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## WETLANDS INTERNATIONAL GOOSE SPECIALIST GROUP BULLETIN

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Ministry of  
the Environment



National Environmental  
Research Institute

No 7, April 1996

**WETLANDS**  
**INTERNATIONAL**

# The Goose Specialist Group of Wetlands International (WI)

**The Wetlands International Goose Specialist Group** monitors goose populations with the aim of providing reliable population estimates and information on goose trends, distribution and breeding success. The Group reviews current status and management of goose populations and encourages studies of population dynamics and habitat ecology.

The Group has a coordinator for the Western Palearctic, Eastern Palearctic/Oriental and North America, respectively, and a steering committee for the work done in the Western Palearctic. In addition, in each Western Palearctic country, the Group has one national coordinator who is responsible for organising and reporting the annual, international goose counts on the days designated by the Group. These counts are stored in a database: the Wetlands International Western Palearctic Goose Database.

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## **Editorial**

Dear friends!

There have certainly been some changes since the last issue of the Bulletin. Readers cannot but help notice the change in our title, for a start! Wetlands International was created in Kuala Lumpur, Malaysia in October 1995 by the official integration of the Asian Wetland Bureau, IWRB and Wetlands for the Americas. The aims of the new organisation are "to sustain and restore wetlands, their resources and biodiversity for future generations through research, information exchange and conservation activities worldwide". The new organisation places great emphasis upon research and sound technical information providing the foundations for its activities and is keen to progress its aims through collaboration, particularly through the global network of wetlands experts. Fundamental to this networking within the former IWRB were the Research Groups (now renamed "Specialist Groups" within Wetlands International, to form part of a Waterbird Network of specialists groups in collaboration with IUCN/SSC and BirdLife International). During the Kuala Lumpur meeting, the vital role of the Specialist Groups was highlighted, and the urgent need for a full-time professional post to support and coordinate the network was stressed. Specialist Group coordinators have also been invited to serve as representatives on the Regional Councils and Executive Committees of Wetlands International to ensure strong representation of the views of the network of Groups at both levels in the organisation. The work of the Goose Specialist Group remains constant, however, in maintaining an international network of experts working with goose research, and provide expert input into Wetlands International and its mission.

The Group held its first annual meeting in Poland in November of last year, which turned out to be a great success. A lively exchange of ideas through informal discussions, presentations and workshops proved too much to stop planning for a second such meeting later in 1996 (see elsewhere in this Bulletin). We extend a huge "thank you" to the West Pomeranian Ornithological Society and the Swidwie Field Station of the Polish Academy of Sciences for their excellent hospitality and for running a very enjoyable meeting. Thanks must also go to all the folk who attended from so many different countries and for their active involvement in the meeting which made it so enjoyable and successful. We must add a vote of thanks to the Åge V. Jensen Founda-

tion for helping fund the attendance of some of the delegates at the conference.

The Poland gathering has also initiated a new section to the Bulletin, namely Annual Meeting reports, which we aim to carry as a regular feature if they prove popular, not as an exhaustive record of the meetings, but reporting on the activities presented at the annual meetings to those folk who were unable to attend. We hope to include more of these in the next issue to spread them over the year. The meeting reports include, in this issue, an analysis of a brief questionnaire put to the meeting to assess the effectiveness and level of readership satisfaction with the Bulletin. We will strive to take many of the ideas and suggestions on board in coming months, but as ever, the Bulletin belongs to you, and in particular, the articles reproduced here depend on your willingness to contribute. One feature that respondents did stress in their answers to the questionnaire was the need for the regular appearance of the Bulletin. This we shall strive to do, with copy dates in future to be the end of February for an April publication and an end of August deadline for an October publication. We hope that the more regular appearance of the Bulletin will stimulate more contributions, but we recognise the conflict with summer fieldwork may mean the autumn edition may be a little slim in some years!

In this issue we have exciting news about progress on the Lesser White-fronted Goose, including previously unpublished information about its occurrence in Lithuania, early reports of the results of satellite telemetry and news from the workshop on the species held during the Poland meeting. You will also note we have included several announcements about activities or organisations of wide interest - please do remember to use the Bulletin as a forum for announcing activities or appealing for collaboration on projects. Whatever, we very much hope that you find this Bulletin to your liking and as ever welcome your views on how it can be improved.

## *Status report*

# **Wetlands International Western Palearctic Goose Database**

## **International counts**

Apart from the International Waterfowl Census (IWC) which includes counts of all goose species in the middle of January, international counts are conducted in September (Greylag Goose), November (Bean and White-fronted Goose), March (Barnacle Goose) and May (Brent Goose). We thank the national coordinators for arranging these counts and supplying the data to the Goose Database. We are happy to inform you that increasing amounts of data have been submitted not only for the January counts but for all goose counts in recent years. The updated summary list of material submitted to us is presented in Table 1.

The site-based data in the Goose Database currently contains counts from 1,365 sites in 29 countries, whereas the national-totals database contains data from 42 countries in the Western Palearctic.

## **Coordinators update**

We welcome Milan Vogrin as the new national coordinator for Slovenia. Milan has provided a short account of the status of geese in his country (page 13). We also welcome Nicola Baccetti who has taken over as the national coordinator in Italy from Fabio Perco. We offer Fabio our sincere thanks for having done a great job.

## **Annual meetings of the Goose Research Group**

In this issue of the Goose Bulletin you will find news from the first in a hopefully long series of annual meetings. The next meeting is planned for winter 1996 at Martin Mere in the UK (see page 50).

The Goose Database intends to bring updated site and count lists from all countries involved in the international goose counts to these meetings and it would be most helpful if all national coordinators would submit to the

database their results from 1995 before 1 July 1996 and their results from 1996 before 1 October 1997.

### **Check of the Goose Database contents**

The Goose Database continues sending out diskettes containing the information in the database on each country to the national coordinators. Such a diskette was recently sent to Bulgaria.

### **Western Palearctic and South-West Asia Waterfowl Census 1994**

The annual report of waterfowl counts in 1994/95 including goose counts from 1993/94 will be published by Wetlands International during autumn 1996.

Data from the counts carried out during September and November 1994 and January, March and May 1995 which are to be included in the annual report must be submitted to the Goose Database before 1 July 1996. If it is not possible to provide the data in a site-based form a national total for all the goose species would still be very helpful.

### **Funding**

The Wetlands International Goose Specialist Group is grateful to acknowledge the following organisations for their support to the Goose Database in 1995 and 1996: German Hunters' Association (Germany), Bestuur Jachtfonds (The Netherlands), Department of Coastal Zone Ecology of the National Environmental Research Institute (Denmark).

Table 1. Status of January goose count data, 1987 to 1996 inclusive, from Western Palearctic countries. Data from the Goose Database (site-based records) are marked with an asterisk (\*); data from other sources are marked +; a blank indicates that no data are available.

	Nat. cor.	No of sites	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Albania									+	+		
Algeria	+	9	*	*	*			*	x	*	*	
Austria	+	2	*	*	*	*	*	*	*	*	*	*
Belgium	+	29	+	+	+	+		+	+			
Bulgaria	+	10	+	+	+			+	+	*		
Croatia	+	6						+	+	*		
Cyprus									+			
Czech Rep.	+	10	+	+	+	*	*	*	*	*	*	*
Denmark	+	134	*	*	*	*	*	*	*	*	*	*
Estonia	+	71							+		+	
Finland									+		+	
France	+	36	+	+	*	*	*	*	*	*	*	*
France	+	24	+	+	+	*	+	+	+	*		
Germany	+	228	+		*	*	*	*	*	*	*	*
Germany	+	139		+	+	*	*	*	*	*	*	*
Greece	+	23	*	*	*	*	*	*	+	*	*	*
Hungary	+	25	*	*	*	*	*	*	*	*	*	*
Ireland	+	98							+	+	+	
Israel								+	+	+	+	
Italy	+	4	*		*			+	+	+	+	*
Jordan								+				
Kaliningrad									+			+

Table 1. Continued.

	Nat. cor.	No of sites	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Latvia	+								+	+	*	*
Lithuania	+								+	+		
Luxembourg	+	1	*	*	*	*	*	*	*	*	*	*
Morocco	+	4	+	+	+	+	+	+	+	+		
The Netherlands	+		+	+	+	+	+	+	+	+		
Norway	+	2	*	*	*	*	*	*	*	*	*	*
Poland	+	97		+			*	*	*	*	*	*
Portugal,	+	1	*	*	*	*	*	*	*	*	*	*
Rumania	+	19		*	*	*	*	*	*	*	*	*
Slovakia	+	34				*	*	*	*	*	*	*
Slovenia	+	8					*	*	*	*	*	*
Spain	+	2	*	*	*	*	*	*	*	*	*	*
Sweden	+	148	*	*	*	*	*	*	*	*	*	*
Switzerland	+								+	+	+	+
Syria									+	+	+	+
Tunisia	+	4	+	+	+	*	*	+	+	+		
Turkey	+	30	*	*	*	*	*	*	+	+		
The Ukraine	+							+	+	+		+
United Kingdom	+	93	+	+	+	+	+	+	+	+		
Former Yugoslavia	+	46	*	*	*	*	*	+	+	+	+	+



*Status report*

## Update to the Goose Ringing Scheme Catalogue

Referring to the catalogue produced in Goose Bulletin 6: 6-14, we wish to draw attention to the following amendments:

### European White-fronted Goose *Anser albifrons albifrons*

C02 R/D	Type/colour/code	Neckband/white/3 characters
	Project start	1990
	Correspondent	Johan Mooij, Biological Station, Wesel, Diersfordter Strasse 9, D-46483 WESEL, Germany and Igor Kostin, Central Research Laboratory for Game Management and Nature Reserves, Teterinsky per. 18, 109004 Moscow, Russia
	Remarks	Ringed in Taimyr

### Greenland White-fronted Goose *Anser albifrons flavirostris*

D01 IRE	Type/colour/code	Neckband/orange/ and legring/white/3 characters
	Project start	1983
	Correspondent	Oscar J. Merne, National Parks and Wildlife Service, 51 St. Stephen's Green, Dublin 2, Ireland
	Remarks	A joint Irish/British/Danish project

### Greylag Goose *Anser anser*

G07 S	Type/colour/code	Neckband/blue/3 white characters
		Neckband/light blue/3 black characters
	Project start	1983
	Correspondent	Leif Nilsson, Ekologihuset, S-223 62 Lund, Sweden
	Remarks	A joint Scandinavian project

We thank everyone for sending details of changes and ask that all new schemes or changes to existing schemes be notified to us as soon as possible.

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*Status report*

## **The Lesser White-fronted Goose in Lithuania**

In all recent Lithuanian publications, this globally threatened species is characterised as an 'irregular and scarce, insufficiently investigated passage migrant' (Nedzinskas 1990, Žalakevičius 1995). Staging areas for this species are poorly known and it is likely that Lesser White-fronted Geese are frequently overlooked in large migrating flocks of other goose species.

