

Short-Tailed Shearwater

Puffinus tenuirostris

Description

This amazing migratory species is commonly known in Tasmania as the muttonbird, or Yolla to people of aboriginal heritage. In Alaskan seas they are called 'whalebirds', feeding in the same seas as the baleen whales, and snatching crustaceans that spill from the mouths of the whales as they strain their krill.

It is one of three species of shearwater in Tasmania, the others being the Sooty Shearwater and the Fluttering Shearwater. The Short-tailed Shearwater came to be known as the 'muttonbird' after the Providence Petrel on Norfolk Island, which formerly had that name, became extinct on that Island. This extinction was due to over-harvesting by the locals, and the introduction of pigs, in the late 1700's.

Whilst the estimated population of Short-tailed Shearwaters is large, around 20,000,000, it was once much larger if the account of Matthew Flinders can be taken as accurate. Flinders in 1798 watched a huge flock pass overhead for an hour and a half, estimated at 132,000,000 birds!.

With a wingspan of one metre, the shearwaters are efficient flyers. They have been recorded flying at speeds of 40-50 knots, three to fifteen metres above the water. Their speed gives them the ability to range far a field in search of food.

Male and female birds look the same, with a dark smoky-brown plumage, with paler underwings and a short rounded tail, similar in appearance to some other shearwater species. An adult is 400-430mm in length. They weigh between 480 and 600g.

Their call is a rapid crooning and wailing – kooka-rookarah repeated rapidly. They co-exist in breeding sites with

Shearwater in flight

Photo: Glen Tepke



Little Penguins, Fairy Prions and Common Diving Petrels.

Distribution

Shearwaters arrive in Tasmania, the Bass Strait Islands and southeast Australia from their annual migration in mid-late September every year to breed. These are the only locations in the world where the birds breed. In the southern hemisphere the Short-tailed Shearwaters feed in waters mainly over the continental shelf, inshore and offshore, but range far south to Antarctic waters.

During April and May the adults and chicks depart Australian waters for their next feeding grounds in the North Pacific, Arctic Ocean and Bering Strait where they feed around the Aleutian Islands. Some 84 species of seabirds gather in this region for the summer, the greatest assemblage of seabirds in the world. The shearwaters amazing migration feat is 15,000 km in each direction. They take between six weeks and two months to make the journey each time.

They are one of the species protected under the Japan Australia Migratory Bird Treaty which aims to protect them from the dangers of fishing practices, and in the case of Tasmania, overharvesting (see Issues Sheet No. 2).

Habitat Requirements

Other than the breeding season, most of the time the shearwaters are at sea, and their main requirement here is for a clean environment, free of human rubbish.

In Australia, they nest on islands, headlands and promontories, exposed areas that allow for easy take off and landing. The vegetation types are generally tussocks and succulent vegetation such as pigface and iceplant. There are few islands around Tasmania on which this species does not nest.

Diet

The diet of short-tailed Shearwaters is small pelagic fish (fish that live in the mid-water such as herring and sardine), crustaceans (in particular krill) and small cephalopods (a class of mollusk that include squid, octopus and cuttlefish).

In the breeding season they seek food in the Southern Ocean, requiring around 200g of food per bird per day. With an estimated (1981) 16 000 000 shearwaters in Tasmanian colonies and an average 80 days in the Southern Ocean during the breeding season feeding, the total annual consumption of krill could be 256 000 tonnes!

See the Shearwaters

Shearwaters returning to their burrows in the evening can make quite a spectacle. There are places in mainland Tasmania you can go to watch them. The Parks and Wildlife Service runs tours to a colony at South Arm near Clifton Beach during summer evenings. You can also see them at The Neck on Bruny Island and watch the penguins return at the same time! Another observation spot is Ocean Beach, Strahan.



Shearwater chick Photo: Graeme Burgan

Flying in large flocks of thousands of birds, they will land on the water in groups, known as “rafts”, to feed. They either dive from a sitting position, or plunge dive from 1-2 metres above the surface of the water in pursuit of squid or fish at an angle of 45-75 degrees. They can dive to a maximum depth of 70m on long foraging trips, surfacing up to 30 metres away, using their wings to guide and propel them under water.

Breeding

Most shearwaters mate for life, although pairs that are unsuccessful at breeding often choose a new partner.

They breed on colonies on the coastline of Australia, from Western Australia to New South Wales, but the majority breed in Tasmania, the Bass Strait Islands and other islands. Shearwaters make burrows in which to lay their eggs and protect their chicks. The burrows are made in soft stable soil with some vegetation cover, and shearwaters return to the same burrow each year. Some of the colonies are vast – in Bass Strait the Trefoil Island colony covers 100 hectares. The largest colony is on Babel Island which has an estimated 3 million burrows!

These birds have a remarkable internal calendar, and their annual cycle is very predictable. Before egg laying, the shearwaters are absent from their colonies for around 20 days in November whilst they feed in preparation for nesting. They lay their eggs, a single one for each pair, over seven days in November.

Males and females both take shifts at incubating the egg. Each spends around 14 days sitting on the egg and does not leave in between, nor is it visited. The entire breeding process is very synchronized, to the point that the vast majority of birds of one gender incubate the eggs, whilst the birds of the opposite gender are at sea.

Eggs hatch around the third week of January. The parents both share in feeding the chick, with one of them staying in the nest for the first week. The chicks gain weight quickly and by the end of March, the chicks are almost twice the weight of the adult birds, with adult birds returning to feed them less frequently.

Habits (Family/Social)

One of the most amazing things about the shearwater is that the adults leave the colony in the first two weeks of

April, leaving the chicks to depart on their own, two to three weeks later. The chicks lose their baby down, grow their flight feathers and must teach themselves to fly, after which they too depart on an epic journey following their parents across the globe. The survival rate of pre-breeding juveniles is estimated at 50%.

Adults and juvenile birds live separately until the young birds breed between five and six years of age, with young birds returning to the southern hemisphere later than breeding birds. The young breeders return to the colony of their birth. In their first year of breeding they often make their own burrow, if there is room in the colony to do so.

Shearwaters can be very long-lived and some birds live in excess of 35 years.

Threats and Persecution

The shearwater faces many human caused threats on its global journey. Gillnet fisheries in the North Pacific in Canadian and Alaskan waters drown up to 50,000 every year. Oil spills at sea and rubbish, particularly plastics, are also an issue.

The Short-Tailed Shearwater has been found washed up dead or exhausted and emaciated in large numbers on the beaches of Japan, North America, the Aleutian Islands and Australia. It is thought these deaths are due to storms at sea, and exhaustion, particularly in young birds, on the migratory path. The deaths have been linked to times when food, mainly krill, has been scarcest during the growth period of the chicks and they have not attained sufficient reserves to make the journey.

Fire is a major threat to breeding grounds. It can cause destruction to the burrows from the loss of vegetation surrounding the shearwaters that provides protection. Fifty two percent of the areas occupied by shearwater colonies had been burnt in the 15 years between 1984 and 1998.

Other threats are:

- Muttonbirding in Tasmania (see Issues Sheet No. 2)
- Grazing animals and pigs
- Introduced grasses, such as kikuyu, that mat and make digging burrows impossible
- Overfishing and depletion of their food source, which may be worsened by climate change.