## AN UNUSUAL COLONY OF ALDER FLYCATCHERS

BY LOUIS W. CAMPBELL

About one mile south of the village of Whitehouse in Waterville Township, Lucas County, Ohio, a colony of Alder Flycatchers (*Empidonax t. trailli*) has chosen an unusual nesting place. One ordinarily associates this species with brushy swamp borders or at least creek bottoms, but this group of some six or eight pairs has selected a dry pasture, thickly overgrown with shrubs and small trees, as a nesting ground. The nearest water is the winding south branch of Swan Creek about one-half mile to the southeast.

The land in this district is very flat. From the top of the stream bank there is a gradual rise of about twenty feet to the general locality of the nesting place, which is slightly higher than the surrounding country. This is due to the fact that the underlying limestone is here within a foot or so of the surface of the earth—in fact, it outcrops at several points.

The place where the nests were found is about one and one-half acres and forms the southern portion of a three and one-half acre field, about 750 feet long by 200 feet in width. The nesting area is quite level, broken only by a trench ten feet wide and less than three feet deep which cuts diagonally across the field and then parallels for about a hundred feet the road which bounds the field to the west. This trench has been cut into the solid rock, the result of a minor quarrying operation. After a heavy rain it may contain some surface water but I have never found any on my trips. About 250 feet north of the area studied and separated by a more open area are two quarry holes, roughly fifty feet in diameter and five feet deep. These holes are dry and show no evidence of having contained water in recent years. From August 1-17, 1935, three and forty-four one-hundredths (3.44) inches of rain fell, yet when I visited the place on August 26 there was no trace of surface water. However, a more moist condition at the bottom of these quarries is indicated by the presence of a few stunted willows and a thick blanket of fog fruit (Lippia lanceolata Michx.). Beyond the holes and on all other sides, the pasture is surrounded by open fields except for a small grove of chestnut oaks (Quercus Muhlenbergii Engelm) averaging one foot in diameter, west of the road and immediately adjacent to the location of the nesting sites.

What grass there is is kept very low by grazing cattle but much of the ground is covered by shrubs and small trees; cock's spur hawthorn (Crataegus Crus-Galli L.), wild crabapple (Malus coronaria

(L) Mill.), black haw (Viburnum prunifolium L.), hazel nut (Corylus americana Walt.), and prickly ash (Zanthoxylum americanum Mill.). The last two are represented by only a few plants. Growing in and along the trench mentioned above are a few taller trees; none of which, however, are more than six inches in diameter; black locust (Gleditsia triacanthos L.), sycamore, elm, and two black ash saplings. At the eastern border is one large elm fifteen inches in diameter and one small sycamore. The character of the soil is further indicated by the following plants: hounds' tongue (Cynoglossum officinale L.), hairy beard-tongue (Pentstemon hirsutus (L) Willd.), yarrow (Achillea millefolium L.), fleabane (Erigeron ramosus (Walt.) B.S.P.),



Fig. 30. Typical crataegus nesting site of "upland" Alder Flycatchers. May 25, 1935, Waterville Township, Lucas County, Ohio.

horseweed (Leptilon canadense (L) Britton), mullen (Verbascum thapsus L.), flowering spurge (Tithymalopsis corollata (L) K. I. & Garcke), mountain mint (Koellia virginiana (L) Mac. M.), wild bergamot (Monarda mollis L.), catnip (Nepeta cataria L.), rock sandwort (Arenaria stricta Michx.), small skullcap (Scutellaria parvula Michx.), catsfoot (Antennaria sp.), prairie ragwort (Senecio plattensis Nutt.). Of the above, eight species indicate dry soil.

Birds other than the flycatchers which nested in this area were: Mourning Doves, Catbirds, Brown Thrashers, Robins, Field Sparrows, and one pair each of House Wrens, Mocking-birds, Yellow Warblers, and Chipping Sparrows. Three nests of the flycatchers were found, all build in the same pattern, in cockspur hawthorn. As may be seen from the accompanying photograph of nest No. 1, they are not typical Alder Flycatcher nests, being less bulky and placed on the upper side of a nearly horizontal branch instead of in a crotch. Nest No. 1 was found on July 10, 1934, about three and one-half feet from the earth. This nest was placed on a branch which was almost perfectly horizontal. It contained three eggs with large embryos. The female was collected at the nest. Concerning the eggs Dr. Charles F. Walker, then assistant curator of Natural History at Ohio State Museum, writes: "They are rather more heavily spotted than our eggs of trailli but we have one set that is quite as much spotted as yours. There seems to be quite a bit of variation in the eggs of these birds."

