

GOOSE BULLETIN

ISSUE 12 – MAY 2011

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GOOSE BULLETIN is the official bulletin of the Goose Specialist Group of Wetlands International and IUCN.

GOOSE BULLETIN appears as required, but at least once a year in electronic form. The bulletin aims to improve communication and exchange information amongst goose researchers throughout the world. It publishes contributions covering goose research and monitoring projects, project proposals, status and progress reports, information about new literature concerning geese, as well as regular reports and information from the Goose Database.

Contributions for the **GOOSE BULLETIN** are welcomed from all members of the Goose Specialist Group and should be sent as a Word-file to the Editor-in-chief. Authors of named contributions in the **GOOSE BULLETIN** are personally responsible for the contents of their contribution, which do not necessarily reflect the views of the Editorial Board or the Goose Specialist Group.

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http://www.geese.org/gsg/

ISSN: 1879-517X

Editorial

Before you, you see the fourth issue of the revived GOOSE BULLETIN and again we managed to produce an issue with a broad spectrum of goose items. Thanks to all authors!

Two papers deal with globally threatened goose species (Lesser White-fronted Goose and Red-Breasted Goose) and one with a species that is doing well (Pink-footed Goose) followed by a further contribution to the discussion about harnesses for satellite transmitters as well as a short report of the 13th meeting of the Goose Specialist Group in Elista and some short notes about the Snow Goose, that is doing so well that some people consider it a pest species.

The variation and number of manuscripts shows that there really was a need for the Goose Specialist Group Bulletin. The Editorial Board is very happy to have the opportunity to support all authors and potential authors to publish their papers in the Bulletin

The resurrection of the GOOSE BULLETIN did not happen unnoticed outside the Goose Specialist Group community. In the past months there were some requests also to produce a printed version for University and Institute libraries. It was argued that a printed version would have the advantage that the manuscripts published in the Goose Bulletin would reach more people and were more likely will be quoted.

So if you feel the need to have a printed version of the Goose Bulletin, you can print out a downloaded electronic version as a booklet and distribute it to such libraries. If that is not sufficient, please contact the Editorial Board and we will try to find a solution.

The next issue of the GOOSE BULLETIN is planned to appear in November 2011, which means that material for this issue should have reached the editor-in-chief not later than the 30th of September 2011.

The Editorial Board



Wintering Lesser White-fronted Geese *Anser erythropus* in The Netherlands

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Introduction

Since about 1985, the number of observations of wintering Lesser White-fronted Geese *Anser erythropus* (LWFG) in The Netherlands has shown a remarkable increase. In the period 1908-1968, 41 observations were registered, of which 24 referred to shot or captured birds. Between 1976 and 1989 the Dutch Rarities Committee registered 51 individuals. This Committee tried to exclude the individuals that belonged to the birds of the Swedish reintroduction project, which started in 1981 as an initiative of the Svenska Jägäreförbundet Öster-Malma. This organisation had developed a plan to create a population of LWFG on the former breeding grounds in Swedish Lapland. The aim was that these birds should not migrate to the classic LWFG wintering grounds in South-Eastern Europe, but to the coasts of the North Sea, which were thought to be safer. The decrease and/or disappearance of LWFG earlier in the 20th century in Sweden and Finland, Norway and European Russia was blamed on hunting pressure along the west coast of the Black Sea and in Greece.



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Under the scheme, between 1981 and 1999 approximately 360 birds were introduced, the vast majority as young birds reared by Barnacle Geese *Branta leucopsis* fosterparents. The project relied on the fact that geese instinctively return to the locations where they first learned to fly. The Swedish project team used captive Barnacle Geese to hatch eggs, which had been laid by LWFG kept in captivity. During the moulting period in July the families were transported to Lapland, to the region of Svaipa, in former days a traditional LWFG breeding site. Of the introduced young birds, 250 individuals were fitted with colour-rings.

The idea was that in the autumn the young LWFG should migrate with their Barnacle Geese foster-parents in a south-westerly direction, instead of south-east, the destination of the formerly native birds. The team expected that in spring the Barnacle Geese would return to their breeding grounds in central Sweden and the LWFG to Svaipa in Lapland. This approach turned out to be successful. Shortly after the start of the project, LWFG with colour rings were reported in the Netherlands, usually solitary birds in flocks of Barnacle Geese. In 1986, LWFG started to breed in Svaipa.



Fig. 1. Map of Lesser White-fronted Goose locations in the Netherlands See text for location names.

Locations

Families of LWFG began to appear on goose-staging areas in The Netherlands. Soon these birds showed a preference for a few locations, where they returned every year, some of which have now been used for a quarter of a century. The four most important sites are shown in Fig. 1 and described below (KOFFIJBERG et al. 2005):

1. Anjummer Kolken (Community of East-Dongeradeel, Friesland)

Meadow area. When the LWFG arrive in autumn, usually their first stop is in Anjummer Kolken. From here, the LWFG spread to other locations. During the return-migration in February/March the LWFG again appear at this location. In 1983-84, the first LWFG were observed in Anjum. The maximum number was 80 individuals in 2003-04.

2. Oude Land van Strijen (Community of Strijen, Zuid-Holland)

Meadow area. The first LWFG appeared here in 1987-88. Depending on weather conditions, the geese can stay here from October to March. The geese show a strong preference for certain parts of this area. The maximum number of 78 birds was recorded in 2007-08.

- **3. Korendijksche Slikken** (Community of Goudswaard, Zuid-Holland) Grasslands situated along the Haringvliet estuary. LWFG have been present here since 1992-93. The maximum number of 27 birds was recorded in 2001-02, but in recent years, fewer than 10 birds have been found.
- **4. Vereenigde Herger en Pettemer Polder** (Community of Bergen, Noord-Holland) Meadow area near the North Sea-coast. The LWFG appeared here in 1995-96. Since 2007-08 the importance of this site for the species has increased. On 11 March 2010, 92 individuals were counted, in three groups of 61, 19 and 12 birds respectively. To date there has been no information that suggested that flocks of importance were present elsewhere in The Netherlands, so it looks like if the entire Swedish population was at this site at that time. No previous aggregation of this size has been witnessed at a single Dutch staging area.

Two other locations in The Netherlands hold LWFG more or less regularly for extended periods, although until now they have held fewer than 10 individuals. One site, the polder Biert, lies on a short distance from the Korendijksche Slikken, and marked birds indicate the same birds used both sites.



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Numbers

For the period 1989-90 up to and including 2004-05, KOFFIJBERG et al. (2005) present the seasonal peak numbers for each of the principal staging areas specified above. The following numbers are based on the results of the goose counts, which are undertaken in The Netherlands every month. Numbers counted outside the fixed census dates are also presented here.

In 2003-04 and 2004-05, numbers of LWFG present in The Netherlands reached the all time maximum of 122-123 birds.

Table 1. Seasonal peak numbers of Lesser White-fronted Geese in The Netherlands during the period 2005-06 up to and including 2009-10, divided between the most important staging areas. Totals indicate the maximum coordinate count at all sites for each season.

| Winter | Maximum numbers on each staging area | | | | | |
|----------|--------------------------------------|---------|--------|------------|----|--|
| | Anjum | Strijen | Petten | Goudswaard | | |
| 2005/06 | 63 | 50-52 | 39-42 | 13-15 | 95 | |
| 2006/07 | 56 | 63 | 31 | 10 | 92 | |
| 2007/08* | 61 | 78 | 64 | 9 | 87 | |
| 2008/09* | 49 | 66 | 58 | 7-9 | 90 | |
| 2009/10* | 23 | 75+ | 92 | 10 | 92 | |

^{*} provisional

Discussion

Table 1 indicates that since 2005-06 the maximum estimated number of LWFG present in winter in The Netherlands has remained at less than 100 individuals. The importance of Anjum has decreased, both in autumn as well as in spring before the start of the return migration. In October/November, fewer birds stop in Anjum and they stay for shorter periods. This is even more the case in spring. Nowadays LWFG sometimes do not appear in spring in Anjum at all (info. E. DOUWMA). Co-ordinated surveys show that at least part of the arriving autumn flocks go directly to Strijen (26-09-2007: 5 individuals). It looks like Petten has taken over the function of Anjum as a premigration area in spring.



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During recent winters, Strijen and Petten have become the most important LWFG staging areas in The Netherlands. It is remarkable that both sites have similar habitat structure, which the other locations show to a much lesser extent, or lack completely. Both Strijen as well as Petten are characterized by the presence of wet grassland, with ditches and hummocks.

The LWFG show a preference for this undulating type of grassland habitat, which at Strijen frequently gives the birds the opportunity to disappear out of sight. Many hours of observation are needed to obtain to an accurate count of the geese here. Fortunately, one count team, the VAN DER LINDEN brothers, have become specialists in this task (OUWENEEL et al 2008). In some years small flocks of LWFG change between Strijen and Petten several times per winter, a distance of about 100 kilometres.

Obviously, by far the majority of the LWFG observed in the Netherlands nowadays belong to the Swedish project. The question is whether all Swedish project LWFG are wintering in The Netherlands and, if so, do observers succeed in discovering the locations of all of them. Observers can easily miss the species, because there are about 100 LWFG mixed in amongst 1.5 to 2 million wintering geese in total. Moreover, the LWFG show a preference for a particular type of habitat where they can hide better than elsewhere.

In winter 2009-10, the question of effective coverage of the birds on their winter quarters arose again. In August 2009, Bosse Fagerström from the Swedish project-team announced that 34 first-year birds had come to Hudiksvall, the post-breeding staging area in Central Sweden. That was the best breeding result ever reported since the start of the project. Nevertheless, in 2009-10 the total number counted in The Netherlands on a single day remained under 100 individuals. Winter 2009-10 was long and brought much snow. In January the LWFG left Strijen for several weeks. Elsewhere in The Netherlands small flocks of LWFG were sometimes reported, but we lack a complete overview of their number and distribution for more than two months. The observation of 92 birds on 11 March 2010 suggested that the vast majority of the population had survived winter. It is unknown if in that winter LWFG left the country to migrate further south, as happened during the harsh winters of the mid-1990s. From this exodus at least one family of project-LWFG did not return.



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In the thirty years that the Swedish LWFG project has run, the project has been proven to be successful. However, the losses must be considerable. One can only wonder if the present population is sufficient enough in the longer term to survive.

The annual introduction of new generations of young birds was in stopped 1999. Some of the introduced birds during 1981-99 are still alive and part of the present breeding population. Successful female 081 introduced as a chick in 1995, now 15 years old, in 2010 once again brought two juveniles to the Netherlands. After 11 years without introductions, in 2010 five chicks of Russian origin were released, now with one of the descendants of a project-LWFG as foster-parent. This bird was seen in October 2010 in Anjum, together with some of the Russian chicks (info E. DOUWMA).

References

KOFFIJBERG K., F. COTTAAR & H. VAN DER JEUGD (2005): Pleisterplaatsen van Dwergganzen *Anser erythropus* in Nederland. - SOVON-informatierapport 2005/06. SOVON Vogelonderzoek Nederland, Beek-Ubbergen.

