

Great cormorant: 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 I of the Directive); and
- regularly occurring migratory bird species.

The great cormorant, *Phalacrocorax carbo*, is a regularly occurring migratory bird in Europe. Also known simply as the cormorant, it is between 80 and 100 cm long with a wingspan of 130-160 cm¹. A typical lifespan is 11 years. The oldest recorded individual was over 23 years old².

Conservation status

- UK green-listed bird of conservation concern³ (not considered under threat).

Distribution and population

Great cormorants have an extremely wide distribution, being found on every continent except South America and Antarctica⁴.



Great cormorant in flight © Paul Lacey

Several sub-species are recognised, including *carbo* and *sinensis*. *Carbo* has a coastal distribution in the breeding season and is restricted to northwest Europe – including UK coasts - and north-east North America. *Sinensis* nests inland rather than at the coast and occurs across Europe and Asia, including in the UK.

In the winter great cormorants occur along much of the UK's coastline and at many inland waters, with large numbers occurring in favoured estuaries, shallow bays and large lowland waterbodies such as reservoirs.

Great cormorant: species information for marine Special Protection Area consultations

During the breeding season, coastal great cormorants nest where the geology creates steep cliffs, stacks and islands.

They are therefore concentrated in Scotland, south-west and north east England. Inland-breeding birds nest in trees at large waterbodies, mostly within central and eastern England.

UK population

The UK wintering population of great cormorants is estimated to be 35,000 individuals⁵.

The Seabird 2000 census recorded 8,884 apparently occupied nests, including both coastal and inland breeders – 1.5% of the global population of the species⁶. In England there were 1,315 apparently occupied nests in 1998-2002 – though this figure only relates to coastal breeders⁷.

Breeding

At the coast, great cormorants nest on sheltered cliff ledges as well as on the top of sea stacks. They build large nests made of sticks, seaweed and a range of marine materials, cemented together with guano. They lay clutches of 3 to 4 eggs. Adult birds regurgitate food for their chicks.

Migration/movements

The breeding season of great cormorants vary significantly from year to year and pairs nest at different times in the same colony⁸, so birds can be potentially present at breeding colonies in the UK from mid-March to mid-September. Some UK birds may winter in coastal waters in the vicinity of their colonies, but others may travel much further, onto inland waterbodies or as far away as the Mediterranean sea⁹.

The plumage of great cormorant is not fully waterproof, so this species requires regular access to perches throughout the year in order to allow their wings to dry.

Foraging

Great cormorants are pursuit-divers, leaping into the water from the surface and then using their feet to propel them forwards, occasionally using

their wings under the water for manoeuvrability. They disturb their prey from sandy or muddy seabed habitats or from hiding places in rocky areas. The deepest recorded dive is 35 m with a mean recorded dive depth of 12.1 m¹⁰.

Coastal birds generally feed on bottom-dwelling fish, but can also take fish from the surface and main water column as well as crustaceans.

Great cormorants forage mainly in shallow coastal rather than offshore waters, foraging over rocky as well as sandy substrates.

Foraging range varies between colonies and with season. A maximum foraging distance of 35 km has been recorded for this species. The mean of all the maximum foraging ranges recorded by different studies is 25 km¹¹.

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 BirdLife International species factsheet: www.birdlife.org/datazone/speciesfactsheet.php?id=3679
- ⁵ Overwintering Population Estimates of British Waterbirds (Musgrove *et al*, British Birds, Vol 104, 364-397)
- ⁶ Seabird Populations of Britain and Ireland (Mitchell *et al*, 2004)
- ⁷ JNCC Seabird Monitoring Programme: jncc.defra.gov.uk/page-2876
- ⁸ The Status of Seabirds in Britain and Ireland (Lloyd *et al*, 1991)
- ⁹ Birds in England (Brown and Grice, 2005)

Great cormorant: species information for marine Special Protection Area consultations

¹⁰ BirdLife International seabird wikispace – seabird.wikispaces.com/Great+Cormorant

¹¹ 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.

Copyright

This note is published by Natural England under the Open Government Licence for public sector information. You are encouraged to use, and re-use, information subject to certain conditions. For details of the licence visit www.naturalengland.org.uk/copyright. If any information such as maps or data cannot be used commercially this will be made clear within the note.

© Natural England 2012