

WWT/JNCC/SNH Goose & Swan Monitoring Programme

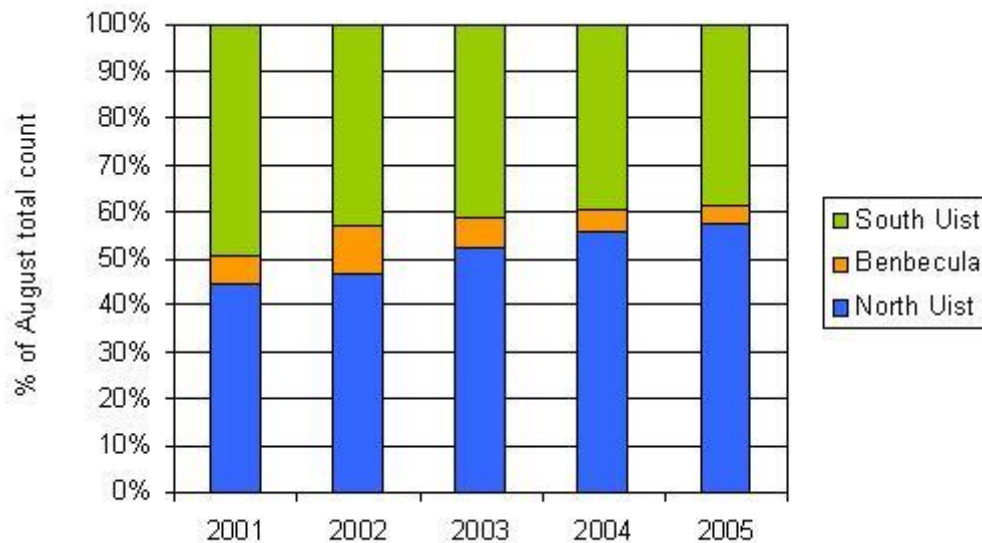
Survey results 2005/06

Northwest Scotland Greylag Goose *Anser anser*

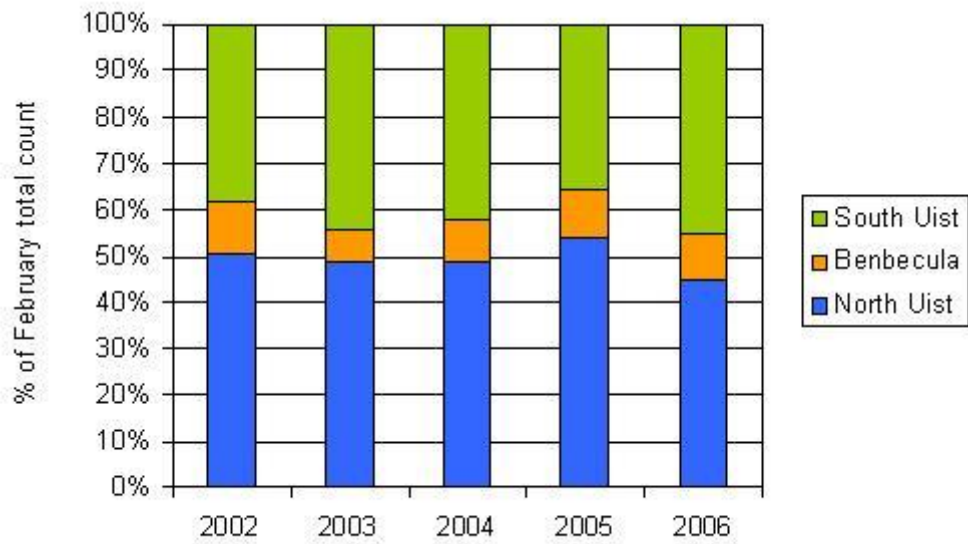
1. Abundance

A total of 4,642 Greylag Geese was counted on the Uists in August 2005. This is a decrease of 13.4% on the August count for the previous year. However, weather conditions were poor during the 2005 count, and it is therefore considered to be an undercount of the actual number of birds present. This is supported by the fact that in February 2006, 4,689 were counted, higher numbers than the August count, even after the mortality that would have taken place between these two counts. The February 2006 count is an increase of 17.3% since the count in February 2005.

