

Status and Occurrence of the Sagebrush Sparrow (*Artemisospiza nevadensis*) in British Columbia.

By Rick Toochin

Introduction and Distribution

The Sagebrush Sparrow (*Artemisospiza nevadensis*) is a western North American species found breeding in dry deserts from southern Washington, eastern Oregon, southern Idaho, southern Wyoming and northwestern Colorado south to southern California to central Baja California, as well as southern Nevada, southern Utah and northeastern Arizona and northwestern New Mexico (Byers *et al.* 1995, Beadle and Rising 2002). The northern birds migrate south to spend the winter in dry zones to desert regions from southern Oregon through California with birds wintering in Nevada, to northern Utah, southern Arizona, southern New Mexico, west Texas, eastern parts of the northern Baja Peninsula and western areas of Northern Mexico (Byers *et al.* 1995, Beadle and Rising 2002, Wahl *et al.* 2005). The Sagebrush Sparrow is a rare winter bird from southwest Kansas through western Oklahoma and southern Colorado (Byers *et al.* 1995, Beadle and Rising 2002). There is another distinct sister species that is very similar looking to the Sagebrush Sparrow that was separated in 2013 by the AOU into a new North American Sparrow species (Retter 2013). This unique species is now called Bell's Sparrow (*Artemisospiza belli*). The Bell's Sparrow is a non-migratory species that is found along the California coast south through coastal regions of the Baja Peninsula in Chaparral habitat (Byers *et al.* 1995, Beadle and Rising 2002). The Sagebrush Sparrow is a casual species in British Columbia with 15 records mostly from the spring (Campbell *et al.* 2001, Toochin and Fenneman 2008, Please see Table 1). In the rest of Canada, the Sagebrush Sparrow is an accidental species, with one late fall record from Brier Island in Nova Scotia (Forsythe 1995).

Identification and Similar Species

The identification of the Sagebrush Sparrow is covered in all North American field guides. In 2013, Sage Sparrow was split into two species from the two very distinct subspecies of Sage Sparrows found throughout their range (Retter 2013): Bell's Sparrow and the Sagebrush Sparrow.

Bell's Sparrow is a non-migratory species found in coastal California (Byers *et al.* 1995, Beadle and Rising 2002). It is identified by blue-gray on the head that extends down onto the lower neck (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). There is a distinct white line that goes from the base of the bill to just over the beginning of the dark eyes (Beadle and Rising 2002, Dunn and Alderfer 2011). From the base of the blue-gray bill to the eye is dark with a white eye ring around the eye that is broken at the right edge (Beadle and Rising 2002, Dunn and Alderfer 2011). The face is all blue-gray with a white and black malar stripe that cuts down onto the white throat (Sibley 2000, Dunn and Alderfer 2011). The breast and belly are white

with a large black belly spot with dark brown streaks down the sides and flanks of the breast (Sibley 2000, Dunn and Alderfer 2011). The under tail coverts are un-streaked and white in color (Sibley 2000, Dunn and Alderfer 2011). The legs are a dark yellow-brown color (Dunn and Alderfer 2011). The back of the bird is a brownish color with fine dark streaks and the rump is brown in color (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). The wings are brown in color with the scapulars, tertials and greater coverts broadly edged in buff (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). The tail is dark brown with the outer web and tip of the lateral rectrices being white in unworn individuals (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). The Bell's Sparrow has a strong tendency to run on the ground with its tail cocked up in the air (Beadle and Rising 2002). The first fall and winter plumaged birds look like adults (Sibley 2000, Dunn and Alderfer 2011). The juvenile Bell's Sparrow is similar to first fall plumaged Sagebrush Sparrows but are darker in overall appearance (Sibley 2000, Dunn and Alderfer 2011). The song of the Bell's Sparrow is similar to the Sagebrush Sparrow but is a slightly different sounding "tweesitivity-slip, tweesitivity-slip, swer" that sometimes can be "chappa-chee, chip-chippa-chee" that lasts two to three seconds long (Beadle and Rising 2002). The call notes of the Bell's Sparrow are a high, thin "tik" or "tik-tik" (Beadle and Rising 2002).

The Sagebrush Sparrow (*A. nevadensis*) is found throughout the birds range with the subspecies (*A. n. canescens*) being confined to central California with these birds being a little bit smaller but otherwise are identical to the latter species in plumage characteristics (Byers *et al.* 1995, Beadle and Rising 2002). Adult Sagebrush Sparrows have a bluish-gray head with the color extending to the nape (Beadle and Rising 2002, Sibley 2000). From the base of the blue-gray bill to the dark eyes is a dark area with a white line that stops before the eye above (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). The white malar area is strong on this species but the black malar line below is not (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). The back is brown with heavy dark streaks that extend down to the brown rump (Beadle and Rising 2002, Dunn and Alderfer 2011). The wings are brown with the scapulars, tertials and greater coverts broadly edged in buff (Beadle and Rising 2002). The throat is buffy white and the breast is slightly darker often with a necklace of thin dark stripes (Beadle and Rising 2002). There is a large dark brown breast spot with brownish sides and flanks that are lightly streaked (Beadle and Rising 2002, Dunn and Alderfer 2011). Legs are brownish in color (Beadle and Rising 2002, Dunn and Alderfer 2011). The tail is dark brown--the outer web and tip of the lateral rectrices are white on unworn birds (Beadle and Rising 2002). The first winter birds which occur after August resemble the adults with some tertials and secondaries being replaced so that these feathers will contrast in color with other feathers (Beadle and Rising 2002). The juvenile birds occur from May through early September (Beadle and Rising 2002). The juvenile Sagebrush Sparrow is recognized by the grayish-brown in color on the head and

