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Room: Seminar Room

On the use of heterospecific information in birds

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In the wild, essential information may be transferred among individuals in order to increase foraging efficiency, avoid predators, or choose breeding habitats and sites. Much is known about the transfer of information within species but much less among species. Recent experiments on the use of heterospecific information in hole-nesting birds purport to show that two migratory species, the pied *Ficedula hypoleuca* and collared *F. albicollis* flycatchers use cues from a resident species, the great tit *Parus major*, to adjust nest site choice. This was shown by manipulating white markings around the entrance holes of nest boxes used by tits in the field and observing that the flycatchers apparently took the markings into account when choosing their own nest box, the type of box chosen depending on the clutch size of the tit. Although the idea is intriguing, we suggest that there are fundamental reasons to doubt that flycatchers can obtain substantial fitness benefits by doing so. We argue that available cues for flycatchers may be uninformative and costly to assess, and that there is actually little evidence for such assessment. In particular, we argue that the most critical assumption fails, namely video filming shows that the flycatchers rarely enter tit nests to assess clutch size because they risk being injured or even killed by the tit owner. We hope that our arguments, and new preliminary results from the field, will broaden the array of hypotheses for data purportedly showing the use of heterospecific information. We suggest that aggression by the tits could be an alternative explanation for the observed nest site choices of the flycatchers.