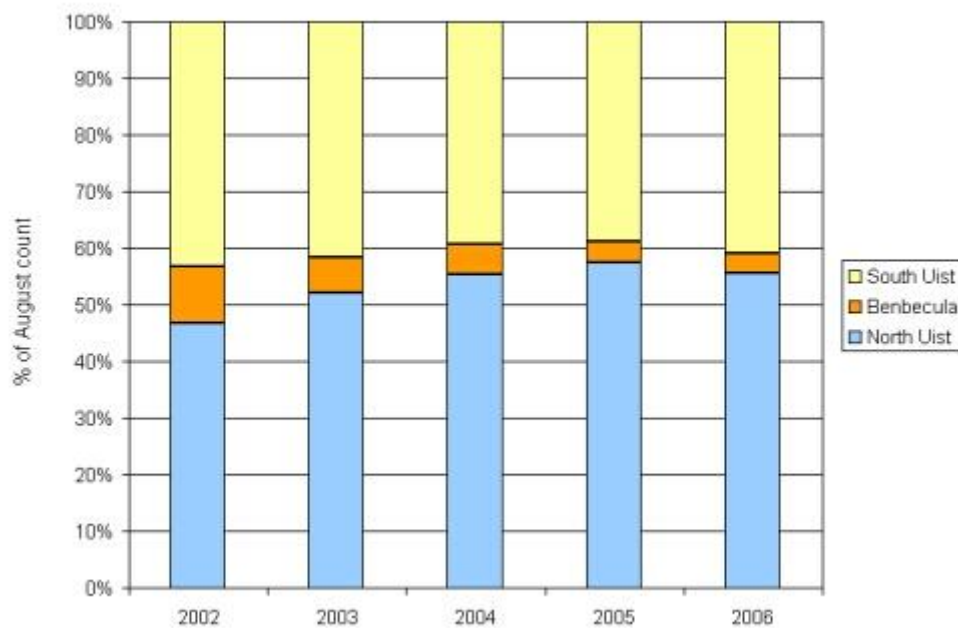
A total of 24 sites were surveyed in both August and February, and the same sites were covered in both months. Greylag Geese were present at 22 sites during August and 21 in February, with no birds counted in both months at one site (Lochmaddy). The distribution of birds in both August and February was fairly typical, with North Uist holding the largest number of the three islands in August. In February, however, South Uist supported slightly more birds than North Uist for the first time since 1994/95. Between 2001 and 2005, there has been an increase in the proportion of birds found on North Uist during the August count, from less than 45% of the total in 2001, to almost 60% in 2005. The proportion during the February count, however, has remained relatively consistent around 50% over this time period. During August, the favoured areas on North Uist were Trumisgarry to Newton (506 birds) and Balranald, Clettraval and Tigharry (475 birds), and on South Uist, most birds were counted in the Iochdar, Gerinish and Drimsdale area (940 birds). In February, the geese were more evenly dispersed on South Uist, with 531 at Bornish to Askernish, 455 at Iochdar, Gerinish and Drimsdale, and 454 at Askernish to Smerclate. On North Uist the favoured area was again the Trumisgarry to Newton area (446 birds).



The distribution of Northwest Scotland Greylag Geese on the Uists, 2001/02 to 2005/06, expressed as a percentage of the monthly total count for each year in August.



