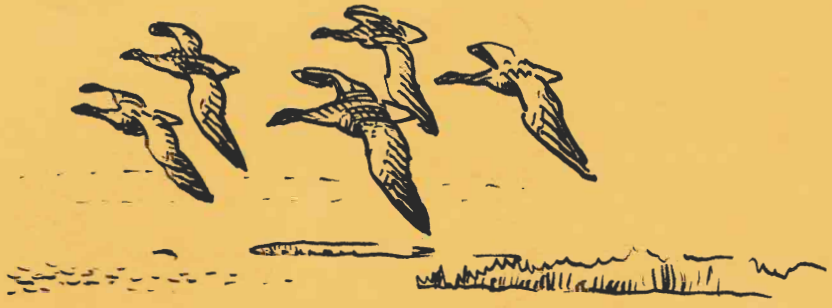

IWRB Goose Research Group Bulletin

List of Contents

Editorial 1

Status reports

IWRB Western Palearctic Goose Database 2
Goose ringing schemes in operation in the Western Palearctic 6
ERRATUM: Brent Goose breeding success 1990/91 15

Regional reports

Central European Bean Geese 16
The disappearance of the Tundra Bean Goose
Anser fabalis rossicus from the Iberian Peninsula 17
Goose migration in Belarus 20
Status of the Lesser White-fronted Goose in China 25

Progress reports

Ringing recovery of a Finnish Lesser White-fronted
Goose from the Russian wintering areas 27
Birdlife Action Plans for the Red-breasted and Lesser White-fronted Geese .. 29

Conference reports

Anatidae 2000 - a conference held at the Council of Europe,
Strasbourg, 5-9 December 1994 32
IWRB Goose Research Group Meeting,
Lower Odra Valley 3-6 November 1995 36
SHOCK HORROR: Geese destroy Arctic wetlands 37

Recent goose references 38

Ministry of
the Environment

National Environmental
Research Institute

No 6, August 1995

IWRB

The Goose Research Group of the International Waterfowl and Wetlands Research Bureau (IWRB)

The IWRB Goose Research 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 encourage 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 centralised database: the IWRB Western Palearctic Goose Database.

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Editorial

Dear colleagues and readers

This issue of the Goose Research Group Bulletin appears prior to the first meeting to be held by the Group in Poland. We very much hope that the establishment of a regular meeting of "goose-minded" people, together with the continued publication of the Bulletin, will greatly enhance the involvement of the membership of the Group and meet our objectives by improving our means of dissemination and communication between goose researchers and enthusiasts. Through a programme of talks and workshops, we hope the meeting will renew old acquaintances, form new relationships, stimulate new ideas and collaboration and offer a friendly and informal basis for lively discussion.

In this issue of the Bulletin, we are keen to provide an update of the register of goose ringing and colour-marking schemes organised throughout the Western Palearctic, last produced in the Bulletin in its first issue (pp. 27-33). This was the second such listing of schemes, but of course, it is now four years out of date. We are extremely grateful to all scheme organisers for their help in updating the register, and hope that new schemes will continue to lodge details with us here at Kalø. Also within these pages comes a report from the database, as well as regional and progress reports and reports from recent meetings of interest to the Group.

Regrettably, Jan Burgers has recently been transferred to another job in his institute in the Netherlands and will therefore not be working with geese in the coming years, and hence has decided to withdraw from the Steering Committee. We thank Jan Burgers heartily for his contribution to the geese work and wish him the best of luck.

Please do remember that the Bulletin is for the benefit of all goose researchers, and we greatly welcome contributions of all forms, excepting full-blown scientific papers! We hope that more of you will use the Bulletin as an outlet for technical accounts, progress reports on projects and as a forum for discussion - the more controversial the better!

We look forward to seeing you in Poland in November!

Status report

IWRB Western Palearctic Goose Database

International counts

We are grateful as ever to the National Coordinators for arranging goose counts and providing data to the Goose Database. The updated list of material submitted to us is presented in Table 1.

The former Yugoslavia will continue to appear in Table 1 as long as the borders between the new republics have not been agreed upon.

The Goose Database currently contains 1357 sites from 29 countries.

Coordinators update

We welcome Dr. A. Kozulin as the new national coordinator for Belarus. Initial information from Belarus indicates that this country might be vital in spring for the small northwest European population of Lesser White-fronted Geese.

Annual meetings in the Goose Research Group

Readers of the Goose Bulletin have all received an invitation to the first in what we hope will be a regular series of annual meetings of the Goose Research Group. This first meeting will take place in Poland on 3-6 November.

The Goose Database coordinator intends to bring updated site and count lists from all countries involved in the international goose counts and, for this reason, it would be most helpful *if all national coordinators would submit their results from 1995 to the Database before 1 October 1995.*

Checking data held by the Goose Database

In order to maintain the highest standard of data quality, control and feedback, the Goose Database continues to send out diskettes containing the information in the database from each country to the national coordinators. Diskettes have recently been sent to Poland and Morocco.

Western Palearctic and South-West Asia Waterfowl Census 1994

The annual report of waterfowl counts carried out in January 1994 has recently been published (Rose 1995). This is a new concept for rapidly reporting results back to the count network which includes trends of ducks, swans and Coot as well a chapter on geese based on information from the Goose Database. It is the plan to continue this form of reporting in future annual reports. Copies of the report are available from the usual outlet for IWRB reports (see the back cover).

Given this annual timetable for reporting, it is *imperative* that data from the counts in January, March or May which are to be included in the annual report from IWRB, *are submitted to the Goose Database before 1 December*. If it is not possible to provide data in a site-based form, national totals of all goose populations will be very helpful.

Funding

The IWRB Goose Research Group is grateful to the Department of Wildlife Ecology, National Environmental Research Institute (Denmark) for their support to the Goose Database in 1995. Additional future funding has been granted by the German Hunters' Association.

References

Rose, P.M. (1995) Western Palearctic and South-West Asia Waterfowl Census 1994. - IWRB Publication 35. IWRB, Slimbridge.

Table 1. Status of January goose count data, 1986 to 1995 inclusive, from Western Palearctic countries. Data from the Goose Database (site-based records) are marked with an asterisk (*); data from other sources are marked +; parentheses indicate incomplete coverage of sites or species: a blank indicates that no data are available.

		Nat. cor.	No of sites	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Albania												+	
Algeria		+	9	*	*	*	*			*	*	*	*
Austria		+	2	*	*	*	*	*	*	*	*	*	*
Belgium		+	29	+	+	+	+	+			+		
Bulgaria		+	19		+	+	+			+	+	*	*
Croatia		+	6									*	
Czech Rep.		+	10		+	+	+	*	*	*	*	*	*
Denmark		+	135	+	*	*	*	*	*	*	*	*	*
Estonia		+	71										
France	Brent	+	36		+	+	*	*	*	*	*	*	
France	Anser sp.	+	24	+	+	+	+	*	+	+	+	*	
Germany	West	+	228	+	+		*	*	*	*	*		
Germany	East	+	139			+	+	*	*	*	*		
Greece		+	23	*	*	*	*	*			+	*	
Hungary		+	25	(*)	*	*	*	*	*	*	*	*	
Ireland		+	98								+	+	
Israel												+	
Italy		+	4		*		*				+	+	
Latvia		+									+	+	
Lithuania		+									+	+	
Luxembourg		+	1	*	*	*	*	*	*	*	*	*	

Table 1 continued.

	Nat. cor.	No of sites	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Morocco	+	4	+	+	+	*	*	*		+	+	
The Netherlands	+		+	+	+	+	+			+		
Norway	+	2								+	+	
Poland	+	108			+			*	*	*	*	*
Portugal	+	1	*	*	*	*	*	*	*	*	*	
Romania	+	19			*	*	*	*	*	*	+	*
Slovakia	+	34						*	*	*	*	*
Slovenia		?									+	
Spain	+	2	*	*	*	*	*	*	*	*	*	
Sweden	+	148	*	*	*	*	*	*	*	*	*	
Tunisia	+	4	+	+	+	+	*		+	+	+	
Turkey		30	*	*	*	*	*	*	*	+	+	
The Ukraine	+								+	+	+	+
United Kingdom	+	93	+	+	+	+	+	+	+	+		
Former Yugoslavia	+	46	*	*	*	*	*		+	+		

Status report

Goose ringing schemes in operation in the Western Palearctic

Introduction

Marking with plastic legrings or neckbands has become a widespread and useful tool in studies of migration patterns, population dynamics and behaviour of geese in Europe.

As a service to the ringing centres and goose researchers in Europe, the IWRB Goose Research Group offers to gather information about the ringing schemes in a catalogue, of which the present is the third version. It replaces the second version distributed in September 1989.

To our knowledge 11 goose species/subspecies which occur in Europe are presently ringed with coloured legrings or neckbands in Europe. In this catalogue a total of 47 projects are reported, some of which are international. Smaller university projects may, however, have escaped our attention.

This catalogue is circulated to all bird ringing centres in Europe, as well as to all those involved in goose ringing schemes. All recoveries with a reading of the metal ring number should be reported to a bird ringing centre. Sightings of colour-ringed birds should be reported to the correspondent mentioned in this catalogue. For internationally coordinated projects, the national coordinator is indicated together with the correspondent. To ease the flow of information, sightings should always be sent to the international correspondent.

It is our intention to update the catalogue at regular intervals. Comments, amendments and supplements are welcome and should be addressed to the compilers. But please keep in mind that it is not the task of the compilers to coordinate the use of ring types, colours and codes. Embarking upon a new project, you should take the precaution of contacting other researchers working with the same species to ensure that there is no overlap in the use of colours or codes. We will be happy to give you guidance.

