

## Kurze Mitteilungen

### Chiffchaff (*Phylloscopus collybita*) defends nest against *Apodemus* mouse

The assumption that small rodents like mice (*Muridae*) and voles (*Arvicolidae*) are predators of small songbird nests and may reduce the nesting success of various species is widely accepted. Nevertheless, evidence of nest predation by mice or voles is scarce and is concluded mostly from experiments with artificial nests, baited with plasteline, quail or sparrow eggs, equipped with phototraps (LEIMGRUBER et al. 1994, DEGRAAF 1995, VAN DER HAEGEN W.M. & DEGRAAF 1996, BAYNE & HOBSON 1997, FENSKE-CRAWFORD T.J. & NIEMI 1997, HANNON & COTTERILL 1998, BAYNE & HOBSON 1999, DEGRAAF et al. 1999, PURCELL & VERNER 1999). With the help of these methods small rodents can regularly be discovered as nest predators. But both approaches are unreliable as the experimental setup usually does not match with natural conditions. Direct observations are difficult because those mammals are active mainly at night and songbird nests are usually well hidden.

New video techniques allow to monitor and to observe small and well hidden songbird nests during the entire breeding cycle. In a recent video documentation BURES (1997) has shown events of predation of unattended nests with eggs and nestlings of Meadow pipit (*Anthus pratensis*) by the common vole (*Microtus arvalis*). Yet, his study gives no hint of the influence of breeding or feeding adults on the nest predation success of the voles involved. In two recent studies nests of several grassland passerines were monitored by video. Mice or voles occurred in only 2 out of 29 (PIETZ & GRANSFORS 2000) and 1 of 25 cases (THOMPSON et al. 1999). In video observations of Blackcap (*Sylvia atricapilla*) nests (SCHAEFER 2001) mice (*Apodemus spec.*) were recorded once in 45 predation events, even though they were regularly observed in the field and on the video recordings.

An explanation to these contradictory results could be given by the observation of a video-monitored Chiffchaff (*Phylloscopus collybita*) nest at the Western Lake of Constance during the breeding season 2000. The Chiffchaff builds oven nests in low, dense vegetation. The female lays 4 to 7 eggs, and breeds and rears the young usually without the help of the male (CRAMP 1988).

The nest was found on April 29 at the edge of a hedge. It was fixed between tall grass, the bottom touching the ground. The camera was set up on the day when the sixth egg was laid. The young hatched on May 11.

On May 17, when the young were 6 days old, at 21:26 hrs, an *Apodemus* mouse approached the nest and looked inside. Immediately, the female left the nest, filling the entrance with its body, raising its wings and opening its beak and remained in this position for another minute. Supposingly, this behaviour was accompanied by loud calls. The mouse retreated quickly and did not return. The young fledged on May 23.

Even though further data are needed we have to reconsider the role of small rodents as predators, since small birds are obviously able to protect their nests. Experiments with artificial nests, where no parental birds are involved, may not be appropriate to yield correct statements. Mice and voles presumably are important predators during the egg stage, especially when the nests are unattended or the parents are disturbed or distracted otherwise (BURES 1997). A high rate of disturbances may thus lead to an increase in predation due to small rodents which get access to unattended nests. Yet, the video studies show that active (i.e. defended) nests are only occasionally predated by mice. In my opinion, more attention should be paid to the capacity of small songbirds to defend their nests against small mammals and on the role of disturbances during the breeding cycle. At the same time, the method to uncover nest predators with artificial nest experiments should be critically revised (YAHNER & VOYTKO 1989, MAJOR & KENDAL 1996, BAYNE & HOBSON 1997b, ORTEGA et al. 1998).

## Zusammenfassung

Zilpzalp (*Phylloscopus collybita*) verteidigt Nest gegen *Apodemus*-Maus.

Mäuse werden häufig als eine der Ursachen für ein hohes Ausmaß an Nesterverlusten verantwortlich gemacht. Beobachtungen von Mäusen, die Eier oder Jungvögel aus Nestsfern entfernen, liegen allerdings kaum vor oder stammen von Experimenten mit Kunstsfernern. BURES (1997) konnte durch Videobeobachtungen zeigen, dass unbewachte Nester des Wiesenpeiers bei hoher Wühlmausdichte einem hohen Maß an Prädation durch diese Nager ausgesetzt sind. Meine Überwachung des Nests eines Zilpzalp mit Videokameras ergab ein gegenteiliges Ergebnis: Als sich nachts eine *Apodemus*-Maus näherte, erschien der hudernde Altvogel mit gespreizten Flügeln und geöffnetem Schnabel im Nesteingang, was zur Flucht der Maus führte. Die fünf, zu diesem Zeitpunkt bereits 6-tägigen Jungen, flogen 12-tägig aus. Die Beobachtung zeigt, dass Kleinvögel Nager von den Nests fernhalten können. Bei einem hohen Maß an Störungen wird dies wahrscheinlich erschwert und führt bei häufiger Abwesenheit der Altvögel zu zusätzlicher Prädation durch Mäuse. Gleichzeitig zeigt die Beobachtung, dass Experimente mit Kunstsfernern wegen des fehlenden Einflusses der Altvögel sehr vorsichtig zu interpretieren sind.

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