

Land bird population changes in Estonia and Finland in 1983–85

Andres Kuresoo

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

The point counts for monitoring changes in land bird populations began in Estonia in 1983. Our method is similar to that used in Finland since 1984, and enables us to compare the Estonian results with the Finnish ones, which have been based on both point counts and line transects. In forests we census the same routes twice during one breeding season, as opposed to the single count used in Finland.

The total number of point count routes in Estonia was 34 in 1983, 38 in 1984 and 49 in 1985, over 70% of them in forests. From 1983 to 1984 many bird species increased in numbers or remained at the same level. This increase continued from 1984 to 1985, even in many species wintering in Estonia, in spite of the severe winter of 1984/85.

The population fluctuations seem to be greater in Finland than in Estonia in quite a number of bird species (see Fig. 1). Finland lies at the northern edge of the range of many southern species. In many

partially migrating species (e.g. the Great Spotted Woodpecker *Dendrocopos major* and the Goldcrest *Regulus regulus*) the northern populations decreased from 1984 to 1985 but the southern ones remained stable or increased, perhaps due to different winter mortality and/or food availability.

The population indices of the long-distance migrants were fairly similar in Estonia and Finland in 1984–85. The same is true of the short-distance migrants in Estonia and South Finland, but towards the north the amplitude of the fluctuations seems to increase.

Our comparisons show that the value of the monitoring results is enhanced when data are available from larger areas. In addition to monitoring, we could study many kinds of problems in the fields of biogeography and migration, if we had closer co-operation and comparable methods on either side of the Gulf of Finland.

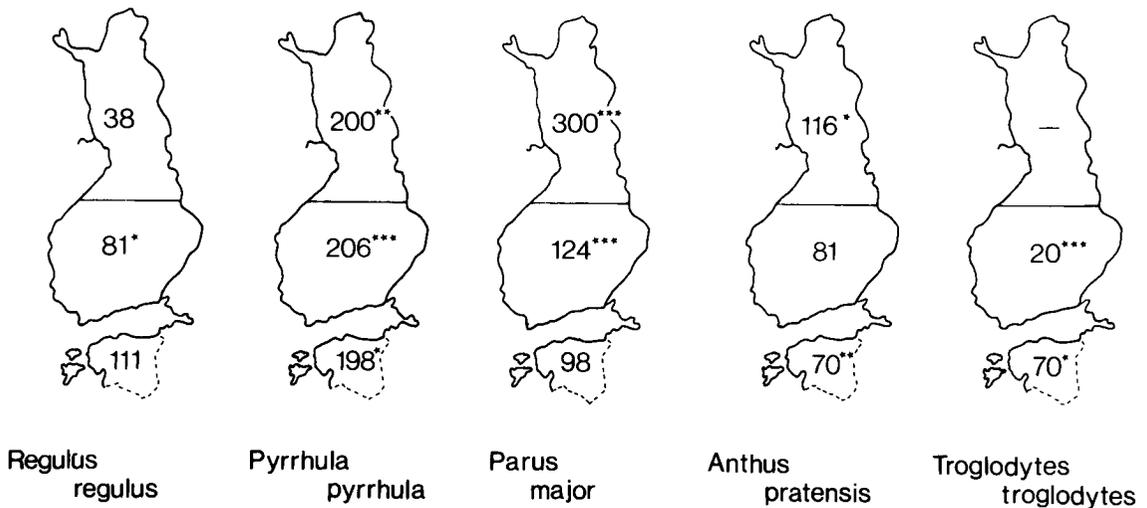


Fig. 1. Population trends of five passerines in Estonia and Finland in 1984–85. The index for 1984 = 100 for all species; index values below 100 thus indicate a decrease from 1984 to 1985, whereas index values exceeding 100 suggest an increase. Asterisks indicate statistical significance. The Finnish data are from Hildén & Väisänen (1986, *Lintumies* 21:115–125).