OUWENEEL G.L., A. VAN DER LINDEN, L. VAN DER LINDEN & K. KOFFIJBERG (2008): Terreingebruik van Dwergganzen in het Oude Land van Strijen. - Limosa 81: 17-23.



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The number of Red-Breasted Geese (*Branta ruficollis*) and Lesser White-fronted Geese (*Anser erythropus*) on the migration routes in 2010

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Introduction

The Lesser White-fronted Goose (*Anser erythropus*, hereafter abbreviated LWFG) and Red-breasted Goose (*Branta ruficollis*, hereafter abbreviated RBG) are globally threatened goose species and presently the most endangered breeding geese in Russia. Data presented here were collected during the study of the numbers and distribution of geese at their major known stopover sites and some wintering areas in Russia, Kazakhstan and Azerbaijan in 2010. The main object of this work was to improve our understanding of the current population sizes and assess the status at the main stopover and wintering sites along the flyways of the RBG and LWFG.

Knowledge about key stopover sites of RBG, LWFG and other geese breeding on Western Taimyr Peninsula has only been possible by tracking birds fitted with satellite transmitters (the only way to reveal migration routes and staging sites used by protected species). Unfortunately, we still have no tagged RBG and had to rely on data from tagged LWFG..

Study area

The goose counts reported here have been carried out in the following regions within the flyways of RBG and LWFG: the Kuma-Manytch depression (A), Northern Kazakhstan (B), Lower Ob River (C) and Kzyl-Agatch Bay (D) (see Fig.1).



Fig.1. Study area and the generalised migration routes of RBG and LWFG

Methods

The goose surveys were carried out from aircraft and by ground surveys throughout the study area following the guidelines provided in the "Monitoring instructions for LWfG surveys" (TOLVANEN et. al. 1999). From ground, by telescope, or from the airplane, using binoculars, we counted and assessed flock size and species composition of all flocks of geese. When conditions permitted, we assessed the ratio of adults and juveniles in the flocks. In NW Kazakhstan annual goose counts were undertaken at between eight and 34 Lakes which are used by staging geese as roost sites. Because of the vast areas used for feeding and the comparatively few counters available, annual goose counts are inevitably spread over a period of between one or two weeks and seldom are able to cover the whole area or the duration of the entire migratory season. The main goose staging areas in NW Kazakhstan were only covered in 2010. In Manytch, small aircraft were used for goose counting for the first time in November 2010, manned by a pilot and a single goose observer.

Counts were undertaken during evening and (more frequently) morning flights to and from roost sites. Relatively small goose groups of less than 5 000 birds were more or less accurately counted, whereas bigger groups are estimated using "100-bird-units" or "1000-bird-units". The species composition of the staging goose flocks were determined by assessing the species composition of small sample flocks during the morning and evening flights as well as during observation of foraging flocks in the field. We attempted to ensure that these sample sizes should constitute at least 10-15% of the total numbers of geese present. Most sample flocks were less than 100 birds. Based on the relative species composition of these samples, the species composition of the total goose aggregation of the area was estimated using the following formula:

Total species in area = (Total species in sample/Total geese in sample) x Total geese in area

Due to the method used the annual estimates of the total number of LWFG and RBG in an area can show considerable fluctuations between years.

Kumo-Manytch depression (Fig 1A)

For many years, the southern part of Russia (the area between Taman and Astrakhan) was considered as a key staging area for globally threatened populations of geese. Important stopover sites have not been surveyed, nor protected, along the migration route used by geese south of the Urals and in Western Siberia. In fact, Manytch is the single most important "bottleneck" site, where the counts during migration and winter periods could potentially provide good total population estimates with reasonable survey effort. Annual geese counts have been carried out in this area since 2006.





Fig. 2. Goose count by aeroplane in the Kuma-Manytch depression.

For the first time in Manytch during November 2010, we used light aircraft to count geese using the NONP "Aero Trans Service", thanks to the kind help of the director Mr. Alexander Nikitin, using 2 aircraft C Π -32 and C Π -34, each with a team of a pilot and a goose observer counter.

Table 1. Numbers of Red-breasted and Lesser White-fronted Geese counted in the Kuma-Manytch depression

| Season | Red-breasted Goose | Lesser White-fronted Goose |
|-------------|--------------------|----------------------------|
| | | |
| Autumn 2006 | 12 600 | ? |
| Winter 2007 | 5 300 | ? |
| Spring 2007 | 18 300 | 99 |
| Autumn 2007 | 1 300 | 46 |
| Spring 2008 | 40 830 | 224 |
| Autumn 2008 | 23 200 | 260 |
| Spring 2009 | 24 500 | 82 |
| Autumn 2009 | 19 073 | 204 |
| Winter 2010 | 1 800 | 4 |
| Spring 2010 | 43 480 | 366 |
| Autumn 2010 | 20 607 | 696 |

Although the maximum number counted did not exceed 696, we suspect that, based on data from the satellite tagged birds, 2 500 LWFG migrate through the Kuma-Manytch depression, which fly on to Azerbaijan to winter.

Northern Kazakhstan (Fig. 1B)

One of the greatest waterbird flyways in Eurasia passes through the Ubagan-Ishim interfluvial area and the Turgay depression. The major concentrations of migrating geese are found in the Kostanay, Akmoly and Actobe districts. The entire western population of LWFG and the whole world population of RBG passes through this area on migration. Regular counts have been carried out in Northern Kazakhstan since 1996 as part of a GEF (Global Environment Facility) project.

The results of autumn goose counts are presented along with data from previous counts in Kostanay oblast (1996-2006) by other research teams, most of them published in annual reports of the Fennoscandian LWFG Conservation project (Table 2).

Table 2. Numbers of Red-breasted and Lesser White-fronted Geese counted in Northern Kazakhstan

| Species | | Red-breasted Goose | Lesser White-fronted Goose |
|---------|--|--------------------|----------------------------|
| | Data source | | |
| Year | | | |
| 1996 | Aarvak et al. 1996, Tolvanen et al. 1998 | 88 000 | 7 900 |
| 1997 | Tolvanen et al. 1999 | 10 676 | 10 413 |
| 1998 | Tolvanen et al. 1999, Yerokhov 2000 | 63 200 - 65 400 | 7 300 - 12 400 |
| 1999 | Tolvanen et al. 2000, Yerokhov 2000 | 95 893 | 6 910 |
| 2000 | Tolvanen et al. 2001 | 27 130 | 1 830 |
| | | | |
| 2005 | Yerokhov & Bragin 2005 | 22 407 | 4 817 |
| 2006 | Berezovikov 2006 | 3 460 | 8 181 |
| 2007 | Our data | 330 | 1 927 |
| 2008 | Our data | 19 607 | 20 832 |
| 2009 | Our data | 28 172 | 3 778 |
| 2010 | Our data | 56 860 | 19 192 |

Incomplete coverage of all the main stopover sites means that the counts were not always fully comparable. Only in 2010 could we cover all of the main staging areas used by geese in Northern Kazakhstan (see Fig.3).

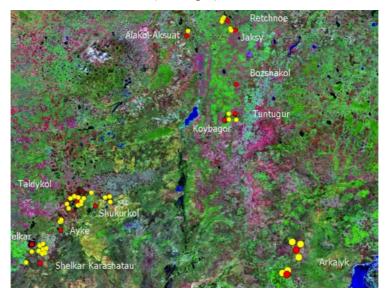


Fig. 3 The key sites for the geese in Northern Kazakhstan in 2010 (yellow dots indicate the feeding areas, the red dots are roosting sites).

The distribution of the geese also depends a lot from year to year differences in water levels in the lakes. ROZENFELD et al. (2009) discovered a previously unknown goose staging site in 2008, holding considerable numbers of LWFG, which has been included in the counts in subsequent years.

In autumn 2008 the average proportion of LWFG in the goose flocks on the lakes of this new site was estimated at 11.2 % (out of a sample of 61 400), 5.5 % (amongst 98 000) and 2.9 % (of 49 300) respectively, i.e. a total number of 13 700 LWFG (see ROZENFELD et al. 2009 for details). Since 2008, drought in NW Kazakhstan had strongly concentrated the geese in the fewer remaining water bodies. At some places almost pure flocks of LWFG or RBG were found, which made it possible to make specified counts in a high proportion of the observed flocks (Tab. 3).

Tab. 3. Number of geese counted, size of samples for species composition and estimated numbers of Redbreasted and Lesser White-fronted Geese in NW Kazakhstan

| | | 1 | lesser willte-mont | | | | |
|------|----------|-------------|--------------------|-----------|-----------|-----------|-------------|
| Year | Total | Size of | Number of | Total | Number of | Total | reference |
| | number | sample for | RBG actually | number of | LWFG | number of | |
| | of geese | species | counted | RBG | actually | LWFG | |
| | counted | composition | | estimated | counted | estimated | |
| | | | | | | | |
| 1997 | 280 000 | 15 000 | 4 725 | 88,200 | 420-1,272 | 7,480 | Tolvanen et |
| | | | | | | | al 1998 |
| 1998 | 293 000 | 11 770 | 2 838 | 63,200- | 585 | 7,300- | Tolvanen et |
| | | | | 65,000 | | 12,400 | al. 1999 |
| 1999 | 747 000 | 46 740 | 2 666 | 52,900 | 381 | 4,850 | Tolvanen et |
| | | | | ŕ | | ŕ | al. 2000 |
| 2000 | 127 000 | 5 940 | 1 556 | 27,130 | 97 | 1,830 | Tolvanen et |
| | | | | ŕ | | ŕ | al. 2001 |
| | | | | | | | |
| 2007 | 83 632 | 16 632 | 336 | 400 | 976 | 1 000 | own data |
| 2008 | 307 222 | 153 722 | 19 607 | 20 000 | 20 832 | 21 000 | own data |
| 2009 | 173 813 | 132 830 | 28 172 | 30 000 | 3 778 | 4 000 | own data |
| 2010 | 441 615 | 214 615 | 53 266 | 57 000 | 18 786 | 20 000 | own data |

Lower Ob-river (Fig. 1C)

Autumn counts of the Lower Ob-river were carried out during 13 to 26 September 2010. The study area was divided into five key zones, based on data from the tagged LWFG (ROMANOV & POSPELOV 2010; THOMAS AARVAK, pers.comm.). During the survey of these zones we used two hydroplanes A-27 and 4E-22, covering a total survey track length of 7 340 km.



Fig. 4. Impressions of the goose habitat at the Lower Ob-river

The total numbers of LWFG and RBG observed during the survey were 3 943 and 6 284 respectively. Thus, the study confirmed this area as a very important key stopover site not only for LWFG, but also for RBG.

Population estimates based on the monitoring results of 2010

In our opinion, the most complete data upon which to base total population size of RBG and LWFG migrating through this flyway after a successful breeding season in 2010 was to base this on numbers observed in Northern Kazakhstan (Tab.4).

