

**Table 6.** Trends in Glaucous-winged Gull breeding populations (number of nests counted) in the BC Salish Sea between 1959 and 2010. All known historical nesting sites are listed. Rough estimates of population size are listed in the body of the table but are not included in the totals tallied at the bottom of the table. A dash indicates colonies for which there are no survey data in a particular year. See Appendix 2 on pages 504-505 for an explanation of the letter codes used to qualify population estimates.

SITE CODE	SITE NAME	Earliest nesting record		Survey Year <sup>a</sup>							
		Count	Year	1959/1960	1974	1977	1978	1981	1986	1999	2009/2010 <sup>b</sup>
Northern Strait of Georgia											
SG-014	Hoskyn Rock	x	2012	-	-	-	-	-	-	-	-
SG-017	Centre Islet	1S	2018	-	-	-	-	-	-	-	-
SG-020	Copper Cliffs	1+eS	1976	-	-	-	0	-	-	-	-
SG-030	Three Islets	1	1974	-	1	1eS	2eS	1	-	-	-
SG-050	Little Rock	1	1974	-	1	0	0	1	1	-	-
SG-055	Ray Rock	10e	2009	-	-	-	-	-	-	-	10e
SG-060	Powell Islets	1	1970	-	0	0	1S	0	-	-	-
SG-070	Major Islet	1S	1970	-	3[3]	0	1S	1	-	-	-
SG-080	Keefer Rock	7	1970	-	-	20[20]	14[1]	28[26]	28	-	-
SG-090	Mitlenatch Island	x	1896	600-1,200e	1,632[1,578]	987[811]	2,558[2,326]	1,922[986]	2,100	-	2,493[1,152]
SG-100	Powell River	6	1986	-	-	-	-	-	6	-	-
SG-110	Vivian Island	59+	1966	-	218[191]	-	240[90]	229[178]	208	-	-
SG-130	McRae Islet	97	1969	-	-	-	150[36]	164[73]	262	-	-
SG-135	Deserted Bay - Dock	1	2021	-	-	-	-	-	-	-	-
SG-140	"Blind" Islets	2	1986	-	-	-	0	0	2	-	-
SG-145	"Cockburn" Islets	150e	2014	-	-	-	0	0	-	-	-
SG-148	"Trafalgar" Rock	1	1986	-	-	-	-	0	1	-	-
SG-150	Hodgson Islands	1	1986	-	-	-	0	0	1	-	-
SG-180	Mouat Islands	16	1981	-	-	-	0	16[11]	35	-	-
SG-190	"Davie" Islet	3	1986	-	-	-	-	0	3	-	-
SG-200	Denman West Dock	1	1986	-	-	-	-	-	1	-	-
SG-210	Denman East Dock	1	1986	-	-	-	-	-	1	-	1eS
SG-212	Hornby Island - West Dock	1	before 2000	-	-	-	-	-	-	-	-
SG-220	St. John Point	25e	1936	S	5	2[2]	-	3-7e	6	-	-
SG-230	Norris Rocks	17	1968	-	85[81]	104[27]	58[22]	111[48]	287	-	185[111]
SG-240	Chrome Island	1	1974	-	1	-	1eS	3eS	3eS	-	1S
SG-250	Sisters Islets	100e	1940	-	108[108]	-	85[65]	151[141]	25	-	-
SG-260	Finnerty Islands	10eS	1974	-	10eS	-	0	6[4]	4	-	-
SG-270	Fegan Islets	2S	1974	-	2S	-	0	1	1	-	-
SG-278	"Sabine" Islets	1	1986	-	-	-	-	0	1	-	-
SG-290	"Upwood" Islet	3	1981	-	-	-	-	3[3]	-	-	-
SG-300	Sheer Island	7	1981	-	-	-	-	7[7]	50	-	-
SG-302	Rabbit Island	22	1986	-	-	-	-	0	22	-	-
SG-305	"Windy" Rock	1	1986	-	-	-	-	0	1	-	-
SG-310	Sea Egg Rocks	5	1986	-	-	-	0	0	5	-	-
SG-330	"Priestland" Rocks	1	1981	-	-	-	-	1	-	-	-
SG-340	"Jeddah" Rocks	2	1981	-	-	-	-	2[1]	-	-	-
SG-360	Franklin Island	700-800eS <sup>c</sup>	1950	500e	387[354]	287[242]	478[404]	443[306]	216	-	47[43]

