



BC COASTAL WATERBIRD SURVEY NEWSLETTER

Bird Studies Canada – BC Programs
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Winter 2004

A Snapshot of the 2003-2004 Season

I hope everyone is enjoying the fall, and the return of our winter birds as the season progresses. The 2003-2004 winter of BC Coastal Waterbird surveys was very successful: surveyors submitted data from **190 active BC Coastal Waterbird Survey (BCCWS) sites** in the province. This winter surveyors saw **116 species**.

The **ten most commonly recorded species** (present at the highest number of sites) were Glaucous-winged Gulls, Bald Eagles, Buffleheads, Mallards, Double-crested Cormorants, Great Blue Herons, Mew Gulls, Common Loons, Canada Geese, and Common Goldeneye. The **most numerous species** (highest average counts) recorded were, in descending order, Dunlin, Snow Geese, Ancient Murrelets (due to one sighting of >1000 flying through the Sunshine Coast), American Widgeon, Western Sandpipers, Surf Scoters, Black-bellied Plovers, Sanderling, Northern Pintails, and Western Grebes.

Species recorded only once during the winter months included a Clark's Grebe off Galiano Island, a Green Heron near Squamish, a Little Gull near Parksville-Qualicum, a Gyrfalcon, Baird's Sandpiper and American Avocet in Boundary Bay, a Red Knot near the Delta Coal Port jetty, and a Sandhill Crane by Port Alberni.

Online Data Entry Now Available

BC Coastal Waterbird Survey data can now be entered online. This great new online system, created by Denis Lepage of Bird Studies Canada, allows you to enter data directly into the database (all data will be reviewed by the program coordinator) and print copies of your surveys. The system will soon be accessible on the BC Coastal Waterbird Survey Website, but at present please contact me (Tasha Smith) for instructions if you wish to enter data online. Toll free 1-877-349-2473, Vancouver 604-940-4696.

5-Year Report on BC Coastal Waterbird Survey Trends

Bird Studies Canada is in the process of producing a report on the preliminary trends and distribution of BC coastal waterbirds, based on the last 5 years of BC Coastal Waterbird Survey data. Data were analyzed by BSC's Shannon Badzinski, who also reviewed the data and protocol of the program in year three. With input from Rob Butler (Canadian Wildlife Service), Dick Cannings will be interpreting the preliminary results, and Tasha Smith will help with editing and graphics. The report will be provided to both Environment Canada and the BC Ministry of Water, Land, and Air Protection in the spring, and will be made available to all volunteers.

Summary of BC Coastal Waterbird Survey data collected during the winter 2003-2004.

** Unidentified birds not included.

The average number of individuals counted per site (**Avg**)* was calculated based on site visits in which the species was present (ie zero counts when species were not present not included in average). Regional averages represent the average of all site means in that region. For each region, the table also presents the number of sites at which each species was counted in at least one survey (**#Sts**). An idea of the distribution of birds between sites can be gained by looking at the percent of total sites in each region (**%Sts**) in which species were counted in at least one survey. For example, on average, few Great Blue Herons were counted at each site, but they appear to be fairly widely distributed among sites, as the percent of total sites with heron counts is quite high in most regions. In contrast, while average counts of snow geese were high, they were only counted at a small percentage of sites in 3 regions. For each region, the total number of sites surveyed (**Total # Sites**) and the total number of species observed over all sites (**# Species**) is presented in each column heading.

