

## Seals (Pinnipedia)

Seals come under the order pinnipeds and are aquatic predators, exploiting marine resources in a variety of coastal habitats. Despite spending most of their life at sea seals must return to land (or ice floes) to breed, and sometimes between foraging trips, to rest. Only two species, grey and common seals, breed around the British Isles. This unique lifestyle means that seals interact with both terrestrial and aquatic ecosystems. Our understanding of their use of the different marine habitats around the British Isles has been greatly improved by research using satellite tagging technology. Seals are able to dive to depths of around 200 metres, greatly increasing their foraging range. Both grey and common seals may be predated on by killer whales. Seals have a layer of fat (blubber) under the skin for insulation, which is not present on other mammals with the exception of whales, dolphins and porpoises.



Image 29: Grey seal pup, image sent in through Mammal Tracker app

# Common (harbour) seal *Phoca vitulina*

## South East analysis

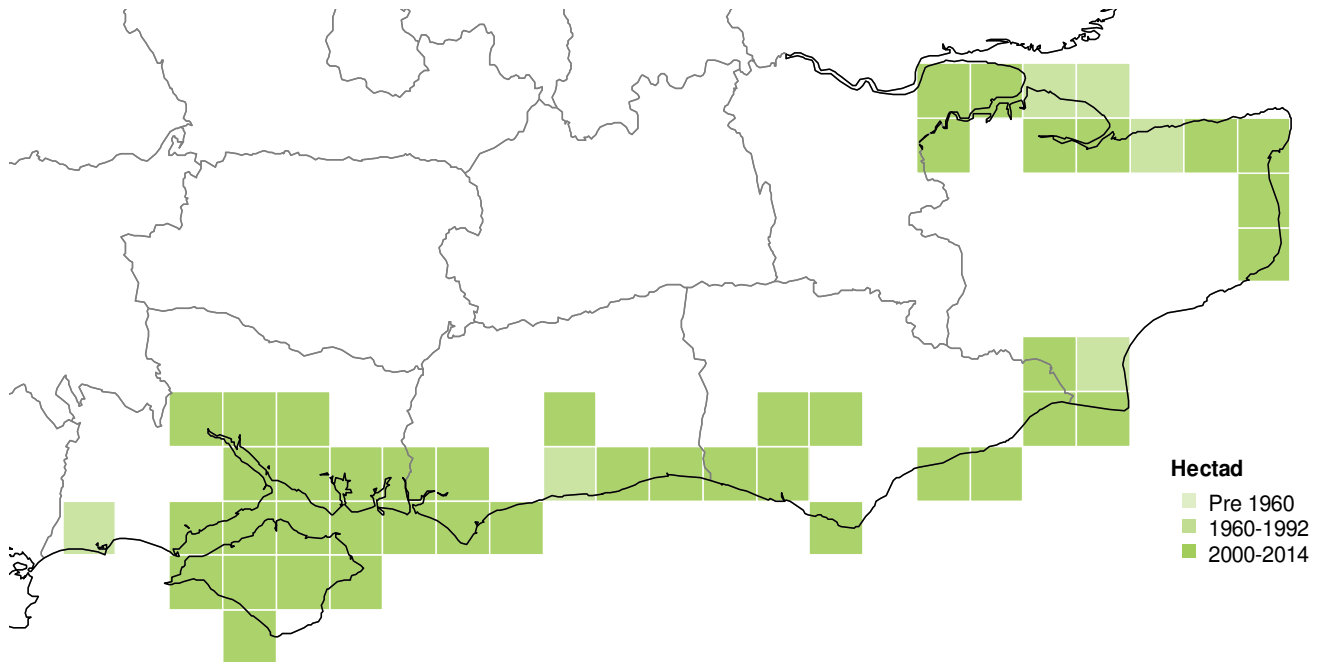


Figure 181: South East distribution of common seal records, showing three time periods of data at hectad level

The common seal's presence is shown at hectad level only as it was felt that showing it at a higher resolution of tetrads would not add anything to this map, as seals are so mobile with so few barriers to their movement along the coast. Small colonies of common seals are found around the South East coast (Figure 181). The area near Chichester, Sussex, for example, has had visiting common seals for a long time. The clump of darker green hectads, indicating records from 2000-2014, can be seen in Figure 181 in this area. Common seals are often seen around Kent's coast, in areas such as Deal. The alpha hull below shows the outline of their range although it exaggerates its extent inland around Kent, due to the way the alpha hull is formed (Figure 182).

