

Bean Goose Action Plan

Current Status

The bean goose breeds along northern Eurasia from the highlands of Norway in the west to Kamchatka in the east. It was regarded as a common winter visitor to northern Britain and East Anglia during the first half of the 19th century. A widespread decline in numbers began in the 1860's and 1870's until in the early part of the 20th century only a few flocks remained. Recently the only two regular wintering flocks in Britain have been those in the Yare Valley (Norfolk), and in the Slamannan Plateau – an area of around 3,600 ha divided between Falkirk and North Lanarkshire Council areas. This is now the only site in Scotland regularly visited by the birds.

The central Scotland flock numbered around 130-150 birds in the 1990's but more recently has increased to around 180-190 birds in 2000/2001 and 2001/2002. Numbers visiting the Yare Valley in the corresponding period have declined to the point where the two populations are now roughly equal in size.

Ringling results have suggested that the bean geese wintering in England and Scotland breed in different parts of Scandinavia. The majority of the individuals visiting central Scotland probably belong to a fully wild sub population, which is clearly distinct from the one wintering in Norfolk. Part of the central Scotland flock may also derive from a re-introduction project, which started in 1974 in central Sweden. Despite being a small proportion of the total northwest European wintering population the British birds occupy an important part of the traditional range of the species and conservation measures are seen as important actions.

Ecology

The bean goose is a winter visitor to Britain, which spends the summer months in Sweden. The flock overwintering on the Slamannan Plateau normally starts to arrive in late September with numbers increasing during October. It is thought that the Scottish flock fly direct across the North Sea using the Forth Estuary as their landmark and fly up the river Forth to the Slamannan Plateau. The birds normally depart in mid to late February returning to their breeding grounds in Sweden.

SPECIES PROFILE



John Molley

Common name: Bean Goose
Scientific name: *Anser fabalis*
Status: Conservation concern

Protection:
Protected under the Wildlife and Countryside Act 1981. Included on annex II/I of the EC Birds Directive and appendix III of the Bern Convention. The bean goose is not a quarry species in the UK.

Associated Habitat and Species Action Plans

Habitats:
Standing open water
Lowland raised and intermediate bog

Species:
Greylag goose
Pink-footed goose

The bean goose is fairly large with an average length of 72-90 cm. It is essentially dark in colour with a dark brown head and almost uniformly brown upper wing. The undertail is white and a white line extends along the top of the flanks. Its most striking feature is its legs, which are orange in the adult and pale yellow in the juvenile. The bean goose is easily confused with its close relative the pink footed goose, which occurs in large numbers in central Scotland. However, its long bill with orange and black colouring distinguishes it from the pink footed goose, which has pink legs and pink on the bill. The bean goose has a cackling flight call, deeper than that of the pink footed goose and quite different from the honking call of the greylag goose

In the past there was evidence that on arrival many of the birds used to feed in cereal stubble fields and occasionally on potato fields. However there has been a decline in both cereal and potato growing on the Slamannan Plateau in recent years and now the main feeding sites are found in grass fields. The birds show preference for pastures, which have been improved agriculturally and contain a high proportion of perennial ryegrass *Lolium perenne*. They prefer feeding fields with no other grazing livestock during the winter months. The main feeding sites are concentrated to the north and west of Slamannan.

Night-time roosts are usually lochs or occasionally temporary flood waters. The favoured night-time roost site being East Fannyside Loch and sometimes nearby moorland. Roosting also occurs on Loch Ellrig and on West Fannyside Loch. Unimproved pasture or moorland is used as daytime roosts, or when the birds are disturbed whilst feeding.

The flock will normally fly at dawn to a selected feeding field where if undisturbed they will spend the day feeding, drinking and resting. If disturbed the birds will fly to another feeding site or onto one of the remote moorland areas where they rest/loaf undisturbed. At dusk they return to their preferred roosting area. It is at this time they are most vocal. During any period of frost or snow the flock will often remain out in their feeding areas and may not return to roost. Night feeding does occur during normal winter temperatures but has not been studied closely. The birds are intolerant of disturbance, and choose open areas with unobstructed sight lines both for feeding and for roosting.

