

## ALDER AND WILLOW FLYCATCHERS IN MASSACHUSETTS

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Among the more notable changes to the A.O.U. Check-list enumerated by the 32nd supplement (Auk 90(2), 1973) is the splitting of Traill's Flycatcher into two species. The northern birds, which formerly passed as Empidonax traillii alnorum and E. t. traillii (in part), are now Empidonax alnorum, to be known by the common name Alder Flycatcher. The southern and western birds, formerly E. t. brewsteri and E. t. traillii (in part), have been elevated to separate species status. They retain the old Latin name E. traillii and have been given the common name Willow Flycatcher.

Since both the Alder and Willow Flycatchers breed in the state, this paper will attempt to give BOEM readers, especially those working on Massachusetts Audubon Atlas blocks, a guide to the identification and habitats of these closely related species. Many of the comments are taken freely from various published sources; others are from my own observations.

As early as 1858, S. Baird described two species on the basis of minor physical differences, but later taxonomists had treated the two distinct populations as comprising two subspecies of one species (Traill's Flycatcher) whose songs differed. Thus, it was not until 1963 that two species were once again formally described in the literature (Stein, 1963). The northern birds (Alder Flycatcher) utter a song which can be written as fee-bée-o, whereas more southern and western birds sing fítz-bew. Recently, the two song-types were found to be associated with differences in habitat, nest structure, and morphology (Aldrich, 1953, and Snyder, 1953). Then R. Stein reinterpreted the facts and made the definitive studies (1958, 1963) in which he showed that sympatric populations maintained constant differences of song, behavior, etc., without interbreeding. Let us examine these differences:

### 1. Voice

Above all, this is the one character that best serves to identify the species. As stated, the Alder sings fee-bée-o. It is not high-pitched like the Black-capped Chickadee's familiar fee-bee, nor is it a clear whistle. Rather, the song is gruff and throaty, more so than the Eastern Phoebe's song. The syllables are run together, with the accent on the second. Actually the third syllable is very short in duration and merely represents a drop in pitch. I prefer to render the song as rñhe-béer, uttered with a lack of enthusiasm, quite unlike the Phoebe's vigorous effort. In Bent (1942) it is aptly written as vee-féel.

By contrast, the Willow Flycatcher's fítz-bew is more distinctly bi-syllabic, with a strong accent on the first syllable. Its quality is less gruff than the Alder's, and the song is given with much more enthusiasm. I liken it to an excited sputter. You can be your own judge by listening to Kellogg and Allen's A Field Guide to Bird Songs (1959). Under Traill's Flycatcher, the first three songs plus one call are alnorum; the last two songs are traillii. Apparently this distinction in voice only holds for normally singing birds, because when disturbed near the nest, the Willow can give calls and alarm notes similar to those of the Alder Flycatcher.

### 2. Habitat

Alder Flycatchers inhabit more or less forested areas, especially along streams or in wet open places, whereas the Willow Flycatcher prefers stream and pond edges in open country. This distinction is not clear cut, especially where the forests have been divided into small parcels. Nonetheless, I would expect Alders in shrubby edges of the Quabbin Reservoir, and Willows in the broad shrubby or marshy edges of the Sudbury River, or along bushy streams through fields. At a locality in Worcester County, Bradford Blodget (pers. comm.) has found both species within earshot of each other, presumably nesting. Here the Willows tended to segregate out into Aspen-Gray Birch thickets at the edge of a cattail marsh, whereas the Alders preferred true alder thickets, as they apparently do elsewhere in that county.

The vernacular names are suggestive of habitat preferences, but alder and willow shrubs are both likely to be found within any given nesting territory in Massachusetts. As a general rule of thumb, areas extensively covered with alders will attract Alder Fly-

catchers; areas largely composed of willows and cattails will support Willow Flycatchers. The former habitat will most often be encountered in uplands; the latter, in lowlands.

### 3. Nest

Alders build nests low to the ground, almost always less than 30 inches high. Willow Flycatchers place theirs higher, averaging about 48 inches, even when using the same species of shrub as alorum. Traillii shows a strong preference for nesting in willows, but alorum nests indiscriminately with respect to shrub type. Alder nests have been compared to those of Song Sparrows, loosely woven and unkempt, usually with long streamers dangling beneath. Willow nests are compact and interwoven with pale tufts of cattail or willow fruits; they resemble nests of Yellow Warblers. Eggs are too variable to be of much value in determining species.

### 4. Plumage and size

Here again there is too little separation to be of any value in the field, but there are measurable differences that, when taken together, serve to distinguish most individuals in the hand.

