CFO-ORC FILE # 34-95-60

COLORADO FIELD ORNITHOLOGISTS - SIGHT RECORD FORM

ACCEPT 7-0

NEW STATE RECORD _____ UNUSUAL RECORD X

Species: Alder Flycatcher (*Empidonax alnorum*)

Date: 28 May 1995 **Number seen:** one **Sex:** unknown **Plumage:** adult

Locality: Barr Lake State Park **Elevation:** 5000'

Nearest town: Brighton **County:** Adams PHOTO

Time observed: about 9:20 - 9:30 AM, 10:30-10:35 AM, and 12:20-12:50 PM MDT

Duration of observation: total of about 45 minutes

Description: While I was tagging along with a Boulder Co. Audubon birding trip to Barr Lake S.P., one member of the group found a very green-backed *Empidonax*. I thought it was going to be a Cordilleran due to the greenness of it. We had seen 6 or 7 Empies up to that point, including Dusky, Hammond's, and Willow and I thought, "Great, a fourth species of Empie. Not a bad morning." I was starting to question myself as to the fairly insignificant eyering when the bird turned around showing off a fairly yellow belly and a bright, white throat. Needless to say, I was startled by that and immediately started thinking bad, rarity thoughts. I spent the next 8-9 minutes studying the bird hoping that it would call.

I initially thought that it might be an Acadian due to the greenness of the back, the strong wash of yellow on the belly, and the contrasting white throat. I left the bird when the group did, but worked it over in my mind for quite a while. Justin Ellenberger and I peeled off from the group around 10:15 to head back to the CBO office. When we got back to the area that the bird had been in, we looked hard in hopes of refinding it. Justin spotted it shortly after we started looking. I quickly discarded Acadian as a possibility, having remembered that that species has a monstrous bill and very long wings, neither of which this bird showed. That left me with only one reasonable possibility: Alder, a species with which I thought I was very familiar from years of birding in Michigan and New York.

After eliminating Acadian, all the field marks fit Alder. I was going over the field marks in my mind one last time figuring that the bird was never going to call, when it called. Twice. It gave the distinctive "peep" (or "peip" as the species has always sounded just slightly two-noted to me) which really clinched the ID for me. Justin and I returned after lunch figuring that we could probably catch the bird given enough waiting for the bird to fly into a net. Unbelievably, it took less than three minutes for it to get caught in the first net we erected. I banded, measured extensively, and photographed (from many angles) the bird in hand.

Shortly-back-from-the-field description: A bright green-backed *Empidonax* with a thin whitish eyering that was wider and pointed behind the eye. I could not discern (in the field) the anterior half of the eyering due to its exceeding slimness. The face was greenish and contrasted strongly with the white throat. The head was the same green as the back with no contrast between the two. The bill was somewhat long for an Empie, but not outrageous, but it was very wide. The upper mandible was dark and the entire lower mandible was yellowish. The belly was fairly yellow. The primary extension was somewhat long with about four primary tips visible on the folded wing. The tail was longish, but not overly so. Flight feathers were dark and there were two buffy wingbars.

31-95-60.

In-hand measurements (see enclosed copy of relevant material in *Identification Guide to North American Passerines* by Pyle *et al.*):

Wing chord = 74mm; tail length = 61mm; wing-tail = 13mm; culmen = 8.4mm; p9-p5 = 10.7mm**; p6 not emarginated; p6-p10 = 1.0mm; p10-p5 = 3.9mm; longest p(p9)-p6 = 6.4mm

** "p" stands for primary and the primaries are numbered sequentially from the innermost (p1) to the outermost (p10). The values given are the differences in length between given primaries with the longest primary of the two being given first such that "p6-p10=1.0mm" means that the sixth primary is one mm longer than the 10th primary.

The combination of back color, size and shape of eyering, throat color, belly color, and bill shape and size eliminate all but the two species of "Traill's" flycatchers. Two of the wing formula measurements (p10-p5 and longest p-p6) suggest that the bird is not a Willow, but the call note I heard twice before capture and twice after capture absolutely eliminates Willow (as well as all other Empies).

