

National Goose Policy Framework In Scotland

Review

2022

Submission to Scottish Ministers



February 2024

Contents

SECTION 1: INTRODUCTION AND RECOMMENDATIONS	3
1. Introduction	3
2. Consultation Process	3
3. Recommendations.....	4
SECTION 2: BACKGROUND INFORMATION AND CONSIDERATIONS	6
4. Overview of current goose management policy in Scotland	6
5. Delivery mechanisms and costs	9
6. Highly pathogenic avian influenza	16
7. Air safety	17
8. Issues identified through consultation	19
9. Modern wildlife management	19
10. Future delivery	20
11. Acknowledgements	20
ANNEXES	22
Annex 1. National Goose Management Policy Review Terms of Reference	22
Annex 2. Island Communities Impact Assessment	24
Annex 3. Summary of Consultation Responses	26
Annex 4. List of policy recommendations from 2017 policy review and a summary of progress.	32
Annex 5. Goose population numbers & status	36
Annex 6. Goose Scheme and Adaptive Management Pilot Areas	39

Review of Scottish Government Goose Management Policy 2022

Section 1: Introduction and Recommendations

1. Introduction

A formal goose management policy has been in place in Scotland since 1999, with a commitment to undertake a review of this policy every 5 years. The last review took place in 2017. The 2022 review provides an update on progress in delivering goose management policies over the previous five years, sets out proposals to refresh policies for delivery of goose management over the next 5-10 years and highlights emerging issues that will require actions in the medium to longer term.

This review takes place in the context of policy drivers prioritising biodiversity, climate change and Net Zero, uncertainty about the shape of future agricultural support mechanisms, impacts of avian influenza, impact of Covid lockdowns on management activities and tightening financial constraints.

The review has been undertaken by NatureScot, supported by Scottish Government Rural Inspections and Payment Directorate, on behalf of Scottish Ministers. The initial scope and commissioning document which was agreed by Scottish Ministers at the beginning of the review process is included at **Annex 1**.

The review has considered the Scottish Island Plan under the Islands (Scotland) Act and concluded that as the policy applies equally across islands and the mainland, it does not require an Island Communities Impact Assessment. Details of the considerations are set out in **Annex 2**.

2. Consultation Process

To inform the review, a national consultation exercise has been undertaken. An initial online questionnaire was available to any interested party to complete. A total of 257 responses were submitted and a summary is included in **Annex 3**. Those responses then formed the basis of detailed discussions with National Goose Forum and individual Local Goose Management Groups and from that, a summary of progress with delivery of the current objectives (**Annex 4**) and an outline of stakeholder priorities going forward has been made (Section 8).

In addition to stakeholders with agricultural and conservation interests, the review panel also held discussions with airport safety managers to assess the need for goose management policy to address air safety issues.

Whilst these discussions inform the process, the final recommendations on future policy are set in the context of current Scottish Government and NatureScot priorities.

3. Recommendations

The review summarises the progress made since the previous review in 2017 (**Annex 4**). It is clear that a number of changes have been introduced to goose management delivery since then and that these changes have made progress in delivering some aspects of existing goose management policies. However, there are a number of areas that have been identified through the consultation process as increasing or developing issues and this review sets out recommendations in Table 1 to support future goose management delivery.

1. Goose policy objectives should be refreshed to ensure that they are clear and measurable and to take into account priority government policies around biodiversity, agriculture, crofting and Net Zero (this recommendation has been completed as part of this review).
2. Work should continue to develop and deliver national and international species management plans. Priority will be given to protected species (Greenland white-fronted goose, Greenland barnacle goose and Svalbard barnacle goose). The development of a new range wide plan for the recently re-classified Icelandic greylag goose is also a priority, incorporating a national plan for resident greylag.
3. Clarify when, where and at what level public funding is required to deliver management interventions.
4. A specific review of support for goose management should take place to ensure the Schemes are operating in an equitable and transparent manner.
5. Commitment to goose management should aim to be medium to long term to allow farmers and crofters to plan management of their businesses.
6. Continue to explore mechanisms to manage populations of resident greylag geese.
7. Consider air safety issues in developing goose management policy and interventions.
8. Improve engagement with key stakeholders through effective use of national and local goose management groups and apply Shared Approach principles¹.
9. Continue engagement with other stakeholders who have an interest in goose management e.g. water quality, tourism, sporting and public and animal health.
10. A delivery plan setting out how goose management recommendations and objectives will be met, including clear roles and responsibilities for all stakeholders and following Just Transition principles², should be developed by the end of 2024.
11. Integrate goose management policy within wider wildlife management approaches.

Table 1. Recommendations from the 2022 Review

¹ [Shared Approach to Wildlife Management](#)

² [Scottish Government Climate Change Just Transition Policy](#)

3.1 Recommendations for refreshed goose policy objectives

Refreshed goose policy objectives to ensure that they are clear, measurable and take into account other key government policies are proposed in Table 2.

- Meet the UK's nature conservation obligations for geese and support goose management in a way which helps to deliver Net Zero³, and biodiversity⁴ targets.
- Support farmers and crofters to manage their agricultural businesses alongside important populations of geese and within Scottish Government's vision for sustainable and regenerative farming⁵ and the National Development Plan for Crofting⁶.
- Utilise clear criteria for using public funding to deliver government policy priorities whilst maximising value for money of public expenditure.
- Support airport managers to mitigate goose related risks to aircraft.

Table 2. Refreshed goose policy objective recommendations

³ [Scottish Government Climate Change Policy](#)

⁴ [Biodiversity strategy to 2045: tackling the nature emergency - draft](#)

⁵ [Sustainable and regenerative farming - next steps: statement](#)

⁶ [Crofting: national development plan](#)

Section 2: Background information and considerations

The following sections of the report set out the background information and the considerations around which the recommendations have been made.

4. Overview of current goose management policy in Scotland

4.1 There are 3 objectives around which goose policy has been based (Table 3), with little change since 2000.

- | |
|---|
| <ul style="list-style-type: none">• Meet the UK's nature conservation obligations for geese, within the context of wider biodiversity objectives• Minimise economic losses experienced by farmers and crofters as a result of the presence of geese• Maximise the value for money of public expenditure |
|---|

Table 3. Current goose policy objectives

4.1.1 Meet the UK's nature conservation obligations for geese, within the context of wider biodiversity objectives

This policy objective has been essential to ensuring that all goose management policies and actions are framed within the context of current legislative provisions. These include European Directives, most of which remain enshrined within UK and Scots Law. The UK is also a signatory to a number of international agreements which are relevant to geese. These include the Ramsar agreement and the African-Eurasian Waterbird 10 Agreement (AEWA). These are long term commitments to promote biodiversity objectives for the benefit of wetlands and waterbirds.

In terms of meeting the nature conservation obligations, Scotland continues to follow the requirements of national and international legislation. Nationally, geese are managed according to the status of the species, through designation of protected sites, open seasons, licensing, goose schemes and the Islay Sustainable Goose Management Strategy. Internationally, partnerships with other ranges states have been strengthened through the AEWA European Goose Management Platform. With regard to wider biodiversity objectives, no assessment of these have been made. Work is required to look at how goose policy can contribute to the targets set out in the recent draft Scottish Biodiversity Strategy. Current population numbers and status of goose species present in Scotland are detailed in **Annex 5**.

In summary, this objective has largely been met and continues to be a relevant part of the goose policy framework but the wording of the objective could be refined to ensure that it is clear and progress is measurable. Going forward, this objective should also cover biodiversity, and Net Zero targets, where they relate to goose management, to recognise key Scottish Government priorities.

