

Schedule 2 Species Assessment Proforma – White-fronted goose

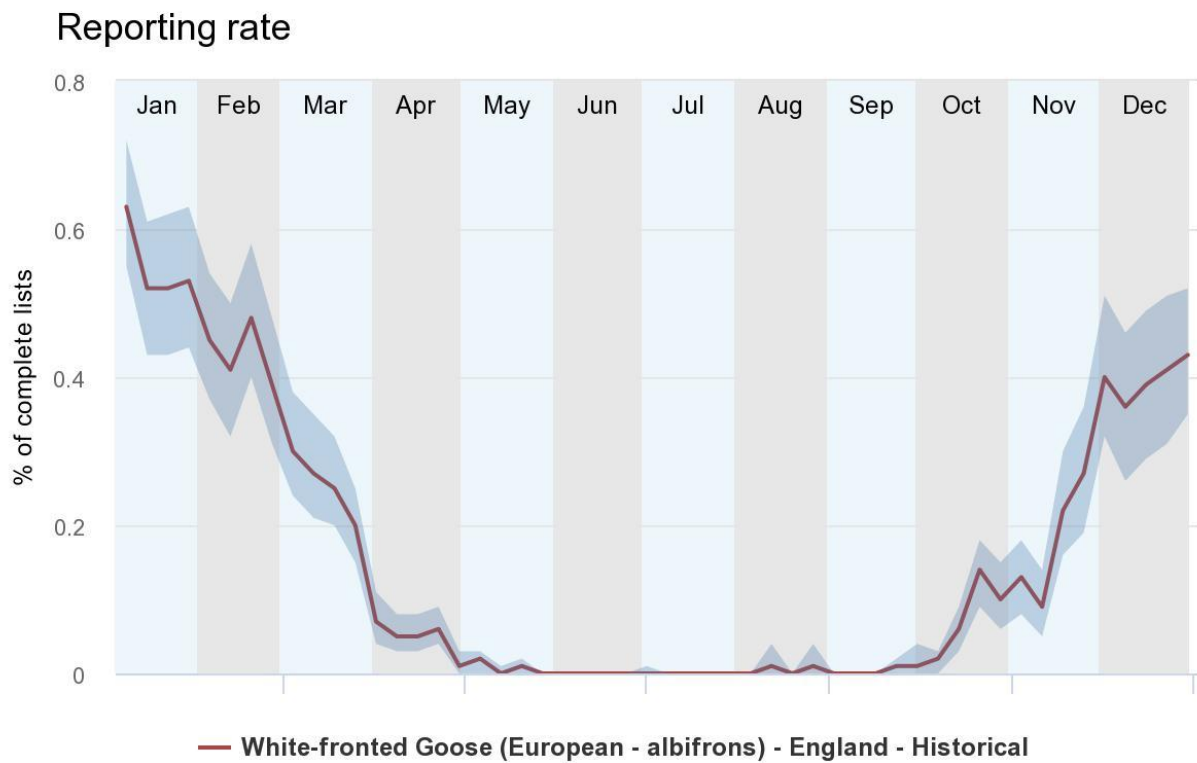
<p>Species</p>	<p>White-fronted goose <i>Anser albifrons</i></p> <p>Note: Schedule 2 lists the white-fronted goose <i>Anser albifrons</i> excluding the Greenland white-fronted goose <i>Anser albifrons flavirostris</i> (which was removed following the statutory instrument ‘Variation of Schedule 2’ in 2020). The only other subpopulation/race to visit England is the European white-fronted goose <i>Anser albifrons albifrons</i>. This review therefore concerns the latter subpopulation.</p>
<p>Conservation status</p>	<p>BOCC 5 status: RED due to a long-term, severe decline (>50%) in the non-breeding population</p> <p>IUCN GB status: ENDANGERED – considered to have an Endangered non-breeding status due to a reduction in population size (50-80%) (Stanbury et al. 2021)</p> <p>IUCN Global: LEAST CONCERN due to extremely large range and overall stability of population (including in Europe)</p>
<p>Habitat and diet</p>	<p>Both on passage and in winter, the species mainly uses lowland pastures and meadows, but also arable fields under clover and cereals, fallows and rough grasslands.</p> <p>It is a gregarious diurnal feeder, though will feed at night especially if disturbed. Flocks usually feed close to roosts or will roost on their foraging areas if undisturbed.</p> <p>Vegetarian, chiefly taking leaves, stems, stolons, rhizomes, tubers and seeds. Analysis of stomach contents of 100 birds taken in Britain suggests that the species eats mainly grasses but the stolons of white clover are important in mid-winter. They prefer younger herbage with less dead matter.</p>
<p>Migratory behaviour and movements</p>	<p>There are six fairly well-separated sub-populations (or races) that overwinter in the west Palearctic, but migration routes are largely unknown. Two sub-species of white-fronted goose winter in the UK, these being the European white-fronted goose <i>Anser albifrons albifrons</i> and the Greenland white-fronted goose <i>A.a. flavirostris</i>.</p> <p>The Greenland white-fronted goose is a globally threatened sub-species that has been the subject of concerted conservation action for several decades. Whilst it formerly overwintered at several peatland sites in NW England, these sites were vacated following drainage and the sub-species became an occasional visitor. However, since 1991/2, there have been between 4 and 16 Greenland white-fronted geese overwintering every year at a site in Northumberland (Grendon Lough, a Northumberland Wildlife Trust reserve).</p> <p>European white-fronted geese breed on the Siberian tundra. After breeding, the species gathers in small flocks (<30 birds) to undergo a post-breeding moult. After the moulting period flocks gather to migrate south to winter quarters, leaving the breeding areas from late-August through September and arriving in England from mid-September to December (Figure 1a & b). Return migration begins in early March and few remain by the end of the month.</p>