Describe the bird's song and call, if given, including method of delivery (i.e. from perch, in flight, duration): The bird gave a semi-musical "peip" twice while foraging before capture, once shortly after being released, and once more while foraging after release; all given while perched.

What is your prior experience with this and similarly-appearing species? I have seen and/or heard over 200 Alder Flycatchers and from 10s to 100s of all species of North American *Empidonax*, except for Buff-breasted, which I've seen once. I have also banded all North American *Empidonax*, except for Acadian and Buff-breasted.

Light conditions: sun behind and slightly right of me

Optical equipment used: 10x40 Leitz and 20/10 eyeballs

Distance, and how estimated: estimated closest distance in field at 25 feet

Other observers who saw the bird with you:
Justin Ellenberger and a bunch of members of Boulder County Audubon Soc., though they knew not its ID

Other observers who saw the bird independently: The guy whose name I don't remember that says he got 379 species in Colorado in 1994. Though he did not ID the bird to species, he did describe to me this bird before I told him what I had found.

If photographed, type of equipment and film: (How is this relevant?) I photographed the bird in-hand and am enclosing five color prints.

List books, illustrations, recordings, other birders, etc. consulted and how this influenced your identification:

a) at time of observation: none **b) after observation:** After writing notes from which I wrote this description, I consulted Kaufman's *Advanced Birding*, but that had no influence on my report.

Reporting observer: Tony Leukering **Signature:** Tony Leukering

Address: Colorado Bird Observatory, 13401 Piccadilly Road, Brighton, CO 80601

Date report was written: 30 May 1995

identification. Many features are given, and reliable identifications are made when all or almost all features coincide to one species. This should usually be the case, but note that occasional individuals will not be identifiable by in-hand criteria alone. Table 1 summarizes the more important identifying features, and fig. 24 illustrates the size, shape, and typical color pattern of the lower mandible for each species. These should be consulted for a preliminary identification, which should then be confirmed with the species accounts.

TABLE 1.
Some key characteristics for the separation of *Empidonax* flycatchers.
(Measurements in mm; see accounts for more information.)

	Yellow-bellied	Acadian	Trail's	Least	Hammond's	Dusky	Gray	Western
Upperparts	green	olive	brownish-olive	grayish-olive	olive to grayish	olive to brownish	pale gray or tinged olive	olive
Wing chord	60–71	67–80	64–77	57–67	63–75	61–73	64–76	56–72
Tail length	46–55	52–62	52–66	51–58	52–62	57–68	56–66	50–63
Wing-tail	12–20	13–21	7–17	4–12	7–16	0–8	6–13	3–14
Culmen	7.0–9.4	9.2–10.1	7.6–10.0	6.3–8.4	6.0–7.9	6.5–8.9	7.6–10.4	7.7–9.0
Wing Formula	p10<p6 p8–p6<5.0 p10>p5	p10>p6 p8–p6>5.5	p9–p5, 8–[illegible]	wing tip <13.5 p9–p6≥5.0	wing tip >13.0 p9–p5<5.0	p10 often <p4. p9–p5<5.0	p10>p4 p9–p5 4–10.	p10<p5
p6 emarg?	variable	no	no	yes	yes	yes	yes	yes

YELLOW-BELLIED FLYCATCHER
Empidonax flaviventris

YBFL
Species # 463.0
Band size: 0

Species—Separated from other species of *Empidonax* with caution. Upperparts green; underparts (including throat) strongly washed yellow; eye ring narrow, yellow, rounded; bend of wing and underwing covs lemon yellow; pp and ss blackish, contrasting distinctly with lemon ss edging and wing bars; lower mandible yellow (fig. 24); culmen 7.0-9.4; inside lining of mouth orangish; wg 60-71; p6 often, but not always emarginated; p10 usually ≤ p6 and ≥ p5; longest p—p6 ≤ 5.0; tail 46-55; wg—tail 12-20; legs gray. Plumage and leg coloration eliminates all other species of *Empidonax* except Acadian and Western flycatchers. From Acadian Flycatcher by yellower underpart coloration (especially throat and chin); shorter bill, wing, and tail; mouth coloration; and wing formula features. From Western Flycatcher by brighter upperpart coloration, rounded eye ring, color of underwing and pp and ss, wing formula features, and wg—tail. See also differences in molt strategy for further identification clues.