Current Factors Affecting the Species

From the more recent knowledge built up of the preference for the habitats of bean geese the most likely threats are:

- Reduction in the area of improved grassland shown to be preferred by the bean geese.
- Visitor pressure, recreational activity and primary industry operations in the vicinity of the main feeding areas resulting in disturbance to both feeding and roosting areas.
- Tree planting in areas used by the bean geese resulting in significant loss of open habitat.
- Loss of lochs or wetlands used as roosting sites.
- Poor quality restoration of open cast mining sites.
- Other developments which may increase the potential for disturbance.

Current Action and Opportunities

John Simpson and Angus Maciver have produced successive annual reports on bird numbers and the habitats used by the birds. These annual reports continue to be produced with funding from RSPB, SNH, Falkirk Council and North Lanarkshire Council.

In recognition of the importance of the Slamannan Plateau for wintering bean geese a group was established in 1994 representing land use and conservation interests in the area. The broad aims of the group were to help conserve the population of bean geese wintering in central Scotland by protecting and managing the habitats used by the geese. The group also sought to minimise potential land use conflicts in the Slamannan Plateau area by the development of land management guidelines to assist industries such as farming, forestry and mineral extraction. It also sought to influence the practice of planning policies for conserving bean geese without discouraging employment prospects or the enhancement of the landscape. The group includes representatives from Scottish Natural Heritage (SNH), Royal Society for the Protection of Birds (RSPB), Central Scotland Forest Trust (CSFT), Forestry Commission (FC), Forest Enterprise (FE), Farming and Wildlife Advisory Group (FWAG), Scottish Agricultural College (SAC) and Falkirk and North Lanarkshire Councils. The group, recently renamed the Bean Goose Action Group (BGAG), has reviewed its objectives, which now accord with the objectives of this Action Plan.

Woodland planting guidelines have been developed and have been in place since 1994/95. These aim to maintain the areas of open landscape favoured by the geese.

In 1996 the RSPB acquired the land at Fannyside Mill which includes Fannyside Loch, the most frequently used overnight roosting site. The management of the land is aimed at maintaining the habitat for the geese.

Communication and Awareness

The special importance of the Central Scotland bean goose flock has created widespread interest both locally and nationally. This interest impacts locally and can create potential problems both in the management of the area for the bean geese and for those living and working the area. A delicate balance exists to satisfy the needs of those with an interest in the bean geese whilst being sympathetic to the requirement of the birds. It is recognised that the continuing success in maintaining the flock in the area is dependent on the help and co-operation of those involved in seeking to see that the requirements of the flock are met, and especially local farmers who make considerable efforts to manage grass on which the flock depends. Communication and liaison with local people is seen as a vital step in maintaining the continuous presence of the flock. It is also recognised that local people have a valuable contribution to make in developing a future strategy in relation to the management of the area for the birds particularly in relation to communication and publicity.

This action plan therefore proposes as one of its objectives that a forum be established of those with an interest in the management and development of the area as it affects the bean geese. The forum would feed back to the Bean Goose Action Group (BGAG) who would be responsible for carrying the strategy forward. The forum would also be a vehicle for liaison with local groups and for raising awareness of the birds in the area.

Objectives and Targets

Objective 1

To protect and maintain the population of bean geese wintering in central Scotland by the identification and the maintenance, enhancement and protection of habitats used by the bean geese for feeding loafing and roosting purposes.

Target 1.1

- Maintain and, where possible, increase the area of habitat favoured by the geese for feeding, loafing and roosting. (Ongoing).

Target 1.2

- Manage the Fannyside Reserve for Bean Geese (ongoing).

Target 1.3

- Minimise disturbance of the bean goose flock caused by recreational use of the area (ongoing).

Target 1.4

- Investigate the establishment of a recognised goose management scheme for the bean geese on the Slamannan Plateau (by 2005).

Objective 2

Minimise potential conflicts between land use and bean geese in the Slamannan Plateau area by developing management guidelines to influence the practice of primary industries (forestry, mineral extraction, wind farms) and via the planning process. (Ongoing).

Target 2.1

- Review forestry guidelines (by 2003).

Target 2.2

- Develop guidance on wind farms and mineral extractions as required (ongoing).

Target 2.3

- Minimise landuse conflicts via the planning and development control process (ongoing).