	All Survey Sites			Lower Mainland & Squamish			Sunshine Coast			Gulf Islands			East Vancouver Island & Victoria			West Vancouver Island			North & Central Coast		
Total # Sites	190			52			16			42			70			9			1		
# Species	121			97			67			71			103			55			13		
Species	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts
Red-throated Loon	4	37	19	4	13	25	1	2	13				4	21	30	2	1	11			
Pacific Loon	35	91	48	5	15	29	154	7	44	25	16	38	40	50	71	2	3	33			
Common Loon	5	141	74	5	33	63	4	13	81	4	28	67	7	62	89	1	5	56			
Yellow-billed Loon	1	3	2	1	1	2							1	2	3						
Pied-billed Grebe	2	35	18	1	8	15	1	5	31	2	3	7	3	17	24	1	2	22			
Red-necked Grebe	6	101	53	8	21	40	7	10	63	6	11	26	8	54	77	5	5	56			
Horned Grebe	7	119	63	6	26	50	8	10	63	5	24	57	8	53	76	3	5	56	1	1	100
Eared Grebe	2	9	5	1	3	6	2	2	13	5	2	5	1	2	3						
Clark's Grebe	1	1	1							1	1	2									
Western Grebe	69	68	36	60	18	35	7	6	38	13	10	24	135	30	43	3	4	44			
Brandt's Cormorant	9	60	32	3	7	13	23	4	25	13	20	48	6	26	37	5	3	33			
Double-crested Cormorant	11	157	83	9	41	79	16	13	81	6	31	74	12	65	93	15	7	78			
Pelagic Cormorant	7	128	67	5	26	50	5	13	81	6	23	55	10	61	87	7	4	44	13	1	100
American Bittern	1	1	1	1	1	2															
Green Heron	1	1	1	1	1	2															
Great Blue Heron	3	152	80	4	44	85	2	11	69	2	32	76	3	59	84	2	6	67			
Sandhill Crane	5	1	1										5	1	1						
Trumpeter Swan	34	32	17	6	8	15	1	1	6	14	2	5	52	20	29	8	1	11			
Mute Swan	4	12	6	5	2	4	1	1	6				5	9	13						
Greater White-fronted Goose	7	8	4	1	3	6							9	5	7						
Snow Goose	233	10	5	258	6	12	391	2	13				1	2	3						
Brant	54	25	13	92	5	10	21	1	6	68	4	10	54	14	20	1	1	11			
Canada Goose	25	136	72	24	38	73	12	13	81	11	25	60	43	57	81	33	3	33			
Domestic Goose	1	3	2							2	1	2	1	2	3						
Eurasian Wigeon	4	30	16	9	8	15	1	2	13	2	2	5	2	16	23	3	2	22			
American Wigeon	143	130	68	341	38	73	36	9	56	40	20	48	99	58	83	18	5	56			
Eurasian X American Wigeon Hybrid	1	1	1										1	1	1						
Mallard	37	157	83	56	46	88	17	11	69	13	31	74	50	63	90	17	6	67			
American Black Duck	1	1	1				1	1	6												
Gadwall	13	12	6	7	5	10	5	1	6				25	6	9						
Green-winged Teal	41	53	28	80	18	35	4	4	25	16	4	10	41	24	34	14	3	33			
Northern Pintail	71	52	27	145	21	40	14	2	13	7	4	10	36	25	36						
Northern Shoveler	5	17	9	4	9	17				6	1	2	6	6	9	5	1	11			
Blue-winged Teal	3	3	2	3	2	4	4	1	6												
Cinnamon Teal	2	5	3	3	4	8							1	1	1						
Ruddy Duck	20	6	3	40	3	6							1	3	4						
Wood Duck	8	6	3	4	3	6				2	1	2	22	2	3						
Canvasback	5	8	4	8	3	6							3	5	7						
Ring-necked Duck	7	19	10	4	7	13	4	2	13	10	3	7	18	7	10						
Greater Scaup	41	68	36	21	19	37	3	4	25	26	7	17	44	37	53	7	1	11			
Lesser Scaup	33	37	19	56	13	25	1	1	6	20	5	12	46	18	26						
Harlequin Duck	15	98	52	7	14	27	11	11	69	19	25	60	19	45	64	8	2	22	25	1	100
Black Scoter	33	50	26	10	10	19	37	5	31	25	10	24	56	24	34				22	1	100
Surf Scoter	123	127	67	160	24	46	47	14	88	93	22	52	200	60	86	19	7	78			
White-winged Scoter	37	83	44	67	18	35	17	5	31	46	12	29	45	44	63	3	3	33	9	1	100
Long-tailed Duck	45	53	28	15	11	21	3	1	6	7	8	19	56	32	46	7	1	11			
Common Goldeneye	21	133	70	13	34	65	10	12	75	19	24	57	27	58	83	4	5	56			
Barrow's Goldeneye	26	100	53	24	31	60	47	14	88	15	15	36	32	38	54	34	2	22			
Bufflehead	30	170	89	14	43	83	17	15	94	20	38	90	55	68	97	11	6	67			
Hooded Merganser	4	85	45	3	14	27	3	9	56	4	18	43	5	40	57	3	4	44			
Common Merganser	9	133	70	7	31	60	5	13	81	7	30	71	17	53	76	5	6	67			
Red-breasted Merganser	12	123	65	8	23	44	6	11	69	10	25	60	16	59	84	6	5	56			