Migratory passage of this goose takes place during March-April and late September-early October in Lithuania. Small staging flocks of the Lesser White-fronted Goose (up to 20-30 birds) have been recorded almost annually in the Žuvintas Reserve (southwest Lithuania, 50°30'N, 23°37'E) during 1966-1986 (Nedzinskas 1990), although there is a lack of information from this site in very recent years.

In the 1960s, large staging flocks of this species (up to 600-800 birds) were recorded in Lithuanian coastal areas, especially the Kuršiu Lagoon and Nermunas River Delta area, 55°18'N, 21°20'E (Valkevičius 1967). However, in recent years we have only irregularly observed mostly small staging flocks (up to 40 birds) at this site. A flock of 130 birds was recorded there in late September 1989. In autumn 1992 (late September - early October), 76 staging birds stayed in cattle-grazed flooded fields in the Nermunas River Delta area and 43 geese were observed on farmland 30 km east of the city of Šilutė.

In 1994 and 1995, we performed a special survey of staging Greylag Geese in Lithuanian coastal areas (including aerial surveys, boat and ground counts). Most potential staging sites for the Lesser White-fronted Goose were also covered. However, in spring and autumn 1994 this species was not recorded from coastal sites. The only record (on 21 September 1994) was from an inland site (ca 100 km east of the Nermunas Delta) where 107 Lesser White-fronted Geese were observed in a mixed flock with nearly 2,000 White-fronted Geese.

In autumn 1995, we recorded 200-230 birds in the Nermunas River Delta area. These birds staged on cattle-grazed fields and in certain sites of the

Kuršiu Lagoon for about 2 weeks (28 September - 13 October). Another small flock (47 birds) was observed in late September on farmland near Šilutė.

The most important staging grounds of the Lesser Whitefronts in Lithuania are at least partly protected. In the Žuvintas Nature Reserve all human activities are prohibited. Principal staging sites in the Nermunas River Delta area are also protected zones within the Nermunas Delta Regional Park where most human activities are regulated.

Unfortunately, the Lesser White-fronted Goose is not currently included in the Lithuanian Red Data Book, nor is it protected from hunting by law although local hunting associations have excluded this goose from their lists of game species. Alas, it is likely that in September 1995, several Lesser White-fronted Geese were shot by mistake (one skin was forwarded to the Museum of Zoology), because most local hunters are unable to distinguish between different goose species.

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#### References

- Nedzinskas, V. 1990: Wildfowl. - In: Logminas V. (ed.); Lithuanian fauna. Vol. I: 20-60. (In Lithuanian).
- Valkevičius, V. 1967: Bird migration in the Kuršiu Lagoon areas in 1962-1966. - Procl. Inst. Zool., Vilnius, pp. 15-37. (In Russian).
- Žalakevičius, M. 1995: Birds of Lithuania. - Acta Ornit. Lit. 11, 110 pp.

## Regional report

### Eastern Palearctic Bean Goose populations

Professor Janet Kear is currently compiling a book on Ducks, Geese and Swans of the World in conjunction with the Wildfowl & Wetlands Trust at Slimbridge. It will be completed sometime early in 1997, but many of the species accounts have been completed already in preparation for publication. As a result of some new literature appearing about the Eastern Palearctic Bean Goose populations, it seemed a good idea to briefly summarise our knowledge of the status and distribution of these geese based on some of the material gathered for Janet's book. Without wishing to pre-empt this major publication, the following brief notes may be of interest, together with the new sources of information. Hopefully, such a provocative display of our present ignorance of these birds will infuriate and stimulate readers to supply more and better information! The editors of the Bulletin are always especially keen to publish material from the Eastern Palearctic flyways.

#### Abundance and distribution

Three forms of Bean Geese are considered to occur in the Eastern Palearctic, although as outlined below, there seems justification for assuming there may only be two, the relatively long-billed taiga form *middendorffii* and a tundra thick-billed form *serrirostris*. The third form *johanseni* is a *fabalis* type whose existence is debated.

*johanseni*: According to Delacour (1954), *fabalis* type birds breeding east of the Ural Mountains should be of the *johanseni* or even *middendorffii* forms. Some of the birds caught in western Europe do fall within the range of measurements for these races (Burgers et al. 1991). *johanseni* is supposed to breed in the West Siberian Lowlands, but their definition is based upon 11 males and 5 females obtained from their wintering grounds in the Tsinling Mountains of northwest China (the race is said to winter from Persia across to China). Both yellow and black-billed *fabalis* type birds have been recovered in the breeding period from the West Siberian Lowlands, so it would seem that the existence of *johanseni* as a separate race is questionable. However, the Bean Geese which winter in the southeastern part of Kazakhstan (east

of Turkestan) and in Kirghizstan are almost completely unknown in the west, and occur far from the wintering range of any other Bean Geese.

*middendorffii*: population less than 10,000 and declining (Andreev et al. in press). Breeds in the forest zones of eastern Siberia from Khatanga to the Kolyma region, south to the Altai and northern Mongolia. Important mass moulting concentrations known from the Yana, Indigirka and Lena river deltas (Degtyarev 1995). Winters in eastern China south to Foochow, Korea and Japan, resightings of marked birds indicating that a few birds breeding in Kamchatka winter in Japan (Kurechi 1991).

*serrirostris*: currently numbers less than 50,000 and declining (Andreev et al. in press), with a ten-fold decline in numbers estimated at some breeding areas (Ebbinge 1991). Breeds in the tundra zone from Khatanga to the Anadyr. Winters in China south to Fokien, Korea and Japan, generally north of *middendorffii*, selecting more maritime habitats (Miyabayashi 1994). Some Japanese-wintering birds originate from Kamchatka (Kurechi 1991).

Both eastern forms are poorly documented compared to western ones. Up to 31,000 Bean Geese have been counted in China (in 1991, WSGCOA 1994), but only 15 sites in China and South Korea have held more than 300 birds in winter (Perrenou et al. 1994). Some 9,000 winter in Japan (Miyabayashi 1994), where there has been a slight increase in recent years under protective legislation. On spring migration, up to 20,000 occur on Kamchatka, mainly in the western lowlands (Gerasimov 1990).

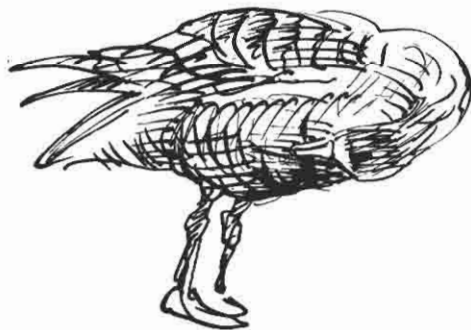
### Feeding ecology

In Japan, *middendorffii* feeds on lake vegetation, taking items such as the fruits of water chestnut *Trapa* and the rhizomes of wild rice *Zizania*. By contrast, *serrirostris* feeds in paddy fields, pasture and agricultural fields (Miyabayashi 1994). These patterns appear similar in Korea, where the species feeds on *Zizania* and *Trapa* during the day at freshwater reservoir sites, as well as gleaning Rice *Riz* from paddy fields harvested by machine (Park & Won 1993). However, the general food habits and habitat preferences are not well known.

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References

- Andreev, A., Madsen, J. & Reed, A. in press: Status and trends of geese in the world. - Faune & Gibier Sauvage.
- Burgers, J., Smit, J.J. & van der Voet, H. 1991: Origins and systematics of the Bean Goose *Anser fabalis* (Latham 1787) wintering in the Netherlands. - Ardea 79: 307-316.
- Degtyarev, A.G. 1995: Localization and status of geese mass moult sites in north Yakutia. - Goose Study Group Bulletin of Eastern Europe and Northern Asia 1: 167-169.
- Delacour, J. 1954: The Waterfowl of the World. - Country Life, London, 284 pp.
- Ebbing, B.S. 1991: Wild goose populations in northern Asia. - IWRB Goose Research Bulletin 1: 26.
- Gerasimov, N.N. 1990: Spring migration and number of Anseriformes in Kamchatka. - In: Matthews, G.V.T. (ed.); Managing Waterfowl Populations. Proc. IWRB Meeting Astrakhan 1989. IWRB, Slimbridge, pp. 46-47.
- Kurechi, M. 1991: Report on East Asian races of the Bean Goose in Japan and Kamchatka. - IWRB Threatened Waterfowl Research Group Newsletter 1: 11-12.
- Miyabayashi, Y. 1994: Inventory of goose habitat in Japan. Japanese Association for Wild Geese Protection. - Wakayanagi, Japan, 316 pp.
- Park, J.-Y. & Won, P.-Y. 1993: Wintering ecology of Bean Geese *Anser fabalis* and White-fronted Geese *A. albifrons* in Juram Reservoirs, Korea. - Bulletin of the Institute of Ornithology, Kyung Hee University IV: 1-24.
- Perrenou, C.P., Mundkur, T. & Scott, D.A. 1994: The Asian Waterfowl Census 1987-1991: distribution and status of Asian Waterfowl. - IWRB Special Publication No. 24/AWB Special Publication No. 86.
- WSGCOA (Waterbird Specialist Group of the Chinese Ornithological Association) 1994: Waterbird Research in China. - East China Normal University Press, 234 pp.



## Regional report

### Wintering Geese of the River Drava, Slovenia

The river Drava emerges from the southeastern part of the Alps to form one of the most important rivers in Slovenia. Here, the river valley opens out into a wide flood plain, dominated by open wet grasslands regularly inundated by flooding. Although large areas have been drained, the small remaining areas of natural alluvial wetlands are of great ornithological importance (Sovinc 1994, Vogrin in press).

The area is the most important wintering area in Slovenia for many species of waterfowl, including Bean Goose *Anser fabalis rossicus* (up to 4,000), White-fronted Goose *A. albifrons* (up to 1,500), Greylag Goose *A. anser* (up to 700), Mallard *Anas platyrhynchos* (up to 30,000), Tufted Duck *Aythya fuligula* (up to 7,000) and Goldeneye *Bucephala clangula* (up to 3,500). As such, the river qualifies for Ramsar site status for some of these species and for the total numbers of wintering birds.

The most important goose site is the Ormož Reservoir, close to the Croatian border, where up to 4,000 Bean Geese have been reported in the past, but now only a few hundred winter here, mainly due to intense tourist hunting activities in the area in recent years. The reservoir is also the only regular haunt for wintering White-fronted Geese in Slovenia.

