

## Information and resources: herring gull

This document provides information and resources on herring gulls (*Larus argentatus*) to support Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) Wild Birds Licence applications, but is not limited to these application types. The information provided is the minimum the Joint Nature Conservation Committee (JNCC) expects to see in support of a Wild Birds Licence application and the inclusion of more recent evidence is also encouraged.



### Herring gull ID and basic ecology

The following sources provide some basic information on herring gull identification and ecology:

- [RSPB](#)
- [BTO](#)
- [Scottish Wildlife Trust](#)
- [The Cornell Lab](#)

### Conservation and legal status

The conservation, protection and legal status of herring gulls are currently identified in the following:

- The [Wildlife and Countryside Act 1981](#)
- The [Conservation of Offshore Marine Species and Habitats Regulations 2017](#)

Herring gull are currently identified as a conservation priority in the following:

- Red listed in [Birds of Conservation Concern 5](#) (2024 update)
- Amber listed in [Birds of Conservation Concern in Ireland 2020-2026](#)
- [UK BAP](#) – priority species

- Classified as least concern on the [IUCN Red List](#)

Further information on [Conservation Designations for UK Taxa](#).

## Population trends and estimates

A sample of herring gull colonies in Britain and Ireland are monitored annually for abundance and productivity (no. of chicks fledged per pair) by the [Seabird Monitoring Programme](#) (SMP) and these are supplemented by periodic censuses, typically every 15-20 years, which aim to provide counts for all colonies. Together, these data allow the identification of [trends](#) in both population size and productivity for [herring gulls](#) in Britain and Ireland.

Population and productivity data are publicly available from the SMP database (<https://app.bto.org/seabirds/public/>).

## Behaviour

An overview of herring gull behaviour during both breeding and non-breeding seasons can be found in Coulson (2019). This book covers occupation of the breeding colony, nesting, roosting, survival, post-fledging, movements, feeding, and population trends. A more detailed account of herring gull behaviour is found in Tinbergen (1953). Understanding herring gull behaviour enables a better understanding of their presence at a colony and the potential impacts of works during different stages of the breeding season.

## Phenology

Although herring gulls have a defined breeding season (April – July), timings of arrival at the colony, nest building and egg laying will vary both within and between colonies particularly due to latitude (northern colonies tend to breed later), as well as individual age and experience of the birds. Phenology can also vary between years due to variables including, but not limited to, weather (before and during the breeding season), disturbance and food availability.

Information and data on herring gull phenology can be found in Weseloh *et al.* (2020) and Coulson (2019).

Note that no data has so far been collected for herring gull colonies offshore, but the breeding season is assumed to be the same as onshore colonies.

## Factors affecting herring gull demography

As with other seabird species, herring gull population trends are strongly influenced by small changes in adult survival (e.g. Jenouvrier *et al.*, 2005). Whilst juvenile and immature survival tends to be lower and more variable year to year, enough young herring gulls need to survive to recruit into the breeding population and replace older individuals lost from the population to prevent population decline. Changes in productivity will also influence colony size and persistence, as will immigration and emigration (e.g. Jenouvrier *et al.*, 2005).

Seabirds are vulnerable to a large number of pressures (Dias *et al.*, 2019) and herring gull demography is influenced by many factors including, but not limited to:

- food availability (e.g. Bicknell *et al.*, 2013; Hüppop & Wurm, 2000)
- commercial fishing (e.g. Foster *et al.*, 2017; Wilhelm *et al.*, 2016)
- climate change (e.g. Cook *et al.*, 2014; Mitchell *et al.*, 2010)
- pollutants (e.g. Seys *et al.*, 2002; HiDef, 2016)
- persecution (e.g. Bregnballe *et al.*, 2006; Kress, 1983; Perrins & Smith, 2000; Wanless *et al.*, 1996)
- disease (e.g. Coulson, 2015; Macdonald & Standring, 1978)

- direct mortality such as predation (e.g. Brouwer & Spaans, 1974; Dalrymple, 2023)
- collision with offshore wind farms (e.g. Bradbury *et al.*, 2014; Furness *et al.*, 2013; Vanerman *et al.*, 2015) and
- bycatch (e.g. Bærum *et al.*, 2019; Miles *et al.*, 2020; Northridge *et al.*, 2020)

General information on pressures that herring gulls are sensitive to can be found in the following:

- [IUCN Red List](#)

Humans present a perceived predation risk to seabirds and their presence around herring gull colonies can result in disturbance (Frid & Dill, 2002). Not all responses to disturbance are visible or behavioural. Physiological responses, or stress, have been recorded in a number of bird species (e.g. Fowler, 1999; Nimon *et al.*, 1995; Culik & Wilson, 1995), and have been shown to reduce breeding success in some birds (e.g. Silverin, 1986). Beale and Monaghan (2004) found that human disturbance had a significant negative effect on the breeding success of both kittiwakes and guillemots at St Abbs Head National Nature Reserve.

## Evidence of birds breeding on offshore installations

There is currently limited published evidence of herring gulls breeding on offshore installations in the Atlantic.

Herring gulls were first observed breeding on platforms in Morecambe Bay by the [North Sea Bird Club](#) in 1998. Their annual reports detail nesting attempts observed each year until 2017, after which records were no longer collected. However, observations of herring gulls resting and roosting on offshore installations are more widely spread (e.g. Burke *et al.*, 2012 and Tasker *et al.*, 1986).

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