



## Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)

Secretariat provided by the United Nations Environment Programme (UNEP)

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To: The Swedish Environmental Protection Agency  
The Norwegian Directorate for Nature Management  
The Finnish Ministry for the Environment  
The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Date: 06 November 2007

Subject: **Final report from the Lesser White-fronted Goose negotiation mission in January 2007<sup>1</sup>**

Ref.: 07-340-LL

Dear colleagues,

We would like to thank you for the constructive meetings that we had in Stockholm, Trondheim, Helsinki, and Bonn in mid-January and your following contributions to the draft mission report. After this round of discussions we are close to reaching some compromises and we are more confident that the international cooperation between all parties for the conservation of the Lesser White-fronted Goose (LWfG) is possible.

In 2005 the AEWA Secretariat launched a species action planning procedure for the Western Palearctic population of the LWfG (commissioned to BirdLife International) to supersede the existing Single Species Action Plan (SSAP) (approved in 1996 by the Bern Convention and the EU), which is largely outdated and does not reflect the current realities and needs for the conservation of the species. In addition, for a number of years there has been a conflict amongst the key players, notably in Fennoscandia, over the captive breeding and introduction of LWfG in modified flyways. The major reason for that is the discovery of alien genes from the Greater White-fronted Goose in the Swedish captive stock, from which originated the free-flying flock, which breeds in the Swedish Lapland and winters in the Netherlands. Hybridisation has also been occurring between released LWfG and Barnacle Geese, the latter were used as foster parents to lead LWfG from Sweden to wintering areas in the Netherlands. The new SSAP should ideally lead to resolving this crisis and provide an agreed and respected platform for international action.

The AEWA LWfG SSAP drafting process started with an expert workshop in early 2005, hosted by the Finnish Government. No agreement between the experts was reached over the contentious issue of genetics and the consensus was to request the CMS Scientific Council as an independent body to provide advice. The Scientific Council approved a set of recommendations at its 13<sup>th</sup> meeting in November 2005 and on that basis, the first draft of the SSAP was finalised. In the course of the SSAP consultation process with the Range States, the AEWA Secretariat received supportive statements for the draft plan from Norway and Finland, and an opposing one from Sweden. For the EU member states the consultations were undertaken at the level of the Ornis Committee, but they reached no agreement either. As of the end of 2006 the process of the species action planning reached a dead end.

The goal of the mission of the AEWA Secretariat (Bert Lenten and Sergey Dereliev) in mid-January was to meet on a bilateral basis with representatives of the governments of Sweden, Norway, Finland and Germany and to negotiate an agreement, based on compromises over amendments in the draft Single Species Action Plan (SSAP) for the Lesser White-fronted Goose (LWfG), which would make it acceptable to all Range States. The AEWA Secretariat had prior consultations with the CMS Secretariat and the DG Environment of the European Commission for the purpose and anticipated outcomes of the negotiation mission.



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The AEWA Secretariat approached the National Focal Points for AEWA in each country and requested meetings. The persons we met with in the four countries are as follows:

**15 January 2007, Stockholm, Sweden**

Mr. Torsten Larsson, Mr. Per Sjogren-Gulve, Mr. Peter Orn, (all from the Swedish Environmental Protection Agency) and Ms. Marie Dahlstrom (Ministry of the Environment)

**17 January 2007, Trondheim, Norway**

Mr. Oystein Storkersen, Mr. Morten Ekker, Mr. Arild Espelien, Mr. Terje Klokk (all from the Norwegian Directorate for Nature Management), and Mr. Ingar Oien (Norwegian Ornithological Society)

**18 January 2007, Helsinki, Finland**

Mr. Heikki Korpelainen, Mr. Matti Osara (both from the Finnish Ministry of the Environment), Mr. Timo Asanti (Finnish Environment Institute), Mr. Petteri Tolvanen (WWF-Finland), Ms. Minna Ruokonen (University of Oulu and Chair of the Finnish LWfG Working Group), and Mr. Teemu Lehtiniemi (BirdLife Finland)

**24 January 2007, Bonn, Germany**

Ms. Christiane Paulus (German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)

Below is a summary of the outcomes of the discussions we had, and agreements and compromises that were reached with each party:

**1) Main priority for the conservation of the LWfG**

There was an overwhelming agreement between everyone involved in the discussions that the main priority for the conservation of the species should be oriented towards the wild populations breeding in Fennoscandia and Russia. There is a strong consensus that the draft SSAP should be revised and approved as soon as possible and large-scale activities on the ground in key areas for the wild populations should be launched as a matter of urgency and priority. Some of the countries are potentially interested in supporting the wild populations conservation with necessary resources.