Jesper Madsen & Tony Fox, National Environmental Research Institute, Division of Wildlife Ecology, Kalø, Grenaavej 12, DK-8410 Rønde, Denmark

Bean Goose *Anser fabalis*

A01 D	Type/colour/code	Neckband/yellow/3 characters
	Project start	1971, continued in 1987
	Correspondent	Forschungsstelle für Ökologie der Wasservögel und Feuchtgebiete, Universität Potsdam, Villa Liegnitz, D-14471 Potsdam, Germany
	Remarks	3,058 geese marked in all, 1,198 since 1987
A02 NL	Type/colour/code	Legring/white/2 characters
	Project start	1984
	Correspondent	Bart Ebbinge, IBN-DLO, P.O.Box 23, NL-6700 AA Wageningen, The Netherlands
	Remarks	Also geese marked with metal rings only
A03 S	Type/colour/code	Legring/various/comb. of colours
	Project start	1974
	Correspondent	Lambart von Essen, Fågelvik Ludgo, S-611 91 Nyköping, Sweden
	Remarks	Part of a reintroduction project
A04 S	Type/colour/code	Neckband/orange/3 characters
	Project start	1976 (terminated 1980)
	Correspondent	Leif Nilsson, Ekologihuset, S-223 62 Lund, Sweden
	Remarks	A joint Swedish/Norwegian/Finnish project
A05 FIN	Type/colour/code	Neckband/orange/3 characters with vertical bars
	Project start	1976 (ongoing)
	Correspondent	Leif Nilsson, Ekologihuset, S-223 62 Lund, Sweden
	Remarks	A joint Swedish/Norwegian/Finnish project
A06 S	Type/colour/code	Neckband/blue/3 characters
	Project start	1987
	Correspondent	Leif Nilsson, Ekologihuset, S-223 62 Lund, Sweden
	Remarks	Coordinator of project: Åke Andersson (see F01)

Pink-footed Goose *Anser brachyrhynchus*

B01 UK	Type/colour/code	Legring/white or orange/3 characters Neckband/grey/2 characters
	Project start	1987
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK
	Remarks	White leg rings and grey neckbands used in UK and Iceland, orange leg rings in East Greenland

B02 UK	Type/colour/code	Legring/various/1 character
	Project start	1987-1992
	Correspondent	I.J. Patterson, Aberdeen University, Culterty Field Station, Newburgh, Grampian, AB41 0AA, UK
	Remarks	Some have multiple solid colour rings only, other rings with single large characters engraved; 123 birds marked
B03 DK	Type/colour/code	Neckband/blue/3 characters, or: Legring/blue or red/2 characters
	Project start	1988
	Correspondent	Jesper Madsen, National Environmental Research Institute, Kalø, Grenaavej 12, DK-8410 Rønde, Denmark
	Remarks	A joint Danish (Jesper Madsen) and Belgian (Eckhart Kuijken) project. Since 1990, 550 geese have been neckbanded

European White-fronted Goose *Anser albifrons albifrons*

C01 D	Type/colour/code	Legring/red (1989) or green (1990 and 1991)/no code, Neckband/white/3 characters (1990 and 1992)
	Project start	1989
	Correspondent	Johan H. Mooij, Biological Station, Wesel, Diersfordter Strasse 9, D-46483 WESEL, Germany.
	Remarks	Joint Russian-German-Dutch project (Igor Kostin, Johan Mooij, Bart Ebbinge), ringing of moulting geese in Taimyr (Russian Federation). Legrings: 172 in 1989, 34 in 1990, 183 in 1991. Neckbands: 134 in 1990 and 315 in 1992
C02 R	Type/colour/code	Neckband/white/3 characters
	Project start	1990
	Correspondent	Igor Kostin, Central Research Laboratory for Game Management and Nature Reserves, Teterinsky per. 18, 109004 Moscow, Russia
	Remarks	Ringed in Taimyr
C03 D	Type/colour/code	Neckband/yellow/3 characters
	Project start	1991
	Correspondent	Forschungsstelle für Ökologie der Wasservögel und Feuchtgebiete, Universität Potsdam, Villa Liegnitz, D-14471 Potsdam, Germany
	Remarks	390 marked in all, 169 since 1991

Greenland White-fronted Goose *Anser albifrons flavirostris*

D01 IRE	Type/colour/code	Neckband (orange) and legring (white)/3 characters
	Project start	1983
	Correspondent	John Wilson, Office of Public Works, 5 St. Stephens Green, Dublin 2, Ireland
	Remarks	A joint Irish/British project
D02 UK	Type/colour/code	Legring/white/3 characters and neckband (orange) and legring (white)/3 characters
	Project start	1979
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK or Tony Fox, National Environmental Research Insitute, Kalø, Grenaavej 12, DK-8410 Rønde, Denmark
	Remarks	Geese ringed in West Greenland and West Scotland; a joint British/Irish/Danish project

Lesser White-fronted Goose *Anser erythropus*

E01 S	Type/colour/code	Legring/various/comb. of colours
	Project start	1981
	Correspondent	Lambart von Essen, Fågelvik Ludgo, S-611 91 Nyköping, Sweden
	Remarks	A reintroduction project
E02 FIN	Type/colour/code	Neckband/blue/2 characters + 3 legrings/various/different colours
	Project start	1989
	Correspondent	Juha Markkola, WWF Lesser White-fronted Goose Project, Märssytie 1 F 6, SF-90560 Oulu, Finland
	Remarks	A restocking project; 121 geese marked.
E03 FIN	Type/colour/code	Neckband/green/2 characters + 3 legrings/various/different colours
	Project start	1994
	Correspondent	Juha Markkola, WWF Lesser White-fronted Goose Project, Märssytie 1 F 6, SF-90560 Oulu, Finland
	Remarks	Wild birds, a study of migration routes and wintering areas; 2 geese marked.

Bar-headed Goose Anser *indicus*

F01 S	Type/colour/code	Legring/various/comb. of colours or 1 character
	Project start	1984 - project ceased
	Correspondent	Åke Andersson, Swedish Hunters' Association, Box 7002, S-750 07 Uppsala, Sweden
	Remarks	Semi-captive birds; 5 geese marked

Greylag Goose *Anser anser*

G01 A	Type/colour/code	Neckband/white/3 characters
	Project start	1978
	Correspondent	Gerald Dick, Weinberggasse 6/6, A-1190 Wien, Austria
	Remarks	Part of a Central European greylag project
G02 CZE	Type/colour/code	Neckband/red/3 characters
	Project start	1972
	Correspondent	Karel Hudec, Hluboká 5, CS-63900 Brno, Czech Republic
	Remarks	Part of a Central European greylag project
G03 DK	Type/colour/code	Legring/various/comb. of colours
	Project start	1960s
	Correspondent	N.O. Preuss, Zoological Museum, Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark
G04 D	Type/colour/code	Neckband/yellow/3 characters
	Project start	1976
	Correspondent	Forschungsstelle für Ökologie der Wasservögel und Feuchtgebiete, Universität Potsdam, Villa Liegnitz, D-14471 Potsdam, Germany
	Remarks	2,140 geese marked, 1,627 collared since 1991
G05 PL	Type/colour/code	Neckband/green/3 characters
	Project start	1987
	Correspondent	J. Witkowski, Dept. of Avian Ecology, Wroclaw University, Sienkiewicza 21, P-50-335 Wroclaw, Poland
	Remarks	See also project G 13.
G06 S	Type/colour/code	Legring/various/comb. of colours or 1 character
	Project start	1970s, project ceased
	Correspondent	Anders Bylin, Tovetorp, S-150 11 Björnlunda, Sweden.
G07 S	Type/colour/code	Neckband/blue/3 characters
	Project start	1984
	Correspondent	Leif Nilsson, Ekologihuset, S-223 62 Lund, Sweden
	Remarks	A joint Scandinavian project.
G08 E	Type/colour/code	Neckband/black (or white)/3 characters with vert. bar (was changed from white to black due to confusion with project G01)
	Project start	1985
	Correspondent	Juan Calderon, Estacion Biologica de Donana, Avda. Maria Luisa s/n, E-41013 Sevilla, Spain.

G09 UK	Type/colour/code	Legring/various/comb. of colours, or: Legring/yellow/2 characters separated by a horizontal bar
	Project start	1986
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK
	Remarks	Native wild geese of the Western Scotland population
G10 UK	Type/colour/code	Legring/white/2 or 3 characters (number/two letters)
	Project start	1982
	Correspondent	R.H. Terry, 39 Bosville Drive, Sevenoaks, Kent, TN13 3JA, UK
	Remarks	Study of movements of feral geese
G12 UK	Type/colour/code	Legring/various/various characters
	Project start	1990s
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK
	Remarks	Various local studies of feral geese in UK. Correspondent will forward details to relevant ringing groups
G13 NL	Type/colour/code	Neckband/green/3 characters (all starting with "J" or "P", no overlap to project G05)
	Project start	1990
	Correspondent	Maarten Loonen, Zoological Laboratory, P.O. Box 14, 9750 AA Haren, the Netherlands
	Remarks	Breeding birds in the Netherlands, see also project G05
G14 UK	Type/colour/code	Neckband/grey/2 characters Legring/white or orange/2 characters
	Project start	1992
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK
	Remarks	Icelandic wintering population, in conjunction with local ringing groups
G15 IS	Type/colour/code	Legring/light green/2 characters
	Project start	1992
	Correspondent	Ólafur K. Nielsen, NCC, Hlemmur 3, PO Box 5324, IS-125 Reykjavik, Iceland.
	Remarks	Icelandic population, may use light green neck bands in future