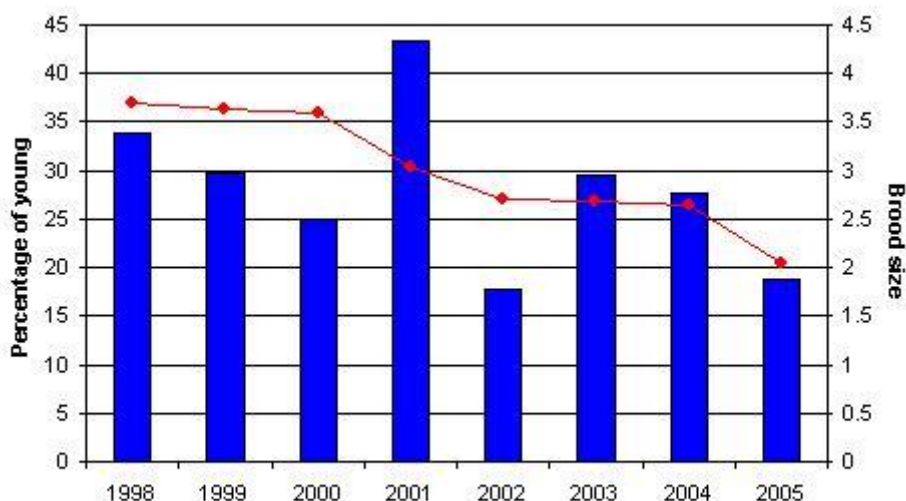
The distribution of Northwest Scotland Greylag Geese on the Uists, 2001/02 to 2005/06, expressed as a percentage of the monthly total count for each year in February.



The distribution of Northwest Scotland Greylag Geese on the Uists, 2002/03 to 2006/07, expressed as a percentage of the annual August count.

2. Breeding success

A total of 1,454 Northwest Scotland Greylag Geese was aged on Tiree on 30 August 2005, and brood sizes were collected for 147 broods. The percentage of young birds in the post-breeding August count was well below the average for the previous five years at 18.8% (mean 2000-2004: 28.7 ± 4.19 se). The mean brood size was also below the average for the previous five years at 2.0 goslings per successful pair (mean brood size 2000-2004: 2.9 ± 0.18 se), and was in fact the lowest recorded since detailed monitoring began in 1998.



The mean percentage of young (bars) and mean brood size (dots) of Northwest Scotland Greylag Geese on Coll and Tiree, 1998 to 2005. Data for 1998 to 2000 from Bowler *et al.* (2005).

3. Discussion

Despite the low count on the Uists in August 2005, it would appear that the number of Greylag Geese there has continued to increase, based upon the February 2006 count which was considered to be an accurate assessment of the number present. If both counts were reasonably accurate they would suggest that almost no mortality took place during winter 2005/06, when it is known that the geese are hunted extensively. Therefore, it is reasonable to assert that the August 2005 count underestimated the number of Greylag Geese present at that time, and that the population is still increasing in the Uists.

The breeding success of Northwest Scotland Greylag Geese on Tiree, another stronghold for the population to the south of the Uists, was low in 2005. The proportion of young in late August was the second lowest since detailed monitoring began in 1998, and the mean brood size was the lowest recorded to date. The reasons for the poor breeding success in 2005 are not known, but this may represent density dependent depression, as the number of Greylag Geese on Tiree has increased considerably over this period.

Since the last national census in 1997, the Northwest Scotland Greylag Goose population is thought to have increased in number and range. In some parts of Scotland, Re-established and Northwest Scotland populations overlap and are therefore indistinguishable. It is likely that it will become increasingly difficult to separate these populations in future, with consequences for the monitoring schemes.

The next complete census of the Northwest Scotland Greylag Goose population is due to take place in August 2008. Due to the difficulties in delimiting the two populations in Scotland, it is hoped that the area surveyed will be extended from that covered in 1997 to include most of Scotland, in order to improve the understanding of distribution and see if the two populations can still be delimited. There is also a need for more information on the movements of this population, especially between breeding areas, and on mortality patterns. This could be achieved through increasing the number of individually marked birds.

4. References

Bowler, J, C Mitchell, & AJ Leitch. 2005. Greylag Geese on Tiree and Coll, Scotland: Status, Habitat Use and Movements. *Waterbirds* 28(1): 61-70.

This report should be cited as:

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Goose & Swan Monitoring