

Selostus: Pesimispuuhissaan vajavaisesti käytäytyvä peippo

Kesällä 1981 havaitsin Taipalsaarella peipon yrittävän pesimistä kuistin katonrajassa sijaitsevien lokeroiden nurkkiin. Naaras herätti huomiota hermostuneella kävelemisellään (lintu ei koskaan liikkunut hyppimällä). Lintu tutki lokeroita satumanvaraisesti tehden nurkissa pyöriviä liikkeitä, jotka normaalissa pesänrakennuksessa olisivat sen alkuvaiheessa merkinneet pesäpaikan soveltuvuuden testausta ja myöhemmin auttaneet hämähäkin seitin kiinnittämistä tulevan pesänrakennusaineksen kiinnikkeeksi. Vähitellen naaras keskitti pesänrakennuksensa yhteen nurkkaan, mutta aina naaraan lennättäessä hakemaan uutta pesäainesta, äsken tuotu tukko putosi kuistin lattialle. Noin 18 päivää — tämä on muuten sama kuin pisin tunnettu peipon pesäntekoon käyttämä aika — kestäneen puuhastelun seurauksena kuistin lattia täyttyi pesäaineksesta, mutta pesimähyllyt olivat lähes tyhjä. Peipponaaraan itse pintainen "pesänteko" selittynee sillä, että lukuisten houkuttelevien ja samanaikaisesti näkyvien pesänurkkausten aiheuttama ärsyke oli liian voimakas. Ratkaisevasti naaraan epäon-

nistumiseen vaikutti kyvyttömyys käyttää hämähäkin seittä sidosaineena; on mahdollista, että sekä tämä kyvyttömyys että outo liikkumatapa palautuisivat johonkin keskushermoston häiriöön.

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Commemorating the centennial of Einari Merikallio's birth

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Einari Merikallio (born 29 February 1888, deceased 8 January 1961) promoted the study of Finland's avifauna more than anyone, since J.A. Palmén, and pioneered a new approach to exploring bird distributions (Anon. 1958, 1961). Merikallio's quantitative estimation of the pair numbers of terrestrial birds in Finland facilitated the study of the ranges and habitat distributions of each species in a novel way. Also, his work provided an incomparable asset for future studies of bird population changes.

Merikallio was born in Oulu. He acquired his M.Sc. at the University of Helsinki in 1912, majoring in zoology. His M.Sc. thesis examined the bird fauna in the archipelago between Oulu and Ii in the Bay of Bothnia. Merikallio mainly worked in the field of education: he taught biology in Riihimäki, Helsinki and Kerava in 1913–24 and was the headmaster of a secondary school at Kerava in 1925–55. He was also an athlete — Merikallio was even nominated to the Finnish team of gymnasts for the London Olympics in 1908 (his studies, however, prevented him from

participating); and he was a devoted choir singer and a keeper of a kennel for a special Finnish breed of dog (for additional details, see Vainio 1962, Nurminen 1982, Sampola 1982). Merikallio acquired his Ph.D. in 1946, and he was appointed Professor *honoris causa* in 1958. Merikallio was long active in the Finnish Ornithological Society; Vice-president in 1924–55 and President in 1956–60. In 1924–40 he was the co-editor of *Ornis Fennica*, at first together with Ivar Hortling and later with Pontus Palmgren.

Merikallio thoroughly studied the composition of the breeding bird fauna in different parts of Finland. He promoted amateur ornithology through his popular books on Lake Äyräpäänjärvi, on the Karelian Isthmus (Merikallio 1929) and on the island group of Heinäsaaret, along the Arctic coast (Merikallio 1924, 1939). Being one of the first bird photographers in Finland, Merikallio illustrated his books himself. He also assembled a notable egg collection that is now deposited in the Zoological Museum of the University of Oulu along with Merikallio's archives. The

Archives include field notes made by Merikallio and numerous other observers, and the Finnish ornithological literature published during Merikallio's life, ordered species by species.

