

WP 33.

14th Meeting
Bird Strike Committee Europe
22-26 October, 1979
The Hague, Netherlands.

BIRD CONTROL AT HELSINKI-VANTAA AIRPORT, FINLAND

Seppo Kuusela¹⁾ and Olavi Stenman²⁾

This paper provides preliminary information about bird control measures taken in 1978-79 at Helsinki-Vantaa Airport, Finland.

- 1) Helsinki-Vantaa Airport, P.O. Box 22, SF-01531 Helsinki-Vantaa-Lento.
- 2) Finnish Game and Fisheries Research Institute, Game Division, Unionink. 45 B, 00170 Helsinki.

Introduction

Compared with many other European countries birds have presented few problems to air traffic in Finland. Three or four of the 87 bird strikes reported in 1970-78 had a serious effect on the aircraft. Most of these incidents occurred at the main international airport, Helsinki-Vantaa. In the 1970s, 2-5 incidents were reported here yearly. These involved the following species: herring gull, black-headed gull, black grouse, and starling. In addition to these species, more than 30 other species are considered to pose a potential hazard to air traffic. The two most serious incidents to date happened in 1978. On June 11th and July 22nd, a DC-8 and a Caravelle, respectively, were damaged by gulls. The damage cost approx. U.S. \$ 250 000 to repair.

Control

Before these two serious incidents The Finnish National Board of Aviation had set up a working group to plan a bird control programme. Quite naturally, however, bird control at Helsinki-Vantaa Airport was stepped up considerably as a result of the incidents. The following measures were taken:

- 1) A bird strike committee was established at the airport on January 9th, 1979, consisting of 10 persons representing:
 - Airport Authority Traffic Manager
 - Air Traffic Control
 - Fire Department
 - Traffic Area Maintenance
 - Finnair Flight Department
 - ornithological experts (the Zoological Museum of the University of Helsinki and the Game Division of the Finnish Game and Fisheries Research Institute).

The committee has had meetings at 1 to 2 month intervals. It has also sent a representative to airports in Sweden and Denmark to get information about the local bird control systems.

Vahoud Garbage
Dump

Antenna

- 2) Car patrolling was made regular after the first serious incident. A shotgun with either live or blank ammunition is used. The airport has a permission to shoot protected birds if necessary.
- 3) Measures were taken to make the airport environment less attractive to birds (as well as to white-tailed deer and moose) by thinning the forests, filling in ponds and keeping the grass relatively high (15 to 30 cm).
- 4) Co-operation with other authorities has been improved. A committee has tried to influence the use of land area in the airport vicinity by issuing statements and taking part in negotiations. This mainly concerns the management of the dump situated 4 km north-west of the airport and the running of the two fur farms (one of which is 2 km and the other 6.5 km from the airport).
- 5) Some of the dispersal methods used abroad (herring gull distress calls, leaving dead gulls near the runway) have been tested.
- 6) Co-operation with the hunting clubs in the airport vicinity has been stepped up.
- 7) An ornithological study at the airport and its surroundings was started in spring 1979. The field study is carried out by a full time ornithologist.
- 8) In the Helsinki archipelago, herring gull eggs were sterilized more effectively than in the previous spring.
- 9) In addition, adult herring gulls on the largest garbage dump in the Helsinki region were trapped and killed after their breeding season.

Results and conclusions

In 1978, more than 1000 herring and black-headed gulls were shot at the airport. The number for this year is smaller, because the gulls tend to avoid the airport area. In addition to shooting, other dispersal methods have been adopted. Blank ammunition used in shotguns has proved to be an efficient method of driving off birds. Over 90 per cent of the herring gull reproduction in the Helsinki archipelago (where there are approx. 6500 breeding pairs) has been prevented by sterilizing the eggs. On the dump, 1500 herring gulls have been caught with gull traps; however, the ringed individuals were released. On the other hand, poisoning (e.g. by alphachloralose) has not yet been considered an appropriate means of control.

The measures taken have clearly improved the situation. In summer 1979 the bird activity was noticeably less heavy than in the previous summer at Helsinki-Vantaa Airport. However, maintaining an acceptable level of safety at the airport requires the continuation and development of bird control measures. It is also very important to continue long-range schemes for making the airport and its surroundings as unattractive to birds as possible.