4.1.2 Minimise economic losses experienced by farmers and crofters as a result of the presence of geese.

This policy objective aimed to reduce the costs of goose damage borne by farmers and reduce the levels of conflict caused by geese in Scotland. It recognises that economic impacts are the main reason for conflict caused by geese.

Intervention in scheme areas (**Annex 6**) has reduced conflict to some extent, as a result of management and compensation, but growing goose populations within some scheme areas, increasing complaints from out-with goose scheme areas and a perceived lack of equity in payments mean that there remains dissatisfaction amongst some of the farming and crofting communities. The consultation responses from stakeholders strongly suggest that this policy objective is not currently being met.

The 2017 review outlined a number of key issues related to this specific policy which have contributed towards some ongoing and increasing conflicts. The consultation exercise for the current review suggests that all of these issues remain in some situations detailed in the bullet points below.

- Calculating economic losses as a result of goose grazing is a difficult and imprecise science. Where compensation is paid, it is calculated using a standard formula to estimate additional cost and profit foregone, using local production costs, prices and yields. However, the approach does not take account of all variables⁷. Furthermore, payment rates are constrained by the available budget, and intervention rates (the proportion of the costs paid) vary with some schemes paying 60% and others paying 100% of the calculated cost⁸ of supporting geese.
- Damage to different crops, by different goose species, at different times of the year and in different land management systems means, along with year to year variations that there is no “one size fits all” approach that can calculate the impact of every goose on every field. However, where protected species occur, consultation feedback from some areas is that the calculation of losses should be equitable.
- Some solutions include management actions such as scaring and shooting. These options are not always fully effective in reducing impacts of geese to a level that reduces economic losses, due to lack of resources, cost of scaring outweighing benefits or effectiveness of techniques where geese are present for long periods of time. Some of the work to manage goose populations, especially greylag geese, has been restricted due to Covid and the knock on impacts have seen increased populations of geese.
- There is not currently a clear definition of what should trigger government intervention, at what point intervention is required, what type of intervention is required and to what extent economic losses should be minimised, which is important for equity and transparency and in demonstrating value for money.
- Population growth driven by a number of factors including agricultural production and climate change has resulted in increasing conflicts across new areas. The policy should be revised and consideration should be given as to how actions stemming from this policy are delivered in a consistent manner across the country,

⁷ Wood-Gee, V. 2020. Farm practice in goose scheme areas. Scottish Natural Heritage Research Report. Unpublished.

⁸ The last payment review was carried out in 2015.

whether damage levels trigger intervention and, if so, to defining what might be an acceptable level of damage, below which no intervention is required.

- Where shooting has reduced the number of geese, conflict remains.

4.1.3 Maximise the value for money of public expenditure

This objective has been the subject of ongoing discussion across a number of years as it lacks clarity on the criteria for evaluating value for money. The consultation exercise demonstrated that stakeholders felt strongly that value for money was not being achieved.

It is proposed that this objective is refreshed to develop clear measurable criteria. It should follow Just Transition principles through the process that must be undertaken in partnership with those impacted by the transition to net zero. Just transition is how we reach net zero and climate resilient economy, in a way that delivers fairness and tackles inequality and injustice.

4.1.4 Guiding principles

Since 2011, the following principles have also guided the delivery of goose management:

- Policy is based on a threefold grouping of the goose populations;
 - protected species in unfavourable status and in most need of protective measures
 - protected species in favourable status
 - populations of quarry species without special protection
- Continued efforts to develop flyway plans and international collaboration to protect threatened species.
- Alternative mechanisms for managing protected species that are no longer of the highest conservation status, should be explored.
- The development of an adaptive management approach, which would require the robust collection of hunting bag returns but would permit agreed levels of local population management – including a willingness to license control measures where supported by good data.
- Support for the development of sport shooting where appropriate.
- The local approach has worked well and should be continued (including facilitation for crofters and farmers to organise the control of geese locally), however, governance and eligibility arrangements should be improved.
- Scheme costs need to be contained, and financial intervention should be targeted on the highest conservation species.

Table 4. Current guiding principles

These principles have broadly been retained in the recommendations covering the next 5-10 years.

5. Delivery mechanisms and costs

5.1 Goose management schemes

The core delivery mechanism for protected species has continued to be goose management schemes (Map 1) co-ordinated by Local Goose Management Groups as set out in Table 6 and costs are set out in Tables 7, 8 and 9. These show that, since 2017/18 payments to farmers to support populations of protected geese have totalled £5.6 million and a further £1 million has been spent on running costs, which include counting of geese, surveys of grass damage and management (scaring and shooting in some locations) of geese. Whilst this is a significant level of public funding within the context of NatureScot's budget, it should be noted that the costs do not, in some cases, cover the estimated costs to farmers of goose damage. Further information on goose management schemes is available [here](#).

The current goose management schemes end in April 2023 and there are no alternatives in place for future schemes. It is anticipated that schemes will roll forward in some form until there is clarity on the future goose management. It is clear from the consultation process that many farmers support standalone goose schemes as a delivery mechanism but there is also support for considering wider agri-environment support mechanisms as a means of supporting farmers and crofters to support goose populations.

Scheme/pilot (start date)	location	Species of goose covered by the scheme/pilot	Summary details
Islay (2000)		Greenland barnacle goose, Greenland white-fronted goose	Winter scheme for migratory geese. Payments made to farmers for managing geese. Costs relate to damage caused but do not cover the full estimated cost of damage. Delivery mechanism for Islay Sustainable Goose Management Strategy.
Solway (2000)		Svalbard barnacle goose	Winter scheme for migratory geese. Payments made to farmers for managing geese. Costs relate to damage caused but do not cover the full estimated cost of damage.
Kintyre (2000)		Greenland white-fronted goose	Winter scheme for migratory geese. Payments made to farmers for managing geese. Costs relate to damage caused.
South Walls -Orkney (2000)		Greenland barnacle goose	Winter scheme for migratory geese. Payments made to farmers for managing geese. Costs relate to damage caused.
Loch of Strathbeg (2000)		Pink-footed goose	Winter scheme for migratory geese. Payments made to farmers for managing geese. Costs relate to damage caused. This scheme closed in 2021 as it did not meet the policy objective of focussing on species of the highest conservation interest.
Uist, Coll & Tiree (2019)		Barnacle Goose	Winter scheme for migratory geese. Payments made to farmers for managing geese. Costs relate to damage caused but do not cover the full estimated cost of damage.
Slamannan (2006)		Taiga Bean Goose	Winter scheme for migratory geese. Payments made to farmers for managing geese. Costs relate to providing undisturbed feeding. Closed in 2018 because hosting the geese did not incur additional cost – neither for management nor from agricultural damage.