Table 4. The estimated total numbers of Red-breasted Geese and Lesser White-fronted Geese along the migration route in 2010

| Species | Wintering sites in Bulgaria and Romania (http:brantaruficollis.org) for RBG and in Azerbaijan for LWFG (January-March) | Spring, Kumo- Manytch depression (March- April) | Autumn, Lower Ob river (September) | Autumn, Northern KZ (October) | Autumn Kumo- Manytch depression (November) |
|---------|---|--|---|--|--|
| RBG | 25 100 | 43 480 | 6 284 | 56 860 | 20 607 |
| LWFG | 2 907 | 366 | 3 943 | 19 193 | 696 |

Breeding success in 2010

Breeding success has only been assessed in Northern Kazakhstan in 2010 after a very successful breeding season. The amount of juveniles in LWFG was 45.4 % (n=312) with an average brood size of 4.2 (n=35), RBG samples comprised 43.4 % juveniles (n=220) and an average brood size of 4.4 (n=15).

Winter counts in Azerbaijan

Few RBG were found during surveys in Azerbaijan, but greater numbers of LWFG were found to be present (Tab. 5).

Table 5. Results of winter counts in Azerbaijan.

| | 2008 | 2010 |
|------|--------------------|-------|
| | (SULTANOV, AARVAK) | |
| LWFG | 1 640 | 2 907 |
| RBG | 9 | 0 |

Discussion

Based on the amalgamation of all count sources presented here, we estimate the total numbers of LWFG and RBG in 2010 after the breeding season to be about 19 200 and 57 000, respectively, although we can not totally exclude some level of double counts. Our surveys discovered new and very important stopover sites in NW Kazakhstan and the Lower Ob valley and showed the importance of the wintering site for LWFG in Azerbaijan (Kzyl-Agatch reserve).

The count in autumn 2010 in all probability did not reflect the true total number of geese migrating through the Kuma-Manytch staging area as the autumn of 2010 was abnormally warm and the dates and the pattern of migration in that year were unusual. The autumn migration started only in the last ten days of November (normally the peak of the migration in this region is in mid November). We suspect that a lot of geese flew to the wintering areas without stopping at Manytch that year. For a more detailed understanding of the autumn numbers of geese, we need to compare our data with the data from the wintering sites.

The Red-breasted Goose is considered as one of the most threatened waterbirds in the western Palearctic, having suffered an apparent decline of ~50% over the last decade. The most recent observations in 2010 have revealed that the number of RBG staging on Kuma-Manytch and Northern Kazakhstan stopover sites is more than double the estimated total based on wintering numbers. This suggests that there must be unknown wintering quarters of the species still to be discovered. We also still have incomplete information about the migration routes and stopover sites used by RBG in Western Siberia. Is the RBG really endangered? In what areas do the geese stage, for how long and how is this related to the status of the habitats used by the geese? The answers may only be revealed by satellite tracking of the birds from the nesting grounds on Western Taimyr.



Fig. 5. Red-breasted Geese on the famous scene called the Meidum Geese from Nefermaat's mastaba in Medium

Acknowledgments

The work was carried out under projects supported by KNIP, AEWA, NOF-Birdlife and RGG.

References

- AARVAK T., I.J. OIEN & S. NAGY (1996): The Lesser White-fronted Goose Monitoring Program. Annual Report 1996 & NOF Raportserie Report N 7- 1996: 18–21.
- BEREZOVIKOV, N.N. (2006): The report of UNEP/DGEF C/F2712-03 Siberian Crane Wetland project in Kazakhstan. Almaty: 1–29.
- ROMANOV, A.A. & I. N. POSPELOV (2010): Intracontinental Spatial Connections of Lesser White Fronted Geese (*Anser erythropus*) from Mountain Subarctic Regions of the Central Palearctic. Russian Journal of Ecology 41(1): 63–66.
- ROZENFELD, S.B., A.YU. TIMOSHENKO & A.R. SALEMGAREEV (2009): Autumn migration of geese in Kostanay Oblast, Kazakhstan, in 2008. Casarca 12(2): 114-137 (in Russian, with English summary).
- SULTANOV, E. & T. AARVAK (2009): Survey of Lesser white-fronted goose in Azerbaijan in January 2008 (Unpublished report).
- TOLVANEN P. & P. PYNNONEN (1998): Monitoring the autumn migration of Lesser White-fronted geese (*Anser erythropus*) and other geese in N-W Kazakhstan in October 1996. Fennoscandian Lesser White-fronted Goose conservation project. Annual report 1997. WWF Finland report N 9, Helsinki: 19–20.
- TOLVANEN P., K.E. LITVIN & P. LAMPILA (1999): Monitoring the autumn staging of Lesser White-fronted geese in N-W Kazakhstan. October 1998. Fennoscandian Lesser White-fronted Goose conservation project. Annual report 1998. WWF Finland report N 10 & NOF Raportserie Report N 1- 1999: 42–46.
- TOLVANEN P., R. KARVONEN, P. PYNNONEN & A. LEITO (2000): Lesser White-fronted geese in Western Estonia in 1999. Fennoscandian Lesser White-fronted Goose conservation project. Annual report 1999: 18–21.
- TOLVANEN P., T. ESKELIN, T. AARVAK, G. EICHORN, I.J. OIEN & E. GURTOVAYA (2000): Monitoring the autumn staging of Lesser White-fronted geese in Kazakhstan, October 1999. Fennoscandian Lesser White-fronted Goose conservation project. Annual report 1999. WWF Finland report N 12 & NOF Raportserie Report N 1: 43–50.
- TOLVANEN P., T. AARVAK & T. BRAGINA (2001): Conservation work for the wetlands and monitoring the autumn staging of Lesser White-fronted geese (*Anser erythropus*) and other geese in N-W Kazakhstan in 2000. Fennoscandian Lesser White-fronted goose conservation project. Annual report 2000. WWF Finland report N 13& NOF Raportserie Report N 2: 13–20.
- YEROKHOV, S.N. & E.A. BRAGIN (2005): The report of UNEP/DGEF C/F2712-03 Siberian Crane Wetland project in Kazakhstan. Almaty: 1–42.



Helgeland in Norway – a new autumn staging area for Pinkfooted Geese

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Introduction

Pink-footed Geese *Anser brachyrhynchus* migrate southwards from their breeding grounds in Svalbard in September and October, with a noticeable peak period for birds passing Helgeland (Nordland county in Norway) in mid – late September (SHIMMINGS, unpubl. data). The geese migrate along two broad corridors – one along the coast of Helgeland, and the other farther inland over mountainous terrain.

According to SHIMMINGS & ANTONSEN (2002) who looked at autumn data up until 2002, staging by Pink-footed Geese during autumn migration was unusual in Helgeland, with only odd records of small numbers recorded. The main autumn staging area in Norway for Pink-footed Geese is around the Trondheimsfjord, about 200 kilometres south of Helgeland (Fig. 1). However, the use of the Trondheimsfjorden as a staging area for Pink-footed Geese is relatively recent, having been established in the 1980s. Pink-footed Geese also established new autumn staging sites farther south in Norway during the late 1980s. (Fox et al. 2005).



Fig. 1. Autumn staging areas for Pink-footed Geese in Norway. Large symbol = Trondheimsfjord. Small symbol = Helgeland.

Autumn staging in Helgeland

In 2004, large numbers of staging Pink-footed Geese were observed at several sites in the municipalities of Alstahaug and Herøy, this being the first season that any numbers of Pink-feet were recorded staging in Helgeland in autumn. Observations in subsequent seasons have revealed that Pink-footed Geese may stage in the area during autumn.

Numbers of staging geese have varied greatly, ranging between 678 and 11 139 goose-days between 2004 and 2010 (Fig. 2).

The reasons for the recent development in autumn staging are many and speculative, but may be the result of one or a combination of the following factors:

- An increase in population size more geese need a larger area in which to feed. Following an expansion in population size from around 15 000 in the mid-1960s, the population was around 50 000 in 2003. The latest population estimate is of 63 000 individuals winter 2009/10 (JESPER MADSEN, NERI, unpubl. data).
- Weather There are numerous field observations of new flocks of Pink-footed Geese arriving from the north and landing in Helgeland during periods of inclement weather such as heavy rainfall and strong headwinds. After arrival, these birds may remain for one or more days, feeding in close proximity of rocky, muddy bays which they use to roost. In autumns of 2007, 2008 and 2010 fewer Pink-footed Geese were recorded staging in Helgeland however in those seasons large numbers of geese were recorded on passage. They did not rest in Helgeland, but continued southwards (17 400 geese in 2007, 25 880 geese in 2008, and 11 870 in 2010). All of these were seasons where weather in Helgeland was more favourable for migration without the need to stop to rest.

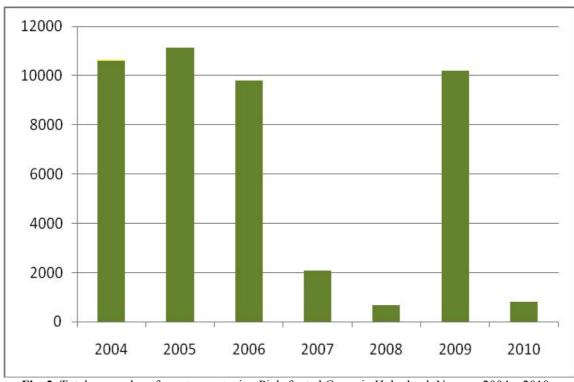


Fig. 2. Total goose-days for autumn staging Pink-footed Geese in Helgeland, Norway 2004 – 2010.

Ring resightings

A total of 140 different ringed individual Pink-footed Geese were identified in Helgeland in autumn (2004-2010 inclusive). Ringed individuals were present for a mean of two days (range 1-17), with 63% of birds being recorded on one day only.

Very few ringed individuals have been recorded in more than one season, with only two out of 140 ringed geese seen in Helgeland in different autumn seasons. Of these 142 resightings, 30 individuals were observed later the same season at sites in Norway south of Helgeland (29 around Trondheimsfjord and one in the county of Oppland).

The remaining individuals were not observed at sites south of Helgeland later in the same season, being either resighted later in wintering quarters or else not observed subsequently that same season. Based on ring resightings, over 20% of individual Pinkfooted Geese that staged in Helgeland also staged in the Trondheimsfjord area later the same autumn, and that they leap-frogged between staging sites on their journey southwards. In one year in particular (2004) over half (13 of 26) of the individuals seen early in autumn in Helgeland were later observed in Trondheimsfjord. These figures are almost certainly a minimum, as not all ringed birds will be recorded in the Trondheimsfjord area, due to variations in observer effort and distribution. It is clear, however, that Pink-footed Geese staging in Helgeland also stage in Trondheimsfjord, and that Helgeland is not necessarily an alternative staging site, but rather a supplementary site, which they may use under certain conditions.



Pink-footed Goose after Naumann 1853.

The effect of hunting

Hunting appears to trigger southward migration. There are many examples of flocks being disturbed by hunting which have immediately taken flight and headed southwards. The reason why hunting triggers migration may be that birds are often shot on roosts where they seek security from disturbance during daytime. Thus, the roosts are perhaps not considered secure enough once the birds are disturbed. Worryingly, there are several observations of hunting beside (and within) one local nature reserve. Hunting is, without doubt, a negative factor leading to birds being forced to head south.

Discussion

Observations have revealed that Pink-footed Geese may stage in the Helgeland area in Norway during autumn migration, and that this is a recent development. This development started only a couple of decades after Pink-feet established autumn staging sites in the Trondheimsfjord area further south. Why the geese have chosen to stage in a new area is uncertain, but may be related to population growth.

