WILLOW AND ALDER FLYCATCHER RECORDS AT A NORTH FLORIDA TV TOWER

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INTRODUCTION

Bird casualties at the WCTV tower in Leon County, Florida, studied since 1955, have included several "Traill's" Flycatchers. The recent recognition (Stein 1963, A. O. U. 1973) of two species (Empidonax traillii, E. alnorum) prompted a review of these records. Four summaries have mentioned "Traill's" Flycatcher kills at the tower but none is entirely correct. Stoddard (1962), reporting the period September 1955-June 1961, listed 10 records but omitted one for 30 August 1959. Another record was listed on 29 September 1956 but Stoddard's original notes from that day list no flycatcher of any kind. The same notes list an Acadian Flycatcher (E. virescens) from the next day (30 September) and there is an identified specimen of a "Traill's" Flycatcher labeled 29-30 September 1956 which is called an Acadian on the original label. Apparently, the notation "Acadian" was a tentative identification, 30 September is the correct date, and the specimen was for some reason mislabeled 29-30 September. Stoddard and Norris (1967) added eight more records from July 1961-September 1966 but listed one too many in the last third of September and one too few in the first third of October. Crawford (1974) noted two additional records from October 1966-September 1973 but gave the grand total from the 1955-1973 period as 5 instead of 21. One more occurred in each autumn of 1974 and 1975, giving a total of 23 through 1975. Stevenson (1966) indicated that four individuals had not been saved as specimens, but only three were discarded. All 20 of the specimens have been examined and 19 have been identified to species.

SPECIES ACCOUNTS

Specimens listed below are in the Tall Timbers Research Station collection, except that those marked by an asterisk (*) are in the National Museum of Natural History in Washington, D.C. J. W. Aldrich, A. R. Phillips, and R. C. Stein provided the identifications, and since they have stressed different criteria such as color or measurements for determining the two species (e. g., Phillips *et al.* 1966, Aldrich 1951, Stein 1963) the specimens may not have been treated uniformly. The identifications of the *traillii* specimens of 20 August

1961 and 7 September 1962 and the *alnorum* specimen of 19 September 1962 are qualified by the notation "?" after the names on the labels and are thus tentative.

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Willow Flycatcher: Empidonax traillii

20 Aug. 1961 (ad $\delta$); 30 Aug. 1959 (sex?); 7 Sept. 1962 ($\quanthing{Q}$);

14 Sept. 1975 (im sex?); 22 Sept. 1958 (im $\delta$); 29-30 [=30]

Sept. 1956 (im $\quanthinq$)*; 30 Sept. 1957 (im $\delta$)*; 2 Oct. 1957 ($\delta$);

4-5 Oct. 1957 ($\delta$).

Alder Flycatcher: Empidonax alnorum

6 Sept. 1973 (im $\delta$); 9 Sept. 1961 (im $\quanthinq$); 15 Sept. 1960 (im $\quanthinq$);

19 Sept. 1962 ($\quanthinq$); 24 Sept. 1967 ($\quanthinq$?);

27 Sept. 1964 (im $\delta$); 1 Oct. 1957 ($\quanthinq$); 2 Oct. 1957 ($\quanthinq$)*;

4-5 Oct. 1957 (im $\quanthinq$?)*.

Unidentified "Traill's" Flycatcher: Empidonax sp.

5 Sept. 1965 (not saved); 14 Sept. 1964 (not saved); 4-5 Oct.

1957 (im $\delta$); 17 Oct. 1964 (not saved).
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DISCUSSION

The specimens show an almost equal frequency of occurrence of the two species at the tower, with 9 and 10 individuals each. *E. traillii* seems to occur earlier in the season (two August records), but a specimen of *alnorum* in the Tall Timbers collection from Baldwin County, Alabama (**Q**, 29 Aug. 1959), indicates that this species also occurs early in the Southeast. The male/female ratio is 5:2 for *traillii* and 2:7 for *alnorum* (of those that could be determined). If these data are lumped, they do not show the 2:1 male/female ratio noted by Phillips *et al.* (1966) at Long Island, New York.

Only one WCTV specimen was aged as an adult during preparation (traillii, 20 Aug. 1961) and it is the earliest record of either species. The combined ratio is 1:11 for adults and immatures. Since adult "Traill's" Flycatchers complete their southward migration before prebasic molt (Dwight 1900: 147, Phillips 1948) the edges of the wing coverts (wing bars) and the tertials of adults in fall migration appear worn. Also, immatures have a more buffy aspect to these areas than do adults (Ridgway 1915: 342, Roberts 1955: 634). Ap-

plying these criteria to the unaged WCTV specimens at Tall Timbers. all were found to be immatures. Field-collected specimens in the Tall Timbers collection (including the Alabama alnorum noted above) were also found to be immatures by this method. These other specimens are: two traillii, Franklin County, Florida, 24 September 1966, unsexed; Grady County, Georgia, 2 October 1949, 9 ?; two called "probably" alnorum, Leon County, Florida, 13 September 1956, unsexed: and lefferson County. Florida, 16 October 1954, unsexed. Thus, the WCTV specimens show a 1:18 adult/immature ratio which becomes 1:23 if the field-collected birds are included. This unbalanced ratio (with the single adult the earliest migrant) agrees with Phillips et al. (1966) who reported 10 of 92 birds as adults and with Hussell et al. (1967) in Ontario, Sutton (1967: 344) in Oklahoma, and Elv (1970) in Kansas who noted a differential, early migration by adults. In contrast are data from Homestead, Florida, which listed two adults and one immature on 1 and 2 October 1969, respectively (Ogden and Fisk 1970), and 14 adults and 11 immatures between 24 September and 19 October 1970 (Fisk 1971). Thus the Homestead data showed neither a conspicuously early adult migration nor a preponderance of immatures. Perhaps these discrepancies are a result of a lack of large series of critically compared specimens from several points in Florida. If information of this type becomes available, a clearer picture of the migration of traillii and alnorum through Florida may well emerge.

I am grateful to the ornithologists who identified the specimens, particularly Aldrich, who was most helpful in providing data on the NMNH specimens. Phillips, D. W. Johnston, and H. M. Stevenson made helpful suggestions on an earlier draft.

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