As suggested by Sweden, work on the SSAP should be performed and decisions should be taken in accordance with the commonly accepted scientific code. The work and the reasons for decisions should be accountable and transparent so that they can be subject to scientific scrutiny at any time. The same should apply to weaknesses and uncertainty in data, their analysis and interpretation.

**2) Coordination of the implementation of the SSAP**

As it is suggested by the current draft SSAP an International LWfG Working Group should be established. The AEWA Secretariat proposed that the members of this Group should be governmental representatives from all Range States who are free to bring in their own experts and use their support. It is proposed that the AEWA Secretariat will chair the Group. A detailed ToR for the Group will be developed by the AEWA Secretariat, approved by the Range States and endorsed by the AEWA Technical Committee. So far no party has expressed any objections to this proposal.

Norway has allocated NOK 250,000 to support a position of a Coordinator to be based in the AEWa Secretariat and invites Sweden and Finland to consider co-financing this post and make it full-time. Supervised by the AEWa staff, the Coordinator will be facilitating the Range States in the implementation of the SSAP. A similar approach proved to be very effective with other SSAPs. *(Note: It should be stressed that funds allocated by Norway for the position of a Coordinator for the SSAP will be enough to cover just a part-time position for one year. In order to secure continuous and quality service more funds will be necessary on annual basis in order to have in place a full-time position and optimal operational budget for a number of years. Unfortunately, the AEWa Secretariat with its current human and financial capacity cannot commit to provide coordination of implementation of the LWfG SSAP. As with regard to the chairmanship of the International LWfG Working Group, the AEWa Secretariat could efficiently fulfil this extra duty only if there is additional support staff at the Secretariat (the Coordinator for the SSAP) and supplementary budget for travel to meetings of the Working Group, if the latter take place outside of Bonn)*

### **3) Establishment of a captive breeding stock from wild Fennoscandian birds**

Sweden again strongly called for the establishment of a gene bank from wild Fennoscandian birds in captivity. Sweden also offered to host the captive flock or to support Norway with expertise in setting up a breeding programme. Norway agrees to include a measure in the SSAP, which suggests the establishment of such a captive stock, subject to the conclusions of a feasibility study. They are considering options for doing that and would be interested in working with Sweden. Finland is in agreement.

### **4) Swedish captive breeding programme**

Sweden required support for the continuation of their captive breeding programme. At the meeting Sweden agreed to carry on its captive breeding programme only with birds from the wild (captured in Russia), while the existing captive stocks, from which birds were introduced into the wild in the past, will no longer be considered for any conservation action. The birds of that stock are still kept, but are not bred. The first shipment of eight wild birds from Russia was received in 2006 and another group of six birds was expected in mid-February this year.

Norway and Finland were not against the continuation of the Swedish captive breeding programme as long as it is entirely based on wild birds only.

As stressed by Sweden, using the available demographic data in a simple deterministic Population Viability Analysis (PVA) it becomes evident that the reproduction of the Fennoscandian (Norwegian) population is not enough to compensate for the annual mortality and prevent population from declining deterministically (unpublished). Conservation measures are urgently necessary to increase survival, i.e. decrease mortality, during the migration and overwintering period, which appear to be the bottlenecks for the trend of the Fennoscandian population. Some conservation measures are already ongoing, but more will be necessary, however, their quick success and efficiency are not guaranteed. In this respect, the captive breeding should be acknowledged and seriously considered as a strategy for securing the existence of the species in the wild through supplementation (or reintroduction).

