

PQBWMA Brant Count 2023
Parksville Qualicum Beach Wildlife Management Area
Estimated Daily Brant Count Report – 2023
By the
Arrowsmith Naturalists
For
THE NATURE TRUST OF BRITISH COLUMBIA
James Goodwin
Count Coordinator and Compiler

The 2023 **Brant Primary Counts** covered the full length of the Parksville Qualicum Beach Wildlife Management Area (PQBWMA). Eight primary counts (Table 1) took place weekly from March 07 to April 25. The PQBWMA was divided into three areas and each was assigned a team of 2 – 4 observers. All team counts were within the same two-hour window to avoid double counting where possible. Counts were ideally taken at approximately mid-tide (3.4M or less) when food sources were exposed on the beach or floating in shallow water.

Count locations included the following named places which were also used in previous counts within the PQBWMA and Strait of Georgia (SOG).

Area 1: Little Qualicum River Estuary, Marshall Stevens Wildlife Area (MSWA), Surfside Dr. West and East, Kincade Rd., Qualicum Beach viewing stand, Seaside Nature Park (SNP), Qualicum Beach.

Area 2: Seacrest Place, Butterball Dr, Johnstone Rd, Admiral Tryon Blvd. East and West, Columbia Beach, French Creek Marina.

Area 3: Parksville Community Park (PCP), Parksville Bay, Englishman River mouth, Mariner Way, Arlett Rd., Craig Bay, Rath Trevor Provincial Park, Brant Point, Madrona Point.

There were 18 Brant Count volunteer observers that contributed a various amount of time: Sandra Gray (SG), Dan Gray (DG), Lynne Brookes (LB), Helen Davidson (HD), Bonnie Mullin (BM), David Erickson (DE), James Goodwin (JG), Maggie Little (ML), Duncan Campbell (DC), Toni Wyckoff (TW), Claire Summers (CS), Dennis Horwood (DH), Liz Thorne (LT), Jim Thorne (JT), Liz Bredburg (LB), Marilyn Bilsbarrow (MB), Jeanne Schippers (JS), Rob Schippers (RS).

In addition to the primary counts, **Incidental Counts** (Table 2) were conducted by individuals or small groups of observers. They recorded Brant numbers during visits to the PQBWMA shores January through April.

Also, this year we were fortunate to have a **daily Brant count** on Rath Trevor Beach, one of the major eelgrass forage sites in the PQBWMA, from Feb. 21 to Apr. 03. Courtesy of Duncan Campbell (Table 3). This count showed Brant didn't use this site during the height of the herring spawn, Mar. 14 to Mar. 29.

PQBWMA Brant Count Report 2023

Table 1: Primary Brant Counts

Brant Count 1:	Estimate Total: 414
Date: 03/07 Time: 9:30 – 11:30	
Area 1: Little Qualicum River Estuary; 2 Brant in the lagoon with approx. 50 ducks. 20 Harbour seals and 200 Gulls on the outer sandbars. One dog off leash with 6 walkers.	
Area 2: FC marina; 9:15 5 Brant flying E. Admiral Tryon access; 15 Brant Butterball; 9 Brant flying w. Seacrest: 15 Brant settled by west point. Total for area 2 was 29.	
Area 3: Rath Trevor Beach, 304 Brant strung along beach. No beach walkers. Mariner way: 79 Brant at the river mouth.	
No. of observers: 11	
Weather: Sunny, 6C with a stiff breeze on the shore.	

Brant Count 2:	Estimate Total: 517
Date: 03/14 Time: 12:00 – 14:00	
Area 1: Fourteen Brant were seen, through the wind and rain, at Little Qualicum Estuary with a flock of American Wigeon and Northern Pintail ducks.	
Area 2: Observers found 485 Brant at the Admiral Tryon pools and an additional 18 Brant near Seacrest Beach.	
Area 3: There were no Brant found in the southern area of the survey, Rath Trevor Beach, possibly due to the strong southeasterly wind.	
No. of observers: 15	
Weather: cold with a strong southeasterly wind.	
Disturbances: none reported	
Comments:	

Brant Count 3:	Estimate Total: 231
Date: 03/21 Time: 13:00 – 15:00	
Area 1: At Surfside Dr. W a large raft of ~3500 diving ducks, mostly Surf Scoter, were observed offshore before fog moved in. There was 65 Brant near shore at Little Q Estuary.	
Area 2: French Creek 2 Brant flying east. Johnstone Rd. was under heavy fog and nothing to report.	
Area 3: On Rath Trevor Beach several people, with children, and 2 dogs off leash held the birds offshore, including 21 Brant . Englishman Estuary 135 Brant flying east. Parksville Beach was in heavy fog, but 8 Brant were recorded.	
No. of observers: 13	
Weather: Dense fog began @ 13:30.	
Comments: March 15 a heavy herring spawn began from Little Qualicum River to Qualicum Beach. The inshore gillnet fishery began March 15 for two days.	
Disturbances: 2 Dogs off leash on beach at Rath Trevor Beach.	

