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A mixed pair of *Parus cinctus* and *P. montanus* nesting in Kuusamo

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In 1984 a female Siberian Tit *Parus cinctus* and a male Willow Tit *P. montanus* were found nesting together in Kuusamo, NE Finland (65°53'N, 29°15'E). The nest was situated in a nest-box, made of boards and placed in an open pine barren, about 30 m from the edge of a bog with dense stands of young birches. The inner diameter of the box was 85 mm and the entrance hole 30 mm. The box was erected in 1976, and in earlier years it had always been occupied by the Pied Flycatcher *Ficedula hypoleuca*. There are 38 small nest-boxes in this area, inspected annually by HK. Each year 2–4 pairs of Siberian Tits have nested in the boxes, but the Willow Tit has used them only once (in 1982).

The nest-box was visited for the first time on 7 June. A Siberian Tit was brooding a newly-hatched chick, and there were no other young or eggs in the nest. The other parent bird was not seen. At the next visit, on 13 June, the single chick was fed frequently by a Siberian Tit and a Willow Tit. The Siberian Tit was captured and ringed, and a distinct brood patch showed it to be a female. During about half an hour after the ringing the bird was not seen, and the Willow Tit fed the chick twice. When the Siberian Tit returned, both parent birds behaved nervously and did not dare enter the box; soon they disappeared. The next day the young was found dead and no parent birds were seen in the vicinity.

The nest and the chick were sent to the Zoological Museum at Helsinki and investigated by OH. The age of the chick was estimated at 6–7 days, which means that the egg was laid on about 23 May, a normal date for both species in Kuusamo. The nest was typical for the Siberian Tit, being built almost exclusively of a thick layer of grey hair. No unhatched eggs or remains of dead young were found buried in the nest material, which indicates that only one egg was laid.

No earlier information on hybridization between the Siberian and Willow Tit seems to exist (Gray 1958, Hildén 1983). Interestingly, in the same summer another mixed pair of these two *Parus* species (female *montanus* x male *cinctus*) was found at Kilpisjärvi, NW Finnish Lapland (Järvinen et al. 1985). In this case two eggs were laid, but they did not hatch and were deserted after c. 19 days' very irregular incubation. Thus in both known cases the interbreeding resulted in a greatly reduced clutch and was unsuccessful (in Kuusamo, the desertion may have been caused by the interference of the observer).

Unfortunately, nothing is known about the origin of these mixed pairs. Hildén (1983) supposes that mixed pairs in tits usually result from "misimprinted" individuals, which have been raised by another species and have adopted the calls of their foster parents; later they would prefer the foster species as sexual partners. This hypothesis probably does not hold for the mixed pair in Kuusamo, as the calls of both birds were species-specific (but the song of the Willow Tit was not heard). Järvinen et al. do not mention anything about the calls of the birds at Kilpisjärvi. Anyway, these two cases suggest that disturbances are likely to occur in the breeding performance of mixed pairs of tits, which may be one reason for the extreme rarity of hybrids compared to the relatively common occurrence of mixed broods of *Parus* species (cf. Hildén 1983).

Selostus: **Lapin- ja hömötiaisen sekapari Kuusamossa**

Lapintiaisnaaras ja hömötiaiskoiras pesivät yhdessä lautapönttöön Kuusamossa 1984. Ensimmäisellä käynnillä 7.6. pesässä oli yksi ainoa vastakuoriutunut poikanen, jota lapintiaisemo lämmitti. Seuraavalla käynnillä 13.6. molemmat emot ruokkivat poikasta. Lapintiaisen rengastuksen jälkeen emot eivät enää uskaltaneet mennä pönttöön ja hävisivät pian paikalta; seuraavana päivänä poikanen oli kuollut. Sekä Kuusamossa että Kilpisjärvellä sekaparin munamäärä jäi hyvin pieneksi (1–2) ja pesintä epäonnistui, mikä viittaa tiaissekaparien huonoon pesintätulokseen ja saattaa olla yksi selitys risteytymien harvinaisuuteen.

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