

## OLIVE WARBLERS IN THE SAN FRANCISCO MOUNTAINS, ARIZONA

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On 19 March 1972 we saw three Olive Warblers (*Peucedramus taeniatus*) on the southeastern slope of the San Francisco Mountains, Coconino County, Arizona. The three warblers included one male in breeding plumage and two individuals in female or juvenal plumage. We saw these birds foraging together in Ponderosa Pines (*Pinus ponderosa*) on a steep south facing slope at the upper edge of the Transition Zone (2640 m). The exact location was 35° 18' 30" N, 111° 36' 40" W.

Phillips et al. (1964) state the breeding range of the Olive Warbler in Arizona to be "north to the south edge of the Mogollon Plateau and west to the Santa Rita and Santa Catalina Mountains." Mearns (1890) found it a common summer resident on portions of the Mogollon range but absent from the San Francisco Mountains. Mearns did, however, report a doubtful sighting of an individual of this species on Kendrick Peak, 10 km northwest of the San Francisco Mountains. The San Francisco Mountains are 96 km north of Baker Butte, the northernmost verified record for the Olive Warbler (Phillips et al. 1964).

The Olive Warbler is a partial migrant, a few individuals remaining in portions of the breeding range in Arizona throughout the winter. The migrant portion of the population apparently returns to southeastern Arizona during March (Phillips et al. 1964). Although 19 March is early, this sighting of the Olive Warbler is consistent with observations of the species in southeastern Arizona. The weather prior to 19 March was warm and sunny and snow had disappeared from the slope before 19 February.

We observed the warblers at a distance of 5 to 30 m for at least 5 minutes. They foraged among the outer branches and needles searching for insects and occasionally sallied out 1 or 2 m in pursuit of small flying insects. The male and at least one other bird sang. The song consisted of 2 to 5 pairs of loud, low pitched slurred notes as described by Robbins et al. (1966). The song "peter-peter-peter-peter" described by Peterson (1961) was not heard. Behavior indicating whether two of these birds were a mated pair (courtship feeding, etc.) or intended to breed in this area (carrying nest material, etc.) was not observed. Vander Wall searched for the birds again on 20 and 25 March, but without success.

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### LITERATURE CITED

- Mearns, E. A. 1890. Observations of the avifauna of portions of Arizona. *Auk* 7:251-264.
- Peterson, R. T. 1961. A field guide to western birds. Houghton Mifflin Co., Boston.
- Phillips, A., J. Marshall and G. Monson. 1964. The birds of Arizona. Univ. Arizona Press, Tucson.
- Robbins, C. S., B. Brunn and H. S. Zim. 1966. Birds of North America. Golden Press, New York.

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