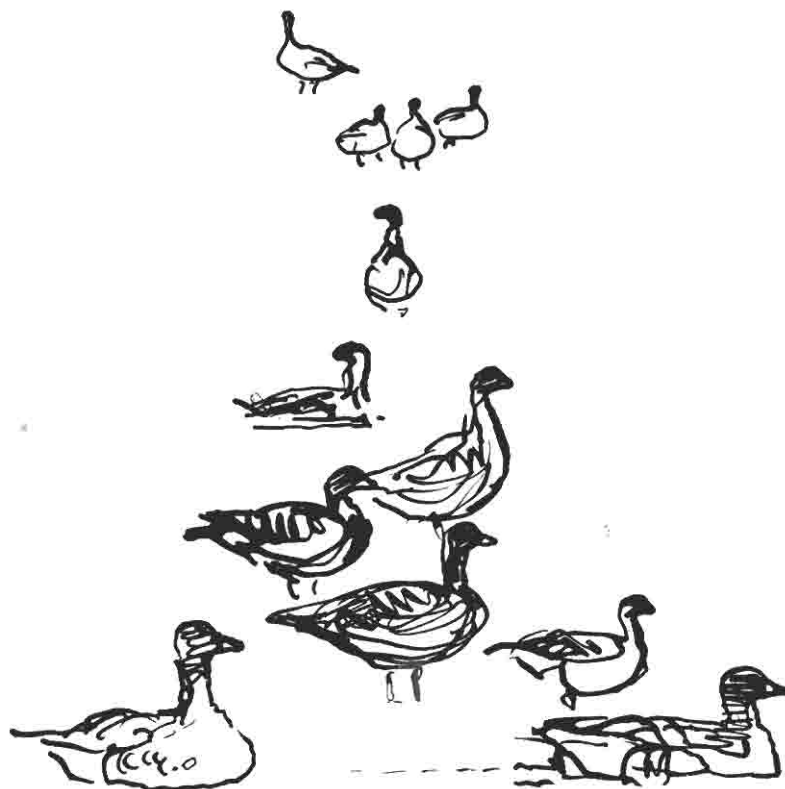
There have been great changes to the river Drava during the last 30 years. Hydro-electric dams now regulate the flow of the river, many of the floodland areas have been drained and 70% of the alluvial forest along the river has been lost. The changes to currents and flooding patterns have had a great effect on the wetlands of the river, and intensive agriculture continues to claim land in the valley.

At present, the river section from Maribor to Ptuj is protected as a Landscape Park, and the section between Maribor and Ormož is listed as an Important Bird Area. However, recognition of its international importance, control of hunting and other tourist activities and a halt to further changes to the hydrological control of the river system remain important objectives for its adequate conservation in the future.

M. Vogrin, Hotinjska cesta 108, 62312 Orehova vas, Slovenia

References

- Sovinc, A. 1994: The Atlas of Wintering Birds in Slovenia. - TZS, Ljubljana. (In Slovene with English summary).
- Vogrin, M. in press: The Drava River - a important European ornithological locality. - *Acrocephalus* 16: 68-70. (In Slovene with English summary).





## Regional report

### Geese of the Ukrainian part of the Danube Delta

The Ukrainian part of the Danube Delta (ca 1,240 km<sup>2</sup>) comprises at least a quarter of the whole delta and is a Ramsar Wetland of International Importance as a breeding area and for seasonal concentrations of water birds. The most valuable and important areas include the Stentsov wetlands, Lake Kugurluy, the coastal stretch of the delta with adjacent shallow sea banks and the Sasyk Reservoir. A nature reserve was established in the coastal section of the delta and today the Danube Delta Nature Reserve occupies a total area of 14,851 ha of delta wetlands and shallow coastal sea banks.

Five goose species regularly occur in the Danube Delta: Greylag Goose *Anser anser* (which also breeds in the area), White-fronted Goose *Anser albifrons*, Lesser White-fronted Goose *Anser erythropus*, Bean Goose *Anser fabalis* and Red-breasted Goose *Branta ruficollis*. The Snow Goose *Anser caerulescens* was recorded in the Danube Delta for the first time during 1983-1995. The following account documents the status of these species in the Ukrainian part of this important wetland during 1983-1995.

#### Greylag Goose

*Status: common breeding, mostly resident species, also common migrant, summer and winter visitor*

The principal breeding grounds of the species are the coastal section of the Kilia channel, the Stentsov-Zhebriyanov wetlands and the Kugurluy-Kartal lake system. Small numbers nest in almost all the larger wetlands of the region with developed cover of emergent vegetation. Nesting territories are occupied from the second half of February. In some years, first nests are constructed in late February. Generally, egg-laying takes place during the second half of March/first half of April, although clutches may be found as late as mid-June. The first goslings appear in mid-April and the young fledge in July.

The breeding population is fairly stable at an estimated 600 pairs, with up to 3,500 non-breeders in summer. In the 1990s, some 3,000 Greylags concentrated in the upper part of the Sasyk Reservoir. Hundreds summer on Lake

Kugurluy and pools of the coastal section of the delta. Soon after fledging of young, geese start visiting harvested cereal fields. In the coastal section of the delta they feed on the water chestnut *Trapa natans* which is ripe at this time, and their daily feeding activities are restricted to the wetlands which primarily lie within the boundaries of the Nature Reserve. Peak numbers of Greylag Geese in the region are observed in September/early October when around 10,000 individuals occur.

In winter, Greylag Geese primarily occur on the delta islands, especially Yermakov Island, and some coastal parts of the delta. They feed mainly on fields of winter cereal and, to a lesser extent, on meadows used for cattle grazing. Since 1983, Greylags were only absent from the delta once, during the unusually severe winter of 1984-85. Usually some 1,000 individuals winter in the delta wetlands. Annually 200-500 geese are shot by hunters.

### White-fronted Goose

*Status: abundant migrant, very rare summer visitor, abundant winter visitor*

White-fronted Geese appear in early October, but peak migration arrival is late October/early November. These geese concentrate at the Sasyk Reservoir, Stentsov Wetlands, Yalpus-Kugurluy-Kartal lake system and the Tuzlov group of limans<sup>1</sup>. The largest night roosts are known to be the upper parts of the Alibey liman and Sasyk Reservoir where thousands of White-fronted Geese concentrate. The number of Whitefronts wintering in the region has increased in recent decades. In the 1980s and early 1990s, 50,000-100,000 wintered in the region. In years with severe weather and poor winter crops, numbers were much lower. An abrupt drop in air temperature and heavy snow fall usually result in the departure of the birds.

White-fronted Geese primarily feed on fields of winter cereal, less often on harvested fields of corn and soy beans. During the study, up to 95% of the green plant matter was removed in certain preferred sections of fields used by geese. At the beginning of the wintering season, geese primarily forage twice a day, arriving on the fields in the mornings and afternoons, shifting around midday to pools to rest and drink. During the shortest days of the winter, especially during foggy and overcast weather, they mostly feed

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<sup>1</sup> Liman is a term which refers to a former river mouth flooded by the sea and presently partially or completely separated from it by a sand spit. This type of water body is somewhat unique to the northern Black Sea region.

throughout the whole day without a break for resting and drinking. The natural course of daily activities of the geese is often disturbed, especially in early winter when hare hunting takes place at goose feeding sites. Flushed geese usually fly to a pool from where they return to field-feeding.

Mass departure and spring migration varies with weather conditions and takes place throughout March. The last migrating flocks are recorded in mid-April. Single individuals and occasionally even pairs can be observed as late as June. It is probable that weak or injured birds spend all summer in the region. Annually, at least 1,000 White-fronted Geese are shot by hunters in the area. Dozens more collide with electric power lines, particularly on foggy days where wires run close to pools used as night and day roosts by geese.

### **Lesser White-fronted Goose**

*Status: very rare migrant species*

We know of only one documented record of this species. A single individual was collected in the middle of November in the northern part of the coastal section of the delta. It is possible that single individuals winter in the region together with the White-fronted Geese.

### **Bean Goose**

*Status: rare, migrant species*

Migrating flocks are observed in March, April, October and November, mostly in the coastal section of the delta. Birds primarily fly in monospecific flocks. No documented records of the species exist for the winter period.

### **Snow Goose**

*Status: very rare, accidental species*

A single individual was spotted in a flock of ten Greylag Geese in June 1992 in the area adjacent to the Danube Djenshey liman. The bird was flying towards the coastal section of the delta. Most likely, it had escaped from

Askania Nova Reserve and Zoo located not far away in the Kherson region. This had happened in the past in other parts of the Ukrainian Black Sea coast. In the same year, there was the first sighting of a single Snow Goose in the Romanian part of the Danube Delta (M. Marinov, pers. comm.), possibly the same individual.

## Red-breasted Goose

*Status: common migrant and wintering species*

The time of autumn arrival depends on weather conditions, but the arrival takes place throughout November and early December. Birds move in monospecific flocks, primarily along the coastal section of the delta. Migration is not observed every year, probably because it takes place at night. Until the winter of 1990-91, this species was not recorded as a winter visitor, perhaps because of a lack of observations in winter in the areas where they now mainly concentrate. Red-breasted Geese were not common in the areas adjacent to the delta where wintering goose monitoring was most thorough. During the winter of 1990-91, only a few Red-breasted Goose flocks were observed, 500 geese were counted in 1992-93, and thorough survey in 1993-94 located 2,500 geese, although the real number was probably twice as many. Few Red-breasted Geese wintered in the region the following winter due to heavy snowfalls, extensive freezing of open water and poor availability of winter cereals - the main source of food for the birds. In most cases, they feed together with White-fronted Geese, and monospecific groups are formed less often.

