

PQBWMA Brant Count 2022
Parksville Qualicum Beach Wildlife Management Area
Estimated Daily Brant Count Report – 2022

By the
Arrowsmith Naturalists
For
THE NATURE TRUST OF BRITISH COLUMBIA
James Goodwin
Count Coordinator and Compiler

The 2022 **Brant Primary Counts** covered the full length of the Parksville Qualicum Beach Wildlife Management Area (PQBWMA). The ten primary counts (Table 1) took place weekly from February 22, to April 26, during daylight hours. The PQBWMA was divided into three areas and each area was assigned a team of 2 – 3 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) 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, Beach Creek, Judges Row.

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.

The twelve 2022 Brant Count volunteer observers were: Sandra Gray (SG), Dan Gray (DG), Lynne Brookes (LB), Helen Davidson (HD), Bonnie Mullin (BM), David Erickson (DE), James Goodwin (JG), Roger Simms (RS), Maggie Little (ML), Ruth Bowes (RB), Duncan Campbell (DC), and Toni Wyckoff (TW).

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. The incidental counts indicated possible overwintering Brant and the locations of Brant concentration.

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. Courtesy of Duncan Campbell (Table 3). The count volumes for this count were low but fluctuations in numbers did indicate a continued use of this sight by birds possibly moving through.

PQBWMA Brant Count Report 2022

Table 1: Primary Brant Counts

Brant Count 1:	Estimate Total: 448
Date: 02/22 Time: 11:00 – 12:40	
Area 3: Rathtrever Beach, 445 Brant feeding along shore in small flocks. Parksville Bay, 13 Brant	
No. of observers: 3. SG/DG/JG	
Disturbances: none reported	
Weather:	
General comments: the count area was divided in two parts, north and south. Brant were found only in the south zone.	

Brant Count 2:	Estimate Total: 410
Date: 03/01 Time: 13:00 – 14:30	
Area 1: Surfside Dr. W, 10 Brant QB Viewing Platform, 7	
Area 2: Admiral Tryon W, 149 in lagoon. Johnstone Rd, 83 along shore	
Area 3: Rathtrever Beach, 138 along shore twice flushed by beach walkers. Mariner way, 23 Brant flying	
No. of observers: 8 RS/ML/LB/DE/BM/JG/HD/RB	
Weather: wind, cold and rain. Heavy rain by 14:30	
Disturbances: Poor weather generally kept people off the beaches. At Mariner Way a loose dog jumped into the estuary flushing numerous ducks.	

Brant Count 3:	Estimate Total: 405
Date: 03/08 Time: 10:00 – 12:00	
Area 1: Surfside Dr. E, 231 Brant off shore with raft of 2000 sea ducks. SUSC, LTDU, WWSC, GR. Scaup.	
Area 2: Columbia Beach to Seacrest Pl. 152 Brant in small flocks stopping and flying N.	
Area 3: Rathtrever Beach 6 Brant along shore. Mariner Way, 16 Brant flying north.	
No. of observers: 8 JG/HD/RB/SG/DG/LB/DE/BM	
Weather: overcast with light wind	
Disturbances: none reported	
Comments:	

Brant Count 4:	Estimate Total: 256
Date: 03/15 Time: 14:00 – 15:00	
Area 1: 0	
Area 2: French Creek to Seacrest Place, 188 Brant. 74 tucked in along the shore and 114 in small flocks flying south.	
Area 3: Rathtrever Beach, 68 Brant along shore. Some walkers but no disturbance.	
No. of observers: 6 RS/ML/JG/HD/DE/BM	
Weather: wind 9 km at 2pm suddenly increased bringing rain and white caps on the open water.	
Comments:	

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Table 1: Primary Brant Counts pg.2

Brant Count 5: **Estimate Total: 301**
Date: 03/22 Time: 09:00 – 11:00
Area 1: Surfside Dr. E, 12 flying
Area 2: Admiral Tryon to Seacrest, 200 Brant. A number of small flocks moving along shore.
Area 3: Mariner Way, 5 Brant flying S
Parksville Bay, 21 on the gravel bar.
Rathtrever Beach, 63 Brant. 14 people on beach with one person disturbing the birds.
No. of observers: 6 DE/BM/SG/DG/JG/HD
Weather: cloudy, 8 C. with SE wind and choppy seas.
Disturbances: At Rathtrever one person walking right at the tide line pushing all birds ahead of her.
Comments:

