

Rock Wren nests at White Mountain Biological Station (placed under small loose rocks) is comparable to that of exposed wooden nest boxes at lower altitudes. The combination of the horizontal orientation of the nest rock and the lack of leaf cover may have accounted for the similar temperature patterns observed in wooden nest boxes and the Rock Wren nest in this study.

The number of feeding trips to the nest (240) was higher than has been reported for most small passerines, even in larger broods (Kendeigh 1952; Anderson and Anderson 1960; Royama, *Ibis* 108:313–347, 1966; Nolan, 1978). As the nestling was probably not yet endothermic, it is doubtful that it was using large amounts of food for thermoregulation. The nutritional value of the insects may have been low or the parents may have eaten some of the food themselves. Further investigation is needed to compare the behavior of Rock Wrens at various altitudes to determine the effects of arctic-alpine habitat on the reproductive biology of these cavity nesting birds.

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A second brood by Canada Geese.—Canada Geese (*Branta canadensis*) normally attempt one nest each year. If the first nesting attempt fails early in the nesting cycle, renesting often occurs (Craighead and Craighead, *J. Wildl. Manage.* 13:51–64, 1949; Kossack, *Am. Midl. Nat.* 43:627–649, 1950; others summarized by Bellrose, *Ducks, Geese and Swans of North America*, 3rd ed., Stackpole, Harrisburg, Pennsylvania, 1976). At Trimble Wildlife Area, Missouri, female geese often made as many as two renesting attempts following failures, but only if the nest was destroyed before the fifth day of incubation (Brakhage, *J. Wildl. Manage.* 29:751–771, 1965). Renesting was common at Marshy Point, Manitoba, where 92% of the pairs that lost clutches during laying made a second attempt. Renesting did not occur, however, if the first nest was destroyed after the second day of incubation (Cooper, *Wildl. Monogr.* 61, 1978). Renesting occurred only up to the tenth day of incubation at Dog Lake, Manitoba (Klopman, *Wilson Bull.* 70:168–183, 1958). To my knowledge, additional nesting attempts have not been reported for Canada Geese when nests were destroyed late in incubation or at hatching, and second broods in Canada Geese have not been reported previously.

In Clinton County, northwestern Missouri, an individually marked pair (neck-collared female and leg-banded male) of resident Canada Geese (*B. c. maxima*) successfully hatched two clutches in the spring of 1983. The pair nested in an elevated man-made nesting structure in a farm pond. The female was at least 5 years old, and the male at least 3 years old. In both nests, only one egg hatched. The female began laying the first clutch of 10 eggs on 8 March 1983. One egg hatched on 22 April 1983, and the nesting pair left the pond with the gosling. The same pair returned to the nest pond without the gosling in early May. The female laid the first of 9 eggs in a new clutch on 16 May 1983. One of these eggs hatched

on 26 June 1983. At that time, most other goslings produced in the vicinity were nearing flight stage. The fates of adults and the gosling of the second clutch were unknown. The first egg was laid in the second nest 24 days after the first gosling hatched.

Sixteen of the 17 unhatched eggs (9 in the first nest and 8 in the second) were in advanced stages of decomposition. Fertility in these eggs could not be verified. One egg in the second clutch contained an embryo that died after 21 days of development (Cooper and Batt, J. Wildl. Manage. 36:1267–1270, 1972). Although both clutches were unusually large, other geese probably did not contribute eggs to the clutches. No other geese were observed in the immediate vicinity of the nest pond, and the closest nesting pair was 1.5 km away.

Most wild anatids are not normally double-brooded (Weller, pp. 35–79 in *The Waterfowl of the World*, Vol. 4, J. Delacour, ed., Country Life Ltd., London, England, 1964). Renesting following loss of broods by Northern Pintails (*Anas acuta*) has been reported in southern Manitoba (Sowls, Prairie Ducks, University of Nebraska Press, Lincoln, Nebraska, 1955). Three percent of nesting female Wood Ducks (*Aix sponsa*) have second broods in southeastern Missouri (Fredrickson and Hansen, J. Wildl. Manage. 47:320–326, 1983). Food supply for the nesting female Wood Ducks and the length of the season are key factors affecting the occurrence of double broods (Fredrickson and Hansen 1983). The instance of double-brooding in the resident flock of Canada Geese near Trimble, Missouri, may have been related to the potentially prolonged nesting season (usually beginning in mid-March and running, in this case, through to the end of June), the absence of the energetic cost of spring migration, or the availability of abundant nutrient and energy resources in the surrounding farmland.

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A four-egg clutch of the Mountain Plover.—Nests of Mountain Plovers (*Charadrius montanus*) typically contain 2–3 eggs, which are relatively uniform in size and color. Graul (pers. obs.) has examined nearly 200 nests, only one of which contained four eggs. On 7 May 1983 we found an additional four-egg clutch approximately 2 km south of Keota, Weld County, Colorado.

Three of the four eggs were relatively uniform in size and color. However, one egg weighed 3.0–3.5 g less than the others, a difference of 18–20%, and lacked the same ground color and markings. Whether eggs of individual plovers are distinctive has not been demonstrated, but Vaisanen (Ornis Fenn. 49:25–44, 1972) found that egg variation among individual waders remained nearly the same within a breeding season and from year to year.

Walters and Walters (Ibis 122:505–509, 1980) reported cooperative breeding in otherwise monogamous lapwings whose nest contained eggs differing in coloration. Alternatively, nests containing eggs of different sizes and colors may be the result of intraspecific parasitism. Sordahl (in Yom-Tov, Biol. Rev. 55:93–108, 1980) indicated possible intraspecific para-