot suffers from high mortality during the breeding season arising from collisions with man-made structures such as windows, wire-mesh fences and vehicles. There are presently no records of Swift Parrot from Trumpeter Bay but the species has been included here as a precaution.

Key potential threats to the species from activities associated with the proposed alteration may include:

- collision with fish-farm structures.

Collisions with fish farm structures

There is the possibility of Swift Parrots colliding with fish farm structures. There are presently no data to assess the likelihood of collisions.

2. Mitigation Measures

Specific measures and management controls to mitigate the risk of impacts on birds are listed below.

a. White-bellied Sea-eagle

Marine Debris

Marine debris collections are currently undertaken during the winter months to avoid disturbing nesting birds.

Foraging

No mitigation measures are required for the proposed alteration.

Nest disturbance

No mitigation measures are required for the proposed alteration.

Reduction in habitat quality and quantity

No mitigation measures are required for the proposed alteration.

b. Wedge-tailed Eagle

Marine Debris

Marine debris collections are currently undertaken during the winter months to avoid disturbing nesting birds.

Nest disturbance

No mitigation measures are required for the proposed alteration.

Modification of foraging behaviour

No mitigation measures are required for the proposed alteration.

Reduction in habitat quality and quantity

No mitigation measures are required for the proposed alteration.

c. Shy Albatross

Collisions with man-made structures

Data surrounding the circumstances of any collision events must be collated to assess if common elements are present, and if so, how they are to be addressed to address or remove the threat to albatrosses.

Entanglement and ingestion of marine farming equipment (marine debris)

The main threat to the Shy Albatross would be through entanglement and/or ingestion of marine-farm derived debris in the marine environment. Marine debris collections are currently undertaken during the winter months reduce the volume of material present in the marine and coastal environment.

d. Swift Parrot

Collisions with man-made structures

Data surrounding the circumstances of any collision events must be collated to assess if common elements are present, and if so, how they are to be addressed to address or remove the threat to Swift Parrots.

Bird species at potential risk, proposed Huon Aquaculture lease alterations Trumpeter Bay, 2017

Supplement to Report to Huon Aquaculture, July 2014 January 2017, BirdLife Tasmania

Huon Aquaculture approached BirdLife Tasmania in November 2016 to advise on bird species potentially at risk from an alternative proposed lease site in Trumpeter Bay, Bruny Island. The proposed lease site is to the north of the current lease, as shown in Figure 1. The UTM grid coordinates for current meter were provided by Huon Aquaculture (0534628 5226410, GDA 94, zone 55) and formed the basis of this *Supplement*.

Two data extraction approaches were used to identify the bird species that were potentially at risk from the proposed lease alteration. The first involved a search of the BirdLife Tasmania database for any records from Trumpeter Bay itself. This resulted in a list of 41 species between 17 December 1994 and 25 February 2015 (Table 1). No new species were added to the list of birds previously reported from Trumpeter Bay.

The second approach involved a search of the BirdLife Tasmania database for all records within a 5km and 10km radii of the coordinates provided of the current meter (0534628 5226410). This resulted in a list of 127 species (Appendix 1); the locations of these records are shown in Figure 2. The majority of the records were of Short-tailed Shearwaters from Storm Bay. The significant increase in the number of species present (Appendix 1) compared to the original risk assessment is due to the more northerly extent of the 10km radius capturing migratory shorebird and woodland bird records from the South Arm Neck and north Bruny Island, respectively (Figure 2).

Species of elevated conservation status listed under the *Tasmanian Threatened Species Protection Act 1995* and/or the *Federal Environment Protection and Biodiversity Protection Act 1999* present in these species extractions (Tables 1 and 2) were identified for this risk assessment. In addition, Swift Parrot, a species known to be vulnerable to collisions with human structures, and Shy Albatross, which is a Tasmanian breeding species, have also been included.

