



Inland Occurrences of Brant (*Branta bernicla*) in British Columbia, 1865–1989

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Brant (*Branta bernicla*) is a small, dark marine goose that breeds from low to high tundra regions of the Arctic from Alaska across Yukon Territory, Northwest Territories, and Nunavut. It migrates and winters strictly in coastal habitats along western and eastern North America and the mainland coast of Mexico. Inland occurrences anywhere on the continent during the non-breeding seasons are rare and sporadic (Reed et al. 1998).

Three subspecies of Brant are recognized, two of which occur in North America. Light-bellied Brant (*B. b. hrota*) is found in eastern North America and Black Brant (*B. b. nigricans*; Figure 1) in western North America (Reed et al. 1998). The latter race breeds in the western Canadian Arctic and north and west Alaska and winters along the Pacific coast from Alaska to Mexico (Bellrose 1980). While it is the dominant subspecies in British Columbia it cannot



Figure 1. Black Brant (*Branta bernicla nigricans*) is the dark subspecies occurring in western North America. Photo by Alan D. Wilson.

be assumed that all inland records listed below refer to this race.

Black Brant use different migration corridors in spring and autumn and unlike many avian migrants the autumn movement is more rapid than the spring passage. The spring movement is protracted and lasts many months whereas the autumn migration is direct and nonstop. In spring, some of the wintering population starts moving north from Mexico and Baja California in early January, stopping over at traditional staging sites in bays and estuaries along the Pacific coast to rest and feed (Figures 2 and 3). A few birds may arrive in British Columbia in late February but large numbers generally arrive a month later. The peak movement occurs in April and by mid-May few Brant remain in the province. Occasionally stragglers are reported on the coast in summer (Reed et al. 1989, Campbell et al. 1990). Autumn migration is spectacular and is among the longest of all waterfowl. Immense flocks fly non-stop from Izembeck National Wildlife Refuge on the western end of the Alaska Peninsula to Baja California, a distance of at least 4,400 km, in 54 hours. This exodus mainly occurs in late October and early November (Dau 1992).

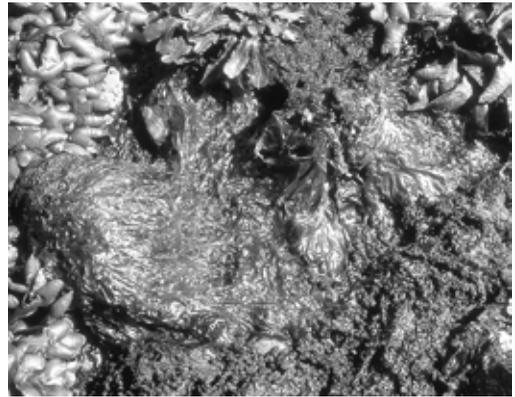


Figure 3. During spring passage in British Columbia, Black Brant feed primarily on the intertidal marine algae sea lettuce (*Ulva lactuca*) that can account for more than half of the diet. Eelgrass (*Zostera marina*) is also an important food. In late March, however, Pacific Herring (*Clupea pallasii*) spawn attracts tens of thousands of marine birds and mammals and may be ingested intentionally for its nutritive value by migrating Black Brant in the province (Bayer 1980). Photo by R. Wayne Campbell.



Figure 2. Black Brant are abundant spring migrants along the coast of British Columbia, stopping at favourite staging areas to rest and feed. The Parksville-Qualicum area of British Columbia (photo) is a significant spring staging area for Black Brant each year. In autumn, most of the population migrates offshore from staging areas on the Alaska Peninsula directly to wintering grounds in Baja California. Photo by R. Wayne Campbell, Qualicum Beach, BC, 17 April 1995.

British Columbia Inland Records

There were no inland occurrences of Brant listed in major references on the birds of British Columbia through 1946 (Brooks and Swarth 1925, Munro and Cowan 1947). These publications covered the period dating back to 1865 (Lord 1866). Campbell et al. (1990) summarized available interior records for the period 1947 through 1989 and listed nine observations from seven widely scattered locations (Table 1). The earliest reliable record was from the east side of the Coast Mountains at Kleena Kleene, about 185 km west of Williams Lake, in autumn 1964.

