

Seasonal Periods for Birds in the Scottish Marine Environment

Explanatory notes

A key stage of a Habitats Regulations Appraisal (HRA) for a proposed marine renewable energy (offshore wind, wave and tidal) project is defining the breeding and non-breeding season periods for the qualifying seabird species of Special Protection Areas (SPAs). The seasonal periods encompass the key behavioural stages, which require different assessment processes.

The table gives recommended periods when the listed species should be considered when planning activity **in the Scottish marine environment**.

The filled cells indicate two week periods when it would be expected to encounter that species in **significant numbers**, and the shading represents the most likely status of birds during that period. Pale cells mean that the species is not usually found in any significant numbers in the Scottish marine environment at that time, although they may be present in Scotland in other habitats.

The periods indicated are those when a significant proportion of the population of each species will be using the marine environment. Earliest and latest dates of individuals occurring will most probably fall outside the indicated periods.

The indicated periods apply to Scottish Waters - timings throughout Scotland will vary slightly (for example breeding attendance may be earlier in south, wintering departure later in north).

- 1) Grey geese are only regularly found at sea during migration periods, breeding and wintering periods are not included in this table.
- 2) Moulting periods are approximate, individuals may be encountered in full wing-moulting (and therefore flightless) in the periods indicated. Body or sequential moulting occurs outside these periods, but birds retain the power of flight.
- 3) Some birds occupy breeding colonies for periods ahead of breeding proper starting. Where this occurs regularly is indicated in the table.

The table is colour coded - a key to codes appears at the foot of the table.

Site-specific seasonal periods

There may be instances where a species at a specific site has shown consistently different timing to those outlined in the table. We strongly recommend the dates in the table are used within assessments unless there is robust evidence to show a consistent alternative pattern. This would require discussion between NatureScot and Marine Scotland Science to agree a site specific change in dates and we would require:

- ~5 years of temporal data for the colony or designated site, such as arrival, lay, hatch or departure dates, showing consistently different periods to those outlined in the table.

Suggested seasonal definitions for birds in the Scottish Marine Environment

Species	Seasonal allocations for key marine species in Scotland											
	J	F	M	A	M	J	J	A	S	O	N	D
Whooper Swan												
Pink-footed Goose												
White-fronted Goose												
Icelandic Greylag Goose												
Barnacle Goose												
Shelduck												
Scaup												
Common Eider												
Long-tailed Duck												
Common Scoter												
Velvet Scoter												
Common Goldeneye												
Red-breasted Merganser												
Red-throated Diver												
Black-throated Diver												
Great Northern Diver												
Northern Fulmar												
Manx Shearwater												
Storm Petrel												
Leach's Petrel												
Northern Gannet												
Great Cormorant												
European Shag												
Slavonian Grebe												
Arctic Skua												
Great Skua												
Atlantic Puffin												
Black Guillemot												
Razorbill												
Common Guillemot												
Little Tern												
Sandwich Tern												
Common Tern												
Roseate Tern												
Arctic Tern												
Black legged Kittiwake												
Black-headed Gull												
Little Gull												
Common Gull												
Lesser Black-backed Gull												
Herring Gull												
Great Black-backed Gull												

Colour Code Key

Breeding period (strongly associated with nest site)	
Breeding site attendance (not closely associated with nest site)	
Migration Period (birds in marine environment only on active passage)	
Flightless moult period	
Winter period (non-breeding)	
Not present in significant numbers (in Scottish marine areas)	