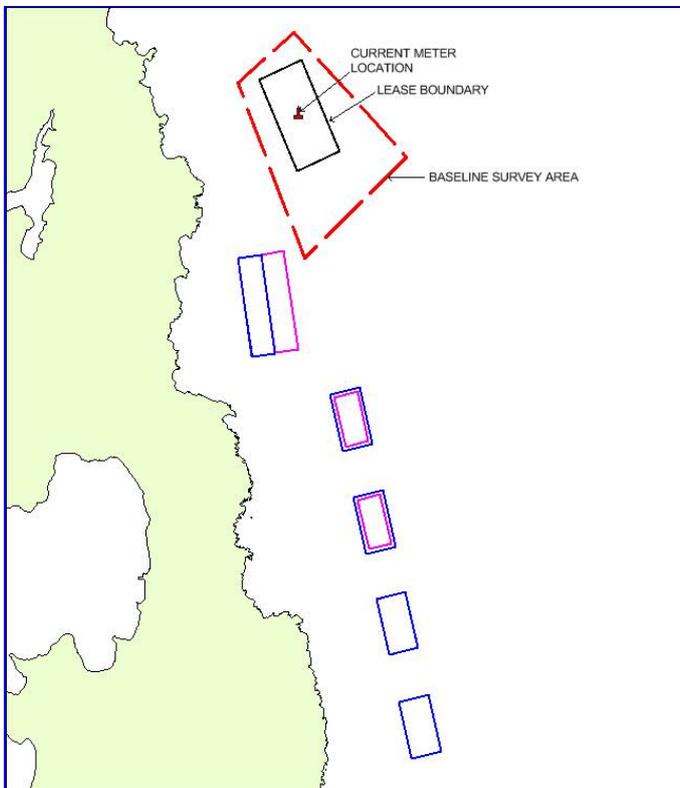


Figure 1. Map showing existing Huon Aquaculture lease in Trumpeter Bay, four previously considered lease sites to the south, and the location of the proposed lease to the north of Trumpeter Bay and just east of One Tree Point (red polygon). Map supplied by Huon Aquaculture.

| Scientific name | Common name | Scientific name | Common name |
|---------------------------------|---------------------------|---------------------------------------|----------------------------|
| <i>Acanthiza chrysorrhoa</i> | Yellow-rumped Thornbill | <i>Criococephalus novaehollandiae</i> | Silver Gull |
| <i>Acanthiza pusilla</i> | Brown Thornbill | <i>Larus pacificus</i> | Pacific Gull |
| <i>Alauda arvensis</i> | Skylark | <i>Lichenostomus flavicollis</i> | Yellow-throated Honeyeater |
| <i>Anthochaera paradoxa</i> | Yellow Wattlebird | <i>Malurus cyaneus</i> | Superb Fairy-wren |
| <i>Aquila audax</i> | Wedge-tailed Eagle | <i>Melithreptus affinis</i> | Black-headed Honeyeater |
| <i>Carduelis carduelis</i> | European Goldfinch | <i>Morus serrator</i> | Australasian Gannet |
| <i>Charadrius ruficapillus</i> | Red-capped Plover | <i>Pardalotus striatus</i> | Striated Pardalote |
| <i>Circus approximans</i> | Swamp Harrier | <i>Passer domesticus</i> | House Sparrow |
| <i>Coracina novaehollandiae</i> | Black-faced Cuckoo-Shrike | <i>Petroica multicolor</i> | Scarlet Robin |
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| <i>Cuculus pallidus</i> | Pallid Cuckoo | <i>Phalacrocorax carbo</i> | Great Cormorant |
| <i>Egretta novaehollandiae</i> | White-faced Heron | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant |
| <i>Epthianura albifrons</i> | White-fronted Chat | <i>Phylidonyris novaehollandiae</i> | New Holland Honeyeater |
| <i>Falco berigora</i> | Brown Falcon | <i>Phylidonyris pyrrhoptera</i> | Crescent Honeyeater |
| <i>Gymnorhina tibicen</i> | Australian Magpie | <i>Rhipidura fuliginosa</i> | Grey Fantail |
| <i>Haematopus fuliginosus</i> | Sooty Oystercatcher | <i>Sterna bergii</i> | Crested Tern |
| <i>Haematopus longirostris</i> | Pied Oystercatcher | <i>Sturnus vulgaris</i> | Common Starling |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | <i>Thalassarche cauta</i> | Shy Albatross |
| <i>Hirundo neoxena</i> | Welcome Swallow | <i>Vanellus miles</i> | Masked Lapwing |
| <i>Hirundo nigricans</i> | Tree Martin | <i>Zosterops lateralis</i> | Silvereye |
| <i>Larus dominicanus</i> | Kelp Gull | | |

Table 1. List of bird species recorded from Trumpeter Bay in the BirdLife Tasmania database.

| Scientific Name | Common name | Date | Count | Lat | Lon |
|-------------------------------|-------------------------|-----------|-------|----------|----------|
| <i>Aquila audax</i> | Wedge-tailed Eagle | 16-Jan-13 | 1 | -42.7813 | 147.5634 |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 25-Jan-97 | 1 | -43.1586 | 147.3936 |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 30-Jul-00 | | -43.1599 | 147.3899 |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 19-May-07 | 1 | -43.1585 | 147.3936 |
| <i>Thalassarche cauta</i> | Shy Albatross | 30-Jul-00 | 1 | -43.1599 | 147.3899 |