### Status in Massachusetts

From the various state treatises a composite description of the breeding range of the Alder Flycatcher can be had: locally common in hill country of the Connecticut Valley counties and westward, uncommon and local in Worcester County, rare and local in eastern counties, and essentially absent from southeastern counties. There can be no doubt that these published accounts all refer to the Alder Flycatcher, for only this song-type was known formerly in Massachusetts. Bagg and Eliot (1937) make one reference to a single Willow singing in early June in Longmeadow. This parallels the situation in New York, southern Ontario, and elsewhere: the Willow Flycatcher has only in the past 20-40 years extended its range to these latitudes.

As yet I can find no published record of the Willow Flycatcher breeding in the state, and its distribution here is poorly known. Many current observers have found singing birds and even a few nests (pers. comm.). These reports are confined, so far as I can determine, to the eastern counties, where many of the same observers have noted a decline in alorum. At Lancaster and Brookfield Station in Worcester County, Blodget has found Willow and Alders at the same locales. Such locales are of great interest with respect to monitoring relative population changes in the two species, and in understanding the apparent decline in alorum and the influx of traillii.

Spring migration of both species is essentially simultaneous, from late May to mid-June. At MBO, dates range from 23 May to 14 June, with a concise peak around 4 June. Upon arrival both species apparently set up territories quickly and are then most vocal, for after eggs are laid (19 June-3 July), the birds sing only occasionally and are likely to be overlooked. Fall migration involves half the number of birds at MBO as in the spring and all are immatures. Banding studies elsewhere show that adults migrate south via more inland routes. Dates at MBO range from mid-August to late September, with no well-defined peak.

### References cited

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"WEATHER OR NOT" INDEED !

The intense sunsets seen during January (BIRD OBSERVER, Vol. 3, No. 1, p. 27) were not the result of abnormal meteorological conditions. Rather, they were caused by sunlight that was scattered by a three-mile-thick dust layer some 12 miles above the earth's surface. The dust had been injected into the atmosphere in October 1974 by Fuego, a volcano in Guatemala. Similar vivid sunsets followed the eruptions of Krakatoa (1883), Pellé (1902), and Agung (1963).

Atmospheric circulation patterns that would affect the dust could have no effect on bird migration or wanderings, which take place some 30 times closer to the earth's surface. Furthermore, since Northern Hemisphere weather fronts normally move from west to east, there was no anomaly in the January weather patterns described by Don Kent.

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PAN-AMERICAN SOCIETY FOR THE PROTECTION OF BIRDS

by David Stirling, Victoria, B.C.

How about a little bird quiz this month? Well then, where would you go to find the following birds, and what do they have in common?

Bean Goose, Garganey, Mongolian Plover, Rufous-necked Sandpiper, Long-toed Stint, Temminck's Stint, Polynesian Tattler, Common Sandpiper, Terek Sandpiper, Black-headed Gull, Common Cuckoo, Skylark, Yellow Wagtail, Red-throated Pipit, Brambling, Little Ringed Plover, Dotterel, Ruff, White-throated Needle-tailed Swift, House Martin, Indian Tree Pipit.

Puzzled? Well, to give you a clue, you could have had all of them on your year's list for 1974 from a single American state---Alaska. And what do they have in common? Each and every one of them, according to the regional reports in American Birds in 1974, was sought out and shot dead in order to document its occurrence in North America.

But what is a mere twenty-one birds? As I write, I have on my desk before me reports of 41 Savannah (Ipswich) Sparrows (an officially endangered subspecies) shot on their breeding ground in two days of the 1974 nesting season; 70 shorebirds shot on Vancouver Island in August of this year; 200 American Golden Plovers shot in Hawaii; 1000 Cattle Egrets shot in four weeks in Florida in 1969 (Auk, 48: 538-546); and, according to the Bureau of Sport Fisheries and Wildlife (now the Fish and Wildlife Service), 196,000 migratory birds collected under federal scientific permit in the U.S. in 1971.

Of course, many worthwhile ornithological studies can be pursued only by careful examination of laboratory material, and our knowledge of birds and of how to protect them would be infinitely the poorer if no one ever handled a specimen.

There are growing numbers of people, however, who have come to believe that on this continent the great majority of birds that are killed ostensibly for "scientific" purposes are killed altogether unnecessarily, and that effective legal controls over bird collecting compared with those in many European countries are negligible. Many people find the killing of extralimital vagrants (the "rarities" of the amateur birder) particularly offensive, and have noted that the custom of shooting such birds to "substantiate" the record contrasts strongly and unfavorably with the custom, for example, in the United Kingdom. There, such birds are zealously protected by amateur birdwatcher and museum ornithologist alike, and there are severe penalties for attempting to molest such a bird.

The Pan-American Society for the Protection of Birds was formed specifically to try to tighten up regulations concerned with bird-collecting. Without in any way wishing to hamper the needs of serious and purposeful biological study, the Society nevertheless has set itself the task of securing far stricter controls over the issuing of collecting permits than exist at present.