Table 6. Goose management schemes 2017 - present

Financial year	Islay	Kintyre	Slamannan	Solway	South Walls	Strathbeg	Uist, Coll & Tiree	Total
2017/18	£877,259	£53,366	£5,295	£185,251	£15,432	£9,998	-	£1,146,601
2018/19	£862,361	£51,205	-	£186,002	£15,267	£9,998	£7,500	£1,132,333
2019/20	£802,997	£52,167	-	£204,839	£15,485	£9,998	£60,814	£1,146,300
2020/21	£790,114	£55,864	-	£206,216	£15,047	-	£60,814	£1,128,055
2021/22	£773,056	£53,788	-	£199,224	£15,578	-	£56,357	£1,098,003
Grand Total	£4,105,787	£266,390	£5,295	£981,532	£76,809	£29,994	£185,485	£5,651,292

Table 7. Management Agreement payments to farmers

Financial year	Islay	Kintyre	Slamannan	Solway	South Walls	Strathbeg	Uist, Coll & Tiree	Grand Total
2017/18	£143,954	£10,988	£2,512	£24,778	£6,665	£3,170	-	£192,067
2018/19	£136,360	£11,290	£600	£28,469	£6,503	£3,226	£6,360	£192,808
2019/20	£134,003	£12,020	£600	£29,829	£11,758	£3,462	£6,784	£198,456
2020/21	£138,192	£12,395	£600	£31,286	£12,448	£789	£6,992	£202,703
2021/22	£138,442	£12,712	£600	£31,344	£8,193	£0	£8,609	£199,901
Grand Total	£690,951	£59,405	£4,912	£145,707	£45,567	£10,647	£28,745	£985,934

Table 8. Scheme running costs (including staff and contract costs for co-ordination, counts and marksmen, plus the cost of scaring equipment). Note counts on Tiree & Coll are provided by RSPB at no cost to NatureScot. Whilst the Slamannan goose scheme closed after 2017/18, NatureScot continues to support counts

Financial year	Islay	Kintyre	Slamannan	Solway	South Walls	Strathbeg	Uist, Coll & Tiree	Grand Total
2017/18	£1,021,213	£64,354	£7,807	£210,029	£22,097	£13,168	-	£1,338,668
2018/19	£998,721	£62,495	£600	£214,471	£21,770	£13,224	£13,860	£1,325,141
2019/20	£937,000	£64,187	£600	£234,668	£27,243	£13,460	£67,598	£1,344,756
2020/21	£928,306	£68,259	£600	£237,502	£27,495	£789	£67,806	£1,330,758
2021/22	£911,498	£66,500	£600	£230,568	£23,771	-	£64,966	£1,297,904
Grand Total	£4,796,738	£325,795	£10,207	£1,127,239	£122,376	£40,641	£214,230	£6,637,226

Table 9. Total costs for goose management schemes since 2017

5.2 Islay Sustainable Goose Management Strategy

The Islay Local Goose Management Scheme is the delivery mechanism for the Islay Sustainable Goose Management Strategy. The strategy aims to reduce agricultural damage by reducing barnacle goose numbers over a 10 year period, from 2014. The reduction is done by shooting geese, with bag limits calculated using a population model. The population over the past 5 years has decreased from an average of 40,989

in 2017/18 to an average of 34,949 in 2021/22 (Figure 1). Work⁹ to look at impacts of geese on Islay through grass measurements demonstrates that fewer geese cause less damage. Post 2024, the intention is to manage the Greenland barnacle goose population across its range with potential take calculated through a population model and agreement on management reached through the European Goose Management Platform¹⁰ processes.

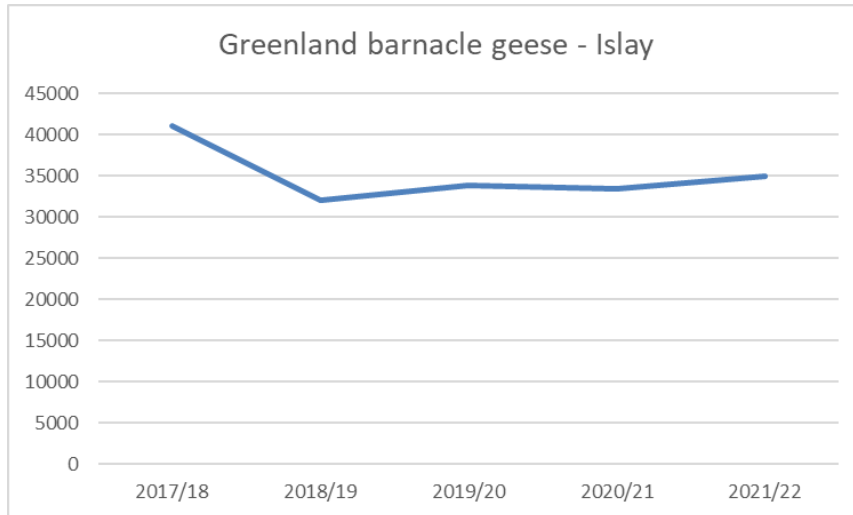


Figure 1. Greenland barnacle goose numbers - Islay

The average number of barnacle geese dropped significantly in winter 22/23 due to the impacts of highly pathogenic avian influenza (HPAI) on Greenland barnacle geese between November 2022 and spring 2023. Further information on HPAI is set out in section 4.6.

The Strategy also covers Greenland white-fronted geese on Islay and aims to support and increase the population on the island. This is done through provision of undisturbed feeding areas. Over the past five years the population has increased from below 5000 to over 6000 and fluctuated around that number (Figure 2). There was a slight drop on the 2022-23 total, based on population counts over the winter to date, but the reason for this drop is not known. There are no confirmed cases of HPAI in Greenland white-fronted geese in Scotland at the time of writing.

⁹ Ewing, D. BIOS, 2021 Analysis of Islay Goose Grass Damage. Scottish Natural Heritage Report. Unpublished

¹⁰ [European Goose Management Platform](#)

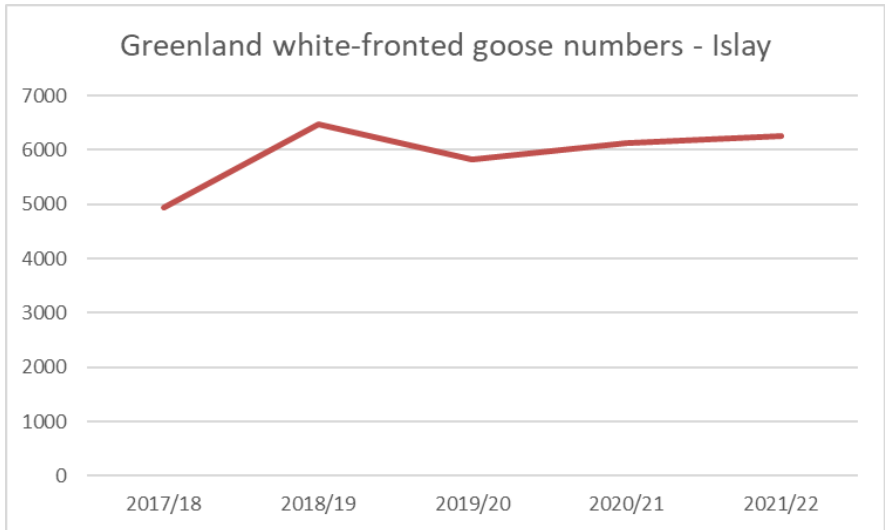


Figure 2. Greenland white-fronted goose numbers - Islay

5.3 Adaptive management pilots

5.3.1 Background

NatureScot established four adaptive management pilot projects in 2012, detailed in Table 10 and on Map 1, to test whether impacts on agricultural activity could be reduced by reducing local populations of resident greylag geese, a quarry species, whilst retaining their conservation interest. The pilots were time-limited for 5 years until 2017. Following the pilots, Local Goose Management Groups (LGMGs) anticipated that they would have the capacity to deliver ongoing maintenance culls at their own expense to contain the smaller, remaining populations.

At all sites, LGMGs set out to reduce goose damage to agricultural crops by halving goose numbers and density (the number of birds/ha of improved land).