Table 2. Species listed under Tas TSPA 1995 and/or EPBC Act 1999 recorded from 'Trumpeter Bay' in BirdLife Tasmania database.

| Scientific name | Common name | Date | Lat | Lon | TSPA |
|------------------------------------|-------------------------|-----------|----------|----------|----------|
| <i>Aquila audax</i> | Wedge-tailed Eagle | 4-Mar-06 | -43.0800 | 147.4100 | X |
| <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | 4-Mar-06 | -43.0800 | 147.4100 | X |
| <i>Pardalotus quadragintus</i> | Forty-spotted Pardalote | 4-Mar-06 | -43.0800 | 147.4100 | X |
| <i>Thalassarche chlororhynchos</i> | Yellow-nosed Albatross | 17-Feb-96 | -43.0830 | 147.4120 | |
| <i>Thalassarche chlororhynchos</i> | Yellow-nosed Albatross | 17-Feb-96 | -43.0830 | 147.4120 | |

Table 3. Species with elevated conservation status listed under the Tasmanian TSPA 1995 and/or the Federal EPBC Act 1999 recorded within 5km of the new current meter mooring.

Potential impacts on bird species

The potential impacts on bird species arising from the proposed lease alteration comprise:

- entanglement - marine farming equipment such as predator nets, bird netting and mooring lines have the potential to entangle birds resulting in injury or death,
- habitat loss - the deployment of marine farming equipment within a lease area may degrade suitable habitat for some marine species. Fish pens restricting access (pelagic species)
- behavioural change - the presence of marine farms may cause some species to alter their behaviour, particularly foraging behaviour by seabirds and eagles,
- alteration of breeding behaviour – the presence and intensity of marine farming activities may interrupt breeding and reduce breeding success from disturbance, and
- other effects - noise, lighting, wastes and vessel movements all have the potential to impact on threatened species.

The species included below have been selected on the basis that (a) they have been recorded at Trumpeter Bay or (b) they have been observed within 5 km radius of the current meter, based on records in the BirdLife Tasmania database. These are:

- White-bellied Sea-eagle
- Wedge-tailed Eagle
- Shy Albatross
- Yellow-nosed Albatross
- Swift Parrot

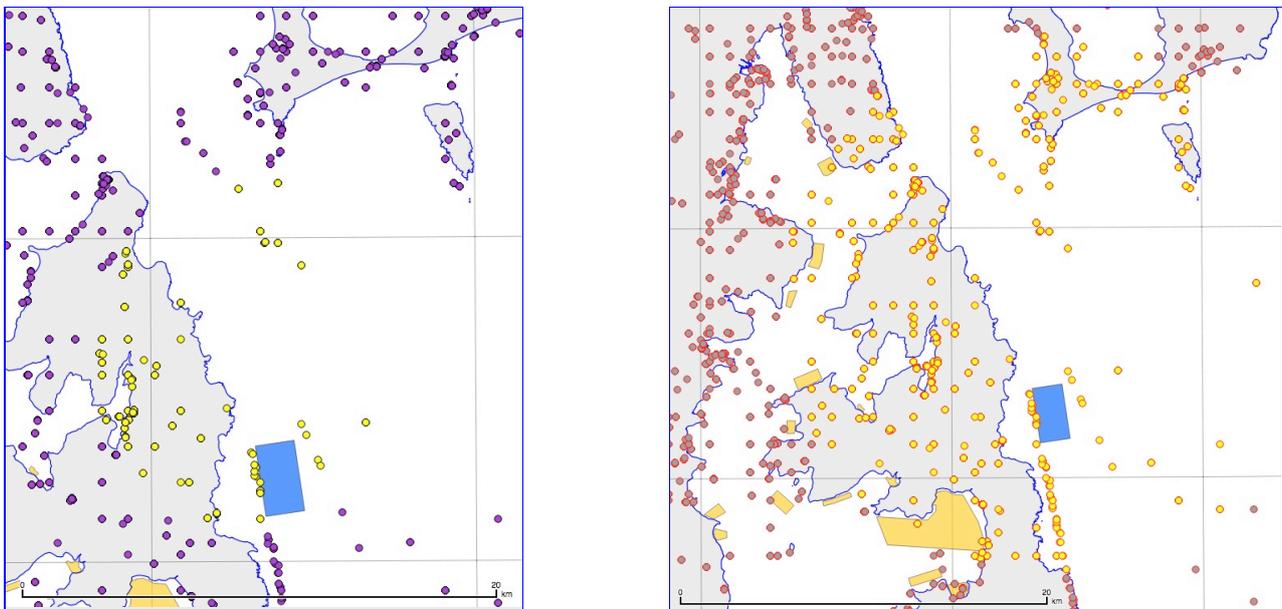


Figure 2. Map showing the locations of bird records from BirdLife Tasmania database. All records within 5km (left) and 10km (right) of the new current meter coordinates are highlighted. The existing Trumpeter Bay lease is shown as the blue polygon in the centre of the map and marine leases in the d'Entrecasteaux Channel are shown in yellow. The 10km UTM map grid is shown and the scale bar is 20km.