### **5) Swedish free-flying flock**

Currently there are approximately 70-90 free-flying birds, most or all of which are descendants of released individuals from the captive stock, birds of which were found to carry alien genes of the Greater White-fronted Goose. This flock breeds in the Swedish Lapland and winters in the Netherlands. The current draft of the SSAP

suggests, following the CMS Scientific Council recommendation, that the free-flying flock should be captured or otherwise removed from the wild.

Sweden required no removal of the free-flying flock and acceptance of the release of purebred LWfG as a possible approach of reducing the potential risk of alien DNA introgression into the wild populations (so-called “dilution”). Sweden suggested that a discussion on the timing of such releases should be initiated in due time.

Sweden also pointed out, that seven Swedish wild birds were caught and were amongst the founders of the captive breeding stock. They estimated that the fraction of released captive-reared LWfG that might carry alien genes was 5-10% (*Finland stressed that this estimate is based on unpublished preliminary results and only a few individuals; they deem that a more relevant estimate, which was already published, would be 36%, based on the Swedish captive stock (see Ruokonen, M., A.-C. Andersson, H. Tegelström (2007). Using historical captive stocks in conservation. The case of the lesser white-fronted goose. Conservation Genetics 8: 197-207)*). According to the records, wild birds were seen in the area where the captive-reared birds were released a couple of years before the releases started in 1981 (one adult and four juveniles in 1979) and in June 1982 10 birds without rings were also seen (all released captive-bred birds from 1981 onwards were marked with colour rings). Further there are records of several more wild birds observed in areas and counties in northern Sweden different from where the releases took place.

During the course of the meeting Sweden accepted the proposal to undertake, as a matter of priority, a feasibility study for a refinement of the free-flying population. The aim will be to capture the free-flying birds, perform genetic analysis and remove from the wild the apparent hybrids, i.e. those birds, which have showed presence of any alien genes. It is however clear, that the currently available methods of analysis do not allow all hybrids to be revealed. Therefore, no complete refinement is possible, but the partial refinement will decrease the frequency of alien genes and alleviate the problem to some extent. For the actual capture of birds, Sweden may request support from Norway. Any actions with regard to the possible refinement should wait for the outcome of the feasibility study. As part of their study, Sweden will consider mapping breeding and moulting areas and migration routes through satellite telemetry, as well as the financial implications and cost-effectiveness of the actions. In this respect, support from Norway may be requested too.

Norway agreed on the refinement option with the rest of the birds from the free-flying flock remaining in the wild. At the same time they required the establishment of a Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia. This Committee should be a sub-set of the International LWfG Working Group, which includes governmental representatives of Sweden, Finland and Norway, who would be free to bring in their own experts and use their support. The AEWa Secretariat offered to chair that Committee. The Committee should act as a platform for agreed and coordinated action of the Fennoscandian countries with regard to the future of captive breeding and releases into the wild, taking full account of the development of the remaining wild Fennoscandian population. A ToR for the Committee will be developed by the AEWa Secretariat, approved by the three states (Sweden, Norway, and Finland) and endorsed by the AEWa Technical Committee. (*Note: Similarly to the International LWfG Working Group, the AEWa Secretariat would be in a position to efficiently chair the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia only if there is additional support staff at the Secretariat (the Coordinator for the SSAP) and supplementary budget for travel to meetings of the Committee, if the latter take place outside of Bonn*)

Finland also agreed with the compromise accepted by Sweden and strongly supported the establishment of the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia.

### **6) Pilot project for testing the method of reintroduction using ultra-light aircrafts**

The German NGO “Aktion Zwerggans” has initiated the idea of leading captive-bred LWfG, by ultra-light aircraft, along a flyway parallel to the one of the current free-flying flock from the Swedish Lapland, but to the Lower Rhine area in North Rhine-Westphalia in Germany. This would be a pilot experimental two-year project. In 2005 the Swedish Environmental Protection Agency issued a permit, which allows “Aktion Zwerggans” to operate in Sweden on this pilot project. In the pilot project it is planned to use birds from existing captive stocks (the only available at the time when the permit was issued), but the permit requires them to be tested by three different methods for alien genes. However, no current method or even a combination of methods can guarantee that birds do not carry alien genes. It is also not guaranteed that during the flight no birds will deviate and escape into the wild, as it has happened in previous cases. Therefore, the risk of again releasing hybrid birds into the wild still exists.