Table 6. cont'd

SITE CODE	SITE NAME	Earliest nesting record		Survey Year <sup>a</sup>							
		Count	Year	1959/1960	1974	1977	1978	1981	1986	1999	2009/2010 <sup>b</sup>
SG-370	Merry Island	x <sup>c</sup>	1924	100e	252[201]	310[255]	362 <sup>d</sup>	158[13]	6	-	3eS
SG-380	Porpoise Bay	1	1978	-	-	-	1	1	-	-	-
SG-390	Trail Islands	2	1973	-	3[3]	-	4eS	5[4]	-	-	-
SG-400	White Islets	x	1923	-	279[278]	-	458[410]	314[185]	490	-	328[253]
SG-430	Christie Islet	x	c1914	299[299]	477[430]	x	722[655]	558[518]	454	246e	255[198]
SG-440	Pam Rock	x	1941	-	121[113]	x	151[115]	131[103]	109	25[7]	11[7]
SG-444	Squamish Harbour	1	2008	-	-	-	-	-	-	-	1
SG-450	Bowyer Island	11S	1978	-	0	-	11S	12	-	-	-
SG-460	"Sunset Beach" Cliffs	1	1956	-	-	-	-	-	-	-	-
SG-470	"Bay" Rock	5	1980	-	-	-	-	-	-	-	-
SG-490	Whyte Islet	6	1978	-	-	-	6[4]	22[19]	0	0	0
SG-500	Bird Islet	3	1974	-	3[3]	-	-	-	38	35[33]	45[15]
SG-505	Kettle Point	2S	1981	-	-	-	-	2S	-	-	-
SG-520	"Eagle" Rocks	2	1974	-	2[2]	-	-	17[5]	10	1	-
SG-530	Passage Island	x	1940	50e	496[456]	-	798[701]	709[451]	384	-	25[11]
SG-540	Grebe Islets	7	1974	-	7[7]	-	12[7]	22[2]	108	257[217]	58[33]
SG-550	Point Atkinson	4	1968	-	-	-	-	-	-	-	-
SG-555	Capilano Lake	1	1972	-	1	-	-	-	-	-	-
SG-560	Wigwam Inn	1	1940s	-	-	-	-	-	-	-	-
SG-568	Port Moody	1	2013	-	-	-	-	-	-	-	-
SG-570	Barnet	2	1977	-	-	2[2]	-	-	-	-	-
SG-580	Second Narrows	2	1975	-	-	-	4	-	40	-	-
SG-590	North Vancouver	1	1967	-	72[57]	25[20]	28[5]	21[10]	158e	-	-
SG-595	West Vancouver	18e	2021	-	-	-	-	-	-	-	-
SG-600	Vancouver Harbour	1	1962	-	-	-	-	-	112e	-	-
SG-610	Lions Gate Bridge	1	1958	-	1	-	-	4	12	-	2
SG-620	Prospect Point	2	1959	2	5	4	1	9	4	-	0
SG-630	Siwash Rock	3-4e	1958	-	6[6]	4	-	5[5]	8	-	0
SG-640	Burrard Bridge	9	1986	-	-	-	-	-	9	-	1
SG-650	Granville Bridge	10	1986	-	-	-	-	-	10	-	-
SG-660	False Creek	172e	1986	-	-	-	-	-	172e	-	-
SG-661	Point Grey	20e	2021	-	-	-	-	-	-	-	-
SG-664	Oak Street Bridge	1	2021	-	-	-	-	-	-	-	-
SG-665	Mitchell Island	2eS	2021	-	-	-	-	-	-	-	-
SG-666	Knight Street Bridge	1	2021	-	-	-	-	-	-	-	-
SG-667	South Vancouver	2	2021	-	-	-	-	-	-	-	-
SG-670	Queens Reach to North Arm	4	2012	-	-	-	-	-	-	-	-
SG-672	Pattullo Bridges	2S	2013	-	-	-	-	-	-	-	-
SG-674	Annacis Island	3eS	2021	-	-	-	-	-	-	-	-
SG-675	Lulu Island - North	1	2008	-	-	-	-	-	-	-	-

