

THE SOUTHERN LIMIT IN CALIFORNIA OF THE NORTHERN PYGMY-OWL

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In northern and central California, the Northern Pygmy-Owl (*Glaucidium gnoma*) is widespread in both the Coast Ranges and Sierra Nevada. In southern California it occurs in the Transverse Ranges from Santa Barbara County (Lehman 1994) east through the San Gabriel and San Bernardino mountains. In the Peninsular Ranges of Riverside, Orange, and San Diego counties, however, evidence for the species is tenuous at best. Intensive study of San Diego County 1997–2002, toward a bird atlas for that area, failed to find the species and suggests that the few past reports were in error.

The pygmy-owl's occurrence in the San Gabriel and San Bernardino mountains is supported by several specimens in the Natural History Museum of Los Angeles County, San Bernardino County Museum, Museum of Vertebrate Zoology (University of California, Berkeley), Dickey Collections (University of California, Los Angeles), and California Academy of Sciences, San Francisco. Through the latter half of the 20th century, the species was seen regularly in many wooded canyons of both slopes of these mountains, in Los Angeles and San Bernardino counties (E. A. Cardiff, J. L. Dunn, K. L. Garrett, R. L. McKernan pers. comm.). In Riverside County, however, Robert L. McKernan (pers. comm.) has noted the pygmy-owl only in the northwest corner, in Millard and Banning canyons of the southern San Bernardino Mountains.

Grinnell and Miller (1944) inferred a range extending south from the San Bernardino Mountains to the international border. Their map, however, shows only two definite localities in the Peninsular Ranges. Both of these, from San Diego County, are based on reports in the literature, not collected specimens. One of the records is from Escondido, where Sharp (1907) reported that J. M. Hatch found a nest with heavily incubated eggs in 1895 and nestlings in 1896. The other record is from the Laguna Mountains, where Willett (1933) reported that C. L. Field found a nest with four young on 20 May 1920. Thus both reports are second hand, with no specimens to support them. Even though both works in which these records were published are landmarks in the history of California birds, I suggest that both identifications were likely mistakes and that on the basis of these errors, Grinnell and Miller overestimated the owl's range. Perhaps to avoid a gap between the San Bernardino Mountains and the two records from San Diego County, Grinnell and Miller mapped the species as occurring throughout the San Jacinto Mountains, even though Grinnell and Swarth (1913) did not find it in their intensive survey of that region.

Once Grinnell and Miller's map gave the pygmy-owl's occurrence in the Peninsular Ranges the imprimatur of legitimacy, birders expected to find the species. Some of even the most experienced identified it occasionally, usually on the basis of call only. As a result, the mistake became entrenched in the literature (Sexton and Hunt 1979, Garrett and Dunn 1981, Unitt 1984, A. O. U. 1998, Small 1998, Holt and Petersen 2000).

Hamilton and Willick (1996), however, considered the pygmy-owl unconfirmed in Orange County, finding no reports detailed enough to support the identification. Michael A. Patten (pers. comm.) knows of no well-supported records from the San Jacinto Mountains. In San Diego County, over 55,000 hours in the field from 1997 to 2002 by observers recording data for a bird atlas did not yield a single visual encounter. As the five years of this project passed, multiple observations of all other species regular in the county accumulated, and the divergence between the supposedly resident pygmy-owl and all other species became more and more obvious. As

NOTES

in the past, observers reported a few calls possibly from pygmy-owls in the county's mountains. Among the most promising prospective pygmy-owls were calling birds heard and tape-recorded in broad daylight about 11:00 AM by Kenneth L. Weaver and Clark R. Mahrdt on Hot Springs Mountain, San Diego County's highest peak, 2 and 3 June 2000. On 15 August 2000, William E. Haas followed up these reports by going to the site and setting mist nets to trap the birds. He caught a presumed mated pair and juvenile of the Northern Saw-whet Owl (*Aegolius acadicus*). Using Avisoft-SASLab Pro (Avisoft Bioacoustics, Berlin, Germany) and Raven versions 1.0 and 1.1 (Cornell Laboratory of Ornithology, Ithaca, New York), Haas (pers. comm.) compared Weaver's recording with recordings of the Saw-whet and Northern Pygmy-Owls; he found it more like recordings of the Saw-whet. That species' call resembles the call of the Northern Pygmy closely (e. g., Sibley 2000:277). Although the Saw-whet Owl typically forages and calls only in the evening (beginning one half hour before sunset) and at night, early in the breeding season it can be stimulated to call at midday by taped recordings or imitations of its advertising song (Cannings 1993).

I queried all the museums listed above, plus the Field Museum (Chicago), Museum of Comparative Zoology (Harvard University), and San Diego Natural History Museum for southern California specimens of the pygmy-owl. None had any from the Peninsular Ranges; the lack of specimens implied by the map in Grinnell and Miller (1944) has evidently not changed in the succeeding 60 years. Only a few sightings have been reported subsequently in *Audubon Field Notes* or *American Birds*. Hypothesizing that all these are misidentifications and that the species' true range is the same as that attested by collected specimens, I suggested this idea to the few experienced birders who had reported the species in the Peninsular Ranges. At this point the house of cards collapsed. All sightings were based on call only, often brief at night, or, in two cases, on poor views of a bird in flight (J. L. Dunn, C. G. Edwards, K. L. Garrett, G. McCaskie pers. comm.). Most observers readily recanted their previous identifications. Garrett (pers. comm.) noted that the short hoots of the Northern Pygmy-Owl are confused frequently not only with those of the Northern Saw-whet but also with those of chipmunks (*Tamias merriami* and *T. obscurus*), mammals common in southern California's foothills and mountains. The Mountain Quail (*Oreortyx pictus*) and Townsend's Solitaire (*Myadestes townsendi*) also emit calls that could be confused with those of the Northern Pygmy-Owl.

The case of the Northern Pygmy-Owl in southernmost California thus recalls that of the Semipalmated Sandpiper supposedly wintering in the eastern United States (Phillips 1975): a long-accepted distribution based on faulty evidence and false assumptions. Even in the past, when the climate was cooler and wetter, the pygmy-owl may not have ranged south of the San Bernardino Mountains. The calls of the far disjunct subspecies of the cape district of Baja California, *G. g. hoskinsii*, resemble those of *G. g. gnoma* of the Sierra Madre Occidental more than those of *G. g. californicum* of California.

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NOTES

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