VII Finnish-Estonian Ornithological Congress

The seventh Finnish-Estonian Ornithological Congress was held in Helsinki on 24–25 October 1986. The congress is described in detail in this issue, in a Finnish article by Pertti Koskimies. In order to facilitate communication with readers of Ornis Fennica abroad, we are publishing the abstracts of the Estonian papers in English. The abstracts have been prepared on the basis of the Finnish texts of the Estonian papers by a number of Finnish ornithologists, to whom I express my gratitude: Antero Järvinen, Mika Kilpi, Pertti Koskimies, Hannu Pietiäinen and Torsten Stjernberg. – OJ.

Bird monitoring in Estonia: aims and results

Vilju Lilleleht

Institute of Zoology and Botany, Vanemuise St. 21, SU-202400 Tartu, Estonian SSR.

The use of birds as a tool in environmental monitoring in Estonia became more official in the late 1970s. The nation-wide ornithological projects have been reorganized by the Ornithological Laboratory of the Institute of Zoology and Botany in the Academy of Sciences of the Estonian SSR. The total number of professional ornithologists working in different research stations and nature conservation areas amounts to 15–18. In addition, there are about 400 voluntary bird-watchers able to participate in different monitoring projects.

There are over 10 main bird monitoring projects in progress in Estonia at present. The collection of phenological material, including, for example, the occurrence of irruptive species, began in 1922, and nest-cards (about 600 per year) have been gathered since 1958.

The most extensive bird survey made in Estonia so far has been the bird atlas project carried out in 1977–82 with the help of over 400 field workers. A second atlas will be prepared in 1985–88.

The breeding birds have been censused in the western archipelago in the 1950s and 1960s and on the coast of the Gulf of Finland in the 1970s. The most extensive study of the breeding bird fauna on lakes was made in the 1950s. Wintering waterfowl populations have been censused since 1967.

Monitoring land bird populations by point counts began in 1983 (Kuresoo, this issue). There are also some special projects, e.g. censusing of mire birds in the Nigula nature reserve since 1968. Mires (peat bogs) cover 20% of Estonia, and a thorough review of their bird fauna was compiled in the 1950s. Birds breeding in forests and agricultural areas are poorly known. Breeding bird populations in the nature reserves in Matsalu, Vilsandi and Nigula have been monitored most intensively in recent years.

Some bird species have been monitored in special projects since the 1950s. These include the Heron *Ardea cinerea*, Black Stork *Ciconia ciconia*, White Stork *Ciconia ciconia* (Veromann, this issue), Mute Swan *Cygnus olor* (Renno & Paakspuu, this issue), Greylag Goose *Anser anser*, Eider *Somateria mollissima*, White-tailed Eagle *Haliaeetus albicilla* (Randla & Tammur, this issue), Golden Eagle *Aquila chrysaetos*, tetraonids, Crane *Grus grus*, Eagle Owl *Bubo bubo* and Rook *Corvus frugilegus*. Results of long-term studies of the population dynamics of the Tufted Duck *Aythya fuligula*, Common Gull *Larus canus* (Rattiste & Lilleleht, this issue), Great Tit *Parus major* and Pied Flycatcher *Ficedula hypoleuca* (Vilbaste & Leivits, this issue) can be used for monitoring purposes, too.

The numbers of migrating Barnacle Geese *Branta leucopsis* (see Leito, this issue) and Swans *Cygnus* have been monitored for years. Passerines have been ringed intensively during both breeding and migration. The total number of birds ringed annually in Estonia is over 100 000.

The Estonian ornithologists have developed their bird monitoring system in close co-operation with their Latvian and Lithuanian colleagues, e.g. by standardizing the field methods. The main objects of the projects are the structure and dynamics of bird populations throughout the year, and also the accumulation of biocides and other chemical compounds in birds. The special monitoring projects include bird species with different ecological properties, to permit comparison between them in interpreting the results. The monitoring should cover as many species as possible, not only possible indicators of special environmental changes.