Brant Count: 4**Estimate Total: 1296**

Date: 03/28

Time: 10:00 – 12:00

Area 1: At Surfside Dr., there were **444 Brant** in the bay and over the gravel bar at Little Qualicum R. At the end of Kincade Rd there were **60 more Brant** mixed in a spectacular raft of 8 - 10 thousand diving ducks, mostly Surf Scoter, spread out 300m from shore.

Another **34 Brant** flying offshore at Beach Creek and at the QB Nature Pavilion long lines of Brant were observed flying offshore; **approx. 250**. At Surfside Dr. E another **30 Brant** were observed flying east. The shoreline at Surfside was covered with thousands of seagulls and herring roe 30cm deep at the high tide line.

Area 2: Starting at French Creek **8 Brant** were observed flying west. At Columbia Beach, another **70 Brant** were seen flying west, well offshore. At Admiral Tryon West **400 Brant** were in the lagoon and over the gravel bar.

Area 3: There were no Brant sightings at either Rath Trevor or Parksville Beaches.

No. of observers: 9

Weather:

Disturbances: none reported.

Brant Count 5:**Estimate Total: 1140**

Date: 04/04

Time: 14:00 – 16:00

Area 1: Observers found **788 Brant** at the Little Qualicum River and assume there were many more that were not visible beyond gravel bar.

Area 2: Off shore at Admiral Tryon East (Columbia Beach) was a raft of thousands of ducks, mostly Surf Scoter and **360 Brant**.

Area 3: There was **no Brant found** on this survey.

No. of observers: 15

Weather:

Disturbances:

Comments: The Little Qualicum River estuary still has a very large bird concentration. Brant were found among the thousands of seagulls and a large raft of ducks offshore. There have been sporadic sightings of less than 100 Brant during the last 2 weeks at Rath Trevor Beach.

Brant Count 6:**Estimate Total: 724**

Date: 04/11

Time: 10:00 – 11:00

Area 1: At the Seaside Nature Park in Qualicum Beach **7 Brant** were spotted flying east. An additional **9 Brant** were observed at Surfside Dr. East. At Surfside Dr. West there were **38 Brant** on the sandbars towards the Little Qualicum River.

Area 2: No Brant found.

Area 3: Rath Trevor Beach a flock of **600 Brant** landed 250 metres offshore and **35 more** finally settled on a sandbar. At Parksville Beach, there was **35 Brant** in the bay. One person with a dog off-leash was on the beach further away from the Brant.

No. of observers: 8

Weather: Warm, sunny with a stiff breeze of the shore.

Disturbances: one dog off-leash at Parksville Beach

Brant Count: 7

Estimate Total: 754

Date: 04/18

Time: 12:00 – 14:00

Area 1: **6 Brant** flying east @ QB Nature Pavilion and **18 Brant** along low tide at line Little Qualicum River.

Area 2: No Brant found. 200+ Dunlin flying and 4 Orca observed for several minutes offshore.

Area 3: at Rath Trevor Beach **500 Brant** along low tide line and **230 Brant** on the water 100m off shore.

No. of observers: 9

Weather: Rain showers reduced visibility.

Comments: very low tide

Brant Count:

Estimate Total: 79

Date: 04/ 25

Time: 9:00 – 11:00

Area 1: Little Qualicum estuary **2 Brant** observed on the gravel bar.

Area 2: At Butterball Beach **40 Brant** flying. Highlights were 40 Black Turnstones, 15 male Black-bellied Plovers and ~1000 Dunlin

Area 3: Tide low, **37 Brant** out along the tide line.

No. of observers: 10

Weather: partly sunny, light wind, and 10c

Disturbances: Beach walkers continue to get too close to the shore and the birds.

Comments:

Brant Count Volume for 2023

Brant may stay in the PQBWMA for 1 – 2 days or as long 2 weeks, therefore we cannot use the total count of all Brant seen on all our Brant Counts. Instead, we take the yearly total on 6 peak counts and regress the volume according to a method courtesy of Sean Boyd, Environment Canada.

All Brant counted in 2023, during the 8 primary counts = **5155**

The six peak counts: 414+517+1296+1140+724+754= **4845**

Regressed volume for 2023 = 3646 (4845x0.67+400)

Regressed volumes for 6 peak counts:

2015 = 9091	2019 = 5586
2016 = 4710	2020 = 6597
2017 = 12,202	2021 = 5625
2018 = 12,693	2022 = 3761

Brant volumes peaked the last week of March to the third week of April then dropped off dramatically.

Herring Spawn

Each spring along the shores of the Strait of Georgia, Pacific Herring broadcast roe on eelgrass and adjacent beaches, providing a pulse of nutrients for migrating waterbirds. The Herring spawn starts beginning of March and continues to 3rd week. Spawning can take place over a wide region, Comox to Duncan.

This spring the DOF herring test fishery began Mar. 03 and found the majority of schooling herring south of Denman Is. and Hornby Is. Small amounts were found between Nile Creek and French Creek.

Spawning activity along the PQB WMA began Mar. 12, from Little Qualicum River to Columbia Beach for approximately one week. Commercial Seine Fishery was Mar. 16 – 17th.

Mar. 28 Herring spawn was 30cm deep on shore from Little Qualicum Estuary to QB Nature Pavilion.

