



Application for support of the AEWA-RECAP Committee for the implementation of two test-flights in the scope of the Lesser White-fronted Goose-microlight project

1. Introduction

The Lesser White-fronted Goose *Anser erythropus* is an exclusively Palearctic species, originally breeding in the southern part of the tundra and forest tundra in Russia as well as in the northern birch forest and mountain tundra in Fennoscandia. Since the first population estimates of the 1950s, a drastic decrease in numbers was recorded from estimated 100,000 birds (USPENSKI 1965) to less than 25,000 in the 1990s (FOX & MADSEN 1999). During the 1930s, local concentrations of c. 50,000 Lesser White-fronted Geese were recorded in the Western Palearctic (RINGLEBEN 1957) and during the 1950s, this population was still estimated at more than 50,000 birds (USPENSKI 1965), but since the 1990s numbers recorded in this region during midwinter counts never exceeded 10,000. The Fennoscandian population was estimated at more than 10,000 birds in the first half of the 20th century, with only 300–500 birds and less than 50 breeding pairs counted in the 1990s (AARVAK et al. 1996, 1997; SCOTT & ROSE 1996; ROSE & SCOTT 1997; TOLVANEN et al. 1998, 1999, 2000, 2001; FOX & MADSEN 1999; LORENTSEN et al. 1999), and about 20 breeding pairs in 2006 (ØIEN et al. 2007).

The Lesser White-fronted Goose population is the smallest goose population in Eurasia and is among the most endangered bird species in the world. The species is included in Appendix 1 of the African-Eurasian Waterbird Agreement (AEWA) under the Bonn Convention, in Appendix II of the Bern Convention and in Appendix I of the EU Birds Directive.

2. The Lesser White-fronted Goose-microlight project

In spite of its high protection status, hunting on the quite similar looking Greater White-fronted Goose *Anser albifrons* causes high mortality rates in Lesser White-fronted Geese. Complete abandonment of goose hunting would be the best protection measure, but is an illusionary aim for the time being.

2.1. Swedish re-stocking project

The late Lambert von Essen started a re-stocking programme in Sweden in 1981. He decided to avoid the main threats by reviving a nowadays deserted but traditional migration route that is currently safe and leads to safe wintering grounds (KAMPE-PERSSON 2008, MOOIJ et al. 2008). He used semi-domestic Barnacle Geese *Branta leucopsis* as foster parents for Lesser White-fronted Goose goslings, which in this way learned from their foster parents to migrate to safe wintering grounds in Western Europe. With his programme von Essen showed that geese are imprinted on the area where they learn to fly and that young geese must be guided by their parents to the winter quarters. The Swedish re-stocking project founded the only currently expanding Lesser White-fronted Goose population worldwide. Today it consists of about 100–150 birds, migrating to the Netherlands for wintering. Although this project has been very successful, there are some genetic problems. Since 1991 in the range of the Swedish re-stocking scheme, a number of hybrids between Barnacle and Lesser White-fronted Geese were recorded. For this reason the project was stopped in the late 1990s (ANDERSSON & LARSSON 2006; KOFFIJBERG et al. 2005, 2006).

2.2. Re-stocking by help of microlight aircraft

Since a first test flight in 1999, performed by a French team under the lead of Christian Moullec (MOOIJ 2001), the Aktion Zwerggans and its Swedish and Finnish partners intend a re-stocking project for the Lesser White-fronted Goose population in Fennoscandia by using microlight aircraft as foster parents. This method was developed in the second half of the 1980s in Canada by Bill Lishman (LISHMAN 1995). Today it is an approved method used in Northern America, Europe and Asia, adopted already for several endangered bird species, e.g. Whooping Crane *Grus americana*, Trumpeter Swan *Cygnus buccinator*, Bald Ibis *Geronticus eremita* and (supported by CMS) Siberian Crane *Grus leucogeranus*.

In the scope of the microlight Lesser White-fronted Goose project it was planned, within a period of four years, to guide about 100 genetically 'clean' Lesser White-fronted Geese annually from the former breeding areas in Fennoscandia along a traditional migratory route from Swedish Lapland along the Swedish Baltic coast across northern Germany to the Lower Rhine area in western Germany. In the selected German wintering site every year a small number of wintering wild Lesser White-fronted Geese are observed (MOOIJ 1993, 2008 & 2010; HEINICKE & MOOIJ 2005; MOOIJ & HEINICKE 2008).

