Flycatcher Fundamentals

Is it a pewee or one of those pesky Empidonax flycatchers?

It happens a lot. A smallish flycatcher lands on a perch in front of an observer, like in this issue's Featured Photo.

"Aarrrgh," goes the mental scream of the observer. "Is that a wood-pewee [insert here one's particular preference for Eastern or Western] or a Willow Flycatcher?"

The genera *Contopus* (pewees, including the Olive-sided Flycatcher) and *Empidonax* cause no little amount of angst among birders, even for relatively skilled and knowledgeable birders. These two genera have been treated individually from an ABA Area perspective previously in *Birding*; see Birch and Lee (2008) for the two wood-pewees, Rowland (2009) for the genus *Empidonax*. However, many birders' problems with what I term little green flycatchers—using the term "green" very loosely (Leukering 2014), begin higher in the taxonomy. That is, many find distinguishing between pewees and empies, as I prefer to call them, difficult (I will refrain from my rant about the use of "empid"). When one cannot assign an unidentified bird to the correct genus, identifying it to species correctly is impossible. The standard field guides, Sibley (2014) and National Geographic (2017) devote little space and few words to the problem. As far as I can tell, this conundrum has not seen a thorough treatment in print. Distinguishing pewees from *Empidonax* flycatchers is a problem surmounted by a combination of taking in the overall shape and focusing on details, sometimes small details; the two genera are quite similar in many respects.

Join the online conversation about this interesting bird:
aba.org/magazine

Featured Photo—*Nanaimo, British Columbia; May 26, 2020. Photo by © John Morrison.*
"Flycatcher sp." may seem tempting, but we can do this! Dull wing bars, a crested head, lack of a strong eye ring, and hefty bill may suggest one of the pewee species, but read the full primer on why this is a Willow Flycatcher.

TONY LEUKERING
Dodge City, Kansas
greatgrayowl@aol.com

Contopus Overview

This genus is comprised of 15 species of medium-sized flycatchers, five of which are found on the *ABA Checklist*, one of which, Cuban Pewee, is a rare vagrant in the ABA Area, and another of which, the Greater Pewee, has a fairly limited distribution in the ABA Area's desert Southwest. All but one of those 15 species has "pewee" in its official English name. Olive-sided Flycatcher is the black sheep, which engendered a minor push for a change of name to "Boreal Pewee" a while back.

The four breeders of the ABA Area share many shape and behavior traits. Chief among these is the strongly peaked crown creating a triangular appearance to their heads in most situations. All four breeding species are migrants and virtually all individuals of the four species depart the ABA Area for the winter. All have long wings (unlike the tropical-resident species of the genus), providing the single-most-useful difference within the ABA Area between the two genera. Oddly, although Sibley (2014) compares *Empidonax* with flycatchers of other genera on page 341, he does not make specific note of the long wings of pewees as a discriminator. Olive-sided Flycatcher's large head and short tail engender a different look from that of the other three species' long, lanky appearance that is accentuated by those species' small heads and long tails. Pewees are more obviously vested than are *Empidonax*, with the distinct dark of the sides extending to the undertail coverts, and have dark central smudges on some of those undertail coverts. All *Contopus* species have short feet, particularly relative to those of most *Empidonax*. Pewees, particularly woodpewees, generally perch upright and present a long, lanky appearance, with the widest portion of the body usually being at the chest level, a very different appearance than typically presented by empies.

Empidonax Overview

Oddly enough, this genus also houses 15 species, but it is much more a northern, less-tropical genus than *Contopus*, as only four species are not on the *ABA Checklist*, although we have only one record of Pine Flycatcher, essentially a Mexico-Guatemala endemic. Relative to pewees, empies, for the most part, have short wings, eye rings, heads that do not typically show a strong central peak to the

LEFT: **Supplemental Photo #1—*Lake Estes, Larimer County, Colorado; June 1, 2011. Photo by © David Waltman.*** The prime directive (for flycatcher finders): Note primary projection, which is always long in the pewees.

RIGHT: **Supplemental Photo #2—*Denver, Colorado; May 23, 2021. Photo by © John C. Breitsch.*** The pose of this bird might make it difficult to note primary projection, at least in the field, but read the entire treatment of *Contopus* versus *Empidonax* ID for other clues you can use like foot and bill size. With the help of photo editing, we can still use primary projection to help ID this bird, even if the wings were less clearly visible in the field.

Supplemental Photo #3—*Camas National Wildlife Refuge, Jefferson County, Idaho; May 11, 2020. Photo by © Darren P. Clark.* Note the relatively limited primary projection on this Least Flycatcher as well as the sharp contrast between the pale tips of the coverts with the rest of the feather, forming the wing bars.

crown, and long feet. The posture of *Empidonax* flycatchers is usually not upright, although singing birds often perch fairly erect. The usual posture is leaned over to varying degrees, and the tubby belly area is usually the widest portion of the body.