a. White-bellied Sea-eagle *Haliaeetus leucogaster*

The White-bellied Sea-Eagle occurs in Tasmania as a single population containing fewer than 1000 individuals and typically nests within 5km of the coast, estuaries or large inland lakes. Large estuaries and convoluted coastlines are favoured sites for both nesting and foraging as these provide a longer interface between land and water. This species is commonly observed within marine coastal waters of southeast Tasmania, and nests for this species have been recorded in close proximity to Trumpeter Bay (Figure 3).

Key potential threats to the species from activities associated with the proposed alteration may include:

- nest disturbance,
- marine debris,
- modification of foraging behaviour, and
- reduction in habitat quality and quantity.

Nest Disturbance

Disturbance to nests can impact on White-bellied Sea Eagles. The Recovery Plan includes buffers of 500m and 1000m line of sight to protect nests from disturbance arising from human activities during the breeding season. Nesting sites have been recorded close to Trumpeter Bay (Figure 3).

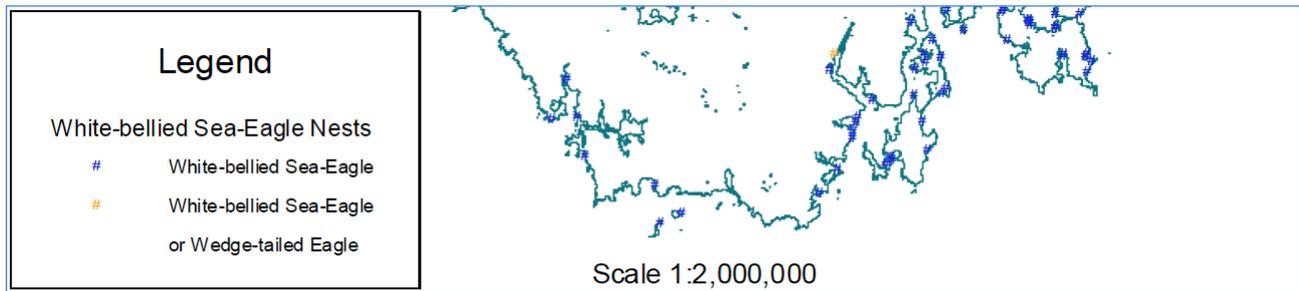


Figure 3. Map of White-bellied Sea-eagle nests (extract of map in Threatened Species Section 2006, *Threatened Tasmanian Eagles Recovery Plan 2006-2010*).

Marine Debris

White-bellied Sea-eagles may potentially be affected by marine farming-derived debris located within the water column or on shorelines around Storm Bay. White-bellied Sea-eagles may become entangled in marine debris resulting in injury or death. It is possible that the proposed leases in Trumpeter Bay may result in an increase in marine debris in surrounding waters and along the foreshore. However, the potential scale of any increase in marine debris is not expected to pose any significant risks to White-bellied Sea-eagle populations within Trumpeter Bay and surrounding areas.

Foraging habitat

White-bellied Sea-eagles are attracted to fish farms and will extend their foraging range to include fish farms, although they rarely exploit fish directly due to the large size of the fish and the aerial netting deployed on all sea cages. The presence of leases within potential foraging habitat is not expected to significantly impact on the foraging behaviour or capacity of White-bellied Sea-eagles to source an adequate supply of marine prey.

Depletion of habitat

Marine farms pose a potentially threat to White-bellied Sea-eagles through the reduction of available habitat and a reduction in habitat quality. It is unlikely that the proposed alteration in Trumpeter Bay would result in a significant loss of habitat for the White-bellied Sea-eagles present close to Trumpeter Bay.

b. Wedge-tailed Eagle *Aquila audax*

The Tasmanian Wedge-tailed Eagle is an endemic subspecies is listed as Endangered under the TSPA and the EPBC Act. The Wedge-tailed Eagle occurs as a single population in Tasmania of fewer than 1000 individuals. Wedge-tailed Eagles are landscape hunters with a wide distribution throughout Tasmania. Nesting sites for this species have been recorded within 5km of Trumpeter Bay (Figure 4).