the heavy streaks of brown on the crown, nape and mantle (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). They have brown streaks on the breast and flanks (Sibley 2000). They do not have white lines like the adult but more a supraloral white spot and the wings have buffy wing bars (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). The song of the Sagebrush Sparrow is a plaintive, high-pitched series of tinkling notes lasting 3-4 seconds and sounds like “*tsit tsit, tsii you, tee-a-tee*” (Beadle and Rising 2002). The call notes of the Sagebrush Sparrow are a rapidly repeated high pitched sounding “*te te te te*” or “*tse tse tse*” (Beadle and Rising 2002). The alarm note that is given is similar in sound to a Dark-eyed Junco (*Junco hyemalis*) and is a thin weak “*tsip*” (Beadle and Rising 2002). The behaviour of the Sagebrush Sparrow is similar to Bell’s Sparrow in that both species like to hop or walk on the ground and will often run through open area with its tail cocked up in the air (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011).

The Black-throated Sparrow (*Amphispiza bilineata*) is a rare but increasingly regular vagrant to British Columbia with 46 records for the Province (Campbell *et al.* 2001, Toochin and Fenneman 2008, Toochin 2012a, Toochin 2012b, Toochin 2012c). Adult Black-throated Sparrows are clearly different from any ages or plumages of the Sagebrush Sparrow and are covered in all standard North American Field Guides (Byers *et al.* 1995, Beadle and Rising 2002). The juvenile Black-throated Sparrow can look superficially similar to the juvenile Sagebrush Sparrow and the Bell’s Sparrow. The juvenile Black-throated Sparrows have a bold white supercilium from the base of the bill over the and past the eye to the back of the neck (Beadle and Rising 2002, Sibley 2000, Dunn and Alderfer 2011). The face is dark from below the eye stripe from the base of the bill through the eye to the dark auricular area (Sibley 2000, Dunn and Alderfer 2011). There is weak white eye arc below the eye (Dunn and Alderfer 2011). The malar area is bold and white with a weak dark malar line below (Beadle and Rising 2002, Dunn and Alderfer 2011). They also have a bold white throat and breast band across the chest (Sibley 2000, Dunn and Alderfer 2011). The rest of the sides, flanks and belly are pale and not streaked (Dunn and Alderfer 2011). In overall size, Black-throated Sparrows are a little smaller than Sagebrush Sparrow and Bell’s Sparrows (Sibley 2000). While they will hop and run on the ground, they don’t cock their tails up in the air like Sagebrush Sparrow or Bell’s Sparrows characteristically do (Beadle and Rising 2002).

Occurrence and Documentation

In British Columbia, there have been 15 records of Sagebrush Sparrow for the Province (Cannings *et al.* 1987, Campbell *et al.* 2001, Toochin and Fenneman 2008, Please see Table 1). There are no records of Bell’s Sparrow for Canada or British Columbia (Cannings *et al.* 1987, Campbell *et al.* 2001). Records fall into two main periods between early March and mid to late April (Cannings *et al.* 1987, Campbell *et al.* 2001, Toochin and Fenneman 2008, Please see Table

1). The March records are likely more southerly overshoots as Sagebrush Sparrow are early migrants in late February through mid March in Oregon (Littlefield 1990). In Washington State, the Sagebrush Sparrow is also an early migrant with birds arriving in mid March through mid April (Wahl *et al.* 2005). This might explain why, in British Columbia, there are two distinct period when records occur. If the source of Provincial records are two different populations with two different periods of migration, then this might explain why records mostly fall into early to mid March and mid to late April as birds are likely coming from both the Oregon and Washington populations. There is a single early May record and a mid June record and this likely reflects the fact that Sagebrush Sparrows do not seem to stay in the Okanagan or dry belt through the summer months (Cannings *et al.* 1987). Sagebrush Sparrows prefer large expanses of big Sagebrush which has long disappeared in the southern Okanagan due to agricultural practices (Cannings *et al.* 1987, Campbell *et al.* 2001). Breeding Bird Survey data in Washington shows between 1966 to 2000 indicate a sharp decline likely due to increased agriculture in the region (Sauer *et al.* 2001, Wahl *et al.* 2005). There are areas of that have large tracts of Sagebrush in the Ashcroft and Cache Creek region of British Columbia that are not regularly checked by observers but it seems highly unlikely that Sagebrush Sparrows are breeding in British Columbia and that their occurrence is from overshoot migrants (Cannings *et al.* 1987, Campbell *et al.* 2001). In Washington and Oregon, birds move south in the month of September into October (Littlefield 1990, Wahl *et al.* 2005). There are only two fall records for the Province with the first being a female collected on Lulu Island in Richmond on October 2, 1930 and the other being of an adult seen on September 24, 1981 at White Lake in the south Okanagan (Cumming 1932, Munro and Cowan 1947, Godfrey 1986, Cannings *et al.* 1987, Campbell *et al.* 2001). In 2013, there have been two records of Sagebrush Sparrow which fall into the spring overshoot period (Please see Table 1). Both birds were seen during unseasonally warm weather and fall perfectly into the two overshoot periods of March and April. With more extensive coverage by observers, it is likely records of this species will continue to be found in southern British Columbia in the future. The only other record for Canada was a bird photographed at a famous migrant vagrant trap location on Brier Island in Nova Scotia on November 13, 1994 (Forsythe 1995).