I present below six helpful identification features in distinguishing between pewees and empies, in order of their usefulness and ease of use.

Primary Projection ■ Those birders eschewing the use of "feather-ID" characters are hampered in correctly identifying species in difficult groups such as those presented here. Primary projection is a powerful identification tool and provides the single-most-certain and most-easily discerned character that absolutely discriminates between the regularly occurring four pewee species and 10 empie species within the ABA Area. Pewees have very long primary projection; empies have primary projection that is short or, at longest (Acadian Flycatcher), moderate. Any small, green flycatcher whose primary projection is about as long as, or longer than, the exposed length of the longest tertial is a pewee. Any small, green flycatcher whose primary projection is obviously shorter than the longest tertial is an *Empidonax*. The only caveat is that Eastern Phoebe, which is certainly a small, "green" flycatcher, also has long primary projection. But it is not a member of either genus considered here, and its darker head lacking a strong central peak to the crown rules out the various pewees, while its habitual tail pumping typically makes it discernible from both *Contopus* and *Empidonax* flycatchers.

Since primary projection is such a powerful tool in flycatcher identification, I go to some length here to describe it on birds in general. On the folded wings of birds, the primaries are folded underneath the secondaries, such that much or most of the length of the primaries is hidden by the secondaries. The innermost three or four (depending on the family) secondaries have been modified over the course of evolution to serve as protection for much of the folded wing, being larger and wider than the other secondaries. The differences in size/shape and their tasks have caused us to treat them differently. We even have a different name for them: tertials. On small, green flycatchers (and most other bird species), the tertials are easy to pick out due to their large size and, frequently, wide and contrastingly colored outside edges. Primary projection is the length of the longest primary extending beyond the tip of the longest tertial. Essentially, this is the length of wing tip visible beyond the longest tertial (Supplemental Photos #1, #3, and #5).

I could lead us all into the weeds by further discussing the minutiae of the relationship of tertials and primary projection, but I suspect that eyes are already glazing over. Suffice it to say that learning how to pick out the primaries on a perched bird and assess primary-projection length can greatly increase one's ability to correctly identify birds of tricky groups, not just among small, green flycatchers. Just be sure that the longest tertial is present. To do that, simply count the number of them. Virtually all passerine species have three, and only three, tertials, with the innermost being the shortest, the outermost the longest. If one's count comes to only two, be careful in assessing primary projection.

Supplemental Photo #4—*Madison County, Idaho; June 27, 2019. Photo by © Darren P. Clark.* Check out the drab wing bars and crested look of this Western Wood-Pewee, and then see if you can find other markers that distinguish this *Contopus* from the *Empidonax* flycatchers.

Side Coloration ■ While many *Empidonax* have coloration on the upper sides darker than that of the belly, that dark coloration usually peters out on the flanks; none show the extensive dark sides and flanks of pewees. The general overall impression of the underparts of pewees is dominated by dark coloration, while that of *Empidonax* is dominated by light coloration.

Undertail Covert Pattern ■ Just the word "pattern" is sufficient here, as *Empidonax* undertail coverts have none; they are entirely pale. Pewees all sport dark smudges to some, many, or most of their undertail coverts. Typically, pewees have more-or-less obvious dark smudges in the middle of the central pair of longest undertail coverts, but some individuals have more coverts with dark central smudges. Some individuals' smudges are faint and could be easily overlooked in the field, so care is required on some birds. Check the primary projection for confirmation.

Head Shape ■ Head shape in birds with feathered heads is ephemeral, as they have individual control of feathers and can quickly alter head shape, either by raising or depressing groups of feathers. The prototypical triangular head shape of pewees can disappear in an instant.

However, creating a strong peak-crowned appearance like that of pewees seems beyond the head-shape capabilities of most *Empidonax*. A small, green flycatcher showing a strongly triangular head shape is probably a pewee. Check the primary projection to be on the safe side.

Wing Bars ■ Olive-sided Flycatcher and Greater Pewee exhibit very thin, very drab—never bright white—wing bars, if they sport them at all. This section is for distinguishing wood-pewees from empies. The brightest, widest, and most prominent portions of the two wing bars in both wood-pewees and *Empidonax* is the inner portion.

Empidonax flycatchers' wing bars are, generally, substantial affairs. Both the median and greater secondary coverts are tipped widely in white, pale yellow, buff, rusty, or gray, depending on species, age, wear state of the plumage, and individual variation. The tips of the median coverts form the upper wing bar, greaters form the lower. The meeting between the pale tip and the rest of the feather is generally sharp, often straight across the feather, with no bleed of pale into the dark. The pale of the tip of the individual coverts extends along the leading (outside) edge of the feather, but even there the distinction between pale and dark is sharp (Supplemental Photo #6).

