

Arctic tern: 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 arctic tern, *Sterna paradisaea*, is listed under Annex I of the Birds Directive. Also known as the sea swallow (as is the very similar common tern), it is between 33 and 35 cm long with a wingspan of 75-85 cm¹. Their typical lifespan is 13 years and the oldest recorded individual was nearly 30 years old².

Conservation status

- SPEC3 (unfavourable conservation status in Europe)³;
- listed in Annex 1 of EU Birds Directive (rare and vulnerable species in Europe); and
- UK amber-listed bird of conservation concern⁴.



Arctic tern © Jeremy Barker

Distribution and population

This species breeds in Arctic and sub-Arctic Europe, Asia and North America, including the UK, which is at the southernmost edge of its breeding range. Arctic terns spend the northern winter in southern oceans as far south as the edge of the Antarctic pack-ice⁵.

Arctic terns have a strongly northerly distribution in the UK, with the breeding population concentrated on Shetland, Orkney and north and west Scotland. They are a rare breeding bird in England away from three large colonies in Northumberland: Coquet Island, the

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Farne Islands and Newton Links.

UK population

The Seabird 2000 census recorded 53,400 apparently occupied nests – 3.1% of global population⁶. In England there were 3,602 ‘apparently occupied nests’ in 1998-2002⁷.

Breeding

Arctic terns nest colonially in high densities on the ground, on dunes, shingle spits and ridges and low offshore islands where disturbance is limited. Away from their main colonies, they nest in small numbers amongst other tern species. Arctic terns make a shallow depression on sand, shingle or low vegetation, where 1-2 eggs are laid.

Migration/movements

Arctic terns are extraordinary long-distance migrants, travelling from their Arctic breeding grounds to spend the northern winter as far as 60 degrees south in Antarctica. They may see more daylight in a year than any other species. One ringed as a chick on the Farne Islands in June 1982 appeared in Melbourne, Australia, in October that same year, a distance of 22,000 km by sea².

Foraging

Arctic terns take food from uppermost waters by plunge-diving or surface-dipping, often following spells of hovering. They regularly forage in small, tight groups over concentrations of prey. There is little information available on dive depths, but they are unlikely to be greater than 50 cm⁸.

They feed on a wide variety of small fish, crustaceans and zooplankton. In the UK sandeels predominate in the diet, with sprat, herring and saithe also regularly taken⁸.

During the breeding season they forage in a range of marine locations, generally in shallow inshore water but also further offshore. Favoured locations include shallow bays, rocky shores, tidal rips, ocean fronts and upwellings.



Time to Fly Exploring Bird Migration (2004) © Jim Flegg

Their foraging range varies between colonies and with season. They have a smaller foraging range than the larger sandwich tern, with a maximum foraging distance of 30 km recorded. The mean of all the maximum foraging ranges recorded by different studies is 24.2 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)

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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 BirdLife International species factsheet: www.birdlife.org/datazone/speciesfactsheet.php?id=3271

⁶ Seabird Populations of Britain and Ireland (Mitchell *et al*, 2004)

⁷ JNCC Seabird Monitoring Programme: jncc.defra.gov.uk/page-2896

⁸ BirdLife International seabird wikispace – seabird.wikispaces.com/Arctic+Tern

⁹ 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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