

THE NORDIC BIRD STRIKE ADVISORY GROUP – A SHORT PRESENTATION

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Abstract

The Nordic countries have almost the same natural environment and climate and cover the same latitudes to a great extent. The bird fauna in the five countries consequently show many similarities and many of the bird populations in northern Europe follow migratory routes, which run through the Nordic countries. The major airline in the region is owned by three of the countries. Furthermore, the Nordic air forces co-operate in many aspects especially within the field of flight safety. Based on all this, the need for a common forum arose, and the Nordic Bird Strike Advisory Group (NBSAG) was established. NBSAG is a supernational advisory organisation dealing with bird strikes and related flight safety problems on airfields as well as in the airfield vicinity, all within the framework of IBSC. Some of the main goals of NBSAG are standardised routines for passing on information about bird movements to aircrew, standardised collection, analysis and presentation of bird strike statistics, establishing local bird strike guidelines and exchange of information and experiences. A much closer co-operation between the airport operators and the airlines is another important goal for the advisory group. A web site for NBSAG will be published later this year.

Key words: advisory group, Nordic bird fauna, migratory birds, standardised methods, co-operation airport operators – airlines

1. Introduction

Before 1995 there was no organised co-operation between the Nordic countries regarding bird strike hazard prevention work and related issues. At that time the Nordic countries only met through the Bird Strike Committee Europe meetings every other year. However, it became more and more apparent that there was a need for co-operation at an intermediate level, between the national and the BSCE levels.

In addition to the traditional multilateral contacts between the Nordic countries, the benefits of co-operation at a supernational level in the bird strike control work are based on the following:

- The Nordic countries have almost the same natural environment and climate and cover the same latitudes to a great extent. As a consequence of this, the bird fauna in the five countries show many similarities. Many bird populations follow migratory routes, which run through the Nordic countries. For instance, the three goose species Brent -, Pink-footed - and Lesser White-fronted Goose all migrate in large flocks through 3-5 of the countries towards their northern breeding grounds [*Figure 1*]. Another example is the Common Crane, which pass through Denmark, Sweden, Norway and Finland [*Figure 1*]. The migration of these large birds represents a hazard for aviation in the whole region.
- The major airline SAS in the North is owned by three of the countries, Denmark, Norway and Sweden, which is an advantage in attempting to find solutions to be accepted by all the Nordic airlines, Braathens, Finnair and Icelandair among others.
- The Nordic air forces cooperate in many aspects within the field of flight safety, inside the Air Forces Flight Safety Committee (Europe). Two of the air forces (RNoAF and SAF) have additional annual meetings.

All this lead to the need of a common forum, and the Nordic Bird Strike Advisory Group (NBSAG) was established.