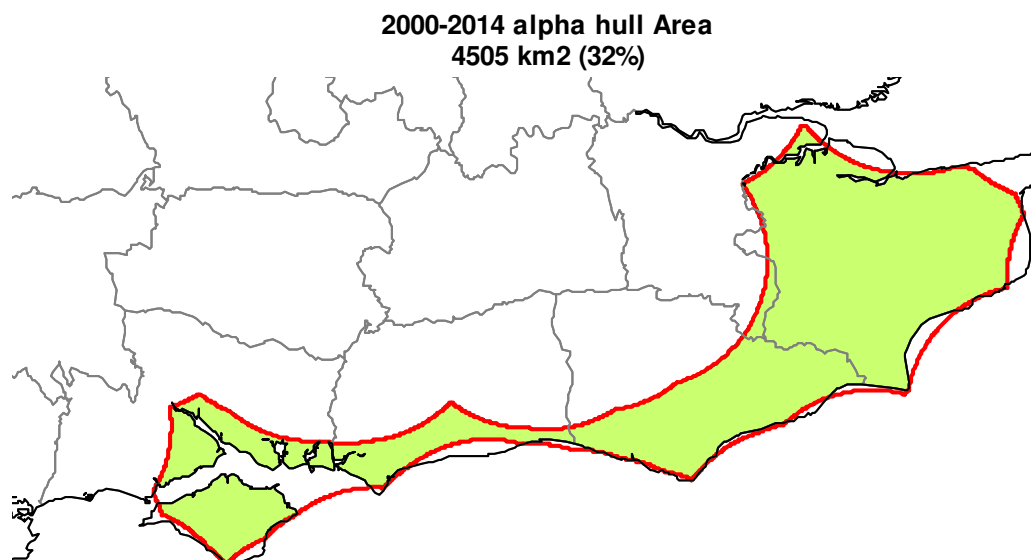


Figure 182: Alpha hull representation of common seal South East distribution for 2000-2014 records

