

Tiedonantoja • Brief reports

An account of a small population of Hawfinches

LARS VON HAARTMAN

The Hawfinch *Coccothraustes coccothraustes* is considered one of the rarest breeding birds in Finland. In 1971, v. HAARTMAN et al. (Pohjolan linnut, Helsinki 1963—72) listed only 8 nests, all of them from S Finland. It was uncertain whether the Hawfinch nests regularly in the country. Furthermore, the species was considered to be decreasing in numbers rather than increasing.

At Lemsjöhölm in the southwestern archipelago of Finland (c. 60°28'N, 21°46'E), the Hawfinch has been observed repeatedly in the last 15 years, and has bred when circumstances were favourable. The observations run as follows (unless otherwise stated, the observations were made in the park or garden):

1947: 10 May 1 flying (migrating?) over the shore of Lemsjöhölm. As I was unfamiliar with the species, the observation cannot be considered absolutely certain.

1963: 7 July 1.

1966: 14 June a pair. The nest was found on 25 June in a small maple in a fork of the trunk. The female incubated. On 28 June there were 4 eggs. Soon after this it was plundered (by a Jay?). The pair or single birds were seen repeatedly until 7 July, inclusive, and the pair was observed again on 4 Sept., but no attempts to re-nest were noted.

1967: 8 June a pair in elms. Also, Hawfinches were observed on 22 and 26 June.

1968: 2 May a bird (probably ♂) showing courtship flight. Probably the same individual was observed on 6, 10 and 19 May.

1969: 29 August 1 (old ♀?).

1970: 7 July 2 (a pair?) seen in Rauduinen, Merimasku, a couple of km from Lemsjöhölm in a clearing in coniferous forest.

1971: 25 June 1 or a pair, on 14 June 1 in elms, on 7 November 1.

1973: 17 June 1 adult (+ one fledgling?) in elms, on 19 June 1.

1975: 27 April 1 feeding on sunflower seeds at my feeding station, on 4 June 1.

1978: 14 June nest on a branch of a large maple 6 m above the ground, only 5 m from the windows of the main building. The female incubated. When flying to the nest or having breaks, she was accompanied by her mate. On 25 June she was still incubating. On 26 June feeding was observed, but owing to the dense

foliage hiding the nest, no details were seen. Feeding at the nest continued until 5 July p.m., inclusive. On 6 July a.m. the (3) young had left the nest and were on the ground. One of them sat in the open on the steps of the main building, subsequently moving over to a nearby horse-chestnut sapling, where it spent one and a half days on the same branch. The young were still carrying some neoptiles.

A second nest was found on 1 July c. 75 m from the first mentioned one. It was situated 6 m above the ground on a branch in a small ash. This nest was clearly visible. The begging notes of the young (long sequences of zy-zy-zy) were audible at a considerable distance. On the next day the young (at least 3) were already scattered in the grass around the nesting tree.

On 9 July it was evident that a number of the young from both nests had survived and were able to fly. The surroundings of the main building at Lemsjöhölm seemed to abound with Hawfinches. There may well have been a third brood; a thorough search for nests had been prevented by lack of time.

This continued throughout July. At the time of writing, at August, the Hawfinches mostly appear alone or in twos. The majority seem to have departed.

The data on the nests in 1978 are unsatisfactory as I was absent during the period 3—13 June and, after finding the nests, for reasons of protection refrained from watching them for any longer periods and even from checking their contents.

The breeding in 1966 and 1978 coincided with large production of elm seeds. In 1978 the crop was, in fact, quite extraordinary. I do not remember ever having seen anything similar. The yield was equally abundant elsewhere in SW Finland. Prof. A. Rousi has informed me that even the northernmost wild elm in the country produced an unusual amount of seeds.

Even at long distances the isabelline colour of the ripening elm seeds formed a clear contrast with the fresh green colour of the other deciduous trees. When the seeds started to fall, the bareness of the elms showed the toll taken by the effort to produce offspring. This enormous seed production was probably made possible by the very rainy summer of 1977,

combined perhaps with a warm spell in the second half of May 1978, at the blooming of the elms.