Nest No. 2 was found June 23, 1934, four feet from the ground, and contained three eggs. The nest was empty when collected July 28. Nest No. 3, found June 27, 1935, was four and one-half feet from the earth and nearer the end of the supporting branch than the other nests. It contained four eggs which, in contrast to those of Nest No. 1, were scarcely marked at all. On July 6 there were two eggs, one fledgling, and one egg just hatching. On July 17 the nest had disappeared. This nest was not photographed or measured.

That this nest-building habit is not characteristic of this particular group is shown by the photograph of a similar nest (No. 4) which was found July 16, 1935, twelve miles northeast of Whitehouse in typical creek-bottom habitat about 100 feet from Swan Creek. This nest was situated on the outer branch of a small elm tree at a sharper angle than the Whitehouse nests, and about seven feet from the earth. It contained three well feathered young. On July 24 the empty nest and a fledgling nearby were collected.

Measurements in millimeters of the three nests taken are as follows:

	Width		Height	
	Maximum	Inside	Maximum	Inside
No. 1	90	53	65	34
No. 2	85	50	62	38
No. 4	100	58	60	32
¹Typical		50.8		38.1

Except for a slight difference in voice, these "upland" Alder Flycatchers were true to type. Fresh specimens taken here and in a wet prairie showed no difference in coloration. Measurements of specimens taken are shown in millimeters in the following tabulation:

<sup>&</sup>lt;sup>1</sup>Howard Jones, "Nests and Eggs of Our Common Birds", 1927.



Fig. 31. Nest No. 1, built in a crataegus tree. Nests No. 2 and No. 3 were very similar to this nest. July 10, 1934, Waterville Township, Lucas County, Ohio.



Fig. 32. Nest No. 4, built in a small elm tree in a typical creek bottom habitat. July 24, 1935. Adams Township, Lucas County, Ohio.

					Width of Cul-	-
Date	Length	Wing	Tail	Culmen	men at Base	Weight
(1) June 21, 1934	. ð 136	70.6	54.5	12	8	
(2) July 28, 1934	8 147	70.1	53.5	11.9	8	
(3) July 11, 1935	. 8 136	71.8	60	11.8	8	14.13 gr.
<sup>2</sup> Ridgway's Average.	. 👌 133	71.8	58.4	12.0		
(4) July 10, 1934	. 우 131	67.1	54.5	11.5	8	
<sup>2</sup> Ridgway's Average.	.♀ 130	68.4	55.4	11.7		

Judging bird voices is a very difficult matter—so much depends upon the ear and judgment of the listener. It was my impression, however, that the Alder Flycatchers of this colony had voices much weaker, pitched higher, and less husky than is typical. Their quality was more like that of the Acadian Flycatcher. The familiar whis-kee call was given much less frequently than normal, and sounded much more like whée-be or rarely whip-wheu-whip. In several hours' observations at different times and on different days, this call was heard less than ten times. On the other hand, the whip or wheep note was given almost constantly. This was not due to fright as the birds were not shy. On one occasion a rapid succession of calls somewhat like a flight song was heard which I was unable to record.

No attempt will be made to explain the presence of this small colony of Alder Flycatchers in such an unusual location. However, it may be that the birds chose this place during consecutive years in which there was heavy rainfall during late May and June and having established themselves remained through dryer years.

## Conclusions

These birds are true Alder Flycatchers in an abnormal habitat.

The voices of these birds are slightly different than other Lucas County Alder Flycatchers.

The nests are unusual but not confined to this group.

If the presence of this colony is due to water collecting in the quarry holes, trees in the bottom of the holes indicate that it must have developed within the last ten or fifteen years.

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<sup>&</sup>lt;sup>2</sup>Ridgway, "Birds of North and Middle America", 1907, p. 558.