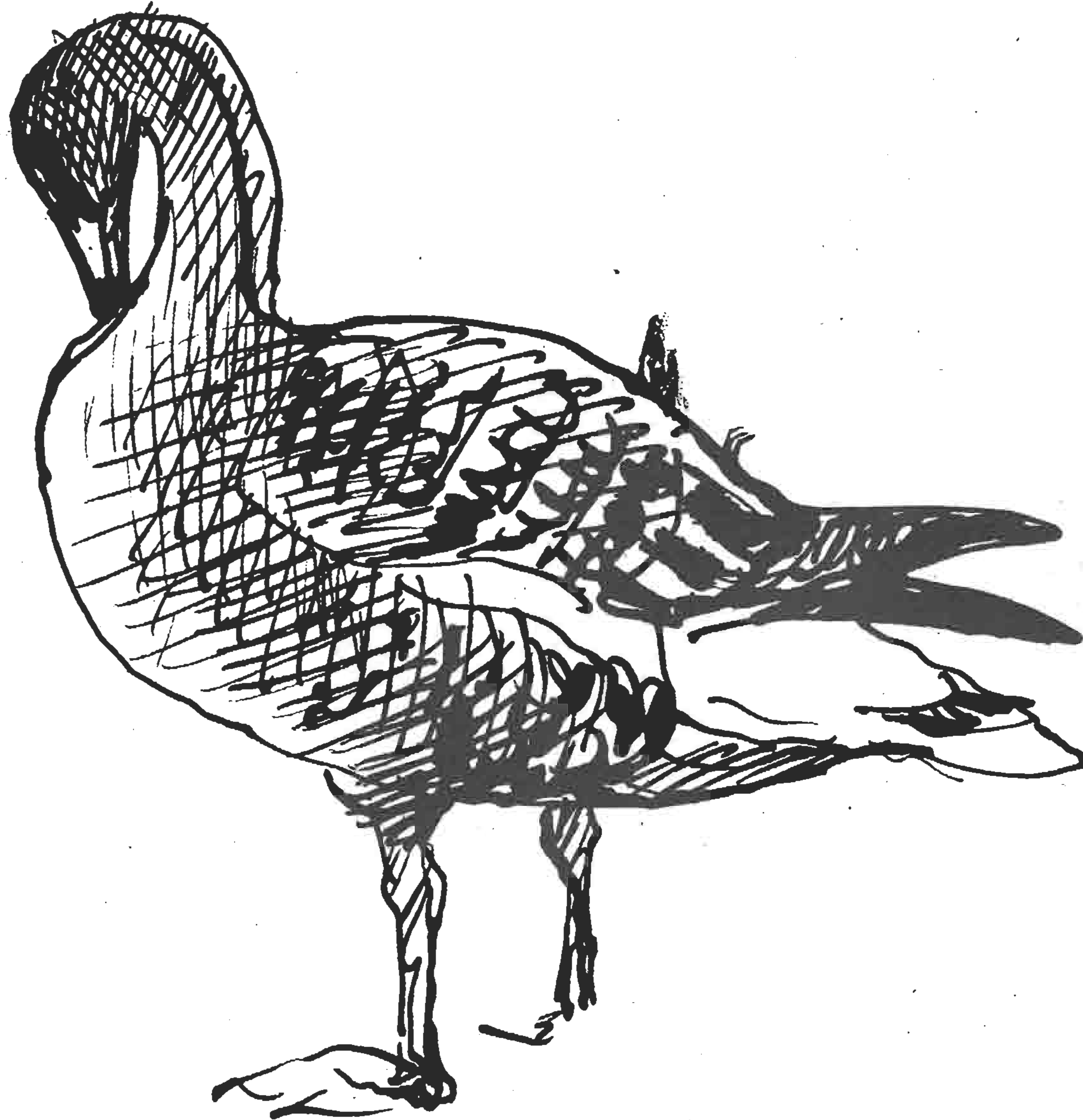
Geese arrive at their feeding areas immediately after sunrise and normally depart at noon to a pool for a short rest. As with Whitefronts, this ceases during foggy weather and during the shortest days of the year. Red-breasted Geese aggregate to roost at night shortly before dusk, the last flocks arriving when it is almost completely dark. The birds concentrate in the upper parts of the Alibey and Burnas limans, Sasyk Reservoir and Stentsov Wetlands. Small groups also winter in the upper delta adjacent to the main river channel.

Spring departure takes place throughout March and the last individuals can still be found in early April. Annually, hunters accidentally kill a few dozen of these birds in the region.

Overall, the Ukrainian part of the Danube Delta and its adjacent territories are of great importance as goose wintering grounds, particularly for Red-breasted and White-fronted Geese. The region is of International Importance for the former species because of the shift in its wintering grounds from the Caspian Sea region to the Black Sea coast, as well as the overall low numbers of the species. In some years up to 10-20% of the world population of the Red-breasted Goose may concentrate in the region.

My thanks to Yuri Zharikov (Department of Biology, Muhlenberg College, Allentown PA 18104-5586, USA) for translation of this manuscript.

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*Progress report*

## **Alternative feeding sites for geese and swans in Niedersachsen, NW Germany: a recent management project to minimise land-use conflict**

Outside of the breeding season, parts of Niedersachsen support internationally important numbers of several goose and swan populations, namely Brent, Barnacle, Greylag, Bean and White-fronted Geese as well as Whooper and Bewick's Swans. Away from the Wadden Sea coasts, where Brents concentrate during spring staging, there are only four areas supporting major concentrations of geese: Dollart and Leybucht in the west, the Elbe estuary and the Elbe valley in the eastern part of Niedersachsen.

Following the reunification of Germany in 1989, a part of the Elbe valley, formerly in the German Democratic Republic, was reintegrated into Niedersachsen in 1993. This fact is significant in relation to the current crop-damage problem which has developed in this area, because:

- 1) In the Elbe valley, which formed part of the border with the former GDR, attractive feeding areas with low overall disturbance levels helped to attract and support large winter populations of Bean and White-fronted Geese and also of Mute, Bewick's and Whooper Swans
- 2) Compensation for crop damage was paid by the government of Mecklenburg-Vorpommern which was responsible for the area until 1993
- 3) Hunting of Bean and Whitefronts was allowed in Mecklenburg-Vorpommern before the reintegration; however, there is no open season for these geese in Niedersachsen

Recent counts of the wintering birds in this area revealed maximum numbers of 45,000 White-fronted and 20,000 Bean Geese together with about 3,000 Bewick's and Whooper Swans and 600 Mute Swans. Increasing complaints from farmers precipitated a governmental management project which is intended to both fulfil the international responsibility for goose conservation in their staging and wintering grounds and, at the same time, to minimise uncontrolled damage on the fields and the consequent economic losses to the farmers.

For this reason, a project was started in the winter of 1994/95 to address the problems. Unfortunately, due to financial problems the full programme

could not be implemented until the 1995/96 season. Under the programme, a total of 1,330 ha (with 750 ha of cereals and 450 ha of rape) out of an area of about 7,600 ha of arable land were managed under management agreements which secured special feeding sites for geese by contractual arrangements. Farmers agreed to treat the contract fields according to prescribed cultivation schemes (which included reductions in the use of pesticides, fertilisers etc), but were not allowed to scare away foraging geese. In return, the agreements guaranteed payment to farmers for one third of the potential harvest from the fields. On approximately 100 ha, sacrificial cereal crops were left unharvested, and the government management agreements include provision for payment for the entire harvest. The object of this part of the programme was to offer the standing grain as a valuable food resource to lure geese away from surrounding non-contract fields. In this way, these contract fields served a double function under the agreements: initially as newly sown fields during the first winter under the scheme and then as a source of grain after the subsequent growing season for the following autumn.

Wherever possible, harvested and non-harvested fields are matched with adjacent permanent grassland areas which function as buffer zones. Outside these areas, farmers are at liberty to scare geese away from non-contract fields to protect them and their crops. Indeed, such activity is considered to be an important management strategy to displace the geese into the disturbance-free zones.

Wildfowl hunting formally occurred throughout the entire area, but with the start of the project, this ceased on a voluntary basis within the project areas. Hence, low disturbance levels and good feeding opportunities are combined to try to concentrate birds into particular fields which are included in the management agreements.

In order to monitor and assess the effects of these management procedures, some research programmes have been established to answer the following questions:

- are non-harvested wheat and barley fields attractive food resources for geese?
- how cost effective is this kind of management?
- are the aims of the scheme being fulfilled under the existing mechanisms in place (ie combining effective goose conservation with the solution of agricultural problems on a regional scale)?

- does the project concentrate local birds on certain fields rather than artificially increasing their number in the entire area?
- can this scheme be applied to other regions and/or other species as a management model?

Although effectively in operation for only one year, the initial results have been encouraging and can be summarised as follows:

- 1) Grain left in stubble fields and in non-harvested fields proved very attractive to geese. It was necessary to roll down the unharvested wheat to make it accessible to the geese. Swans, however, did not take to using the grain or corn
- 2) High concentrations of birds in a non-harvested wheat field rapidly depleted the food resource;
- 3) Fields under contract tilled this autumn proved no more attractive to geese than those fields outside of the scheme. Since farmers invested little or no effort in scaring geese from non-contract fields, geese seemed to feed on all fields regardless of the management situation
- 4) Most farmers involved in this project are content with the level of payment available under the agreements. They obviously felt compensated for the damage on their non-contract fields under the terms of their agreement and therefore saw no need for scaring
- 5) Farmers not involved in the project are upset, because they feel that they suffered additional work (scaring geese and protecting their fields) without receiving any form of compensation
- 6) At present, there is no indication that overall bird numbers have increased as a result of the project

This brief outline of the project to alleviate agricultural conflict is presented here as information to the wider goose research community, in the hope that these techniques may be of interest to other managers and projects at other goose haunts along the flyway. The findings are at present very much in the preliminary stage, but we would very much welcome any observations and comments on the work.

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*Progress report*

## **North American Canada Geese in West Greenland**

The increase in Canada Geese summering in West Greenland has only recently been recognised (Fox et al. 1996) and the origin and causes of this colonisation are far from clear. Although Canada Geese have been reported in West Greenland for many years, and Palmer (1976) reported a Greenland recovery of a bird ringed in Ontario, the numbers have undoubtedly increased dramatically in the last decade. In July 1992, 10 flightless adult Canada Geese were caught in Isungua, West Greenland (67°08'N 50°23'W) and their measurements suggested that they were of the *interior* subspecies. Three of these were recovered, all shot together at Sandy Island, Labrador, Canada (56°43'N 61°20'W) and we have had an unconfirmed report of another shot in Long Island, New York in January 1994. Since the time of ringing, there have been four records of the five geese that were neck-collared from the eastern United States, Long Island (New York), New Jersey and Pennsylvania, all during November - February (J. Hestbeck, pers. comm., Fig. 1). Hence, it is clear that at least some of these birds come from the East Atlantic Flyway population, some elements of which have shown declines in recent years (Trost & Malecki 1985).

In 1992, extensive aerial survey of West Greenland was carried out by the Greenland Environmental Research Institute to assess the distribution and abundance of White-fronted Geese. The numbers of Canada Geese found in these surveys amounted to 514 birds (see Fox et al. 1996), including a number of families with goslings. In 1995, we repeated the aerial survey of the same areas and found 1,362 Canada Geese a total increase of 265% along the same flown routes. Most Canada Geese were found to the north with more than half the number on Svartenhuk (72°N) in 1995, and less than 10% at Naternaq (68°N). Increases in numbers from 1992 to 1995 were greatest in the south with 964% in Naternaq, 413% on Disko-Nussnaq and 83% on Svartenhuk. Hence, it seems likely that colonisation started to the north and is moving southward. Sightings of 40 Canada Geese from Svartenhuk as long ago as August 1989 (H. Ettrup, pers. comm.) give some support to this.

This expansion of range is of considerable interest, especially because of the potential ecological overlap of this species with the White-fronted Goose.