*Averages calculated differently than in 1999/2000 newsletter

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# Species	64			97			67			71			103			55			13		
Species	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts	Avg	#Sts	%Sts
Turkey Vulture	3	45	24	2	8	15	2	2	13	4	11	26	4	24	34						
Bald Eagle	4	175	92	4	48	92	4	13	81	4	39	93	4	67	96	1	7	78	2	1	100
Northern Harrier	2	14	7	2	11	21				1	3	4									
Sharp-shinned Hawk	1	11	6	1	9	17				1	2	3									
Cooper's Hawk	1	10	5	1	6	12				1	4	6									
Red-tailed Hawk	1	24	13	1	15	29				1	1	2	1	8	11						
Rough-legged Hawk	1	1	1	1	1	2															
Osprey	1	19	10	2	3	6	1	1	6	1	6	14	1	9	13						
American Kestrel	1	1	1										1	1	1						
Merlin	1	14	7	1	5	10	1	2	13	1	1	2	1	6	9						
Peregrine Falcon	1	14	7	1	9	17				1	5	7									
Gyrfalcon	1	1	1	1	1	2															
Virginia Rail	2	3	2	1	1	2							2	2	3						
American Coot	6	23	12	5	8	15	3	2	13	8	1	2	7	11	16	2	1	11			
American Avocet	2	1	1	2	1	2															
Semipalmated Plover	1	3	2	1	2	4				2	1	2									
Black-bellied Plover	92	26	14	486	4	8				4	7	17	32	14	20	1	1	11			
Pacific Golden-Plover	5	2	1										5	2	1						
Killdeer	3	63	33	2	15	29	4	4	25	3	6	14	4	36	51	3	2	22			
Black Oystercatcher	4	66	35	4	5	10	5	9	56	6	15	36	5	35	50	4	1	11	3	1	100
Marbled Godwit	1	2	1	1	1	2							1	1	1						
Whimbrel	1	1	1										1	1	1						
Greater Yellowlegs	6	36	19	12	10	19	1	1	6	3	9	21	6	15	21	4	1	11			
Lesser Yellowlegs	3	6	3	13	1	2				1	1	2	1	4	6						
Spotted Sandpiper	1	15	8	1	6	12				1	1	2	1	8	11						
Wandering Tattler	2	2	1							1	1	2	3	1	1						
Red-necked Phalarope	20	1	1										20	1	1						
Short-billed Dowitcher	4	1	1										4	1	1						
Long-billed Dowitcher	11	8	4	16	3	6							8	5	7						
Wilson's Snipe	6	8	4	19	2	4							1	6	9						
Black Turnstone	31	50	26	25	2	4	58	6	38	53	11	26	24	28	40	31	2	22	125	1	100
Surfbird	19	21	11				43	5	31	22	6	14	11	7	10	55	2	22	2	1	100
Rock Sandpiper	21	3	2				1	1	6				1	1	1				62	1	100
Red Knot	1	1	1	1	1	2															
Dunlin	696	37	19	2001	9	17				217	7	17	244	19	27	31	2	22			
Sanderling	83	15	8	14	3	6				334	3	7	12	8	11	91	1	11			
Semipalmated Sandpiper	1	1	1										1	1	1						
Western Sandpiper	130	13	7	346	4	8							34	9	13						
Least Sandpiper	6	7	4	11	2	4							5	4	6	8	1	11			
Baird's Sandpiper	5	1	1	5	1	2															
Bonaparte's Gull	34	71	37	12	13	25	72	10	63	19	17	40	38	30	43	1	1	11			
Heermann's Gull	3	9	5							2	1	2	4	7	10	2	1	11			
Little Gull	1	1	1										1	1	1						
Mew Gull	53	147	77	31	40	77	45	15	94	58	21	50	82	66	94	12	5	56			
Ring-billed Gull	18	51	27	16	24	46	3	3	19	4	1	2	22	23	33						
California Gull	32	69	36	11	15	29	143	5	31	54	8	19	28	37	53	78	4	44			
Herring Gull	14	46	24	6	4	8	10	4	25	28	14	33	6	20	29	11	3	33	60	1	100
Thayer's Gull	50	62	33	3	10	19	24	2	13	32	11	26	146	38	54	2	1	11			
Western Gull	2	17	9	1	6	12	1	1	6	10	1	2	2	8	11	1	1	11			
Glaucous-winged Gull	56	182	96	44	50	96	70	16	100	18	39	93	90	70	100	12	6	67	10	1	100
Glaucous-winged X Western Gull Hybrid	5	9	5	2	6	12	6	1	6				14	2	3						
Black-legged Kittiwake	5	2	1										1	1	1				8	1	100
Caspian Tern	15	3	2	15	3	6															
Common Tern	8	3	2	11	2	4							2	1	1						
Common Murre	4	40	21	4	2	4	2	4	25	3	8	19	6	21	30	3	5	56			
Pigeon Guillemot	3	59	31	1	7	13	2	4	25	3	11	26	5	36	51	2	1	11			
Marbled Murrelet	5	48	25	1	1	2	6	10	63	4	8	19	8	28	40	7	1	11			
Ancient Murrelet	230	4	2				439	3	19				1	1	1						
Rhinoceros Auklet	13	18	9							8	2	5	13	15	21	9	1	11			
Short-eared Owl	2	3	2	2	3	6															
Belted Kingfisher	1	133	70	1	29	56	1	10	63	1	30	71	2	57	81	1	7	78			
American Dipper	1	7	4	1	3	6	1	3	19				1	1	1						
Common Raven	2	45	24	2	21	40	2	2	13	2	8	19	2	14	20						
Northwestern Crow	13	77	41	9	29	56	11	7	44	11	15	36	22	23	33	6	3	33			