Key potential threats to the species from activities associated with the proposed alteration may include:

- nest disturbance,
- marine debris,
- modification of foraging behaviour, and
- depletion of habitat.

Nest Disturbance

Nesting sites for this species have been recorded within 5 km of Trumpeter Bay (Figure 4). High and medium levels of disturbance during nesting have been known to adversely affect the success of breeding birds. The proposed lease alteration is unlikely to adversely affect the breeding success of Wedge-tailed Eagles within Trumpeter Bay and surrounding areas.

Marine Debris

Wedge-tailed Eagles may potentially be affected by marine farming-derived debris located on the shorelines around Trumpeter Bay. Wedge-tailed Eagles may become entangled in marine debris resulting in

injury or death. It is possible that the proposed leases in Trumpeter Bay may result in an increase in marine debris in surrounding waters and along the foreshore. However, the potential scale of any increase in marine debris is not expected to pose any significant risks to Wedge-tailed Eagle populations within Trumpeter Bay and surrounding areas.

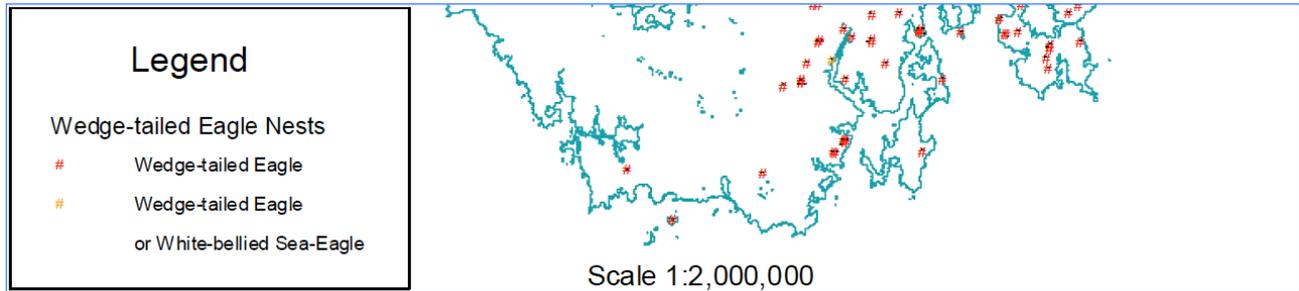


Figure 4. Map of Wedge-tailed Eagle nests (extracted from map in Threatened Species Section 2006, *Threatened Tasmanian Eagles Recovery Plan 2006-2010*).

Foraging habitat

Wedge-tailed Eagles may be attracted to fish farms, however they are generally known to favour hunting in open areas and have been recorded hunting over most terrestrial Tasmanian habitat types. The presence of leases within potential foraging habitat is not expected to significantly impact on the foraging behaviour or capacity of Wedge-tailed Eagles to forage and obtain adequate levels of prey.

Depletion of habitat

Marine farms pose a potential threat to Wedge-tailed Eagles through a reduction of available habitat and a reduction in habitat quality. It is unlikely that the proposed alteration in Trumpeter Bay would result in a significant loss of foraging and nesting habitats for Wedge-tailed Eagles present close to Trumpeter Bay.

c. Shy Albatross *Thalassarche cauta*

The Shy Albatross is the only albatross species endemic to Australia and Tasmania, with colonies present on three islands: Albatross Island off Tasmania's north west, and the Mewstone and Pedra Branca off the Tasmanian south coast. The Shy Albatross is listed as Vulnerable under the EPBC Act (and as a Marine and a Migratory Species) and the TSP Act.

The total breeding population is currently around 14 000 birds. Adults remain close to breeding colonies year-round, whereas juvenile birds – predominantly from the Mewstone have been recorded foraging at sites as distant as southern Africa. Key potential threats to the species from activities associated with the proposed alteration may include:

- collisions with anthropogenic structures,
- behavioural change - the presence of marine farms may cause individuals to alter their behaviour, and
- entanglement in marine farming equipment, and ingestion of marine debris.

Collisions with anthropogenic structures, behavioural change(s)

The foraging range of Shy Albatrosses is extensive, and it is likely that Trumpeter Bay would be included within this foraging range. Shy Albatrosses feed in waters over the continental shelf, including bays and readily follows fishing vessels.

Marine farming activities may attract Shy Albatrosses during foraging and feeding activities in Storm Bay; the most likely scenario is that albatrosses would be attracted to the area to scavenge food, and so there is potential for interaction between the albatrosses and fish farms.

It is considered unlikely that incidental mortality events would occur within the waters of the proposed alteration, but the likelihood would increase if large vessels (with artificial deck lighting) were attending the leases during night-time, hours of low light or during foggy/misty conditions when illumination can result in disorientation of the birds.