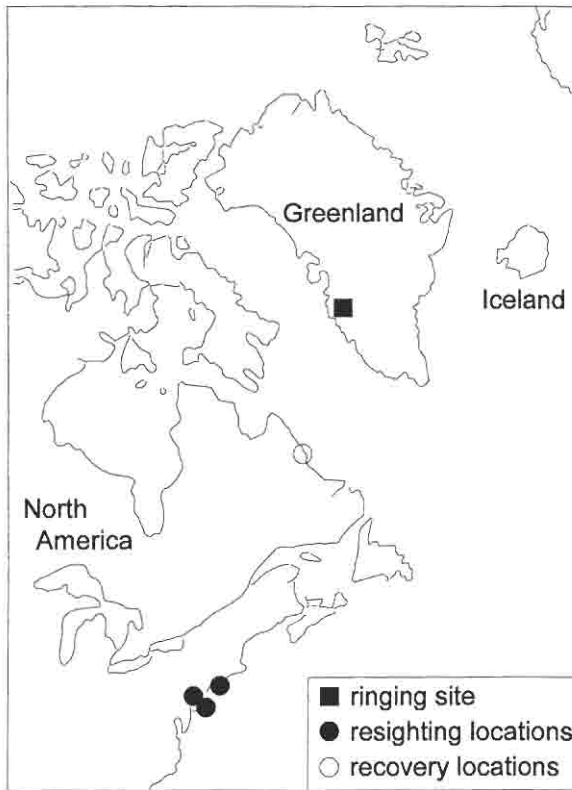


Figure 1. Map showing location of capture and marking of 10 Canada Geese in West Greenland in July 1992 and subsequent resighting/recovery sites for seven of these birds.

There is no doubt that both species exploit similar habitats in the same landscape, and there is also little doubt that Whitefronts have not increased at the same rate as the newly arrived Canada Geese in the same areas. In total, Whitefronts in censused areas have increased by 13%, slightly more than the increase in the winter counts over the same period (2% from 29,954 in spring 1992 to 30,459 in spring 1995). In 1995, the ratio of Canada Geese to Whitefronted Geese varied between 2 (on Svartenhuk) and 0.05 (In Naternaq). Intriguingly, Whitefronts have increased only in the northern areas, whilst their numbers have remained stable in the south. The possibilities for the study of competitive interactions are, therefore, considerable in an area which formerly supported only one of the species, particularly as the respective wintering ecology of the two populations involved are so different. Not only does the Canada Goose winter in a different continent, but it exploits very rich agricultural areas in contrast to the Whitefront in

Britain and Ireland which winters more on low-intensity agricultural biotopes on the western edge of Europe.

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#### References

Fox, A.D., Glahder, C., Mitchell, C.R., Stroud, D.A., Boyd, H. & Frikke, J. 1996: North American Canada Geese (*Branta canadensis*) in West Greenland. - *Auk* 113: in press.

Palmer, R.S. (ed.) 1976: Handbook of North American Birds. Volume 2. - Yale University Press, New Haven.

Trost, R.E. & Malecki, R.A. 1985: Population trends in Atlantic Flyway geese: implications for management. - *Wildl. Soc. Bull.* 13: 502-508.

*Progress report*

## **Latest news on radio-tagged Lesser White-fronted Geese**

In case you have not heard yet, we are delighted to announce that four Lesser White-fronted Geese were caught and fitted with satellite transmitters last summer. The work was carried out by a team from the Norwegian Ornithological Society and the Norwegian Institute for Nature Management. The logged signals showed that the birds moved first to the Kanin Peninsula from their Norwegian moulting quarters. This movement to another part of the Arctic was unexpected and may suggest that the area functions as an important stop-over and gathering area for the population. Alas, one of the birds was shot in this area, and another disappeared (perhaps also killed in the same way), but the two surviving birds then flew southwest, crossing the Baltic to stop off in eastern Germany. Alerted local birdwatchers found a group of 13 Lesser Whitefronts, including the radio-tagged birds at Galenbecker and Putzarer Sees. Subsequently, only one of the transmitters continued to function, but this was enough to enable observers to locate the bird in the Hortobágy area of Hungary, where the signals showed the bird to have moved to next. It was located amongst a group of 70 Lesser White-fronted Geese using the area, and during early November, plans were made to catch these birds and mount at least one more radio-transmitter. Unfortunately, severe weather pushed the birds out of their Hungarian staging areas, and in the course of November, the last functioning transmitter showed that the bird had reached Lake Kerkiní in Greece, where local observers found 43 birds immediately on searching the area, subsequently moving on to the Evros Delta.

These observations are extremely exciting, providing our first clues to the linkage between the disparate known haunts of the Lesser Whitefront in Europe, as well as demonstrating some surprises about the birds' use of these networks. Given its continuing precarious status in Europe and globally, this information is vital to enable its effective protection. In particular, the results highlight the need for establishing a network of reserves along the migration route, and it is cheering to see that all of the sites mentioned above are BirdLife International Important Bird Areas. It is clearly essential that these sites enjoy adequate protection if these birds are to be able to make their long migration to and from their wintering area to breed in the Arctic.

*Annual meeting report*

## **IWRB Goose Research Group Meeting - Western Palearctic, 3-6 November 1995, Lower Odra Valley, Poland**

The most important fact about this meeting is that it took place at all. For the first time, all the Western Palearctic members of the Goose Research Group had been invited to meet and 70 of them from 22 countries, were able to travel to Poland. The second most important fact is that the participants found the meeting so useful that they agreed that, in future, similar meetings should be held every year.

All of us who attended are grateful to our hosts, members of the West Pomeranian Ornithological Society and the Polish Academy of Sciences, for their efforts to ensure that the meeting ran smoothly, despite the initial handicap of a power-cut due to the winter storm that greeted us. There was no other lack of warmth! We are much indebted too to the Danish National Environmental Research Institute for allowing three members of its staff to organise the programme and most of the travel arrangements, and for securing funds to enable workers from counties short of foreign currencies to attend from Åge V. Jensen's Foundation, Denmark.

The choice of the Odra Valley as the meeting place was suitably symbolic: this is the north end of the political boundary between central and western Europe, though the boundary is ignored by the geese that visit the area in autumn and use the German and Polish sides of the river as they see fit. Science is an international activity; yet it is not easy for biologists to learn to work within ecological rather than political boundaries. Nor is it easy for the financially hard-pressed national organisations which provide the funds for travel to recognise that money spent on bringing biologists together is likely to be money well spent. The series of meetings now planned will be an essential part of the learning process, for administrators as well as biologists.

The contributed papers were arranged under four headings:

1. Goose population monitoring (17 papers)
2. Delineation of populations (5 papers)
3. Population processes (10 papers)
4. General ecology (5 papers)

Thirty-seven papers in two days is a heavy load. The subject classification was necessarily somewhat arbitrary, but shows the strong emphasis on descriptive material, rather than on analysis or synthesis. In this respect, the conference resembled the contents of the GRG Bulletins. The three workshops that followed gave a foretaste of what I believe should be the main function of future GRG meetings, discussion aimed at collective approaches to subjects of concern, in which immediate progress looks possible. The proposal for a joint western European project on Greylag Geese was aimed at integrating a variety of local studies by focusing on the detection of the large numbers of individually-marked geese that are now in circulation throughout their annual cycle, during which most of them move between several countries. Some of the southern wintering areas around the Mediterranean Sea were not represented, a reminder that it will not be easy to carry out comprehensive searches for marked geese, let alone obtain much additional information about them in some parts of their ranges.

The second workshop was concerned with improvements in monitoring programmes in countries surrounding the Black Sea. Impressive progress has been made there in recent years, despite some political problems, which may make it hard to expand the count coverage. International agreement on dates of counting and rapid exchanges of information should result in further improvement.

The third workshop dealt with the most sophisticated product of the GRG so far, an Action Plan for the Lesser White-fronted Goose. In addition to its importance in its own right, this joins the Greenland White-fronted Goose Management Plan of 1993 as pioneering models for future collective agreements between 'range states' in Europe.

As an observer from North America, where a great deal of effort has been put into writing 'goose population management plans', and the setting up of an Arctic Goose Joint Venture, under the umbrella of the North American Waterfowl Management plan, I have to caution that agreeing of a plan is relatively easy. The real difficulties lie in securing and maintaining the funding and commitment needed to put plans into effect. Determination and persistence are required to obtain results. Though without any formal status in the processes of implementation, the GRG is likely to be an important forum for refreshing and fortifying the proponents of Action Plans, in their struggles against indifference, competing interests and the general scarcity of funds for waterfowl and wetlands conservation. The drafters of plans often damage their own efforts by giving more space to what biologists

would like to know than to identifying the most urgent practical problems and suggesting how they can be dealt with, and by shying them away from ranking what most needs to be done, and what the suggested activities might cost - in political and social terms, as well as financially. It is a mistake to think that those are the jobs of other people. An Action Plan has to be 'sold', to its potential supporters as well as to affected members of the public and to possible suppliers of funds; and, at least, in the earlier stages of this lengthy process, the people who really know what they are talking about are, or should be, the most effective sellers.

Paul Rose's paper on the necessity of achieving precision and accuracy in the definition and enumeration of populations provided an excellent illustration of the perennial conflicts between what may be desirable for the practice of wildlife conservation and what geese may choose to do. The 'percentage of population' rules of the Ramsar Convention have been of great value in securing the initial declaration of Sites of International Importance. Lower-level officials in regulatory agencies are always happy to have threshold numbers to look at. But they dislike the numbers changing. If births and deaths were the only population processes, regulators might be appeased without too much trouble. Deplorably, goose populations are continually ebbing and flowing, as well as increasing or decreasing. Consequently, biologists keep changing their minds about which geese belong to which already-defined group, or 'create' new groups, and find previously-uncounted groups, upsetting the existing state of things. Disorder being anathema to administrators, Paul came out strongly against it. But geese do not heed directives and will continue to make nonsense of rigid classifications. Surely no one would wish to damage wetland conservation, and penalise geese for increasing, by 'delisting' a site because it now holds less than 1% of a population that has grown. There is no realistic alternative to pragmatism and flexibility in the application of criteria; get wetlands protected by whatever method works in a particular country and situation and hang on to them.

Another important reason for avoiding dogmatism in population definition is the arrival of DNA-analysis, which is turning the rules of old-style taxonomy inside out. It is no longer sensible to debate the classification of Bean Geese, for example, solely on external criteria, such as the size and colour of their bills. I do not know whether anyone is attempting a 'modern' classification of the species. It may be some years before that is completed, and it would be foolish to guess at the outcome. Museum taxonomists - now an endangered species - were notorious for the vigour with which they assailed

each other in print. We have to hope - if without conviction - that their successors will be less egocentric. Meanwhile, there are practical reasons for agreeing on provisional population subunits: if all Eurasian White-fronted Geese form a single taxonomic unit, the 1% threshold would be very high.

