SOUTHERNMOST RECORD OF A SPOTTED OWL X BARRED OWL HYBRID IN THE SIERRA NEVADA

MARK E. SEAMANS, JEFFERY CORCORAN, and ANGELA REX, University of Minnesota, Department of Fisheries, Wildlife, and Conservation Biology, 200 Hodson Hall, 1980 Folwell Ave., St. Paul, Minnesota 55108

In the summer of 2003, we located a territorial hybrid between the Spotted Owl (Strix occidentalis) and the Barred Owl (S. varia) in the Rubicon River watershed, Placer County, in the Sierra Nevada (latitude 38° 57′ N, longitude 120° 29′ W). The individual was located in the same general area on six occasions, and it may have displaced a pair of Spotted Owls from this area. We trapped Spotted Owls and color-banded them in this area each year from 1993 to 2002. We found the pair of Spotted Owls that occupied this area in 2002 defending a different area 4.5 km to the southwest in 2003. On four occasions, we found the hybrid owl roosting in a natural cavity in a Black Oak (Quercus kellogii). This cavity had been used as a nest site by Spotted Owls in 3 of the past 10 years.

We captured the hybrid owl on 24 June 2003 and recorded the following measurements: mass 625 g, wing chord 320 mm, tail length 210 mm, tarsus length 59.9 mm, bill length 36.4 mm, and bill depth 22.8 mm. These measurements are within the range reported for the California Spotted Owl (S. o. occidentalis) by Gutiérrez et al. (1995) and at the lower end of the range reported for the male Barred Owl by Mazur and James (2000). The hybrid owl's plumage was similar to that of a Spotted Owl (Gutiérrez et al. 1995) except for five or six dark brown vertical bars on the breast. We recorded three distinct vocalizations: a long series call with 20–40 equally spaced notes, an ascending call ending with a note inflected down (Figure 1a), and a third call (Figure 1b) that was seemingly a cross between the Spotted Owl's typical four-noted location call (Gutiérrez et al. 1995) and the Barred Owl's typical "who cooks for you?, who cooks for you all?" call (McGarigal and Fraser 1985).

This is the southernmost observation of a Barred Owl or Barred \times Spotted hybrid in the Sierra Nevada. This bird could represent local, undetected presence of Barred Owls in the area or dispersal of a bird from farther north. Previously, the nearest reported locations of Barred Owls or Barred \times Spotted hybrids had been more than 75 km north of the Rubicon River watershed. Moreover, the Barred Owl range had not been reported to have expanded south in the Sierra Nevada in over a decade (G. Gould, California Department of Fish and Game, unpubl. data; Dark et al. 1998. It is unknown if this observation represents a long-term range expansion of the Barred Owl in the Sierra Nevada.

We thank the U.S. Forest Service for funding the study of Spotted Owl demography (contract #FS-53-9158-00-EC14 to R. J. Gutiérrez). R. J. Gutiérrez and M. Crozier read drafts of this note. We thank our field technicians who helped with surveys in 2003. We thank A. Franklin for preparing the sonograms. This research was approved by the University of Minnesota Animal Care and Use Committee (animal subjects code 0011A74061).

LITERATURE CITED

Dark, S. J., Gutiérrez, R. J., and Gould, G. I. 1998. The Barred Owl (Strix varia) invasion in California. Auk 115:50–56.

Gutiérrez, R. J., Franklin, A. B., and LaHaye, W. S. 1995. Spotted Owl (*Strix occidentalis*), in The Birds of North America (A. Poole and F. Gill, eds.), no. 179. Acad. Nat. Sci., Philadelphia.

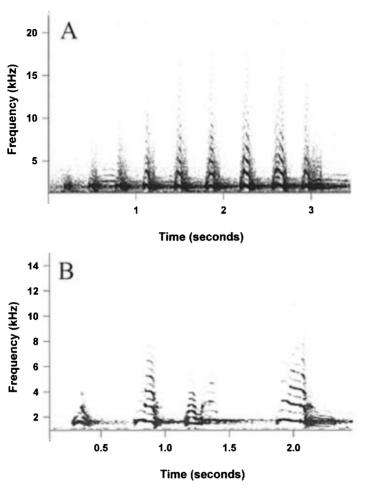


Figure 1. Vocalizations of a hybrid Spotted \times Barred Owl near the Rubicon River, Placer County, California: ascending call (A) and call similar to the Spotted Owl's four-noted location call (B).

Mazur, K. M., and James, P. C. 2000. Barred Owl (Strix varia), in The Birds of North America (A. Poole and F. Gill, eds.), no. 508. Birds N. Am., Philadelphia.

McGarigal, K., and Fraser, J. D. 1985. Barred Owl responses to recorded vocalizations. Condor 87:552-553.

Accepted 6 October 2004