Table 6. cont'd

SITE CODE	SITE NAME	Earliest nesting record		Survey Year <sup>a</sup>							
		Count	Year	1959/1960	1974	1977	1978	1981	1986	1999	2009/2010 <sup>b</sup>
SG-677	Sea Island	9	2018	-	-	-	-	-	-	-	-
SG-679	Lulu Island - South	2	2008	-	-	-	-	-	-	-	-
SG-680	Westham Island	3	1972	-	-	-	-	-	-	-	-
SG-700	Roberts Bank Superport	3	1988	-	-	-	-	0	-	-	-
SG-710	Tsawwassen Ferry Terminal	3+	~1961	-	9[7]	3eS	4S	7[3]	-	-	4
SG-720	Tsawwassen Breakwater	10e	1970	-	115[102]	160[147]	150[103]	223[106]	238	-	250e <sup>c</sup>
SG-730	White Rock	1S	2010	-	-	-	-	-	-	-	1S
<b>Gulf Islands</b>											
GI-010	Ballenas Islands	50e	1952	-	0	-	-	2eS	0	-	-
GI-015	Yeo Islands	1S	1978	-	-	-	1S	-	-	-	-
GI-020	Ada Islands	75+	1961	-	171e	-	154[127]	155[108]	124	-	73[69]
GI-040	Maude Island	2	1986	-	0	-	-	-	2	-	0
GI-045	Long Lake	1	1986	-	-	-	-	-	1	-	-
GI-050	Five Finger Island	x	1958	-	311[288]	459[422]	473[454]	599[559]	671	288e	9[2]
GI-060	Hudson Rocks	x	1958	75e	248[242]	259[252]	236[225]	308[291]	247	122[74]	10eS
GI-070	Snake Island	x	1947	300-500e	558[432]	400e <sup>f</sup>	615[582]	719[631]	673	204[44]	23e
GI-076	Brandon Islands	3S	1999	-	-	-	-	-	-	3S	-
GI-085	Nanaimo Harbour	10e+	2005	-	-	-	-	-	-	-	-
GI-090	Gabriola Island - West Cliffs	2	1968	-	4	5	3	-	-	-	4
GI-095	Harmac - Mill	100e+	2005	-	-	-	-	-	-	-	-
GI-100	Gabriola Island - East Cliffs	1	1977	-	-	1	-	-	-	-	-
GI-110	Carlos Island	1	1978	-	0	-	1	-	-	-	-
GI-112	Breakwater Island	1S+	2012	-	-	-	-	-	-	-	-
GI-130	Round Island	5	1977	-	-	5[2]	3[2]	3[2]	-	-	-
GI-150	Decourcy Island	3	1977	-	-	3	2	-	2	-	0
GI-160	Valdes Island - West Cliffs	1	1977	-	0	1	1	0	-	-	-
GI-170	Ruxton Island	2	1977	-	-	2	2	-	2	-	-
GI-171	Whaleboat Island	1	1986	-	-	0	0	-	1	-	-
GI-180	Tree Island	1	1977	-	-	1	2[2]	-	-	-	-
GI-190	Miami Islet	22	1968	-	52[47]	43[39]	32[25]	26[16]	38	-	5eS
GI-200	Ragged Islets	10-20e	1961	-	103[75]	126[117]	130[111]	89[29]	69	-	28[18]
GI-210	Rose Islets	x	1963	-	208[113]	167[160]	167[135]	211[183]	116	-	21[12]
GI-220	Canoe Islet	x	1963	-	67[60]	57[21]	50[30]	62[23]	56	-	-
GI-230	Galiano Island - North Cliffs	4	1976	-	-	2	1	-	6	-	-
GI-240	"Preedy" Rock	2	1978	-	-	-	2[1]	-	-	-	-
GI-250	Augustus Point	4e	1972	-	10	6	3	6+	8	-	-

