

An Ash-throated Flycatcher (*Myiarchus cinerascens cinerascens*) in Maryland.—On November 26, 1957 I collected an immature male Ash-throated Flycatcher that had been seen daily since November 22 by Richard A. Simon on our property at Monkton, Maryland. Dr. John W. Aldrich identified the bird as belonging to the nominate race, and the specimen is now #465388 in the United States National Museum collection. Another specimen (now in U. S. Natl. Mus.) was collected at Beltsville, Maryland, on Nov. 25, 1911, by E. B. Marshall, and identified many years later as an Ash-throated Flycatcher by Samuel Army, but not recorded in the literature.

Mr. Robert T. Mitchell of the Patuxent Research Refuge, Laurel, Maryland, examined the droppings that were collected during the 24-hour period that the bird was kept alive. Of the 0.5 cc analyzed, three grasshoppers comprised 85 per cent, skin of fruit 10 per cent and undetermined insect (?) fragments 5 per cent. The breast feathers of the bird were infested with feather lice and their eggs. The body has been preserved in alcohol, and will be examined for internal parasites.

There are a few other records for this western species east of the Mississippi River, only two of which are mentioned in the A.O.U. Check-list (1957). One was collected five miles south of Baton Rouge, Louisiana, on March 20, 1943, by Howell (Univ. of Kansas, Pub. Mus. Nat. Hist., 1:186, 1947). Another was collected near Pensacola, Florida, on Dec. 24, 1944, by F. M. Weston (Auk, 63:451, 1946), who observed another individual in the same area on Oct. 21, 1956 (Florida Naturalist, 30:30-31, 1957). Finally, an Ash-throated Flycatcher was reported seen on the Little Creek, Virginia, 1957 Christmas Bird Count (Audubon Field Notes, 12:125, 1958). Dr. George Lowery, Jr. informs me that in the Louisiana State University Museum are three additional specimens taken in Louisiana, west of the Mississippi: False River, Point Coupee Parish, Dec. 23, 1945; Johnson Bayou, Cameron Parish, Jan. 4, 1948; Willow Island, Cameron Parish, April 1, 1957.

It was interesting to note that the flycatcher at Monkton frequented only the lowest branches of the trees scattered throughout and surrounding an open field. It was never observed higher than six feet. A wintering Mockingbird was seen chasing the flycatcher on several occasions.—STEPHEN W. SIMON, *Blue Mount Road, Monkton, Maryland*.

Systematic Notes on the Olive Warbler.—The attractive Olive Warbler, (*Peucedramus taeniatus*) inhabits high mountain pine forests from central Arizona south to Nicaragua. While related to the large genus *Dendroica*, it has for many years been segregated as a closely allied, monotypic genus. Griscom (1957, "The Warblers of America," Devin-Adair Company, New York, p. 349) recently recommended merging *Peucedramus* with *Dendroica*, a move with which I agree. I have, below, presented evidence which weakens one of the alleged generic distinctions. The only real revision of the species was by Miller and Griscom (1925, Amer. Mus. Nov., 183:1-14).

As appears from the map, my distributional and taxonomic conclusions generally confirm those of Miller and Griscom (*op. cit.*) and of Zimmer (Auk, 65: 126, 1948), but the range of *jaliscensis* is considerably extended. I find myself at variance with the arrangement of the Mexican Check-list (Pac. Coast Avif., 33: 244, 1957), which treats *jaliscensis* and *giraudi* as synonyms of *taeniatus*. There are additional color characters not heretofore described for some of the races. I studied a series of 310 skins. Obviously this report is not definitive; however, until adequate autumn collections are made in Mexico and Central America little more can be done.



FIGURE 1. Distribution of the Olive Warbler. Each locality from which one or more specimens was examined in the present study is indicated by a dot. Subspecies ranges are delimited by narrow, solid lines, but only pine islands are inhabited within these extensive areas. Dotted lines bound the States of Mexico; wide, solid lines mark international boundaries.