At the meeting Sweden accepted the option of providing offspring of Russian wild birds from the new captive stock, which is being currently built up. This would require some postponement of the project, by at least three years, because no birds will be available earlier. Sweden was agreeable with the postponement of this pilot project.

Both Norway and Finland welcomed this compromise.

However, Sweden informed that they are not in a position to withdraw their permit, because they will be facing legal and economical consequences, which they would prefer to avoid. They expressed no opinion on if the German government could hold its permit, but highlighted that the project is valuable in providing an alternative and safer migration route and wintering site within the EU and in eliminating the risk of LWfG x Barnacle Goose pair-bonding in the new Swedish captive-bred LWfG.

The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety initiated a consultation in March with representatives of the NGO “Aktion Zwerggans” and the main sponsor of the pilot project Allianz Environmental Foundation. As a result of this consultation, it was agreed that the project will be postponed by three years and during this period it will seek international acceptance and in particular of the results of Dr. Wink’s genetic analysis of captive and wild LWfG conducted in the framework of the project.

### **7) Other issues**

A number of other points were raised, which concern the text of the SSAP. No objections were expressed to the proposed modifications:

- Reference to the BirdLife/EU evaluation of the 1996 Action Plan and conclusions of why the objectives were not achieved;
- Description of genetic impoverishment and inbreeding as a potential threat (*Note: A recent scientific publication suggests that genetic variability in the Fennoscandian population is as high as in the Russian population, thus despite its small size, the Fennoscandian population has no signs of inbreeding (Ruokonen, M., A.-C. Andersson, H. Tegelström (2007). Using historical captive stocks in conservation. The case of the lesser white-fronted goose. Conservation Genetics 8: 197-207); probable explanation of that could be found in another paper concluding that approximately half of the Fennoscandian males have mtDNA haplotypes that are otherwise found in Russian birds, thus suggesting that there is probably a regular influx of male birds from west Russia ensuring gene-flow, which is likely to reduce or eliminate possible harmful effects of inbreeding (Ruokonen, M., L. Kvist,*

*T. Aarvak, J. Markkola, V. Morozov, I.J. Øien, E. Syroechkovsky Jr., P. Tolvanen, J. Lumme (2004). Population genetic structure and conservation of the lesser white-fronted goose (Anser erythropus). Conservation Genetics 5: 501-512));*

- Quotations of the CMS Scientific Council recommendations should remain in the text and the SSAP should provide an audit trail of the process of negotiations and how the agreement over the SSAP was reached; a copy of the CMS Scientific Council recommendation should be appended to the SSAP;
- The SSAP should make a reference to Robert Lacy's proposal in his independent statement for the dilution approach (replenishing the free-flying flock with pure LWfG); a copy of the Robert Lacy's independent statement should be appended to the SSAP.

The AEWA Secretariat would like to make an additional point, which as we understood from our post-mission talks is also supported by other people from the four parties. By now it has accumulated a significant amount of genetic studies dedicated to the LWfG from various scientists, notably most publications and work, yet unpublished, produced by Andersson, Ruokonen, and Wink. However, conclusions of some of these studies seem to be to some extent discrepant or may be even contradictory to each other and thus leading to rather different views implying different conservation strategies. Therefore, we suggest that all available studies should be reviewed and evaluated by an independent population geneticist (or a team) with proper scientific expertise and experience (ideally in molecular DNA analysis of birds, conservation genetics and statistical proficiency). We believe that the conclusions of such an independent evaluation may help to unite the stakeholders around shared views and will be helpful in designing future conservation action.