Entanglement in fishing equipment, and ingestion of marine debris

Shy Albatrosses may potentially be affected by marine farming-derived debris around Trumpeter Bay, or

may become entangled resulting in injury or death. An additional cause of incidental mortality occurs through the ingestion of fishing equipment and marine debris. The incidental mortality of Shy Albatrosses from entanglement and ingestion of fishing equipment has been identified as a key threat to the species. The proposed lease alteration that entanglement and ingestion of marine farming equipment could potentially be considered as an additional threat to this species.

d. Yellow-nosed Albatross *Thalassarche carteri*

The Indian Yellow-nosed Albatross breeds on islands and island groups in the Indian Ocean, and travel widely, reaching New Zealand and the western Pacific Ocean. The individuals range from temperate to sub-antarctic waters, typically between 30° and 50°S. The current population is fewer than 65,000 birds and the species is listed as globally Endangered under IUCN criteria, and Vulnerable (and Marine and Migratory under the EPBC Act.

Key potential threats to the species from activities associated with the proposed alteration may include:

- collisions with anthropogenic structures,
- behavioural change - the presence of marine farms may cause individuals to alter their behaviour, and
- entanglement in marine farming equipment, and ingestion of marine debris.

Collisions with anthropogenic structures, behavioural change(s)

The oceanic range of Yellow-nosed Albatross is extensive, and it is likely that Trumpeter Bay would be included within this foraging range, given records from Storm Bay. Marine farming activities may attract Yellow-nosed Albatrosses during foraging and feeding activities in Storm Bay; the most likely scenario is that albatrosses would be attracted to the area to scavenge food, and so there is potential for interaction between the albatrosses and fish farms.

It is considered unlikely that incidental mortality events would occur within the waters of the proposed alteration, but the likelihood would increase if large vessels (with artificial deck lighting) were attending the leases during night-time, hours of low light or during foggy/misty conditions when illumination can result in disorientation of the birds.

Entanglement in fishing equipment, and ingestion of marine debris

Yellow-nosed Albatrosses may potentially be affected by marine farming-derived debris around Trumpeter Bay, or may become entangled resulting in injury or death. An additional cause of incidental mortality occurs through the ingestion of fishing equipment and marine debris. The proposed lease alteration that entanglement and ingestion of marine farming equipment could potentially be considered as an additional threat to this species.

e. Swift Parrot *Lathamus discolor*

The swift parrot is a small fast-flying parrot that occurs in eucalypt forests in southeastern Australia and is listed as Endangered on the EPBC Act and TSP Act. The swift parrot breeds only in Tasmania and migrates to mainland Australia in autumn. The breeding season of the swift parrot coincides with the flowering of blue gum and the nectar of this eucalypt is the main source of food for the parrots during breeding. The breeding distribution varies inter-annually, reflecting food availability and quality of flowering gums. The swift parrot suffers from high mortality during the breeding season arising from collisions with man-made structures such as windows, wire-mesh fences and vehicles. There are presently no records of Swift Parrot from Trumpeter Bay but the species has been included here as a precaution.

Key potential threats to the species from activities associated with the proposed alteration may include:

- collision with fish-farm structures.

Collisions with fish farm structures

There is the possibility of Swift Parrots colliding with fish farm structures. There are presently no data to assess the likelihood of collisions.

Mitigation Measures

Specific measures and management controls to mitigate the risk of impacts on birds are listed below.

White-bellied Sea-eagle

Marine Debris

Marine debris collections are currently undertaken during the winter months to avoid disturbing nesting birds.

Foraging

No mitigation measures are required for the proposed alteration.

Nest disturbance

No mitigation measures are required for the proposed alteration.

Reduction in habitat quality and quantity

No mitigation measures are required for the proposed alteration.

Wedge-tailed Eagle

Marine Debris

Marine debris collections are currently undertaken during the winter months to avoid disturbing nesting birds.

Nest disturbance

No mitigation measures are required for the proposed alteration.

Modification of foraging behaviour

No mitigation measures are required for the proposed alteration.

Reduction in habitat quality and quantity

No mitigation measures are required for the proposed alteration.

Shy and Yellow-nosed Albatrosses

Collisions with man-made structures

Data surrounding the circumstances of any collision events must be collated to assess if common elements are present, and if so, how they are to be addressed to address or remove the threat to albatrosses.

Entanglement and ingestion of marine farming equipment (marine debris)

The main threat to the Shy Albatross would be through entanglement and/or ingestion of marine-farm derived debris in the marine environment. Marine debris collections are currently undertaken during the winter months reduce the volume of material present in the marine and coastal environment.