However, field observations reveal that Pink-feet numbers build up during periods of inclement weather (strong head-winds and heavy precipitation), suggesting that resting in Helgeland may be a decision that is "forced upon" the geese. Once settled, geese may remain for varying periods of up to one day or as many as 17 days. Thus, once Pink-feet have discovered suitable feeding sites in Helgeland, they may well remain. The fact that very few (1.4%) individually marked geese have been observed in more than one season also indicates that individuals are exhibiting exploratory behaviour, and have not, to date, established a clear pattern of staging in the area.

There is little conflict with agricultural interests during the autumn staging period. At this time the birds feed mainly on grassy coastal pastures, on salt-marshes or on grass fields that have been cut for silage. To date, most landowners appear to welcome the geese, and some gain a little income from the sale of hunting licenses. However, one or two farmers have complained that geese have competed with beef and dairy cattle on some grass fields.

It is hoped to be able to follow developments regarding autumn staging by Pink-footed Geese in Helgeland in future autumn seasons. In addition to counting feeding and passage birds, it will be important to continue to monitor the effects that hunting has on autumn distribution in the area. It might also be good to address any conflicts between geese and farming. At present such conflicts are minimal, although the situation may change in the event of increased usage of sites during autumn. It should be stated here that autumn grazing is less likely to lead to conflict compared to grazing during the important spring growth period.

Acknowledgements

Special thanks to all who have contributed to this project by providing count and resighting data. Data on individually ringed geese and their life histories were downloaded from www.geese.org on 13.01.2011.

The County Governor's Office in Nordland (Fylkesmannen) have funded fieldwork and the agricultural department in Herøy municipality have administered practical aspects of the project.

References

FOX, A.D., J. MADSEN, E. KUIJKEN, D.W. NORRISS, I.M. TOMBRE & D.A. STROUD (2005): Effects of agricultural change on abundance, fitness components and distribution of two arctic-nesting goose populations. – Global Change Biology 11: 881-893.

SHIMMINGS, P. & J. ANTONSEN (2002): Høsttrekk hos kortnebbgås *Anser brachyrhynchus* på Helgelandskysten 1999-2002. – Havørna 13: 48-51.



Harnessing those pesky Anser species.

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Introduction

In the November 2010 issue (11) of the Goose Bulletin, VOSLAMBER et al. described their experiences with various types of backpack style harnesses used to attach GPS-data-loggers and satellite transmitters (also called platform transmitting terminals, or PTTs) to Greylag Geese *Anser anser*. A number of problems were encountered, such as birds chewing through the harness material, destroying the antenna wire, and breaking the metal rings that attach the harness to the transmitter. Their limited success in collecting quality data, in addition to concern for the welfare of birds that experienced difficulty in shedding structurally damaged harnesses, lead to the conclusion that backpack style harnesses are not suitable for attaching data tracking devices to large goose species.

We agree with Voslamber et al. that attempting to monitor any species in the genus Anser can be wrought with problems. Unlike most waterfowl, the bill adaptations of this group, which are suited for not only grazing and gleaning of grasses and sedges, but also grubbing of tubers and rhizomes, provide them with a means of stressing the best laid plans for attachment of PTTs. In contrast, Malecki and Sheaffer have successfully marked and monitored hundreds of ducks (Mallard Anas platyrhynchos, Black Duck Anas rubripes, Northern Pintail Anas acuta) and Branta geese (Canada Geese Branta canadensis, Brent Geese Branta bernicla) in North America using vhf transmitters, conventional satellite PTTs and GPS/satellite PTTs attached with teflon ribbon backpack harnesses. For examples: MALECKI et al. 2001, 2006, SCRIBNER et al. 2003, SHEAFFER 2010a. This is the same style harness design first used by raptor biologists (see BUEHLER et al. 1995) and also by VOSLAMBER et al. However, over the years, harness modifications have been necessary, especially regarding our recent work collecting GPS data from Greenland White-fronted Geese Anser albifrons flavirostris. We feel that the results of this work, and insight into what harness modifications were made to increase the probability of success, may be helpful to others.

Harness Design

Material such as leather, string, elastic, and rubber have all been used to attach vhf transmitters and satellite PTTs to the backs of waterfowl. We have found nothing more pliable and resilient than 0.33 inch (8.38 mm) tubular teflon ribbon (Bally Ribbon Mills, Bally, Pennsylvania, USA). We use only PTTs manufactured by Microwave Telemetry, Inc. (Columbia, Maryland, USA) based on past experience regarding performance and the willingness of the company to incorporate modifications. For instance, they will provide a heavier antenna wire with additional support at the base. They also have a ground tracking feature that allows recovery of the PTT. Microwave's PTTs have 3 wire loops for attachment of the harness; one at the front and one on each side toward the rear.

The PTT is mounted on the back between the wings (see Fig 6, pg 35: VOSLAMBER et al. 2010). The rear ribbon runs behind the wings and around the belly of the bird, with attachment at each of the rear wire loops. At the belly, the ribbon passes through a short connecting segment of ribbon containing a loop at each end (Fig 1, A). The front ribbon passes along one side of the neck, through the front loop of the short connecting segment on the belly, and back along the other side of the neck.

The connecting strap is made from a 2.5 inch (6.4 cm) length of ribbon folded so that the two ends meet at the centre. The ends are sewn in place with dental floss leaving a loop at each end large enough for the harness ribbon to pass. The sewn portion is sealed with Loctite 380 BlackMax glue (Loctite Corp., Rocky Hill, Connecticut, USA) and covered with a piece of .25 inch (6.35 mm) shrink wrap tubing (J.C.Whitney, LaSalle, Illinois, USA) which is then heated with a butane or electric soldering iron. The short connecting segment allows the birds to freely adjust the contact point where the two ribbons join, thus reducing behavioural time spent preening and adjusting the harness. When possible, we hold birds overnight in a pen or large cage with straw and water to allow them to adjust to the harness. This also allows us a final check that the harness has been properly fitted.

When working with White-fronted Geese, we found that reinforcing the short belly segment with a narrow piece of flat plastic strapping slipped inside the ribbon was helpful. On the front and rear loops, we also ran a piece of 250 lb (113 kg) test monofilament fishing line inside the ribbon to prevent the loop from falling apart should a bird chew through the ribbon.



Fig. 1. Teflon ribbon harness attached to a 22 g solar-powered PTT, highlighting the belly connecting strap (A) and the connection of the harness to the front PTT ring (B).

Harness attachment

Attachment of the Teflon ribbon to the PTT consists of passing one end through the wire loop and back onto itself (Fig 1, B). A metal clamp, consisting of an aluminium butt ring (size 6, National Band and Tag Co., Newport, Kentucky, USA) folded over itself and crimped, secures the ribbon. The loose end of ribbon is cut and Loctite BlackMax 380 glue applied to prevent unravelling. The metal clamp is then covered with a short piece of shrink-wrap tubing and heated. Prior to fitting the harness to the bird, we connect one ribbon to a rear wire loop on the PTT and another to the front loop. The PTT is mounted on the bird and the rear ribbon is passed behind the wing and around the belly of the bird, where it is passed through a loop of the short connecting segment, then continued around the belly and through the wire loop on the opposite side of the PTT. Here the ribbon is doubled on itself and temporarily held in place with an electrical alligator clamp to facilitate final adjustments. A 0.7 inch (1.9 cm) length of shrink tubing is slid over the ribbon for the frontal loop before running the ribbon along one side of the bird's neck, through the remaining loop of the short connecting segment, and back along the opposite side of the neck. Here the ribbon is passed through the shrink tubing and temporarily secured by another alligator clip.

Final adjustment consists of working the front and rear ribbons into the feathers, making certain that the rear ribbon is in a straight plane around the bird and not pulled forward on the sternum causing it to rub against the wing patagiums. The short connecting segment should not be forward of the sternum, where it might interfere with feeding. The frontal ribbon should be worked deep into the grove on each side of the neck proximal to the clavicle. This prevents the ribbon from popping out and sliding off the shoulder. One finger should be easily placed underneath the rear of the PTT on winter marked birds; a bit more space allowed when marking in summer to compensate for additional fall/autumn muscle mass. Two fingers should easily fit under the front of the PTT. The front loop need not be snug. It simply holds the PTT in a forward directed position and prohibits the harness sliding off the rear of the bird. Some researchers have advocated inclusion of an elastic strip inside the Teflon ribbon to allow for changes in body mass. This sounds reasonable, but our work with captive birds found that the stiffer ribbon did not get preened into the feathers, resulting in more chewing of the harness. Also the snugness caused by the elastic resulted in skin abrasion underneath the PTT (SHEAFFER 2010b).

When all adjustments are complete the rear ribbon is secured to the wire loop. The front ribbon is secured anterior to the connection already on the PTT with another metal clamp and the piece of shrink tubing previously in place. The two metal clamps and shrink tubing at the front of the PTT reduce the angle of the ribbon posterior to the neck, which helps keep the ribbon from sliding out of the grove inside the clavicle of the bird. We occasionally use another metal clamp anterior to the sternum-connecting segment to further reduce slippage of the harness off the shoulders of the bird. For birds equipped with solar panel PTTs, we also trim the feathers along the sides of the PTT to reduce their covering of the panel.

Greenland White-fronted Geese

In summer, 2009, we placed two 45 gm solar-powered GPS/satellite PTTs on flightless adult male White-fronted Geese in western Greenland. The PTTs were programmed to collect six GPS locations each day with the locations downloaded to an orbiting satellite every three days. Each PTT was attached with a Teflon ribbon harness, but with no use of monofilament or strengthening of the short connecting segment on the belly. We monitored each bird's movements for 56 and 76 days (Fig. 2) with each bird losing its PTT, presumably by chewing through the ribbon, prior to migration.

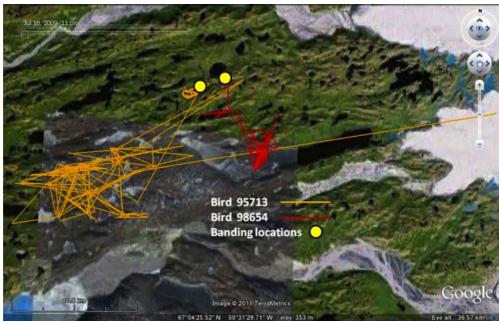


Fig. 2. Movements of two male Greenland White-fronted Geese in western Greenland, July – September, 2009. Birds were carrying a solar-powered GPS satellite transmitter attached using a Teflon ribbon backpack harness.

Greenland Whitefronts winter primarily in Ireland and the UK. In December 2009, we placed four additional PTTs on adult male geese using the Wexford Slobs in southeastern Ireland. The first goose was released without any modifications to the harness. It quickly chewed through the harness and was observed with the front loop dangling on his breast. The next three birds were released with harnesses reinforced with the monofilament in the loop and plastic strapping in the connecting segment. All three left Ireland on their spring migration (April 9th), with two making it to Iceland on April 10th. The third bird flew south of Iceland and settled on the open ocean (Fig 3).

