



Australian Seabird & Turtle Rescue Inc

Policies and Procedures

Shearwater protocol

www.seabirdrescue.org.au

This policy applies to staff of Australian Seabird & Turtle Rescue Inc. (ASTR) and rescue volunteers.

Summary:

This policy defines the approach of Australian Seabird & Turtle Rescue Inc. to the rescue and rehabilitation of the migratory species of shearwater birds.

AUSTRALIAN SEABIRD & TURTLE RESCUE INC.

Shearwater Protocol

Title: Shearwater protocol

Replacing existing policy plan or procedure No

Type of document: Procedure

Related Legislation or other Documents:

Department of Planning, Industry and Environment (DPIE).

<https://www.environment.nsw.gov.au/topics/animals-and-plants/native-animals/native-animal-facts/shearwaters>

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1 Title: Shearwater protocol

2 Background:

There are four main species of shearwater breeding along the south-eastern Australian coastline that we would expect to rescue or see in care:

- Short-tailed shearwater (*Ardenna tenuirostris*) breed from Tasmania to as far north as approximately Five Islands Nature Reserve off the coast of Wollongong NSW. Short-tails migrate along the south-eastern Australian coastline heading north late April to early May migrating to the Bering Sea with their southward migration occurring from late September to early October. They use a bimodal feeding strategy to feed their chick and forage in the southern-ocean when provisioning their chick. They predominantly feed on southern -ocean krill and myctophid fish (Bool, 2018).
- Wedge-tailed shearwater (*A. pacifica*) are widely distributed, breeding on 32 islands from Cook Island to Gabo Island Nature Reserve in VIC, with large populations breeding on; Lord Howe, Muttonbird Island, Broughton Island, Five Islands and Montague Island (Marchant et al., 1990). Their southern-most known breeding colony is Gabo Island in VIC, they are globally widely distributed in sub-tropical and tropical habitats, predominantly feeding on fish and squid (Beaver, 2021).
- Flesh-footed shearwater (*A. carneipes*) breed on Lord Howe, south Australian and New Zealand islands. They migrate north in May, arriving back in late September to early October (Marchant et al., 1990).
- Sooty shearwater (*A. grisea*) breed on several NSW islands including; Broughton, Cabbage Tree, Boondelbah, Bird, Lion, Bowen and Montague. They also feed in the southern-ocean, predominantly on fish (Marchant et al., 1990).

All four species of shearwater are listed as migratory species under the Japan Australia Migratory Bird Agreement (JAMBA 1981) and consequently the federal governments Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). They all use burrows to lay and raise a chick, are monogamous and enter and exit breeding colonies after sunset and well before first light.

All of these species of shearwater undertake long annual migrations with their southward migration on occasion resulting in beach cast birds. This is a result of not being able to consume enough prey to fatten up just prior to their long migration back to their breeding grounds. Rehabilitation for southward migrating short-tailed shearwaters has historically been poor but may not be the case for other species of shearwater.

On their first northward migration fledglings can become disorientated as a direct result of bright lights attracting them to the mainland causing birds to crash land in unexpected places. This exposes them to two main risks; predator attacks (dogs, foxes and cats) and human activity such as moving vehicles. Due to their large wingspan (97-105cm) they are unable to avoid these risks due to an inability to obtain enough lift to fly away from danger. The chance of successful rehabilitation is much more successful once they arrive at their breeding grounds, when they

commence their breeding phase or when they begin to migrate northward to their winter habitat.

3 Purpose

The purpose of this protocol is to clarify our response to the rescue and rehabilitation of shearwaters during two life cycles, their southward migration to their breeding colonies and their northward migration to their nonbreeding habitat, particularly when fledglings leave the breeding colony for the first time to undertake their first migration.

4 Procedure

4.1 Rescue and Identification

The identification of different species of shearwaters can be difficult and unlikely to be easily carried out by untrained rescuers, some guidance is provided in Figure 4.1, 4.2 and Table 4.1. All seabirds found by the public need to be identified by an experienced ASTR member and not presumed to be a shearwater. All birds are to be put in an appropriate box, lined with clean towels or sheets, somewhere quiet and warm away from pets, children or drafts.

All birds will be retrieved and assessed for identification and rehabilitation will be undertaken as per the ASTR Animal Husbandry Policy or as directed by a specialist rescue and rehabilitation coordinator. Fledglings and juvenile birds can be identified by residual down on their bodies.