The scale of the reduction cull required on Orkney was much greater. The Orkney population of resident greylag geese numbers approximately 24,000 resident greylag geese, whilst the Western Isles populations number approximately 3,000 – 9,000 individuals.

During the pilots, the adaptive culls undertaken using traditional methods on the Western Isles successfully delivered the reduction culls that the LGMGs set out to achieve.

By contrast, although the Orkney LGMG delivered the largest total take, it was beyond the capacity of the LGMG to reduce the Orkney resident greylag population using traditional control methods, and working only in summer and early autumn to protect the Icelandic greylag geese that winter on Orkney.

Uists (2012)	Greylag	Adaptive management pilot for management of resident greylag geese. Co-ordinates management actions but no payments made for damage caused by geese.
Lewis and Harris (2014)	Greylag	Adaptive management pilot for management of resident greylag geese. Co-ordinates management actions but no payments made for damage caused by geese.
Tiree and Coll (2012)	Greylag	Adaptive management pilot for management of resident greylag geese. Co-ordinates management actions but no payments made for damage caused by geese.
Orkney (2012)	Greylag	Adaptive management pilot for management of resident greylag geese. Co-ordinates management actions but no payments made for damage caused by geese.

Table 10. Adaptive management pilots

5.3.2 What has happened since the close of the adaptive management pilots in 2017?

LGMGs continued to control resident greylag populations but with limited funding support from NatureScot and Scottish Government and with limited success. Only the Orkney LGMG was able to secure additional funding (from the NFUS and the local authority).

Resident greylag populations increased and they are now greater than they were in 2017 at all four pilot sites. Restrictions during the Covid 19 pandemic reduced control efforts in 2020 and 2021.

The Orkney LGMG has successfully trialled a corralling method to control resident greylag geese. The Group has also developed a plan detailing how it could achieve a reduction cull using a combination of shooting, corralling and egg oiling.

5.3.3 Financial and other support given to LGMGs to support adaptive management of resident greylag geese

NatureScot and Scottish Government have committed a total of £570,000 expenditure to support adaptive greylag goose control on Orkney, Uist, Tiree & Coll and Lewis and Harris since 2012. Since 2017, modest levels of funding helped LGMGs to deliver maintenance culls whilst they investigated options for preparing to continue this work at their own expense (Table 11).

Financial year	Uist	Orkney	Tiree	Lewis	Total
2018/19	£14,500	£5,177	£1,692	£6,000	£27,369
2019/20	£8,500	£14,245	£0	£6,489	£29,234
2020/21	£7,212	£12,319	£2,400	£6,582	£28,513
2021/22	£6,000	£38,181	£6,000	£6,000	£56,181
2022/23	£7,500	£27,000	£6,000	£7,500	£48,000
Grand Total	£43,712	£96,922	£16,092	£32,571	£189,297

Table 11. Adaptive management areas costs since 2017

In addition to funding, NatureScot has enabled local management of greylag geese through the provision of licenced take. In 2016, resident greylag geese were added to General Licences to permit control to prevent agricultural damage during July and August. From 1 January 2020, the General Licence was amended to permit the take of greylag geese year-round to prevent agricultural damage. This change reduced the administration involved in applying for a licence to control greylag geese. The sale of greylag goose meat is currently permitted under General Licence in areas previously part of the pilots.

5.3.4 Discussion – the future.

The four groups at the former adaptive management pilot sites now seek long term government funding to control populations of native greylag. Farmers Scotland-wide may also seek funding to control these geese as their number and density increase.

Goose policy is currently focused on species of highest conservation concern. To support farmers in managing species of lower protections would be a significant policy change.

In the crofting counties, greylag geese present just one of many challenges to maintaining and developing crofting activity. Challenges specific to crofting that have been cited include; an aging crofting population, the lack of control that crofters have over sporting rights, and the limited number of crofters with the ability to shoot. The Scottish Government National Development Plan for Crofting recognises the impact that geese can have on croft businesses, such as the significant agricultural damage on productive farmland associated with high densities of geese. It commits to Scottish Government, in partnership with NatureScot, continuing to support goose management schemes and help mitigate the impact of geese on crofts and farms and sets out a number of tools through which this will be done.

There was general support for licensing of the sale of resident greylag goose meat on a long term basis.

6. Highly pathogenic avian influenza

The current Highly Pathogenic Avian Influenza (HPAI) outbreak which began in 2021 is the largest in the UK to date, affecting poultry, other captive birds and wild birds, notably seabirds and wildfowl, including geese. Scotland is home to important wintering populations of wildfowl, including geese, some populations of which are being severely affected by HPAI.

The continued detection of infection in wild birds through 2022/23 demonstrates that the virus is still circulating in wild bird populations and the probability of HPAI H5 still being present in wild birds in GB in early February 2023 is very high, with direct and indirect contact with wild birds being the most likely risk pathway for introduction of the virus into poultry holdings.

6.1 Impact on Svalbard barnacle geese

The current outbreak in geese was first detected in the Svalbard barnacle goose population in the Solway in late October 2021. The virus spread rapidly through the population, and by the end of the winter, estimates suggest that 13,200 birds, around one third of the flyway population were killed by the virus. These estimates are based on population counts of live birds and productivity data. The first positive test for HPAI H5N1 in a Svalbard barnacle goose in the Solway was returned on 13 November 2021. A total of 31 birds were tested between November 2021 and January 2022 with 29 of those were found to be positive.

Whole population counts in November confirmed that ca 13,200 adult birds were lost. Further counts and assessment of juvenile recruitment this year has surprisingly pointed to exceptional breeding success. As of mid-December 2022 only 2 Svalbard barnacle geese had tested positive for H5N1 and no significant reports of mortality.

6.2 Impact on Greenland barnacle geese

The first cases of HPAI H5N1 in the Greenland barnacle goose population were detected in Donegal, Ireland in late January 2022. By early February 2022, the first Scottish cases were detected on Islay. No cases were confirmed in other parts of the Scottish range, although it has recently been reported that there were a small number of suspected cases on Tiree in spring 2022. By the spring migration in 2022 it is estimated that 1700 birds were killed in Ireland and 1000 on Islay. A total of 5 barnacle geese were tested on Islay and 4 of these tested positive.

Reports from Iceland over the summer suggest that the virus was still circulating and that c.200 birds from the Icelandic breeding population had died. A co-ordinated count took place across the key Scottish wintering sites in the first week of November and estimates of productivity suggest it is very low, at 3.54%. Although the data suggested that the Scottish population at this point was as high as 60,000 birds.

Regular scheme counts on Islay, in winter 2022-23, indicate that the population has declined from just under 35,000 birds in late November to 24,500 birds in February, with the peak impacts of HPAI being recorded from mid-December through to early January. Smaller numbers of carcasses in the tens or low hundreds have been reported on Oronsay, Tiree, Coll and Uist. Although the population can fluctuate in any given year, the Islay decline has taken place during a period of high mortality due to HPAI and suggests, along with reported deaths through an Epicollect recording system, that a minimum of 5000 birds have been lost on Islay. A flyway level census of Greenland barnacle geese took place in mid-February and it is hoped that this will provide a more accurate estimate of impacts on the population.