Brant Count 6: **Estimate Total: 485**
Date: 03/29 Time: 13:00 – 14:30
Area 1: Surfside dr. W. 95 Brant
Area 2: no Brant found
Area 3: Rathtrever Beach, 256 Brant. 18 people and 1 loose dog on beach
Parksville Beach, 134
No. of observers: 7 RS/ML/JG/HD/LB/DE/BM
Weather:
Disturbances: At Rathtrever Beach the number of people on the beach continually kept the off the shore where they were feeding.
Comments: Raft of 2-3 thousand seabirds 100 Meters of shore. Mostly Scoters.

Brant Count 7: **Estimate Total: 1284**
Date: 04/05 Time: 10:00 – 11:45
Area 1: No Brant found
Area 2: No Brant found
Area 3: Rathtrever Beach, 604 Brant
Parksville Bay, 680 Brant
No. of observers: 6 HD/TW/BM/LB/SG/DG
Weather: Strong cold winds and choppy seas.
Disturbances: Poor weather kept people away from the shore.
Comments: Sea conditions made it difficult to see if Brant were holding off shore during the storm.

Brant Count 8: **Estimate Total: 1541**
Date: 04/13 Time: 13:00 – 15:00
Area 1: Surfside Dr. 55 Brant
Area 2: Admiral Tryon E. 3 flying east
Butterball, 7 flying west.
Area 3: Rathtrever Beach: 498 Brant along shore line
Mariner Way 8 flying
Parksville Bay, 970 along west side disturbed by walkers and 4 dogs on beach
No. of observers: 8 JG/ML/HD/LB/BM/DE/SG/DG
Weather: Cold, breezy and overcast

Disturbances: 4 dogs on beach at Parksville Bay

PQBWMA Brant Count Report 2022

Table 1: Primary Brant Counts pg.3

Brant Count 9 : **Estimate Total: 848**

Date: 04/19 Time: 09:30 – 11:30

Area 1: Surfside Dr. W, 56 Brant

Area 2: French Creek, 50 flying east

 Johnstone Rd. 10 Brant in 3 small groups flying east

Area 3: Rath Trevor Beach, 443 Brant, flushed by eagles several times

 Mariner Way, 4 flying

 Parksville Bay, 285 Brant flushed by walkers and eagles

No. of observers: 6 RS/ML/HD/JG/SG/BM

Weather: sunny, warm, and breezy

Disturbances: Warm weather brought out the dog walkers. French Creek 2 dogs loose on the beach and Johnstone Rd. 6 people and 2 dogs on the beach.

Comments:

Brant Count 10: **Estimate Total: 296**

Date: 04/26 Time: 14:00 – 15:30

Area 1: Surfside Dr. W, 109 Brant feeding along shore

Area 2: no Brant found

Area 3: Rath Trevor Beach, 187 Brant along shore. Flew out to the gravel bar when 2 walkers approached.

No. of observers: 5 JG/SG/DG/DE/BM

Weather: overcast with light breeze

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

Comments:

Brant Count Volume for 2022

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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 during the 10 primary counts = **6277**

The six peak counts: 448+410+485+1285+1541+848= **5017**

Regressed volume for 2022 = 3761 (5017 x 0.67 + 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 Apr.05 to Apr. 19 then dropped dramatically.
This seasons Herring Spawn was the lowest in years. Commercial fishermen were unable the fill their quotas. Even though quotas had been reduced from 2021 levels.

Most of the spawning was north of Nile Creek, off Hornby Is. and near Comox.
Lack of spawning Herring in local waters left no herring eggs piled on the tide line or drifting on the water surface to entice Brant to stay.

Lack of eel grass along the high tide line possibly indicates there was less feed for migrating Brant as well.