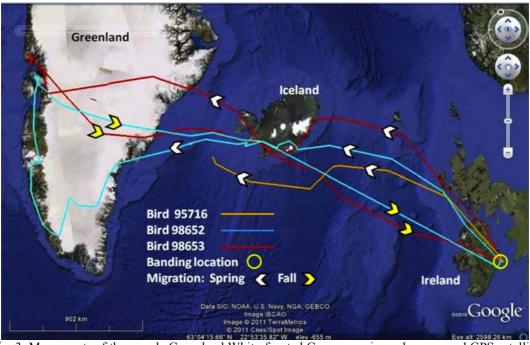


Fig. 3. Movements of three male Greenland White-fronted Geese carrying solar-powered GPS satellite transmitters attached with a Teflon ribbon backpack harness. Birds were marked in December 2010.

Six days later he was lost at sea. It is unusual for Greenland White-fronts to not stop and rest in Iceland, where they acquire additional reserves for the arduous flight over the Greenland ice cap and for breeding. We surmise that the lost goose bypassed Iceland to avoid the ash plume from the active volcanic activity present at this time. This may have been the ultimate cause of its demise.

The remaining two geese successfully arrived in Greenland, summered on the breeding ground, and returned to Ireland the following fall (Fig. 3). One bird was found dead in a field on December 1, 2010 and, as of March 2011, the other bird is alive and the PTT still working.

Conclusions

The use of satellite tracking technology for waterfowl and other avian species has done much to increase our understanding of seasonal movements and distribution patterns. We are now able to monitor birds for a complete annual cycle, something that could never be done with ring recoveries or external visual markers. With the development of solar-powered GPS capabilities, the scale at which we can now define and assess daily movement patterns and use of habitat broadens our ability to delve deeper into the energetic demands affecting all aspects of a bird's life. This is an exciting and quickly evolving area of bird study that will surely influence avian research and management over the next few decades.

The use of backpack harnesses for PTTs with GPS capability represents the best methodology available for pursuing studies requiring this level of location precision (± 15 m). Standard satellite PTTs assess broad scale movements from the Doppler Effect as signals are picked up by an orbiting satellite. These location fixes can be accurate within 1000 m, but there are few orbiting satellites available to pick up transmissions from animal or fish PTTs. This means that "high quality" fixes are not obtainable on a frequent and sustained basis. These PTTs are also available in smaller external packages and as implants because they can function on less battery power, although there is a trade-off with battery size and how long or often they transmit. With GPS capability there is more energy required to collect the data, thereby requiring an exposed solar panel. External mounting, be it backpack or a modified neckband, are the only options.

There is no denying the fact that any type of external marker, whether a simple ring or a more complex backpack, is going to effect, in some way, the bird's behaviour and survival. In a world where all habitat is constantly undergoing some form of disturbance, it becomes imperative that we monitor the responses of those organisms coping with these changes and the effect on their survival and recruitment; at least to the best of our ability. Instead of throwing up our hands and concluding that a technique does not work, let's pool our resources and constantly try to improve on methods to get the job done.

More work needs to be done and we're sure there are ways to build a better PTT attachment. Our ability to move forward with this rapidly advancing technology is dependent on development of better methodologies and the reporting of significant findings in outlets such as the Goose Bulletin.

References

Buehler, D.A., J.D. Fraser, M.R. Fuller, L.S. McAllister & J.K.D. Seager (1995): Captive and field-tested radio transmitter attachments for bald eagles. - Journal of Field Ornithology 66: 173-180.

- MALECKI, R., B. BATT & S. SHEAFFER (2001): Spatial and temporal distribution of Atlantic Population Canada geese. Journal of Wildlife Management 65: 242-247.
- MALECKI, R., S. SHEAFFER, D. HOWELL & T. STRANGE (2006): Northern pintails in eastern North America: Their seasonal distribution, movement patterns, and habitat affiliations. Atlantic Flyway Council Waterfowl Technical Section. Final Report. 67 pp.
- SCRIBNER, K., R. MALECKI, B. BATT, R. INMAN & H. PRINCE (2003): Identification of source Population for Greenland Canada geese: Genetic assessment of recent colonization. The Condor 105: 771-782.
- SHEAFFER, S. (2010a): Black duck research. Livingston Ripley Waterfowl Conservancy Research Update. 5 pp.
- SHEAFFER, S. (2010b): The foundation for evaluation of mid-continent mallard distribution, movements and habitat use: Final report 2010 fall pen study. Livingston Ripley Waterfowl Conservancy Report. 25 pp.
- VOSLAMBER, B., M. PODHRAZSKY & T. BOUDEWIJN (2010): Harnesses on geese. Goose Bulletin 11: 35-40.





City Chess, Elista, Kalmykia (Russia) (© Johan Mooij)

13th meeting of the Goose Specialist Group in Elista

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From Thursday 24 March to Tuesday 29 March 2011 the 13th meeting of the Goose Specialist Group of Wetlands International and the IUCN-SSC (GSG) was held in conjunction with the 4th meeting of the Russian Goose, Swan and Duck Study Group of northern Eurasia (GSDSG) in Elista, Kalmykia (Russian Federation).

These goose specialist meetings were held in the scope of the joint symposium "WATERFOWL OF NORTHERN EURASIA, GEOGRAPHY, POPULATION AND ENVIRONMENTAL DYNAMICS AND POPULATION MANAGEMENT" in Chess City (or City-Chess), a small village devoted to chess, east of the Kalmykian capitol Elista (Russia). The village consists of a central, four-storey City Chess Hall surrounded by two-storey guesthouses.



City Chess Hall and neighbouring guesthouses (© Johan Mooij)

The Symposium was attended by 140 participants from 18 different countries: Australia (1), Belarus (1), Belgium (2), Bulgaria (3), Czech Republic (1), Finland (2), France (2), Germany (3), Hungary (1), India (3), Kazakhstan (1), Latvia (1), Netherlands (7), Norway (1), Russian Federation (99), the United Kingdom, (2), Ukraine (7), and the United States of America (3). Only the participants from China unfortunately had problems in getting their visas arranged in time, and therefore were not able to attend this meeting.





Participants Waterfowl Conference Elista March 2011 (©Vladimir Melnikov)

The Republic of Kalmykia is the only state in Europe where the majority of the people are of Mongolian origin and the dominant religion is Buddhism. The Buddhism of Kalmykia is Tibetan of origin and the Kalmyk people recognize Tenzin Gyatso, 14th Dalai Lama of Tibet, as their spiritual leader. Therefore it was not really surprising that the conference was opened and blessed by two Bhuddist monks (lamas) from the Central Khurul of Kalmykia in Elista.



Blessing of the conference by Bhuddist monks (©Vladimir Melnikov)

Vyacheslav Nikolaevich Ilymzhinov, the First Deputy Prime Minister of the Republic of Kalmykia was impressed that so many people from so many countries gathered in their excellent conference hall in Chess City in Elista.

On the website http://www.kalmpriroda.ru/n58.html of the Republic of Kalmykia a special news item was dedicated to this conference.



Vyacheslav N. Ilyumzhinov, First Deputy Prime Minister of the Republic of Kalmykia (©Vladimir Melnikov)

The organisers of the conference chose late March for the conference not only to synchronise the stay of the participants in Elista with that of the Red-breasted Geese in the Kuma-Manych depression, but also to have better, more spring-like weather. But the opposite of well done is well meant. As the participants observed during the conference excursion, the Red-breasted Geese were there, but arranging the weather was more complicated. During the arrival of most participants the weather was benign, but during the first days of the conference it started to rain, the temperatures dropped and the rain turned to snow that lasted until the mid-conference excursion.





Conference hall in Chess City before and after snowfall during the conference (© Doortje Dallmeijer)

Sonia Rozenfeld and Petr Glazov initiated the plan to hold this joint meeting in Elista during the previous GSG meeting in Höllviken (Sweden) and this plan was endorsed by the late chairman of the GSDSG Nikolay Poyarkov, Yevgeny Syroechkovskiy (current chairman of the GSDSG) and Konstantin Litvin, the liaison person between the GSG board and the GSDSG.



Sonia Rozenfeld (© Vladimir Melnikov)

Sonia Rozenfeld and Petr Glazov (conference secretary) and the organization Monomax Congresses and Incentives from St.Petersburg were responsible for the local organisation and all practical arrangements. The organizing further consisted of Arkadiy A. Tishkov, Konstantin E. Litvin, Vladimir V. Morozov, Olga B. Pokrovskaya, Anastasia B. Popovkina, Olga Yu. Anisimova and Elmira M. Zaynagutdinova. The local committee was chaired by Victor Badmaev (of the "Chernye Zemli" Nature Reserve in Kalmykia).



Konstantin Litvin, Petr Glazov and Anastasia Popovkina (© Vladimir Melnikov)

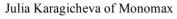
The conference chairing was jointly by Yevgeny Syroechkovskiy (on behalf of the GSDSG) and Barwolt Ebbinge (on behalf of the GSG) and Vladimir Miroshnichenko (on behalf of the Kalmykian Ministry of natural Resources, Environment Conservation and Energy Development).



Chairmen Barwolt Ebbinge and Yevgeny Syroechkovskiy (© Vladimir Melnikov)

Monomax Congresses and Incentives developed a special website for registration and information, organized all logistics, and arranged for simultaneous translation from Russian to English and vice versa during the conference. The two interpreters really did a great job and skilfully translated all presentations and lively discussions.







The interpreters on their balcony (© Vladimir Melnikov)

The scientific programme was in the capable hands of a team chaired by Aleksandr (Sasha) Kondratyev, and in addition to presentations about the distribution, flyways, abundance and systematics of waterfowl, special sessions were also held on hunting and game management, on waterfowl in arid ecosystems and on the impact of growing biofuels and land use change on waterfowl habitats. All in all, during the four conference days there were 92 oral presentations and 27 poster presentations.



Aleksandr Kondratyev (© Vladimir Melnikov)

During the different sessions interesting data about goose, swan and duck ecology, management as well as hunting from all over Eurasia were presented. Furthermore there were presentations about crop damage problems and population development. Because many Greater White-fronted Geese and Red-breasted Geese that winter around the Black Sea migrate in spring through Kalmykia to their Siberian breeding grounds special focus was on these two species. Moreover, smaller but important numbers of Lesser White-fronted Geese also pass through Kalmykia.

Problems with illegal hunting were extensively addressed as well as the topic of legal spring hunting, and how this could be restricted in order to safeguard the future of migratory goose populations.

It was striking that three independent presentations from three different sites on the Taimyr peninsula all indicated an expansion of the breeding range of Redbreasted Geese, whereas the midwinter counts of this

species continue to show a decline. Here clearly more research and improved midwinter surveys are needed to clarify whether indeed Red-breasted Geese are declining, or that simply many Red-breasted Geese are overlooked, because they have shifted their wintering sites once again.

Several contributions dealt with the wealth of resightings of neck-banded Greater White-fronted Geese that are now accumulating through the network of observers that use the website <www.geese.org>. Also the precarious situation of the seriously declining population of Taiga Bean Geese was highlighted.

Finally a resolution was adopted to address all these topics and call for better protection of migratory geese and improved regulation of hunting in Russia.