Dark-bellied Brent Goose *Branta bernicla bernicla*

H01 NL	Type/colour/code	Legring/yellow, light green, blue or white (ring on both legs)/1 character
	Project start	1973
	Correspondent	Bart Ebbinge, IBN-DLO, P.O.Box 23, NL-6700 AA Wageningen, The Netherlands
	Remarks	A joint British (A.K.M. St Joseph), Dutch (Bart Ebbinge) and German (Peter Prokosch) project
H02 D	Type/colour/code	Neckband/black/3 characters
	Project start	1985
	Correspondent	Hans Wolfgang Nehls, Zoologischer Garten Rostock, Rennbahnallee 21, 2500 Rostock, Germany
	Remarks	Project abandoned
HO3 UK	Type/colour/code	Legring/white (2 characters) and comb. of colours
	Project start	1990
	Correspondent	Steve Percival, Ecology Centre, Science Complex, University of Sunderland, Sunderland SR1 3SD, UK
	Remarks	Geese caught in England

Light-bellied Brent Goose *Branta bernicla hrota*

I01 IRE	Type/colour/code	Legring/yellow/3 characters
	Project start	1984
	Correspondent	Micheal O'Briain, Irish Brent Goose Study, Zool. Dept., Univ. College Dublin, Belfield, Dublin 4, Ireland
	Remarks	Geese caught in NWT of Canada and in N Ireland.
I02 UK	Type/colour/code	Legring/white/orange (2 characters) and/or comb. of colours
	Project start	1988
	Correspondent	Steve Percival, Ecology Centre, Science Complex, University of Sunderland, Sunderland SR1 3SD, UK, or Preben Clausen, National Environmental Research Institute, Kalø, Grenåvej 12, DK-8410 Rønde, Denmark
	Remarks	A joint UK/DK project. Geese caught in England, Denmark and Svalbard; in 1979 some geese were also marked with orange rings (no code)

Barnacle Goose *Branta leucopsis*

J01 NL	Type/colour/code	Legring/various/1 character (rings on both legs)
	Project start	1979
	Correspondent	Bart Ebbinge, IBN-DLO, P.O.Box 23, NL-6700 AA Wageningen, The Netherlands
	Remarks	Russian population; a Dutch (Bart Ebbinge) and German (Peter Prokosch) project; geese caught in both countries. Reporting has terminated (contacts see J02)
J02 S	Type/colour/code	Legring/various/1 character (rings on both legs). Legring/various/2 characters (rings on one leg)
	Project start	1984
	Correspondent	Kjell Larsson, Dept. of Zoology, Uppsala University, Villavägen 9, S-752 36 Uppsala, Sweden
	Remarks	Project coordinated with J01; breeding population in the Baltic (Gotland, Öland and Estonia)
J03 UK	Type/colour/code	Legring/various/2 or 3 characters (ring on one leg)
	Project start	1973
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK
	Remarks	Svalbard population; geese marked in Svalbard and Scotland
J04 S	Type/colour/code	Legring/various/comb. of colours (1 left, 2 right leg)
	Project start	1975
	Correspondent	Pelle Palm, Skansen Foundation, Box 27 807, 115 93 Stockholm, Sweden
	Remarks	356 semi-captive geese marked
J05 UK	Type/colour/code	Legring/white/3 characters, sometimes with combination of colours or: Legring/various/comb. of colours
	Project start	1963
	Correspondent	Records to Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK, for forwarding to ringers concerned: David Cabot, Rockfort House, Rockfort Avenue, Dalkey, Co. Dublin, Ireland; Steve Percival, Ecology Centre, Science Complex, University of Sunderland, Sunderland SR1 3SD, UK
	Remarks	Greenland population; geese caught in Scotland (Steve Percival), Ireland and E Greenland (David Cabot)

Canada Goose *Branta canadensis*

K01 S	Type/colour/code	Neckband/blue/3 characters, or: Legring/various/comb. of colours or 2 characters
	Project start	1970s (neckbanding since 1987)
	Correspondent	Leif Nilsson, Ekologihuset, S-223 62 Lund, Sweden
K02 N	Type/colour/code	Legring/yellow/3 characters
	Project start	1986-1990
	Correspondent	Ole Reitan, NINA Hovedkontor, Tungasletta 2, N-7005 Trondheim, Norway
	Remarks	Scheme ceased in 1990, but records are still welcomed at the contact address
K03 N	Type/colour/code	Neckband/red/3 characters
	Project start	1989
	Correspondent	Ole Reitan, NINA Hovedkontor, Tungasletta 2, N-7005 Trondheim, Norway
	Remarks	Marking at several sites in Norway continues
K04 UK	Type/colour/code	Legring or neckband/various/comb. of colours or 2 or 3 characters
	Project start	ca 1969
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK
	Remarks	Approximately 10 local schemes in operation in Britain, some of which have now terminated. For further details contact the correspondent
K05 UK	Type/colour/code	Neckband/yellow/3 characters
	Project start	1992
	Correspondent	Wildfowl & Wetlands Trust, Slimbridge, Gloucester GL2 7BT, UK, or Tony Fox, National Environmental Research Institute, Kalø, Grenaavej 12, DK-8410 Rønde, Denmark
	Remarks	A joint UK/DK project. 10 birds ringed in west Greenland.

Status reports

ERRATUM: Brent Goose breeding success 1990/91

In Table 2 of "Recent population status of Brent Geese (IWRB Goose Research Group Bulletin 5: 5-7), the proportions of juveniles amongst wintering Dark-bellied Brent Geese was reported erroneously to be 34.0% in winter 1990/91. The correct figure should have been 21.4%, based upon the UK November sample aged for the proportion of young (Kirby et al. 1991). Our apologies for the error.

Reference

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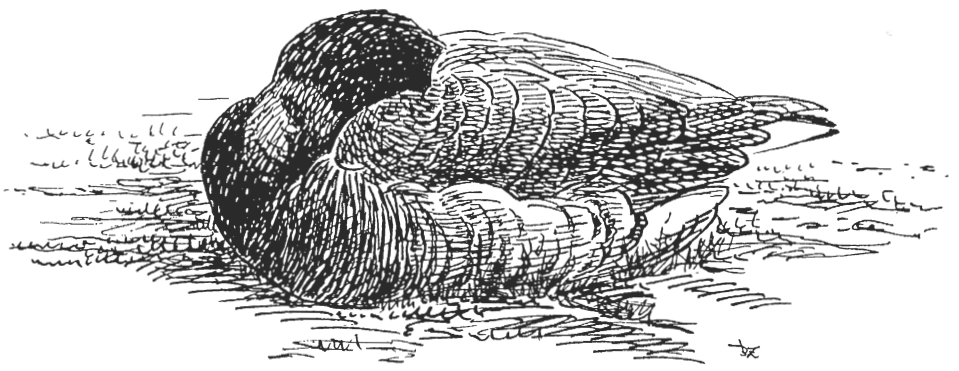

Regional report

Central European Bean Geese

Since the last Bulletin, Karel Hudec has kindly sent more information about recent changes in goose numbers in southern Moravia. Grey geese in the area have generally increased from 25,000 in 1982 to ca 100,000 in the last three winters. Although these large numbers include White-fronted Geese, 80-90% are Bean Geese. The increase in numbers has been accompanied by a change in phenology as well, since the geese used to arrive in mid-February and depart in the first half of March during the mid-1980s. However, in recent winters, the larger flocks have begun to arrive still earlier. Generally, the large congregations gather in the course of just one week, in the last days of December 1992 during 1992/3, and on 10 January 1994 in 1993/4. Karel thought that perhaps the change in numbers constituted a new tradition of stopping in the area on spring migration from more southerly wintering areas, but there seems to be no correlation with the numbers on Lake Neusiedlersee, for example. This leaves the question - where are these geese coming from? The increase has been so dramatic that it must represent a shift from other areas, but from where and why has the change occurred? Has part of the wintering area been exhausted of food progressively earlier (perhaps as a result of faster depletion of food through increases in numbers) or has the shift resulted from some other cause? Do they come from further west, in Germany or the Netherlands? Does anybody have any explanation of the dramatic changes?

Regional report

The disappearance of the Tundra Bean Goose *Anser fabalis rossicus* from the Iberian Peninsula

Most European-wintering goose populations were reported increasing in the 1980s (Madsen 1991). In most cases, this was undoubtedly so, but some changes may reflect improved census coverage. The marked redistribution of the European White-fronted Goose *Anser albifrons albifrons* and the various populations of Bean Geese *Anser fabalis* within their wintering ranges during this century also complicates the assessment of trends. This note summarises the disappearance of the Tundra Bean Goose *A. f. rossicus* from the Iberian Peninsula, which needs to be taken into account when assessing overall population trends in this subspecies.

Although Spain has harboured a large population of wintering Bean Geese for several centuries, they only attracted the attention of scientists in the early 1960s. By then, the major decline had already occurred, and only a few thousand wintering Bean Geese remained (Bernis 1964). Of the former numbers, only one estimate exists, referring to the core area in the Duero Basin, known since the 14th century, about which Bernis et al. (1964) wrote: "Es más que probable que en tiempos no todavía demasiado lejanos, los gansos invernasen por cientos de miles en la cuenca del Duero [It is more than likely that at times not so long ago, hundreds of thousands of geese wintered in the Duero Basin (our translation - *eds.*)]". This statement, however, begs three questions, the second of which was posed by Bernis (1964): 1. To which period does this estimate refer? 2. How many Greylag Geese were included in this total? 3. How accurate was the estimate?

