

**FIELD OBSERVATIONS OF GRAY
FLYCATCHERS BREEDING AT
SUMMERLAND, BRITISH COLUMBIA,
1988 - 2005**

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The Gray Flycatcher (*Empidonax wrightii*) is a migratory species that breeds only in western North America from south-central California, southern Nevada, central Arizona, and south-central New Mexico northwest through the Great Basin to central and eastern Washington and into extreme south-central British Columbia. It winters locally in the

southwestern United States, southward to central Mexico (Sterling 1999). In British Columbia, the Gray Flycatcher breeds locally only in the Okanagan valley (Campbell et al. 1997).

Historical Background

Campbell et al. (1997) summarized information available on the Gray Flycatcher in British Columbia through 1993. The species was first recorded in the province on 19 June 1984 when a single bird was identified by Hue and Jo Ann Mackenzie along Camp McKinney Road, 10 km east of Oliver. Two years later, 13 birds were detected in the same general area and breeding was confirmed on 6 July 1986 when a nest with eggs was discovered. In the same year a second group of Gray Flycatchers was observed on 14 June 1986 between Trout and Shingle creeks, 5 - 8 km southwest of Summerland (Cannings 1987). Although breeding has not been confirmed, small populations of Gray Flycatchers also occur locally within 0.5 km of the Kettle Valley Railway trestle, on the Trout Creek Ecological Reserve, about 9 km southwest of Summerland, and along the Meadow Valley Road about 5 km west of Summerland.

This note discusses the results of monitoring a small population of breeding Gray Flycatchers near Summerland for the past 17 years, and updates information in Campbell et al. (1997) for British Columbia.

Arrival and Departure

On 24 July 1988, I observed two unfamiliar *Empidonax* flycatchers approximately 3.5 km west of the Summerland Research Station (now Pacific Agri-Foods Research Centre). This facility is located directly northwest of Shingle Creek in the Okanagan valley. Diagnostic field marks were noted and subsequent research confirmed *Empidonax wrightii*. I was keen to monitor a local population of this little known flycatcher so I walked and searched for Gray Flycatchers, a distance of about 3 km from the Kettle Valley Railroad trestle to Trout Creek, about 12 times a season for 17 years.

The Gray Flycatcher is one of the earliest *Empidonax* flycatchers to return each spring in the vicinity of Summerland, arriving about a week earlier than its close relative the Dusky Flycatcher (*E. oberholseri*). Male Gray Flycatchers usually arrive a

week earlier than females and are therefore audible as soon as they are on territory (Sterling 1999). Among the *Empidonax* flycatchers, detections of Gray Flycatchers in spring begin with vocalizations that are as distinctive as those of Least Flycatcher (*E. minimus*). This, along with the specific habitat requirements of the Gray Flycatcher, and its habit of slowly lowering and raising its long tail, helps with identification and pin-pointing location. The song consists of two parts; a very emphatic two-syllable note, with emphasis on each syllable: *chuwip* (Sterling 1999) and a softer, higher pitched irregular *teeap* (Whitney and Kaufman 1985). The call note of both sexes is distinct: an emphatic *wit* accented on the last syllable that can sound like a Yellow-rumped Warbler (*Dendroica coronata*). It may function as a position call (Sterling 1999) as well as an alarm call (Johnson 1963). Sterling (1999) also notes greeting, display and chase calls, a territorial rattle call and a flight song, although I have not yet observed this. I have heard a rapid-pitched call that is reminiscent of Say's Phoebe (*Sayornis saya*) and from the nest I have heard the young make a soft trill and a *peep* or *sweet* sound. When the males arrive on site they give their territorial call from the tops of the highest trees, frequently changing location, making it difficult and confusing to count them. Even in mid-summer males call from high perches, albeit, less frequently.

Campbell et al. (1997) mentions that spring migrants may reach British Columbia in late April with the peak influx occurring from mid-to-late May. The earliest spring arrival date at Summerland for the period 1988 to 2005 was 18 April 2004, with most migrants arriving later in the month and peaking in early May. In autumn, Campbell et al. (1997) suggests that southward migration commences in August and is completed by early September. This remained unchanged for the Summerland population, but a bird photographed on 8 September 2002 was a late record for the province. The photo by Laure W. Neish is of a bird in Penticton on 22 September 2005 (Figure 1). Annual chronology of the Gray Flycatcher in Summerland, BC, is summarized in Figure 2.

Breeding Habitat

The Summerland breeding population occupies a flat-bottomed valley running north to south, with an average elevation of 545 m. It is bordered on



Figure 1. Gray Flycatcher at Rose Garden, Penticton, BC. 22 September 2005 (Laure W. Neish). BC Photo 3270.

either side by hills reaching 727 m in elevation. The dominant vegetation is a young, relatively open mixed forest of ponderosa pine (*Pinus ponderosa*) and interior Douglas-fir (*Pseudotsuga menziesii* var. *glauca*) that was thinned in 1988. The xerophytic under-story consists primarily of red currant (*Ribes cereum*), snowbrush (*Ceanothus velutinus*), arrow-leaved balsamroot (*Balsamorhiza sagittata*), Saskatoon (*Amelanchier alnifolia*), soapalallie (*Shepherdia canadensis*), spreading dogbane (*Apocynum androsaemifolium*), yarrow (*Achillea millefolium*), and several species of grasses (Parish et al. 1996).