Along most of the planned migratory route hunting of Greater White-fronted Geese is forbidden. The test flight of 1999 showed that the microlight method has comparable high survival rates as the Swedish Barnacle Goose method without the risk of hybridization, which makes the microlight method a very promising method to save the Fennoscandian Lesser White-fronted Geese from extinction.

2.3. History of the Lesser White-fronted Goose – microlight project.

In the late 1990s doubts rose about the genetic composition of the captive stock of the Lesser White-fronted Geese used for re-introductions (RUOKONEN & LUMME 1999; RUOKONEN 2000, 2001; RUOKONEN et al. 2004) and it was objected that the birds of the re-introduction projects were imprinted on a completely new migratory route. As a consequence all re-introduction projects were stopped until these open questions have been cleared. Based on the results of the 1999 test flight the Swedish Environmental Protection Agency (SEPA) 2005 permitted Aktion Zwerggans to implement a pilot project, consisting of two test flights in 2006 and 2007 with up to 25 captive bred Lesser White-fronted Geese annually.

Project birds must be tested genetically, to guarantee that no birds carrying alien genes will be released. All birds have to be individually marked and their whereabouts have to be monitored. After a thorough review of the results of the pilot project and the comparison of these with the results of the Barnacle Goose method, SEPA will decide if a large-scale re-introduction project by means of microlight aircraft can be permitted in subsequent years.

Due to the outbreak of avian flu in a number of European countries in winter 2005/06 the start of the pilot project was postponed for one year. Based on the results of a negotiation mission of the AEWA secretariat and the subsequent founding of the LWfG RECAP (Committee for captive breeding, re-introduction and supplementation of Lesser White-fronted Geese in Fennoscandia) in 2007 the German Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) requested Aktion Zwerggans and the Allianz Umweltstiftung to postpone the first flight of the pilot project for a 3-years period until there would be a enough offspring of Russian wild birds from the new Swedish captive breeding stock. Although project preparations already were started and widely advanced, out of free will Aktion Zwerggans agreed to postpone the implementation of the pilot project for a 3-years period to reach a general acceptance of the Lesser White-fronted Goose-microlight project within LWfG RECAP.

2.4. Present situation of the LWfG-microlight project

Since the year 2000 Aktion Zwerggans - since 2001 sponsored by the Allianz Umweltstiftung (= German Allianz Environmental Foundation) - tries to implement a follow-up flight of the first test flight of 1999, performed by a French team under the lead of Christian Moullec, in the scope of a science-based species conservation project for the Lesser White-fronted Goose, based on the microlight-method, developed by Bill Lishman in North America.

To realize this aim Aktion Zwerggans:

- discussed the project with all key-players in conservation of the Lesser White-fronted Goose from the beginning of the project in 1999 to reach a general acceptance of the Lesser White-fronted Goose-microlight project. As one of the results of these discussions - in spite of considerable costs - all birds of the German captive breeding stock were genetically tested. Furthermore Aktion Zwerggans analysed historical sources to reconstruct historical flyways of the Lesser White-fronted Goose and several times voluntarily postponed the start of the project (i.e. MOOIJ & HEINICKE 2008, MOOIJ et al. 2008, PEDALL et al. 2008).
- build up a German captive breeding stock, based on offspring of Russian wild birds from East German Lesser White-fronted Goose breeders. The founder birds of this captive breeding population were caught from the wild by Moscow Zoo and sold to goose breeders in the former GDR. All birds were genetically tested and only genetically "clean" offspring of these originally Russian birds were used for breeding and included in the pedigree book of the German captive breeding population, kept by Cottbus Zoo. Because of the former iron curtain between Western and Eastern Europe the birds of this former GDR captive breeding population never had contact or mixed up with the captive breeding birds of Northwestern Europe and represent a genetic cluster close to original Russian birds (e.g. PEDALL et al. 2008).
- developed a specially designed microlight aircraft for the project, gathered and trained a group of volunteers for the implementation of the project, trained experienced volunteer pilots to fly with geese, etc.
- reached a considerable amount of engagement and public awareness for the Lesser White-fronted Goose and its conservation problems in Germany.