## Common (harbour) seal *Phoca vitulina*

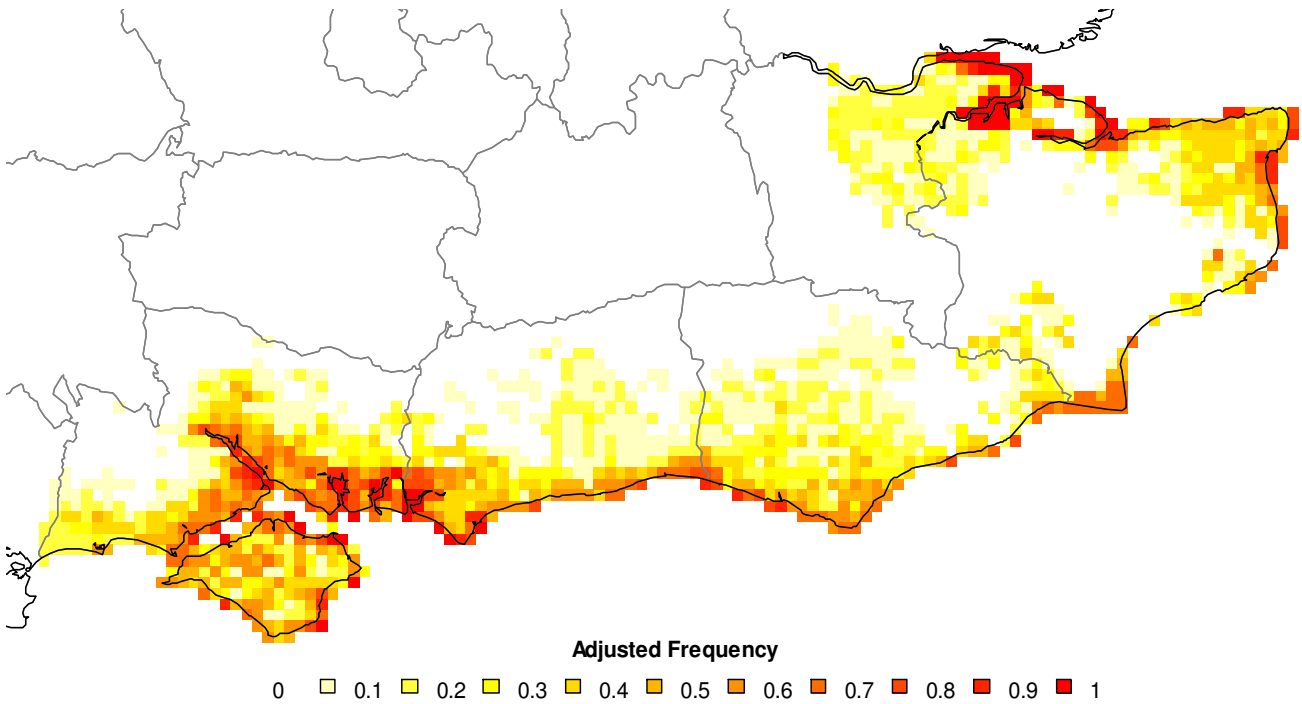
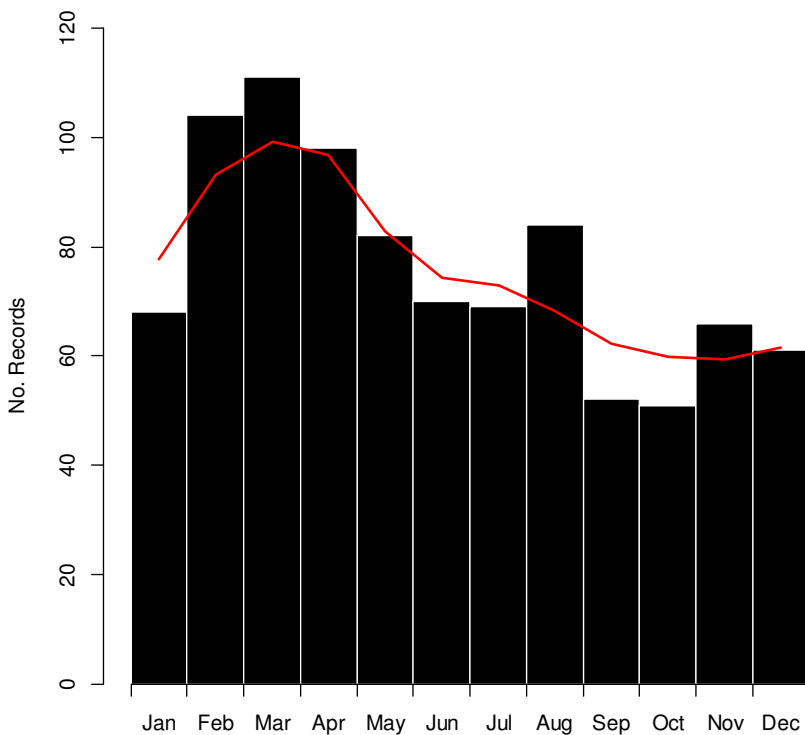


Figure 183: South East map displaying common seal predicted distribution using Frescalo technique (2000-2014) records

The Frescalo map for the common seal demonstrates the species' distribution along the coast. The red squares indicate areas where there are more tetrads containing records for the species that lie closer together.