Target 2.4

- Develop guidance on opencast/mineral extraction and restoration.

Objective 3

Further knowledge of bean goose requirements and behaviour, in particular investigating local movements and behaviour of individual birds and the migration route to Sweden (ongoing).

Target 3.1

- Continue annual monitoring of bird numbers and areas preferred for grazing loafing and roosting (ongoing).

Target 3.2

- Follow the migration route back to Sweden by fitting a radio or satellite tracking device to one of the birds (2005).

Objective 4

Raise awareness of the bean goose flock to increase local awareness and appreciation of the value and needs of the Slamannan Plateau bean geese.

Target 4.1

- Establish a forum where those with a local interest in the bean geese can become involved in the development of a strategy for the flock particularly in relation to communication and publicity.

Target 4.2

- Identify viewing places where members of the public can view the geese while minimising disturbance. (2003).

Target 4.3

- Provide interpretative signs on appropriate footpaths in the bean goose area (2003 onwards).

Action	Potential Deliverers		Year to be completed or in place						Meets objective
	Lead	Partners	2003	2004	2005	2006	2007	2012	
A. Policy and Legislation									
1. Ensure that this habitat is afforded adequate consideration and, where possible, protected from damaging development through the planning process by: a) Developing appropriate policies within local and structure plans and other strategies as they are written or reviewed. (Ongoing).	Falk C (DS) N Lan C		✓	✓	✓	✓	✓	✓	1,2
2. Ensure that this habitat is afforded adequate consideration and, where possible, protected from damaging development through the planning process by: b) Production of supplementary planning guidance. (By 2003).	Falk C (DS) N Lan C		✓	✓					1,2
3. Identify the need for, and develop guidelines relating to potential development on the Slamannan Plateau e.g. Wind Turbine, mineral extraction, to protect the areas and habitats known to be favoured by bean geese.	BGAG		✓	✓	✓	✓	✓	✓	1
4. Raise the profile of bean geese in developing and reviewing agri-environment schemes and consider options for targeted management grants for fields used by bean geese under agri-environment schemes.	BGAG	SNH, FWAG, SAC, SEERAD	✓	✓	✓	✓	✓	✓	1
5. Ensure that the development of countryside access does not cause disturbance to sites known to be favoured by bean geese.	BGAG	Falk (DS), N Lan (DS)	✓	✓	✓	✓	✓	✓	1,2
B. Site Safeguard and Management									
1. Manage open areas designed for bean geese in any local Scottish Forestry Grant (SFGS)/Challenge Funding.	FC, CSFT	BGAG	✓	✓	✓	✓	✓	✓	1
2. Manage Fannyside Reserve in a way that encourages use by bean geese.	RSPB	BGAG, SAC, FWAG	✓	✓	✓	✓	✓	✓	1
3. Pursue the designation of a non-statutory Bean Goose Area within the Councils local plan. (Falkirk 2003, N. Lan as opportunity arises).	Falk C N Lan C	RSPB, SNH, BGAG	✓						1
C. Species Management and Protection									
1. Investigate feasibility of a goose management scheme to secure payment for land managers within the bean goose area.	BGAG	SNH, FWAG, SAC	✓	✓	✓				1
2. Review Woodland guidelines used in assessing applications for forestry grant aid in areas used by the bean geese.	BGAG	FC, CSFT, SNH	✓						2
D. Advisory									
1. Distribute woodland guidelines to applicants for forestry grants and to others involved in tree planting on the Slamannan Plateau.	FC	CSFT, FWAG	✓	✓	✓	✓	✓	✓	2