BSC Data Complements the Waterfowl Survey Work of the Canadian Wildlife Service

Andre Breault
Waterbird Biologist, Canadian Wildlife Service

Agencies such as the Canadian Wildlife Service primarily track wintering waterfowl through large-scale surveys. In BC, these surveys are conducted over important wintering waterfowl habitats such as the Fraser River Delta and the East and West coast of Vancouver Island, or they target continentally significant populations like Wrangell Island Snow Goose and Trumpeter Swans. This kind of large-scale survey is quite different than the surveys undertaken regionally or locally by volunteer groups such as BSC or by agencies, where the emphasis is to collect very detailed data at a smaller scale but where it is much more difficult to project survey results at a broad scale.

Large-scale (mostly aerial) surveys are used to determine waterfowl distribution and abundance at the landscape (or provincial, national or international) level. They have the advantages of allowing the coverage of large and often inaccessible areas, providing standardised data at a large geographical scale and of being compatible with other continental surveys tracking large numbers of birds. They are however, costly and they do poorly at segregating between similar species. In practice, most aerial surveys make no effort at separating species of goldeneyes, mergansers, scoters, scaups, wigeons or swans from the air at high speed. The precision of the data collected also varies extensively, species like the Wood Duck and Harlequin Duck being rarely visible during aerial surveys.

From a management perspective, one should not take for granted that all species within a given group do equally well or badly. Similar species often vary in abundance, distribution, habitat use, conservation needs and sometimes even trends. One should consider species composition while tracking waterfowl populations and identify trends for individual species. The BSC data meets both of these objectives.

In practice, here is how both types of data can be integrated. I recently produced a preliminary assessment of the estimated distribution and abundance of coastal waterfowl, using data collected in the course of various aerial surveys of the BC coast. These data by themselves fell short of providing a clear picture of the relative abundance of Barrow's and Common Goldeneyes, Hooded, Red-Breasted and Common Mergansers,

Lesser and Greater Scaups, Eurasian Wigeons, etc. I therefore looked at volunteer data provided by BSC and Christmas Bird Counts to help determine the relative coastal distribution and abundance of each of those closely-resembling species and to get a preliminary estimate of the minimum population size of species poorly visible from the air. This process clearly emphasizes the point that volunteer groups provide important information on birds in BC and that the data you collect is useful and complementary to other surveys and monitoring programs in BC.

BC Coastal Waterbird Survey Data Used for Ducks Unlimited Canada Conservation Plan

Dan Buffet, Ducks Unlimited Canada

Biological data including BSC's BC Coastal Waterbird Survey data is being used by Ducks Unlimited Canada (DU) to develop strategic plans for habitat securement along the East Coast of Vancouver Island.

The East Coast of Vancouver Island (ECVI) is part of the Georgia Basin, which together with the Fraser River Delta, Fraser Valley and North Puget Sound, form one integrated habitat complex. Data from sources such as the BC Coastal Waterbird Survey has shown that in this area the mixture of agricultural and intertidal habitats provides important migrating and wintering habitat for millions of waterfowl from Asia, Alaska, the Interior of British Columbia, the Canadian Arctic, the Western Boreal Forest and the Prairie Pothole regions, that migrate along the Pacific Flyway.