There is much still to be learned from visible marking, and by radio-telemetry, about how and when geese migrate, and shift during the winter, and what prompts them to do so. Like most other topics of scientific investigation, this is proving to be far more complicated than it used to seem, when we had to rely solely on observations of unmarked birds. Many stocks of geese have increased enormously in the last half-century. This is leading to all sorts of unforeseen changes: who would have guessed thirty years ago that Barnacle Geese would establish themselves and flourish as breeding birds around the Baltic Sea?

So much to do, just to catch up with the changes that are going on; and so few of us to do it. That is why this first GRG meeting was so important, and why there must be many more. We have to collaborate, and avoid redundant work; to choose a manageable number of tasks, at any one time, not attempt to do everything at once; above all, encourage and help each other because scientific research is seen by many people as a luxury that cannot be afforded when economic conditions are as hard as they now are in many countries.

It was a privilege and a pleasure to make new friends at Swidwie, as well as to see again many old ones: 'thank you for having me'.

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*Annual meeting report*

## **Workshop on the Greylag Goose at the Lower Odra Valley Meeting 6 November 1995**

Studies of Greylag Geese *Anser anser* are presently being undertaken to varying degrees in a number of different areas of Europe, several of the projects using neck-banding as an aid to follow the geese at an individual level. The use of neck-bands through the years has clearly shown that it is possible to obtain much more information this way than by just following migration patterns as the same individuals can be studied on breeding, staging, wintering and sometimes also moulting grounds. During the discussions about regular meetings of the IWRB Goose Research Group at the *Anatidae 2000* conference in Strasbourg, many delegates said that they felt a need for an overview of the different European projects monitoring Greylag Geese and for discussing the possibilities of integrating the different studies where possible. It was, therefore, decided to organise a Greylag Goose workshop during the first meeting of the IWRB Goose Research Group in Poland.

At this workshop researchers in the western European flyway were invited to give short presentations of their studies and plans for the future. Leif Nilsson started with a summary of the Greylag studies in South Sweden, which started as a part of the Nordic Greylag Goose Project in 1984 and which initially aimed to study the migration patterns of the species. The project database now holds more than 100,000 resightings and includes extensive knowledge of wintering quarters and staging areas for a number of breeding Greylag Geese in Scania. These detailed life histories have been used to study how various factors, acting outside the breeding areas, influence the survival and productivity of as well as the recruitment to the breeding population, especially contrasting two groups of geese migrating to winter quarters in southwestern Spain and the Dutch delta. Factors acting on the population in the breeding areas have also been studied as have habitat selection in the postbreeding flocks. The aim of the studies is to establish a population model for the species.

Tony Fox continued with a presentation of intensive studies undertaken on the moulting Greylag Geese on the island of Saltholm in Øresund between Denmark and Sweden. Although Saltholm is a newly established moulting area, recent totals of about 9,000 moulters make it one of the most important

moulting areas in Europe. The studies are part of the environmental assessment of the Øresund Fixed Link Project established to build a bridge between Sweden and Denmark. Some interesting data on the reactions of geese to various different sources of disturbance were presented.

Neck-banding of Greylag Geese first started in eastern Germany and Erich Rutschke gave a summary of the Greylag Goose studies here where a total of 1,600 individuals were neck-banded before marking was stopped three years ago; much analysis work, however, still remains to be done. The populations of eastern Germany are of special interest as part of the birds seem to follow the migration routes of the central European population, whereas the majority migrates to southwestern Europe.

The intensive neck-banding programme organised in Norway by Arne Follestad forms part of the Nordic Project. The Norwegian Greylag Geese are of special interest as they breed much further north than other Greylags. They have also been shown to have a totally different migration pattern compared to Greylag Geese from areas around the southern Baltic. The Norwegian geese stage for long periods in The Netherlands both during autumn and spring migration, whereas Baltic Greylags not wintering here pass quickly. The Norwegian Greylag Geese not only show differences in the migration pattern and breeding schedules related to their more northern breeding areas but also show morphological differences. All evidence points to the fact that Greylag Geese from Norway should be considered as separate from those around the southern part of the Baltic.

Maarten Loonen reported a number of studies undertaken on Greylag Geese in the Netherlands, which also includes a neck-banding programme monitoring local breeding birds. Studies of moulting Greylag Geese are important in the Netherlands since up to 60,000 moult in Flevoland. The studies include assessment of the influence of geese on their habitats, particularly on the reeds *Phragmites* in the moulting area and Sea Rush *Scirpus* in the staging areas. Of special interest were the studies of various goose parasites and their effects on their life histories of the geese. Maarten also reported on the DNA-studies undertaken which may throw light on the question of the differentiation of populations of Greylag Geese.

Extensive studies of Greylag Geese have also been undertaken in Spain. Juan Chans reported on the monitoring of wintering Greylag Geese in the Marismas of the Guadalquivir and on the problems of managing the wintering goose populations in southern Spain. Hakon Persson presented some

results from his long-term studies of wintering goose populations in Spain. He presented evidence for the influence of the changing water conditions in the winter area of the Marismas on the survival and productivity of geese from northern Europe. He also discussed the differences in goose winter ecology between the Norwegian and the Baltic populations (based on neck-banded geese from the different areas). The two populations show different arrival patterns in Spain, moreover the Norwegian geese preferred to feed in low steppe vegetation, whereas the geese from the Baltic population seemed to prefer *Scirpus* vegetation.

In addition to the invited presentations, a number of participants reported on Greylag studies undertaken in other areas and on the status of the species in different countries. Contributions were thus also received from Estonia, Poland, The Czech Republic, Belgium, France and the United Kingdom.

In between the talks there were sometimes lively discussion on various aspects of Greylag Goose biology. Hunting and management was much debated and J. Chans stressed the importance of collecting information from the breeding areas for integration into management of the wintering populations in Spain.

Summing up, I think I share the feeling of most of the participants in this first Goose Research Group conference that there is a need for a forum for informal discussions of many aspects of our goose studies. I already look forward to a new Greylag Goose workshop at the next conference to learn about the developments of all the new projects reported in Poland.

Leif Nilsson, Ecology Building, S-223 62 Lund, Sweden

*Annual meeting report*

## **Recommendations on urgent actions for the conservation of the Lesser White-fronted Goose**

In connection with the International Meeting of the Goose Research Group of the International Waterfowl and Wetlands Research Bureau, a workshop was held on the implementation of the International Action Plan for the Lesser White-fronted Goose (BirdLife International/Bern Convention 1995). Twenty leading experts from 10 Lesser White-fronted Goose range states participated in the workshop. An international working group for the implementation of the Action Plan, prioritising activities and raising funds for action was created, with members from Norway, Finland, Sweden, Russia and Hungary.

Up-to-date reports on the distribution and numbers of the species showed:

- There is a continued alarming decline in numbers throughout the range, and even disappearance from former important breeding areas in northern Russia; at the moment, only approximately 2,000 individuals can be accounted for throughout the entire Western Palearctic range, and the existing population estimate of 25,000-50,000 individuals is judged to be far too optimistic;
- Important late summer and autumn staging areas have been located on the Kanin Peninsula, north Russia, through the successful use of satellite transmitters mounted on geese in Fennoscandia (see page 26);
- Furthermore, potentially important staging areas have been located in the northeastern corner of Brandenburg in Germany, in the Azov Sea in Russia and in northern Kazakstan;
- Encouragingly, the protection of wintering areas in Hungary and north-eastern Greece has been followed by increases in numbers of Lesser White-fronted Geese;
- The available information indicates that the declines are primarily caused by excessive mortality mainly due to hunting.

The workshop endorses the recommended actions proposed in the International Action Plan for the Lesser White-fronted Goose. Due to the alarming status of the species, the workshop recommends that the following actions be given the highest possible priority immediately, ie from the winter of 1995/96 onwards:

- Search for the remaining Lesser White-fronted Geese in Azerbaijan and around the coasts of the Azov Sea in Russia, which were formerly the major wintering area for the central part of the population;
- Action to provide protection for the Lesser White-fronted Geese on the Kanin Peninsula in Russia and in Brandenburg in Germany;
- Locate concentrations of Lesser White-fronted Geese on the Taimyr and Yamal Peninsulas, Russia, which were in the past the most important breeding areas for the species, and through satellite tracking locate staging and wintering grounds of the birds;
- Locate wintering areas used by the Lesser White-fronted Geese passing through Hungary (through satellite tracking of few individuals).

The workshop recommends that the most urgent and effective conservation measure to be implemented is the creation of shooting-free zones in key staging, wintering and breeding areas of Lesser White-fronted Geese.

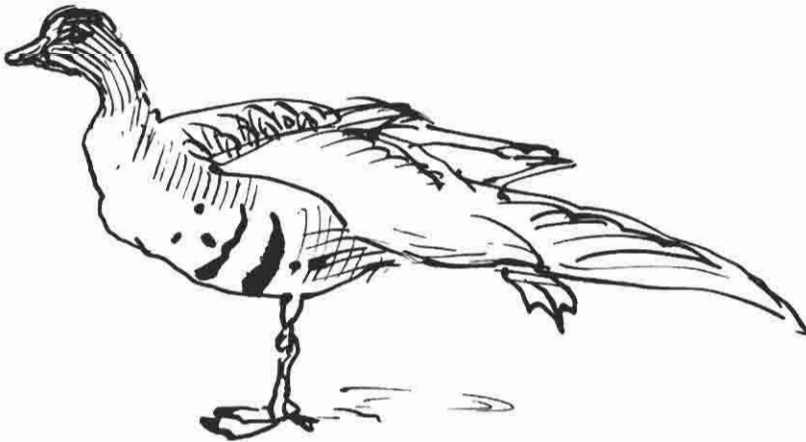
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Further members of the Lesser White-fronted Goose Working Group:

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Lambart von Essen, Sweden  
Vladymir Morozov, Russia  
Eugeny Syroechkovski, Russia  
Sandor Faragó, Hungary



*Annual meeting report*

## **Review of goose populations wintering in the Western Palearctic**

The need for an up-to-date and comprehensive review of the status and management of goose populations in the Western Palearctic is clear and has been discussed for some time, although the prospect of putting together such a document has proved daunting. The publication would represent a milestone publication, of use to managers, researchers and enthusiasts alike, synthesising over 20 years of census work and other research never before gathered together. The idea was first mooted at the First International Meeting of the Goose Research Group in Poland in November 1995, when potential contributors were approached to sound them out about the idea of attempting such a publication. The very positive response was greatly heartening, and some financial support for the editorial work has kindly been granted to the Group from the Dutch Jachtfonds to help gather material together for the project. Although no funding is available for the individual contributors nor for the production of the final report as yet, the British Joint Nature Conservation Committee have given their support to the programme and financial support for the publication as a Wetlands International Special Publication is being sought.

