



Breeding Status of Wilson's Warbler in the Creston Valley, British Columbia

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Wilson's Warbler (*Cardellina pusilla*) is a regular and widespread spring and autumn migrant and summer visitant throughout British Columbia. The highest numbers in summer are reported in the Northern Boreal Mountains ecoprovince in the northern interior of the province. From the late 1800s through 2000, there were only 86 breeding records for British Columbia, based mostly on observations of recently fledged young. There are no confirmed breeding records for the extreme southeastern portion of the province, including the entire West Kootenay region (Campbell et al. 2001). This note documents the current breeding status of Wilson's Warbler in the Creston valley, which constitutes the most southerly location for this species in the interior of British Columbia.

Wilson's Warbler was first recorded in the Creston valley as an autumn migrant on 18 August 1947 and 9 August 1948, with one location along Summit Creek (Munro 1950). Over the next four decades, the species' status remained unchanged and it was considered a *rare* migrant with no evidence of breeding (Munro 1958, Butler et al. 1986). It is possible the species was overlooked in summer as early ornithological investigations were carried out primarily in the valley bottom and only rarely were higher elevation habitats visited where I found that Wilson's Warbler breeds.

The first confirmed breeding of Wilson's Warbler in the Creston valley was documented in 2009 when Marcia Long and I discovered two separate broods of recently-fledged young in the Summit Creek watershed (Campbell et al. 2010). On 30 June, a male and female Wilson's Warbler were observed foraging

in alder (*Alnus* spp.) shrubs and Engelmann spruce (*Picea engelmannii*), then flying to a stand of alders carrying food. After sitting quietly for close to an hour, we observed a short-tailed, fledged young perched on a low branch near some horsetail (*Equisetum* spp.). The habitat was along the edge of a wide transmission corridor at an elevation of 1,399 m. On 8 July in the same general area, a recently fledged Wilson's Warbler, with down on its head (Figure 1) was perched in a sapling alder being fed by both parents.



Figure 1. Fledged Wilson's Warbler perched low to the ground in an alder shrub. Natal down on the head suggests the bird had recently left its nest. *Photo by Marcia Long, Summit Creek, BC, 8 July 2009. BC Photo 4023 (see Campbell and Stirling 1971).*

On 12 July 2012, while driving along Boundary Lake Forest Service road at 1,312 m elevation, I observed a male Wilson's Warbler with food in its bill perched on the outer branch of an Engelmann spruce. I watched from my vehicle as both male and female warblers made repeated food trips to the vegetated roadside slope (Figure 2). Upon closer inspection, I found a well concealed nest along the road bank that held three feathered nestlings, which appeared to be a few days from fledging. When I returned on 2 August, the nest was empty allowing me to examine it more closely. The nest was built on the ground in a hollow under dry, broken roots in a dense patch of shrubs and forbs (Figure 3). It was constructed of dead grasses, plant stems, plant fibres, dry leaves, and stems of horsetails as well as small twigs and was lined with fine rootlets, mosses, and mammalian hair (Figure 4).

In the Creston valley, Wilson's Warbler breeds in the Engelmann Spruce-Subalpine Fir Biogeoclimatic Zone (ESSF), the common subalpine zone throughout

the southern interior of British Columbia. This ecological zone occurs from 1,200 m to 2,300 m elevation. It is characterized by a long cold and snowy winter and a short cool summer. Characteristic shrubs include black huckleberry and grouseberry (*Vaccinium* spp.), white-flowered rhododendron (*Rhododendrum albiflorum*), and false azalea (*Menziesia feruginea*) (Coupé et al. 1991). The three Creston valley breeding records (fledged young from two broods and a nest) were recorded at the edge of Engelmann spruce forests in disturbed habitats associated with high-elevation roads and transmission corridors. In adjacent northeastern Washington, Wilson's Warbler breeds at the edges of moist subalpine woodlands (Smith et al. 1997).

The entire breeding period for Wilson's Warbler, from nest-building to fledging, in the Creston valley ranges from 31 May to 14 July. Ranges of calculated dates for each stage of breeding using averages published by Stewart (1973), Stewart et al. (1977), and Ammon (1995) are as follows: nest-building (31



Figure 2. Wilson's Warbler nest was discovered along the vegetated bank of the Boundary Lake Forest Service road in mid-July. Photo by Linda M. Van Damme, Boundary Lake, BC, 2 August 2012. BC Photo 4026.



Figure 3. After discovering an active Wilson's Warbler nest along the Boundary Lake Forest Service road on 12 July, three weeks later the area had been grazed and trampled by free-ranging cattle exposing the nest. Photo by Linda M. Van Damme, Boundary Lake, BC, 2 August 2012.



Figure 4. Wilson's Warbler nest showing its position and immediate ground cover and coarse nest materials. Photo by Linda M. Van Damme, Boundary Lake, BC, 2 August 2012. BC Photo 4027.

May to 19 June), egg-laying (5 to 23 June), incubation (9 June to 4 July), and fledging (21 June to 14 July). The initiation of nesting in the valley is two weeks earlier than reported by Campbell et al. (2001) but fledged young have been found as late as 31 July in the Southern Interior Mountains ecoregion of southeastern British Columbia.

Currently, Wilson's Warbler is an uncommon spring and autumn migrant through the Creston valley with smaller numbers remaining in the subalpine throughout the summer to breed (Van Damme 2009, 2012). †

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About the author

Spending a day exploring the mountainous slopes of the Creston valley where bird numbers and diversity are much lower, Linda considers it a good day to come home with one new breeding record. It's an added bonus to picking a bucket of fresh huckleberries.