

# THE VIRGINIA BREEDING BIRD BOOK: THE ATLAS AND BEYOND

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Willow Flycatcher (*Empidonax traillii*)

## ANATOMY OF A SPECIES ACCOUNT

### INTRODUCTION

### SEASONAL STATUS; MIGRATION

### MAJOR BREEDING HABITATS IN VIRGINIA

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Early and late dates for nests building, eggs, young, sighting of fledglings.

### BREEDING BIOLOGY

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### HOW CONFIRMED

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### AUTHOR



Black Skimmer (*Rynchops niger*)

## SPECIES ACCOUNT FOR WILLOW FLYCATCHER

Willow Flycatcher (*Empidonax traillii*)

The Willow Flycatcher, a nondescript little brownish-olive bird, is the second most populous of the five species of *Empidonax* flycatchers known to have bred in Virginia. It is difficult to identify if not singing the distinctive "fizz-bew" song that sometimes, close up, includes an additional tick note that may further confuse differentiation from the three-noted "fee-be-yo" song of the Alder Flycatcher. These birds can be safely identified in the hand, but it is probably best to leave non-vocalizing birds unidentified.

Willow Flycatchers are uncommon but widespread in the Piedmont and Mountain and Valley regions of Virginia, and largely absent from the Coastal Plain except for far northeastern Virginia (Clapp 1991). They reach a peak in numbers in far southwestern Virginia, a point brought home by the relatively large numbers found in alder thickets in western Carroll and eastern Grayson counties during the 1997 Galax Foray, where Dalmas (1999) thought it "Perhaps more common in the Upper New River Valley than anywhere else in the state, especially in the Elk Creek and Chestnut Creek drainages."

In Virginia, presumably as elsewhere (cf. Sedgwick 2000), Willow Flycatcher males arrive as much as two weeks earlier than females to set up their breeding territories. Although a few have been found in late April or very early May, most first reports are from 9-15 May with records much later in the month largely of birds on territory. Because of the great similarity to Alder Flycatchers the details of their fall migration are poorly known, but birds are moving south probably from late July through at least August and early September. There are very few records after 15 September; the latest records are apparently two observations on 20 September, one recent, one more than 100 years ago (USNM 293923).

Willow Flycatchers are usually associated with water, either among willows surrounding waterbodies or in alders along streams (Scott 1973b). They can also be found in brushy drier habitats in some areas (Scott 1973b). In one area in Loudoun County they can be found in a small white pine plantation, and in southwestern Virginia I have found them singing in dry upland brush. In both instances, however, the birds were not far from water bodies.

Nest-building has been reported from 4 June at Blacksburg (R. Mays in litt.-EM) to 16 June in Fairfax County (Abbott 1965) with eggs in the nest from 10 June at Nokesville (Clapp 1997) to 12 July at the Bland Experimental Farm, Clarke County (J. Little, in litt.-EM). Young in the nest have been reported between 28 June at Bland (J. Little, in litt.-EM) and 26 July at the VPI College Farm in Blacksburg (R. Mays, in litt.-EM); the young in the latter were recently hatched, making it probable that they were still in the nest into early August. The peaks for eggs and young in nest are about 18-25 June and 4-12 July, respectively. Adults have been reported feeding recently fledged young as early as 12 July near Leesburg (S. C. Rottenborn, in litt.-EM) to as late as 8 August at Blacksburg (R. Mays, in litt.-EM).

Data on breeding habits of Willow Flycatchers are very limited and based largely on data collected 2000-2003 in Loudoun, Clarke, and Montgomery counties. Multiflora rose (9 nests) was most commonly used as a nest site in Loudoun and Montgomery counties, while common buckthorn (7 sites) was used most frequently in Clarke County. Other plants supporting nests included Hawthorne (3 sites), blackberry (3 sites), privet, willow, osage orange, and introduced shrubs Korean evodia and Fontanisia phillyroides ssp. fortunei (1 each). Both *Crataegus* sp. (Meanley 1952) and *Rosa* sp. (King 1955) have been reported as the predominant nest site in other areas. Heights of 25 nests ranged from 2.5 ft in a Hawthorn to 9 ft in osage orange (mean= 4.4 ft); slightly more than one-half the nests (13) were between 3 and 5 ft. This is very similar to the means and range for 93 nests in Michigan (4.37 ft, 2-9 ft) (Walkinshaw 1966) and for 80 nests in Ohio and Nebraska (4.57 ft, 2.4-9.25 ft) (Holcomb 1972a). Heights as great as 12 ft have been recorded elsewhere (Berger 1967).

The compact nest, resembling that of the Yellow Warbler, is usually in upright crotches in small trees or bushes, less commonly on horizontal branches supported by another branch extending upward. Nests are usually found in clumps of bushes rather than isolated ones (Walkinshaw 1966) and on the outside of thickets or bushes (Sedgwick 2000).

Seven presumably complete Virginia clutches averaged 3.58 eggs with either 3 or 4 eggs laid; clutches of 2 eggs (Holcomb 1972a) and 5 eggs (Walkinshaw 1966) are known. Clutch size to the north is apparently larger (Holcomb 1972a, Walkinshaw 1966) and to the southwest (Sogge 2002), smaller. The nearly white eggs, spotted to greater or lesser degree at the large end, are incubated for 12-15 days (Walkinshaw 1966, Holcomb 1972a, McCabe 1991) with 13-15 days the usual period. The female, with rare exceptions, selects the nest-site, builds the nest, incubates the eggs, and broods the young (Sedgwick 2000).