Table 6. cont'd

SITE CODE	SITE NAME	Earliest nesting record		Survey Year <sup>a</sup>							
		Count	Year	1959/1960	1974	1977	1978	1981	1986	1999	2009/2010 <sup>b</sup>
GI-260	Wallace Island	3	1974	-	3[3]	12[8]	10[6]	7[1]	3	-	-
GI-270	Tent Island	1	1972	-	3[3]	16	7	15e	12	-	-
GI-280	Bare Point	1	1968	-	11	8	4e	16e	5	-	-
GI-280	Chemainus - Harbour	3	2010	-	-	-	-	-	-	-	3
GI-290	Shoal Islands	1	1974	-	1	-	1	-	-	-	-
GI-290	Crofton - Mill	20e	2016	-	-	-	-	-	-	-	-
GI-300	Cowichan Lake	1	1985	-	-	-	-	-	-	-	-
GI-310	Vesuvius Bay	4	1986	-	-	-	-	-	4	-	-
GI-320	Ballingall Islets	40	1934	57	96[96]	118[116]	106[105]	63[30]	145	-	22[6]
GI-330	Galiano Island - Central Cliffs	3-4eS	1976	-	-	1	1	-	-	-	-
GI-340	"Wise" Rock	1S	1977	-	-	1S	0	-	-	-	-
GI-370	Galiano Island - South Cliffs	1	1977	-	-	1	0	-	-	-	-
GI-380	Lion Islets	2	1977	-	-	2[2]	2[1]	-	1	-	-
GI-390	"Gossip" Rock	1	1986	-	-	0	0	-	1	-	-
GI-410	"Long Harbour" Islet	3	1974	-	3[3]	1	1	-	~1 <sup>g</sup>	-	-
GI-420	Chain Islands	4	1977	-	-	4	16[4]	-	~5 <sup>g</sup>	-	-
GI-424	Hawkins Island	3	1934	-	-	0	0	-	-	-	-
GI-440	Red Islets	1S	1977	-	-	1S	1S	-	-	-	-
GI-450	Prevost Island - South Cliffs	2	1977	-	-	2	3	-	-	-	-
GI-460	Channel Islands	1	1977	-	-	1	1	-	-	-	-
GI-470	Belle Chain Islets	15	1966	-	6[6]	29[23]	50[43]	78[46]	56	-	18
GI-490	Pine Islet	4	1977	-	-	4[1]	1	-	-	-	-
GI-510	East Point - Cliffs	7	1977	-	0	7	6	3	7	-	-
GI-520	Lyll Harbour - Cliffs	1	1986	-	-	0	-	-	1	-	-
GI-540	"Croker" Rock	2	1955	-	-	0	0	-	-	-	-
GI-550	Java Islets	x	1900	372[372]	372[358]	374[348]	499[481]	384[315]	298	-	25[15] <sup>h</sup>
GI-560	Blunden Islet	1-2	c1960	-	-	0	0	-	-	-	-
GI-590	Jackson Rock	1	1978	-	-	0	1	-	-	-	-
GI-595	Fulford Harbour	1	2022	-	-	-	-	-	-	-	-
GI-620	Tortoise Islets	1S	1977	-	-	1S	1S	-	-	-	-
GI-630	Arbutus Island	39	1976	-	-	-	69[55]	89[83]	150	55[7]	68[53]
GI-640	Hatch Point - Wharf	2	1981	-	-	-	-	2[1]	-	-	-
GI-656	Swartz Bay - Ferry Terminal	1	2020	-	-	-	-	-	-	-	-
GI-660	"Swartz Head" Rocks	1	1978	-	-	-	1	-	-	-	-
GI-670	Imrie Island	x	1927	270[245] <sup>i</sup>	298[298]	315[299]	355[287]	279[247]	216	41[2]	-
GI-680	Reay Island	5	1974	-	5[5]	6[6]	1	-	-	0	0
GI-690	Greig Island	20e	1963	-	40[39]	-	44[38]	53[46]	52	14[2]	17[14]