Figure 1 & 2: Record #8: Sagebrush Sparrow adult on February 18, 1998 along Victoria waterfront. Photos © Laurie Savard.



Figure 3 & 4: Record #9: Sagebrush Sparrow adult April 6, 2000 at Iona Island Regional Park, Richmond. Photos © Jo Ann MacKenzie.



Figure 5, 6 & 7: Record #13: Sagebrush Sparrow adult April 12, 2012 in Kelowna. Photos © Avery Bartels.

Table 1: British Columbia records of Sagebrush Sparrow

1.(1) immature October 2, 1930: R.A. Cumming (specimen: BCPM 6913) Lulu Island,

- Richmond (Cumming 1932, Munro and Cowan 1947, Godfrey 1966, Campbell *et al.* 2001, Toochin 2012a)
- 2.(1) adult singing May 3, 1970: K. Gruener : Sagebrush along Ritcher Pass Summit, South Okanagan (Cannings *et al.* 1987, Toochin and Fenneman 2008)
 - 3.(1) adult March 20-22, 1974: *fide Jamie Fenneman* Comox flats, Comox (J. Fenneman pers. Comm.)(Toochin and Fenneman 2008)
 - 4.(1) adult June 11, 1980: R. & J. Satterfield: White Lake, Okanagan (Cannings *et al.* 1987, Campbell *et al.* 2001, Toochin and Fenneman 2008)
 - 5.(1) adult September 24, 1981: Al & Jude Grass: White Lake, Okanagan (Cannings *et al.* 1987, Campbell *et al.* 2001, Toochin and Fenneman 2008)
 - 6.(1) adult April 27, 1982: D. J. Wilson, KRS: Katzie Marsh, Pitt Meadows (Mattock and Hunn 1982c, Weber 1985, Campbell *et al.* 2001, Toochin 2012a)
 - 7.(1) adult March 2, 1996: Chris Siddle: Grey Canal Road, Vernon (Bowling 1996a, Davidson 1999, Campbell *et al.* 2001, Toochin and Fenneman 2008)
 - 8.(1) adult February 16-19, 1998: R. Barns, and other observers (BC Photo 1783) Dallas Road along waterfront, Victoria (Bowling 1998b, Campbell *et al.* 2001, Toochin and Fenneman 2008)
 - 9.(1) adult April 5-6, 2000: Peter Sandiford, Rick Toochin, and other observers (photo) Iona Island North Arm Jetty Base, Richmond (Toochin 2012a)
 - 10.(1) adult March 14, 2007: Tom Plath: Iona Island North Arm Jetty Base, Richmond (Cecile 2007c, Toochin 2012a)
 - 11.(1) adult April 27, 2009: Les Lee: White Lake (e-bird Canada database: Accessed May 3, 2013)
 - 12.(1) adult April 16, 2010: Doug Brown: Nighthawk, South Okanagan (Yahoo message #23220 bcintbird)
 - 13.(1) adult April 12, 2012: Avery Bartels (photo) Kelowna (BC Bird Alert Blog: Accessed April 18, 2012)
 - 14.(1) adult March 3, 2013: Corina Isaac, Rick Toochin: (BC Bird Alert Blog: Accessed March 3, 2013)
 - 15.(1) adult April 27, 2013: Doug Brown: south end of Blue Lake, South Okanagan (BC Bird Alert Blog: Accessed April 27, 2013)

Hypothetical records:

- 1.(1) adult June 11, 1922: C. de B. Green: Sagebrush near Keremeos (Cannings *et al.* 1987, Toochin and Fenneman 2008)
- 2.(1-2) reported by S.J. Darcus in the Okanagan in the summers of 1933 and 1934 (Parham 1937, Cannings *et al.* 1987)
- 3.(1) adult March 13, 2005: *fide David Allinson*: Chatterton Hill, Victoria (Toochin and Fenneman 2008)
- 4.(3) adult April 7, 2010: Karl Ricker: Nicklaus North Golf Course, Whistler (R. Cannings Pers. Comm.)

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