As the main decline in the Duero basin took place in the 1950s (Carlos Valverde, pers. comm.), it seems reasonable to assume that the estimate referred to the 1930s. Bernis (1964) reported that north-central Spain was used by two different groups of Greylag Geese *Anser anser* (one migrating en route to the Guadalquivir Marismas, the other wintering in Duero), which probably originated from different parts of the breeding range. We now know that the two groups involved came from the Baltic area and Norway respectively (cf. Persson 1995). As the Norwegian population has increased 3-5 fold during the last 15-20 years, reaching 60,000 individuals in the early 1990s (Follestad 1994), this population could not have exceeded 10-20,000 mid-century. This suggests that 90% of geese wintering in the Duero basin at that time could have been Bean Geese. Since Francisco Bernis tended to underestimate rather than exaggerate numbers, there is little reason to doubt his estimate. That there were

large numbers of geese there is further supported by the fact that every village had its own "ganseros", boys whose responsibility it was to scare geese from crops (Noval 1975).

Consequently, there is good reason to believe that perhaps 200,000 Bean Geese may have wintered in Spain in the 1930s. Since Bean Geese had disappeared from many areas late last century and early this, especially between the Duero basin and the Spanish east coast, the population could have been even larger previously (Bernis 1964). In Portugal, the species never occurred in important numbers (Reis 1930). In most cases, the subspecific status was not established, but there is little doubt that these were *rossicus*; the Taiga Bean Goose *A. f. fabalis* has only ever occurred as a vagrant in Spain (Persson 1995).

The decline of the Tundra Bean Goose in Spain can be divided into three phases. Range reduction occurred up until the 1940s, although we know little of the numbers involved. Numbers may have been relatively stable during this contraction period; the geese merely concentrating in the core area, the Duero basin. The main decline took place prior to the 1960s, when numbers fell to about 5-10,000. During the last three decades the Bean Goose has disappeared almost completely; only 20 birds were reported during winter 1994/95.

If the sharp decline in the 1950s was caused by wintering ground factors, it could have been caused by the large-scale modernisation of Spanish agriculture of the time. The most important consequence of these changes was probably the loss of safe night time goose roosts, when seasonally flooded wetlands were reclaimed; the most important, Laguna de La Nava, disappeared in 1960. Hunting, however, had been of little significance (Bernis et al. 1964), until the loss of most roosting sites caused excessive hunting disturbances in the few remaining sites.

The last phase of the decline, from 6,000 in winter 1968/69 to 20 in winter 1994/95, has been well monitored (Purroy & Regueras 1985, Rodriguez & Palacios 1991, Persson 1995), but its cause remains to be satisfactorily established. The last Iberian stronghold was Embalse de Ricobayo, which geese only started to use in the mid-1950s (Regueras 1982).

Spanish-wintering Bean Geese were part of the general European population and probably not an isolated one (Huyskens 1986); five out of six ringing recoveries were of birds ringed in the Netherlands (Huyskens 1986, Rodriguez & Palacios 1991). Their disappearance could be explained by short-stopping, but whether this was due to deterioration of conditions in Spain, or improvements at wintering areas closer to breeding areas (or a combination of both) will never be known.

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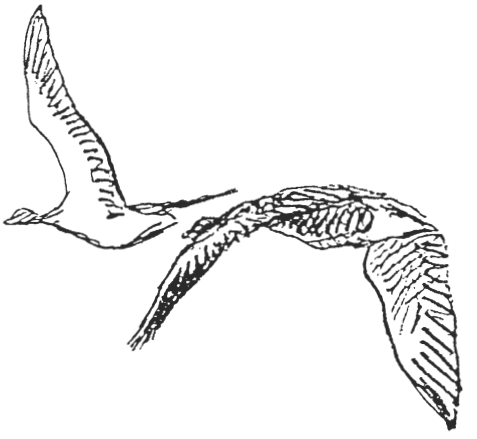

Regional report

Goose migration in Belarus

While the major nesting areas and the wintering grounds of most western European goose species are well known, their autumn and spring migration routes which take them between these important areas are not so well documented (Rutschke 1990). It is vital that important staging areas are identified and protected where necessary and for this reason, there is a need for improved understanding of the migration routes used by geese. Some recoveries of White-fronted and Bean Goose ringing schemes from the 1960s provide some information, but little has been published on the visible migration of geese. This note presents details of observed goose passage over the southern and central parts of Belarus during 1978-1995.

Methods

From fixed points, all geese flying within range of vision were recorded during 4 hours after sunrise on dates given in Table 1 and Figure 1. Geese below 100 metres were disregarded as local feeding flights.

Table 1. Numbers of migrating geese recorded over Belarus during spring and autumn when observations were carried out.

Site	River system	Dates of Observations	Total geese counted (hr^{-1})
(A) Grudno	Neman	31.03 - 15.04.80	1223 (19.1)
		01.10 - 31.10.78	96 (0.8)
(B) Minsk airport		21.03 - 11.4.83	1557 (17.7)
		01.09 - 30.10.83	433 (1.8)
(C) Belovezh-skaya Pushcha	Lesnaya	20.03 - 04.04.94	732 (12.2)
(D) Turov	Pripyat	14.03 - 15.04.94	8876 (69.4)
		23.09 - 20.10.94	202 (1.9)
		19.03.95	11563 (2890)
(E) Narovlya	Pripyat	22.03 - 02.04.94	1482 (33.7)
(F) Berezinski Reserve	Beresina	31.03 - 15.04.94	1703 (26.6)
		23.09 - 20.10.83	751 (7.0)

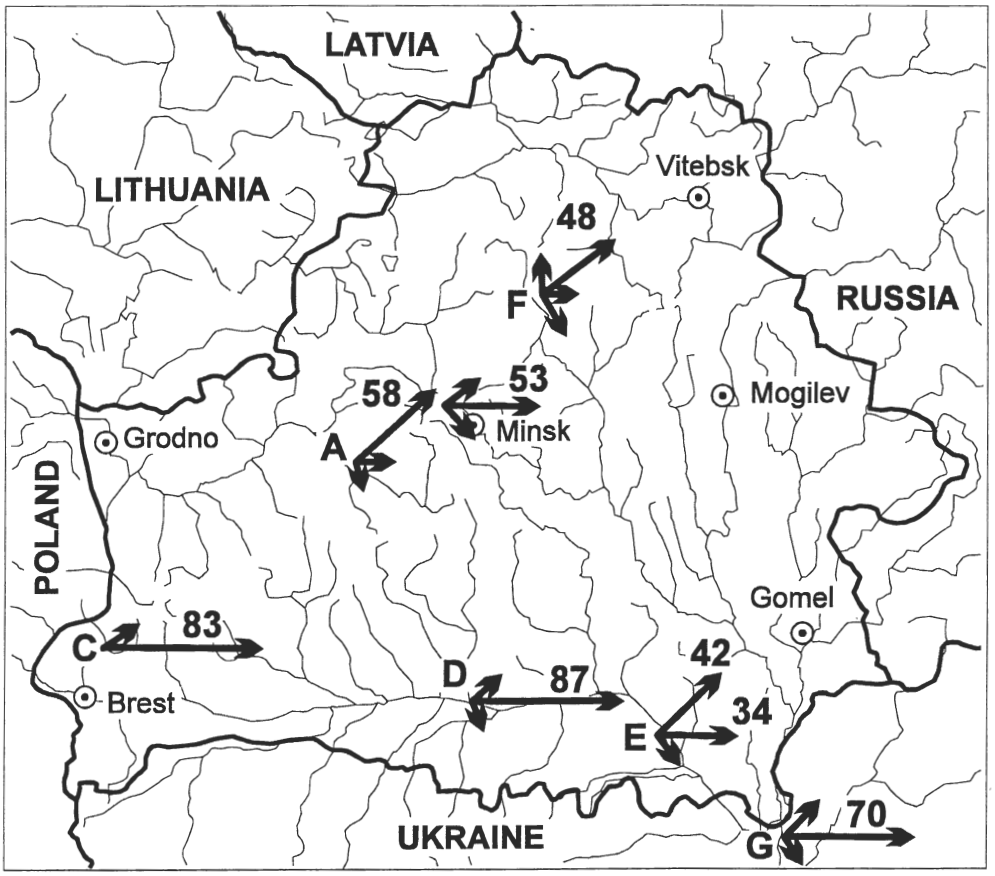

Figure 1. Visible goose migration in spring over Belarus. Data presented by cardinal points, digits indicate percentage of total numbers passing in each direction. Code letters indicate sites indicated in Table 1, G indicates studies from the Dneipr by Poluda (1992).

Results

During spring migration many more geese were observed than during autumn migration (Table 1). Species composition of 1,214 geese counted in the Pripyat valley in spring 1994 was 69% White-fronted Geese, 20% Bean Geese, 7% Grey-lag Geese and 4% Lesser White-fronted Geese. Composition amongst 7,105 geese identified on 19th March 1995 were 86%, 13%, 0% and 1.3% for the same species respectively.

The first date of arrival in spring in Belarus range from 15 February (1957) to 31 March (1980), varying considerably with spring temperature. Duration of spring migration varied between 15 (1980, Grodno) and 30 days (1994, Turov), but was most intense for a period of 14 days. The start of the return passage

ranged from 16 September (1988) to 23 October (1957, Fedyushin 1967), but generally the passage movements were intense for 10 days during the first half of October.

Figures 1 and 2 show the relative frequency of directions taken by birds in spring and autumn based on the observations. The variability of the directions taken by geese in spring compared to that in autumn suggests that the birds are migrating via river systems and probably between feeding areas, rather than making direct flights as seems to be the case in autumn.

There was little variation in flock size between sites and between spring (mean 34.1, n = 353) and autumn (mean 31.0, n = 42).