Five additional records, all from the vicinity of Kelowna in the central Okanagan valley, were recently

uncovered in the field notes of the late Glenn R. Ryder (see Campbell and Henderson 2013). These now represent the earliest records of vagrant “Black” Brant in the interior of British Columbia by 23 years.

Ryder referred to Brant in his field notes as “Common” Brant or “Black (Common)” Brant and listed identification features with each record that included a combination of field descriptions such as “a small dark goose with short black neck and white collar (necklace), dark head and breast; white rump. No white cheek-patch like Canada Goose” (Figure 4). Glenn and his older brother Donald also recorded additional information on species and numbers of other waterbirds seen with Brant as well comments on behaviour. Highlights from these records follow.

Table 1. Chronological list of inland occurrences of Brant in British Columbia, 1942–1989.

Year	Date	Location	No.¹	Source	Comments²
1942	Nov 13	Cameron Beach	2	G.R. Ryder field notes ³	Flying with 150 CAGO up lake
1944	Dec 10	Bellevue Creek	14	G.R. Ryder field notes	Swimming along shore
1944	Dec 17	McKinley Landing	4	G.R. Ryder field notes	On beach with 1 ROGO
1945	Dec 1	Manhattan Point	3	G.R. Ryder field notes	Resting in bay with ducks
1946	Mar 3	Poplar Point	6	G. R. Ryder field notes	On lake shore with 1 SNGO
1964	Nov 18	Kleena Kleene	4	Campbell et al. (1990)	No details
1970	Aug 19	Jones Lake	17	Roberts (1973)	Stopped for a couple of hours
1970	Dec 2	Trout Creek	12	Cannings et al. (1987)	Seen by L. Brock
1970	Dec 5-12	Penticton	2	Cannings (1972)	Feeding on beach with CAGO
1977	Nov 13	Naramata	1	Cannings et al. (1987)	With CAGO
1977	Nov 15-28	Trout Creek	1	Cannings et al. (1987)	With CAGO
1978	Mar 22	West Creston	1	Butler et al. (1986)	Seen by R. Scheer
1981	Mar 1981	Trout Creek	1	Cannings et al. (1987)	Seen by L. and M. Lopatecki
1986	Sep 16-22	Fort St. John	1	Campbell (1986), Siddle (2010)	At sewage lagoon

¹Number of Brant recorded.

²Four-letter codes follow Campbell et al. (2007).

³See Campbell and Henderson (2013) for history.



Figure 4. The white color or necklace of Black Brant (left) readily distinguishes it from Canada Goose that shows a white patch on the chin. *Photos by Alan D. Wilson (Black Brant) and Mark Nyhof.*

November 13, 1942 – Cameron’s Beach, Kelowna (11U 320486E 5527671N; el. 342 m) – “... (2) Common Brant flying with 150 Canada Geese north up lake [Okanagan].”

December 10, 1944 – Bellevue Creek, Kelowna (11U 319978E 5521215N; el. 342 m) – “... (14) seen along beach just south of creek mouth.” Numbers of other waterbirds in the immediate vicinity included Double-crested Cormorant (2), Mallard (26), Northern Pintail (50), Northern Shoveler (6), Lesser Scaup (19), Common Goldeneye (42), and Common Mergansers (400+).

December 17, 1944 – McKinley Landing, Kelowna (11U 323351E 5536679N; el. 342 m) – “... (4) with (1) lone Ross’s Goose, about the size of a Mallard Duck..., (6) Common Mergansers along shoreline in small bay.”

December 1, 1945 – Manhattan Point, Kelowna (11U 320192E 5530393N; el. 344 m) – (3) seen with waterfowl...resting by shoreline.” Numbers of other waterbirds included Pied-billed Grebe (12), Horned Grebe (8), Wood Duck (6), Green-winged Teal (40+), Mallard (100), Northern shoveler (4), Gadwall (10),

American Wigeon (62), Ring-necked Duck (14), Common Goldeneye (80), and Hooded Merganser (24).

March 3, 1946 – Poplar Point, Kelowna (11U 320735E 5531741N; el. 343 m) – “...(6) seen with (1) Snow Goose on the beach (edge of lakeshore) just north of Poplar Point Birds just standing at rest.”