These birds often crash land at night, attracted to mainland lights and with most requiring short periods in care. All birds are required to undertake an assessment to determine if there are any injuries or illnesses. Release will be contingent upon approval and instructions from a rescue coordinator after an assessment has taken place.

4.1.1 Southern Migration (from September)

All birds presenting locally should be assessed and identified by an experienced ASTR member. Members of the public in more distant locations can be advised to take the bird to a veterinary

surgeon after it has been properly identified by ASTR and only if it is impractical for the bird to be retrieved by an ASTR member.

4.1.2 Northern Migration (from April)

All birds should be assessed within the guidelines of the ASTR Animal Husbandry Policy as they have a good chance of survival.

4.2 Assessment

Assessment needs to take into consideration the following critical aspects in consultation with the rescue and rehabilitation coordinator:

- Age of bird if known, if unsure speak to an ASTR shearwater specialist
- The weight of a bird is critical for each species, adults generally can weigh more than a fledgling with a variation in weight throughout their annual cycle, if in doubt always consult an expert as to what is normal for that species, age and time of year
- Feather condition and waterproofing
- Time of year, southward or northward migration
- Type of injury or illness if any evident
- Possible ingestion of plastics, this is particularly an issue for fledglings and for flesh-footed and short-tailed shearwaters but not necessarily for adults
- Is the urate white with olive faeces; if not there may be an underlying infection. Dark brown tar like consistency may indicate that the bird's organs are starting to fail. If in doubt consult the rehabilitation coordinator by taking photographic evidence.
- Is the poo large or small, if small and not excreted often it is a good indication that hydration is required as soon as possible as per the ASTR husbandry policy
- Can the bird hold their wings in or are they drooped outwards
- Are they sleeping all the time
- All of these factors need to be recorded as observations and are critically important in making an assessment by the ASTR shearwater specialist
- Ensure their weight is taken daily, first thing in the morning before they have been fed

4.3 Release

Once a bird has been assessed fit to be released in consultation with a shearwater specialist, birds are to be released before first light or after last light from an area with no dogs or predators such as white-bellied sea eagles. Ideally wind strength is >10 knots from a headland where if the bird fails to take off it can be easily retrieved. Release may take several efforts, carefully place the bird out of the carrier cage, allow 1 hour each time and up to 5 days. Birds may initially spend time flapping and preening before they take off, allow them to do this it is a normal part of getting ready to migrate or fledge. When releasing

weather conditions are important, if there are onshore storm events or extremely bad weather out at sea do not release until the weather pattern has passed.

If after 5 days the bird has not taken off obtain guidance from the rehabilitation coordinator as to the next steps.

Table 4.1: Approximate weights, arrival and departure dates and distinguishing features (Vogelnest, 2000).

Shearwater Species	Approximate normal weight (grams)	Arrival dates	Departure dates	Distinguishing features
Short-tailed	480-800	Late September early October	Early May	Black toenails, short-tail and bill (29-34mm)
Wedge-tailed	300-570	Last week in August to early September	Mid-March (subtropical and tropical colonies) to mid to late April to early May (temperate colonies)	Pink toenails, feet and legs, long bill (35-40mm) and wedge tail
Flesh-footed	580-750	Late September	Early May	Dark-tipped pale horn-coloured bill (39-46mm) and pink legs and feet
Sooty	650-950	Late September	Early May	Long slender bill (38-44mm)