I want to acknowledge the help of Dr. Robert T. Orr at the California Academy of Sciences and of Dr. Allan R. Phillips in the field. I am indebted to Dr. Phillips and Dr. George M. Sutton for the loan of specimens from their private collections and to the curators of the American Museum of Natural History, the Museum of Vertebrate Zoology of the University of California, the Chicago Natural History Museum, the University of Kansas Museum of Zoology, the University of Michigan Museum of Zoology, the University of Minnesota Museum of Natural History, and the United States National Museum for the loan of specimens.

A resume of the material studied is:

Peucedramus taeniatus arizonae (Miller and Griscom), Amer. Mus. Nov., 183:10, 1925 (Chiricahua Mts., Arizona).

Generally paler, grayer, and less green than the more southerly races; fresh-plumaged birds of all ages and both sexes are also browner-backed.

Material from northwestern Chihuahua averages slightly smaller, with adult males blacker-backed than those of Arizona, New Mexico, and northwestern Coahuila.

Specimens examined—Southeastern Arizona, 103 (Santa Rita, Chiricahua, and Huachuca Mts.); Southwestern New Mexico, 40 (Reserve); Northwestern Coahuila, 15 (Sierra del Carmen); Northwestern Chihuahua, 34 (Pacheco, Babicora, Garcia).

Peucedramus taeniatus jaliscensis (Miller and Griscom), Amer. Mus. Nov., 183:9, 1925 (Zapotlan=Cuidad Guzman, Jalisco).

Blacker-backed than *arizonae* in worn plumage, and darker and less brownish-olive in fresh plumage. As compared with *giraudi*, the green dorsal wash is lacking; the head and neck are paler, less bright orange in both immature and adult males

in fresh plumage; the edgings of the flight feathers are paler, less green. As compared with *taeniatus*, fresh-plumaged adult males have a darker, less yellowish shade of ochraceous about the head.

The population in southern Jalisco is paler, less blackish-backed than the more northern populations. It is *not* particularly small, as stated by Miller and Griscom (*op. cit.*). The extensive population of the Sierra Madre Occidental and Sierra Madre Oriental is darker, blacker-backed than the rest of the race. The population of the isolated Sierra de Tamaulipas is almost distinct enough (distinguishable 67 per cent from 100 per cent on size, and about the same on color) to be a subspecies. The series which I studied was the same group of six reported on by Martin, Robins, and Heed (Wilson Bull., 66:38-57, 1954). I find this series averages smaller, less extensively yellow-throated, and paler greenish-edged on the flight feathers than other *jaliscensis*; it is 100 per cent distinguishable from *arizonae*.

Two immature specimens from central western Coahuila are almost as close to *arizonae* as to *jaliscensis*. They lack the brownish-olive back color of *arizonae*, however.

Specimens examined.—Southern Jalisco, 11 (La Pisagua, 9 miles west of Ciudad Guzman, La Canoas, Volcan de Colima, Sierra Nevada de Colima); northcentral Jalisco, 1 (La Venta del Astillero, January, a migrant); Nayarit, 2 (near Tepic, January and February, possibly migrants); Zacatecas, 8 (Laguna Valderama, west of Milpillas); Durango, 10 (Laguna del Progreso, Coyotes, Otinapa, El Salto, Adjuntas); southern Chihuahua, 1 (Lagunita); western Tamaulipas, 1 (La Joya de Salas); Sierra de Tamaulipas, 6 (Acuna); central Coahuila, 2 (22 miles south of Ocampo).

Peucedramus taeniatus giraudi Zimmer, Auk, 65:126, 1948 (Las Vigas, Vera Cruz).

Back much greener than in any of the other races. As compared with *taeniatus*, males darker, duller, more orange about the head, and larger. As compared with *arizonae* and *jaliscensis*, fresh-plumaged birds of both sexes slightly brighter orange or yellow about the head.

