Interspecific feeding of a Great Grey Shrike (*Lanius excubitor*) fledgling by adult Yellowhammers (*Emberiza citrinella*)

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Abstract: On 25 May 2003, near the village Budy (Biebrza Marshes, East Poland), interspecific feeding of a Great Grey Shrike (*Lanius excubitor*) fledgling by adult Yellowhammers (*Emberiza citrinella*) was observed.

Key words: Great Grey Shrike, *Lanius excubitor*, Yellowhammer, *Emberiza citrinella*, interspecific feeding

Among some fishes, mammals, and at least 2.4% of all bird species, additional adults (alloparents or helpers) play a role in raising and feeding the young (SKUTCH 1935, SKUTCH & KOENIG 1990, EMLEN 1991, SOLOMON & FRENCH 1997, TROMBINO 1999). Alloparents – individuals other than the genetic parents – may acquire selective advantages associated with increased inclusive fitness, parental experience, reciprocal altruism, and exploitation of fostered young (RIEDMAN 1982). However, there are also instances when wild animals of one species raise the young of a different species (SHY 1982, MCNAIR & DUYCK 1991). These observations are not easy to understand evolutionarily. Interspecific parental activity should not have any evolutionary benefit for the caregiver, and should be interpreted as misdirected parental care (SHY 1982). Yet, some authors propose that interspecific helping could also be beneficial for the helper – for example, unmated birds may benefit by gaining experience in feeding the young, which may enhance the probability of pairing in the next breeding season (TROMBINO 1999). Reviews of interspecific feeding in birds show...
that this behaviour is very rare, but in spite of this, there are known records in more than 20 bird families (SHY 1982, MCNAIR & DUYCK 1991).

On 25th May 2003, at 15:00 hrs, near the village Budy (Biebrza Marshes, East Poland) one of us (R.D.), with three local birdwatchers, observed a recently fledged (ca. 20-day-old) Great Grey Shrike (*Lanius excubitor*) sitting on the ground at the border of a road lined with poplars (*Populus* sp.). When a Marsh Harrier (*Circus aeruginosus*) flew overhead, the fledgling hid in grasses and dry branches. A pair of Yellowhammers (*Emberiza citrinella*) then fed the shrike fledgling. The birds were not wary and allowed observation at a distance of 6–8 m. The Yellowhammers delivered food (ca 10 visits) during the three hours of observations. The shrike fledgling begged loudly toward the feeding birds and showed its yellow rictus. The Yellowhammers fed the fledgling with small larvae. At the same place in the next two days, two shrike fledglings were observed being fed by adult Great Grey Shrikes. No other signs of allofeeding by the Yellowhammers were observed.

We were not successful in finding the Yellowhammers’ nest. However, both birds showed intense anxiety, indicating the proximity of their nest. It is possible that they were feeding their own nestlings at that time or that their nest had been recently destroyed, and the fledgling Great Grey Shrike accidentally approached it.

Great Grey Shrikes regularly hunt for small birds in the study area. In fact, Yellowhammers are the third most abundant bird in Great Grey Shrike territories, and are the most frequent bird prey of this shrike in eastern Europe (LOREK et al. 2000, HROMADA et al. 2001). However, Yellowhammer individuals do not seem to be affected by presence of the shrikes (HROMADA et al. 2001).

SHY (1982), in her review, mentions several cases when calls and visual signals of the young were considered to be the factor triggering interspecific feeding behaviour. Sometimes, fledglings have directly solicited food from adults of a different species. MCNAIR & DUYCK (1991) watched a Red-eyed Vireo (*Vireo olivaceus*) fledgling begging from a Cedar Waxwing (*Bombycilla cedrorum*) adult. Reports of feeding of heterospecific fledglings are rarer than reports dealing with nestlings, therefore it is uncertain whether interspecific feeding of fledged young is rare in the wild (SHY 1982).

We suggest that the most likely explanation for this unusual feeding behaviour of Yellowhammers is that the adult birds were responding to a feeding stimulus (begging by a young bird). Young Great Grey Shrikes are larger than Yellowhammers and have conspicuous features linked with begging behaviour – yellow corners of the bill, bright orange mouth, combined with wing waving and intensive calls. An intensively begging shrike fledgling could represent a supernormal stimulus for the Yellowhammer adults that might have been recently feeding their young, and both birds started to feed the shrike fledgling and continued to do so for 3 hours. A good example of the astonishing effect of supernormal stimulus on heterospecific adults are nestlings of European Cuckoos (*Cuculus canorus*), actually “hijacking” the chick-rearing instincts of alloparents.

Our report appears to be the first one to document a Yellowhammer feeding a juvenile of another species, as well as the first case of a Great Grey Shrike being fed by a heterospecific adult (SHY 1982, MCNAIR & DUYCK 1991). All known cases of Emberizidae feeding juveniles of another species were found in North America.
(SHY 1982). Our observation is all the more interesting, because Yellowhammers are common prey of Great Grey Shrikes in the study area.

REFERENCES