Nests

Nest searching, all in the valley bottom, began in May with the detection of adults seen flying from low perches to the ground and back again, frequently uttering a “wit” call. I would then slowly approach the bird to see if it is foraging for food or gathering nesting material and then follow it, hopefully, to a nest. More than once I found myself right under the nest without knowing it. If the adult was on the nest or feeding young, I did not approach within 15 m, and remained in the vicinity only long enough to verify nesting activity.

Most nests were situated on a small branch next to the trunk of a ponderosa pine tree, although five nests were found in Douglas-fir. One particular tree was used in consecutive years, but the nest was built in different places each year. Nest heights ranged from 2 to 6 m (N = 36), with a mean of 3.1 m. Tree diameter at breast height (dbh) ranged from 10 to 30 cm (N = 28) with a mean of 20.3 cm. On average, nest heights and tree diameters in British Columbia were less than those reported from a ponderosa pine forest in California, where mean nest height was 5.4 m and mean tree diameter was 33.7 cm (Sterling 1999). Sterling (1999) also noted a “highly significant correlation between nest height with tree height and dbh”.

In Summerland, nesting material consisted of fine and coarse grasses that formed the bulk of the nest. Often, yarrow was woven into the outside exterior of the nest. Horsehair, small feathers, and plant down, possibly from dogbane, were used to line the nest. On 13 May 1990, an adult was observed meticulously weaving a bill full of spider webbing into the nest

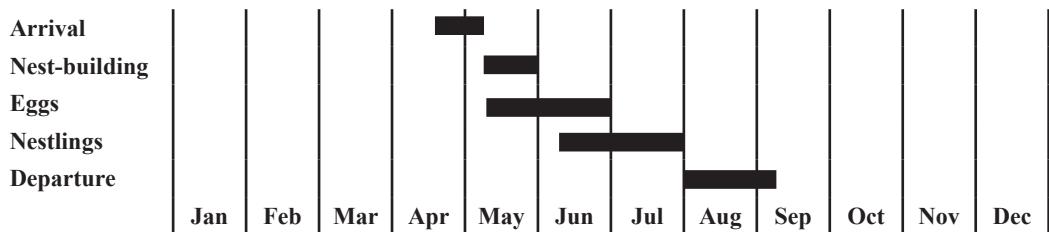


Figure 2. Annual chronology of Gray Flycatcher in Summerland, British Columbia. Data compiled from observational records spanning 1988 - 2005.

cup.

Dimensions for three deep cupped nests are within the range reported by Sterling (1999): outside diameter 8.7 x 12.5 cm (Sterling: 10.0 x 14.0 cm); inside cup diameter 4.5 x 7.5 cm (Sterling: 5.5 x 8.0 cm); inside cup height 3.0 cm (Sterling: 3.0 x 7.0 cm); outside cup height 6.0 x 6.25 cm (Sterling: 5.0 x 8.0 cm).

I found only two nests that have survived the winter and Sterling (1999) states that nests are apparently not reused.

Brown-headed Cowbird Parasitism

Although Brown-headed Cowbirds (*Molothrus ater*) are common in the study area, no evidence of cowbird parasitism was found in any of my nests. Historically, however, the first nest found for Gray Flycatcher (near Oliver) did contain a single cowbird egg (Cannings 1987). In central Oregon, parasitism by the Brown-headed Cowbird ranged from 20 - 40% (Sterling 1999). Russell and Woodbury (1941) noted that young are fed by adults for 14 days after fledging, but I found only three instances where adults with fledged young remained near the nest for a week or two. None of these adults were attending juvenile Brown-headed Cowbirds.

Predation

I have no direct evidence of predation on eggs or young, although I did find one nest on the ground with scattered egg fragments and a small hole in an egg. Curiously, I have watched active nests on one visit only to find no nest, no eggs, and no young at the nest site a week later.

Coexistence

The Gray Flycatcher shares the study site and resources with the closely related and similar-looking Dusky Flycatcher, which is often the case with many other *Empidonax* flycatchers. At this site the Dusky Flycatcher prefers the hilly slopes on either side of the small valley while the Gray Flycatcher predominates in the valley bottom.

One interesting observation from 3 June 1992 was of both species nesting only 10 m apart, with the Gray Flycatcher in a ponderosa pine and the Dusky Flycatcher in a Douglas-fir. Both nests were 2.5 m from the ground, so I was able to observe any

species interactions relatively easily until the young fledged. Both pairs of adults fed their young with no apparent conflict. The fact that Gray Flycatchers forage on the ground, and Dusky Flycatchers forage in the forest canopy, may influence the amicable parenting activity.

Acknowledgements

I want to thank L.M. Van Damme for her guidance in writing this note.

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About the Author

Laurie has been a bird-watcher, naturalist, and conservationist since 1973. He regularly contributed to the four-volume set of *The Birds of British Columbia* as well as the British Columbia Nest Record Scheme since 1980. He participates in many bird counts and surveys and has led birding tours for five years as part of the Meadowlark Festival in the south Okanagan valley. Since 1992 he has served as a volunteer warden for the Trout Creek Ecological Reserve.