<p>Population status (abundance and distribution)</p>	<p>Non-breeding population estimate, based on WeBS data for the period 2012/3-2016/7 (Woodward et al. 2020¹): GB =13,500 UK = 14,000 In Britain, European white-fronted goose winter mainly in the south and east of England (and all of the key sites are located here) although, in recent winters, records have been received from as far north as Orkney. Balmer et al. (2013) indicates them to be frequent in other parts of England, with isolated records as far afield as western Scotland. Note, there are occasional reports of white-fronted geese present during the breeding season and sometimes breeding in England, but these will relate to either individuals that have escaped from captivity or injured wild birds.</p>
<p>Population trends</p>	<p>Latest medium and long-term trends for England from WeBS are as follows (and see Figure 2): 10-year trend (2012/13 to 2022/23) = -24% 25-year trend (1997/98 to 2022/23) = -77% Numbers in Europe as a whole appear to be stable following a large, long-term increase. Declines in the numbers of wintering birds in the UK have been matched or exceeded by gains in other parts of mainland Europe (eg The Netherlands). The ten-year trend shows comparatively little change against the 25-year trend; this is because the population is now at a severely depleted level following a steep decline throughout the 2000s.</p>
<p>Drivers of population change</p>	<p>It is generally accepted that this population is undergoing a partial wintering range shift towards their breeding grounds, in a north-easterly direction, but with some birds still occupying the western end in England. This results in an increasing proportion of the population wintering in areas outside England and is reflected in national and site level trends. The evidence for this shift comes from long-term datasets gathered via international goose monitoring schemes across many European countries (Mooij et al 1999; Nilsson 2013). Although the exact size of the hunting bag is unknown, Hearn (2004) suggested it unlikely that direct mortality from hunting in the UK has a major influence on UK wintering numbers. Annual mortality is relatively low (estimated at c. 25-30%) but hunting accounts for around 80-95% of annual mortality (Hearn 2004). Like a number of goose and swan species, annual breeding performance is quantified by measuring the proportion of first winter birds present in wintering flocks. This is carried out in several European countries, including the UK, usually in January to synchronise with the International Waterbird Census (IWC) counts. Between the early 1960s and mid-1990s, the proportion of first winter birds fell from 34% to 27%, suggesting declining breeding productivity during this period. Differences in breeding performance have been linked to lemming cycles (which determines the food available to predators of the geese, notably Arctic fox), with the poorest breeding years occurring the first season after a year when there was a high abundance of lemmings and, hence, high predator abundance (Mooij et al 1999). Since the mid-1990s, breeding productivity measures</p>

¹ Note that GB estimates for this species have been recently updated (Caulfield et al. 2025). The GB estimate has now reduced to 10,000 individuals (peak mean 2017/18 to 2022/23), but as there has been no update to UK estimates, the reference to Woodward et al. (2020) remains relevant.

