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NOTES ON THE ROOSTING BEHAVIOUR OF THE GREAT SPOTTED WOODPECKER *(DENDROCOPOS MAJOR)* AND THE THREE-TOED WOODPECKER *(PICOIDES TRIDACTYLUS)*

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At dusk 15.58 hours on 17th Nov. 1961, I observed at Kivisuo, Utajärvi (64°47' N) a sparse mixed forest an aspen tree approx. 30 cm thick broken at a height of 9 metres. A male Three-Toed Woodpecker climbing the tree was being chased by a male Great Spotted Woodpecker. Both birds called and moved around the tree several times. Finally, the aggressive behaviour of the latter caused the former bird to fly to the base of a spruce some 50 metres away. The Great Spotted Woodpecker looked around for some time whilst calling softly and then entered hole No. 1.

After some time, another Great Spotted Woodpecker of unknown sex flew to the same aspen tree and entered hole No. 4. When I then moved close to the tree and knocked at it, the birds flew away from their holes, and a third bird of unknown sex from hole No. 3. Thus three birds of the same species were spending the night in different holes of the same aspen trunk.

I continued to watch from my hiding

place, after two minutes a Great Spotted Woodpecker of unknown sex returned and flew almost directly into hole No. 1. No other woodpeckers showed up until about six minutes later, when in almost complete darkness the Three-toed Woodpecker returned to the tree and knocked at it. The Great Spotted Woodpecker peered out from its hole and made some short noises, but then withdrew. The Three-toed Woodpecker moved around very cautiously, and then entered hole No. 4 after having frisk peered in it several times.

According to BLUME (1961) Great Spotted Woodpeckers have been known to spend the night in hollow oaks with many holes. This species will come to the roosting territory before other species, but is the last to go to rest.

The roosting time at about 16.00 hrs at Utajärvi (64°47'N) the sunset having taken place at 15.05 hrs, does not agree with the "timetable" given by PYNNÖNEN (1939) for Joensuu (62°35' N) However, PYNNÖNEN thinks that after the long summer days, the woodpeckers in the autumn may withdraw to their sleeping holes as late as half an hour after sunset. It is possible that the still longer delay occurring at Utajärvi may be caused by the still longer summer days at this latitude.

According to PYNNÖNEN, woodpeckers generally do not choose definite trees for their night quarters unless suitable trees with holes are really scarce, but BLUME mentions, that woodpeckers like to live in a well known hole. In the present case the forest concerned had recently been felled consequently with a shortage of suitable trees. This is also supported by the fact that some of the woodpeckers returned to the same tree after having been chased from it. PYNNÖNEN reports similar observations on the Great Spotted Woodpecker and the Great Black Woodpecker (*Dryocopus martius*).

The aspen trunk in question was decayed but dry. According to BLUME the woodpeckers do not like to spend their nights in damp decaying trees.

According to HOWARD (1920), woodpeckers defend their territory. PYNNÖNEN mentions that the woodpeckers show much variation in their territorial behaviour but that a behaviour similar to that reported is extremely rare. BLUME mentions that different species are incompatible. According to VIRKKUNEN (1967) the White-backed Woodpecker (*Dendrocopus leucotos*) clearly avoided the Great Spotted Woodpecker in its feeding territory. Such behaviour was not observed with the Great Spotted and Three-toed Woodpeckers. In 28th Nov. 1967, at 11.30 hours at Somerselkonen Kuusamo, I had an opportunity to observe a Great Spotted Woodpecker feeding on a dry pine. At the same time a male Three-toed Woodpecker was feeding on a dry spruce. These woodpeckers were at a distance of about 50 metres and showing no interest in each other.

The aggressive behaviour of the Great Spotted Woodpecker at Utajärvi was possibly caused by the attempts of the Three-toed Woodpecker to enter a hole already occupied or by the fact that the holes 1 & 2 were connected. Sometimes in winter there can be two individuals of the same species spending the night in the same tree (BLUME), but it is rare for so many specimens of the same species to use the same tree for night quarters.

BLUME mentions that hollow trees give a good shelter for the woodpeckers. The felling of trees can however according to BLUME contribute to death among woodpeckers. Extreme cold may also sometimes kill woodpeckers in their roosting places in hollow trees. On 30th March 1967 I found at Maakrunni island one dead male Three-toed Woodpecker in an aspen tree (approx. 15 cm

thick and 3.5 m high). This woodpecker had probable died in the extremely cold winter 1965—66. Another dead male Three-toed Woodpecker was found by SARKANEN (1967) at Kerava in a dry birch during the same winter. According to the observations made by the author (NYHOLM 1968) in the years 1957—66 in Kuusamo, Salla and Savukoski communes the pine marten (*Martes martes*) has in eight different cases fed on Great Spotted Woodpeckers. The birds had been caught or found bead, in great probability in their roosting holes, by the pine marten which also frequents hollow trees.

It was anyway undoubtedly clear that in previously mentioned cases the woodpeckers were fighting over well favoured night quarters.

Selostus: **Huomioita käpytikan ja pohjantikan yöpymisestä.**

Utajärven Kivisuolla havaitsin 17. 11. 1961 hämärissä klo 15.58 käpytikan häätävän pohjantikan yöpymispuultaan lahosta n. 9 metriä korkeasta ja 12—13 tuumaa paksusta haavasta, jossa oli kuusi yöpymisreikää. Koputtaessani runkoa pakeni ko. haavasta kolme käpytikkaa.

Seuratessani piilopaikasta tapahtumien kulkua, sukelsi käpytikka reikään n:o 1 parin minuutin kuluttua karkoituksesta. Toisia käpytikkoja ei näkynyt. Melkein täydessä hämärässä saapui pohjantikka ko. puun tyviosaan ja kopautteli varovasti puuta noustessaan. Käpytikka kurkisteli kolostaan ja äänteli, mutta vetäytyi levolle. Pohjantikan käyttäytymisestä kuvastui selvästi varovaisuus.

VIRKKUSEN (1967) mukaan valkoselkätikat aristelevat käpytikkaa sen reviirillä. Itse saatoin taas havaita esim. Somerselkosessa käpytikan ja pohjantikan ruokailevan tietoisina toisistaan n. 50 metrin etäisyydellä täysin rauhallisina.

BLUMEN (1961) mukaan ontot puut tarjoavat tikoille hyvän suojan. Kuitenkin puiden kaatumiset (BLUME), paleltumiskuolema (SARKANEN 1967, tekijä 1967) ja näätä (*Martes martes*) (NYHOLM 1968) voivat aiheuttaa tuhoja ontoissa puissa yöpyvien tikkojen joukossa.

On kuitenkin täysin selvää, että em. harvinaisessa tapauksessa kilpailtiin hyvin suositusta yösijasta.

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