6.3 Other goose species

A total of 32 greylag geese were tested, predominantly from Aberdeenshire, and 28 of these tests were positive for H5N1. No significant concentrations of dead birds were reported. There were 78 records of pink-footed geese tested and 68 of these were positive for H5N1. These cases were widespread across the country, but there was a small concentration of ~200 dead birds reported in the Findhorn area in April 2022. With further pink-footed goose mortalities of 30 birds over 6 weeks and within which 1 bird tested positive. In winter 2022/23 there were reported concentrations of impacts on pink-footed geese and greylag geese in the Moray Firth, Aberdeenshire and around Aberlady Bay areas

7. Air Safety

Increasing numbers of geese, particularly greylags, around Scottish Airports. Risks are identified and addressed through individual airport safety plans and wildlife management plans. NatureScot issue licences to manage geese around airports where required.

Consultation with a number of airport safety managers has resulted in agreement that regular discussion of the issues caused by geese in and around airports may identify areas of mutual interest to airports, land managers and conservation organisations. Going forward it is suggested that goose policy includes a policy objective around supporting and mitigating goose related risks to aircraft.

8. Issues identified through consultation

The public consultation process resulted in a wide range of responses. Local goose management groups and stakeholders participating in the National Goose Forum were then asked to identify the key issues that they wish to see addressed in future goose management policy. These issues are set out in Table 12. As far as possible, the priority issues have been addressed in the recommendations and changes to policy objectives going forward.

N.B. popularity indicates issues that cut across a number of groups and are not necessarily an indicator of importance or priority.

LGMGs want:	Number of groups that included this issue in their top 3 priorities (from 7 responses)
For quarry species	
Long term commitment to funding the control of quarry species, especially greylag	6
Provision of as wide a range of tools for greylag population control as possible	3
A species action plan for greylag geese	2
For Annex 1 species	
Support targeted at species of conservation concern such as Greenland white-fronted geese and Greenland barnacle geese	2
Long term commitment to adaptive management of barnacle geese on Islay	1
The size of the goose scheme budget to meet farmers' needs	2
More equitable distribution of support across the barnacle goose range (including funding for management and control and bag limits and licences)	3
Support for goose management to be integrated with agricultural support mechanisms, and they should be simpler and continue to be non-competitive	2
Governance	
Greater autonomy for LGMGs	1
<i>Green = most popular, Orange = medium popularity, Yellow = less popular</i>	

Table 12. Key issues identified through consultation with NGF and local groups

9. Modern wildlife management

In the current NatureScot Corporate Plan¹¹, one of the key aims is to 'modernise wildlife management and licensing functions'. Wildlife needs to be managed in such a way that supports biodiversity, climate and net zero outcomes as well as

¹¹ [NatureScot Corporate Plan 2022-2026 - A nature-rich future for all](#)

supporting economic opportunities. A modernised approach to living with wildlife means recognising the changing role that land managers and practitioners across Scotland play in delivering wildlife management in light of climate change and biodiversity loss. The Shared Approach to Wildlife Management sets out principles and a framework within which stakeholders can deliver effective wildlife management, within which goose management will sit and it is recommended that goose management continues to apply that Shared Approach going forward.

10. Future delivery

Whilst goose management policy has been in place since 2000, there has, at times been a lack of clarity and transparency over what the policies actually mean, what they will deliver and how progress on delivery is measured. As we refresh current policies we need to consider how goose management is delivered over the next 5-10 years; a period when approaches to wildlife management are changing and we move the focus from single species management to management which will deal holistically with contributing towards climate, net zero and biodiversity targets. As such, it is difficult to set clear actions right now as policies are still developing and new rural support schemes have not been completed.

The final recommendation in this review is that a delivery plan is developed that will set out how goose management is taken forward in the short term and how a just transition is made towards new ways of supporting geese in the context of wildlife management and emerging agricultural policies. The plan, drawn up with input from key stakeholders, should cover a 5 year period, set out measurable targets and be completed by the end of 2024.

11. Acknowledgements

The report has been prepared by a project team of staff from NatureScot and Scottish Government Rural Payments and Inspections Directorate and overseen by a steering group of staff from those organisations and Scottish Government. We would like to thank all contributors from the National Goose Forum, all of the Local Goose Management Groups, Highlands and Islands Airports Limited and individual stakeholders for their input into this review.



Annex 1. National Goose Management Policy Review Terms of Reference

The terms of reference agreed with Scottish Ministers are as follows:

1. NatureScot staff, supported by Scottish Government RPID staff, will take forward a Review of Goose Management Policy.
2. A project board will oversee the Review, comprising staff from SG policy and RPID and NatureScot.
3. The Review will produce a report for Scottish Ministers that will include recommendations for delivery of goose management policy over the next 5-10 years.
4. The deadline for submission of a final report is 30 November 2022¹².
5. The Review will include stakeholder input via the National Goose Forum and local goose management groups (LGMGs). National stakeholder representatives and LGMGs will be responsible for consulting with the memberships of the organisations they represent. It is anticipated that collated responses will be submitted from each organisation and each LGMG. There will be at least two meetings of the National Goose Forum at which the review will be discussed and a third meeting at which a final draft is discussed.
6. The Review will be done in two parts with the first part looking at the delivery of the current policy objectives and the second part to look to the future and make recommendations, with justifications, on the following issues:
 - a. Goose policy objectives and other key policy and legislative drivers – review whether or not the current objectives remain relevant and if any additional objectives are required, paying particular attention to the just transition to net zero, the green recovery and any new (since the last review) or emerging legislation such as the Islands Bill
 - b. How goose policy objectives are delivered, including:
 - What role do national and local stakeholder groups play?
 - c. Reviewing the apparent inequities in the distribution of financial and resource support with land managers dealing with highly-protected receiving more support compared to those managing less-protected species.
 - d. Reviewing the support mechanisms for the adaptive management pilot projects and the future of these mechanisms in goose management.
 - e. Ensuring that national and international commitments are fully integrated within the policy objectives.

¹² Date changed to Spring 2023 due to pressures of work responding to the Highly Pathogenic Avian Influenza outbreak

7. The review will not consider current payment rates as any future support will be developed once there is agreement on the mechanisms for delivery.

Communications and stakeholder engagement

8. The review will take account of stakeholders' views in the following ways:
 - a. Feedback submitted by stakeholder representatives on National Goose Forum and Local Goose Management Groups will be considered. This can be in the form of meeting minutes or individual written responses from groups or individuals. Representatives of organisations on NGF or LGMGs are responsible for engaging those they represent.
 - b. Responses to a questionnaire, which will be available on the NatureScot website¹³.

¹³ The summary responses are summarised in Annex 3 of this document, which will be published on the NatureScot website

Annex 2. Island Communities Impact Assessment

Review of Goose Management Policy 2022

Step One – Develop a clear understanding of your objectives:

- The objective is to review current goose management policy across Scotland and provide a set of recommendations to Scottish Ministers for future policy over the next 5-10 years.
- Consultation is required with stakeholders across the country
- Many of our islands support large numbers of geese, so although the policy is national, it will impact on island communities
- The policy applies equally across the mainland and islands.
- The policy is a refresh of policies which have been in place since 2000.

Step Two – Gather your data and identify your stakeholders:

- Current policy is delivered through a number of routes. In areas where there are concentrations of geese, local goose management groups are in place and these include key stakeholders in each location. There are currently local goose management groups in place in Orkney, Lewis & Harris, Coll & Tiree, Uist, and Islay.
- Consultation with HIAL over goose issues near airports has also taken place, covering all of the island airports.
- The initial online consultation process was open to anyone but further detailed discussions have been had with local groups
- The approach has been the same across the islands and the mainland

Step Three – Consultation

- We have consulted with stakeholders with an interest in goose management
- Online consultations, in-person and web based face to face meetings with local groups and national level consultations with key stakeholders have taken place
- The consultation applied equally across islands and the mainland.