Figure 4.1: Identification to key to species

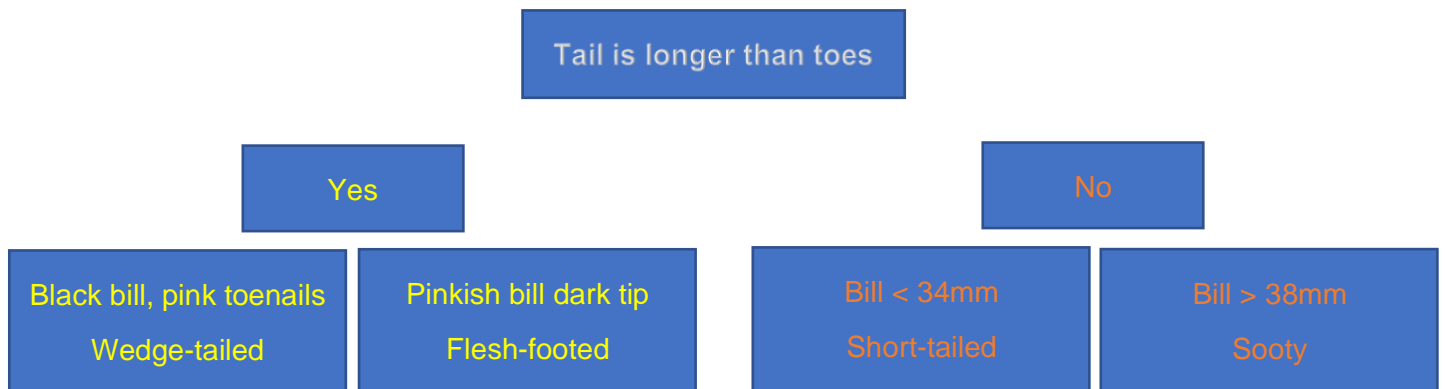
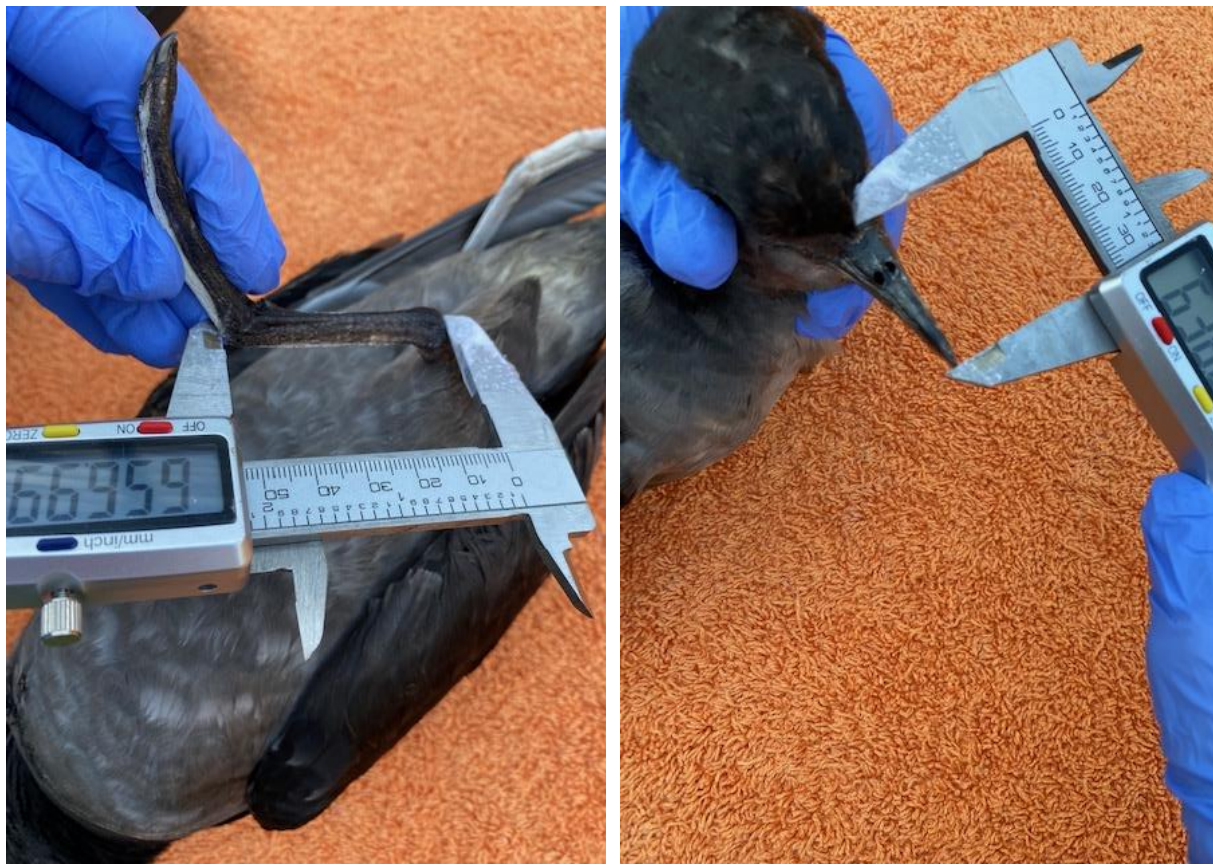


Figure 4.2: How to take measurements for tarsus and culmen



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