The common seal is most often recorded in spring and summer, although recording for this species does continue consistently throughout the year. There is a spike in data between February and April, when seals begin pupping (Figure 184). Another spike occurs in August, coinciding with the Zoological Society of London's (ZSL's) Harbour Seal Survey in the Thames Estuary. There is a slight decline of records in the autumn, but this may potentially be indicative of lack of recorder effort rather than the absence of the species.

Figure 184: Phenology histogram displaying monthly record submission

# Grey seal *Halichoerus grypus*

## South East analysis

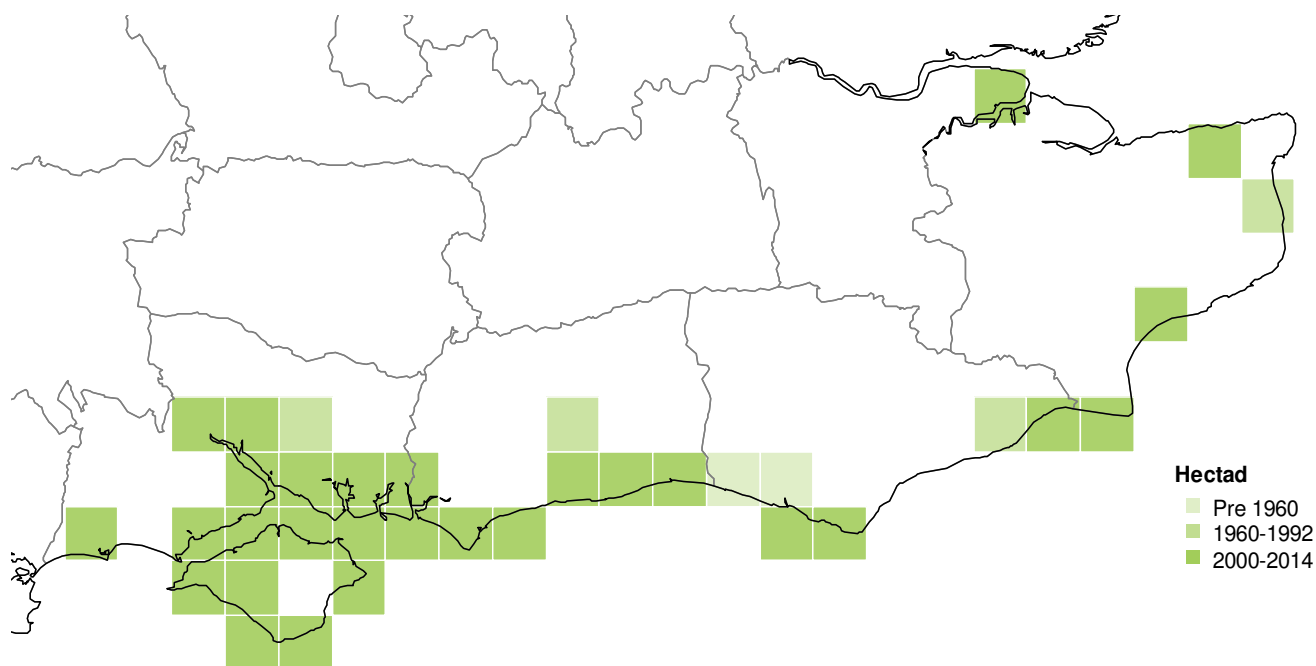


Figure 185: South East distribution of grey seal records, showing three time periods of data at hectad level

The grey seal's presence is shown at hectad level only as it was felt that showing it at a higher resolution of tetrads would not add anything to this map, as seals are so mobile with so few barriers to their movement along the coast (Figure 185). Grey seals are becoming more common around the UK coast and can be seen in areas around the South East. For example, they are increasing around Chichester, Sussex, an area where common seals have been present for a long time. The alpha hull below shows the overview of the grey seals main range as displayed by these records (Figure 186). Due to the way the alpha hull is formed, it indicates a false presence in inland areas.