The ECVI shares similar habitat threats with the Fraser River Delta such as urban expansion and changing agricultural practices, but there are additional threats including aquaculture in the intertidal habitats and impacts of forestry in watersheds. As in the Fraser River Delta, habitat threats on the ECVI are concentrated within the limited band of productive habitat along the intertidal zone and adjacent floodplain.

Using varied data on bird distribution and habitat use on the ECVI, including BC Coastal Waterbird Survey data, DU has developed a conservation plan for the ECVI. The 20-year conservation plan targets over 40,000 ha of intertidal, marine and agricultural habitats, using a mix of conservation tools such as working on policy and best management practices (e.g. urban growth, marine protected areas, Agricultural Policy Framework), conservation agreements with private or and government landowners to management habitats, conservation covenants, acquisition, education, and evaluation.

Agencies such as the Canadian Wildlife Service and the B.C. Ministry of Water, Land and Air Protection will also provide input to the plan. The plan will be then be used by all partners of the Pacific Estuary Conservation Program (Canadian Wildlife Service, Department of Fisheries and Oceans, Ministry of Water, Land and Air Protection, Ducks Unlimited Canada, Nature trust of BC, Nature conservancy of BC, Land trust of BC) to guide conservation programs along coastal B.C.

Site in the Spotlight: a look at 3 years in Queen Charlotte Channel, Vancouver

Ken Wright, BCCWS surveyor, West Vancouver

Lofty white clouds cling to the verdant forests of Bowen Island. Brilliant spot-lighting from a setting January sun illuminates the seaside cliffs with a golden hue. The only break in the silence of this perfect, calmest of winter days is the strange whistle of airborne Barrow's Goldeneyes as they pass before me. In the bay to my right, a juvenile and adult male Harlequin Duck repeatedly dive into the translucent emerald waters. Offshore, flocks of greyish Glaucous-winged Gulls float high on the mirror-like water surface and beyond them, several Double-crested Cormorants emerge from their dives.

I began my BC Coastal Waterbird surveys in the program's inaugural year. My survey area includes three abutting sites along the rugged coast south of Horsehoe Bay on Vancouver's northern shoreline - where I was fortunate to grow up and where I developed my fascination for birds and nature.

Preliminary examination of my first 3 survey years reveals thirty-five different waterbird species from Pacific Loons to Belted Kingfishers (listed below). Although the steep rocky habitat of this coastline does not support a high diversity of species, it has yielded impressive numbers of rocky shoreline specialists nonetheless. The most common species is the Barrow's Goldeneye, with an average of 183 birds/survey. Surf Scoters and Glaucous-winged Gulls follow the Barrow's Goldeneye in abundance, with 121 and 112 birds/survey. Also listed are the 10 most common species. On one survey, an unprecedented 48 Black Oystercatchers showed up along with numerous Surfbirds and Black Turnstones, all species indicative of rocky coastal habitats. Other highlights included Common Murre, Brandt's Cormorant, Red-throated Loon and Black Scoter.

Queen Charlotte Channel Waterbirds 2000-02

Red-throated Loon *Gavia stellata*
Pacific Loon *Gavia pacifica*
Common Loon *Gavia immer*
Horned Grebe *Podiceps auritus*
Red-necked Grebe *Podiceps grisegena*
Western Grebe *Aechmophorus occidentalis*
Double-crested Cormorant *Phalacrocorax auritus*
Brandt's Cormorant *Phalacrocorax penicillatus*
Pelagic Cormorant *Phalacrocorax pelagicus*
Great Blue Heron *Ardea herodias*
Mute Swan *Cygnus olor*
Canada Goose *Branta canadensis*
Mallard *Anas platyrhynchos*
American Wigeon *Anas americana*
Harlequin Duck *Histrionicus histrionicus*
Long-tailed Duck *Clangula hyemalis*
Black Scoter *Melanitta nigra*
Surf Scoter *Melanitta perspicillata*
White-winged Scoter *Melanitta fusca*
Common Goldeneye *Bucephala clangula*
Barrow's Goldeneye *Bucephala islandica*
Bufflehead *Bucephala albeola*
Hooded Merganser *Lophodytes maculatus*
Common Merganser *Mergus merganser*
Red-breasted Merganser *Mergus serrator*
Black Oystercatcher *Haematopus bachmani*
Black Turnstone *Arenaria melanocephala*
Surfbird *Aphriza virgata*
Mew Gull *Larus canus*
Thayer's Gull *Larus thayeri*
Glaucous-winged Gull *Larus glaucescens*
Common Murre *Uria aalge*
Pigeon Guillemot *Cephus columba*
Marbled Murrelet *Brachyramphus marmoratus*
Belted Kingfisher *Ceryle alcyon*

Average number and range of ten most common species.

