

Tiedonantoja • Brief reports

Observations of interlocked Swifts *Apus apus* and *A. affinis*

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Lack (1956) has described in detail the Common Swift's (*Apus apus*) fight for its home. A battle may start when a strange Swift enters an occupied nesting hole. The birds rush together gripping each other's legs with their claws and struggle furiously. The fight between two Swifts, interlocked in this way, may last for more than five hours, periods of screaming and pecking alternating with long pauses when the apparently exhausted birds lie motionless and silent. The usual end of a fight is for both birds, still grappled, to tumble out from the nesting hole. Apparently the Swifts usually release their grip in the air, but in his book Lack mentions two published records of Swifts found alive but interlocked on the ground below a nest.

Here we report six finds of interlocking on the ground, five of Common Swifts and one of the Little Swift *Apus affinis* (this African species is also named the House Swift). The observations show that the fighting behaviour described by Lack may continue outside the nesting hole for 25 min and that this strange type of fight is not restricted to the Common Swift.



FIG. 1. Interlocked Little Swifts lying still under a nesting place. Observe eyes covered by nictitating membranes.

On 24 August 1977, between 17 and 18 hrs, two of the authors (BN and T-OR) found a motionless pair of interlocked Swifts on a hotel terrace at Mikumi Wildlife Lodge in Tanzania, about 240 km west of Dar es Salaam. Although touched by hand the birds remained in this akinetic state for about 15 min. Apparently these birds had fallen from a nesting hole as Swifts were nesting under the roof above the terrace. They were photographed (Fig. 1). The birds can be identified as Little Swifts as no other African Swift combines a white rump with a short and square tail without spine tips to the tail feathers (Mackworth-Praed & Grant 1969).

The interlocked Little Swifts were finally lifted up and only their heart beats revealed that they were alive. We tried, without success, to open their grip on each others legs. After a few minutes they woke up, loosed their grips and flew off.

Through an inquiry about interlocked Swifts in a Swedish popular magazine (Reuter 1978b) read by over 500 000 people, we have obtained two reports. Thanks to a Finnish broadcast we obtained two additional reports, and one such observation has previously been reported by one of the authors (Reuter 1978a). The five observations on interlocked Common Swifts, two in southern Sweden and three in southernmost Finland, are very similar. They were made over a number of years and all were from May or early June, within a few weeks of the arrival of the Swifts to this part of the world (Lack found that most battles occur before the eggs are laid).

In two cases the observers saw the Swifts falling from the nest and in the remaining three cases the interlocked pairs were found below a known, or potential, nesting place. It is thus probable that all five fights started in the nest. One interlocked pair screamed and fought furiously when found and this fight continued in the hands of the observer. In this case the birds had one foot gripped on the antagonist's leg while the claws of the other were thrust deep into the muscles of the antagonist's breast.

In two cases the fights were less violent and interrupted by long periods of silence. In one of these fights the pair loosened their grip spontaneously after 10—15 min, in the other their grip was only released after the observer had laid his hand over them, and this after about 25 min. Two pairs were lifted up within a few minutes. In one of them the Swifts first moved only their eyes, but suddenly they loosened their grips on each others legs and flew off. In the other case two people needed a lot of effort to open the grip. All ten Swifts were able to fly after the fight, but one of them first sat still for about 30 min.

In other bird groups interlocking is a rare but not completely unknown phenomenon. It is mentioned to occur in the Robin *Eriothacus rubecula* (Lack 1953) and the Starling *Sturnus vulgaris* (Schneider 1960) and we have received reports about short interlockings between fighting Starlings and fighting Great Tits *Parus major*.

The above described very long fights may be characteristic for those Swift species, which, like the Common and Little Swifts, nest in holes, as the number of such suitable sites often is limited in natural environments. When these fights occasionally continue outside the nest they are probably maladaptive, the birds being exposed to all sorts of danger. The long periods when the birds lie still and do not react to otherwise fearful stimuli are intriguing. We think it unlikely that this state is a simple expression of muscular exhaustion.

If any reader of this journal finds a pair of interlocked fighting Swifts, we suggest that you throw them up into the air. That way you could find out whether fighting Swifts have a grip-opening reflex, which (usually) is triggered in the air during the fall from the nest. Such a reflex could explain why finds of interlocked Swifts are relatively rare although the nest fights described by Lack are common.

Numbers of Starlings *Sturnus vulgaris* breeding in northern Finland still low in 1978—79

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Further to our earlier report on Starling populations in northern Finland (Ojanen et al. 1978: *Ornis Fennica* 55:38—39), we present data for the years 1978 and 1979. During these summers the numbers of breeding Starlings continued to be low (Table 1).

In 1978 Starlings were observed breeding only in Hupisaaret, Virkkula and Juorkuna

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Selostus: Havainnot toisiinsa takertuneista tervapääskyistä

Kirjoittajat selostavat kuutta havaintoa tervapääskyistä, jotka oli löydetty kynsillään toisiinsa takertuneina maasta pesäkolon alapuolelta. Yksi tapauksista koski afrikkalaista pikkutervapääskyä *Apus affinis* (kuva 1), muut meikäläistä lajia. Ilmeisesti tappelut olivat alkaneet pesäkoloissa, mistä linnut olivat sitten pudonneet irrottamatta otettaan toisistaan. Tappelu voi jatkua maassa jopa 25 minuuttia, lintujen välillä levätessä liikkumattomina, ja ne pitävät niin lujasti kiinni toisistaan, että ihmisen on hyvin vaikea avata kynsien otetta. Vastaavia tapauksia on ilmoitettu satunnaisesti kottaraisesta, talitiisesta ja punarinnasta.

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nest-box areas. In the following year Virkkula had no population either, which is surprising because this is the study area that ought to be the best habitat for Starlings. In Hupisaaret, the park area of Oulu, the numbers of breeding birds have stayed at 1—3 pairs, and the same seems to be true of the agricultural study area of Utajärvi.