

Atlantic puffin: species information for marine Special Protection Area consultations

The UK government has committed to identifying a network of Special Protection Areas (SPAs) in the marine environment by 2015. Natural England is responsible for recommending potential SPAs in English waters to Defra for classification. This, and other related information notes, have been written to provide information to coastal and marine stakeholders about the bird species we are seeking to protect through Marine SPAs. For more information about the process for establishing marine SPAs see TIN120 *Establishing Marine Special Protection Areas*.

Background

The Birds Directive (EC Directive on the conservation of wild birds (79/409/EEC)) requires member states to identify SPAs for:

- rare or vulnerable bird species (as listed in Annex I of the Directive); and
- regularly occurring migratory bird species.

Also known as puffins, Atlantic puffins, *Fratercula arctica* are a regularly occurring migratory bird species in Europe. They are 28 - 35 cm long with a wingspan of 47 - 63 cm¹.

The typical lifespan of a puffin is 18 years and the oldest reported individual was over 35 years old².

Conservation status

SPEC 2 status (concentrated in Europe and with an unfavourable conservation status)³. UK amber-listed bird of conservation concern⁴.

Distribution and population

This species only breeds in the North Atlantic, and 95% of birds breed on the north east Atlantic coasts.



Puffins by Malte Busch

The majority of UK birds nest in north and west Scotland. In England puffins breed on coasts and islands in the north and or south-west.

The Seabird 2000 census estimated the UK breeding population at 580,700 *apparently occupied burrows*, 10% of the global population⁵. The English breeding population was estimated at 75,734 *apparently occupied burrows*⁶.

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The largest colony in England is on the Farne Islands, Northumberland, with large numbers also on Coquet Island in Northumberland.

Migration/movements

Young are independent when they leave colonies in July and August. Over winter puffins live in the open sea with few, if any, present in English inshore waters⁷. Birds disperse widely, with those from the Isle of May (Firth of Forth) colony moving into the Atlantic Ocean as well as the adjacent North Sea⁸.

Breeding

Puffins excavate their own burrows or occupy rabbit burrows. They may also use rock cavities next to steep cliffs or on offshore islands and stacks. A single egg is laid in a shallow hollow at the end of the burrow.

Foraging

The main foraging method used by puffins is pursuit-diving from the sea surface, using their wings to propel them through the water. They can dive up to 60 m to catch prey, although most dives less than 30m⁹. They carry multiple fish in their bills when feeding chicks, a maximum of 62 fish have been recorded¹.

Their prey is smaller schooling fish, particularly sandeels and they fish in inshore and offshore waters. There is some evidence to indicate a strong association with tidal fronts.

The foraging range varies between colonies and with the season. The mean foraging range is 30 km, with a maximum recorded foraging distance of 200 km⁹.

References

¹ The Birds of the Western Palearctic (Snow and Perrins, 1998)

² BTO Bird Facts website - www.bto.org/about-birds/birdfacts

³ Birds in the European Union: a status assessment (BirdLife International, 2004)

⁴ Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man (Eaton et al, British Birds Vol 102, 296-341)

⁵ Seabird Populations of Britain and Ireland (Mitchell et al, 2004)

⁶ JNCC Seabird Monitoring Programme webpages - <http://jncc.defra.gov.uk/page-2898>

⁷ The Atlas of Wintering Birds in Britain and Ireland (Lack et al, 1986)

⁸ Wintering areas of adult Atlantic puffins *Fratercula arctica* from a North Sea colony as revealed by geolocation technology (Harris et al, Marine Biology, 2009)

⁹ Bird Life International seabird wikispace - <http://seabird.wikispaces.com/Atlantic+Puffin>

Further information

Natural England Technical Information Notes are available to download from the Natural England website: www.naturalengland.org.uk. In particular see:

- TIN120: *Establishing marine Special Protection Areas*
- TIN121: *A review of the Flamborough Head and Bempton Cliffs Special Protection Area*
- TIN122: *Northern gannet species information for marine Special Protection Area consultations*
- TIN123: *Common guillemot species information for marine Special Protection Area consultations*
- TIN124: *Razorbill species information for marine Special Protection Area consultations*
- TIN126: *Northern fulmar species information for marine Special Protection Area consultations*

For further information contact the Natural England Enquiry Service on 0300 060 0863 or e-mail enquiries@naturalengland.org.uk.

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