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Kurze Mitteilungen

Do Marsh Harriers *(Circus aeruginosus)* tend to rob Honey Buzzards *(Pernis apivorus)*?

Zusammenfassung

Neigen Rohrweihen dazu, Wespenbussarde zu parasitieren?

Aus den Kalksümpfen bei Chelm (SO-Polen) werden 14 Fälle beschrieben, bei denen Rohrweihen Wespenbussarden Beute abjagen. Die Opfer verloren 6 mal Nester von Hymenopteren (Apoidea) an die Rohrweihen. Solche kleptoparasitischen Attacken werden durch 3 Hauptfaktoren begünstigt: 1. offene Habitate, z.B. Wiesen und Sümpfe, 2. großvolumige Beute, die aus großer Entfernung gesehen werden kann, und 3. hoher Nährgehalt der Beute.

Kleptoparasitic behaviour is quite widely observed in raptors (BROCKMANN & BARNARD 1979). Gaining a prey by robbing other birds was also observed in Harriers (*Circus* spp.) (SCHIPPER 1973, KITOWSKI 2001). It is usually performed on host birds carrying small mammals or passerines.

The study was carried out between May 1992 and late August 2001 in the area of calcareous marshes near Chelm (51°08'N, 23°37'E, SE Poland). The marshes are one of the major nesting sites of Marsh Harriers in east Poland. From 1986 to 1992 about 58-64 breeding pairs of Marsh Harriers nested in the marshes (1049 ha) (BUCZEK & KELLER 1994). At the moment the size of the population is found to be smaller by about 50 % (KITOWSKI unpubl.).

In the years 1992-2001, the author registered N=14 attempts to rob Honey Buzzards by adult males of Marsh Harrier. One pattern was adapted and followed in all robbing acts which were all perfomed on adult Honey Buzzards carrying nests of social *Hymenoptera*.

Pirating lasted from 21 to 53 seconds ($\bar{x}$=33.9±8.9 seconds, n=14) during which a chasing aggressor dived onto the host birds on average x=2.4±2.1 times (range: 0-7) that made them trying to escape and drop their prey, i.e. nests of wild bees *(Apoidea)*, either into Saw Sedge *Cladium mariscus* marshes, or onto small "xerothermic islands" typical for the area of marshes. Honey Buzzards lost their prey in N=6 (42.3 %) cases. Males of Marsh Harriers landed on the places where the prey was dropped and stayed there for $\bar{x}$=1538.3 ±653.6 sec.) (range: 671-2220 sec.). Though neither the individuals of Marsh Harriers, nor Honeybuzzards were individually tagged, owing to individual differences in plumage, the author is convinced that at least 3 different individuals representing Honey Buzzards and 4 individual males of Marsh Harrier were involved in the interactions described. Within a period lasting from an hour up to few hours following the interactions, I tried to find the places onto which the nests containing larvae of social insects had been dropped. Only in two cases the search was successful. Both nests, which belonged to European Hornet *Vespa crabro*, were destroyed and the larvae eaten out.

Though the research conducted by others

revealed that the food spectrum of Marsh Harrier is relatively broad and the imago of various insect (grasshoppers *Tettigonoidea*, beatles *Coleoptera*) is found in their diet (SCHIPPER 1977, CRAMP & SIMMONS 1980, WITKOWSKI 1989), larvae of such insects had never been detected in the diet before. Despite an extensive review covering 30 papers on occurrence of different groups of animals in the diet of Marsh Harrier performed by the author , no cases of eating larvae from nests of social *Hymenoptera* were reported.

The open character of the marshes and their surrounding eases detection of Honey Buzzards carrying nests. It has been reported by many authors (i.e. BROCKMANN & BARNARD 1979) that host birds whose prey is clearly visible were frequently targeted with kleptoparasitic attacks. It seems highly probable that the energetic value of the larvae of *Hymenoptera* plays a significant role, since they are rich in amino acids and fats, which are highly desired nutrients (JAROSZ, Z. personal comm.). Last but not least the mosaic structure of the usable agricultural area as well as a variety of small landscape elements such as individual trees, bushes, ditches, etc. (WOJTAK & KITOWSKI 2001) result in a diversity of species of *Hymenoptera* and make the area very attractive for foraging Honey Buzzards.

Literature

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