

European shag: 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 SPAs in English waters to Defra for classification. This and other related information notes have been prepared and will be available at meetings and online so that anyone who might be interested in why the SPA is being considered for classification can find out more about the birds that may be protected. 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 (2009/147/EC) requires member states to identify SPAs for:

- rare or vulnerable bird species (as listed in Annex 1 of the Directive); and
- regularly occurring migratory bird species.

The European shag, *Phalacrocorax aristotelis*, also known simply as the shag, is a regularly occurring migratory bird in the UK. It is between 65 and 80 cm long with a wingspan of 90-105 cm¹. A typical lifespan is 12 years. The oldest recorded individual was over 29 years old².

Conservation status

- UK amber-listed bird of conservation concern³.

Distribution and population

European shags are confined to the north-east Atlantic and Mediterranean coasts.



European shag © Paul Glendell

The majority of UK birds nest in north and west Scotland. Shags winter along much of the UK coastline, generally in sheltered waters in the vicinity of breeding colonies.

In England, shags breed on coasts and islands in the north-east, Yorkshire and the south-west, where hard rocks create cliffs and islands. The UK has 26,600 *apparently occupied nests* (an estimate of number of pairs), 34% of the global population (2004)⁴. The wintering population is 110,000 individuals⁵.

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The English breeding population is 3,863 *apparently occupied nests* (Seabird 2000)⁶. The largest English colonies are at the Farne Islands in Northumberland and the Isles of Scilly, with over 1,000 pairs at each site⁸. There are no recent estimates for English wintering numbers.

Migration/movements

Adult shags tend only to make limited movements after the breeding season, whereas immature birds disperse more widely. Shags rung in the UK have been recovered as far away as Spain, Norway and Denmark⁷.

Shags, particularly immature birds, are prone to displacement during long periods of poor weather or onshore winds, which make foraging difficult. *Wrecks* of shags can then appear in unusual locations, including inland⁸.

Breeding

Shags nest on sheltered cliff ledges from just above high water mark to 100 m, and sometimes on boulder beaches or in shallow caves. The nest is a heap of thick vegetation lined with grasses. Females lay between 1 and 6 eggs, usually 3¹.

Foraging

The birds pursuit-dive from the sea surface, using their feet to propel them through the water. They can dive up to 80 m to catch prey, although the mean dive depth is 33 m⁹. They prefer shallower waters, such as sand and gravel banks, and also tidal fronts. They can form dense feeding flocks in areas of high prey availability and feed on a wide range of benthic, demersal and schooling fish. They regurgitate food for their chicks.

In the breeding season shag use coastal waters, usually less than 40 m deep⁸. They have a limited foraging range compared to some other seabirds: maximum foraging range is 17 km, with mean foraging range 5.9 km¹⁰. In winter they are more widely spread along favoured coastlines, but they generally remain in inshore waters.

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 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)

⁴ Seabird Populations of Britain and Ireland (Mitchell *et al*, 2004)

⁵ Overwintering Population Estimates of British Waterbirds (Musgrove *et al*, British Birds Vol 104, 364-397)

⁶ JNCC Seabird Monitoring Programme: jncc.defra.gov.uk/page-2877

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blx1.bto.org/ring/countyrec/resultsall/rec800aII.htm

⁸ Birds in England (Brown and Grice, 2005)

⁹ BirdLife International seabird wikispace – seabird.wikispaces.com/European+Shag

¹⁰ Seabird foraging ranges as a preliminary tool for identifying candidate Marine Protected Areas (Thaxter *et al*, Biological Conservation, 2012)

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*

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

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