As long as the elms carried their seeds, the Hawfinches regularly fed in their tops. From about 26 June on, the Hawfinches collected fallen seeds from roads, flower-beds, or wherever they were easily obtained. Other birds feeding on the fallen seeds were some Chaffinches and large flocks of Greenfinches. Little by little the seeds disappeared, carried away by the wind or consumed by the birds. At the beginning of August, a huge number of seedlings appeared, forming a nuisance, especially in the flower-beds. On 10 July the Hawfinches were observed for the first time feeding on unripe fruits of the bird-cherry. The sound of rejected parts of the fruits falling to the ground revealed the presence of the birds even when they were silent. It was often possible to watch them from a distance of 10—15 m. A fortnight later, the fruits at the tops of the bird-cherries were locally almost completely consumed, though there were still plenty on the lower branches and the trees in other places were less completely depleted.

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The occurrence of breeding in connection with maximal production of elm seeds shows that the Hawfinch is not faithful to a definite site, but breeds wherever it finds an opportunity to raise young.

A patchy environment, where food occurs only locally, necessitates continuous mobility of the potential breeders. They have to survey the local prospects within as large an area as possible. The repeated appearance of Hawfinches at Lemsjöholm even in the years when they did not breed, indicates that this was their strategy.

In Finland cherries and plums are cultivated only on a very restricted scale, and the plums, at any rate, develop too late to be of importance to the nestlings or fledglings. So elms are likely to be the most important source of food during the breeding season of the Hawfinch, or, at least, with respect to late broods; breeding in May could not be based upon elm seeds. It has been maintained that the nestlings are given mainly animal food, but the Hawfinches at Lemsjöholm visited the elms continuously when they had nestlings.

The large elms at Lemsjöholm (assumed to date from the 19th, in a couple of cases from the 18th century) number about 30, the smaller elms (usually 25—50 years) about 40. In the park of Lemsjöholm the elms are obviously inferior in multiplying to ashes, maples and oaks, but superior to lindens. In 1978 even

the smaller elms, or many of them, set seeds.

The occurrence of elms in Finland is very restricted (P. J. OLLINMAA 1952: *Silva Fennica* 77). In the entire archipelago of SW Finland there is not a single clump of wild elms (H. SKULT 1956: *Acta Bot. Fennica* 57). Planted elms are found mainly in cities, on cemeteries, and around a few old mansions. Cities and their immediate surroundings are thus the most likely places for the Hawfinch, and a thorough investigation would, perhaps, reveal that a larger population exists in S Finland than has hitherto been assumed. On the other hand, Sweden and Estonia have populations of Hawfinches far exceeding that in Finland, and birds from these countries may invade Finland in favourable years. The repeated observations of Hawfinches far north of their breeding area, and even in Lapland, indicate that this may be possible.

In both 1966 and 1978 breeding at Lemsjöholm followed upon cold winters. The winter of 1965—66 was, in fact, extremely cold and also unusually rich in snow. It seems that the food situation, rather than the severity of the winters, is decisive with respect to the breeding of Hawfinches, though, being known as a partial or short-distance migrant, the species is presumably fully exposed to the effects of cold.

Selostus: Erään pienen nokkavarpuskannan vaiheista

Vuosina 1963—78 nokkavarpusia havaittiin Askaisten Lempisaareessa ja sen lähiympäristössä 10 eri vuotena, useimmiten kartanon puistossa, mutta kerran jopa hakatussa mäntykuusimetsässäkin. Aikaisin havainto oli 25.4., myöhäisin 7.11. Yksilöitä oli useimmiten 1—2. Pesiminen havaittiin 1966 (pesä tuhoutui) ja 1978 (2 pesää, molemmista lentopoikaset lähtivät). Pesiminen tapahtui kesäkuussa. Sekä 1966 että 1978 jalava tuotti runsaasti siemeniä, 1978 jopa ennätyksellisen paljon. Jalavan siementen loputtua nokkavarpuset käyttivät ravintona tuomen vielä kypsyttämättömiä marjoja.

Löytääkseen paikat, missä ravintoa on kyliksi tarjolla, nokkavarpuset nähtävästi liikkuvat laajoilla alueilla. Runsaasti siementävät jalavat näkyvät kellanruskean värinsä perusteella selvästi kilometrien päästä. Koska jalavia on eniten kaupungeissa ja niiden lähiympäristössä ja nämä muutenkin tarjonevat eniten ravintoa, jatkuva nokkavarpuskanta voi ehkä esiintyä niissä. On kuitenkin epävarmaa, onko pesiminen maaseudulla seurausta vaelluksesta kaupungeistamme vai mahdollisesti invaasiosta naapurimaista.