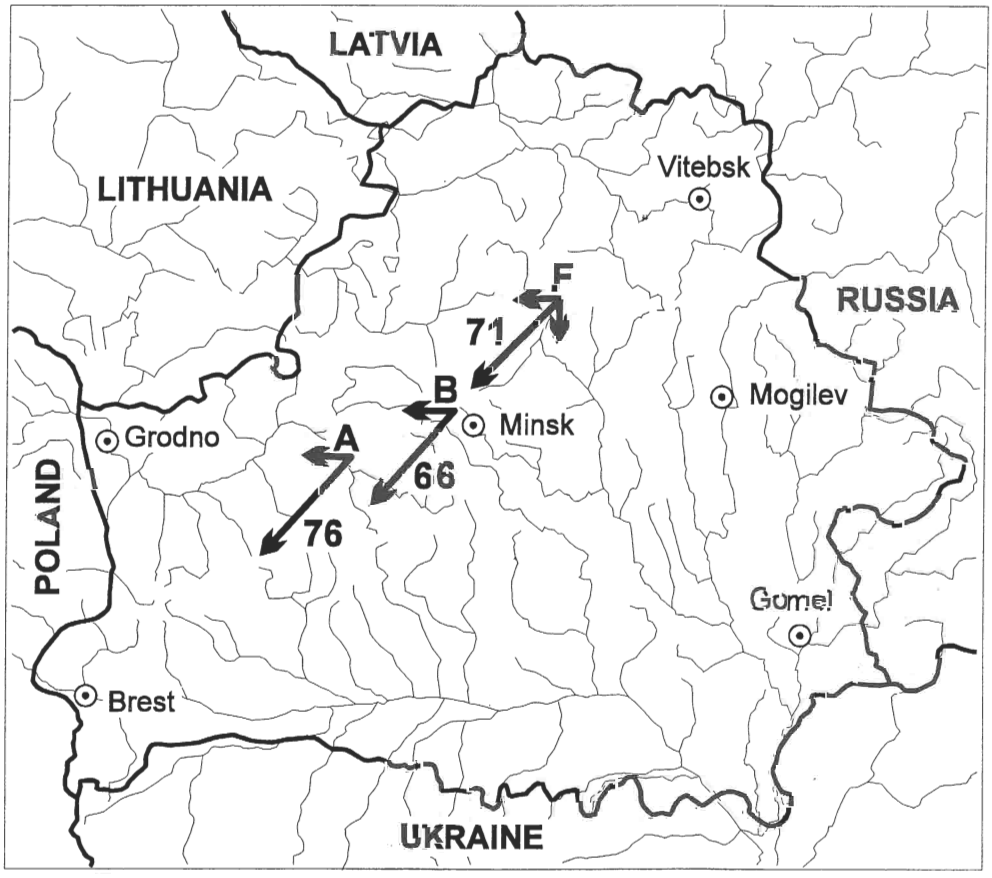

Figure 2. Visible goose migration in autumn over Belarus. Conventions as in Figure 1.

Discussion

Geese are generally considered to migrate from eastern Europe on a broad front from the St Petersburg region to the Pancarpathian. In autumn they return rapidly to the Baltic coast, while ringing recoveries demonstrate that the spring return is slower and takes place by a more southerly route (Lebedeva 1968, Lebedeva & Kichinski 1979). These patterns are supported by our visible migration patterns, with autumn migrants probably progressing through Belarus towards their ultimate wintering areas in Hungary and southeast Europe where wintering numbers are relatively small (Rutschke 1987). Although geese do stop to feed in autumn, they utilise extensive bogs and marshes, lakes and reservoirs, since agricultural land offers little forage at this time.

In spring, larger numbers, perhaps birds wintering in northern Europe, pass through on a much broader front, following the river systems. The large numbers reported from the Pripyat River system confirm this catchment as one of the most important spring staging areas not only for geese but also for large numbers of waders and ducks which also use the river system. Geese at this time utilise the flood-plain habitats as most other freshwater habitats remain frozen at this time, remaining as late as early May in some years.

There is no doubt that the floodplains of Belarus provide important staging areas for migratory geese in spring and autumn, and it is vital that the distribution and abundance of all waterbirds using these areas are fully assessed in the near future. Counts of feeding areas and, in particular, regularly used roost sites is an urgent priority to enable the development of a site safeguard policy for these areas.

Acknowledgements

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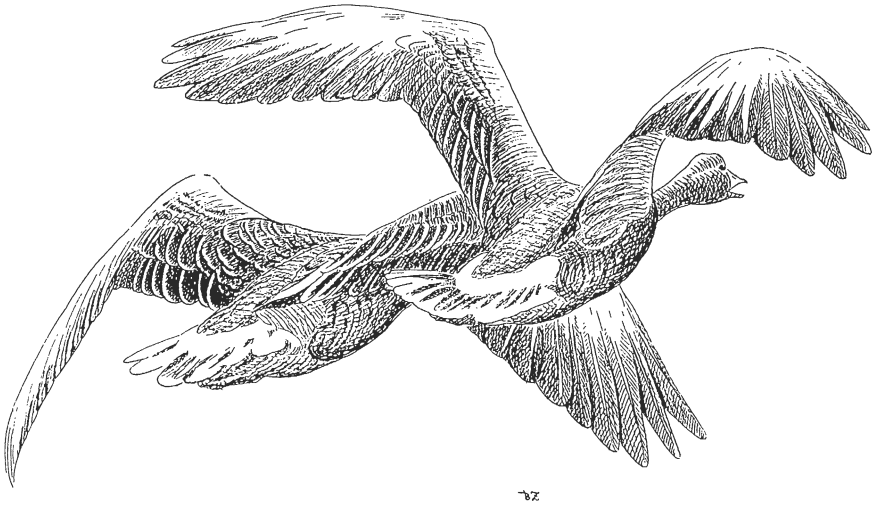

Regional report

Status of the Lesser White-fronted Goose in China

With so much interest focussed upon the Lesser White-fronted Goose in the west of its range, it is pleasing to report the publication of some data relating to its status in China. As a result of the discussions surrounding the compilation of the Action Plan for Lesser White-fronted Geese at the *Anatidae 2000* meeting, Jianjian Lu, the chairman of the Chinese Waterbird Specialists Group, undertook to compile a review of the status of the species from information gathered from colleagues in China. We are extremely grateful to Jianjian Lu for his compilation and supply of translations of recent Chinese publications to assist in putting together the following brief account. This work was carried out during his visit to Texel in the Netherlands earlier this year.

The Lesser White-fronted Goose is a passage migrant and wintering species in China, with a population estimated at between 1,000 and 10,000 birds. It is a quarry species and currently is not listed in any form amongst the protected species listed in the Chinese Red Data Book. It is therefore only protected to a limited degree where it occurs within nature reserves or areas inaccessible to hunters (Lu 1990, Lu et al. 1994). In extracting recent count data obtained since 1990, Jianjian identified 10 areas supporting regular numbers in excess of 50 birds, the most important being:

1. Poyang Lake (28^{0}50' N, 116^{0}10'E) which supported 5,432 on 16 January 1990 and 3,100 on 21 November 1991;
2. Shijiu Lake (31^{0}20' N, 118^{0}40'E) with 2,650 on 20 February 1992;
3. East Dongting Lake (29^{0}10' N, 113^{0}50'E) is mainly a wintering area where 1,200 were counted on 8 January 1990, comprising a major part of the wintering goose numbers there (Liu et al. 1994);
4. Qingdao coast (36^{0}10' N, 120^{0}10'E) which, although mainly a staging area, may support important numbers in winter also (e.g. 1,000 on 10 January 1991; Liu 1994);
5. Xingkei Lake Nature Reserve (45^{0}30' N, 132^{0}30'E) is an important staging area in spring (late March to early May), where 3-5,000 gather regularly (Li et al. 1994);
6. Hannan Lakes in Hubei Province support regularly up to 400 individuals in winter (Lu 1990, Hu & Guan 1994).

These counts underline the parlous situation facing the species in the east of its range and emphasise the need to be vigilant regarding this element of the population. Clearly there are problems with the effective protection of this vulnerable population in China where there is considerable hunting pressure on

wetlands. The publication of the very impressive review of Waterbird Research in China (Lu et al. 1994) is timely to draw attention to the conservation needs of Chinese wetlands and the birds they support.

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Progress report

Ringing recovery of a Finnish Lesser White-fronted Goose from the Russian wintering areas

In 1984, WWF (World Wide Fund for Nature) Finland started a project to study, protect and restock the Lesser White-fronted Goose *Anser erythropus* population in Fennoscandia. The species is now amongst the most endangered species in Europe (Madsen 1994) and the Fennoscandian population has crashed from several thousand in 1910 to some 50 pairs in the 1990s. The larger Russian population has also suffered major declines in recent years according to reports at the *Anatidae 2000* conference in Strasbourg, France in December 1994. To date, 121 Lesser White-fronted Geese have been reintroduced to northern Finnish Lapland near areas which are known to have naturally occurring populations.

Almost nothing is currently known of the wintering areas of Fennoscandian Lesser White-fronted Geese. There are two recoveries of Swedish-ringed Lesser White-fronts from the 1960s, one from Greece, the other from the eastern Black Sea. At least part of the Russian population winters in southeast Europe and southwest Asia (in an area possibly stretching from Hungary right across to the Caspian Sea). There are several reports on the fate of birds from the restocking programme in Finland. Some have been reported shot by hunters, but several have been seen in western Europe in winter in Denmark, England and the Netherlands. No reports have been received from more eastern areas, perhaps because of the absence of a network of observers, or perhaps (but less likely) because these geese do not occur there.

In August 1994, a family of wild Lesser White-fronted Geese were captured in northern Finland. The mother and gosling were marked with green neckbands and a satellite transmitter fitted to the male. The family initially moved north into northern Norway, but subsequent reports of the location of the transmitter via satellite showed no movement, suggesting either the male was dead or had lost the transmitter. The transmitter was eventually located, and the transmitter and remains of the male bird retrieved. The gander had probably been killed by a White-tailed Eagle *Haliaetus albicilla*.