<i>Species</i>	<i>Mean</i>	<i>SD</i>	<i>Min #</i>	<i>Max #</i>
Barrow's Goldeneye	183	169	0	466
Surf Scoter	121	181	5	603
Glaucous-winged Gull	112	69	39	238
Surfbird	54	76	0	255
Double-crested Cormorant	18	8	6	31
Mew Gull	12	8	2	23
Black Oystercatcher	11	13	0	46
Horned Grebe	9	7	0	24
Black Turnstone	6	11	0	37
Canada Goose	5	6	0	18

After five years of counting birds for the BCCWS my enthusiasm keeps increasing each year. Also knowing that these data ultimately contribute to a better understanding of our lovely waterbirds' populations gives more purpose to this monitoring effort.

Following the Wintering Waterbirds North

John Neville, BCCWS surveyor, Saltspring Island

When you are doing your waterbird survey you may wonder where the wintering waterbirds go in the spring. Western Grebes, for example, go east into the BC interior and the prairies. Brandt's Cormorants head south to California. Many of our winter species also head north.

My wife Heather and I traveled north at the beginning of May this year to the Dempster Highway in the Yukon and NWT. As we traveled the Alaska Highway many lakes were still frozen, or partially frozen over. The open water held large rafts of ducks and geese, and flocks of shorebirds. Surf Scoter and Goldeneye numbered in the thousands at Charley Lake, along with Red-necked Grebe, Mew and Bonaparte's Gull. The Red-necked Phalarope, which winter in the south Pacific, were riding high, like little puff balls in the water. At Whitehorse, we just missed the large flocks of Tundra Swans heading up to the Mackenzie Delta. 200,000 Sandhill Cranes also migrated through just a few days before our arrival. Many of these birds fly the Bering Sea to nest in Siberia.

The first part of the Dempster is in boreal forest, but as the elevation increased, our surroundings changed to mountain tundra. Later, the road followed the Blackstone River, with numerous ponds, lakes and open tundra. As water became ice-free, Mallard, Pintail, Bufflehead and Widgeon moved in. More long distance migrants like Lesser Yellowlegs, Least Sandpiper, and Upland Sandpiper could be seen and heard on the tundra. Breaking ice crunched and sometimes boomed on the Blackstone River. Kestrels, and Gyrfalcon, could be seen on the cliffs - quite a thrill! Towards the end of May, when most of the lakes were open, Common and Red-throated Loon added their calls to the soundscape. The loon's night chorus was fabulous! We watched a pair of Red-throated Loons dispute with Mew Gulls for the use of an island. The gulls won.

Before reaching the Arctic Circle, we stopped at a large pond hosting territorial Horned Grebe, Northern Shoveller and Canada Geese, and a nearby cliff held Rough-legged Hawks. Ascending the western slopes of the Richardson Mountains we passed our first three Long-tailed Jaegers half hidden in the tundra grasses. Like the Red-necked Phalarope, these birds winter in the South Pacific.

Before reaching the Peel River, we noted American Widgeon, Long-tailed ducks, Blue-winged Teal and Arctic Loon on the ponds. In the Peel River Valley itself there were large lakes where Trumpeter Swans nested well away from the road. At the beginning of June the ferries start crossing the Peel and the MacKenzie rivers. On the last 100 km of the road to Inuvik, we passed Arctic terns skimming the water and Glaucous Gulls riding pans of ice.

The Dempster is 734 km long, starting near Dawson City. It is possible to drive it in two days, but the longer you stay on the road, the more wildlife experiences you may have. We spent five weeks birding along the road. The best birding is mid May to mid June, but July is the worst month for insects. Heather added seventeen (17) life birds to her list and I recorded enough birds for a CD: "Bird Songs of the Arctic-Along the Dempster Highway".