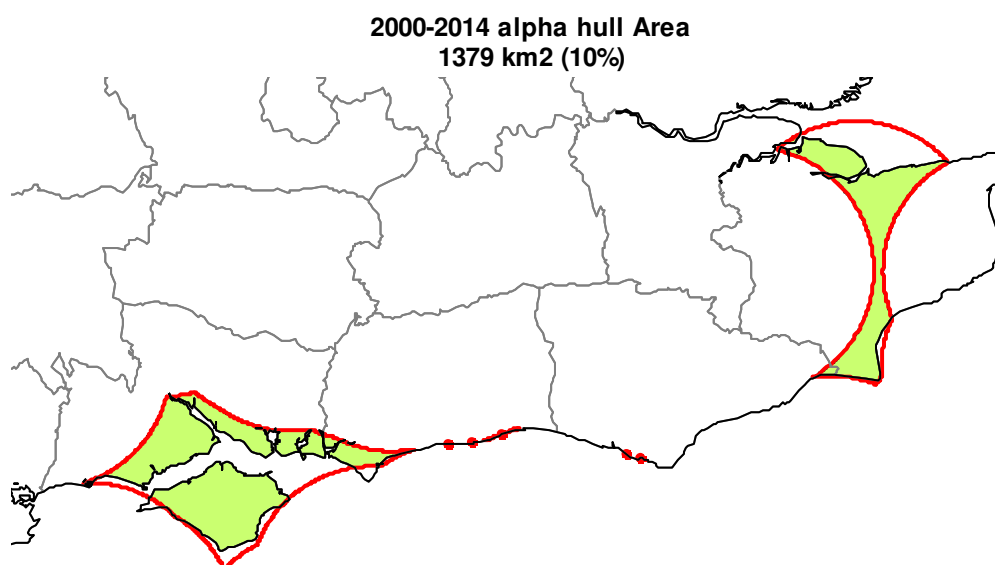


Figure 186: Alpha hull representation of grey seal South East distribution for 2000-2014 records