Table 6. cont'd

SITE CODE	SITE NAME	Earliest nesting record		Survey Year <sup>a</sup>							
		Count	Year	1959/1960	1974	1977	1978	1981	1986	1999	2009/2010 <sup>b</sup>
GI-710	Little Group	35	1977	-	-	35	2[1]	-	6	1S	0
GI-720	Rubly Island	x	1977	-	-	x	0	-	-	-	-
GI-740	Sidney	2	1981	-	-	-	-	2	4	-	-
GI-750	Mandarte Island	x	1892	1,800-2,000 <sup>e</sup>	1,047[1,037]	1,666 <sup>j</sup>	544[505] <sup>+k</sup>	1,386[1,112]	2,363	-	2,432[1,920]
GI-770	Sallas Rocks	29	1986	-	-	-	-	-	29	-	9[1]
GI-800	Ten Mile Point	1	1960	1	-	-	-	-	-	-	-
GI-820	Jemmy Jones Island	1S	1978	-	-	-	1S	-	-	-	-
GI-850	Mary Tod Island	1	1986	-	-	-	-	-	1	-	2S
GI-880	Harris Island	41	1971	-	-	28[28]	47[38]	19[6]	22	-	-
GI-890	Chain Islets/Great Chain Island	x	1924	700-1,000 <sup>e</sup>	1,764[1,659]	1,838[1,789]	1,956[1,765]	1,880[1,508]	2,432	-	2,066[1,410]
GI-900	Trial Islands	x	1948	50 <sup>e</sup>	0	-	2S	-	-	-	100 <sup>e</sup>
GI-905	Ogden Point - Port	x	2008	-	-	-	-	-	-	-	-
GI-910	Harrison Island	1	1980	-	-	-	-	-	-	-	-
GI-930	Victoria	1	1958	-	-	-	-	-	110	-	-
GI-940	Brothers Islands	143	1981	-	-	-	-	143[133]	-	-	-
<b>Colonies surveyed in 1974, 1978, 1981, 1986, and 2009/2010 (24 colonies)</b>											
<b>Northern Strait of Georgia</b>											
	Colonies with nests			n/a	11	n/a	11	11	11	n/a	10
	Nests			n/a	3,742	n/a	5,599	4,380	4,161	n/a	3,406
<b>Gulf Islands</b>											
	Colonies with nests			n/a	13	n/a	13	13	13	n/a	13
	Nests			n/a	4,976	n/a	6,128 <sup>l</sup>	5,951	7,284	n/a	4,749
<b>Total BC Salish Sea</b>											
	Colonies with nests			n/a	24	n/a	24	24	24	n/a	23
	Nests			n/a	8,718	n/a	11,727 <sup>l</sup>	10,331	11,445	n/a	8,155
<b>All surveyed colonies<sup>m</sup></b>											
<b>Northern Strait of Georgia</b>											
	Number of colonies known			14	36	39	42	49	63	64	70
	Number of known colonies that were accurately surveyed			1 <sup>n</sup>	29	16	30	38	44	6	18 <sup>e</sup>
	Surveyed colonies that had nests			1 <sup>n</sup>	28	13	26	37	43	5	15 <sup>e</sup>
	Total nests			299 <sup>n,o</sup>	4,302	1,909	6,300	5,313	5,632	564	3,459 <sup>e</sup>
	Nests with known contents			299 <sup>o</sup>	4,285	1,897	6,265	5,279	n/a	527	3,447
	Percent of known nests that were empty			0 <sup>o</sup>	7	20	17	39	n/a	22	47
<b>Gulf Islands</b>											
	Number of colonies known			15	31	52	58	62	71	72	76

