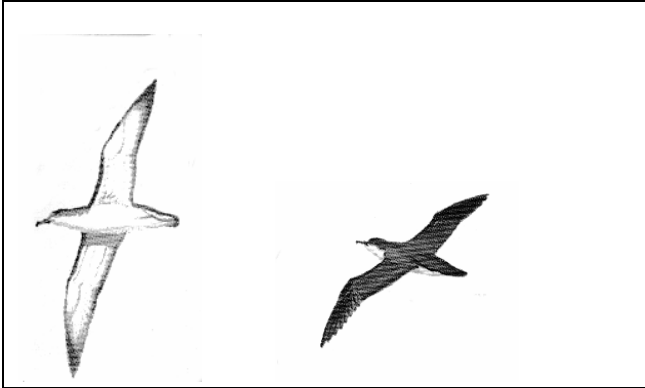


Nomination

Puffinus assimilis baroli Little shearwater



Geographical extent

OSPAR Regions: V

Biogeographic zones: 1,4,5,21,23

Region & Biogeographic zones specified for decline and/or threat: as above

The Little Shearwater has a fragmented distribution in all three major oceans with most of its range in the southern hemisphere. *Puffinus assimilis baroli* is an endemic European race that breeds in the archipelagos of Madeira, the Azores and the Canaries (Cramp & Simmonds, 1997).

Little Shearwaters feed from surface of sea possibly on small fish, cephalopod and crustaceans and spend more time on water than other shearwaters. They breed in rocky ground, caves, cliffs, and stone walls. The rough nest is generally a tunnel in soft soil or a hole between rocks or under fallen boulders (Monteiro *et al.*, 1996a). They also use old tunnels of other species. Little is known about breeding habits, as they are winter breeders, laying eggs in January or February with chicks fledging in May and June. The birds frequently visit breeding sites outside breeding season.

Application of the Texel-Faial criteria

The Little Shearwater was nominated in a joint submission by three Contracting Parties and also by one Observer. The criteria common to both nominations were decline, regional/local importance, and sensitivity, with information also provided on threat.

Regional/Local importance

The Azores holds the entire known breeding population of *P.a.baroli* in the OSPAR Maritime area. Breeding sites were known from the islands of

Flores, Corvo, Graciosa and Santa Maria and Monteiro *et al.* (1999) located several previously unknown colonies in the Azores during seabird surveys in the late 1990s. They estimated that there were 840–1,530 pairs of little shearwaters in the Azores at that time. The Wider Atlantic OSPAR Region (Region V) is therefore of regional importance for this subspecies.

Decline

The first known breeding record for Little Shearwater from the Azores was in 1953 on São Miguel (Bannerman & Bannerman, 1966). With rats now present on that site it is no longer used by the breeding birds (Le Grand *et al.*, 1984). ICES (2002) consider that evidence for a decline in breeding numbers within the OSPAR area is based on relatively poorly documented population trends in the Azores (Monteiro *et al.*, 1996b). However, they note that there is very strong circumstantial evidence indicating that most areas of the Azores have become unsuitable as breeding habitat due to rats and cats introduced by human colonisation and established settlement on the main islands. Almost all of the remaining colonies of little shearwaters are on highly inaccessible cliffs or rat- and cat-free islets.

Sensitivity

The little shearwater is considered sensitive due to the small numbers breeding on the Azores. *P.a.baroli* breeds in winter therefore disturbance is less of an issue but predation (e.g. by rats) appears to have a significant impact on breeding distribution (ICES, 2002). Like all seabirds they are also sensitive to oil pollution.

Threat

The major threat to shearwaters is predation at their breeding sites. They are taken by mammalian predators, such as rats and cats, as well as by yellow-legged gulls whose numbers appear to be increasing in the Azores. The adult birds are also susceptible to oil pollution whilst feeding at sea, but are less sensitive to human disturbance at their breeding sites than some other seabirds, as they breed during the winter months.

Relevant additional considerations

Sufficiency of data

The little shearwater is difficult to study, partly because it is a winter breeder. As a consequence relatively little is known about its biology including aspects such as the age of breeding or breeding success rate in particular locations. The birds are

also difficult to study at sea as they do not flock and are therefore difficult to observe. These difficulties mean that there is limited information about *P.a.baroli* in the OSPAR Maritime Area.

Changes in relation to natural variability

It is not possible to gauge the effect of natural variability on population trends of this species at the present time.

Expert judgement

There is limited information about population size and trends of Little Shearwater in the OSPAR Maritime Area however the threat to this species is clear.

ICES evaluation

The ICES evaluation of the subspecies *P.a. baroli* notes that the number that occur outside the OSPAR area are rather larger than numbers within the OSPAR area. The population in Cape Verde appears to be declining and threatened while the population in Madeira is currently stable but has probably declined in the past (ICES, 2002). Within the OSPAR Maritime Area ICES report that there is very strong circumstantial evidence indicating that most areas of the Azores have become unsuitable as breeding habitat for *P.a.baroli*, mostly because of the numbers of predators (rats, cats and yellow-legged gulls).

Threat and link to human activities

Cross-reference to checklist of human activities in OSPAR MPA Guidelines

Relevant human activity: shipping and navigation;
Category of effect: Biological –introduction of non-indigenous species;

Little shearwaters are threatened by predators at their breeding sites. Some of these predators (rats and cats) will have been introduced by man. At sea, the species is susceptible to oil pollution.

Management considerations

Useful management measures to consider include protection at breeding sites, including predator control, and minimising disturbance from human activity. Measures to reduce the risk of pollution and to safeguard food supplies would benefit this species at sea.

The Little Shearwater is listed on Annex 1 of the EU Birds Directive and the subspecies *Puffinus*

assimilis baroli is listed on Annex II of the Bern Convention.

Further information

Nominated by:

Joint Submission by Iceland, Portugal & UK; BirdLife International

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