The gosling was subsequently shot on 19 November 1994 in Kurchanskiy, one of the many lagoon areas on the east coast of the Azov Sea (Figure 1), near the city of Krasnodar, 2,800 km SSE of the ringing site. Although regrettable, the recovery is highly significant, as this is the first ringing recovery of a wild Finnish Lesser White-fronted Goose. We had earlier suspected that the geese migrated south and east from Finland, but had little evidence apart from the ear-

lier Swedish recoveries. This information sets a new conservation priority to establishing the importance of this area for Lesser White-fronted Geese, and we recommend that a collaborative project, involving Russian and other researchers, be established to explore the areas, obtain further information about wintering goose populations and the conservation status of the area, and to determine the need and feasibility of the establishment of protected areas free from hunting for this highly threatened population.

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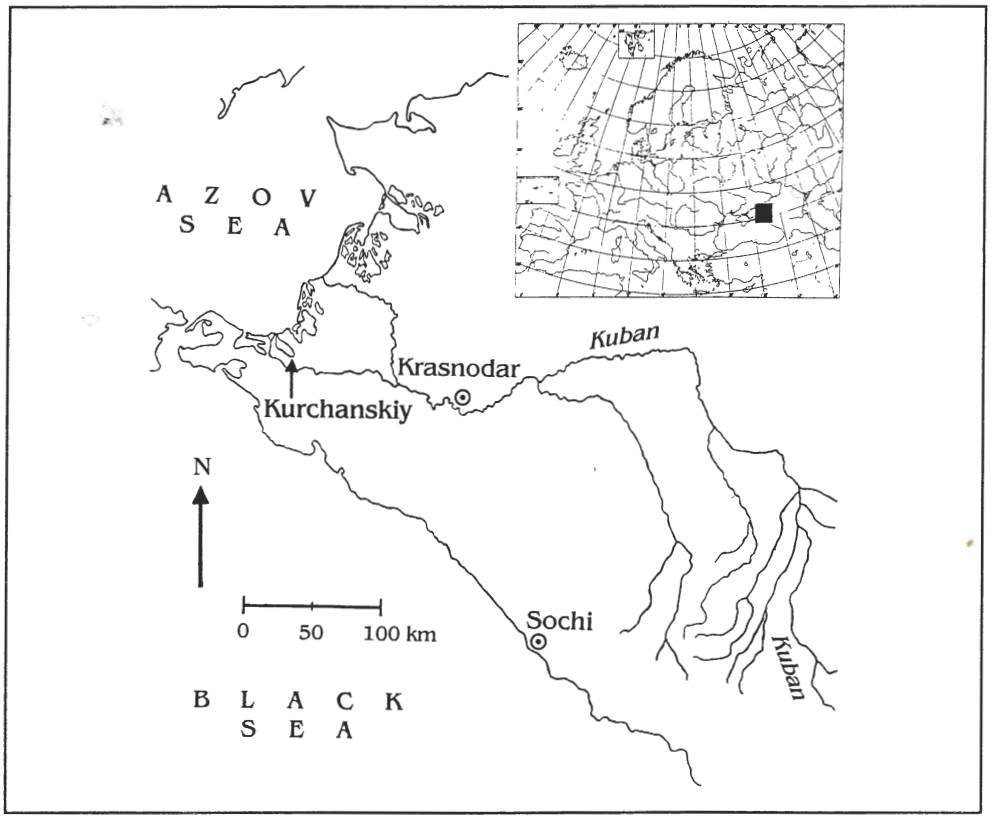


Figure 1. Location map (inset) showing details of the recovery area, Kurchanskiy in the Kuban Delta, southeast Azov Sea, of the Finnish-marked Lesser White-fronted Goose.

Progress report

Birdlife Action Plans for the Red-breasted and Lesser White-fronted Geese

An overall conservation Action Plan for the Anatidae is currently being prepared by IWRB for BirdLife International. However, there remains an urgent need to focus attention on threatened taxa in greater detail, and to this end, one major objective of the *Anatidae 2000* meeting in Strasbourg was to draft species Action Plans for key species, taking advantage of the gathering of a number of experts from around the globe to pool current knowledge and understanding.

Amongst the geese, the Red-breasted and Lesser White-fronted Geese stand out as facing particularly great conservation problems, and these populations were therefore the target of special evening workshops to develop Action Plans, the final drafts of which have now been completed. The Lesser White-front programme was coordinated by Jesper Madsen (NERI, Denmark), the Red-breasted Goose programme by Janet Hunter and Jeff Black (THE WILDFOWL & WETLANDS TRUST, UK).

The Lesser White-front faces the most serious conservation problems. Its Plan identified the drastic decline in its population during the present century, with reductions of 90% in numbers since the 1940s. The gathered wisdom at Strasbourg confirmed that the world population was probably less than 50,000 individuals (ca 1,000 wintering in Europe, perhaps 30,000 in the Caspian Region, although there are no recent figures to confirm this, and ca 6,000 in the Eastern Palearctic), with every indication that the species continues to decline. The workshop identified the complete lack of any knowledge of the numbers, distribution, ecology and conservation of the element of the population using the central part of the range. The disquieting conclusion was that reasons for this dramatic decline remain completely unknown, certainly the negative effects of habitat loss, disturbance, shooting and increased predation known to be occurring are not sufficient to explain the dramatic declines which appear to have taken place in the 1950s. More likely, changes in staging areas and wintering grounds could have played a major role. Reintroduction and restocking programmes, initiated in Sweden where Lesser White-front goslings are fostered by adult Barnacle Geese, have had some success, but as long as there is a wild population, the Action Plan placed low priority upon restocking as a conservation tool.

However, the emphasis from the entire exercise was the desperate lack of knowledge relating to most aspects of the species' ecology. High priority was

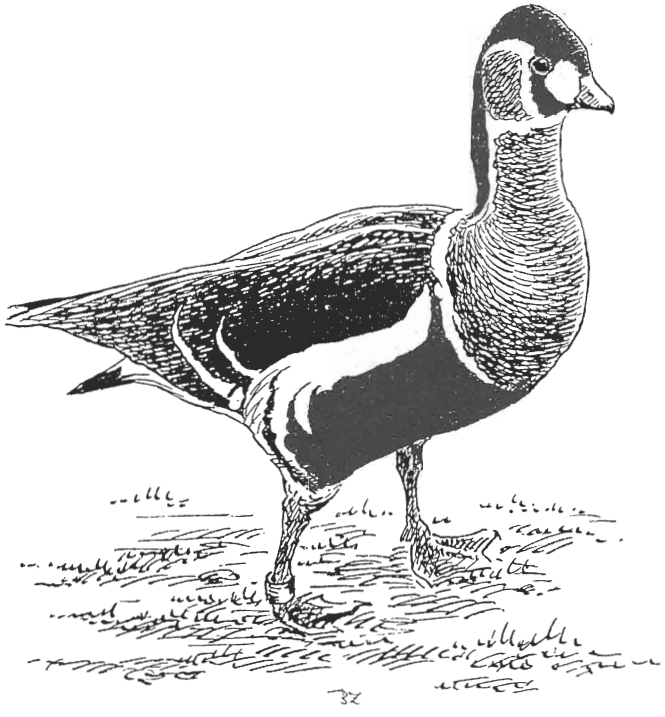
given to location and assessment of key areas, especially in the central part of the range, namely in central Siberia, Kasakhstan and Azerbaijan. Use of satellite transmitters was advocated to locate migratory routes, despite the potential disturbance that capture and transmitter attachment may cause. At this stage, any information on routes and sites used by the dwindling population could give vital information on problems faced by Lesser White-fronts. High priority was given by the Action Plan to minimising kill and disturbance, prevention of habitat loss throughout the range and efforts to increase the conservation profile of the species throughout its range.

The Red-breasted Goose numbers some 70,000 individuals and is numerically less threatened than the Lesser White-front. However, population estimates have been relatively incomplete in recent years, a situation confounded by a massive shift in wintering areas from the Caspian Sea (due to dramatic land-use change and perhaps also to hunting pressure) to the western Black Sea during the 1960s, when a serious decline in numbers also apparently occurred. However, the new wintering areas of Romania and Bulgaria recently adopted by the geese are themselves threatened by changes in land tenure there, as the old large collective cereal farms are converted to small-scale cultivation of cash crops such as vines and vegetables. Such land-use change would be detrimental to the carrying capacity of the area for geese and would affect Red-breasted Geese substantially. In addition, saline lagoons used by the geese in Romania for roosting (being less likely to freeze in severe weather) have been artificially isolated from the Black Sea, and this may have serious consequences for the geese which depend on open water for roosting at night and drinking during daytime. Illegal hunting continues, despite protection for the species throughout its range except in Romania. Its association with other geese (especially White-fronted Geese) renders the Red-breasted Goose vulnerable to hunting disturbance associated with the commoner species as well, perhaps influencing foraging performance, distribution and reproductive success. On the breeding areas, exploitation of oil and gas reserves on the Yamal and Gydan Peninsulas in Russia have led to the abandonment of these parts of the former breeding grounds.

The Action Plan placed high priority upon protection of the bird throughout its life cycle, with special emphasis upon winter feeding habitat and roost sites. Laws protecting Red-breasted Geese from hunting should be created throughout its range and enforced where this is not currently the case. Research needs were manifold, with a particular requirement to assess important spring and autumn staging areas, to derive a better understanding of nutritional requirements and to look in more detail at the association of breeding birds with nest sites of birds of prey and the effects of this on reproductive output. More effort is required to adequately census the population both on the breeding and win-

tering grounds. Much effort was placed upon the importance of international collaboration and the increased public awareness of the plight of the species.