Following the discussions with each party, the AEWA Secretariat would like to suggest the following eight conclusions, subject to final approval by the four parties, to be laid down in the final draft of the SSAP:

1. The parties agree that the main priority for the conservation of the LWfG is the preservation of the wild populations breeding in Fennoscandia and Russia and that the work on the SSAP and any decisions should follow the code of transparency and accountability so that they can be subject to scientific scrutiny at any time. The parties will be considering support for conservation on the ground along their flyways. Particular attention shall be paid to mortality due to hunting and urgent targeted measures should be implemented to reduce the magnitude of this threat, the success of which shall be promptly and regularly reviewed and evaluated. Supplementation with captive-bred birds should be considered if other conservation measures are not as quickly efficient as needed and should populations continue to decline. As with any other captive breeding, reintroduction or supplementation initiatives this project will be subject to consideration by the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia (*see conclusion 3 below*). The efficiency of conservation measures is to be assessed by the International LWfG Working Group (*see conclusion 2 below*).
2. The parties agree that an International LWfG Working Group should be established, consisting of governmental representatives of all Range States, who would be free to bring in their own experts and use their support. The group will be chaired by the AEWA Secretariat (*efficient chairmanship would be possible only if additional support staff (coordinator for the SSAP) and supplementary budget are made available to the Secretariat*) and will operate in accordance with ToR developed by the AEWA Secretariat, approved by the Range states and endorsed by the AEWA Technical Committee.

3. The parties agree on the establishment of a Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia, consisting of governmental representatives of Sweden, Finland, and Norway, who would be free to bring in their own experts and use their support. The Committee will be chaired by the AEWA Secretariat (*efficient chairmanship would be possible only if additional support staff (coordinator for the SSAP) and supplementary budget are made available to the Secretariat*) and will operate in accordance with ToR developed by the AEWA Secretariat, approved by the three states and endorsed by the AEWA Technical Committee.
4. The parties agree that a captive stock of wild Fennoscandian birds should be established, subject to the conclusions of a feasibility study. The long-term future of all captive breeding programmes will be reviewed by the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia.
5. The parties agree that the Swedish captive breeding programme could carry on as long as it is based on wild birds only. The long-term future of all captive breeding programmes will be reviewed by the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia.
6. The parties agree that the current free-flying flock, breeding in Sweden and wintering in the Netherlands, will remain in the wild, subject to genetic screening and refinement, i.e. removal of apparent hybrids, which will be undertaken following the conclusion of a feasibility study. Further on the dilution with purebred birds is considered a principally viable option. The long-term future of all reintroduction and supplementation programmes will be reviewed by the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia taking full account of, amongst others, the success of conservation actions, including revival of the wild Fennoscandian population, and other pertinent factors. Decisions regarding the Swedish free-flying population should also take into account the conclusions of the independent review and evaluation of available LWfG genetic studies (*see conclusion 8 below*).
7. The parties agree that the implementation of the pilot experimental project of the NGO “Aktion Zwerggans” will be postponed by three years. As with any other captive breeding, supplementation or reintroduction initiatives this project will be subject to consideration by the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia.
8. The parties agree that a review and evaluation of the existing genetic LWfG studies by an independent expert(s) with proper scientific expertise and experience (ideally in molecular DNA analysis of birds, conservation genetics and statistical proficiency) should be undertaken. This work will be commissioned by the AEWA Secretariat to an independent expert(s) selected by the Secretariat too. The conclusions of this independent evaluation will be submitted to the Committee for LWfG captive breeding, reintroduction and supplementation in Fennoscandia and the International LWfG Working Group for their consideration.

All the four parties involved in the negotiations commented on the mission report and its conclusions circulated in late January (first draft), late May (second draft) and early July (third last draft) and their conclusions were incorporated as much as possible in this final report. This final report was agreed by representatives of the four parties.

The Secretariat is grateful for the good spirit of the negotiations earlier this year. We would like to thank you for your cooperation in this respect and we are looking forward to finalising the International Single Species Action plan and more importantly to starting its implementation with the aim to conserve the Lesser White-fronted Goose.

Kind regards,



Bert Lenten  
AEWA Executive Secretary



Sergey Dereliev  
AEWA Technical Officer

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<sup>1</sup> This final report is based on three draft versions of the mission report circulated by e-mail respectively on 26 January 2007, 21 May 2007 and 05 July 2007, which were commented by representatives of the four states (Sweden, Norway, Finland, and Germany). The Swedish Environmental Protection Agency (SEPA) requested some amendments to the version of 05 July 2007. These amendments were clarified between the AEWA Secretariat and SEPA and then agreed with the other three states in bilateral telephone conversations.