Severe decrease in a population of Pied Flycatchers in NE Finland

ERKKI PULLIAINEN

A number of studies (LIND & PEIPONEN 1963, HILDÉN 1967, VALANNE et al. 1968, PULLIAINEN 1977, JÄRVINEN 1978) carried out in northernmost Finland during the past two decades have shown that the installation of nest-boxes can cause a manifold increase in the numbers of Pied Flycatchers *Ficedula hypoleuca*. A strong increase also took place in my study area (67°44'N, 29°37'E) in E Finnish Forest Lapland, where Pied Flycatchers prefer pine- and spruce-dominated forests as nesting habitats (PULLIAINEN 1977). An intensive study was started in 1973 and from that year onwards an excess of nest-boxes has been available. Since then only one Pied Flycatcher nest has been found in a natural hole. Thus the numbers of these birds nesting in nest-boxes show the real numbers of the local population, excluding unpaired birds. The numbers of nest-boxes occupied by Pied Flycatchers in 1973—78 are shown in the table below:

Year	No. of nest-boxes	No. of nests with eggs	Fledglings (as % of eggs laid)
1973	187	27	79.6
1974	296	30	90.6
1975	296	34	70.1
1976	296	19*	29.5
1977	296	17*	12.7
1978	296	2	69.2

* one renesting included

Besides Pied Flycatchers, only 6—9 pairs of the Redstart *Phoenicurus phoenicurus* and the Siberian Tit *Parus cinctus* occupied these nest-boxes each year (PULLIAINEN 1977, 1978, unpubl. data). Thus there was practically no competition from other species.

Two decreases were evident in this Pied Flycatcher population, the first from 1975 to 1976 and the second, more drastic one, from 1977 to 1978. In the latter year only two pairs nested in this area. In addition a few unpaired males were heard singing.

In 1973—75 and 1978, the fledging success (as calculated on the basis of the eggs laid) was fairly good, while in 1976 it was rather poor and in 1977 extremely low. In the latter

summer there was a heavy snowfall in the study area during the egg-laying and incubation period of the Pied Flycatcher, and even adult birds suffered from it (PULLIAINEN 1978). Although the first decrease cannot be attributed to poor fledging success in the previous year(s); this may be the explanation of the second decrease.

It is interesting to note that in 1978 immigration from more southern populations did not compensate the losses caused by the local catastrophe in the previous summer. This may naturally be a mere chance, but it may also be due to a lack of surplus individuals ready to emigrate from the south, caused, for example, by the increased number of acceptable nest-sites (increasing number of nest-boxes installed by man), low productivity of the southern populations and/or great post-fledging mortality.

Selostus: Erään kirjosiippopopulaation huomattava vähentyminen Koillis-Suomessa

Metsä-Lapin itäosassa Värriötunturin maastossa tutkittiin vv. 1973—78 pöntöissä (määrä taulukossa, toinen sarake) pesivien kirjosiippoparien määriä (kolmas sarake) ja lentoon lähteneiden poikasten määriä (neljäs sarake). Pöntöissä pesivien parien määrässä tapahtui kaksi vähentymistä, ensimmäinen vuodesta 1975 vuoteen 1976 ja toinen, merkittävämpi vuodesta 1977 vuoteen 1978. Ensimmäistä vähentymistä ei voi selittää edellisen kesän alhaisella poikastuotolla, kun taas toiseen vähentymiseen vaikutti varmasti kesän 1977 todella huono poikastuotto, mikä aiheutui munintahaudontavaiheessa esiintyneestä ankarasta takalvesta lumisateineen (ks. PULLIAINEN 1978). Etelän kirjosiippopopulaatioista kesällä 1978 ei saatu pareja korvaamaan edellisen kesän katastrofin aiheuttamia menetyksiä.