The proceedings of the conference will be published as three separate volumes of the Russian journal Casarca, one volume with the papers dealing with Red-breasted Geese, one with all other English papers, and one with the Russian papers. All speakers are kindly requested to submit the full text of their presentations before 1 June 2011 to Anastasia Popovkina, who also edited the Abstract book together with Marjorie Bousfield.

Please send your submission before 1 June 2011 to the following e-mail address: <goosegroup@gmail.com>

The conference was sponsored by the partnership between Wetlands International and Shell, by the INNO-fund of WWF-NL, by the Dutch Faunafund, and by the US Fish and Wildlife Service and by the Russian Foundation for Basic Research. We are extremely grateful for this support. On the Russian website a photo gallery by Vladimir Melnikov can be found illustrating the excellent atmosphere during the conference. There also all abstracts of the many interesting papers can be downloaded. Also the list of participants can be downloaded here. Out of the 8 GSG-board-members the following were present in Elista:



Johan Mooij, Ingunn Tombre, Konstantin Litvin, Barwolt Ebbinge and Thomas Heinicke (© Vladimir Melnikov and Doortje Dallmeijer)

Post-conference excursion.

After the conference a small group of 14 participants took part in a post-conference excursion, which allowed them to see the vast steppes of Kalmykia and the adjacent Astrakhan district in more detail, as well as the huge Volga Delta. During this trip at least 10 000 Greater White-fronted Geese were carefully checked for neckbands, but none were found suggesting that most of the Greater White-fronted Geese that stage in Kalmykia do not winter in western Europe, where most of the Greater White-fronted Geese have been marked with neck-bands. Flocks of hundreds of Little Bustards, many raptor species, thousands of Calandra Larks, European Cranes and Demoiselle Cranes were observed.



Post-conference excursion participants (© Barwolt Ebbinge)

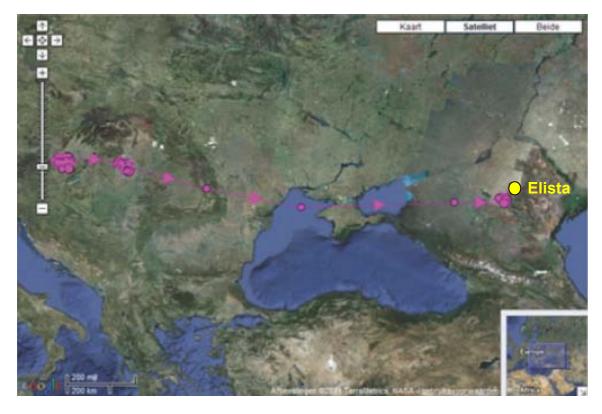


White-fronted Goose Gyula from Hungary visited the Elista-Conference

Bartwolt Ebbinge

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A special surprise during the conference was the appearance in Kalmykia of the White-fronted Goose Gyula, which was mounted with a satellite transmitter in Hungary this winter by Gerard Müskens and Márta Ferenczi. On 25 March this bird made a sharp turn and headed straight for Elista (in the red circle) during the conference (see maps below).

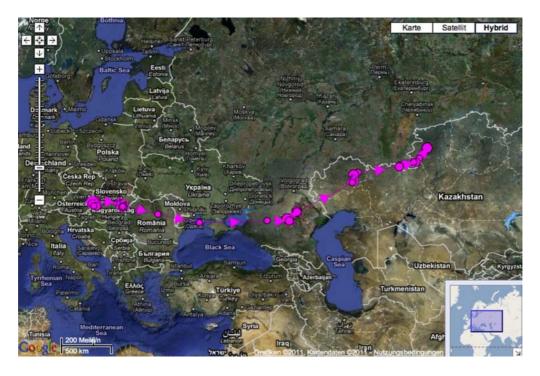


Route of White-fronted goose Gyula until the last week of March 2011 (www.blessgans.de)



Gyula in Kalmykia

Gyula left Hungary on 23 March to reach Kalmykia on 25 March 2011. On 28 March he flew back again heading westward to Manytch Lake to stay there until 6 April 2011. The decision to turn westward again was most likely initiated by the fresh snowfall, which turned Elista completely white again during the conference. On 7 April Gyula resumed his spring migration heading NE again, flying over Elista, then staging again from 7- 10 April near Ar-Nur in northern Kalmykia, and his last signal was on 18 April when already flying over NW-Kazakhstan (see www.blessgans.de).



Route of White-fronted goose Gyula until late April 2011 (www.blessgans.de)

Coming GSG-conferences

As announced by Ingunn Tombre in Elista our next and **14th GSG-meeting** will be organised in Norway from **17-22 April 2012** with a special focus on Svalbard Pinkfooted Geese and Barnacle Geese. The meeting will be organised by Paul Shimmings and Per Ivar Nicolaisen.

Our **15th GSG-meeting** will be organised at the Bassin d' Arcachon in France in **January 2013**. The meeting will focus on Brent Geese and eelgrass and Vincent Schricke of the French Office National de le Chasse has offered to host this meeting.

For the **16th GSG-meeting** Cao Lei has offered to invite us to China, and this meeting will probably be held in **November 2014.**

You will hear more about these meetings in the next issues of the Goose Bulletin as well as on the GSG website.



History, Background and Activities of "Le Balkan-Bulgaria" Foundation

Pavel Simeonov¹ and Earl Possardt²

¹ Le Balkan-Bulgaria Foundation lebalkan@lebalkan.org

Le Balkan was first established in 1992 in France to boost the French-Bulgarian cooperation in the field of nature protection and immediately became engaged with Redbreasted Goose (*Branta ruficollis*) conservation issues in the Durankulak area of
Bulgaria. Le Balkan-Bulgaria Foundation was subsequently formed in 1995 as a natural
development of the initial work of Le Balkan-France. Throughout this period we have
enjoyed very good relations with the Bulgarian and French ministries of environment.
Since 1992 the work of Le Balkan has been focused in the Dobrudja region. By 1995
with the support of WWF-Italia Le Balkan had appointed three guards and signed
contracts with several of the local municipalities for the management of 2 300 ha of
grasslands. At that time, Le Balkan already had purchased several plots of farmland
with a total area of 3 ha around the Lake Durankulak with a grant from LNVLLuxembourg.

Goose counts

Le Balkan Foundation has been a full participant in the mid-winter counts for White-fronted (*Anser albifrons*) and Red-breasted Geese since its establishment. Our responsibilities generally include the census of the wintering waterbird populations in the Dobrudja coastal region, in particular the Lakes Shabla and Durankulak as part of traditional mid-winter counts of wintering waterbirds in the most important wetlands of Bulgaria.

These counts have been a crucial tool to assess the status of the Red-breasted Goose (RBG) and have shown a drastic downward trend since 1997. According to Fox et al. (2010) the species declined with about 40% since the 1990s. Early on, Le Balkan gained experience in RBG tracking through a French GEF project 1998-2001 under participation of the Ministry of Environment and Water. Unfortunately our first attempt to place satellite transmitters on Red-breasted Geese in 1998 was unsuccessful, due to transmitter failures and poor satellite coverage of the region at the time. However, this effort was important in spite of its failure to collect data on movements, as it did establish the feasibility of such a project.

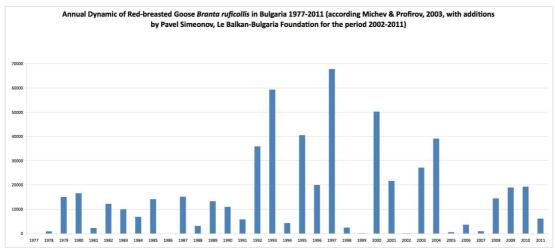


Fig. 1. Annual counts of Red-breasted Goose *Branta ruficollis* in Bulgaria 1977-2011 (according to Michev & Profirov 2003, with additions by Pavel Simeonov, Le Balkan-Bulgaria Foundation for the period 2002-2011)

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Fig. 1 illustrates the results of mid-winter counts of RBG in Bulgaria. Since these data show great fluctuation in numbers over the 34-year period they are difficult to interpret. We can confidently say that between 1992 and 2004 an estimated 20 000 to 68 000 RBG wintered in Bulgaria with the exception of four years where as few as 500 Redbreasts were counted.

During the period 2005 to 2011 we estimated a range of 1 000 to 19 000 RBG with two years recording fewer than 1 000 birds. This dramatic decline in wintering RBG in Bulgaria since 2004 is cause for great concern given the known threats from illegal hunting, public disturbance, agricultural practices and the changing landscape.

Because survey efforts were not robust prior to 1992 and weather factors influence the distribution of the wintering geese we cannot project long-term trends prior to 1992.

The Branta Birding Lodge & Conservation Centre

In 2001 Le Balkan Foundation established the Branta Birding Lodge & Conservation Centre in the core area of the RBG wintering grounds near Durankulak Lake, in partnership with several European institutions and NGOs: FFEM (French GEF), Ministries of the Environment of France and Luxembourg, Luxembourg Liga for the Protection of Birds (LNVL) and the MAVA Foundation (Switzerland). The objective of this project was to provide a conservation presence and measure of security in the surrounding area of the Durankulak Lake, a key site for the wintering population of the RBG.

This presence has allowed Le Balkan Foundation experts to acquire a great deal of experience and knowledge about the RBG, agricultural practices, public use of the Durankulak Protected Area and land use and land values. More importantly, Le Balkan has gained the full support of local municipality and local people. During this period of the Bulgarian-French project in 1998-2001 the local municipalities of Shabla and Kavarna demonstrated their commitment to the conservation efforts by providing free offices for project personnel in support of the project and associated RBG conservation activities.



Fig. 2. Red-breasted Geese (*Branta ruficollis*) near the Branta Birding Lodge & Conservation Centre (© Pavel Simeonov)

The official inauguration of "Branta Birding Lodge and Conservation Centre" was held on 5 July 2007. Since this date the Centre has became the focal point for the conservation of the wintering RBG in the Durankulak area. Such a specific platform overlooking the roosting site of the geese (Lake Durankulak) provides an important local base for our activities, accommodating our members, scientists and birdwatchers, synergizing the conservation efforts with other large initiatives involving stakeholders, conservation groups and the public, offering a meeting place for discussions with local people, Bulgarian and foreign institutions and NGO's, and organizing workshops. Today, the Branta Conservation Centre serves as a field station, where volunteers participate and develop conservation and education activities. The Centre also hosts an ecological and archaeological exhibition, including detailed photographic and cartographic materials, providing visitors with information on coastal Dobrudjha and on Le Balkan Foundation's activities for the conservation of the RBG.



Fig. 3. The Branta Birding Lodge & Conservation Centre (© Pavel Simeonov)

Other projects

In 1998 a partnership between Swarovski Optik, and Le Balkan Foundation, with scientific co-operation of the International Programme for Research and Management of the Dalmatian Pelican in the Palaearctic (Project leader: Biological Station of Tour du Valat in France), was established with the main goal of improving the breeding conditions of the Srebarna Dalmatian Pelicans colony and to ensure the future of the pelicans. As a result, between 1998 and 2011, Le Balkan implemented several very important measures, management techniques, and conservation and research activities in the colony (building of artificial platforms, restoring the breeding site, monitoring and ringing the pelicans). Due to the implementation of these measures we have witnessed the highest numbers of breeding pairs (more than 200 breeding pairs) and breeding success since 1950.

