Blue Tits *Parus caeruleus* breeding in House Martin *Delichon urbica* nest

JEAN-MICHEL ROBERGE & JOHAN MÅNSSON

The selection of unusual nest sites in birds is an interesting phenomenon since it may reflect the adaptive capacity of a species to cope with varying conditions (Enemar 2002). This short communication aims to describe such an event observed in the Blue Tit *Parus caeruleus* and to discuss the phenomenon of interspecific secondary nest use.

On 15 June 2003, an adult Blue Tit was observed commuting to a House Martin *Delichon urbica* nest located in the roof corner of a building at Grimsö (Västmanland), south-central Sweden. A closer look confirmed the presence of well-grown Blue Tit nestlings in the nest. On 16 June, observations during longer periods showed that two adult Blue Tits were feeding the nestlings at regular intervals. Note that all of three other House Martin nests on the same building wall were occupied by breeding House Martins. Since no activity was detected at the Blue Tit nest after 17 June in spite of daily visits, we assume that the young had fledged by then. Unfortunately, due to the inaccessibility of the nest and the very short period of observation, it turned out to be impossible to count the number of nestlings and thereby assess reproductive success.

We do not know of any other record of the Blue Tit breeding in a House Martin nest from Sweden. A thorough search of the international literature allowed us to find only one such record, from Britain, where seven young Blue Tits fledged successfully from a House Martin nest in 1982 (McNeil 1992). Most typically, the breeding site of the Blue Tit is a hole in a tree, in a wall, a nestbox or any artificial hole when natural ones are lacking (Snow & Perrins 1998). Our observation provides evidence that covered nests created by other bird species can provide breeding sites for the Blue Tit.

Other bird species known to breed in House Martin nests are the House Sparrow *Passer domesticus* (Summers-Smith 1963), the Swift *Apus apus*, and the Wren *Troglodytes troglodytes* (McNeil 1992). Although such records are very rare, they suggest that the House Martin may play a non-negligible ecological role by supplying breeding and roosting sites for other species in situations where other types of cavities would be rare. The House Martin is not alone in that respect. In northern Europe, the best known example of nest engineers is the woodpeckers Picidae, which provide nest holes of a size that suits other birds from tits Paridae to owls Strigiformes in size. For that reason, woodpeckers are often classified as keystone species (Johnsson et al. 1990). Other examples of birds that provide nests for other species are crows Corvidae and some raptors Accipitriformes, such as the Common Buzzard *Buteo buteo*, the Osprey *Pandion haliaetus*, and the Goshawk *Accipiter gentilis* (Svensson et al. 1999). The nests constructed by those species are commonly used by falcons and owls. Interestingly, the nest makers mentioned above not only serve the avifauna but also some mammal species such as pine marten *Martes martes*, squirrel *Sciurus vulgaris* and bats *Chiroptera* spp. (Johnsson et al. 1990, J.-O. Helldin pers. comm. 2003). The opposite situation, i.e. where the mammals have provided nest for birds, has also been observed, e.g. Shelduck *Tadorna tadorna* in old fox *Vulpes vulpes* and badger *Meles meles* lairs, and Stock Dove *Columba oenas* in rabbit *Oryctolagus cuniculus* burrows (Svensson et al. 1999). Thus many other birds and mammals are working as bird nest engineers in the shadow of the better known woodpecker case. Our observation of Blue Tits breeding in an old House Martin nest provides evidence for one more example of such interspecific secondary nest use.

References

Enemar, A. 2002. Robin *Erithacus rubecola* breeding in nestboxes – an accidental event? *Ornis Svecica* 12:90–92.

Johnsson, K., Nilsson, S. G. & Tjernberg, M. 1990. The black woodpecker – a key-species in European forests. Pp. 99–102 in *Conservation and management of woodpecker populations* (Carlson, A. & Aulén, G. eds). Department of Wildlife Ecology, Swedish University of Agricultural Sciences, Uppsala, Sweden. Report No. 17.

McNeil, D. A. C. 1992. Use of house martin nests by blue tits for breeding. *British Birds* 85:314–315.

Snow, D. W. & Perrins, C. M. 1998. *The birds of the Western Palearctic*. Volume 2. Oxford University Press, Oxford.

Summers-Smith, J. D. 1963. *The house sparrow*. W. Collins & sons, London, U.K.

Svensson, S., Svensson, M. & Tjernberg, M. 1999. Svensk fågelatlas. *Vår fågelvärld*, Supplement 31, Stockholm, Sweden.

Sammanfattning

Konstaterad blåmeshäckning i hussvalebo

En blåmeshäckning konstaterades i ett hussvalebo

på en byggnad vid Grimsö i Västmanland. I boet kunde flera närmast flygga ungar observeras under två dagar 15–16 juni 2003 och den 17:e hade de lämnat boet. Vi har inte funnit någon annan dokumentation om blåmeshäckning i hussvalebon i Sverige. Vi har dock funnit en notering från Storbritannien där en lyckad blåmeshäckning utfördes i ett hussvalebo (McNeil 1992). Andra arter som visat sig utnyttja hussvalornas bon är gråsparv *Passer domesticus* (Summer-Smith 1963), tornseglare *Apus apus* och gärdsmyg *Troglodytes troglodytes* (McNeil 1992). Trots att det är ett ovanligt fenomen innehar hussvalan en viktig roll genom att bereda häcknings- och övernattningsplatser för andra fåglar. I denna roll är dock inte hussvalan ensam. Flera fågelarter är kända för sitt ”bo-ingenjörskap” och ett av de bästa exemplen är hackspettarna. Intressant är också att se att även andra djurgrupper utnyttjar fåglarnas verk, såsom att mården använder hackspettsbon. Även det motsatta förhållandet går att finna t.ex. gravanden som utnyttjar gamla räv- och grävlingsgryt. Vår observation av en blåmeshäckning i ett hussvalebo är således ytterligare ett exempel på ett sekundärt boutnyttjande.

Jean-Michel Roberge & Johan Månsson, Swedish University of Agricultural Sciences (SLU), Forest Faculty, Department of Conservation Biology, Grimsö Wildlife Research Station, SE - 730 91 Riddarhyttan, Sweden. Corresponding author (E-mail): Jean-Michel.Roberge@nvb.slu.se