	<p>have varied between years but with an overall decline. It is not clear why there has been a long-term increase in the non-breeding population at the same time breeding productivity has been declining, although this could relate to density dependent population limitation operating on the breeding grounds (i.e. as the number of breeding pairs increases, average breeding productivity per pair declines due to competition or another density dependent factor). In the most recent winter for which data is available (2021/22), the proportion of young birds in the England was 32.26%.</p>
Impacts of climate change	<p>Climate change-induced short stopping/distributional shifts has been the main factor driving the large decline in the non-breeding population in England in recent decades and is likely to lead to further declines and possible loss as a regular overwintering bird in this country.</p>

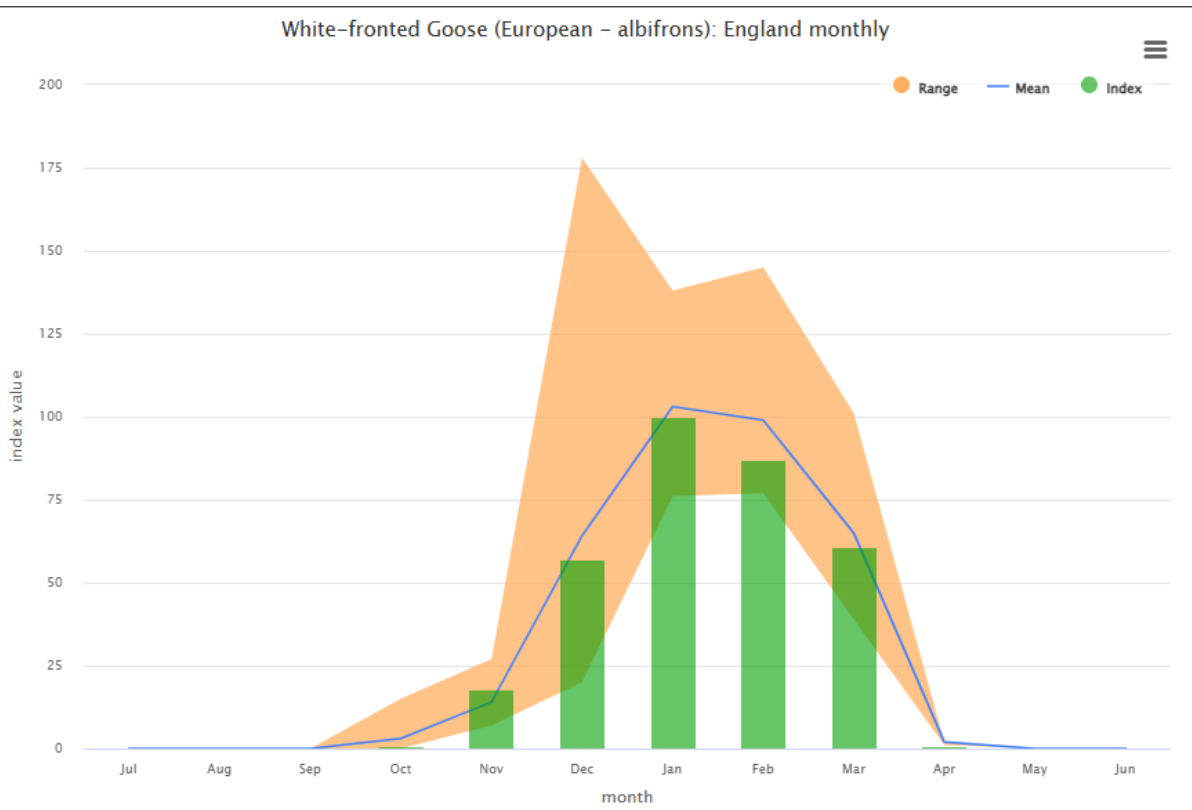
Figure 1a



www.birdtrack.net

BirdTrack (accessed January 2026), BTO. Login available via <https://www.bto.org/get-involved/volunteer/projects/birdtrack>

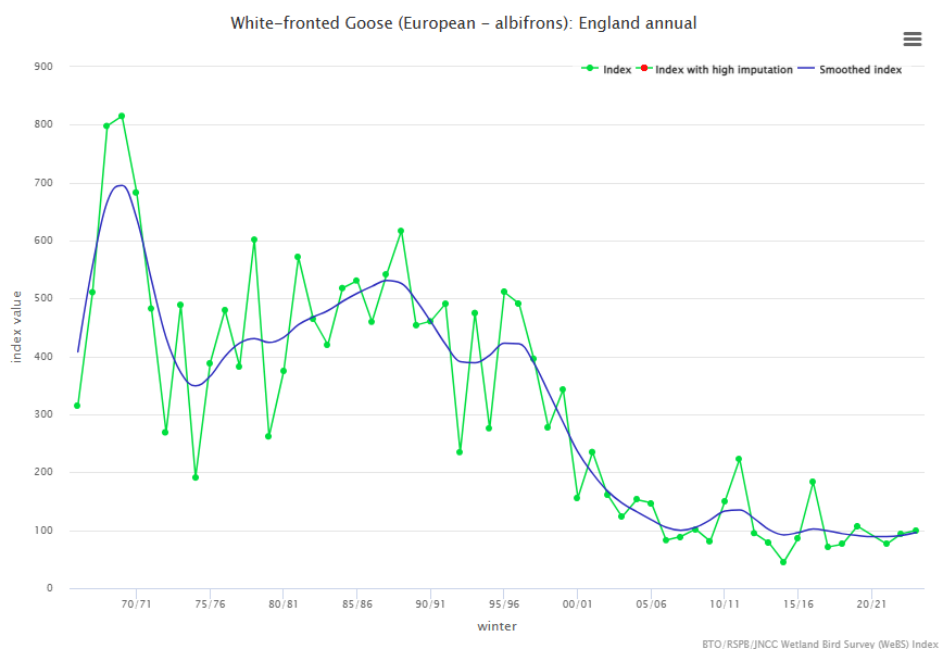
Figure 1b Likelihood of occurrence of European White-fronted Goose in England by month