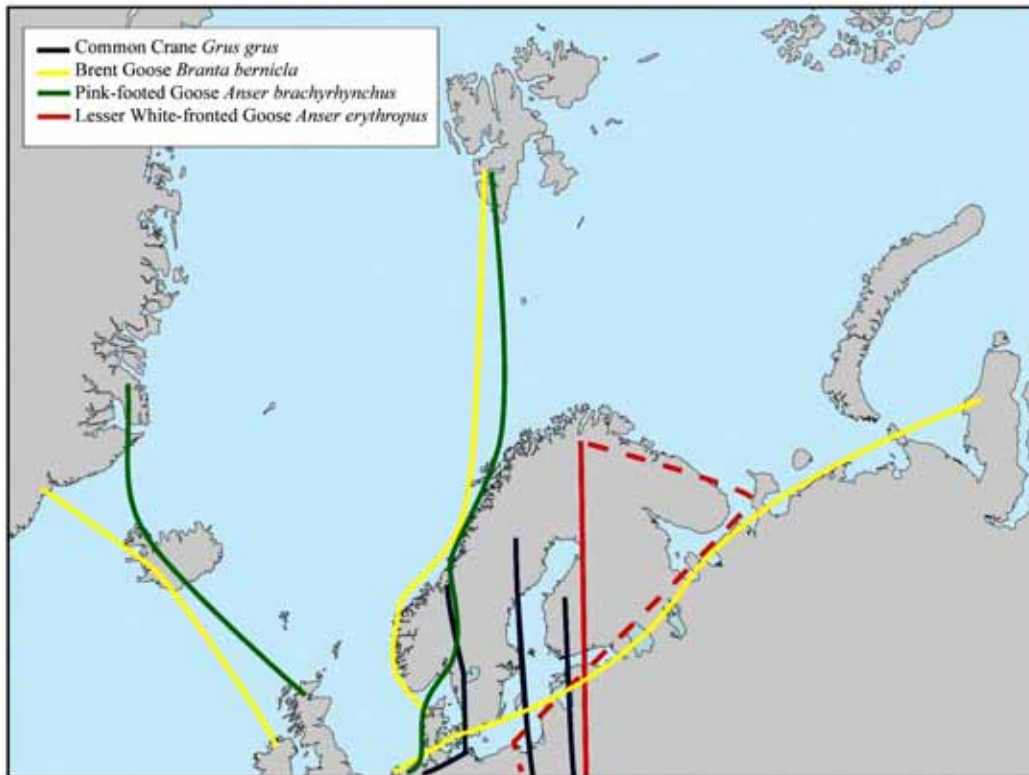


Figure 1. The migration routes of Common Crane *Grus grus*, Brent Goose *Branta bernicla*, Pink-footed Goose *Anser brachyrhynchus* and Lesser White-fronted Goose *Anser erythropus*. Where the migration routes differ between autumn and spring (the Lesser White-fronted Goose), the autumn migration route is marked with a dotted line. (Sources: ALERSTAM 1982, BYE & SANDVIK 1995, Danmarks Miljøundersøgelser & Lunds Universitet 2001, ØIEN & AARVAK 2002, BAKKEN et al. 2003.)

2. Organisation

NBSAG, with members from Denmark, Finland, Iceland, Norway and Sweden, was founded in Helsinki, April 1995, after a period of less formal meetings in 1993-1994. The advisory group meets once a year in one of the countries. Representatives come from the Nordic CAA's, the airlines, the main airports, the air forces and some environmental institutes, i.e. very much the same composition as the IBSC.

As with the IBSC, the NBSAG has only an advisory function, and no formal authority.

3. Objective

The objective of NBSAG is to give advice on how to minimise the risk of collision between aircraft and birds or other animals. This should be obtained by:

- Co-ordination of efforts and ambitions among the Nordic countries,
- Collection of data on bird congregations and movements within the countries and data on bird hazards on and around airports, and analyses of this data,
- Exchange of experiences between the Nordic organisations especially within the framework of IBSC, and
- Propagation of information regarding bird strikes and related subjects.

4. Some results

4.1 Standardised routines for passing on information to aircrew

Nordic Bird Strike Advisory Group is working out standardised routines for passing on information to aircrew. These routines are:

- i)** Local procedures to ensure that information on bird activities immediately are passed on to those responsible for wildlife control at the airport or to ATC,
- ii)** Information on migrating birds, being a potential hazard to aircraft, received by ATC should be passed on to adjacent ATC units,
- iii)** ATC should pass on information described above to the aircrew operating on or in the vicinity of the airport, and
- iv)** Information about persisting and dangerous bird activity in critical zones should be incorporated in the ATIS if such service is provided.

These routines were necessary, as the flow of information was inadequate earlier.

4.2 Standardised collection, analysis and presentation of bird strike statistics

A standardisation of collecting, analysing and presenting bird strike statistics has been agreed upon in the NBSAG. This standardisation implies that the following elements are included in the statistics: i) the size of the bird(s), ii) the site of the strike in relation to the airport, iii) the number of birds hit, iv) the month of occurrence, and v) the bird strike rate. Two examples from Copenhagen and Oslo airports are shown in *Figures 2a and b*.

4.3 Local bird strike guidelines

A set of local bird strike guidelines was established in order to complement the authorities' regulations regarding bird control at the airports. The intention behind the guidelines was to stimulate the airport operator to establish and document a Bird Strike Prevention Program at the airport and to take appropriate actions. The guidelines recommend that the Bird Strike Prevention Program include information on responsibilities, on qualification of involved people (such as shooting license etc.), on methods used, on known risks with the work, and on documentation of the work.