Specimens examined: Vera Cruz—14 (Perote, Las Vigas); Estado de Mexico—9 (Mt. Popocatepetl, Rio Frio, Villa Victoria, Volcan Toluca); Distrito Federal—5 (La Cima, San Andres); Morelos—1 (Tres Cumbres); Michoacan—13 (Patzcuaro, Tancitaro, Uruapan, Zitacuaro); northcentral Jalisco—2 (near Tequila, Sierra de Cuyutlan). One specimen from Guerrero (male, wing 79 mm.) taken December 1, 1941, at Cuapongo, is a migrant or a vagrant of this race.

Peucedramus taeniatus taeniatus (du Bus), Bull. Acad. Roy. Sci. Lettr. Beaux-Arts, Belgique, 14, p. 2:104, 1847 (San Pedro, Oaxaca, or Chiapas, near Tabasco border).

As compared with the more northern races, adult males brighter, more yellowish orange on the head, neck, and throat; females more orangish yellow about the head; both sexes with back more leaden gray and with the dorsal green of *giraudi* lacking; size smaller. Larger than *micrus*.

Males from Guerrero and Oaxaca are somewhat paler backed than those from Chiapas.

Specimens examined—Guerrero—2 (Omiteme, Cuapongo); Oaxaca—3 (La Parada; 25 miles northwest of Oaxaca City); Chiapas—13 (San Cristobal, Comitán, Volcan Tacana).

Peucedramus taeniatus micrus (Miller and Griscom), Amer. Mus. Nov., 183:10, 1925 (San Rafael del Norte, Nicaragua).

Very similar in color to the darker specimens of *taeniatus*, from Chiapas, but smaller and with wider bill than that of any other race.

Specimens examined—El Salvador—2 (Dept. Chalatenango).

TABLE I
MEASUREMENTS IN MILLIMETERS OF ADULT-PLUMAGED MALES OF
Peucedramus taeniatus. AVERAGES IN PARENTHESES.

		Wing	Tail
<i>arizonae</i>	46 Arizona, New Mexico	75-80 (77.6)	47-54 (50.5)
	7 Northwestern Coahuila	76-81 (78.3)	49-54 (51.9)
	18 Northwestern Chihuahua	74-78 (76.3)	48-52 (50.2)
<i>jaliscensis</i>	11 Durango, Zacatecas, southwestern Chihuahua	73-80 (76.6)	46-53 (50.0)
	1 Southwestern Tamaulipas	78	51
	4 Sierra de Tamaulipas	69-75 (73.0)	46-50 (47.7)
	6 Southern Jalisco	75-79 (77.3)	46-52 (49.2)
<i>giraudi</i>	11 Michoacan and north- central Jalisco	75-79 (76.4)	47-54 (49.6)
	15 Vera Cruz, Morelos, State of Mex., Distrito Federal	73-79 (76.3)	47-54 (51.3)
<i>taeniatus</i>	5 Oaxaca, Guerrero	70-75 (73.0)	48-51 (49.2)
	6 Chiapas	71-76 (73.5)	47-54 (49.7)
<i>micrus</i>	1 El Salvador	70	51

The Olive Warbler has usually been regarded (*e.g.*, Bent, 1953, Bull. U. S. Natl. Mus., 203:153-160) as slightly migratory. In the present study, two specimens were identified as migrants or winter wanderers. As noted above, they were an adult male of *jaliscensis*, evidently of the Sierra Madre Occidental population, taken near Guadalajara in January, and an adult male of *giraudi*, taken in Guerrero in February. I conclude that some individuals, but not entire populations, move as much as 100 miles in winter.

According to Ridgway (Bull. U. S. Natl. Mus., 50 (2):495 1902) and Bent (*op. cit.*), the male Olive Warbler acquires adult plumage at the first postnuptial molt, when it is about 14 months old. I find that this is not invariably true. Two males prepared by Ernest P. Edwards in 1952—July 29 at Rio Frio, State of Mexico, and August 13, 25 miles northwest of Oaxaca City, Oaxaca—have about one-half completed a postjuvinal molt directly from juvenal plumage to adult male dress. In each case, Dr. Edwards noted the testes as minute and the skull as immature (not granulated).