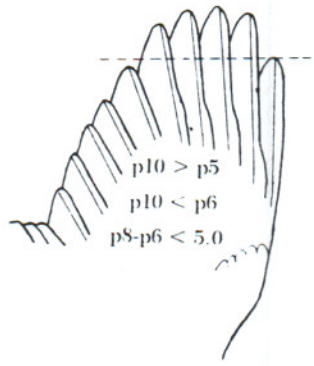

Figure 25. Wing formula of the Yellow-bellied Flycatcher.

Molt—PB: HY partial (Jul-Sep), AHY incomplete (Sep-Dec); PA incomplete-

Skull—Completes in HY/SY from 15 Nov (as early as 15 Oct in SE populations) thru Jan. Some SYs may retain windows thru spring.

Age—Juv (May-Aug) has upperpart feathers edged buff, wide wing bars, and underparts dull white or faintly suffused with brownish.

HY/SY (Aug-Jul): Underparts, often including throat, strongly washed yellow (thru Jan); wing bars wide, buffy (thru Feb); rects tapered (fig. 26), tipped buffy when fresh.

AHY/ASY (Aug-Jul): Underparts with moderate yellow wash on breast and belly, throat whitish; wing bars narrow, white or tinged yellow; rects truncate (fig. 26), without buff tips.

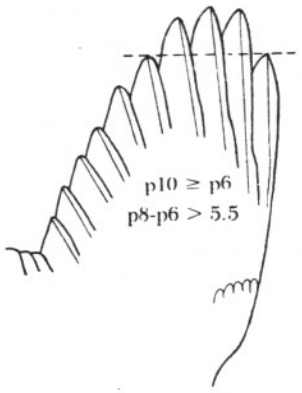

Figure 27. Wing formula of the Acadian Flycatcher.

Sex—♂ = ♀ by plumage. CP/BP (Apr-Aug). Wg: ♂(n65) 70-80, ♀(n33) 67-75.

References—B,R,W,SK,O,BBM; Mengel (1952), Robbins (1959), Phillips *et al.* (1966), Traylor (1968).

TRAILL'S FLYCATCHER

TRFL
Species # 466.9
Band size: 0

ALDER FLYCATCHER
Empidonax alnorum

ALFL
Species # 466.1

WILLOW FLYCATCHER
Empidonax traillii

WIFL
Species # 466.0

Species—Upperparts brownish to olive; eye ring absent or indistinct (sometimes with distinctly paler lores); culmen 7.6-10.0; bill width > 5/8 culmen; lower mandible entirely or mostly yellowish (fig. 24); wg 64-77, p6 not (occasionally slightly emarginated; p10 ≤ p6; p9-p5 usually 8-13; wg—tail 7-17; legs blackish. From wood-pewees by shorter and less pointed wing. From other species of *Empidonax* by plumage and leg coloration, lack of distinct eye ring, large bill, and lack of emargination to p6.

Willow and Alder flycatchers should be separated with great caution, and only with extreme individuals, if at all (see Note, p 36). Alder Flycatchers generally

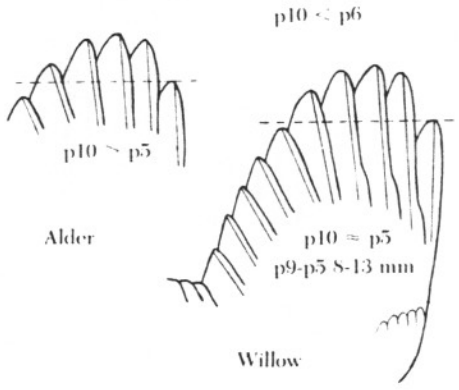

Figure 28. Wing formulas of Willow and Alder flycatchers.