The Goose in the Eagle's Nest

Doug Carrick, BCCWS surveyor, Hornby Island

This April, I saw a goose in an eagle nest at Bradsdadsland, a campsite on Hornby Island. I thought it was a joke - perhaps a decoy put there for laughs - but Rosemary Nixon and others confirmed that it was true. What's going on anyway? A goose in an eagle's nest? The eagles, by the way, had abandoned the nest three years ago and now live in a new nest across the road. I asked Ben Kramer, the manager of the campsite, if he knew about the geese in the nest. "Oh yes", he said. "They were here last year too." I asked if they had laid any eggs. "Yes. They hatched out a few days ago. The whole family left the nest just yesterday (May 8th)." But the chicks can't fly yet! "No problem. The chicks just tumble out of the nest." He then added that they can fall 50 or 60 feet without injury. In this case, it was high tide, so they fell into the water.

According to statistics on coastal geese: 64% nest on the ground, 13% in osprey or eagle nests, 11% on muskrat or beaver lodges, 9% on artificial nest tubs or platforms and 3% on bridges or pilings. The maximum height for a tree nest was 100 feet.

Another thing about coastal geese: they don't all migrate as other geese do. Many stay around the Georgia Strait all year round. I found this out thanks to a big white farmyard goose. It fell in love with a wild goose and became part of the flock. Where all the other geese look the same, this white goose acts as a marker to this particular flock. I first spotted them in May 2001. At the end of December they were still around. They had not migrated. Since then I've seen the white goose and its flock throughout 2002

and 2003, and most recently in April 2004. Not long ago I was informed that a white goose was seen at Campbell River with a flock of Canada geese – perhaps the extent of their migration.

The Mop Bird: A New Species?

Bob Chappell, BCCWS surveyor, Victoria

On the evening of Feb. 10, 2004, a neighbour phoned, stating that there was a bird stuck in her floor mop, on the outdoor patio. This had occurred over several evenings. On visual inspection the bird was buried deep into the strings, with only its tail protruding.

I returned later with my camera, at which time, it had backed out more, as shown in the photograph. This was the last night that it returned to the mop.



Survey Contest

Last winter we held a contest for volunteers who did the most surveys and followed the survey schedule most closely. I would however like to clarify that there is some flexibility in the survey date. I did emphasize last year that we have specific survey dates planned each month, and that it is best to go out on these dates to try to obtain synchronous surveys across the BC coast. This is still true. However, if you really, *really* cannot survey that day, or if the weather/seas are so terrible that they seriously impede bird identification, please try to survey as close to the planned date as possible. It is also very important to get data each month, even if it is not on the exact survey day, to have good seasonal coverage for all species. Planned dates help prevent surveys done at irregular seasonal intervals (for example, surveys done in the last week of September and the first week of October).

Thanks to the generosity of Wildbirds Unlimited and Mountain Equipment Co-op, 85 volunteers won prizes for their admirable survey efforts. Prizes including naturalist books, pocket drybags, rainproof fieldbooks, ballcaps, mini thermoses, and

songbird CD's were sent out along with this newsletter.

Thanks also to the Canadian Wildlife Service for their continuing support of this program.

Protocol Questions and Answers

Here are a few questions I encountered when talking with volunteers over the past year...

What do I do if there are so many birds I can't count all individuals?

Give your best estimate. Try to avoid vague numbers such as "100s" or "100+". Because data for each species must be entered in the database as exact numbers, a count of "100s" could be entered either as 200 or 800, and "100+" would be entered simply as 100.

Can I include birds in my count that I see outside my survey site?

No, but these sightings can be recorded in the comments section and will be included as comments in the database.

What if I can't make the survey date?

Please try to survey as close as possible to the scheduled date. It is important to try to get good seasonal coverage by getting data for each month, so it is better to survey on a different day than to skip the survey that month.

If there are few birds on the scheduled survey date, should I come back and do the survey when there are more birds around?

No; natural variation of bird numbers over time is normal. Counting only when there are large numbers of birds may bias the survey and result in artificially high counts for that year, compared to other years.

What if there are no birds at all at the site during the survey?

Please still send in a form reporting the absence of birds. This is still valuable information.

Special Thanks to Long-Term Surveyors

A very special thanks to our long term volunteers, who have completed 5 years of surveys since the inception of the program in the winter of 1999/2000. Their admirable commitment to continuous data over five years is highly valuable for the analysis of bird trends and represents a major contribution to conservation.