Step Four – Assessment:

- The assessment does not identify unique impacts of goose policies specific to islands.
- The assessment does not identify any potential barriers or wider impacts specific to islands

You must now determine whether in your opinion your policy, strategy or service is likely to have an effect on an island community which is significantly different from its effect on other communities (including other island communities).

The policy review takes a national approach and focusses on goose management by species, conservation status and agricultural impacts, regardless of island or mainland location. Therefore it does not have an effect on an island community which is significantly different from its effect on other communities (including other island communities). A full ICIA is, therefore, not required and the assessment moves on to Step Six.

Step Six – Making adjustments to your work:

- Should delivery mechanisms/mitigations vary in different communities? *No, the policy is national*
- Do you need to consult with island communities in respect of mechanisms or mitigations? *Island stakeholders have been consulted at every stage as detailed in previous comments and will continue to be consulted specifically through local goose management groups and national stakeholder representatives.*
- Have island circumstances been factored into the evaluation process? *Yes, hence the use of digital technology to ensure effective communications.*
- Have any island-specific indicators/targets been identified that require monitoring? *No*
- How will outcomes be measured on the islands? *As part of the 5 yearly review process applied nationally*
- How has the policy, strategy or service affected island communities? *No differences in approach between islands and mainland*

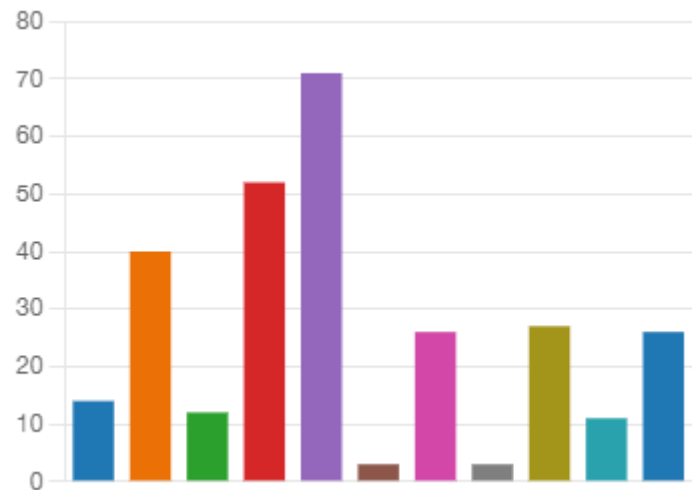
Annex 3. Summary of Consultation Responses

The consultation used MS Forms to collate data and the following information is set out in the format that MS forms allows. Whilst the stats include all the response data, the summary laid out by the Forms software provides single quotes from random responses. The average numbers relate to numerical responses where 1 is negative and 5 is positive.

257 Responses

1. Which area is your interest in?

● Coll/Tiree	14
● Islay	40
● Kintyre	12
● Lewis/Harris	52
● Orkney	71
● Slamannan	3
● Solway	26
● Strathbeg	3
● Uist/Barra	27
● National	11
● Other	26

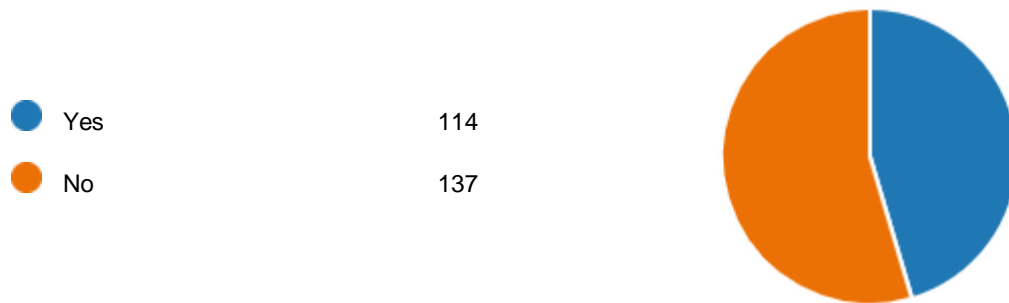


2. What is your interest in goose management?

● Farming/crofting	224
● Land owner	83
● Conservation interest	47
● Sporting interest	22
● Other	13



3. Are you involved in a goose management scheme?



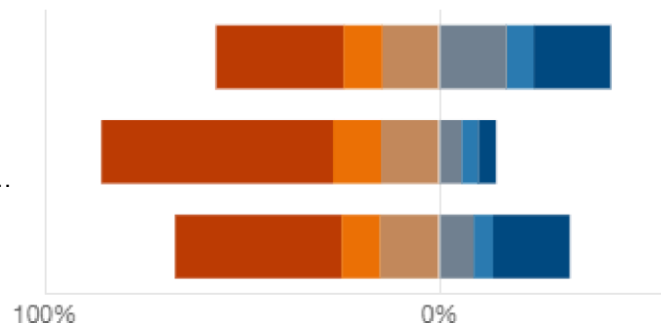
4. In the last five years do you feel that the three policy objectives have been met?

■ Not ■ Slightly ■ Partially ■ Mostly ■ Fully ■ I don't know

Objective 1. Meet the UK's nature conservation obligations for geese, within the context of wider ...

Objective 2. Minimise economic losses experienced by farmers and crofters as a result of the presence of..

Objective 3. Maximise the value for money of public expenditure



5. If you have any comments on or proposals to amend the objectives, please detail below.

98 Responses

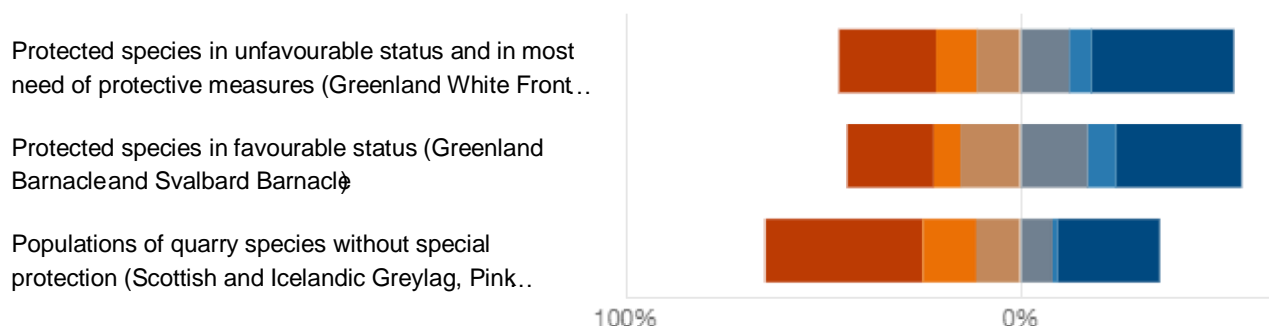
Latest Responses

"From a point of view of plant genetic diversity conservation,...

"National Local Goose management schemes, when properly...

6. Has the current policy of prioritising different goose species been an effective framework for allocating resources to deliver the three policy objectives?

■ Not
 ■ Slightly
 ■ Partially
 ■ Mostly
 ■ Fully
 ■ I don't know



7. If you have any comments on or proposals for change to prioritising goose species, please detail below.

75 Responses

Latest Responses "National We support the prioritising of protected species/po...

8. Have local goose groups been an effective way to deliver goose management over the last 5 years?

230 **2.59**
Responses **Average Number**

9. If you have any comments on or proposals for change to local goose groups, please detail below.

100 Responses

Latest Responses "National RSPB Scotland believes that Local Goose Manage...

