

FIRST RECORD OF THE YELLOW-BELLIED FLYCATCHER FOR THE EL PASO REGION OF TEXAS

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The Yellow-bellied Flycatcher (*Empidonax flaviventris*) breeds across the boreal forest from eastern interior Alaska to Newfoundland and migrates through the eastern United States, including eastern Texas, to winter in Central America (Oberholser 1974, Gross and Lowther 2011). It is rare west of central Texas (Oberholser 1974), with records from Big Bend National Park, Brewster County (Oberholser 1974; two specimens, 3 September 1968 and 1 September 1969), the Davis Mountains (Peterson and Zimmer 1998; 1 September 1994), and Balmorhea State Park, Reeves County (Lockwood 2015; fall record with no date). The species is rare in adjacent New Mexico, with 28 individuals reported to the New Mexico Bird Records Committee, all from the far eastern counties of Eddy, De Baca, and Roosevelt in fall migration (29 August–6 October, Sandy O. Williams III, pers. comm.). Farther west in Arizona, California, and Nevada the species is a vagrant, with all records from late August to mid-October (Phillips et al. 1964, Hamilton et al. 2007, Sullivan et al. 2009, <https://ebird.org/>), except for an exceptional mid-winter and an early June record from Arizona (Rosenberg and Witzeman 1999, Rosenberg et al. 2017). The Yellow-bellied Flycatcher is unrecorded from the El Paso region comprising El Paso County, western Hudspeth County, and southern Doña Ana County (New Mexico) (Paton et al. 2012). Although not a comprehensive source, the eBird citizen-science database contains no records for the Trans-Pecos region of Texas; its westernmost Texas record is from Midland County (Sullivan et al. 2009, <https://ebird.org/>).

While perusing the University of Texas at El Paso (UTEP) Biodiversity Collections, I noted a specimen of an *Empidonax* flycatcher that appeared to me to be misidentified (Figure 1). The specimen had been identified as a Cordilleran/Pacific-slope Flycatcher (*Empidonax occidentalis/difficilis*, i.e., Western Flycatcher), but multiple aspects of the plumage seemed more consistent with a Yellow-bellied Flycatcher, including the lemon-yellow tones to the venter and the dark wings with contrasting white tertial edges. Further examination of the specimen showed a short bill, olive-green dorsum, and broad wing bars on the greater and median coverts with a buff-yellow wash. The eye ring was largely missing, especially posterior to the eye, but appeared uniformly thin anterior to the eye. The flight feathers were uniformly fresh, lacking any signs of wear or molt. A detailed examination of the wing feathers showed that the inner two tertials were slightly fresher than the remaining remiges, suggesting a molt limit.

The following information comes from the data on the specimen tag and the field notes of Scott M. Cutler, which are housed at the UTEP Biodiversity Collections. The specimen was collected by Becky Bailey on 17 September 2011, at 5525 N. Stanton Drive in El Paso, El Paso County, Texas. It was delivered to a wildlife rehabilitator, and then donated to the UTEP Biodiversity Collections. No other notes are given on the circumstances of the collection. The specimen was prepared by Scott M. Cutler on 25 September 2011 and given catalog number UTEP 2829. It was sexed as a female (although the sex is noted as being uncertain) and aged as a “juvenile.” I interpret the comment on the tag “skull part single” as meaning that the skull was incompletely ossified, which combined with a molt limit in the tertials indicates an immature bird in formative plumage during its first fall. The Yellow-bellied Flycatcher undergoes most of its preformative molt in its breeding range before suspending it for fall migration and completing it in the winter range (Pyle 1997, Gross and Lowther 2011). A partial skeleton was also preserved.



FIGURE 1. Photos of the El Paso specimen of the Yellow-bellied Flycatcher (UTEP 2829), in lateral (left), dorsal (center), and ventral (right) views. Scale bar is centimeters.

Photos by Alonso Corral

Although plumage pattern and coloration are important for identification of *Empidonax* flycatchers, morphometrics provide a quantifiable method for identification in support of plumage-based identification (Pyle 1997). Pyle (1997) and Baumann et al. (2014) gave ranges of values for each species of *Empidonax* against which measurements can be compared, particularly the relative lengths of the outer primary feathers, wing chord, and tail length. Although some of these measurements were obtained by the preparator (see specimen tag in Figure 1), for consistency I remeasured all relevant variables. I measured all eleven quantitative traits listed by Pyle (1997) and Baumann et al. (2014) with digital calipers to the nearest 0.1 mm or with a ruler (wing and tail) to the nearest millimeter. The measurements, along with the values listed by Pyle (1997) and Baumann et al. (2014), are listed in Table 1.

Most of the measurements of the El Paso *Empidonax* fall in the zone of overlap between the Western and Yellow-bellied flycatchers. However, the short tail and thus the wing-minus-tail measure fall well outside the range of the Western Flycatcher. The length of wing minus tail is at the maximum value Pyle (1997) specified for the

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TABLE 1 Measurements of the El Paso *Empidonax* in Comparison to Values for the Western and Yellow-bellied Flycatchers^a

Measurement	El Paso specimen	Yellow-bellied	Western
Wing	63	60–72	56–72
Tail	44*	46–55	50–63
Wing – tail	19*	12–19	6–15
Bill from nares	8.3	7.0–9.4	7.7–9.2
Bill width	5.5	4.8–5.6	5.0–5.8
Longest P – longest S	12.0	10.3–17.5	8.6–17.1
Longest P – P6	3.3	2.2–6.7	0.2–4.4
P6 – P10	5.5	1.9–6.3	4.7–9.8
P9 – P5	6.5	5.8–11.5	2.8–9.8
P6 emarginated?	slightly	variable	yes
Length S1 fringe	17.8*	15.2–19.7	18.6–26.5

^aComparison values from Pyle (1997) except the length of the pale fringe on S1 is from Baumann et al. (2014). Values from Pyle (1997) are based on the 95% confidence interval from 40 specimens per species. P, primary feather; S, secondary feather. All measurements in millimeters. An asterisk indicates measurements outside the range of the Western Flycatcher.

Yellow-bellied, and while the tail measurement is 2 mm shorter than Pyle's minimum value for the Yellow-bellied, it is far outside the range of the longer-tailed Western Flycatcher. The length of the pale fringe on the secondaries of the Yellow-bellied and Western flycatchers differs (Baumann et al. 2014), and the measurement of the El Paso *Empidonax* falls within the range of the Yellow-bellied and well outside the range of the Western. No other *Empidonax* species shows the bright lemon-yellow venter of the Yellow-bellied Flycatcher, although both the Acadian (*E. virescens*) and Least (*E. minimus*) flycatchers can approach its brightness. Both of those species are ruled out by the morphometrics: the wing, tail, bill length from nares, and all five primary-feather measurements eliminate the Acadian, while the tail, wing – tail, and bill width eliminate the Least. Thus, this specimen represents the first record of Yellow-bellied Flycatcher for the El Paso region.

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