** Note that the adoption of the mitigation measures for these two species of albatross would also represent mitigation for all albatrosses, giant petrels and petrels that are present within Storm Bay at different times of the year.*

Swift Parrot

Collisions with man-made structures

Data surrounding the circumstances of any collision events must be collated to assess if common elements are present, and if so, how they are to be addressed to address or remove the threat to Swift Parrots.

| Scientific name | Common name | Scientific name | Common name | Scientific name | Common name |
|-------------------------------------|------------------------------|-----------------------------------|----------------------------|-------------------------------------|-------------------------|
| <i>Acanthiza chrysorrhoa</i> | Yellow-rumped Thornbill | <i>Egretta novaehollandiae</i> | White-faced Heron | <i>Pelecanoides urinatrix</i> | Common Diving-Petrel |
| <i>Acanthiza pusilla</i> | Brown Thornbill | <i>Eiseyornis melanops</i> | Black-fronted Dotterel | <i>Pelecanus conspicillatus</i> | Australian Pelican |
| <i>Acanthorhynchus tenuirostris</i> | Eastern Spinebill | <i>Epthianura albifrons</i> | White-fronted Chat | <i>Petroica multicolor</i> | Scarlet Robin |
| <i>Accipiter fasciatus</i> | Brown Goshawk | <i>Eudyptula minor</i> | Little Penguin | <i>Petroica phoenicea</i> | Flame Robin |
| <i>Alauda arvensis</i> | Skylark | <i>Falco berigora</i> | Brown Falcon | <i>Phalacrocorax carbo</i> | Great Cormorant |
| <i>Anas castanea</i> | Chestnut Teal | <i>Falco peregrinus</i> | Peregrine Falcon | <i>Phalacrocorax fuscescens</i> | Black-faced Cormorant |
| <i>Anas gracilis</i> | Grey Teal | <i>Fulica atra</i> | Eurasian Coot | <i>Phalacrocorax melanoleucos</i> | Little Pied Cormorant |
| <i>Anas rhynchos</i> | Australasian Shoveler | <i>Gallinula mortierii</i> | Tasmanian Native-hen | <i>Phaps chalcoptera</i> | Common Bronzewing |
| <i>Anas superciliosa</i> | Pacific Black Duck | <i>Glossopsitta concinna</i> | Musk Lorikeet | <i>Phaps elegans</i> | Brush Bronzewing |
| <i>Anthochaera chrysoptera</i> | Little Wattlebird | <i>Gymnorhina tibicen</i> | Australian Magpie | <i>Phylidonyris novaehollandiae</i> | New Holland Honeyeater |
| <i>Anthochaera paradoxa</i> | Yellow Wattlebird | <i>Haematopus fuliginosus</i> | Sooty Oystercatcher | <i>Phylidonyris pyrrhoptera</i> | Crescent Honeyeater |
| <i>Anthus novaeseelandiae</i> | Richard's Pipit | <i>Haematopus longirostris</i> | Pied Oystercatcher | <i>Platyercus caledonicus</i> | Green Rosella |
| <i>Aptenodytes patagonicus</i> | King penguin | <i>Haliaeetus leucogaster</i> | White-bellied Sea-Eagle | <i>Platyercus eximius</i> | Eastern Rosella |
| <i>Aquila audax</i> | Wedge-tailed Eagle | <i>Heteroscelus brevipes</i> | Grey-tailed Tattler | <i>Pluvialis fulva</i> | Pacific Golden Plover |
| <i>Ardea alba</i> | Great Egret | <i>Himantopus himantopus</i> | Black-winged Stilt | <i>Pluvialis squatarola</i> | Grey Plover |
| <i>Arenaria interpres</i> | Ruddy Turnstone | <i>Hirundo neoxena</i> | Welcome Swallow | <i>Podargus strigoides</i> | Tawny Frogmouth |
| <i>Artamus cyanopterus</i> | Dusky Woodswallow | <i>Hirundo nigricans</i> | Tree Martin | <i>Poliiocephalus poliocephalus</i> | Hoary-headed Grebe |
| <i>Biziura lobata</i> | Musk Duck | <i>Larus dominicanus</i> | Kelp Gull | <i>Puffinus gavia</i> | Fluttering Shearwater |
| <i>Cacomantis flabelliformis</i> | Fan-tailed Cuckoo | <i>Larus novaehollandiae</i> | Silver Gull | <i>Puffinus griseus</i> | Sooty Shearwater |
| <i>Calamanthus fuliginosus</i> | Striated Fieldwren | <i>Larus pacificus</i> | Pacific Gull | <i>Puffinus tenuirostris</i> | Short-tailed Shearwater |
| <i>Calidris acuminata</i> | Sharp-Tailed Sandpiper | <i>Lathamus discolor</i> | Swift Parrot | <i>Rhipidura fuliginosa</i> | Grey Fantail |
| <i>Calidris canutus</i> | Red Knot | <i>Lichenostomus flavicollis</i> | Yellow-throated Honeyeater | <i>Stagonopleura bella</i> | Beautiful Firetail |
| <i>Calidris ferruginea</i> | Curlew Sandpiper | <i>Limosa lapponica</i> | Bar-tailed Godwit | <i>Stercorarius parasiticus</i> | Arctic Jaeger |
| <i>Calidris minuta</i> | Little Stint | <i>Limosa limosa</i> | Black-tailed Godwit | <i>Sterna bergii</i> | Crested Tern |
| <i>Calidris ruficollis</i> | Red-Necked Stint | <i>Malurus cyaneus</i> | Superb Fairy-wren | <i>Sterna caspia</i> | Caspian Tern |
| <i>Calidris tenuirostris</i> | Great Knot | <i>Manorina melanocephala</i> | Noisy Miner | <i>Sterna nereis</i> | Fairy Tern |
| <i>Calyptrorhynchus funereus</i> | Yellow-tailed Black-Cockatoo | <i>Melanodryas vittata</i> | Dusky Robin | <i>Strepera fuliginosa</i> | Black Currawong |
| <i>Capella hardwickii</i> | Latham's Snipe | <i>Melithreptus affinis</i> | Black-headed Honeyeater | <i>Strepera versicolor</i> | Grey Currawong |
| <i>Carduelis carduelis</i> | European Goldfinch | <i>Melithreptus validirostris</i> | Strong-billed Honeyeater | <i>Sturnus vulgaris</i> | Common Starling |
| <i>Charadrius bicinctus</i> | Double-banded Plover | <i>Morus serrator</i> | Australasian Gannet | <i>Thalassarche cauta</i> | Shy Albatross |
| <i>Charadrius ruficapillus</i> | Red-capped Plover | <i>Myiagra cyanoleuca</i> | Satin Flycatcher | <i>Thalassarche carteri</i> | Yellow-nosed Albatross |

