

NOTES

OBSERVATIONS OF BREEDING DUSKY FLYCATCHERS IN THE CENTRAL OKANAGAN VALLEY OF BRITISH COLUMBIA

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The Dusky Flycatcher (*Empidonax oberholseri*) is a widespread and fairly common breeding species that uses a variety of habitats throughout the Okanagan Valley and much of southern interior British Columbia. Compared to many nesting species in British Columbia, relatively little is known of the nesting behaviour of the Dusky Flycatcher in British Columbia (n = 73 nests; Campbell et al. 1997), and specifically, the Okanagan Valley (n = 23; Cannings et al. 1987). During the spring of 2003 and 2004, I searched extensively in and around a power-line corridor southeast of Kelowna, locating three and five nests in each year respectively (Figure 1). The purpose of this note is to provide additional information on the nesting activities for this otherwise poorly understood nesting species in British Columbia.

Arrival and Nest Construction

In British Columbia, Dusky Flycatchers typically arrive first in the Okanagan Valley. The earliest known arrival date is from Kearns Creek on 20 April 1985 (Campbell et al. 1997). On 4 May 2004 I observed three singing males along McCulloch Road, where all of this work was conducted. On that same day, I also observed an apparent bonded pair, as two birds appeared to be actively searching for a potential nest site. During that search, a third bird appeared and a brief scuffle ensued, possibly signifying territory establishment or competition for mates.

On 17 May 2004 I discovered three completed Dusky Flycatcher nests (Table 1). Assuming that nest construction takes two to three days (Sedgwick 1993), these birds had likely formed pairs prior to 15 May. Of two other nests located on 19 May 2004, one was complete and the other was 50 % complete, with the female perched in the middle of the nest and arranging the materials around her. On 21 May that nest was complete.

All five nests were built in deciduous trees or shrubs. Three were in Saskatoon (*Amelanchier alnifolia*), one in a young Douglas maple (*Acer glabrum*) and one in an ocean spray (*Holodiscus discolor*). Of three nests located in 2003, one was in Nootka rose (*Rosa nutkana*) and two

were in Saskatoon. Site fidelity may be important for the Dusky Flycatcher, as two of the nests found in 2003 were also used in 2004. Nest height ranged from 1.3 to 2.5 m. The nests were situated in a fairly linear manner throughout the corridor, with the first and the last nests being approximately 400 m apart.

The materials used in all nests were fine grasses, coarse grasses, plant fibers and animal hair. Three nests utilized downy feathers as a lining, one nest had spider webs woven into the exterior, and one nest had small orange casings from Douglas-fir (*Pseudotsuga menziesii*) buds. All nests were placed in the forks of main or secondary branches. Elevation of these nests ranged from 610 to 630 m. All previously known breeding records in British Columbia were between 650 and 2,300 m (Campbell et al. 1997).

Nest Habitat

Among the nests found in 2004, two were in an electrical transmission corridor and three were within 100 m of the edge of the corridor. The corridor is situated on a gentle north-facing slope with numerous shallow to fairly steep gullies oriented north to south. The two nests found in the corridor were located on the banks of these gullies. One nest was on the east-facing bank and the other was on a west-facing bank. The vegetation found in the gullies consisted mainly of small shrubs such as Oregon grape (*Mahonia* spp.), snowberry (*Symphoricarpos albus*) and Nootka rose. Larger bushes and deciduous trees like trembling aspen (*Populus tremuloides*), Douglas maple and Saskatoon were also present. The corridor edge consisted of open second-growth Douglas-fir woods interspersed with sapling firs and ponderosa pine (*Pinus ponderosa*). The under-story consisted of grasses, Oregon grape, Saskatoon, and ocean spray.

Eggs and Young

The eggs discovered on 19 May constitute the earliest known egg date of Dusky Flycatcher in British Columbia. The previous record was 24 May (Campbell et al. 1997). Compared to other species, the Dusky Flycatcher is an



Figure 1. An adult Dusky Flycatcher sits tight on a nest. Near Kelowna, BC. 6 June 2004 (Richard Mooney).

uncommon host of the Brown-headed Cowbird (20 % of 93 nests; Campbell et al. 1997), although regional rates of parasitism may be higher (45 % of 11 nests in the Okanagan Valley; Cannings et al. 1987), possibly depending on cowbird density. In addition to the nest parasitized in 2004, one nest in 2003 contained a “bulging” juvenile cowbird. Upon successfully fledging, it was discovered that a nestling Dusky Flycatcher was still alive and continuing to be fed by the adults.

Concluding Remarks

Vegetation maintenance in transmission corridors appears favourable to Dusky Flycatchers as evidenced from this study. Transmission corridors in other parts of the Okanagan Valley may also be favourable, as a brood of recently fledged young was observed in a corridor just southeast of Kalamalka

Table 1. Nest chronology of five Dusky Flycatcher nests observed at McCulloch Road in the Okanagan Valley in 2004. *Nest parasitized with two eggs from Brown-headed Cowbird and subsequently removed. NC = Nest Complete.

Nest	Date	17 May	19 May	20 May	21 May	25 May	6 Jun	15 Jun	1 Jul
1		NC	2 eggs	3 eggs			3 yng	Failed	
2		NC				1 egg	4 eggs*	2 yng	2 fledged
3		NC	1 egg	3 eggs		4 eggs	4 yng	4 yng	Nest empty
4			NC	1 egg		3 eggs		3 yng	Nest empty
5					NC	2 eggs	Failed		

Lake Park near Vernon on 14 July 2003 (pers. obs.).

The status of the Dusky Flycatcher population in British Columbia is not precisely known, although there is indication that it is decreasing slightly (www.mbr-pwrc.usgs.gov/bbs/reglist03.html). Two important points for sustaining populations appear to be the effects of logging on the breeding grounds and how different silvicultural techniques enhance or hinder breeding potential (Sedgwick 1993). The importance of nest site fidelity is unknown for this species, but it may be a beneficial strategy. Kelly (1993) speculated that Dusky Flycatchers selected nest sites that conceal parental movements from nest predators, and are more likely to select a nest site based on features in the immediate vicinity of the nest, rather than features characteristic of the bird's territory.

To further expand our presently limited understanding of Dusky Flycatcher breeding activity in British Columbia, a more detailed investigation of habitat requirements and reproductive success will be needed. In Wyoming, Kelly (1993) suggested that a multi-scale approach to habitat selection both within and between habitat types would be of considerable value for understanding habitat relationships. I agree, and feel it would be at least equally valuable for the Okanagan Valley, as this species occupies different habitat types that are both natural and managed.

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