Virginia Willow Flycatchers are apparently single brooded; the span of egg dates suggests they readily re-nest if a nesting attempt fails. Other populations of this race, *Empidonax traillii traillii*, are known to re-nest repeatedly following failed nesting attempts (Holcomb 1972a, 1974), often using nesting material from the failed nest in constructing a new one (Holcomb 1972a). Subsequent clutches average smaller than first clutches (Holcomb 1972a). Both parents feed the young, which usually remain in the nest 13-15 days (Walkinshaw 1966, Berger 1967, Holcomb 1972a). Young may leave the nest as early as 11 days and as late as 19 days, with smaller broods generally requiring less time (Holcomb 1972a). The fledged young follow the adults about their territory, begging for food, for nearly 4 weeks (Walkinshaw 1966).

Although common enough in northern Virginia, the Willow Flycatcher reaches its peak abundance in far southwestern Virginia (Sauer et al. 2003). It was considered common in the lowlands near Mt. Rogers in 1980 (Hall 1980a) and expanding its range southward into the Appalachians into the 1990s (Hall 1993d). According to the BBS, Virginia Willow/Alder (i.e. Willow) Flycatchers have shown a modest, but not significant 0.4% per year increase 1966-2002 (Sauer et al. 2003). Judged from trend maps through 1996 as well as BBS results from neighboring states, it seems likely that populations to the north and northwest are increasing somewhat more rapidly than those to the south and southwest.

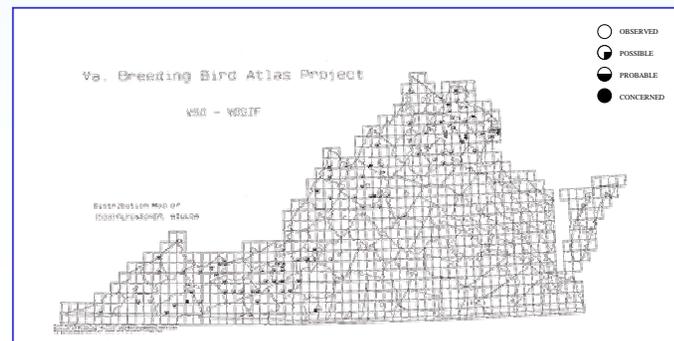
Willow Flycatchers were rarely confirmed by the VAP. The half-dozen confirmation were primarily of nests with eggs or young; one was a sighting of recent fledglings.

These flycatchers are subject to highly variable rates of nest-parasitism; for this race at two localities in Michigan, 5.3% to 10.1% of nests were parasitized (Walkinshaw 1966, Berger 1967). Four of 25 (16%) Virginia nests in which parasitism was likely to have been noted were parasitized, a higher rate than at most other sites in the east. All the parasitized nests were in Clarke County, making a local parasitism rate of about 40% and making the Brown-headed Cowbird a significant threat to that population. Parasitized nests are frequently abandoned (Holcomb 1971a, Berger 1967) and cowbird eggs are sometimes built into the nest walls (Holcomb 1971a, Berger 1967). Cowbird parasitism causes nest-failure in most nests parasitized (Walkinshaw 1966, Berger 1967).

Considering that many Virginia Willow Flycatchers are in secondary habitats such as those found around farm ponds and other constructed waterbodies, it is likely that populations in the Old Dominion are relatively unthreatened.

Roger B. Clapp

## RANGE MAP FOR WILLOW FLYCATCHER



## ADDITIONAL DATA BEYOND ATLAS LIMITS

### MIGRATION ACCOUNTS

Contains more detailed information than previously available  
 Based on available literature, unpublished notes, migration files held at Patuxent Wildlife Research Center, and observations posted to the internet. 1996-2003



Nest parasitized by Cowbird

### NESTING CHRONOLOGY AND DATA

(Based on more than 15,000 nest records assembled over ten years)

- Extensive notes of egg collectors
- Nest records from more than 20 museums and institutions.
- Data from North American Nest Record Scheme
- All available literature
- Nest records for 3,000 nestlings of common species (e.g. Chipping Sparrow, Eastern Phoebe) made by Clapp
- Substantial post-atlas nesting data by Virginia bird-watchers and others



Chipping Sparrow (*Spizella arborea*)

### POST-ATLAS (AFTER 1989) STATUS FOR NEWLY-BREEDING, RARE AND DECLINING SPECIES IN VIRGINIA

- Species breeding in Virginia for the first time
  - 1994 Yellow-rumped Warbler
  - 1996 Mississippi Kite
  - 2000 Scissor-tailed Flycatcher
- Species no longer known to breed in Virginia
  - Yellow-bellied Flycatcher
  - Bewick's Wren
  - Swainson's Thrush
- Species exhibiting strong population declines
  - Upland Plover
  - Gull-billed Tern
  - Black Skimmer
  - Loggerhead Shrike



Swainson's Thrush (*Catharus ustulatus*)

- Species exhibiting significant range expansions, population increase, or breeding confirmation for areas otherwise unknown
  - Spotted Sandpiper - 2003 3<sup>rd</sup> known breeding record for the Piedmont
  - Sedge Wren - 2003 1<sup>st</sup> nest with contents for Virginia
  - Bobolink - 1999 1<sup>st</sup> breeding record in the Coastal Plain

Poster Design by Claudia Austin Angle