The action planning process has proved extremely valuable in highlighting the gaps in our understanding of threatened species and the problems they face, and shows how vital this can be in setting priorities and establishing clear objectives within an overall framework of activities which can then be used to attract resources for collaborative work of agreed importance. This approach is particularly vital for the Lesser White-front, where the numbers of agencies and individuals involved is great, but the approaches adopted to date have been very different. Faced with the current poor information base and lack of understanding of the reasons for its current parlous plight, it was relatively easy to establish agreed short-term objectives on which to build a longer-term recovery plan. Anyone interested in seeing the text of the Action Plans are invited to write to the coordinators at their host institutions.



Conference report

Anatidae 2000 - a conference held at the Council of Europe, Strasbourg, 5-9 December 1994

After the highly successful IWRB conferences on geese (held at Kleve, Germany 1989) and swans (Oxford, UK, 1990), it was decided that there should be a large gathering of waterfowl specialists organised by IWRB every decade, starting in the 1990s. In addition, IWRB will publish an Action Plan for the world's Anatidae in 1995. This is one of a series of Action Plans being developed for various taxonomic groups under the IUCN Species Survival Commission. These processes formed the focus of this important gathering in Strasbourg, the *Anatidae 2000* Conference, since it offered the opportunity for the gathering together of the world's waterfowl experts to share information and experience. In particular, the conference aimed to structure action plans for the entire group of Anatidae as well as single species action plans for threatened taxa.

The conference was convened by IWRB in conjunction with the Office National de la Chasse and Ministere de l'Environment in France. Its objectives were to draw together experts from around the globe to review and compare current research and management approaches, assess current population abundance, distribution and trends and thence to flag up conservation priorities for the world's ducks, geese and swans. In particular, this information collation exercise was timely in developing a basis for the technical input to the forthcoming African-Eurasian Migratory Waterbird Agreement under the Bonn Convention. The Conference aimed to produce three major outputs from the deliberations, namely conference proceedings (to be published in the journal Gibier Faune Sauvage within a year, containing all spoken contributions), an Action Plan for the Anatidae and the threatened populations, and a set of conclusions and recommendations from the meeting.

The Anatidae Action Plan is basically aimed at summarising population status and offering conservation priorities for all populations of Anatidae, enabling adequate assessment of conservation problems and probabilities for success, to ensure that the limited funding available for conservation is suitably targeted. The drafting of the Action Plan is currently underway, spearheaded by Richard Lansdown and Paul Rose, so anyone interested in the process and keen to contribute to it should contact them at IWRB, Slimbridge. The document will be finalised before the end of 1995, when it will be presented to the IUCN SSC.

Many things of interest to IWRB Goose Research Group members were presented at the meeting, too much to even summarise adequately here. Since the

proceedings will appear in journal form in the near future, we will not extensively survey the information presented, but it is worth mentioning some of the highlights of the meeting.

Rudi Drent presented an excellent synthesis of our understanding of ecological bottlenecks in the annual cycle of waterfowl, concentrating on the migratory pathways of Brent and Barnacle Geese and the close link in time and space with the phenology and distribution of their major food resources. He stressed the important interplay between the distance between the staging areas and the time taken to accumulate reserves ready for onward passage at various critical stages. He very neatly summarised the use of *Zostera* resources by each flyway population of Brent Geese around the globe in spring prior to the final flight to ultimate breeding areas.

It was wonderful to hear contributions from African speakers, albeit disheartening to hear agricultural conflict is not restricted to northern geese - Josiah Katondo described damage to rice fields from Spur-winged Geese *Plectropterus gambensis* and Egyptian Geese *Alopochen aegyptiaca*. Given these and the problems associated with goose-agriculture conflict in South America described by Pablo Canevari from Wetlands for the Americas, there is a clear need to exchange information about agricultural conflict caused by different species in different parts of the world, perhaps broadening the brief of the IWRB Goose Research Group to include species other than the Anseriformes.

Andy Green presented an overview of Globally Threatened Anatidae species as a plenary presentation using recently revised IUCN categories. His synthesis identified 9 goose populations as Globally Threatened, namely: Swan Goose *Anser cygnoides*, Middendorf's Bean Goose *A. fabalis middendorfi*, Thick-billed Bean Goose *A. f. serrirostris*, Tule White-fronted Goose *A. albifrons gambelli*, Lesser White-fronted Goose *A. erythropus*, Ne-ne or Hawaiian Goose *Branta sandvicensis*, Aleutian Canada Goose *B. canadensis leucopareia*, Western Canada Goose *B. c. occidentalis* and Red-breasted Goose *B. ruficollis*. Workshop sessions were subsequently held to develop Species Action Plans for the Red-breasted and Lesser White-fronted Geese (described elsewhere in this edition of the Bulletin).

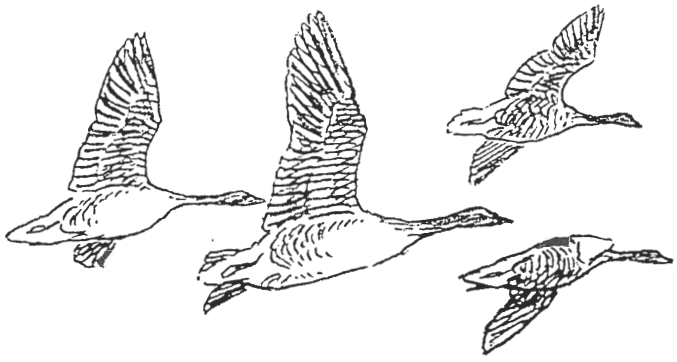
A whole workshop was devoted to geese on the Monday, so plenty of lively discussion was expected. Declines in goose populations in China as a result of habitat destruction and over-exploitation through hunting were outlined by Li Xiaoming which gave cause for concern and underlined the dramatic differences in the fortunes of goose populations in the East Asian flyway compared to those in Nearctic and the Western Palearctic. The impressive overview of status, trends and distribution of geese throughout the world, combining the

might of Messrs. Alexander Andreev, Jesper Madsen and Austin Reed, greatly underlined this disproportionate balance in our understanding and basic knowledge about geese throughout the world. They demonstrated that whilst the largest populations enjoy the best research and monitoring programmes and show the greatest increases (all in North America and the Western Palearctic), the populations of the Eastern Palearctic and Oriental regions are declining, have poor protective legislation and are relatively little known. The news was not all depressing from the East, however! It was good to see distribution and energetics studies of the poorly known Swan Goose *Anser cygnoides* presented by Jianjian Lu from China. The establishment of collaborative projects in Eastern Asia is greatly encouraging, exemplified by the joint programme involving personnel from Japan (Japanese Association for Wild Goose Protection, Taihaku), Russia (Academy of Sciences, Magadan) and the US (National Biological Survey, Lafayette) to restore the East Asian flyway population of Lesser Snow Geese. This species used to breed on the Russia Arctic coast but was subject to over-exploitation and habitat destruction. This type of collaboration, exchanging staff, experience and techniques is clearly an important means of developing our knowledge in these areas and must offer the most optimistic ways forward in the coming years.

A number of national coordinators of the goose counts in the Western Palearctic held an informal lunchtime gathering at the conference, when the idea of an IWRB Goose Research Group meeting to be held in autumn 1995 was presented. Amongst the items discussed were the problems relating to goose counts carried out along the border of countries; specific problems relating to count coverage in individual countries; a proposal for the IWRB Goose Database to publish a manual for national goose coordinators and the Red-breasted and Lesser White-fronted Goose Action Plans. To judge from the enthusiasm and the difficulty of getting through all the business during the lunchtime, there is a very clear need for such a meeting to offer the opportunity to gather and discuss an array of subjects. A meeting is now planned for the autumn in Poland (see details elsewhere in this bulletin).

The whole conference was enlightened by the presence of an illuminated white Mother Goose, donated by the youngest participant, Gwen Fox (age 3 months), which enabled speakers to read their prepared texts. Mother Goose's presence drew comments on the need to increasingly involve young people with wetland conservation issues. The Conference was a great success, despite a few minor problems with the suitability of some of the meeting rooms as venues for the workshops. The conference and the delegates achieved a considerable amount in the limited time they were gathered together, but this was only possible thanks to the considerable oil applied to this effective machine by the organisers, in particular Janine van Vessem and Simon Nash (IWRB) and Paul

Havet (ONC), with their respective teams of helpers. The challenge now is for all the words and knowledge to be channelled into real action. *Anatidae 2000* took great strides towards highlighting the most critical gaps in our knowledge and mechanisms for protection of Anatidae and this will form a very important basis for targeting future conservation efforts.



Conference report

IWRB Goose Research Group Meeting, Lower Odra Valley 3-6 November 1995

While the Goose Research Group Bulletin functions as a very useful mechanism for keeping goose researchers informed about what is going on, there is no real substitute for a proper get-together to stimulate the network and get the juices going!

For this reason, the Goose Research Group has decided to hold an annual meeting, consisting of a relatively informal programme of presentations and workshops. The first is to be held in the Lower Odra Valley, in northwestern Poland, organised locally by the West Pomeranian Ornithological Society and the Swidwie Field Station of the Polish Academy of Sciences.

This location and the timing has been chosen to give the meeting a flavour of the topics to be discussed, being in the heart of the autumn staging area for Bean and White-fronted Geese in Europe. The themes for the gathering include discussion about goose monitoring programmes, delineation of populations and population processes behind the observed trends in overall numbers. There will be a special meeting to give an overview of all monitoring activities in the Western Palearctic, and a day of special workshops. These will comprise workshops on Greylag Geese (chaired by Leif Nilsson proposing a joint western European project), Black Sea monitoring networks (chaired by Stefan Pihl to improve current networks and coverage) and the Lesser White-fronted Goose Action Plan (currently being discussed at the Council of Europe, but in need of implementation - chaired by Jesper Madsen).

