

NOTES

LIKELY OCCURRENCE OF OVERLAPPING BROODS IN THE ROCK WREN

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The majority of multiple-brooded birds delay several days between the fledging of the first brood and the initiation of a second clutch (Rothstein 1973, Kluyver et al. 1977). Overlapping broods, in which the parents start a second clutch before the first brood has fledged, have been reported for only a few species in North America, such as the Cedar Waxwing (*Bombycilla cedrorum*; Putnam 1949), Rose-breasted Grosbeak (*Pheucticus ludovicianus*; Rothstein 1973), and Cactus Wren (*Campylorhynchus brunneicapillus*; Anderson and Anderson 1960). Overlapping broods have been found in at least nine Old World species including the Great Reed Warbler (*Acrocephalus arundinaceus*; Stresemann 1934), Tree Creeper (*Certhia familiaris*; Vollbrecht 1938), Goldcrest (*Regulus regulus*; Palmgren 1932), Great Tit (*Parus major*; Rheinwald 1971), and Coal Tit (*Parus ater*; Winkel 1975). We report here a likely instance of overlapping broods raised by a single pair of Rock Wrens (*Salpinctes obsoletus*) in Colorado.

We found Rock Wren nests in Gregory Canyon, Boulder County, Colorado. The walls of the canyon are covered with scattered Ponderosa Pine (*Pinus ponderosa*) and Douglas Fir (*Psuedotsuga menziesii*), with an understory of short grass and rock outcrops. Both of the nests were in cavities within the rock outcrops.

When found on 13 June 1996, the first nest contained an unidentified number of nestlings, being fed by a pair of Rock Wrens. On 22 June, four partly feathered young were in it. At 0900 on 25 June, we found a second nest 10 m from the first nest, with the female and an unidentified number of eggs inside the cavity. At approximately 1000 the same day, the first nest fledged four young. Both the male and the female fed the young, which had moved to a nearby rock outcrop. On 26, 27, and 29 June we observed three, four, and six eggs, respectively, in the second nest. The first egg hatched between 11 and 14 July, and five or six young fledged 27 July. At a laying rate of one egg per day (Merola 1994), the clutch for the second nest probably was initiated one day before the chicks in the first nest fledged.

Because the birds were not banded we cannot be absolutely certain that only a single female or a single pair of wrens was attending the two nests. On only two occasions during the summer, however, did we see other Rock Wrens anywhere in Gregory Canyon, and on no occasion were more than two wrens observed near the two nests. The male, which was readily distinguishable from other wrens in the study area by very dark streaking on the breast, had a territory that encompassed both nests. We observed the male feeding fledglings from the first nest on all sides of the second nest, while the female was incubating the second clutch, and he occasionally fed her in the nest. Therefore the two nests belonged indisputably to this single male. The female was observed with the male, feeding the fledglings of the first nest while the second nest was confirmed to be absent of an incubating female. She was then observed heading in the direction of the second nest, most likely to resume incubation. Rock Wrens are typically monogamous (Ehrlich et al. 1988, Merola 1994), but polygyny is frequent among some other wrens (Ehrlich et al. 1988). In either case, overlapping broods or polygyny, we saw family life organized in a way not previously recorded for the Rock Wren.

NOTES

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