The color of wood-pewee wing bars is often dull, tending to gray much more so than those of empies, and they are typically not sharp, with the pale coloration of the tip often bleeding into the dark. Although the upper wing bar on *Empidonax* is typically at least a bit narrower than the lower wing bar, the upper wing bar on wood-pewees is even more so. The palest, most contrasting portion of the tips to the median coverts is usually the very fringe of the tip that presents as a chain of scallops often undetectable at longer range. The tips to the greater coverts, forming the lower wing bar, are generally deeper than those of the median coverts, but most of the pale coloration is restricted to the fringe of the feather tip, rather than a solid pale tip to the feathers

Supplemental Photo #5—*Niobrara County, Wyoming; June 15, 2019. Photo by © Steven G. Mlodinow.* Despite the bird's rounded crown, the obvious dark smudges on this bird's undertail coverts rule out all *Empidonax* flycatchers and help us identify it as a wood-pewee. While we are ogling those coverts, note that the longest primaries extend beyond the undertail coverts, providing another character with which to rule out empies. The location during the breeding season strongly indicates that this is a Western Wood-Pewee.

Supplemental Photo #6—*Fresh Pond, Cambridge, Massachusetts; Nov. 9, 2016. Photo by © Jeremiah R. Trimble.*
Stronger wing bars and an appreciable eye ring, among other things, distinguish this Least Flycatcher from a member of *Contopus*. Note also the long foot.

typical in *Empidonax*. That pale fringe is always more extensive on the leading edge of the feather than on the trailing edge. The above features combine to present such a drab appearance to the wing bars that they often do not stand out (Supplemental Photo #7).

Foot Length ■ While this is a character tricky to use, given good views of the entire length of foot from the tarsometatarsal joint (akin to our ankles, but frequently called knees by birders) to the toes can enable certain identification to genus in most individuals. Unfortunately, that feather control noted above can create problems, as fluffing out the belly feathers can hide most or all of the length of the foot proximal to the toes. As in Supplemental Photo #7, pewees have short, even very short, feet, while empies generally have relatively long ones. Indeed, the name *Contopus* comes from two Greek words, *kontos*, which means short, and *pous*, which means foot! Hammond's Flycatcher, which tends to forage higher in the vegetation column than other *Empidonax* (at least on the breeding grounds), has the shortest feet of any ABA Area *Empidonax* species (personal observation: I have handled for banding all ABA Area breeding species other than Buff-breasted, even measured foot length in most of them). Of course, if one is seeing the legs so well that one can determine that the individual is either short-footed or long-footed, one can probably see more-reliable features well enough to distinguish between these two genera.

Willow Flycatcher Is a Problem Child

Some of the above text about distinguishing *Empidonax* from pewees breaks down when one considers Willow Flycatcher. Most individuals lack eye rings. The species sports a relatively large bill and frequently presents a peak-crowned, triangular-headed appearance (as in the Featured Photo). Willow is also the *Empidonax* species in my experience that

Supplemental Photo #7—*Montezuma County, Colorado; May 23, 2016. Photo by © Steven G. Mlodinow.* Another Western Wood-Pewee gives nice views of its hefty bill. Also visible is the lower wing bar formed of pale scallops, the obvious dark smudge on at least one of the central undertail coverts, and the tip of the longest primary on the bird's left wing extending as far as the tips of the longest undertail coverts, all being features ruling out the genus *Empidonax*.

Supplemental Photo #8—*Monhegan Island, Maine; May 29, 2017. Photo by © Jeremiah R. Trimble.* The Olive-sided Flycatcher is the only member of its genus, *Contopus*, to not have "pewee" in its official common name. Unlike on wood-pewees, the column of pale up the center of the underparts continues across the breast to the throat.

is most likely to exhibit wood-pewee-like wing bars. The simplest and quickest way to make the wood-pewee/Willow Flycatcher distinction is primary projection. While Willow Flycatchers have relatively long primary projection…for an *Empidonax*, wood-pewee primary projection is much longer, so start there.

Acknowledgments

I have discussed this topic over the years with a wide variety of birders, particularly Michael O'Brien, Tom Johnson, Mark Peterson, and Steve Mlodinow. Although these folks and others have had input into my understanding of flycatcher identification, any mistakes or overgeneralizations here are mine.

Works Cited

Dunn, J. L., and J. Alderfer. 2017. *National Geographic Field Guide to the Birds of North America*, 7th ed. National Geographic, Washington, D. C.

Lee, C.-T., A. Birch, and T. L. Eubanks. 2008. Field identification of Western and Eastern wood-pewees. *Birding* 40 (5): 34–40.

Leukering, T. 2014. Seasonal timing: Small, green flycatchers. *Colorado Birds* 48: 249–254 (https://tinyurl.com/jue5cw3n).

Rowland, F. 2009. Identifying *Empidonax* flycatchers: The ratio approach. *Birding* 41 (2): 30–38.

Sibley, D. A. 2014. *The Sibley Guide to Birds*, 2nd ed. Alfred A. Knopf, New York.