In 1992 another Swarovski partnership was established in Durankulak to develop a large-scale conservation and sustainable tourism development project in the area, with proposed measures such as:

- Land purchase in the vicinity of the lake for the long-term conservation of the site.
- Implementing management activities such as: restoration of former fishponds to create suitable habitats for fish and water birds.
- Favouring individual species or group of species like pelicans, herons, terns by building rafts, platforms and artificial nests.
- Breeding of the endangered wild carp in former fishponds for stocking into Durankulak Lake.
- Development of bird watching tourism in the area.

The project also aimed at engaging local people in the entire conservation process. Due to unfavourable economic circumstances and the unfortunate opposition by other groups who did not share this vision, the project failed in 2003 due to withdrawal of the major sponsor.



Fig.4. Flying Red-breasted, Greater White-fronted and Lesser White-fronted Goose near Durankulak Lake (© Pavel Simeonov).

History and summary of Le Balkan Foundation conservation efforts for the Redbreasted Goose.

Our work related to the RBG is focused mainly on the conservation of the species at its wintering habitats, foraging and roosting areas. A chief aim is to establish a "safety zone" in the Coastal Dobrudja region, where birds can roost and feed undisturbed, and where no poaching is possible. In this regard, an innovative approach was undertaken in 2005 with financial support of EECONET Action Fund and Frankfurt Zoological Society.

This involved purchase by Le Balkan of inland farmlands that are areas of great significance for wintering birds. It is also very important that these territories be used for the production of grain crops and prevented from being developed as golf courses, wind or solar power plants or any other conversion from cereal fields.

Summary of accomplishments

- More than 40 ha of agricultural lands have been purchased in the region of Coastal Dobrudja for winter foraging habitat with the financial support of BirdLife Luxembourg, EECONET Action Fund as well as EURONATUR and Frankfurt Zoological Society
- Materials and expertise needed for the rescue of RBG have been secured as part of the activities of the Branta Conservation Centre.
- Over 15 years of patrolling, monitoring, research and mid-winter counts have been conducted around the Lakes and the adjacent lands of significance for the wintering RBG.
- Patrolling and observation activities for prevention of poaching are conducted as part of our program against illegal hunting and fishing in wetlands especially through our strategic position overlooking Durankulak Lake which allows us to alert the Regional Inspectorate of Environment about the illegal hunting around the lake.
- Poster about the RBG has been published and disseminated in the regions of significance for the conservation of this species.
- In parallel, a birdwatching Company "Branta-Tours" has been established to organize guided trips in the area and benefits from ecotourism are directly contributing to the conservation of the RBG including supporting the operating costs of Branta Centre.
- Today, Le Balkan is implementing locally the RBG Bulgaria-U.S. Conservation Project with support and a partnership with the U.S. Fish and Wildlife Service.

Objectives include:

- Expanding cooperation and strengthening the effectiveness of local nature conservation groups.
- Full participation in winter surveys for the RBG.
- Ensure compliance with hunting regulations, facilitating the implementation of agrienvironmental measures suitable for foraging geese.
- Raising public awareness to promote conservation action.
- Facilitating the implementation of priority actions identified in the Action Plan developed by the International RBG Working Group.
- Increasing knowledge of movements and behaviour on wintering grounds, migration routes and threats at stop-over sites.
- Facilitating the rehabilitation of sick and injured RBG and other endangered or threatened species.

How will we accomplish this?

- 1. Develop ecotourism, publish leaflets and posters, organize awareness campaigns, and organize an annual RBG Celebration event
- 2. Maintain a website www.redbreastedgoose.org to inform the public about the plight of the RBG, the Bulgaria-U.S. Conservation Project and needed conservation actions and to raise funds to support conservation activities.
- 3. Designate at least one mobile observer to participate and support the cooperative patrolling teams set up by the responsible institutions.

- 4. Collaborate with all organizations, groups or individuals that may contribute to the conservation of RBG.
- 5. Cooperate and exchange information with other projects, NGO's or individuals involved in the conservation of the RBG.
- 6. Raise funds to purchase lands for foraging habitat on wintering grounds and to establish a program for cooperative agreements with willing farmers for crop management with a special focus on Kavarna Municipality.
- 7. Conduct satellite telemetry studies of RBG to determine movements on wintering grounds and during migration to better inform management and policy decisions for conservation of the RBG especially about issues of hunting, public activities on protected lands and development.
- 8. Conduct satellite telemetry studies of White-fronted Geese (WFG) on the wintering grounds and during migration to understand the relationship between this species' foraging and roosting behaviours and the RBG and to be able to ensure WFG hunting regulations are compatible with RBG conservation.

We are pleased to announce that the Bettembourg regional group of the Luxembourg Bird Protection League (LNVL), which is one of the long-term partners of Le Balkan Foundation, is now also an official partner of the Bulgaria-U.S. RBG Conservation Project.

Recently, LNVL made an important contribution to the project in order to support aviary construction, planning for the establishment of a RBG Rehabilitation Centre in Durankulak, and the preparation of cooperation agreements with farmers to carry out farming practices in a way that are beneficial to RBG conservation.

In addition, LNVL is setting up a Bulgarian-Luxembourg exchange programme for young people interested in nature conservation. The Branta Conservation & Education Centre – RBG Field Station in Durankulak is an ideal place to start such youth conservation education efforts that will involve exchanges with local schools.

How you can help

- By reporting of any observations of poaching and illegal hunting.
- By disseminating information materials related to the conservation of the RBG.
- By notifying the Branta Conservation and Rehabilitation Centre in Durankulak about birds in distress.
- By making a donation for the conservation of this species in Bulgaria. Find out more about how you can make a donation at www.redbreastedgoose.org



Greater Snow Goose population does not decrease in spite of management measures.

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Greater Snow Geese (*Anser caerulescens atlantica*) breed from the northern Foxe Basin and central Baffin Island northward to Ellesmere Island and into northwest Greenland. They winter almost exclusively along the Atlantic Coast. In spring, the main staging area is located in southern Québec, where nearly the entire continental population can be found prior to the northward migration to the breeding grounds.

The first management plan for Greater Snow Geese was adopted in 1981. This original plan was prepared in response to an identified need by the Canadian Wildlife Service (CWS) the United States Fish & Wildlife Service (USFWS) and the Atlantic Flyway Council. At the time of the 1981 plan's completion, the Greater Snow Goose population was recovering from a low of several thousand birds in the early 1900's to over 200 000. As such, the over-riding objective of the 1981 plan was to ensure that the population did not fall below 120 000. In the three decades since the original plan, the Greater Snow Goose population, as indexed by the spring survey, has undergone a five-fold increase to over 1 million birds.

Special conservation measures implemented between 1999 and 2003 seemed to have stopped the population growth and stabilise it between 800 000 and 1 000 000 individuals. Among all these measures, the spring conservation harvest and, to a lesser extent, the liberalisation of hunting regulations for spring season in the United States have shown to be the most efficient ones. In the past five years in the USA and Canada an average of 0.5 - 0.7 million Snow Geese was shot annually. The increased harvest may have stopped rapid growth, but the population wasn't reduced and is still disturbing parts of the tundra habitat. In a report for the Arctic Goose Joint Venture, alternative options ranging from egg collection as well as mass live-capture and culling on the breeding grounds to the use of chemical avicides were outlined. But such "direct control" measures will be difficult to implement and are very expensive.

References

- BÉLANGER, L. & J. LEFEBVRE (2006): Plan for Sustainable Integrated Management of the Greater Snow Goose in Québec: 2005-2010 Action Plan. Canadian Wildlife Service, Québec Region, Environment Canada, Sainte-Foy.
- RAFTOVICH, R.V., K.A. WILKINS, K.D. RICHKUS, S.S. WILLIAMS & H.L. SPRIGGS (2009): Migratory bird hunting activity and harvest during the 2007 and 2008 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland, USA.
- SIMMS, N. (2010): Despite Conservation Season, Snow Goose Numbers Continue to Grow. Delta Waterfowl Magazine, http://www.deltawaterfowl.org/media/magazine/archive/2010-04/snowgeese.php.
- SNOW GOOSE, SWAN AND BRANT COMMITTEE OF THE ATLANTIC FLYWAY GAMEBIRD TECHNICAL SECTION (2009): Management Plan for Greater Snow Geese in the Atlantic flyway. USFWS, CWS.
- U.S. FISH AND WILDLIFE SERVICE (2009): Waterfowl population status 2009. U.S. Department of the Interior, Washington, D.C. USA.
- U.S. FISH AND WILDLIFE SERVICE (2010): Waterfowl population status 2010. U.S. Department of the Interior, Washington, D.C. USA.



Polar Bears won't eat Snow Geese into extinction

Kieran Mulvaney

Published in Discovery News, Fri Nov 5, 2010 11:26 AM ET http://news.discovery.com/earth/polar-bears-wont-eat-snow-geese-into-extinction.html

Polar bears thrive on the sea ice of the Arctic, where they prey primarily on the ringed seals that nervously look around for signs of trouble whenever they haul themselves out of the water. But, as anyone who has spent any time observing them in the wild will confirm, polar bears are also extremely smart animals, and researchers have recently witnessed signs of remarkable adaptability in the face of a changing climate.

As Discovery News reported in April, researchers in Canada have observed several instances in which solitary bears have come ashore from the sea ice and wandered through Snow Goose colonies, eating eggs out of the nests, and even climbed rock cliffs to eat murre eggs and chicks.

In years past, by the time sea ice melted for the summer and polar bears came ashore, the eggs would have hatched and the birds flown the nest. However, as the climate warms, sea ice will melt, and bears will come ashore, earlier in the year. What was particularly notable was that, in three quarters of the episodes that scientists witnessed, a solitary bear ate every single egg in the colony. That suggested the ramifications of this behaviour for bird populations could be catastrophic. However, a new study by researchers affiliated with the American Museum of Natural History suggests that Snow Geese, at least, should be able to breathe easily.

Writing in a recent edition of the journal Oikos, the researchers describe running computer models that simulated the timing of events during the Arctic spring: the break-up of sea ice, the movement of bears onto shore, the migration of geese to the North, and the laying of eggs. They found that climate change will indeed result in increased overlap between polar bears coming ashore and eggs being in the nests; that this overlap will indeed provide an opportunity for at least some polar bears to procure at least some food; and that the consequences will almost certainly result in a decline in Snow Goose numbers.

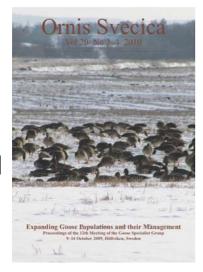
However, climate change will also cause increased variability from year to year, and as a result, there will be some years when there is no overlap at all -- either because the geese have fledged earlier, the bears have come ashore later, or both. Those periodic years of "mismatch" will, they conclude, enable Snow Goose numbers to rebound again. "Even if the bears eat every egg during each year of complete 'match,' our model shows that periodic years of mismatch will provide windows of successful goose reproduction that will partially offset predation effects," said lead author Robert Rockwell, a research associate in the Division of Vertebrate Zoology at the Museum and a professor at the City University of New York.