The work will be written up on the basis of each of the 22 goose populations regularly occurring in the Western Palearctic in winter. Each will be compiled by a principal author, who will be expected to gather information from a number of coordinators at the national level who would be co-authors of the individual sections. Each species account will be of a maximum of 10,000 words, including up to 8 figures, and will follow a standard format, as follows:

1. **Population review** - overview of range and identifiable subunits within the geographical area, delineation of flyways based on ringing and other information, overall trends in numbers and distribution, breeding success and mortality
2. **Breeding grounds and breeding ecology** - brief review and key literature sources

3. **Moult migration and moulting areas** - detailing most important areas and where possible relating moulting birds to breeding or wintering provenance - including country profiles
4. **Autumn staging and wintering areas** - detailing most important areas and where possible relating to breeding areas - including country profiles with numbers and distribution, feeding ecology, legal status, hunting bags, conservation or other management
5. **Discussion section** - bringing together all the information synthesised in the above sections with recommendations and proposals for research and conservation needs in the immediate future

A worked example for Greenland White-fronted Geese *Anser albifrons flavirostris* has been completed and sent out to authors for guidance.

At present, we are delighted that all the population principal authors have accepted their task and are setting about compilation of this exciting volume. Undoubtedly, many readers of the Bulletin will already have received requests for help and support with the work, and your help with the process is greatly appreciated. The deadline for the first drafts of the material is 1 June 1996, so please try to speed up the process of supply of contributions as much as possible. The final drafts of the population reviews will be submitted to the editors before September and it is hoped that a full draft of the text will be ready by 1 December 1996 and that the publication will be ready for distribution in early 1997.

**Jesper Madsen, Tony Fox & Gill Cracknell**, Department of Coastal Zone Ecology, National Environmental Research Institute, Kalø, Grenaaavej 12, DK 8410 Rønne, Denmark.



Annual meeting report

## Wintering Greylag Geese at Lac du Der, France

Lac du Der is a 4,800 ha reservoir in Champagne, 200 km east of Paris. It was created in 1974 to regulate the flow of the Marne and Seine rivers and quickly became an important wetland for migrating and wintering birds. Currently, it regularly supports more than 20,000 waterbirds and is designated a Ramsar site. The lake also supports many human recreational activities, such as water-skiing, sailing and fishing, especially during April to October. Some 5,650 ha of water and adjacent habitats are managed as a reserve by the Office National de la Chasse, including three refuge areas totalling 460 ha from which human activity is excluded.

Greylag Goose numbers have increased at the lake since its creation and have caused local agricultural damage since 1989, especially during 1993/94. We present here the preliminary results of studies of Greylag numbers and staging phenology and address the problem of agricultural conflict and its potential solutions.

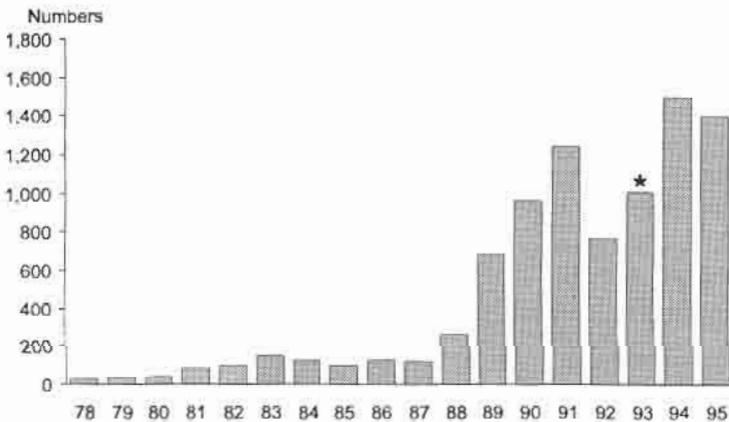


Figure 1. Numbers of Greylag Geese counted at Lac du Der on 15 January of each year. Data from ONC except for 1993. \* indicates data from IWRB.

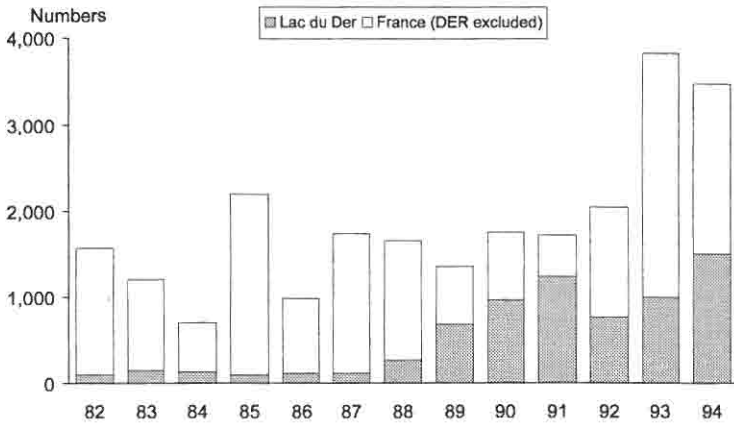


Figure 2. Wintering numbers of Greylag Geese in France and Lac du Der based on annual mid-winter International Waterfowl Counts (sources: Lac du Der, ONC; France, IWRB).

### Greylag wintering numbers

Goose numbers have been monitored at the site monthly since the lake was created. Six Greylag Geese wintered in 1974/75 when the lake was filled, but numbers remained low until January 1987 when 120 were present. Numbers reached 263 birds in 1988 and 1,500 in January 1994 (Fig. 1). Between 1982 and 1988, wintering numbers at Lac du Der represented 6-19% of the total French count, but by 1989-1994, Lac du Der supported 26-72% of the national mid-January total (Fig. 2).

### Origins of wintering birds

Neck-banded Greylag Geese first appeared in winter 1985/86, and between 1987 and 1995, 222 neck-collared geese (representing 3-13% of the sites' wintering numbers) have been recorded. Eighty-seven individuals were identified in winter 1993/94 alone. Of all resighted geese, 96% originate from Sweden, the remainder from Germany, Czechia, Spain (these being largely of Swedish origin) and Denmark. Eighty-four percent of Swedish birds came from Øster Malmö and 16% from Taffsnas Gnesta (southeast Sweden) where they were introduced in 1974 (the year Lac du Der was flooded), but not neck-collared until 1984. Fifty-three percent of all Greylags marked in Södermanland have been resighted at least once at Lac du Der (L. Nilsson, pers. comm.).

### Phenology of use and winter site fidelity

Relative use of Lac du Der is shown in Figure 3 for the marked and unmarked birds in recent years. First birds arrive in early September, building to a peak in late December. Resident numbers remain stable until mid-January, when birds start to depart. In March, numbers rapidly fall and by 20 March, all have left the site (although exceptionally a few may summer).

The patterns observed in numbers and amongst followed individuals suggest that Lac du Der is largely a winter resort, rather than a migratory staging area for birds moving elsewhere. Of 165 marked birds reported between 1992 and 1995, 82% exclusively wintered on the lake, the remainder staging (mostly in October/November with some of these returning in late February/March) to winter elsewhere. Based only on observations of marked birds wintering at Lac du Der, arrival takes place from late September to late December; departure starts in late February, 50% have left by 2 March and all have gone by 20 March, giving mean stays of 117 days  $\pm$  27 s.d. Having wintered once at Lac du Der, geese will return to winter there in 8 out of 10 winters. Geese changing wintering site were most often reported from The Netherlands, or to a lesser extent Spain or elsewhere in France.

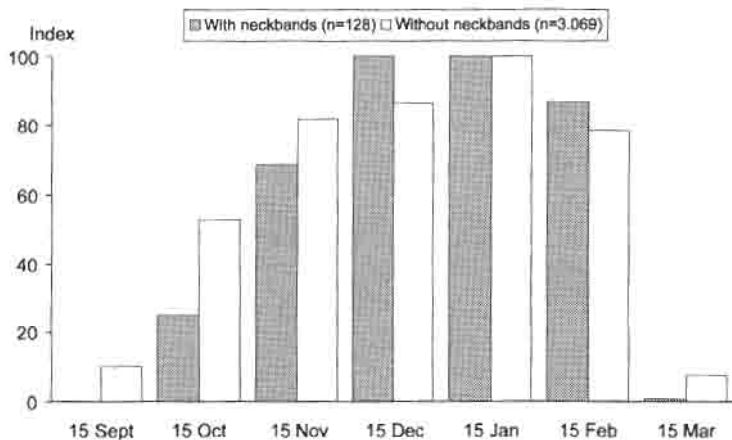


Figure 3. Monthly index of abundance of marked and unmarked Greylag Geese at Lac du Der (September 1992 - March 1995).

## Diet and habitat use

Studies showed that geese fed entirely in natural peripheral habitats in September, mainly on Creeping Bent Grass *Agrostis stolonifera*, Reed Grass *Phalaris arundinacea*, Greater Yellow-cress *Rorippa amphibia* and Tufted Sedge *Carex gracilis*. This fell to 85% in October, when geese started to forage on adjacent areas of winter cereals, managed reseeded Rye Grass *Lolium perenne* grassland, grass on permanent ley and Rape. During January-March, geese were spending between 60% and 82% of their foraging time on cultivated land.

## Agricultural conflict and measures to reduce damage

Since 1989, increased use of cultivated land has resulted in damage to agricultural crops. This is probably the result of the interaction of four factors: i) the increase in geese over the period, ii) extension of Willow *Salix* scrub along the shoreline displacing the *Agrostis* grasslands favoured by the geese, iii) the damage caused by increasing numbers of Wild Boar *Sus scrofa* to marginal grasslands and iv) increasing number of human visitors to the lake disturbing shore-feeding geese, and moving them onto farmland. In the winter of 1992/93, 11.5 ha of winter wheat and reseeded grassland were damaged by goose feeding and in 1993/94 2 ha of Rye Grass and 2.5 ha of rape.

For this reason, in 1994, Willow stands were removed, shoreline vegetation cleared by rotary cutter and an area of the southern lake declared a disturbance-free refuge. Seven hectares of sacrificial cereals, rape (1 and 1.5 ha), Rye Grass (2 × 1 ha fertilised plots) and legumes (1 and 1.5 ha of triticale, lightly fertilised) were sown in parallel strips perpendicular to the lake shore under the EU set-aside scheme.

Detailed studies of the goose use of these and surrounding areas in the following winter showed that birds fed on the set-aside from early October, constituting 65% of all time spent feeding on cultivated land from late October to late December. Their use declined thereafter to 22% in January and 12% by March. Wheat was favoured over triticale in set-asides (although geese may have regularly fed on triticale after dark, as was observed on a number of occasions). Rape was only consumed on managed plots, most rape fields were more than 2 km from the reserve and never used. Rye-grass set-aside was preferred to other areas, constituting 70% in October, 80% in

December and 100% in March. Overall, 34% of all goose use took place on cultivated land in the set-aside area, which constituted only 17% of the total agricultural land used by the geese, and less damage was reported. These preliminary results suggest that the restricted area of the set-aside limited goose use rather than the types of sacrificial crops involved.