Other interior occurrences in British Columbia through 1989 listed by Campbell et al. (1990) are summarized in Table 1 and Figure 5. More precise locality information for each place is as follows: West Creston (11U 528558E 5436594N; el. 630 m), Penticton (at Okanagan Lake; 11U 312118E 5486828N; el. 343 m), Naramata (10.3 km north Penticton; 11U 311907E 5496969N; el. 344 m), Trout Creek Point (delta of Trout Creek at Summerland on Okanagan Lake; 11U 308348E 5498796N; el. 342 m), Kleene Kleene (10U 376119E 5955496 N; el. 931 m), Jones Lake (4 km southeast 150 Mile House; 10U 576181E 5770353N; el. 736 m), Fort St. John (sewage lagoons, 5 km northeast Fort St. John; 10V 637706E 6238554N; el. 662m).

Elevations for 13 interior locations ranged from 342 m (Okanagan Lake) to 931 m (Kleena Kleene).

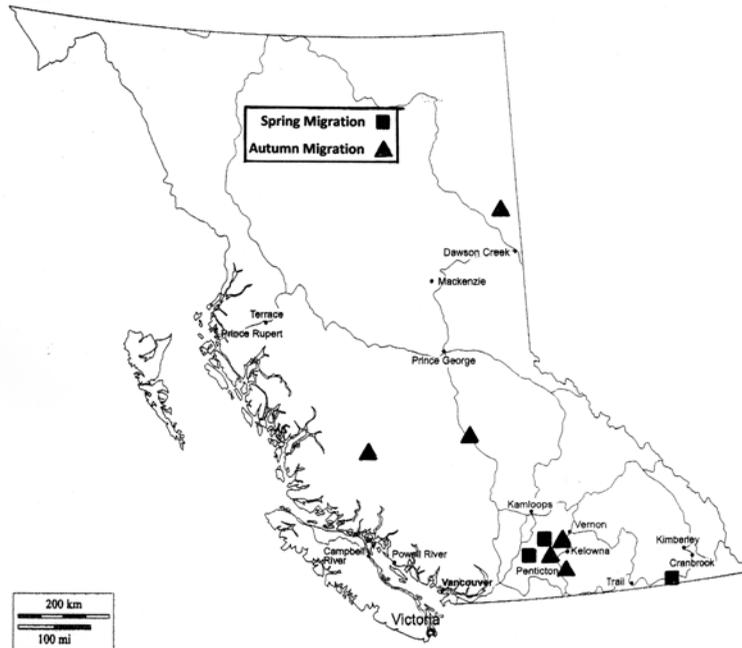


Figure 5. Locations of inland occurrences of “Black” Brant in spring and autumn migration in British Columbia, 1942 to 1989. Records, from south to north, are: CRESTON VALLEY (West Creston); OKANAGAN LAKE (Penticton, Naramata and Trout Creek Point at Summerland, Bellevue Creek, Cameron Beach, Manhattan Point, Poplar Point and McKinley Point in the vicinity of Kelowna); CHILCOTIN (Kleena Kleene); CARIBOO (Jones Lake); and PEACE RIVER (Fort St. John).

Pacific Northwest Inland Records

For a species that spends its life on sea coasts (Figure 6) inland records of “Black” Brant in the Pacific Northwest, (e.g., British Columbia, Washington, and Oregon), are scarce. Einarsen (1965), in his book *Black Brant: Sea Goose of the Pacific Coast* quotes Taverner (1928) regarding the inland status of Black Brant, “It appears inland or on freshwater lakes only as a rare straggler.” Not much has changed over the following 63 years through 1989.

Dawson and Bowles (1909) do not include inland occurrences for Washington State and mention Black Brant is, “...found only on salt water.” Jewett et al. (1953) include an early record by Lawrence (1892, p. 42) who stated, “A flock seen flying south August 30, 1890, near Axford Prairie, four miles south of Humptulips.” The latter location is about 20 km inland

southwest of the Olympic Mountains. There are two additional inland records through 1989, both during autumn migration, both in eastern Washington: Walla Walla (6 November 1977) and Richland (15 November 1987) (Kraege 2005).