have slightly longer and more pointed wings and slightly smaller bills, such that a scatter diagram involving these characteristics provides the best clue to their identities (see below). As with all species of *Empidonax*, ♂♂ have longer and more pointed wings than ♀♀, hence knowing the sex can be of use. Also, eastern forms of Willow Flycatcher tend to have slightly shorter and less pointed wings than western forms, and may be easier to separate from Alder Flycatcher. The following measurements and scatter diagram are derived from Stein (1963):

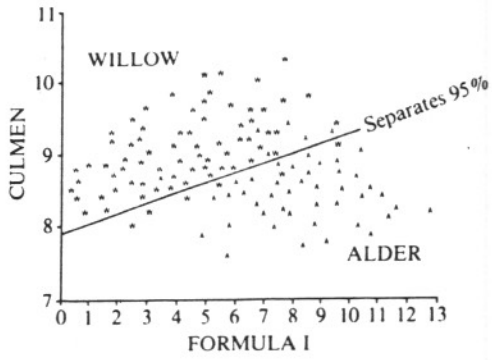

Figure 29. A scatter diagram of culmen length vs. a wing formula equation in Willow and Alder flycatchers. Formula I is the difference between the longest p–p6 and p10–p5 (positive or negative). This comparison was used to separate 90–95% of these two species in both sympatric and allopatric populations (see Stein 1963).

TABLE 2.
Some measurement ranges and means (in mm) of Alder and Willow Flycatchers (mostly from Stein 1963). See Sex for breakdown of ♂ and ♀

	Alder	Willow
Sample	56–57	66–68
Wing chord (mean)	65.8–76.5 (70.35)	63.2–74.5 (68.78)
p10–p5 (mean)	0.0–5.8 (2.27)	−2.6–2.9 (0.27)
Longest p–p6 (mean)	3.4–7.2 (5.14)	2.3–6.4 (3.97)
Culmen (mean)	7.6–9.3 (8.50)	8.0–10.3 (8.99)

[Note: A recent examination of these features indicates that much more study is needed before this identification problem is resolved. The above should be applied to captured birds in the interest of learning more, however, birds should probably not yet be reliably separated by in-hand criteria alone.]

Additional plumage criteria that may possibly be of use are slightly larger and more contrasting pale loral spots and darker centers to the crown feathers of certain populations of Alder Flycatcher.

Molt—PB: HY/SY partial (Sep-Jan), AHY/ASY complete (Sep-Jan); PA:SY complete (Mar-Apr), ASY partial (Mar-Apr). All molts take place on the winter grounds. More investigation is needed to determine the timing and extent, especially in HY/SYs. Molt strategies may differ between the two species.

Skull—Completes in HY from 15 Oct (may complete as early as 15 Sep in California populations of Willow) thru Dec. Some SYs may retain windows thru spring.

Age—The following is reliable for all autumn birds N of the winter grounds but becomes more difficult to use after completion of the 1st PB. No plumage criteria are known for birds in alternate plumage:

Juv-HY/SY (Jun-Apr): Wing bars wide, bright buffy (thru Dec); eye ring (if present) dull buffy white (thru Dec); flight feathers relatively fresh (thru Nov); rects pointed (fig. 26; rect shape possibly useful thru Oct on some SYs).

AHY/ASY (May-Apr): Wing bars narrow, dull whitish; eye ring (if present) white; flight feathers relatively worn in fall; rects truncate (fig 26).

ALDER FLYCATCHER 34-95-60

COSCNo. 6) 15 67*82 N-I N I -042

ALDER FENCATCHER 34-95-60

CCSDNO. 5) 13 6/2*8Z N-1 N Z NN2

Z NN Z N 1-N CCSDNO. 5) 13 6/2*8Z

ALDER EXCAVATOR 34-95-60

HOLDER FOR CATCHER 34-95-60

COSCNo. 8) 19677+82 N-1 N 1 032