

POLYGYNY IN UTAH DIPPERS

CARL D. MARTI and STEPHEN W. EVERETT, Department of Zoology, Weber State College, Ogden, Utah 84408

Prior to Price and Bock's (1973) findings of polygyny in Colorado, the Dipper (*Cinclus mexicanus*) had been considered to be monogamous. This paper reports polygyny in a second geographical area.

We have been studying reproduction, movements and mortality of Dippers from 1976 to the present. These observations are being made on 8 km of the Ogden River from the mouth of Ogden Canyon to Pineview Reservoir and on 9 km of the South Fork of the Ogden River below Causey Reservoir, both in Weber County, Utah. Adult and nestling Dippers were banded with U.S. Fish and Wildlife Service bands and combinations of colored plastic leg bands to allow individual recognition.

We found a single polygynous male (3.4% of the breeding males) compared to 29 monogamous males in the combined 1976 and 1977 breeding seasons. The incidence of polygyny in Colorado was higher at 12.8% of the breeding males. We observed the male copulating with one of the females, feeding broods at both nests on numerous occasions, and defending the area containing both nests. Both females successfully fledged two broods each; a total of 19 young was "fathered" by the single male. This number compares to an average of 8.75 ± 4.27 young fledged by four polygynous males in Colorado. Egg laying for the first clutches of both females began about 25 April 1977, and the young of the second clutches fledged from 4 to 8 July 1977. Price and Bock (1973) found that territories of the polygynous Dippers they studied were not bordered closely by other territories. In contrast, the territory of our polygynous male was bordered on both sides by other Dipper territories. Price and Bock (1973) observed that nests of the mates of polygynous males were from 180 to 3220 m apart. Nests of the two females in our study were only 100 m apart; one was built under a bridge and the other under a house overhanging the river. The same male and one of the females fledged two broods (total of 9 young) in the same territory in 1976.

Potential Dipper nest sites on the Ogden River were abundant and fairly evenly spaced; several Dipper territories contained two or more. We have no reason to believe that the quality of the territory where polygyny occurred was higher than that of other areas, nor was the territory larger than others.

Our observation supports Price and Bock's (1973) prediction that polygyny in Dippers occurs in other populations.

LITERATURE CITED

Price, F. E. and C. E. Bock. 1973. Polygyny in the Dipper. *Condor* 75:457-459.

Accepted 11 December 1978