In connection with the above observation of variability as to the time of acquisition of adult plumage, the following data on specimens examined are suggestive: Of males in worn plumage, taken from March through early August, there were of *arizonae* 56 in adult plumage and 36 in first year (female type) plumage. These same figures for *jaliscensis* were 19 adult and 1 (questionable: "sex?" on label) first year; for *giraudi* 17 adult and 4 first year; for *taeniatus*, *aurantiacus*, and *micrus*, together, 7 adult and no first year. It seems that the trait of the male

Olive Warbler taking over a year to acquire adult plumage is more characteristic of *arizonae* than of more southern races. Such geographic variability throws doubt on the use of this molt character as a generic distinction, as was done by Bent (*op. cit.*) and Chapman (1907, "The Warblers of North America," D. Appleton & Co., New York, p. 110).—J. DAN WEBSTER, *Hanover College, Hanover, Indiana, and California Academy of Sciences, San Francisco, California.*

Unusual Nest and Nesting Behavior of a Mourning Warbler.—While studying the breeding biology of the Mourning Warbler (*Oporornis philadelphia*) at the University of Minnesota Forestry and Biological Station in Itasca Park, Minnesota, the writer found on June 21, 1956, a nest containing three eggs of the owner and one of the Brown-headed Cowbird (*Molothrus ater*). The latter egg was removed. The nest was located at the edge of a clump of raspberry (*Rubus* sp.) in a clearing in the forest. It was supported about 5.5 inches from the ground by several small dead branches.

The nest was peculiar in having two cavities instead of a single open cup. It was shallow and elongate, measured 9 inches in length, 5.5 inches in width and 3.5 inches in height. The depths of the cavities were 1.5 inches and 1 inch. The diameter of the deeper cavity was 2.5 inches and the overall inside diameter of the nest, including both cavities and the area between them, was 6.5 inches. Three other normal nests examined by the writer averaged 4.3 inches in outside diameter, 3.7 inches in height, 1.9 inches in depth of cavity, and 2.2 inches in inside diameter. Both cavities of the nest under consideration were poorly lined. The eggs were in the deeper of the two cavities.

The extra cavity, although never containing eggs or young, apparently stimulated incubating and brooding responses in the female. During attentive periods of incubation, when the female faced the secondary cavity, she would often hop from the main cavity to the secondary one. In many cases she did not settle but simply paused a few seconds and hopped back into the main cavity. At other times she settled, usually facing away from the main cavity. In settling, she used the same side-to-side rocking motion employed in settling on the eggs or young. The usual time spent in the secondary cavity was 10 seconds to 1.5 minutes although she occasionally remained as long as 3 minutes. Sometimes the female would resettle and was even seen to rise and poke in the cavity as though moving eggs or rearranging the nest lining. Visits to this secondary cavity occurred usually from 1-4 times during each attentive period of incubation, which averaged about 28 minutes in length in this female. This behavior continued after the young had hatched, although the time spent in the secondary cavity was less.

The construction of the nest was also responsible for the death of the young. In addition to being shallow, the nest was slightly tilted, making it easy for the young to fall out. On the morning of July 7, two young (one egg failed to hatch) were found on the ground beneath the nest. Although cold and feeble, they were still alive and were replaced in the nest. The side of the nest was propped up with a small stick, but despite this the young were found dead beneath the nest the next morning.

The writer wishes to thank George C. West and Richard Brewer for suggestions regarding the manuscript.—GEORGE W. COX, *University of Illinois, Urbana, Illinois.*

Pied-billed Grebes Mistake Highway for Water.—It is interesting to speculate upon the frequency with which birds, in flight or migration, make mistakes