The area and number of feeding plots will be extended in years to come, and crop rotations planned on the basis of the results of these studies of goose feeding responses to the available crops. Although primarily based on one season's data, the experience of a combination of natural habitat management, refuge creation and provision of sacrificial crops under the EU set-aside scheme seems to provide a promising basis for alleviating potentially severe local agricultural conflict at this site.

### **Acknowledgements**

We are extremely grateful to the Nordic Greylag Goose Project, and in particular to Leif Nilsson, for information relating to the life-histories of collar-ringed geese resighted at Lac du Der.

**J.B. Mouronval, R. Varnier & V. Schricke**, Office National de la Chasse, 1, place Exelmans, F-55000 Bar le Duc, France

*Annual meeting report*

## **Goose Bulletin questionnaire**

After six issues of the Goose Bulletin, we felt it was time to think hard about its future. It is costly to produce and distribute, and we get very little feedback about its style and contents. As a result, the Editorial Board organised a questionnaire which was handed out to participants at the Poland meeting. We received 36 responses, for which we were extremely grateful, and despite the horrendous statistical bias involved in extrapolating from these, we reproduce the results for interest here.

Asked about regularity, 32 respondents said they wanted a regular appearance; 30 specified that they felt two issues should be produced per year. The majority stated they would be willing to pay, say \$10, per annum to receive it, although we all agree that the subscription would reflect the ability of different individuals to pay. Surprisingly enough, 29 said they read the whole Bulletin!

We asked for scoring of the various sections, starting one in order of preference, and requested people to specify whether there should be more/the same/less in certain sections. The results were a little ambiguous, the following table summarising the mean scores for each category and the number of "votes" for each:

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	Mean score	More	Same	Less
Status reports	2.1 (31)	17	15	0
Progress reports	2.6 (28)	12	19	0
Database update	3.0 (29)	-	-	-
Regional Reports	3.5 (29)	17	15	1
Conference reports	3.9 (28)	7	22	2
References	4.0 (31)	-	-	-

---

Everybody who filled in a questionnaire said they found the reference section useful, and several emphasised how important they felt this feature was in the Bulletin. We received 16 positive answers and 17 negative ones to the

question of whether people would like to see more scientific contributions appearing in the Bulletin, so the jury remains out on that one!

We also received a whole range of suggestions from the respondents on what other features they would welcome in the future, for which we are extremely grateful. These include (in no particular order):

1. Russian summaries of important articles
2. Overviews of legal status, hunting pressure, bags, length of seasons, etc
3. More site/habitat/conservation based articles
4. Reviews of gaps in knowledge
5. Appeals and announcements of collaborative projects
6. More progress reports on on-going activities and techniques
7. Publication of proceedings from Goose Group Meetings
8. More national reports/country profiles
9. Book/report reviews
10. More photos, maps and illustrations
11. Extra material on monitoring techniques
12. An address list, including who does what in the goose world

Further to all these points, we were recommended to spread the editorial load away from Kalø where there is a disproportionate burden and to reduce the typeface to squeeze more into the same number of pages. There were also pleas for the Bulletin to become global, and shift away from our heavy Western Palearctic emphasis.

Many of these changes, of course, rely as much upon you, the readership and contributors, as they do on us at the Editorial Board. However, a huge thank you to everybody who contributed to the survey - Christian Glahder (Danish National Environmental Research Institute, Arctic Ecology Department) won the bottle of wine from the draw of responses!

*Announcement*

## **Goose Research Group of Eastern Europe and North Asia**

The meeting in Poland in November 1995 provided the ideal platform for the launch in the west of the Goose Research Group of Eastern Europe and North Asia. The group has produced its first impressive 192-page Bulletin with the support of the Russian Association of Hunters and Fishermen in 1995.

The Bulletin is in Russian, but virtually all the contributions have English summaries, legends and captions. Edited by Eugeny Syroechkovski Jr., the Bulletin covers a multitude of subjects, from the general problems facing goose studies and conservation to highly specific species studies and reviews.

To find out more about the Group, its activities and subscriptions to the Bulletin, contact Eugeny Syroechkovski Jr., Leninski Prospect 33, Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow, Russia; fax: +7 095 124 79 32; phone: +7 095 246 71 54; e-mail: @syroech.msk.ru.





*Announcement*

## **Formation of a Goose Ecology Study Group of the Deutsche Ornithologen-Gesellschaft**

A national goose ecology study group has been proposed and founded by Professor Hans-Heiner Bergmann from Osnabrück University, Lower Saxonia, Germany. The group aims to exchange results and coordinate goose research in Northern Germany.

The first meeting took place during 2-4 February 1996 in the research station of the University of Cologne in Rees-Grietherbusch in the Lower-Rhine area which is one of the most important wintering areas of arctic breeding geese in inland Germany. Communal activities in the fields of research plans and public relations have been proposed. Some of the major fields where research is needed have been identified and discussed, eg winter movements of geese and causes of large-scale displacements of wintering subpopulations, mainly in Bean Geese *Anser fabalis* and Whitefronts *Anser albifrons*. Also, hunting of geese is regarded as a questionable method of population regulation. On the basis of present goose distribution, public feeling is likely to press for action against goose hunting in Western Europe in the near future.

A second meeting will take place in the Ökologische Schutzstation Steinhuder Meer, Lower Saxonia, not far from Hannover, in January/February 1997. This meeting will be organised by Th. Brandt. Further details will be published later. Further information can be obtained from Professor Dr Hans-Heiner Bergmann, Department of Biology, University of Osnabrück, D-49069 Osnabrück; phone: +49 541 969 2845; fax: +49 541 969 2870; e-mail: bergmann@ciptb5.biologie.uni-osnabrueck.de.

## Announcement

### Japanese Association for Wild Geese Protection

Many of you will know of the excellent work of the Japanese Association for Wild Geese Protection. It was extremely encouraging to see the publication of a major analysis of the all goose habitat in Japan by the Japanese Association for Wild Geese Protection (Miyabayashi 1994). This impressive work includes major site assessment and appraisal for all major goose sites in the country, and is extensively translated into English for the benefit of foreign readers. It contains a great deal about Bean Geese *Anser fabalis*, their habits and distribution in Japan. Its collation represents a considerable achievement and congratulations must go to all concerned in its compilation.

The Association also produces a journal, called *Goose Study*, the most recent of which we have received was issue number 9, from April 1995. It features some very interesting articles on waterfowl migration in Kamchatka (including 17,000-20,000 Bean Geese, 10,000-15,000 White-fronted Geese *Anser albifrons* and 1,000-2,000 Lesser White-fronted Geese *Anser erythropus*, with 324 Lessers reported in spring from Lake Kharchinskoe), results of ringing studies of Bean and White-fronted Geese in northeast Asia, protection status of geese in Kamchatka and the status of geese in Chukotka.

The material is extremely interesting, and all those interested in the journal and the Association should contact the Editor-in-Chief, Masayuki Kurechi, Minamimachi 16, Wakayanagi, Miyagi, 989-55 Japan; telephone: 228-32-2004; Fax: 228-32-3294; e-mail: hgh02256@niftyserve.or.jp.

#### References

- Miyabayashi, Y. 1994: Inventory of goose habitat in Japan. - Japanese Association for Wild Geese Protection. Wakayanagi, Japan, 316 pp.

*Announcement*

## Geese on the Internet

Several people have kindly e-mailed us to inform the Goose Group Bulletin about the existence of Evan Cooch's goose reference database. He has listed about 1,500 references to date from journals - books and theses may follow. It is very user-friendly, and can be searched on simple keywords in the title, or by author, date, journal, etc

The address is: <http://mendel.mbb.sfu.ca/wildberg/gooseref.html>.



### *Search the GooseRef Bibliography*

This is a simple search engine for a large database of primary literature (no theses or book chapters yet) on the biology of various goose species. It is updated monthly (last modification on **Saturday, 16-Mar-96 17:42:05 PST**).



Please enter the keyword(s) you want to search for:

Limit the number of references output?

*Announcement*

**Announcement of the Wetlands International Goose Specialist Group Meeting at Martin Mere, United Kingdom, 16-19 December 1996**

Following its successful first meeting in the Lower Odra Valley, Poland in November 1995, the Wetlands International Goose Specialist Group has arranged the second meeting to be held at Martin Mere, in northwest England 16-19 December 1996. The gathering will be based at the Wildfowl & Wetlands Trust (WWT) centre and will be organised locally by WWT staff.

This meeting will again consist of a programme of relatively informal presentations and workshops, but this time, the presentations will be based around a theme, namely "Use of individual marking techniques in the study of goose populations". We very much welcome all contributions, spoken and written, which fit within this topic, and are extremely keen to encourage presentations, for example, on the effects of marking techniques on behaviour, mortality, breeding success, etc, the effectiveness of different marking techniques in terms of reading error and on the results of marking programmes and their application.

The Martin Mere site is a unique locality, created by WWT from a green-field site into one of the regions most important wetlands. Delegates will have the opportunity to see something of the 20,000 Pink-footed Geese which roost at the site, which also holds up to 20,000 Wigeon and over 1,000 migratory swans. Booking forms will be sent to all recipients later, but full details and booking forms can now be obtained from Carl Mitchell, WWT, Slimbridge, Gloucester, GL2 7BT, UK; telephone: +44 1453 890 333; fax: +44 1453 890 827; e-mail: SL\_CRM@VA.WSL.AC.UK.





**The Wetlands International Goose Specialist Group Bulletin** is a biannual publication which aims to improve communication and information exchange amongst goose researchers throughout the world. The Bulletin is produced by the Wetlands International Goose Specialist Group with support from various sources (see Goose Database report, this issue).

The bulletin publishes contributions covering goose research and monitoring projects, project proposals, status and progress reports, as well as regular reports from the Goose Database and a list of recent literature concerning geese.

The Editors welcome potential contributions to the Bulletin and will be pleased to advise on presentation. Manuscripts sent on diskette as Word-Perfect or ASCII files are welcomed; a hard copy printout should also be enclosed. Please note copy dates are the end of February for the April issue and the end of August for the October issue.

Views expressed in the Goose Specialist Group Bulletin do not necessarily reflect those of NERI, Wetlands International or the Editors.



IWRB Publication 36 • 1995

# Geese in Hungary 1986-1991

Numbers, Migration and Hunting Bags

Sándor Faragó



Sándor Faragó: Geese in Hungary 1986 - 1991. Numbers, Migration and Hunting Bags. - IWRB Publication 36, 1995.

This book can be ordered from: NHBS, 2-3 Wills Road, Totnes, Devon TQ9 5XN, UK, price £20.00 (P&P excluded).