Alas, this doesn't mean that the future is bright for polar bears after all. The energy derived from wandering through Snow Goose colonies and chowing down on eggs is insignificant compared to an extra few weeks on the ice devouring seals. The evidence continues to point to polar bear numbers diminishing gradually as sea ice season shortens, and then precipitously once sea ice declines past a certain point.



New Publications.

Proceedings of the 12th meeting of the Goose Specialist Group of Wetlands International "GOOSE 2009", 9 – 14 October 2009 in Höllviken (Sweden)



The 12th meeting of the Goose Specialist Group took place in Höllviken in southern Sweden from 9-14 October 2009. The meeting was very well organised by Leif Nilsson and his team of the University of Lund, and sponsored by the Swedish Association for Hunting and Wildlife Management (Svenska Jägareförbundet). A short report about "Goose 2009" was published in GOOSE BULLETIN 9 from November 2009 (GOOSE BULLETIN 9: 8-12).

Now the proceedings of this meeting have been published in the renowned Swedish Journal "Ornis Svecica" (Vol. 20, No. 3-4, 2010: 111-235).

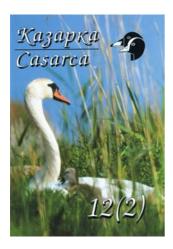
All participants of the Höllviken-meeting should have received a copy by now (if not, just write an email to Leif

Nilsson), but a few more copies are still available for interested people who could not attend the meeting.

If you are interested in such a copy, please contact Leif Nilsson leif.nilsson@zooekol.lu.se. For those who do not need a hard copy it is also possible to download it from Leif's homepage: http://www.zoo.ekol.lu.se/waterfowl/index e.htm



Two new issues of Casarca, the journal of the GSDSG



The Goose, Swan and Duck Study Group of Northern Eurasia (GSDSG) has again published two issues of their journal Casarca.

Since 1995 the journal appears with one or two issues per year. Most papers are in Russian, but all of them have an English summary as well as bilingual figures and tables, which enable non-Russian speaking people to extract the core information.

To get a good overview of waterbird research and conservation activities as well as waterbird population status and development on most of the territories of the former USSR, Casarca is a must!

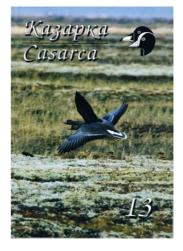
In Casarca 12(2) (2009) there are papers about Greylag, Snow, White-fronted, Lesser White-fronted and Bar-headed Geese as well as reports about some local studies.

Casarca 13 focuses on hunting and hunting bags of waterbirds in Europe as well as in different parts of the Russian Federation.

Issues of Casarca cost 10 Euro (postage costs not included!) and can be ordered by:

Bird Ringing Centre (RGG), Moscow, 117312, Russia. Fax/phone: +7 (499) 783 32 26;

email: goosegroup@gmail.com.





New Publications 2010

ANDERSSON, Å. & N. HOLMQVIST (2010): The Swedish population of Lesser White-fronted Goose *Anser erythropus* – supplemented or re-introduced? – Ornis Svecica 20: 202-206.

BLACK, J.M., D.E. LEE & D.H. WARD (2010): Foraging home ranges of Black Brant *Branta bernicla nigricans* during spring stopover at Humboldt Bay, California, USA. – Wildfowl 60: 85-94.

EBBINGE, B. (2010): Expanding Goose Populations and their Management – Introduction. – Ornis Svecica 20: 111-112.

FARAGÓ, S. (2010): Numbers and distributions of geese in Hungary 1984–2009. - Ornis Svecica 20: 144–154.

FOX, A.D., B.S. EBBINGE, C. MITCHELL, T. HEINICKE, T. AARVAK, K. COLHOUN, P. CLAUSEN, S. DERELIEV, S. FARAGÓ, K. KOFFIJBERG, H. KRUCKENBERG, M.J.J.E. LOONEN, J. MADSEN, J. MOOIJ, P. MUSIL, L. NILSSON, S. PIHL & H. VAN DER JEUGD (2010): Current estimates of goose population sizes in western Europe, a gap analysis and an assessment of trends. - Ornis Svecica 20: 115–127.

FOX, A.D., L. CAO, Y. ZHANG, M. BARTER, M.J. ZHAO, F.J. MENG & S.L. WANG (2011): Declines in the tuber-feeding waterbird guild at Shengjin Lake National Nature Reserve, China – a barometer of submerged macrophyte collapse? - Aquatic Conservation: Marine and Freshwater Ecosystems 21: 82-91.

FOX, A.D. & C.M. GLAHDER (2010): Distribution and abundance of post moulting White-fronted and Canada Geese in west Greenland 2007. - Polar Research 29: 413-420.

FOX, A.D., G.F. FOX, A. LIAKLEV & N. GERHARDSSON (2010): Predation of flightless pink-footed geese *Anser brachyrhynchus* by Atlantic walruses *Odobenus rosmarus rosmarus* in southern Edgeøya, Svalbard. - Polar Research 29: 455-457.

- GLAHDER, C.M., D. BOERTMANN & J. MADSEN (2010): Assessing impacts on geese from mining activities in the Ramsar site Heden, East Greenland. Ornis Svecica 20: 215-224.
- HAKE, M., J. MÅNSSON & A. WIBERG (2010): A working model for preventing crop damage caused by increasing goose populations in Sweden. Ornis Svecica 20: 225-233.
- HARRIMAN, V.B. & R.T. ALISAUSKAS (2010): Of flees and geese: the impact of an increasing nest ectoparasite on reproductive success. Journal of Avian Biology 41: 573-579.
- HEINICKE, T. (2010): Tundra Bean Goose Anser fabalis rossicus during spring migration in northern Sweden rare visitor or regular passage migrant? Ornis Svecica 20: 174-183.
- HÜBNER, C.E., I.M. TOMBRE, L.R. GRIFFIN, M.J.J.E. LOONEN, P. SHIMMINGS & I.S. JÓNSDÓTTIR (2010): The connectivity of spring stopover sites for geese heading to arctic breeding grounds. Ardea 98: 145-154.
- KAMPE-PERSSON, H. (2010): Naturalised geese in Europe. Ornis Svecica 20: 155-173. KLEEFSTRA, R. (2010): Monitoring van ganzen op slaapplaatsen in het centrale merengebied van Friesland, 1998-2010. Limosa 83: 160-167.
- MARCHI, C., I.F. SANZ, E. BLOT, J. HANSEN, A.J. WALSH, M. FREDERIKSEN & A.D. FOX (2010): Between-winter emigration rates linked to reproductive output in sitefaithful Greenland White-fronted Geese. Ibis 152: 410-413.
- MEIJUAN, Z., L. CAO & A.D. FOX (2010): Changes in within-winter feeding behaviour of wintering Bean Geese *Anser fabalis serrirostris* at Shengjin Lake, Yangtze floodplain, China. Wildfowl 60: 52-63.
- MITCHELL, C., K. COLHOUN, A.D. FOX, L. GRIFFIN, C. HALL, R. HEARN, C. HOLT & A. WALSH (2010): Trends in goose numbers wintering in Britain & Ireland, 1995 to 2008. Ornis Svecica 20: 128–143.
- MOOIJ, J. H. (2010a): Die Zwerggans *Anser erythropus* in Nordrhein-Westfalen. Charadrius 46: 106-115.
- MOOIJ, J. H. (2010b): Review of the historical distribution of the Lesser White-fronted Goose *Anser erythropus* in Europe. Ornis Svecica 20: 190–201.
- MOOIJ, J. H. (2010c): Harvest of Waterfowl in the Western Palearctic. Casarca 13: 31-75 (in Russian).
- NILSSON, L., A. DE JONG, T. HEINICKE & K. SJÖBERG (2010): Satellite tracking of Bean Geese *Anser fabalis fabalis* and *A. f. rossicus* from spring staging areas in northern Sweden to breeding and moulting areas. Ornis Svecica 20: 184-189.
- POISBLEAU, M., N. GUILLON & H. FRITZ (2010): Preservation of winter social dominance status in Brent Geese *Branta bernicla bernicla* within and across winters. Journal of Ornithology 151: 737-744.
- TOMBRE, I.M., H. TOMMERVIK, N. GULLESTAD & J. MADSEN (2010): Spring staging in the Svalbard-breeding Pink-footed Goose *Anser brachyrhynchus* population: site-use changes caused by declining agricultural management? Wildfowl 60: 3–19.
- M. TRINDER, C. MITCHELL, R. SWANN & C. URQUHART (2010): Status and population viability of Icelandic Greylag Geese *Anser anser* in Scotland. Wildfowl 60: 64-84.
- VOSLAMBER, B., E. KNECHT & D. KLEIJN (2010): Dutch Greylag Geese *Anser anser*: migrants or residents? Ornis Svecica 20: 207-214.
- VULINK, J.T., M.R. VAN EERDEN & R.H. DRENT (2010): Abundance of migratory and wintering geese in relation to vegetation succession in man-made wetlands: the effects of grazing regimes. Ardea 98: 319-327.

ZHANG, Y., L. CAO, M. BARTER, A.D. FOX, M. ZHAO, F. MENG, H. SHI, Y. JIANG & W. ZHU (2010); Changing distribution and abundance of Swan Geese *Anser cygnoides* in the Yangtze River floodplain: the likely loss of a very important wintering site. - Bird Conservation International 21: 36-48.

ZHAO, M.J., L. CAO & A.D. FOX (2010): Distribution and diet of wintering Tundra Bean Geese *Anser fabalis serrirostris* at Shengjin Lake, Yangtze River floodplain, China. – Wildfowl 60: 52-63.

Call for help: Summary of accomplishments:

As discussed during the Höllviken meeting we invite all goose researchers to send their publications to our data bank of geese literature. Not only international but also local publications (including those in languages other than English) are most welcome.

Please send your publications, preferably as a pdf file, to Fred Cottaar - fred.cottaar@tiscali.nl



Instructions to authors

The Goose Bulletin accepts all manuscripts dealing with goose ecology, goose research and goose protection in the broadest sense as well as Goose Specialist Group items.

All manuscripts should be submitted in English language and in electronic form. Text files should be submitted in ".doc"-format, Font "Times New Roman 12 point", tables and graphs in ".xls"-format and pictures in good quality and ".jpg"-format.

Species names should be written with capitals as follows: Greylag Goose, Greenland White-fronted Goose etc. Follow an appropriate authority for common names (e.g. Checklist of Birds of the Western Palearctic). Give the (scientific) Latin name in full, in *italics*, at first mention in the main text, not separated by brackets.

Numbers - less than ten use words e.g. (one, two three etc) greater than 10, use numbers with blank for numbers over 1 000.

Example of citation: In text BUEHLER et al. (1995) and in references:

BUEHLER, D.A., J.D. FRASER, M.R. FULLER, L.S. MCALLISTER & J.K.D. SEAGER (1995): Captive and field-tested radio transmitter attachments for bald eagles. - Journal of Field Ornithology 66: 173-180.

In case of doubt please look at the last issue of the Goose Bulletin.