## Grey seal *Halichoerus grypus*

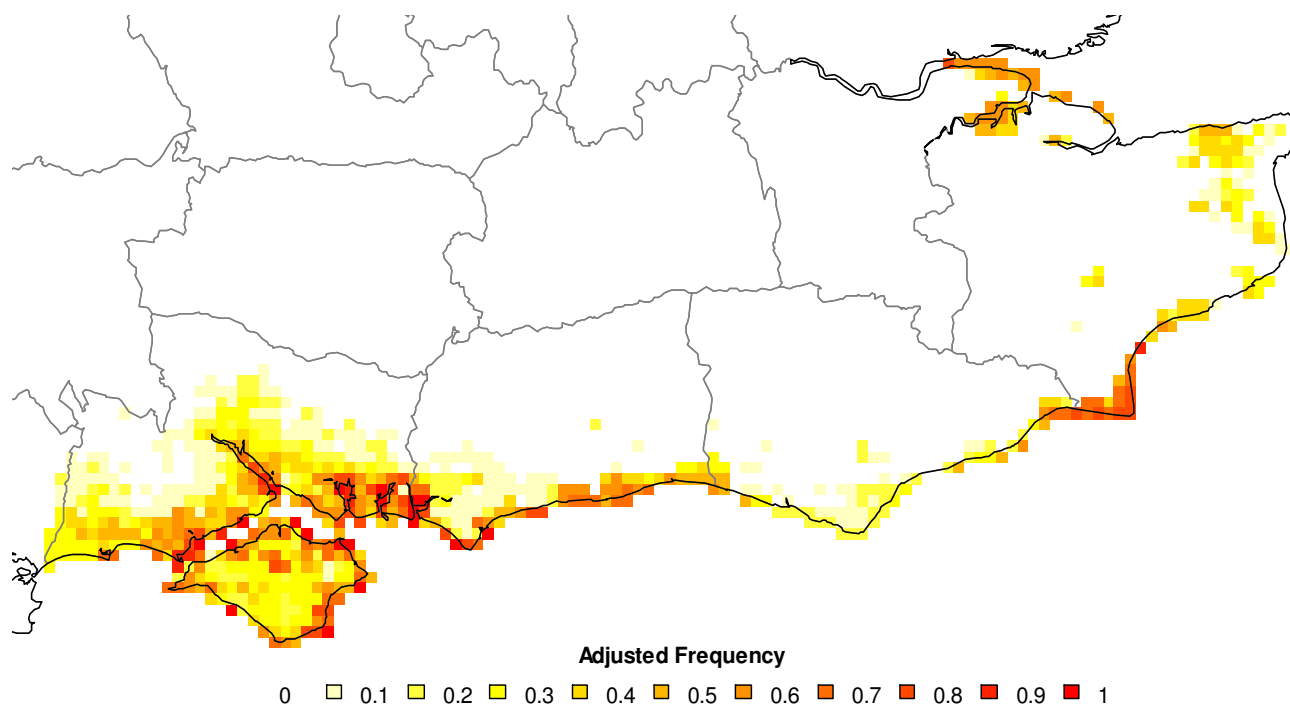
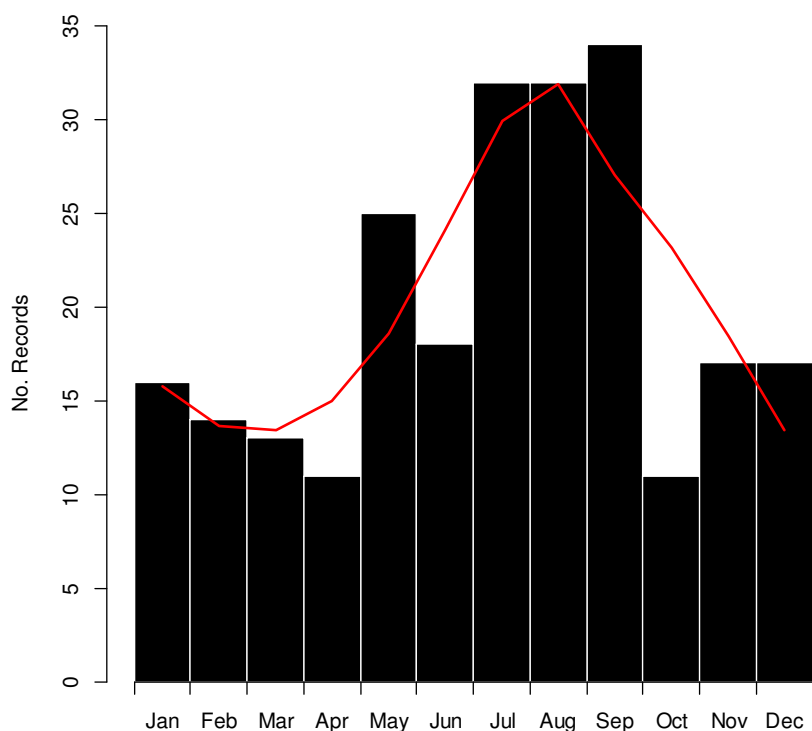


Figure 187: South East map displaying grey seal predicted distribution using Frescalo technique (2000-2014) records

Frescalo shows the main areas where grey seals are found with several tetrads close to one another in red, and their more scattered occurrence in yellow.



There are greater peaks and troughs in the data submitted for the grey seal than the common seal, which reflect less consistent data collection for this species (Figure 188). The greatest peak occurs between July and September, coinciding with seal surveys, particularly boat-based surveys, for example, in Kent. There are fewer records in autumn, winter and early spring, with the fewest number of records submitted in April and October. ZSL encourage the public to record sightings of grey seals in ongoing surveys and programmes in the Thames Estuary and surrounding regions.

Figure 188: Phenology histogram displaying monthly record submission