

Key to Eastern Empidonax Flycatchers
By Dorothy L. Bordner

Many banders have found the published material on the identification of the Empidonax flycatchers cumbersome and time consuming to use in the field. For the past several years we have used the following outline which gives a quick reference and comparison of the bare essentials for Empidonax identification or processing. It combines the information from Robbins, Eastern Empidonax Flycatchers, 1959, and Phillips, Howe, Lanyon, Identification of the Flycatchers of Eastern North America, with Special Emphasis on the Genus Empidonax, Bird-Banding, 37: 153-171, 1966.

Definitions have been omitted (except for Formula B) to save space. Those characters which did not contribute to differentiation between species were also omitted. (For example: the 6th primary of the Yellow-bellied Flycatcher can be notched, slightly notched, or not notched; both species in B. have the 10th primary longer than the 5th.)

Notation used: \leq reads less than or equal to.
 \geq reads greater than or equal to.

EMPIDONAX FLYCATCHERS

YELLOW-BELLIED FLYCATCHER	<u>Empidonax flaviventris</u>	AOU 463
ACADIAN FLYCATCHER	<u>Empidonax virescens</u>	AOU 465
TRAILL'S FLYCATCHER	<u>Empidonax traillii</u>	AOU 466
LEAST FLYCATCHER	<u>Empidonax minimus</u>	AOU 467

Generic characters: Small, usually silent, flycatchers with wing bars and prominent eye ring and with relatively long tarsus. Before proceeding with identification make sure the bird is not a Wood Pewee or a White-eyed Vireo. Pewee tarsi measure 12 to 14 mm.; Empidonax, generally 15 to 18. Pewee wing is generally 75 mm. or more and is browner than any Empidonax. Vireos bite; flycatchers do not.

Distinction of AGE:

Immature--wide buffy wing bars.
Adult--narrow white wing bars.

Distinction of SPECIES:

A. Back brownish and throat white (or grayish):

- | | | | | |
|---|---|---|---|-------|
| 1 | { | (1) 6th primary always notched. | } | LEAST |
| | | (2) Tail notched. | | |
| | | (3) 10th primary \leq 5th primary. | | |
| | | (4) Bill \leq 5.5 mm across nostrils. | | |
| | | (5) Wing $<$ 69 mm (One sample 57-67) | | |

- | | | | | |
|---|---|---|---|----------|
| 2 | { | (1) 6th primary <u>not</u> notched. | } | TRAILL'S |
| | | (2) Tail rounded. | | |
| | | (3) 10th primary \geq 5th primary. | | |
| | | (4) Bill \geq 5.5 mm across nostrils. | | |
| | | (5) Wing $>$ 63 mm (One sample 63-74) | | |

B. Back greenish and throat washed with yellow:

1 { (1) Formula B \leq 5.00 mm.
(2) Mouth orange.
(3) Wing 60-69 mm. } YELLOW-BELLIED

2 { (1) Formula B \geq 6.00 mm.
(2) Mouth flesh or yellowish.
(3) Wing 64-81 mm.
(4) 6th primary not notched. } ACADIAN

*Note: Check mouth color of any suspected Acadians, i. e. any large greenish backed.

Formula B = distance between tip of 6th primary and tip of wing.

SEX information based on small samples. Use with caution.

	Female	Overlap	Male
Least	57-62	62	62-66
Traill's	65-68	68-71	71-74
Yellow-bellied	60-65	65-66	66-69

(Lengths based on flattened wings in sex chart.)

Additional notes:

Flycatchers have ten primaries with the outer primary being number ten. The relative lengths of the tenth primary and the fifth primary should be determined with the wing held in the normal closed position against the body.

Sixth primary shape:



6th primary
notched.

(or cut out)



6th primary
not notched.

(or not cut out)

The lengths in the species key are based on the wing chord, not flattened, while those in the sex information are for flattened wings. Flattened measurements usually average 0.5 mm longer than chord measurements. The sex information is based on small samples and should be used cautiously. It is not suggested that banders sex their flycatchers.

The bill width measurement is that across the middle of the nostrils and a small error in position could make an error of 0.5 mm in this measurement.

Tail shape can be very hard to distinguish if a flycatcher has been held in a gathering cage - and even sometimes if the bird is badly tangled in the net.

Very late fall stragglers should be checked carefully for possible western species, particularly if the lower mandible is dark or partially dark. See "Additional Notes on the Flycatchers of Eastern North America" by Phillips and Lanyon, Bird-Banding, 41: 190-197, 1970.

It would be interesting if other banders would keep records of the molt of head and body feathers or lack of it in the flycatchers that they handle during fall migration. Our IBOR information showed a trend for certain species to be in heavier molt than others. We would be interested in observations, pro or con, from other stations.

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Editor