Port Alberni

Rela Cripps, Sandy McRuer

Pacific Rim

Peter Clarkson, Jeanette Martinolich, Brian Slater

Zeballos

Bill Heidrick

Malcolm Island

Tiiu McCormick

Port Mcneill

Ron Barre, Paul Colton, Yvonne Maximchuk, Bill Proctor

Campbell River

Ed & Thelma Silkens

Black Creek

Betty Brooks

Courtenay-Comox

Edna Bowen, Jim & Betty Goodman, Bill Heybroek, Frank Hovenden, Jean Hudson, Pat Levitt, Jim & Betty Lunam, May Mackenzie, Diana Maloff, Nelson McInnes, Art Morgon, Norma Morton, Barbara Sedgwick

Denman Island

Mikell Callahan, Patrick Fawkes, Mike Morrell

Hornby Island

Donna Baker, Gene Barker, Margaret Beswetherick, Jan Bevan, Bev Bullen, Doug & Sheila Carrick, Carole Chambers, Pam Gordon, Amanda Heath, Bev Lownie, Frances & Torbin Madsen, John Mills, Rosemary Nixon, Tony & Carol Quin, Ilze Raudzins, Donald Ross, Ann Zielinski

Parksville-Qualicum

John Brighton, Vi Chungranes, Allen Kokorudz, John & Lois MacKenzie, G. Allen & Helen Poynter

Nanaimo

Steve Baillie, Don Blood, Neil Bourne, John & Lynda Butterworth, Trudy Chatwin, Bruce Cousens & Charlene Lee, Barbara & Bob Graves, Liz Hammond-Kaarremaa, Monica Mather, Geoff Robins, Neil Robins, Harriet Rueggeberg, Tauno & Cathy Tuominen

Cowichan Valley

Dave Aldcroft, Derrick Marven

Saltspring Island

Heather & John Neville

Galiano Island

Patti Moreland & Terri Kerr

Mayne Island

Anne McNeill, Doreen Tamboline

Pender Island

Bert & Daphne Jervis, Bev O'Sullivan, Mary Roddick

Victoria

Jerry & Gladys Anderson, Lonny & the late Geoff Bate, Robert Chappell, Yorke Edwards, Kerry Finley, Jeremy Gatten, Ruth Keogh, Anne Knowles, Eric Lofroth, Jack

McLeod, Glen & Judy Moores, Al Storey, Arlene Yaworsky

Lower Mainland

John Chandler, Marian Coope, Kyle Elliot, Dale Jenson, Hue & Jo Ann Mackenzie, Gareth Pugh, John Rawsthorne, Brian Scott, Prue & Bernie Spitman, Audrey Viken, Ken Wright

Squamish

Squamish Estuary Conservation Society (thanks to Jim Wisnia and David Lassman)

Sunshine Coast

Russ Tkachuk, Paul Jones, Blake Fougere, Heather Harbord, John Newell, Rand Rudlund

Lasqueti Island

Sheila Ray, Sue Wheeler

Texada Island

John Dove

Also a grateful thanks to new and continuing volunteers in all regions for their efforts and important contributions to this past winter's surveys.

Alan Shatwell, BCCWS surveyor, Bowen Island

David Allinson, Jlonka Bally-Brown, Liz Bamford, George Bangham, Barb Beasley, Kevin Bell, Susan Bell, Maija Bismanis, Janice Brown, Peter Candido, Dannie Carsen, Joan Cartwright, Jim Clelland, Lynda Colbeck, Thomas & Evelyn Constable, John Coulson, Sue Couch, Ed Dahl, Chris Dale, Warren Drinnan, Michael Dunn, Bob Dyer, Michael Edgell, Liz Fitch, Jennifer Fletcher, Jeremy Gatten, Pierre Geoffray, Larry Golden, Billie Gowans, Tony Greenfield, Sandra & Brent Gurd, Vicki Hansen, Pam & David Helem, John Henigman, Fran Johnson, Rob Johnson, Christina Kereki, Bill Kinkaid, Jan Kirkby, Debbie Lacroix, Terry Ludwar, David Lumley, Alan MacLeod, Joe Materi, Margaret McDonnell, Mike McGrenere, Eric Milton, Jessica Murray, Fran Newson, Paul deNiverville, Monica Nugent, Ivar Nygaard-Petersen, Viveka Ohman, Bonnie Parks, Barry Price, Wendy Prothero, Herbie & Bernard Rochet, June Ryder, Bernard Schroeder, Grant Scott, Alan Shatwell, Fred Simpson, David Spalding, Ron Speller, Ken Summers, Derek Sutton, Jack & Bev Temp, Chris Thompson, Marti Tilley, Sally Wait, Ken Walker, Diane Webster, Marja deJong-Westman, Alan Whitehead, Bruce Whittington