10. Has the National Goose Forum been an effective way for stakeholders and local groups to engage and contribute to the delivery of national goose policy over the last 3 years?

218 **2.19**
Responses **Average Number**

11. If you have any comments on or proposals for change to the National Goose Forum, please detail below.

62 Responses

Latest Responses "National The direct presence of LGMG representatives at Na...

12. Greylag – Has adaptive management of greylags been useful in reducing agricultural damage in your area?

212 **1.69**
Responses **Average Number**

13. If you have any comments on or proposals for change to adaptive management, please detail below.

74 Responses

Latest Responses "National Adaptive management is not always conducted in ...

14. Greylag - How successful has the licenced sale of greylag goose meat been in your area?

177 **1.55**
Responses **Average Number**

15. If you have any comments on or proposals for change to the sale of greylag goose meat, please detail below.

70 Responses

Latest Responses "National RSPB Scotland does not oppose the introduction of..."

16. Within the national budget for goose management have the resources been fairly allocated to species and land managers?

211 **1.97**
Responses **Average Number**

17. If you have any comments on or proposals for change to allocating resources, please detail below.

79 Responses

Latest Responses "National There have been longstanding local and regional d..."

18. Is there suitable information available to develop and deliver national goose policy?

 Yes	65
 No	89
 Don't know	93



19. If you have any comments on the information available, please detail below.

45 Responses

Latest Responses "National Whilst geese are relatively well monitored bird spe...

20. Which approaches could we consider to improve the delivery of goose management?

● Species Action Plans (A national..	130
● Future agri-environment schemes	103
● Current goose management arr...	118
● Other	42



21. If you have any proposals for future approaches, please detail below.

94 Responses

Latest Responses "National We would urge caution in making any shift away f...

Annex 4. List of policy recommendations from 2017 policy review and a summary of progress.

Evidence for the following assessment comes from various sources including goose scheme annual reports, NGF minutes and informal consultations with stakeholders. These are listed in the table below and an assessment of progress is summarised using a traffic light system as follows:

Green	Good progress on taking forward this suggestion.
Orange	Some action taken on this suggestion but further actions may be required (outline given).
Red	No action taken on this suggestion or the situation has changed and different actions have been taken. Further actions may be required (outline given).

Suggestion from 2017 Review	Summary of progress	Further action required
Retain existing National Policy Framework objectives but refine these to ensure clarity and consistent delivery.	Policy framework retained but objectives were not refined.	Review and refresh objectives.
Continue the current goose management schemes until 2021 but consider options set out for future goose management delivery to ensure a clear way forward in place by early 2020.	Current schemes continued and then extended to 2023. Slamannan was closed in 2018 and Strathbeg in 2020.	Development of future goose management strategy alongside review of agricultural policy and how best to dovetail with new agri-environment schemes.
Consider emerging goose management issues, encourage self-help approaches as the initial basis for solutions but work to resolve more complex issues where required and perhaps considering interim measures to cover immediate issues.	NatureScot has encouraged farmers to adopt a self-help approach for greylag geese through local meetings with Caithness, Speyside, Uist, Lewis and Harris, Tiree and Coll, Orkney and Islay farmers.	There is no long term agreement on self-help and public funding as LGMGs successfully petitioned for continued funding for RGL control. LGMGs consider self-help is not a viable option.
Contain costs to ensure that goose management can be delivered within current budget limitations or can address future budget constraints.	Schemes have been delivered within existing budget limitations.	Costs associated with agricultural production have increased significantly in the last few years without an associated increase in budget.
Contribute to international flyway planning initiatives via African-Eurasian Waterbird Agreement and share knowledge and expertise across range states. Use the protocols within international flyway planning processes to agree population range sizes and implement adaptive harvest management where appropriate.	Ongoing work with EGMP to implement Greenland barnacle goose flyway plan, contributions to Taiga Bean Goose Plan.	Expansion of this approach to include Icelandic greylag in response to AEWA A* classification.
Goose Science Advisory Group to develop a detailed research monitoring plan to provide robust data to support delivery of goose policy objectives.	ToR changed to have a framework of expertise to be called upon when required	
Develop Scottish Species Action Plans to ensure a consistency of approach across species and range and pull these together into a Scotland wide goose management plan. Significant stakeholder consultation should be carried out during the development of these plans.	No progress on national plans	Calls for plans for greylag geese as the highest priority.

<p>Apply lessons learned from adaptive management pilots and look to expanding the licensed sale of goose meat where possible.</p>	<p>Enabling sale has expanded as far as it legally can be – within the framework of Adaptive Management. Very limited development of markets due to short term nature of EC approvals and funding for AM.</p>	<p>Needs long-term AM to develop markets.</p>
<p>Review National Goose Management Review Group and sub-group membership and terms of reference.</p>	<p>Completed and new ToR agreed. Format now includes local group representation.</p>	

In the medium to longer term, the key proposals are:		
Implement agreed approaches to delivery of future management in goose scheme areas and elsewhere if required.	Ongoing.	New approaches to be decided alongside new agri-environment options as they develop.
Promote ongoing self-help approaches to management of quarry species.	Ongoing.	There is no long term agreement on self-help and public funding as LGMGs successfully petitioned for continued funding for RGL control. LGMGs consider self-help is not a viable option.
Develop approaches to goose management within wider agri-environment support mechanisms, taking particular note of revisions to Scottish Rural Development Programme.	Stalled because future framework for agri-environment support has been delayed.	New approaches to be decided alongside new agri-environment options as they develop.
Develop communications with stakeholders dealing with air safety, public health and animal health.	New communications on air safety through EGMP webinar and subsequent meeting with Scottish airport safety representatives. Significant work with animal health bodies on HPAI.	Develop new policy objective on air safety. Continue work on animal health related to HPAI outbreaks.
Keep a watching brief on any changes to policy on use of lead shot.	Ongoing.	Lead shot not used by NatureScot to deliver any goose management.

Annex 5. Goose population numbers & status

Legal status of geese in Scotland

Common name <i>Scientific name</i>	Birds of Conservation Concern in the UK, Channel Islands and the Isle of Man (BoCC 5)	Europe an Red List of Birds (2021)	IUCN Global Red List	Wildlife and Countryside Act	Wild Birds Directive	Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)	Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention or CMS)	Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)
Taiga Bean Goose <i>Anser fabalis fabalis</i>	Amber	Least concern	Least concern		Annex II (Part A)	Appendix III	Appendix II	Column A, category 1c
Greenland/ Iceland Pink-footed Goose <i>Anser brachyrhynchus</i>	Amber	Least concern	Least concern	Schedule 2	Annex II (Part B)	Appendix III	Appendix II	Column C, category 1
Greenland White-fronted Goose <i>Anser albifrons flavirostris</i>	Red	Least concern	Least concern*		Annex I	Appendix III	Appendix II	Column A, category 2*
Icelandic Greylag Goose <i>Anser anser</i>	Amber	Least concern	Least concern	Schedule 2	Annex II (Part A), Annex III (Part B)	Appendix III	Appendix II	Column A, category 3e*
British Greylag Goose <i>Anser anser</i>	Amber	Least concern	Least concern	Schedule 1 (Part II) in Outer Hebrides, Caithness, Sutherland and Wester	Annex II (Part A), Annex III (Part B)	Appendix III		

				Ross only, Schedule 2				
Greenland Barnacle Goose <i>Branta leucopsis</i>	Amber	Least concern	Least concern		Annex I	Appendix II	Appendix II	Column B, category 1
Svalbard Barnacle Goose <i>Branta leucopsis</i>	Amber	Least concern	Least concern		Annex I	Appendix II	Appendix II	Column A, category 3a
East Atlantic Light- bellied Brent Goose <i>Branta bernicla hrota</i>	Amber	Least concern	Least concern		Annex II (Part B)	Appendix III	Appendix II	Column A, category 2
Canadian Light-bellied Brent Goose <i>Branta bernicla hrota</i>	Amber	Least concern	Least concern		Annex II (Part B)	Appendix III	Appendix II	Column A, category 3a 3e

Aside from AEWA, most global and European assessments/protections are at species level e.g. Bean Goose, Greater White-fronted Goose and Brent Goose
* While Greater White-fronted Goose is Least Concern globally at species level, there is evidence that the Greenland White-fronted Goose sub-species has distinct morphology, geographical range, migration timing and maintained separation from other Greater White-fronted Goose populations. Many authors therefore consider the sub-species meets the IUCN Endangered criteria (e.g. the Greenland and Icelandic Red Lists).

