

10th Annual Meeting of the Goose Specialist Group of Wetlands International, 26-31 January 2007, Xanten

Lesser White-fronted Goose Workshop, 29th January, 20.00 – 23.00 hrs

Report

Chair: Gerard Boere

Participants: Pentti Alho; Åke Andersson; Tatiana Ardamatskaya; Per Bernhardtson; Sergey Dereliev; Craig Ely; Thomas Gehle; Cy Griffin; Antti Haapanen; Thomas Heinicke; Toon Helmink; Niklas Holmqvist; Lauri Kahanpää; Igor Kostin; Yevgenya Lanovenko; Oleg Mineev; Johan Mooij; Vladimir Morozov; Szabolcs Nagy; Gerard Ouweneel; Axel Paulsch; Lavinia Raducescu; Antonina Rudenko; Paul Schnitzler; Wolfgang Scholze; Markus Schwarz; Ulf Skyllberg; Maire Toming; Didier Vangeluwe; Rainer Warthold; Michael Wink; Sergey Yerokhov;

1) Gerard Boere welcomed the 32 participants and gave a short introduction into the workshop's background with special emphasis at the different positions concerning re-introduction measures. He emphasized that the workshop is for information exchange only and has no decisive status. Nonetheless it is important to update each other on recent findings and developments. The new draft International Action Plan on the LWfG is still under elaboration. By the end of 2006 ORNIS-Committee has decided to await new results especially on the key issue "LWfG-genetics" that shall be presented and discussed at this workshop. Unfortunately, the members from WWF Finland and Birdlife Norway are absent. A report on presentations and conclusions of this workshop shall be taken and forwarded to AEWA and other bodies engaged in finalizing the new International Action Plan. This will be done under the responsibility of the chair of the workshop; a list of participants in the workshop is included in this report.

2) Ake Andersson reported briefly about the unchanged endangered status of the LWfG and the working group's tasks: the need to protect the remaining wild populations as a first priority and be prepared for other actions if the need arises.

3) Michael Wink gave his report (see attached document) on the results of the recent genetic analyses he carried out with a total of 270 LWfG samples (249 LWfG individuals) from breeding stocks in Germany, Sweden and Finland and wild LWfG from European Russia. The combination of the three different analysis methods used, enables identification of individuals with traces of introgression and assessment of genetic diversity of the various captive stocks in comparison with the wild birds. The breeding stocks especially in Germany, but in Sweden and Finland as well, reveal unexpectedly high genetic diversity, almost identical to the wild Russian LWfG. Dr. Wink's conclusion is that the current captive stocks are considered to be suitable for reintroduction after exclusion of hybrids which have been determined with the methods described in his report.

4) Johan Mooij gave reports (see attached documents) on newly discovered LWfG-records in a) Germany (Mooij & Heinicke) and b) Sweden (Mooij & Kampe-Persson, historical data). There are much more records than previously known. These many records seem to support the existence and important role of former and still existing western LWfG-flyways to and through Germany, one of them leading from the former northern Swedish breeding grounds southwards to east Germany and further to Southern Europe. This means in Johan Mooij

opinion (and those of other people) that Lambart von Essen with the Swedish reintroduction project did not create a completely new flyway but restored to a very large extent a former one. The same applies in his opinion to the future international reintroduction project Operation Fjällgas/Operation Lesser Whitefront/Aktion Zwerggans.

5) Lauri Kahanpää presented his mathematical population models (see attached document) about effects of protection measures for LWfG in Europe and European Russia, wild and stocked birds. The models are available at <http://www.piskulkaconf.tk> for everybody's use.

6) Szabolcs Nagy gave a review (see attached document; not yet available, will be circulated afterwards) on the process of elaboration of the new AEWA LWfG International Action Plan and its contents. The current draft is based on the recommendations of the CMS Scientific Council given in 2005.

7) Discussion.

The discussion focussed for most of the time on genetic issues and on the interpretation of the new findings on old LWfG observations/records in Sweden and Germany and whether or not that constitutes evidence for old flyways.

a) LWfG genetics

In addition to Michael Wink's new results on the genetics of captive stocks, Sergey Dereliev reported information on new results of Minna Ruokonen on genetic relationships between the original Fennoscandian and the Western Eurasian birds: 50 % of the males of the extant Fennoscandian wild population have genotype similar to wild west Russian birds.

As a conclusion it could be stated that the original Fennoscandian population does not need to be regarded as a special conservation unit. European Russian origin of a bird is no obstacle for using it in a reintroduction or restocking program in Europe. This may apply also for captive stocks with the same genetic composition as the European Russian LWfG.

It would have been favourable if Michael Wink could have integrated samples from the original Fennoscandian LWfG into his analyses. Unfortunately, it was mentioned that Minna Ruokonen was not willing to provide them for such an analysis. Sergey Dereliev, AEWA Secretariat, is asked by the workshop participants to once more ask Minna Ruokonen about this.

Gerard Boere, once more, underlined the value of looking into the history of the distribution of LWfG and Arctic Anatidae in general and referred to the classic publication by Daan Ploeger (Ardea 1968) on the geographical differentiation of Arctic *Anatidae* during the last ice-ages. This and other data clearly shows that many species with now broken distributions originally had a continuous breeding range or went through a narrow genetic pathway. This has consequences for the interpretation of present genetic information in relation to the present distribution of many Arctic breeding species..

