

Autumn Occurrence and Expansion of the Breeding Range for Swamp Sparrow (*Melospiza georgiana*) in Southeastern British Columbia

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In 1926, Taverner (1974: p. 295) described the range of the Swamp Sparrow (*Melospiza georgiana*; Figure 1) in western Canada as "mostly north and east of the Great Plains" with "one record for central British Columbia." Campbell et al. (2001) updated the bird's status, noting an early record near Vanderhoof and more recent records of probable breeding near Prince George and south to Bowron Lakes. The authors also reported an increase in wintering birds on the south

coast supporting the impression of a southwestward expansion of the species. The 2008-2012 provincial breeding bird atlas project (Starzomski 2015) extended that range with "confirmed" breeding near Revelstoke that consisted of "multiple females with brood patches in July" caught for banding and "a juvenile that was less than two weeks out of the nest" (R. Cannings, pers. comm.). These records, however, are not accepted as convincing evidence of breeding.



Figure 1. Adult Swamp Sparrow carrying food to its nest with young. *Photo by Douglas Leighton, lower Blaeberry valley, 15 km north of Golden, BC, 3 July 2015.* BC Photo 4159a. (see Campbell and Stirling 1971)

This note describes a confirmed breeding record in 2015 in the lower Blaeberry valley, located about 15 km north of Golden, British Columbia.

When the Checklist of Birds of the Upper Columbia River Valley was published in 1997 there were no records of Swamp Sparrow (Ferguson and Halverson 1997). That year, on 8 and 9 June, I found a singing male in the "lower Blaeberry valley" in what appeared to be suitable breeding habitat (Campbell et al. 2001, Starzomski 2015) - a fenland/beaver pond complex with vegetation which, due to local cold air ponding effects, mimics boreal habitat (Figure 2). On 29 May 2005, another singing male was found in the same area, the last record of a spring or summer bird for a decade. Swamp Sparrow proved to be a more regular autumn migrant, starting in 1997, with one at "Moberly Marsh" in Burgess and James Gadsden Provincial Park along the Columbia River on 23 October 1997. Another was observed in the lower Blaeberry valley on 24 and 25 October the same year. By 2017, I had recorded autumn Swamp Sparrows 96 times between 5 September and 21 November with up to six birds at Moberly Marsh and three in the lower Blaeberry valley. There was a notable recent increase in detections during this autumn period with 83% (80 sightings) of occurrences recorded after 2010.



Figure 2. Swamp Sparrow breeding habitat at "Kettleson Pond" in lower Blaeberry valley. The photo was taken from the shoreline side with a view north across the fenland to Willowbank Mountain. The nest site was located below the base of bog birch in center foreground of the photo. *Photo by Douglas Leighton taken on 24 September 2017 to better show vegetation.* BC Photo 4159b.

On 2 July 2015, in the "lower Blaeberry valley" near what I call "Kettleson Pond," I heard unfamiliar sharp chips coming from the edge of the wetland. It proved to be an agitated Swamp Sparrow, my first July record in the area, and its behaviour suggested that it was near a nest or fledglings. The next morning I returned to that site and almost immediately found a pair of adults. Both were carrying food and chipping at my presence with the male occasionally singing nearby (Figure 3).



Figure 3. Male Swamp Sparrow carrying food for its young to a nearby nest. *Photo by Douglas Leighton, 4 July 2015.* BC Photo 4159c.

Retreating to a more distant observation point, I observed at least one of them repeatedly carrying food to their nest site. It was in a sphagnum (Sphagnum sp.) hummock at the base of a multi-stemmed bog birch (Betula pumila) surrounded by tall grasses, sedges, and cattails on the edge of an old Beaver (Castor canadensis) channel about 10 m out in the fenland (Figure 4). I first saw one adult visiting the nest via the bog birch then noticed more, but less visible, visits from the water's side. Due to the vegetation and setting I could not see exactly where they were going from either side. Access proved beyond gumboot range on the water side and there appeared to be no way to find it from any side without damaging or destroying the nest site. A similar effort two days later yielded the same result. Lincoln Sparrow (Melospiza lincolnii) sometimes nests here in burrows pushed into sphagnum hummocks.



Figure 4. Swamp Sparrow nest site viewed from water (fenland) side. The nest site is in, or below, the base of bog birch at the centre of the photograph at head of old Beaver channel. *Photo by Douglas Leighton, 4 July 2015.* BC Photo 4159d.

Returning on 7 July, I found that, except for the male singing occasionally, the pair was much quieter and did not visit the nest site. Instead, both birds stealthily fed at least two, and possibly three, fledglings hidden in vegetation within a 30 m of the nest site. They approached these areas silently but often chipped or "churped" as they left. The presence of fledglings was confirmed by distinctive but infrequent high-pitched "seet" or "siit" begging calls. Finally, I got a fleeting glimpse of one I described as a "short-tailed fledgling" just as an adult left it.

The next morning (8 July) I returned hoping to photograph at least one fledgling. Despite watching many feeding visits over more than three hours and confirming the presence of three fledglings, I only saw one hop across a gap in the sedges and missed that photo. That was the last fledgling I saw or heard. Initially they had been in the same area as the previous day but by the time I left that day they had moved farther out into the fenland where extensive bog birch thickets probably create more secure rearing habitat. The following day (9 July) they were still farther out in the fenland and only the adults were seen or heard. On 11, 15 and 22 July, only the male was heard singing and only once on the latter two dates.

Despite frequent visits to that area no Swamp Sparrows were found there again until 17 August when I heard one chip a few times but did not observe it clearly. As the presence of that bird was about two weeks earlier than any prior (or later) autumn migrant it seemed likely that it nested locally. The next bird was found on 22 September, a more typical autumn arrival date, but the exceptional numbers that autumn (21 daily records of up to 3 birds) to a then new record late date (November 12) suggested that some of them may have been reared locally.

The next spring (2016) a male sang on the 2015 territory from 22 May to 4 June but none was found there for the rest of that summer or in the spring or

summer of 2017. However, the area in which these observations were made was only a small part of a large fenland complex with much more apparently suitable Swamp Sparrow breeding habitat which could not be visited (and individuals were not heard). The possibility of ongoing local breeding is supported by the continuing high autumn numbers, particularly in 2017, and their exceptionally early first dates: 5 September 2017 and 6 September 2016 (and a new record late date, 21 November in 2016). Alternatively, this increase may be related to the larger developing pattern with more west-slope migrants and wintering birds on the coast. The White-throated Sparrow (Zonotrichia albicollis) also shows a similar pattern of breeding range expansion and seasonal movements in the study area. It was a remarkable coincidence that both were the first confirmed breeding in the Golden area in 2015 and were only about one kilometer apart.

Remarks: This confirmed breeding record (and potential observations from Revelstoke) would not appear significant to those relying on Swamp Sparrow range maps in some recent field guides (e.g., Griggs 1997, Kaufman 1996, Kaufman 2000) or websites (e.g. www.allaboutbirds, www.audubon.org). The references show the limit of the breeding range west of the Rocky Mountains extending much further south in British Columbia. This seemingly clairvoyant error almost certainly originated in the otherwise authoritative book on A Guide to the Identification and Natural History of the Sparrows of the United States and Canada (Rising 1996). It appears that a record from Fort Nelson in the far northeast corner of the province was apparently confused with the city of Nelson in the West Kootenay area and the map was drawn accordingly.

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