BTO/RSPB/JNCC Wetland Bird Survey (WeBS) Index

Calbrade, N.A., Birtles, G.A., Woodward, I.D., Feather, A., Hiza, B.M., Caulfield, E.B., Balmer, D.E., Peck, K., Wotton, S.R., Shaw, J.M. & Frost, T.M. 2025. Waterbirds in the UK 2023/24: The Wetland Bird Survey and Goose & Swan Monitoring Programme. BTO/RSPB/JNCC/ NatureScot. Thetford.

Figure 2 Trend in wintering European white-fronted Goose abundance in England



BTO/RSPB/JNCC Wetland Bird Survey (WeBS) Index

Calbrade, N.A., Birtles, G.A., Woodward, I.D., Feather, A., Hiza, B.M., Caulfield, E.B., Balmer, D.E., Peck, K., Wotton, S.R., Shaw, J.M. & Frost, T.M. 2025. Waterbirds in the UK 2023/24: The Wetland Bird Survey and Goose & Swan Monitoring Programme. BTO/RSPB/JNCC/ NatureScot. Thetford.

Impacts of hunting on populations

The white-fronted goose (excluding the Greenland subpopulation) is listed on Schedule 2 Part 1 of the Wildlife and Countryside Act 1981 and is legal quarry outside the close season which runs from 1 February to 31 August (21 February to 31 August below high-water mark).

Aebischer (2019) suggested the annual bag of white-fronted geese is <100 birds. Due to the small size of the hunting bag, Ellis & Cameron (2022) were not able to include the species in their initial assessment of the sustainability of the UK waterbird harvest. It is, therefore, very difficult to assess the potential impact of shooting, but if the bag is around 100 birds per annum, this would represent <1% of the non-breeding population estimate.

Potential benefits to the species of a change to Schedule 2

Climate change-induced short stopping/distributional shifts is clearly the main factor driving the large decline in the non-breeding population in England in recent decades. Restricting the timing or the level of shooting is, therefore, unlikely to have a major long-term effect on the adverse population trends being experienced by the species which are being caused by broader factors operating by outside of England. However, it is possible that restricting hunting (by either reducing the shooting period or removing it completely from Schedule 2) might slow the rate of decline to a small extent.

A further consideration is that removing white-fronted goose completely from Schedule 2 may act as an additional safeguard for protecting individuals of the Greenland white-fronted goose *A.a. flavirostris* subpopulation that winter in England. The Greenland white-fronted goose was removed from Schedule 2 in England in 2020 (bringing its status in line with the other UK countries) in order to protect the small numbers of birds that overwinter/occur on passage here. Individuals of the two subpopulations can be distinguished in good light conditions with appropriate optical equipment - *flavirostris* birds tend to be darker overall and have a carrot-orange bill which matches the legs, although the pink bills of Eurasian birds can appear orange in some lights and clear views are required to be sure of the colour. There is, however, considerable potential for misidentification in a shooting/wildfowling situation which could lead to accidental shooting. Whilst there is only one regular overwintering site for Greenland white-fronted goose in England, individuals/small flocks do occur occasionally at other English sites (e.g. on the Lancashire coast), so this is a further factor to consider when reviewing the Schedule 2 status of White-fronted goose. In addition, BASC previously secured a moratorium with the wildfowling community on the shooting of all white-fronted geese in northern England to try to avoid the potential for mis-identification in areas where both sub-species could co-exist. A further factor to consider is the very low numbers that are shot each year (less than 100 individuals across the whole of the UK), so removing from Schedule 2 is unlikely to have a big impact on the sport of shooting in England.

RECOMMENDATION

Remove from Schedule 2 based on the precautionary principle as this may, firstly, help reduce the rate of decline and risk of extinction as a regular overwintering bird in England, and secondly, act as an additional safeguard for protecting (from accidental shooting) individuals of the population of Globally Endangered Greenland white-fronted goose *A.a. flavirostris* occurring in England.

References

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