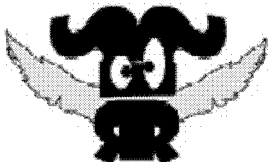


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HOW DOES DAILY NEST MONITORING INFLUENCE THE SURVIVAL OF ARTIFICIAL NESTS?

One of the main research themes in ornithology focuses on reproduction of birds. The frequent visiting of nests, however may influence the breeding success. In order to study this 100 artificial ground and shrub nests were placed in a consecutive order along ten transect lines at forest edges in southern Hungary in May 2010. Each nest contained one quail and one plasticine eggs; half of the transects were controlled daily (disturbed), half of them only at the end of seven days exposure time (undisturbed). The experiment was repeated in June, while places of ground and shrub nests as well as disturbed and undisturbed transects were interchanged. Nest predation rate was independent of month or disturbance, but it did depend on interaction of them. Disturbance influenced predation rate inversely in the two months, it decreased that in May (ground nests: disturbed 44%, undisturbed 48%; shrub nests: disturbed 12%, undisturbed 40%), but increased it in June (ground nests: disturbed 84%, undisturbed 56%; shrub nests: disturbed 36%, undisturbed 36%). The differences arose from that activity of ground nest predators (mainly mammals, using olfactory cues) depended on weather; nest predation rate was higher in sunny weather. Finally, as expected more ground nests were depredated than shrub nests, and the predator assemblages of two nest type were different too. In summary, disturbance can influence nest survival by frightening away visually searching predators (birds), but also attracting olfactory predators (mammals) due to increased amount of odour cues, which is weather dependent.