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Tuulihaukan erikoisia pesäpaikkoja

ERKKI KORPIMÄKI, REIMA HAAPOJA & SAKARI IKOLA

Tutkiessamme petolintuja Etelä-Pohjanmaalla Kauhavan ja Lapuan seudulla vuosina 1977—78 olemme havainneet tuulihaukan *Falco tinnunculus* pesintöjä erikoisissa paikoissa. Näistä viisi on sen verran mielenkiintoisia, että ansaitsevat tulla lähemmin esitellyiksi.

6.6.1977 löytyi tuulihaukan pesä puisesta tynnyristä Lapuan Alajoelta Särkymänevan luoteiskulmasta. Ko. tynnyri oli 47 cm pitkä, halkaisija 41 cm, edessä oleva aukko 11×10.5 cm ja sivulla oleva 10×10.5 cm. Tynnyri oli nostettu rämämäntyn 2.5 m:n korkeuteen n. 45° :n kulmaan siten, että lentoaukot olivat alaviistossa. Pesässä oli löytöhetkellä 6 pientä poikasta, jotka rengastettiin 18.6.

Kauhavan Koppalan kylästä löysimme 7.6. 1977 tuulihaukan pesän helmipöllön pöntöstä, joka sijaitsi kuusivaltaisessa metsäniemekkeessä n. 30 m:n päässä pellostä. Pesäpöntön korkeus oli 43 cm ja pohja 23×25 cm (lentoaukko 13×11 cm). Kovalevystä tehdyn pöntön etuseinä oli yhdestä nurkasta revennyt pohjaan saakka, niin että naaras saattoi nähdä ympäristöön hautoessaan. Pesässä oli löytöhetkellä 6 munaa, joista 5 kuoriutui. Lentoon selvisi 3 poikasta.

Seuraavana vuonna 29.4. tapasimme tuulihaukan vanhasta variksen pesästä Kauhavan Alajoelta Ruhansaaresta. 14.5. pesä oli ihmisen toimesta heitetty alas. Samalla kerralla tarkistimme pesäpuun vieressä olevan tuulihaukalle tarkoitettun pöntön. Siinä oli 1 muna. Lopulliseksi munaluvuksi tuli 4. Kysyessä oli todennäköinen uusintapesä. Myöhemmin sekin epäonnistui. Pöntön koko oli $25 \times 30 \times 25$ cm. Etu-

seinästä oli ylempi lauta jätetty kokonaan pois, joten uuttu oli avomallia (lentoaukko 12.5×30 cm).

Kauhavan Heikkilän kylässä havaitsi Jarmo Toppari tuulihaukan pesän kaksikerroksisen, asumattoman pappilan päädyssä räystäällä olevalla tasanteella, jossa aikaisemmin olivat pesineet kesykyhykkyt. Pesä oli räystäällä ja tasanteen välisessä kulmauksessa n. 4 m:n korkeudella kyyhykjen lantaan kaivetussa kuopassa. Siinä oli 1 muna 17.5.1978. Pesyekooksi tuli 5 ja poikasia rengastettiin sama määrä. Edellisenä vuonna tuulihaukka pesi n. 200 m:n päässä autiotalon pihassa jokivarren männyssä olevaan variksen pesään.

19.5.1978 lähti tuulihaukkanaras ladosta vanhasta variksen pesästä Kauhavan Alajoelta. Pesä oli tehty ladon päädyssä olevan hirren päälle räystäällä alle n. 3.5 m:n korkeuteen. Päätyseinä oli lähes avoin, siinä oli vain muutamia lautoja, joten haukat pääsivät pesään esteettä ulkoapäin. Löytöhetkellä siellä oli 4 munaa, myöhemmin tuli vielä yksi lisää. Rengastusikäisiä poikasia varttui 3. Paikallisten asukkaiden mukaan tuulihaukka oli pesinyt samassa paikassa jo edellisenä vuonna, varis oli rakentanut pesän v. 1976.

Kaikilla em. reviiireillä oli tarjolla vanhoja variksen pesiä riittävästi, mutta haukat olivat valinneet harvinaisempia pesäpaikkoja. Yhteistä oli myös se, että pesästä oli suora näköyhteys ympäristöön. Tämä olisi syytä ottaa huomioon tuulihaukanpönttöjä rakennettaessa.

Keski-Euroopassa tuulihaukan pesiminen rakennuksissa ja pöntöissä on yleistä (esim.