| | | | | | |
|---------------------------------|---------------------------|----------------------------------|-------------------------|---------------------------------|------------------------|
| <i>Chrysococcyx basalis</i> | Horsfield's Bronze-Cuckoo | <i>Ninox novaeseelandiae</i> | Southern Boobook | <i>Thalassarche melanophrys</i> | Black-browed Albatross |
| <i>Chrysococcyx lucidus</i> | Shining Bronze-Cuckoo | <i>Numenius madagascariensis</i> | Eastern Curlew | <i>Thinornis rubricollis</i> | Hooded Plover |
| <i>Circus approximans</i> | Swamp Harrier | <i>Numenius minutus</i> | Little Curlew | <i>Tringa glareola</i> | Wood Sandpiper |
| <i>Colluricincla harmonica</i> | Grey Shrike-thrush | <i>Numenius phaeopus</i> | Whimbrel | <i>Tringa nebularia</i> | Common Greenshank |
| <i>Coracina novaehollandiae</i> | Black-faced Cuckoo-Shrike | <i>Oxyura australis</i> | Blue-billed Duck | <i>Turdus merula</i> | Common Blackbird |
| <i>Corvus tasmanicus</i> | Forest Raven | <i>Pachycephala pectoralis</i> | Golden Whistler | <i>Turnix varia</i> | Painted Button-quail |
| <i>Coturnix ypsilophora</i> | Brown Quail | <i>Pachyptila turtur</i> | Fairy Prion | <i>Vanellus miles</i> | Masked Lapwing |
| <i>Cracticus torquatus</i> | Grey Butcherbird | <i>Pardalotus punctatus</i> | Spotted Pardalote | <i>Vanellus tricolor</i> | Banded Lapwing |
| <i>Cuculus pallidus</i> | Pallid Cuckoo | <i>Pardalotus quadragintus</i> | Forty-spotted Pardalote | <i>Zosterops lateralis</i> | Silvereye |
| <i>Cygnus atratus</i> | Black Swan | <i>Pardalotus striatus</i> | Striated Pardalote | | |
| <i>Daption capense</i> | Cape Petrel | <i>Passer domesticus</i> | House Sparrow | | |
| <i>Egretta garzetta</i> | Little Egret | | | | |

Appendix 1. Species recorded within 10km of the current meter in Trumpeter Bay at 0534628 5226410 (GDA 94, zone 55).