Daily monitoring of Rath Trevor Beach found the Brant didn't use this primary forage site from March 14 to March 29th.

Disturbances to wildlife. Disturbances to feeding Brant by walkers and dogs, on and off leash, continues to be a problem. Improved signage at beach accesses and public education seems to have reduced the number of dogs on the beaches but there are still numerous disturbances by people enjoying a walk on the beach at low tide. Walkers that are totally unaware they are chasing up the birds before them. Bald Eagles are also a source of frequent disturbances.

Mileage. Mileage was calculated by determining the round-trip distance from Wembley Mall, Parksville to the survey sites. **Total mileage for 8 primary counts= 1044 Km.**

Survey hours. Coordination and compiling time **20 hr.**

Total person hours of observation for the eight primary counts were approx. **190 hours.**

Total time for daily Rath Trevor Beach counts from Feb. 21 to Apr. 03 was approx. **20 Hrs.**

Total volunteer hours = 230

Thank you to all volunteer observers and incidental contributors from the Arrowsmith Naturalists.

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Brant Count Compiler 2022

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Date: 2023	Incidental Brant counts	Time daylight hrs	Table 2
Jan 02	22	11:00	Parksville beach
Jan 21	23	11:45	Parksville Beach
Jan 28	21	13:00	Rathtrevor
Feb. 07	40	10:00	JG. Flying off shore @ Englishman River Estuary and landing on the water
Fed 09	20	11:30	Englishman Estuary
Feb. 10	93	12:30 – 2:30	SG/DG. Rathtrevor park – 300+ Dunlin, dozens of BBPL.
Feb 10	40	1:30	DE/CS. 40 Brant flying E from QB, may same birds.
Feb 12	108	1:30	JG Rathtrevor, low tide. 300+ Dunlin feeding on water line.
Feb 14	27	10:00	JG/SK Rathtrevor, flying
Feb 15	31	15:00	Jim Mott Rathtrevor, low tide.
Feb 18	20	15:50	French creek, low tide. Derek Ibister eBird
Feb 18	36		Rathtrevor
Feb 21	90	13:30	Rathtrevor
Feb 24	140	13:00	Rathtrevor
Feb 26	133	11:45	Rathtrevor
Feb 28	39	12:00-14:00	Full survey of PQB WMA 6 Brant at Columbia Beach, 23 at Rathtrevor and 10 observed flying E from mariner way
Mar 02	107	13:30-15:00	Butterball SG/DG
Mar 03	80	16:00	Liz B. Rathtrevor
Mar 07	107	13:00	Seacrest Beach
Mar 08	21	12:30	Little Q low tide JG
Mar 09	75	PM	Rathtrevor BM
Mar 11	165	10:00	Rathtrevor HD/Duncan/D. Helm
Mar 12	43	11:30	Rathtrevor Tide 3.8M JG
Mar 15	185	14:00	Surfside Dr E Herring spawn ~1000 raft of divers
Mar16	210	17:00	End of Country Club Dr Flying E.
Mar 19	27	14:15	QB nature Park
Mar 25	381	15:00-15:30	French Creek, skeins of Brant offshore flying north.
Mar 30	500	15:00	Admiral Tryon Liz B
Apr 03	600	pm	@ Little Q SG/DG
Apr 05	1500	15:30	Little Q estuary eBird
Apr 07	380 900	11:00 13:30-16:00	Rathtrevor Beach BM Seacrest to Admiral Tryon SG/DG
Apr. 09	500	15:30	Rathtrevor Beach Liz/Jim
Apr 14	800	12:30	Rathtrevor Beach
Apr 21	500	12:30	Rathtrevor

Table 3

From Rathrevor to Craig Bay						
Date	Time	Beach Sh	Count	Tide	Location	
				Metres		
02-21-23	1330	30	90	2.8	TNM	<i>TNM=off Tigh-Na-Nara</i>
2-22-23	1500	90	130	2.7	TNM	<i>brant pt = end of Rath</i>
2-23-23						
2-24-23						
2-25-23						
2-26-23	1600	90	7	1.5	TNM	
2-27-23	1600	70	110	2.8	TNM	
2-28-23						
3-1-23	1600	70	110	2.6	TNM	
3-2-23	1600	70	110	3	TNM	
3-3-23	1700	50	10	3.1	TNM	
3-4-23						
3-5-23						
3-6-23						
3-7-23	930	10	70	3.5	Brant pt	
3-8-23	1130	50	40	2.7	TNM	
3-9-23	1500	50	10	2.6	TNM	
3-10-23	1100	20	150	2.2	brant pt	
3-11-23	100	70	180	1.9	brant pt	
3-12-23	1200	30	90	2.6	brant pt	
3-13-23	100	30	20	2.3	brant pt	
3-14-23						
3-15-23						
3-16-23						
3-17-23						
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3-24-23						
3-25-23						
3-26-23						
3-27-23						
3-28-23						
3-29-23						
3-30-23	1900	90	80	1.7	TNM	
3-31-23	1700	20	600	2.4	brant pt	
4-1-23						
4-2-23						
4-3-23	1300	30	400	2.7	brant pt	