The pattern of inland vagrancy is similar for Oregon. Early records by Bendire (1877), Mearns (1879), Anthony (1886), and Woodcock (1902) were dismissed by Gabrielson and Jewett (1940) as being the small dark race of the Little Cackling Goose (*Branta minima*) [now Cackling Goose (*Branta hutchinsii*)]. Gilligan et al. (1994) considered Black Brant a “rare vagrant inland, occurring most frequently during the fall migration, but also in mid-winter and during the spring migration.” The authors list nine interior locations without details. Merrifield (2003) states, “Black Brant are rare inland, usually occurring among flocks of Cackling Canada Geese.”



Figure 6. As Black Brant is dependent on a very narrow marine diet of mainly eelgrass and sea lettuce (foreground) it must seek out productive feeding areas along the Pacific coast for its survival during the nonbreeding seasons. *Photo by R. Wayne Campbell.*

Patterns of Inland Occurrences

Since first recorded in the interior in 1942, “Black” Brant has been reported in 10 of 48 years (21%) through 1989 (Table 1). Three of the 14 occurrences (21%) are during spring migration (all March), the remainder (79%) during autumn migration (August and September, November and December). There are no records for October. Spring dates range from March 3 to 22 and autumn dates from August 19 to September 22 and November 13 to December 17. Spring records are from West Creston and two locations on Okanagan Lake whereas autumn records are more scattered, representing 10 different interior locations (see Figure 5). Of the latter, eight (80%) are from Okanagan Lake (Table 1).

All spring migration records in British Columbia are of single-day visits of one to six birds. In autumn the length of stay ranged from one to 14 days with numbers between one and 17 birds (Table 1). Inland habitats ($n = 13$) included large lakes, including beaches (69.2%), a creek mouth (7.7%), a small lake (7.7%), a fresh-water marsh (7.7%), and a sewage lagoon (7.7%). “Black” Brant associated directly with Canada Goose,

Snow Goose (*Chen caerulescens*), and Ross’s Goose (*C. rossii*) and loosely with aggregations of mixed species of waterbirds on the water near shore.

Instead of flying directly from staging areas in Alaska (e.g., Izembek Lagoon) to wintering grounds in Baja California, as in autumn, spring migrants work their way up the Pacific coast over several months from wintering grounds, stopping at traditional locations along the way to feed and rest (Figure 7). The northward movement may start in early January. The first migrants may arrive into Puget Sound, WA, and southern coastal British Columbia in late February or early March. Numbers build in British Columbia through March and April and most leave by early May (Reed et al. 1989, Campbell et al. 1990). Theed Pearse monitored arrival and departure dates for central eastern Vancouver Island over a 40-year period and recorded peak spring numbers of 3,000 Black Brant on 17 March 1940 at Qualicum Bay and Kye Bay (Comox) (Einersan 1965, p. 54). This spring passage coincides with spring records for the interior in the Pacific Northwest, especially in March. Also, rarely is the length of stay at interior locations longer than one day.



Figure 7. In March, Brant arriving in south coastal British Columbia to feed, rest, preen, and ingest grit increase steadily and build to impressive numbers. All records from the interior of the province are during this month. *Photo by Alan D. Wilson.*

In autumn, the timing of departure from the major staging ground at Izembek Lagoon in Alaska varies among years but the final exodus usually occurs in late October and early November (Reed et al. 1998). Movement from breeding grounds in the western Arctic to staging areas along the Gulf of Alaska, however, may start in the second week of August (Einersen 1965, p. 52), which might explain the record at Jones Lake in the Cariboo on 19 August (Table 1) and 30 August in Washington State. This early westward movement of non-breeders, juveniles, and immatures may also account for the September record in Fort St. John. All other records in November and December are during the post-exodus from Alaska. †

Acknowledgements

The late Glenn R. Ryder entrusted his meticulous field notes to the author for use and safe-keeping hopeful that some of his records would be published (see Campbell and Henderson 2013). I am grateful to

wildlife photographer Alan D. Wilson for use of his Black Brant images. Spencer G. Sealy, Patricia Huet, and Dennis A. Demarchi reviewed early drafts.

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