Table 6. cont'd

SITE CODE	SITE NAME	Earliest nesting record		Survey Year <sup>a</sup>							
		Count	Year	1959/1960	1974	1977	1978	1981	1986	1999	2009/2010 <sup>b</sup>
	Number of known colonies that were accurately surveyed			3 <sup>n</sup>	25	42 <sup>f</sup>	53 <sup>k</sup>	28	40	9	22
	Surveyed colonies that had nests			3 <sup>n</sup>	23	39 <sup>f</sup>	47 <sup>k</sup>	27	39	8	18
	Total nests			699 <sup>n,o</sup>	5,381	5,608 <sup>f</sup>	5,067 <sup>k</sup>	6,599	7,940	728	4,932
	Nests with known contents			642 <sup>o</sup>	5,185	5,214	5,035	6,555	n/a	667	4,781
	Percent of known nests that were empty			4 <sup>o</sup>	8	5	10	18	n/a	59	26
Total BC Salish Sea											
	Number of colonies known			29	67	91	100	111	134	136	146
	Number of known colonies that were accurately surveyed			4 <sup>n</sup>	54	58 <sup>f</sup>	83 <sup>k</sup>	66	84	15	40 <sup>e</sup>
	Surveyed colonies that had nests			4 <sup>n</sup>	51	52 <sup>f</sup>	73 <sup>k</sup>	64	82	13	33 <sup>e</sup>
	Total nests			998 <sup>n,o</sup>	9,683	7,517 <sup>f</sup>	11,367 <sup>k</sup>	11,912	13,572	1,292	8,391 <sup>e</sup>
	Nests with known contents			941 <sup>o</sup>	9,470	7,111	11,300	11,834	n/a	1,194	8,228
	Percent of known nests that were empty			3 <sup>o</sup>	8	9	14	27	n/a	43	35
Number of historical sites surveyed that were abandoned											
	Northern Strait of Georgia			0	1	3	4	1	1	1	3
	Gulf Islands			0	2	3	6	1	1	1	4
	Total BC Salish Sea			0	3	6	10	2	2	2	7

<sup>a</sup> See colony accounts for data sources.

<sup>b</sup> Most colonies were surveyed in 2010; Belle Chain Islets, Java Islets, Greig Island, Mandarte Island (main island), Sallas Rocks, Mary Tod Island, and Chain Islets were surveyed in 2009.

<sup>c</sup> Estimate of 700-800 pairs listed for Franklin Island included both Franklin and Merry islands.

<sup>d</sup> Contents of 351 nests were determined: 279 contained eggs; 72 were empty.

<sup>e</sup> An estimate of 250 pairs was made for Tsawwassen Breakwater in 2010 but nests were not counted. This estimate was not included in the totals for 2010.

<sup>f</sup> An estimate of 400 pairs was made for Snake Island in 1977 but nests were not counted. This estimate was not included in the totals for 1977.

<sup>g</sup> See colony accounts.

<sup>h</sup> This may be an incomplete count; see colony account.

<sup>i</sup> A total nest count was conducted on Imrie Island in 1960 but Drent suspected that he may have missed 20-30 nests in tall-grass habitat and made a total estimate of 290-300 nesting pairs.

<sup>j</sup> Contents of 1,366 nests were determined: 1,321 contained eggs or young; 45 were empty.

<sup>k</sup> Only a partial count was conducted on Mandarte Island in 1978. The island was not included in the totals for all surveyed colonies in 1978. Substituting the count from 1977 would give totals of 6,732 nests for the Gulf Islands and 13,032 nests for the entire Strait of Georgia in 1978.

<sup>l</sup> As only a partial count of nests was conducted on Mandarte Island in 1978, we substituted the count made in 1977 in the total for 1978 so that 1978 could be included in the inter-annual comparison. This was similar to how counts on Mandarte Island from 2009 and 2010 were included in the comparison.

<sup>m</sup> Includes only colonies where total nest counts were conducted; excludes rough estimates for several colonies in 1959/1960, Snake Island in 1977, and Ray Rock and Tsawwassen Breakwater in 2009/2010 and the incomplete counts conducted on Mandarte Island in 1978 and in Squamish Harbour and White Rock in 2009/2010. Number of sites also differ from those given in previous compilations<sup>30, 377, 420</sup> because we included urban nest sites<sup>218, 220, 431</sup> and some unpublished records<sup>484, 523, 524</sup> and separated some sites that had been lumped together.<sup>453</sup>

<sup>n</sup> Nest counts were conducted in 1959/1960 on only four colonies (Christie Islet, Ballingall Islets, Java Islets, and Imrie Island). Estimates of numbers nesting at other colonies were not included in the totals for 1959/1960.

<sup>o</sup> Only nests with eggs or young were reported on Christie and Java islets; empty nests may not have been recorded and total numbers of nests may have been larger.