Merikallio's first more extensive scientific paper (1921) examined the faunistic composition of the birds of Oulanka, Kuusamo. The early studies on the sea birds of the Bay of Bothnia only reached the manuscript level (1930). Later, in 1939, Merikallio returned to the Bay of Bothnia and estimated the bird numbers in the sanctuary of Krunnit, Ii (Merikallio 1950), which has given rise to several later comparisons (Väisänen & Järvinen 1977, Helle & Helle 1979, Helle et al. 1988).

Merikallio's censuses of land birds were initiated in the lush spruce forests of Törmävaara, Tervola — near the Arctic Circle — where, in 1915, he estimated the numbers of breeding birds in a study plot of one square kilometre (Merikallio 1917; see also Rauhala & Väisänen 1986, Väisänen et al. 1986). This was the first extensive study of breeding land birds in Finland, and one of the earliest in the whole world. Merikallio crisscrossed the area and recorded the numbers of the scarce breeders. The most abundant species were classified in the botanical style as "abundant", "fairly abundant" etc., but on his way back he decided to drop this convention and use unequivocal numbers rather than subjective verbal terms. Merikallio made similar "study plot" censuses in different parts of Finland in 1915–29.

Since 1916 Merikallio started increasingly to use the line transect method because, in his opinion, it gave a more representative sample of the area and was therefore a more solid basis in calculating estimates of bird numbers. Transect length was estimated using a map or by pacing, and the width of the transect was estimated using the eye. Transect width varied with vegetation, but also with the weather, from 20 to 50 m on both sides of the observer. Usually Merikallio also recorded birds observed outside the transect, estimating their distance from it. These data were used for estimating the abundance of scarce birds.

Even though the censuses made by Merikallio in 1915–29 were extensive, they were of a preliminary nature: not all were strictly timed to early mornings, or to early summer. Besides, the transects were often made in easy terrain, not infrequently along paths and small roads. Merikallio made little use of these data in his later publications (but see Merikallio 1951 and also Järvinen & Väisänen 1979).

It seems likely that the 54-km long transect censused by Olavi Kalela in 1936 rekindled Merikallio's



interest in transects. Kalela's transects were 40 m wide, Merikallio's 50 m wide, but otherwise Merikallio's new transects followed Kalela's (1938) method. Kalela's impact on small mammal research in Finland — and even internationally — is well known, but he should also be remembered as a developer of Finnish line transect censuses.

In 1941–56 Merikallio expanded his transect work to include the whole of Finland. The first results constituted his Ph.D. thesis (1946), analysing the distribution and numbers of land birds breeding in eastern Finland. For a nearly 60-year-old school headmaster this thesis, written in addition to his daily work, was an impressive achievement. Some themes in the thesis were later pursued in more detailed studies: the effects of the climatically warm period of the 1930s on the distribution of southern and northern species in Finland (1951), and the zoogeographic regionality of the Finnish avifauna (1955a, 1955b). His work culminated in two books on the distribution and abundance of Finnish birds, first in Finnish (1955c) and then — on the basis of more than 1000 km of line transects — in English (1958). My first comments in this article particularly refer to

Merikallio's magnum opus of 1958. I quote Olli Järvinen's (1982) words on Merikallio: "The key to his success was undoubtedly his untiring fieldwork: even the most exciting ideas will prove false, but the value of extensive data sets collected using well-defined methods is permanent."

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I met Merikallio only once, as a schoolboy when I was one of the guides on an excursion in northern Finland, during the International Ornithological Congress in Helsinki, in 1958.

When I close my eyes, I remember the early warmth of June on vast open mires we visited. A mild breeze on my face, never ceasing. The peat with its characteristic strong odour; odd groups of Broad-billed Sandpipers displaying above fathomless pools; a Hen Harrier attacking the intruders at her nest; the melancholy song of the Brambling in the bluish forest islands of the mire.

Alongside the silver-haired Merikallio I plodded, innocently unaware of how he had lighted the path now dawning ahead of me.

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