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 each observer's home to their survey site. **Total mileage for primary counts= 1190 Km.**

Survey hours. Coordination and compiling time **25hr.**

Total person hours of observation for the ten primary counts were approx. **136 hours.**

Total hours contributed by ANAT'S to INCIDENTAL COUNTS (Table 2) was approx. **28 hours.**

Total time for daily Rath Trevor Beach counts (table 3) was approx. **17 Hrs.**

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 2022 Mm/dd	Incidental Brant counts	Time daylight hrs.	Incidental Survey Results Table 2	
01/29	100	13:00	Madrona Point. Approx. number, a large raft of Brant bobbing @ 300m	JG
02/01	245		Rathtrevor beach, flying in along shore.	SG/DG
02/05	36	12:30 – 14:30	Small flocks moving between Admiral Tryan and Seacrest beach. 2 GRYE – 45 BLTU – 72 DUNL.	SG
02/07	331	13: 35 – 14:40	Rathtrevor. Brant strung along shore line in small groups feeding in shallow water. Continually 10 – 12 people and 3 dogs. All birds were eventually flushed, moving to the far west side of bay. 16 BBPL-100+ DUNL	JG/SG
02/13	60	10:13 - 11:45	Mariner Way >60 Brant 400M off shore. Two small groups flew by.	JG/SK
02/13	150	14:45	Rathtrevor – Bob Rosnau -eBird	
02/19	65	11:50	Rathtrevor – 3.5M tide – Ed Klassen - eBird	
02/18	12	13:00	Little Q – LOW 2.5M tide -Allan Melnychuck - eBird	
02/16	160+	13:15	Rathtrevor Beach – more seen at south end of beach, not counted	Ruth RB
02/22	50-60	15:00	Eaglecrest beach – chased off by two dogs running loose.	Dave E
02/24	363	12:00 – 12:40	Rathtrevor – tide 4.1 falling to 3.6. 280 Brant on shore in front of parking lot, flushed by 2 BAEA. 83 Brant at East end strung along beach.	JG
02/24	450	13:30- 15:30	Rathtrevor – tide way out, east beach Brant feeding along shore, another 120 at west end near Craig Creek. Total 450	SG
03/05	50	10:30	Columbia Beach	
	70	13:30	Little Q Estuary	DE
03/06	95	14:43	Rathtrevor	DE
03/13	37	09:30	Mariner Way – on the water	JG, Sue/Mel
	260	11:00- 11:30	Arlett Rd, Mariner Way 60 Brant flying N&S, est. 200 Brant 1Km off shore.	JG, Sue/Mel
03/12	270	13:30	Rathtrevor	eBird Arnold Skie
03/16	228	12:00 – 14:00	Lit' Q Estuary – 13:45: 5-7000 scaup & scoters flying down island in strings of 100.	SG/DG
03/18	200	14:00	Seaside Nature Park	SG/DG
03/19	305	12:45	Johnstone Rd. Raft 200+ seabirds, 200+ AMWI, MALL,NOPI on shore	SG/DG
03/26	288	13:45- 14:15	Tide 3.5M falling (a good distance) 188 by brant Point & ~100 by Craig Bay resorts. Cool Windy few people on beach.	JG
03/31	400	14:00	Tide 2.5M Rathtrevor	eBird B. Denham

			Incidental Reports Pg. 2	
04/02	65	13:00	Tide 2.5m LQ Surfside Dr. W	JG
	162	09:30	Englishman River Estuary	eBird D. Wilshire
	447	11:00	Rathtrevor	eBird V.Lugin
	350	12:00	Parksville C. Park	eBird D.Russin
	425	15:30	Parksville C Park	eBird B. Hay
			Daily count >862	
04/03	400	12:30 – 13:00	PCP Tide 1.6M wind & rain, 400 Brant flew in and spread along the tide line in the bay. Only possible because no one on beach.	JG
	600	13:30-14:00	PCP tide 1.2 Disturbance by walkers and two dogs	SG/DG
	625	14:15-	Rathtrevor Disturbance walkers and dogs	SG/DG
			Daily count >1225	
04/08	400	11:00	Rathtrevor Beach, from 10 am. to 11am. Brant were disturbed frequently by BAEA's Final count off Brant Pt. Tide 3.5M (ok mid-tide)	JG
	1070	11:20 11:40	Parksville Bay. Tide 3.3. 530 Brant strung along west side of bay. 540 Brant on gravel bars at hovercraft stn. Daily count 1470	JG
04/11	70	10:45	Arlette Rd flying north.	JG
	1000	12:45	Rathtrevor Bay	Duncan
04/17	350	11:27	Parksville Bay eBird	S. Beauchesne
	300	15:20	Parksville Bay eBird	N. Simpson
04/22	185	12:00	Rathtrevor, along shore line at low tide	JG
	20	12:40	Parksville (PC P), on far west shore	JG
	75	11:30 – 12:30	Surfside Dr W. weather & seas calm Daily total 280	TW
04/23	18	9:30	Little Q Estuary, on the gravel bar; may have been more behind the bar	JG