Action	Potential Deliverers		Year to be completed or in place						Meets objective
	Lead	Partners	2003	2004	2005	2006	2007	2012	
2. Update and distribute the information leaflet highlighting the bean goose, its habitat requirements and appropriate action to benefit the bean geese, to all landowners and occupiers.	BGAG	RSPB, SAC, FWAG							1,4
E. Research and Monitoring									
1. Monitor annually species numbers and fields used for feeding and roosting and produce an annual report. (see action E2).	AM, JS	RSPB, SNH, Falk C N Lan C	✓	✓	✓	✓	✓	✓	1,2,3
2. Produce an updated GIS map of key bean goose feeding and roosting fields based on data from action E1.	SNH		✓	✓	✓	✓	✓	✓	1,2,3
3. Conduct further research into the local movements and behaviour of individual birds in the central Scotland flock by fitting neck collars using cannon netting for capture.	BGAG	SNH, JS, AM		✓					3
4. Follow migration route back to Sweden by fitting a radio transmitter to one of the birds.	BGAG			✓					3
5. Review existing research in the UK and elsewhere on bean geese and identify the need for future research to be carried out.	BGAG		✓						3
6. Make contact with universities, research units and other organisations/individuals with an interest in bean geese. Initial contact with key organisations by 2003 and as opportunities arise thereafter).	BGAG		✓	✓	✓	✓	✓	✓	3
7. Establish links with those involved in the management of the Norfolk flock to maximise opportunities for joint working. (Initial approach by 2003).	BGAG		✓						3
F. Communication and Publicity									
1. Produce and erect interpretative signs on appropriate footpaths and access routes adjacent to areas known to be used by bean geese for feeding or roosting and where necessary encourage use of alternative routes to avoid disturbance. (Initially by 2003 and as necessary thereafter).	BGAG Falk C (DS)	JS, AM	✓	✓	✓	✓	✓	✓	1,2,4
2. Maintain, develop and manage the existing website as a source of information on the bean goose flock in central Scotland.	AM, JS	BGAG	✓	✓	✓	✓	✓	✓	4
3. Identify one or more viewing places where members of the public can view the bean geese whilst minimising disturbance.	BGAG	FWAG	✓						4
4. Establish a forum to create a strategy for managing the bean goose flock in central Scotland.	BGAG			✓					4

Action	Potential Deliverers		Year to be completed or in place						Meets objective	
	Lead	Partners	2003	2004	2005	2006	2007	2012		
5. Develop links with local groups and schools in the bean goose study area to raise awareness and understanding of the importance of bean geese in the area.	BGAG, EARAG			✓						4
6. Ensure this species is included in the local biodiversity awareness raising and education strategy.	EARAG		✓							4
G. Plan Monitoring and Review										
1. Monitor the implementation of actions in this plan annually.	BGAG	All partners	✓	✓	✓	✓	✓	✓	✓	All
2. Monitor the completion and effectiveness of the actions in detail and review this plan every 5 years to ensure continued effectiveness, starting in 2007.	BGAG	All partners						✓	✓	All

Abbreviations

AM	- Anugs Maciver	JS	- John Simpson
BGAG	- Bean Goose Action Group	N Lan C	- North Lanarkshire Council
CSFT	- Central Scotland Forest Trust	RSPB	- Royal Society for the Protection of Birds
EARAG	- Education and Awareness Raising Action Group	SAC	- Scottish Agricultural College
Falk C (DS)	- Falkirk Council Development Services	SEERAD	- Scottish Executive Environment & Rural Affairs Department
FC	- Forestry Commission	SNH	- Scottish Natural Heritage
FWAG	- Farming & Wildlife Advisory Group		

Key contacts

Katrina Marshall, Chair BGAG and SNH

John Simpson, Local Ornithologist

Angus Maciver, Local Ornithologist

Plan author

Iain Fraser, SAC

Bibliography

Brackenridge W.R., 1999 "Bean Goose Species Action Plan", North Lanarkshire Biodiversity Action Plan.

Orr-Ewing D., Fraser I & Russell C., 1995, "Bean Geese in Central Scotland", published by RSPB on behalf of The Bean Goose Working Group.

Robertson D., & Fraser I., 1995, " Bean Goose Field Grazing Sward Species Composition Slamannan", unpublished report for SNH.

Simpson J.G., & Maciver A., 2000, "Population and Distribution of Bean Geese in the Slamannan Area 1999/2000", unpublished report.

Simpson J.G., & Maciver A., 2001, " Population and Distribution of Bean Geese in the Slamannan Area 2000/2000", unpublished report.

Smith T., O'Brien M., & Bainbridge I., 1995, "Distribution and Habitat Use by Bean Geese in the Slamannan Area Second Year 1994/95", RSPB.

www.bean-geese.pwp.blueyonder.co.uk