

NOTES

TWO-YEAR OLD FEMALE SPOTTED OWL BREEDS SUCCESSFULLY

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To understand the population dynamics of a species it is necessary to know age at first breeding and frequency of breeding by age class (Caughley 1977). Despite intensive studies of the Spotted Owl (*Strix occidentalis*) in Oregon, California and Washington during the last decade (Allen and Brewer 1985, Barrows 1981, Barrows and Barrows 1978, Forsman et al. 1984, Solis 1983), no one has been able to determine the age at which Spotted Owls become reproductively mature. In June 1984 we observed a 2-year-old female which bred successfully and, at the same time, a similar event was observed in California (Barrows 1985). This paper provides detailed documentation of successful nesting by a 2-year-old Spotted Owl in Oregon.

Spotted Owls retain their Basic I white-tipped rectrices for 26 months after hatching (Forsman 1981). Birds less than 26 months old are readily distinguished from older owls, which have mottled tips on the rectrices. On 3 May 1984, we found a female Spotted Owl with Basic I rectrices 23.2 km SSE of Cottage Grove, Lane County, Oregon. The same female was again observed on 27 June 1984, roosting with a recently fledged young. Three more trips to the nest area during the next 3 weeks revealed the female roosting consistently with the young and an adult male. The tips of the male's rectrices were well rounded and mottled, indicating it was at least 3 years old. Several food transfers between the female and fledgling were observed.

On 22 July 1984, we captured both the fledgling and female with a noose pole and fitted them with radio transmitters. Even though we closely examined the female's rectrices while attaching the transmitter, age could only be determined as less than 26 months (wear on Basic I rectrices is variable and not a good indicator of exact age). On subsequent visits we observed that the female lost all of her Basic I rectrices between 1 and 12 August (a nearly simultaneous molt). The developing Basic II rectrices could be seen protruding slightly beyond the tail coverts on 30 August. The molt of the rectrices established that the female was 2 years old during the 1984 nesting season. Although the above observations indicate that Spotted Owls are capable of breeding successfully at at least 2 years of age, this phenomenon appears to be rare. It is still unknown whether the majority of Spotted Owls first breed at 3, 4 or more years of age.

ACKNOWLEDGMENTS

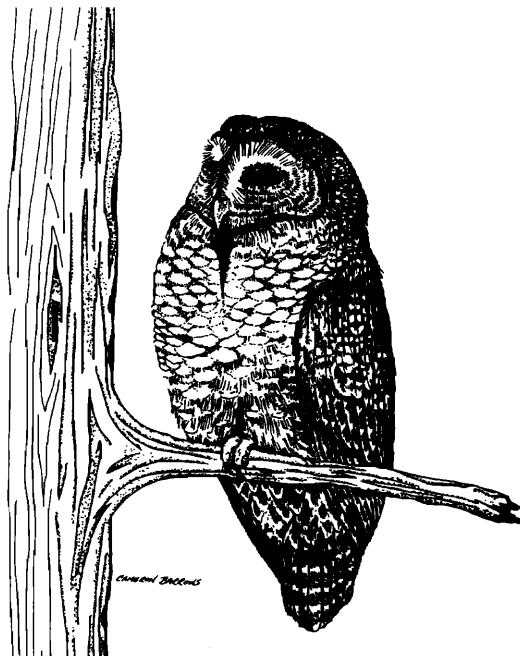
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Spotted Owl

Sketch by Cameron Barrows