Since 2001 the German Allianz Umweltstiftung sponsored the activities of Aktion Zwerggans to protect and re-inforce the Lesser White-fronted Goose population in Fennoscandia. After almost 10 years of annual delays the Allianz Umweltstiftung has withdrawn its continued support for the project in 2009 for legal reasons, but has indicated that they are prepared to finance the project again, if Aktion Zwerggans - at the latest in autumn 2010 - can show a written permission for the start of the project in near future.

The board of the Allianz Umweltstiftung also has decided that if Aktion Zwerggans cannot show such an official written permission to implement the Lesser White-fronted Goose-microlight project until autumn 2010 that the two microlight aircraft, which with financial support of the Allianz Umweltstiftung were especially developed and prepared for this project, have to be sold. The sales revenues have to flow back to the Allianz Umweltstiftung.

3. The future of the LWfG-microlight project

In spite of all delays Aktion Zwerggans still is convinced of the microlight-method as a promising method to re-inforce the Fennoscandian breeding population of the Lesser White-fronted Goose and wants to test the effectiveness of the method by implementing two test-flights.

During a prior meeting of the LWfG RECAP Committee the consensus was reached that the release of Russian birds and their offspring would cause no problems.

So the restart of the LWfG-microlight project after the end of the moratorium in 2010, only seems to be dependent

- of the fact that there has to be sufficient offspring from the Russian birds, like those bred in Sweden, and
- of the fact that the owner of these birds - the Swedish Hunters Organisation - has to be prepared to give offspring of their Russian birds for the LWfG-microlight project.

Aktion Zwerggans will contact the Swedish Hunters Organisation to negotiate about the availability of sufficient offspring of Russian Lesser White-fronted geese for the project.

In the scope of the test-flights it is planned, in two subsequent years, to guide up to 25 genetically 'clean' Lesser White-fronted Geese (offspring of Russian wild birds) annually from the former breeding areas in Fennoscandia along a traditional migratory route from Swedish Lapland along the Swedish Baltic coast across northern Germany to the Lower Rhine area in western Germany (KAMPE-PERSSON 2008, MOOIJ et al. 2008).

Before the start of the migration the project geese will be ringed and partly marked with a (satellite) transmitter. After arrival of the birds in the nature reserve "Bislicher Insel" near Xanten, a core area of the Ramsar site and SPA "Unterer Niederrhein" (Lower Rhine area), the microlight aircraft will be taken apart and the Lesser White-fronted Geese released out of human care. The birds will winter there associated with up to 30,000 Greater White-fronted Geese, wintering there every year. It is expected that the Lesser White-fronted Geese will fly back to Sweden without human help, like the birds from the first test-flight 1999/2000 did. In the scope of the two test-flights the released birds will be monitored on their flight back to Sweden. The monitoring results will be published.

After almost ten years of discussion, data analysis, scientific background research and improvement of the microlight method Aktion Zwerggans is convinced that the method - as well as its scientific background - is considerably improved and would appreciate to get started.

Therefore Aktion Zwerggans applied for an official permission of SEPA to start the project with offspring of Russian wild birds in May 2010 and SEPA allowed this application in August 2010 (see attachment).

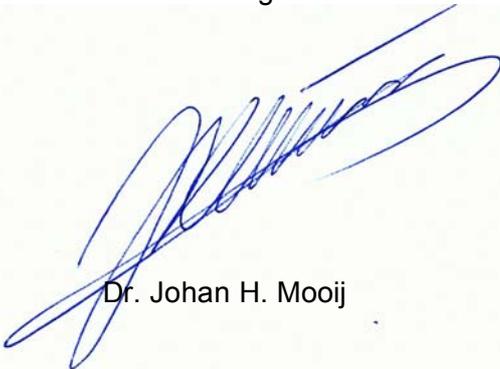
The project is also supported by the LANUV (Environment Agency of North Rhine-Westphalia) (see attachment).

Subsequently - with this letter - Aktion Zwerggans also applies to AEWA's RECAP Committee to support the two test-flights authorised by SEPA.

Aktion Zwerggans would appreciate to receive an official written support for the implementation of the pilot project from the RECAP Committee before late September 2010 in order to be able to negotiate with the Allianz Umweltstiftung about a renewal of the sponsoring of the project by the Allianz Umweltstiftung.

Aktion Zwerggans would enjoy to implement the LWfG-microlight project in close co-operation with all key-players in LWfG protection.

With kind regards



Dr. Johan H. Mooij

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