Population data for migratory geese in Scotland

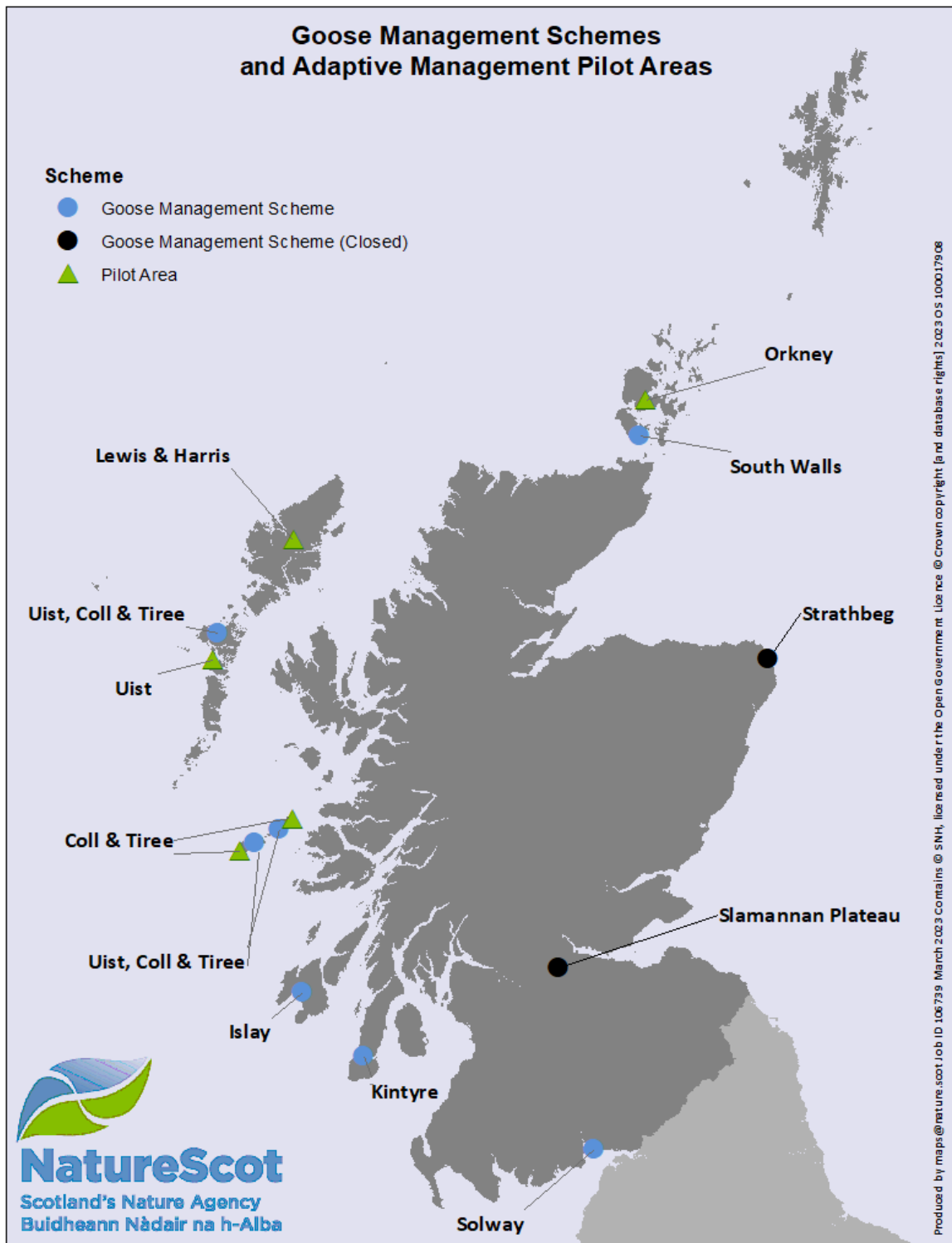
Common name <i>Scientific name</i>	Breeding area	Main Scottish wintering areas	Other wintering areas	Scottish population	UK population	International flyway population	Estimate dates
Taiga Bean Goose <i>Anser fabilis fabilis</i>	Central Scandinavia	Slamannan Plateau, Falkirk	Yare Valley, Norfolk & Denmark	217	222	1,500/ 66,472 [^]	2021/22
Greenland/Iceland Pink-footed Goose <i>Anser brachyrhynchus</i>	East Greenland & Iceland	Central & Eastern Scotland	Lancashire & Norfolk	268,575	418,271	418,501	Oct 2021
Greenland White-fronted Goose <i>Anser albifrons flavirostris</i>	West Greenland	Galloway, Argyll, Loch Lomond, Outer Hebrides, Caithness & Orkney	Dyfi Estuary, Wales & Eire	9,687	9,738	18,027	Spring 2022
Icelandic Greylag Goose <i>Anser anser</i>	Iceland	Orkney, North and East Highlands	Iceland, Norway & Eire	49,015	50,098	65,693	Nov 2021
Greenland Barnacle Goose <i>Branta leucopsis</i>	East Greenland	West coast & islands from Islay to South Walls, Orkney	Eire	58,135	58,135	73,391	2020
Svalbard Barnacle Goose <i>Branta leucopsis</i>	Svalbard	Solway Firth	Budle Bay, Northumberland	36,185*	38,585*	38,585*	2021
East Atlantic Light-bellied Brent Goose <i>Branta bernicla hrota</i>	Svalbard & North Greenland	Moray Firth, Eden Estuary, Forth Estuary	Lindisfarne & Denmark	c.120	4,393	7,300	10/11 to 14/15
Canadian Light-bellied Brent Goose <i>Branta bernicla hrota</i>	East Canadian high Arctic	Loch Indaal, Islay Loch Ryan, Stranraer	Eire, Western England, France & Spain	c.200	18,400 [§]	40,500	10/11 to 14/15

[^]There are 1,500 individuals (last estimated in 2014) in the Western flyway sub-population of the overall Western Palearctic population of 66,472 geese

*Peak counts immediately after migration and before peak deaths due to HPAI – subsequently an estimated one third of the population was lost in 2021/2022

[§]80% in Northern Ireland

Annex 6: Goose Scheme and Adaptive Management Pilot Areas





© Crown copyright 2024



This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.scot

Any enquiries regarding this publication should be sent to us at

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-83521-934-8 (web only)

Published by The Scottish Government, February 2024

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS1413714 (02/24)

W W W . g o v . s c o t