Vladimir Morozov pointed out that possible genetic differences between the original Fennoscandian birds and Russian birds are reasonable, as the Fennoscandian birds are existing on the edge of the species range. Knowledge on the wild Russian populations and their genetics is still poor and should be increased. The workshop participants supported Vladimir Morozov's wish for increased study activities in that area.

The phenomenon of a common mtDNA haplotype, in this case shared by LWfG and GWfG-individuals, is also known from other closely related goose species, i.e. Ross' and Lesser Snow Goose as was the substance of a comment by Craig Ely, Alaska Science Center. It is the result of common ancestors about 10-20.000 years ago and should not be misinterpreted as a recent hybridisation. This is an important remark and may shed some more light on the discussions and the "pollution" of LWfG in Western Europe, with GWF genes.

The new genetic information given by Michael Wink will be used to build up a genetically "clean" breeding population in captivity. The breeders will remove hybrids according to Michael Wink's results. Close cooperation between the breeding stations in Germany, Sweden and Finland, whose birds have completely been analyzed, is planned. A pedigree book on the individuals in these breeding stocks shall be started. Michael Wink is ready to give advise for the breeders on exchange of individual birds in order to optimize genetic variability within the stocks.

Michael Wink's analysis presents information, which may play an important role in the future conservation work. These results have yet not been submitted to a peer-reviewed journal for publishing.

b) LWfG flyways:

The meeting concluded that information with regard to the westernmost part of Europe is probably insufficient to really prove the existence of a former flyway and advised that more historical data from Belgium, Netherlands, France and Spain should be searched for and, if available collected in order to strengthen the conclusions on historical LWfG flyways especially for west/southwest of Germany and western parts of Germany. Historical data from Sweden and eastern Germany are already comprehensive and reliable.

Concerning actual flyways, Thomas Heinicke (Dachverband Deutscher Avifaunisten) pointed out that there are regular observations of LWfG groups with more than 10 individuals in Germany, especially in Eastern regions, which are not taken into account within the actual Action Plan draft. In the last 10 years, a strong increase of LWfG observations in Eastern Germany was detected, due to highly increased observing intensity. There are two regions in Eastern Germany, where substantial numbers were reported:

- lake Galenbeck, lake Putzar (state Mecklenburg-Vorpommern): a flock of eleven birds in September 1995 (together with a satellite-transmitted Norwegian bird; another transmitted bird was lost there in the same period); 5 birds in September 1996, a flock of 15 birds in October 2003.
- Oderbruch with Altfriedland fish ponds, Lower Odra valley + surroundings (state Brandenburg): during last years 5-20 observations annually, with 1 to 5 birds regularly reported; in September 2006 a flock of 13 birds (with young) at Altfriedland fishponds, in October 1986 a flock of 10 birds at lake Felchowsee.

There are further regions in Eastern Germany, where LWfG are seen quite frequently:

- Middle and Lower Havel area, Spreewald area, lake Rangsdorf/Nuthe-Nieplitz lowlands (all in state Brandenburg)
- Northwestern Saxony (Torgau fishpond, areas N + S of Leipzig)
- Lake Neolithteich (state Sachsen-Anhalt); in November 1999, a flock of 28 birds was reported by Leo v.d.Bergh.

It has to be noted, that in late December 1996 a satellite-transmitted Norwegian bird was detected and later on lost in the region of Halle-Leipzig.

During the last 10 years, more than 300 observations of LWfG were reported in Eastern Germany, with most observations during autumn migration (late September, October), few

observations in winter months and a small spring migration peak (February to April). The phenology of LWFG in Eastern Germany is comparable with those LWFG, observed in Hungary.

c) New International LWfG Action Plan draft:

Neither the new information on genetic composition of the original Fennoscandian LWfG given by Sergey Dereliev nor Michael Wink's new genetic results had been available to IUCN and CMS bodies, the Scientific Council in particular, when they made their recommendations for the new International LWfG Action Plan. The workshop participants wish AEWA and other decision making bodies to incorporate these new results, as appropriate, into the new plan. The genetic issue is regarded to be solved to a very large extent. Remains to formulate recommendations on these new findings.

The likely evidence, as provided by Johan Mooij in his paper on historical data from Germany and Sweden, for the historical flyway of LWfG between Northern Sweden and eastern Germany in particular and then further south, could be as well incorporated in the new International Action Plan.

The same with the present regular observations of LWfG groups in Germany, especially in Eastern parts, which are so far neglected in the existing Action Plan draft. Most important regions for LWFG in Eastern Germany should be included in the Action plan, as not all sites are currently protected and in most areas, goose hunting is still allowed.

A High Court decision in the Netherlands on the reintroduced LWfG in Sweden and wintering in the Netherlands forced the Dutch Government to study the distribution of the species and the need to establish reserves. A Regional Court decision in Finland on released LWfG from the Finnish breeding stock took away the charges that a few introduced LWfG can be considered as a way to establish a population of alien species; which is illegal in Finland (and in many other countries). These Court decisions, although different in scope, may also lead to further amendments for the new Action Plan.

The workshop participants agreed that the chair of the meeting, taking responsibility for the final wording, would submit the report of the meeting, with summaries of the presentations, to the AEWA Secretariat for further distribution.