All available places have been filled for this meeting, the first of its kind, but we hope that this will become a regular meeting to which everybody, interested amateurs, students, professionals or simply enthusiasts are cordially welcome. There are already invitations from potential host nations for the venue of next year's meeting, so watch this space for more news.

Conference report

SHOCK HORROR: Geese destroy Arctic wetlands as climate shift boosts flocks!

It is not often that arctic nesting geese make it into the British newspaper *THE TIMES*, but it happened on 30 March 1995! Nick Nuttall, the newspaper's Environment Correspondent described how goose populations on the edge of the arctic were booming, causing widespread devastation by turning lush sedge meadows and wetlands into "lifeless mudflats". He was reporting on Dawn Bazely's presentation at the Arctic Conference held at Aberdeen earlier this year. He continued that British and Canadian researchers are "...linking the boom to climate changes which in some areas are causing ice to melt earlier than normal, allowing the geese to grub out the roots of grasses and other plants, or breed earlier". He also noted that declines in hunting and changes in agricultural practice might be involved, but of course makes the important point which perhaps the public is not aware of, namely that increases in wintering geese may threaten the stability of delicate northern ecosystems. Readers of this Bulletin can read about the conference in more sober tones in the proceedings of this special British Ecolological Society meeting, currently in the process of editing.

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We are still keen on incorporating references to grey literature and unpublished reports, which rarely can be found in the most widespread computer databases. For this purpose we need support from all our readers writing such material - so please continue to send suggestions to Preben Clausen at the Bulletin editorial address. Thanks to all who contributed to the present list.

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Boudewijn, T.J. & Ebbinge, B.S. General Review, pp. 39-50.

Boudewijn, T.J. & Ebbinge, B.S. Dutch Wadden Sea in the past and the present, pp. 51-68.

Rösner, H.-U. & Stock, M. Numbers, recent changes, seasonal development and spatial distribution of Dark-bellied Brent Geese in Schleswig-Holstein, pp. 69-85.

Potel, P. & Südbeck, P. Dark-bellied Brent Geese in Niedersachsen: a review of numbers, trends and distribution, pp. 87-96.
Madsen, J. Dark-bellied Brent Geese in the Danish Wadden Sea: numbers and habitat utilisation, pp. 97-101.
Stolk, P. The EU-Birds Directive (79/409), pp. 103.
Stolk, P. The convention on the conservation of migratory species of wild animals (Bonn convention). Draft agreement on the conservation of African-Eurasian migratory waterbirds (AEWA), pp. 104-105.
Stolk, P. The Dutch legislation, policy and management, pp. 107-108.
Postma, P. Zeeburg, pp. 109-112.
Fleet, D. Nature conservation legislation in Schleswig-Holstein, pp. 113-120.
Remijnse, P.C. Reception of Brent Geese on arable land; an experiment, pp. 121-123.
Remijnse, P.C. Geese concentration area Kapelse-Yerseke Moer, pp. 124-125.
Potel, P. & Südbeck, P. Legislation, policy and management in Niedersachsen, pp. 127-130.
Ebdrup, J. Dark-bellied Brent Geese in the Danish Wadden Sea: legislation, policy and management, pp. 131.
Waard, H. de. Geese-accomodation areas, pp. 132-133.
Paassen, A. van. National project on goose damage in agriculture, pp. 134-135.
Waard, H. de. Current problems in the Netherlands, pp. 137-139.
Stolk, P. The regional game damage committee, pp. 141.
Engelmoer, M. & van Dijk, K. The conflict between population management of Brent Geese and new aims in nature conservation, pp. 142-144.
Fleet, D.M. Current problems in Schleswig-Holstein, pp. 145-146.
Potel, P. & Südbeck, P. Outline of the current problems in Niedersachsen, pp. 147-149.
Waard, H. de. Quantitative aspects of damage on Frisian Islands, pp. 150-151.
Madsen, J. Dark-bellied Brent Geese in the Danish Wadden Sea: Management and conservation problems, pp. 153-154.
Dijkema, K.S. Expected developments of the Netherlands saltmarshes and seagrasses, pp. 157-167.
Woudstra, A. Situation of agriculture on the Dutch Wadden Sea Islands, pp. 169-170.
Potel, P. & Südbeck, P. Description of the expected developments in Niedersachsen, pp. 171-173.
Madsen, J. Expected developments in the Danish Wadden Sea, pp. 175.
Remijnse, P.C. Brent Geese in the Dutch Delta area, pp. 177-178.
Mitchell, C., Kirby, J.S., Salmon, D.G. & Cranswick, P.A. Monitoring Dark-bellied Brent Geese Branta bernicla bernicla in Britain 1988-94, pp. 179-188.
Mahéo, R. Brent Geese in France, pp. 189-192.
Nugteren, J. van. Atlantic Brant (Branta bernicla hrota) in the USA, pp. 195-198.
Clausen, P. Active researchers and publications on Brent Geese Branta bernicla in the 1990s, pp. 199-213.

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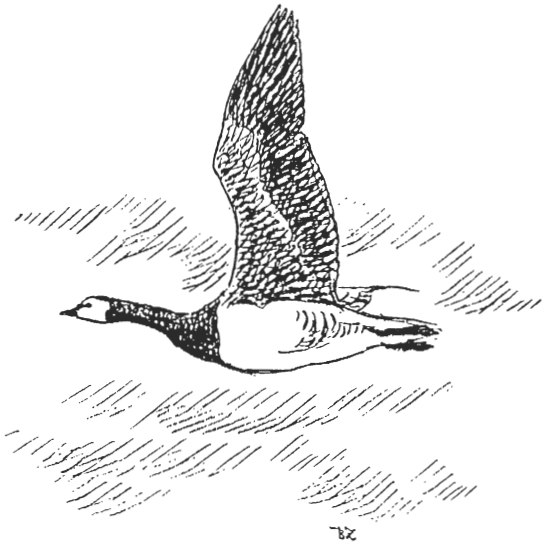

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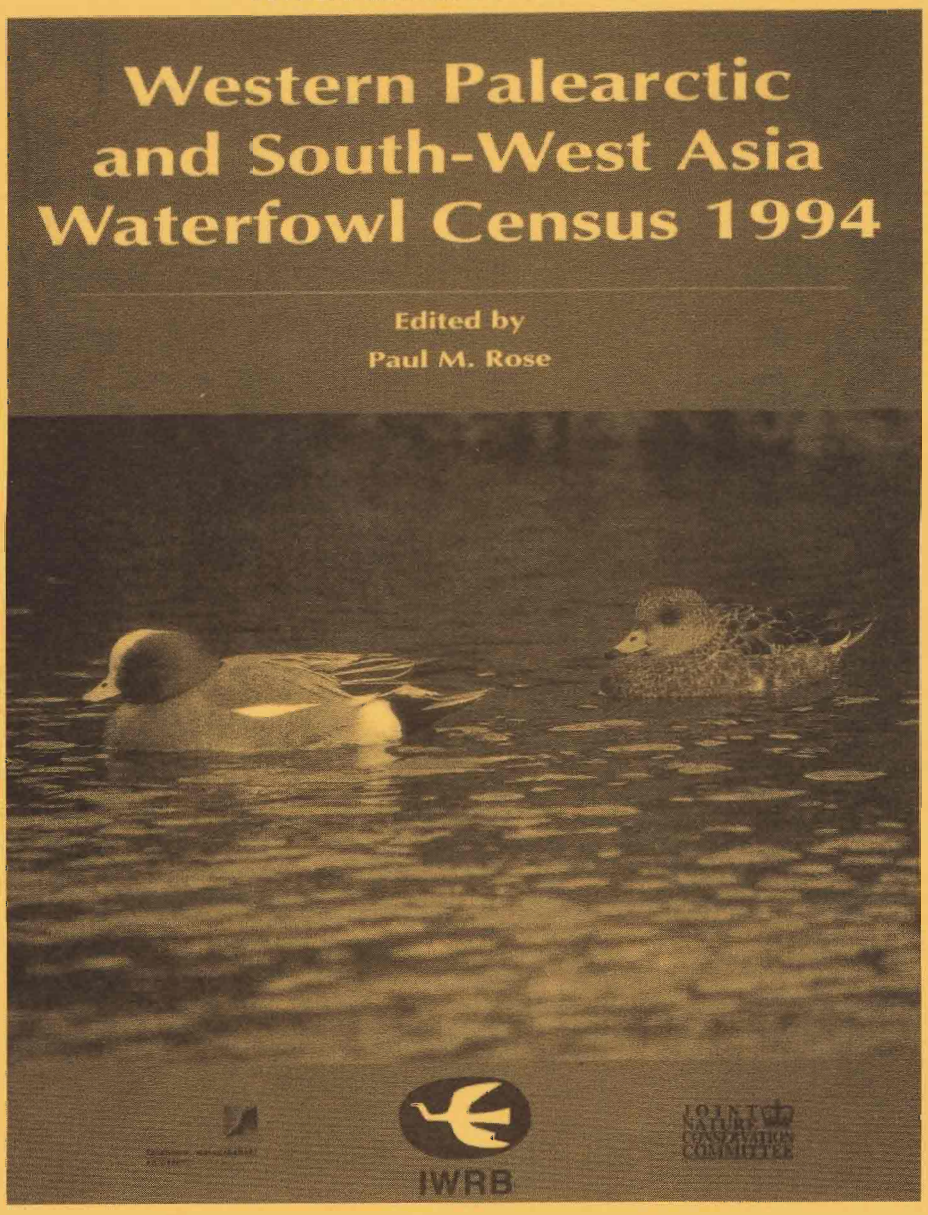

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