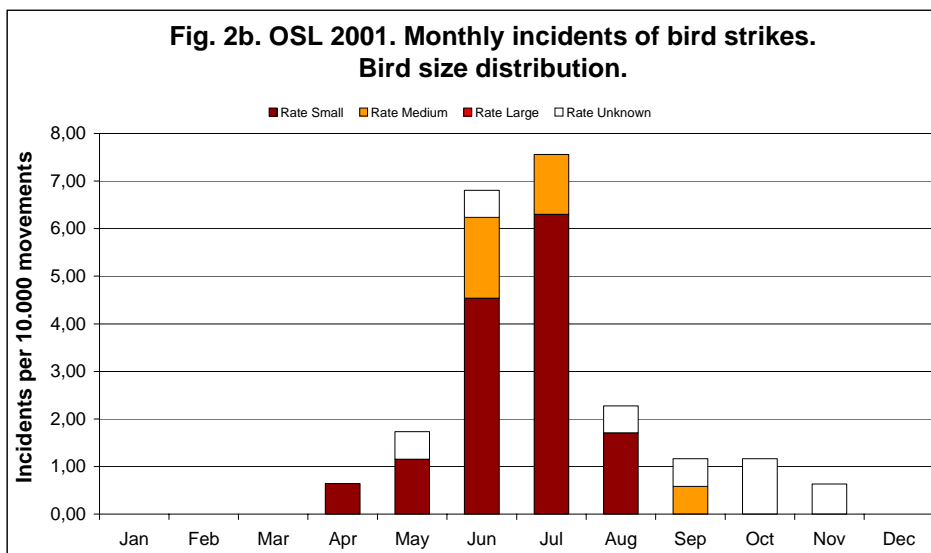
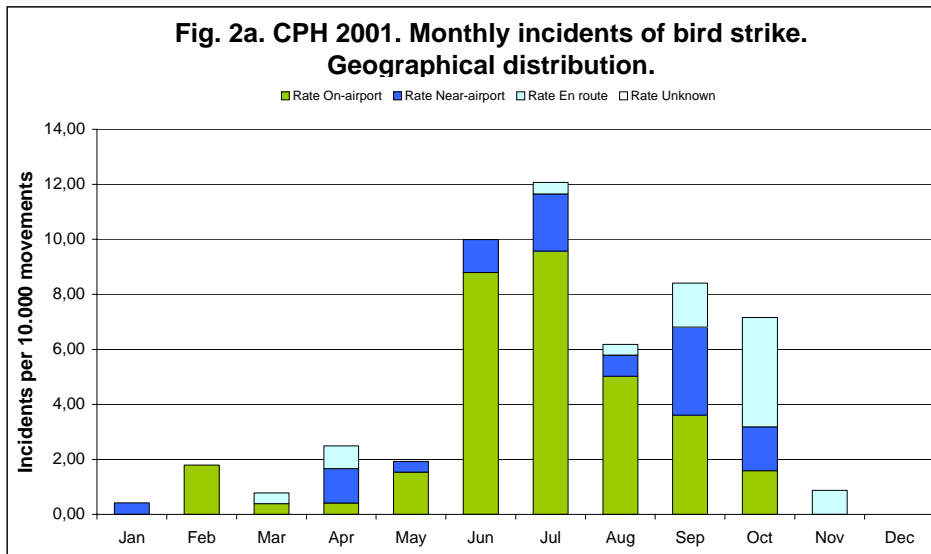
4.4 Exchange of experiences

At the NBSAG meetings the airports give information about their work to prevent bird strikes. With this exchange of experiences the effective methods can be recommended to others.

For example, the permission to shoot birds at airports as a bird control method varies much between the countries. In order to maximise the effect of bird control, the experiences with the method above are discussed within the NBSAG.

4.5 Closer co-operation between the airport operators and the airlines

Since the start of the advisory group, there has been a much closer co-operation between the airport operators and the airlines. This has led to a better understanding between the two sides.



5. Future goals

- To influence the Nordic authorities in bird/aircraft issues.
- Developing contacts with IBSC and other bird strike committees.
- To investigate the Nordic air forces' needs to involve in Bird Avoidance Models from the United States.
- In order to facilitate communication between the partners and to focus on the necessity to co-ordinate the efforts to achieve the group's objectives, NBSAG will publish a web site later this year. A web site will also give the public a view into the work and results of the group.
- To produce a Nordic bird strike report including the main Nordic airports.

6. Acknowledgements

We are grateful to Mogens Hansen for working out the bird strike statistics in *Figures 2a and b* and for drawing the figures. We are also grateful to Vidar Bakken for drawing *Figure 1*.

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