Daily Count

Table 3 pg.1

From Rath Trevor to Craig Bay				
Date	Time	Beach Showing	Brant	Location
		%	Count	Brant Point
				spread along tide line
2-8-22	1500	50	150	
02-09-22	1400	50	100	
02-10-22	1500	50	160	
02-11-22	1600	50	60	
02-12-22	1600	50	20	
02-13-22	1600	20	130	
02-14-22	900	90	200	
02-15-22	1700	20	30	
02-16-22	1230	50	190	brant Point
02-17-22	1200	50	200	Brant Point
02-18-22	1600	50	100	spread along tide line
02-19-22	1700	50	40	spread along tide line
02-20-22	1230	50	150	Brant Point
02-21-22	1230	50	300	Brant Point
02-22-22	1600	90	150	Brant Point
02-23-22	1230	20	320	spread along tide line
02-24-22	1600	90	100	
02-25-22	1600	90	20	spread along tide line
02-26-22	1300	20	150	spread along tide line
02-27-22	1600	50	90	spread along tide line
03-01-22	1300	20	50	spread along tide line
03-02-22	1000	50	250	spread along tide line
03-03-22	1500	50	60	spread along tide line
03-04-22	1700	20	100	spread along tide line
03-05-22	1500	90	160	spread along tide line
03-06-22	1200	50	130	spread along tide line
03-07-22	1530	90	60	Brant Point
03-08-22	1200	90	70	
03-09-22	1500	90	300	spread along tide line
03-10-22	1600	90	250	spread along tide line
03-11-22	1400	50	300	spread along tide line
03-12-22	900	20	300	Brant Point
03-13-22	1600	20	320	spread along tide line
03-14-22	900	50	200	Brant Point
03-15-22	1600	20	40	spread along tide line
03-16-22	1100	50	180	spread along tide line
03-17-22	1000	50	230	spread along tide line
03-19-22	1600	90	200	spread along tide line
03-20-22	1600	90	110	spread along tide line
03-21-22	1100	20	80	spread along tide line
03-23-22	1600	90	150	spread along tide line

Daily Count

Table 3 pg.2

<i>From Rath Trevor to Craig Bay</i>				
<i>Date</i>	<i>Time</i>	<i>Beach Showing</i>	<i>Count</i>	<i>Location</i>
				BP = Brant Point
				S=spread along tide line
3-24-22	1000	60	200	s
03-25-22	1700	70	200	s
03-26-22	1500	20	300	s
03-27-22	900	10	250	s
03-28-22	1100	20	400	s
03-29-22	1500	10	250	b
03-30-22	100	20	180	s
03-31-22	1200	80	320	s
04-01-22	900	10	400	s
04-02-22	1400	100	500	s
04-03-22	1000	10	260	s
04-04-22	1600	10	550	s
04-05-22	1300	70	300	s
04-06-22	1100	30	350	b
04-07-22	1200	50	300	s
04-08-22	1100	20	450	b
04-09-22	1200	50	600	s
04-10-22				
04-11-22	1300	20	1000	s
04-12-22	1400	20	650	s
04-13-22	1100	60	620	s
04-14-22	1200	80	550	s
04-15-22	1530	30	350	s
04-16-22	1200	90	600	s
04-17-22	1200	100	320	s
04-18-22	1200	80	160	s
04-19-22	1000	50	300	s
04-20-22	1600	70	250	s
04-21-22	1200	40	210	s
04-22-22	1500	90	370	s
04-23-22	1700	70	200	s
04-24-22	1400	30	200	s
04-25-22	1200	20	160	s
04-26-22	1200	40	130	s
04-27-22	1300	40	220	s
04-28-22	900		20	s
04-29-22	900		0	s
04-30-22	1000		0	s