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Sora Rail

© Enid Lemon

Trevlac Trifles No. 4

Rallying Rails

By Giff Calvert

Trying to watch rails has to be one of the most frustrating experiences for the amateur birder. For one thing, the two species we have here, the Soras and the Virginias, are relatively tiny. Every time I see one I am amazed how small they really are, the newly hatched young no bigger than your thumb nail, jet black but surprisingly coloured on their faces. And then they move so fast when not completely under cover; and their usual habitat, the thickest kind of aquatic vegetation, does not make for easy or continuous observation.

Contrarily, in late autumn or on a mild early winter's day the Virginias will, due perhaps to a shrinkage of their usual diet, swim around in open water picking off invisible tidbits on the surface, in the same delicate way that moorhens and indeed wood ducks or widgeons do. (By the way, has anyone ever seen a wood duck put its head completely under water whilst feeding?)

The rail's ventriloquial powers, so astonishingly loud, make it difficult to pinpoint where they are, and only on two occasions when walking around the pond have we been able to surprise a pair with young - one year with newly hatched ones on April 10th, remarkably and dangerously early. When surprised they freeze, like baby waders, on command, and will not move even when almost trodden on. A few minutes of immobility and patience will test the parents to the limit. They will dart in and out of the vegetation, shrieking their heads off, and eventually venture to within a

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foot or two of the intruders. Suddenly and for no apparent reason the whole family will start moving about, minding its own business. This is as near as anyone will get to live rails, unless it be in a blind; and a great thrill it is.

In the first two years after we made Trevlac Pond with its deep-dredged channels and artificial islands, there was very little vegetation along the shorelines, and we were therefore able on a fairly regular basis to see the rails feeding along them. During the second spring there were two families of Virginias, one with five and the other with four babies. They seemed to be fairly territorial, and it was only once that we saw both families at the same time; that is how we knew there were two. Early one morning - the young must have been about a week old - we found a dead mature Virginia in the middle of the front lawn. It was lying underneath the hydro and telephone wires going to the house, and our assumption was that it had hit them whilst flying in the dark from the main pond to a smaller one on the other side of the driveway. There were no visible signs of injury, but its neck seemed to be broken. Two days later on the shoreline of the island in front of the house - and to our great pleasure - there were three adult and nine young rails all together peacefully resting and preening themselves in the sunshine.

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From the Editor

Contest

For our next contest we have a really great prize that will provide lots of incentive for members to enter some good articles. Christine and Andrew Rushforth have kindly offered their cabin at Fanny Bay for three days and two nights as a prize for the best submission received by May 22.

As before, submissions can deal with just about any subject related to natural history. Many topics are not directly related but are still suitable, so use your imagination.

The contest is open to all members both young and old. The only restriction is that the prize is open only to non-smokers as there is no fire department in the area of the cabin. So start working now, and you could win this excellent prize and help keep up the quality of our magazine. Good luck!

Send entries to: Mark Nyhof, The Victoria Naturalist, 220 Beechwood Avenue, Victoria, B.C. V8S 3W7

The winner of the book Field Guide to the West Coast Mountains by Stephen Whitney is Harold Hosford for his article entitled "Will the Real John Forster please Stand up?" Congratulations Harold and thanks to all who submitted articles.

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Marine Awareness Month in May

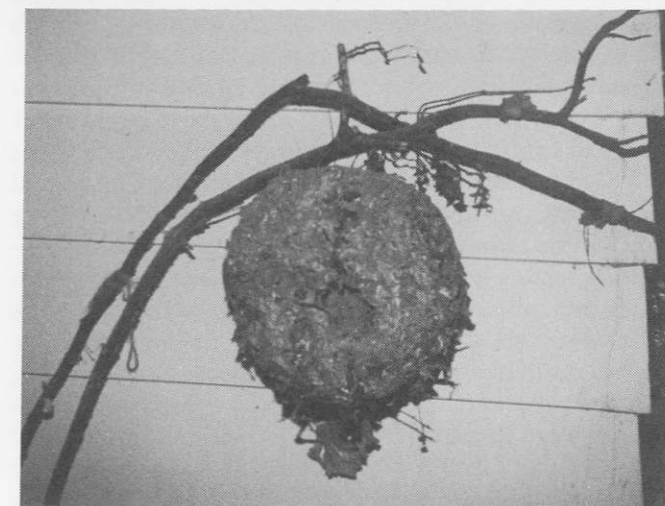
We are notified by Stephen Price, president of ORCA (Ocean Research and Conservation Society), that that organization will be celebrating Marine Awareness Month in May with several programs to focus attention on whales and on the Robson Bight area. During May, ORCA and the Friends of the Provincial Museum will host a series of lectures by Canadian marine biologists on current issues of marine life. May 25 to 31 will be "Wild Whale Week" on Wharf Street, with a variety of displays and activities, a street dance, and a special children's "Wild Whale Day" at the Provincial Museum. A wall of the Chandler Building on Wharf Street is the future site of a whale mural which is to depict the A-5 killer whale pod of Robson Bight and is to be dedicated to the memory of Robin Morton, who worked as a marine biologist and wildlife photographer in the Robson Bight area.

Phone ORCA at 598-2787 if you would like to help with these Marine Awareness Month programs.

Home is Where You Find It

By Marge Crowther

There is so much happiness to be had in return for a few pennies invested in birdseed, a homemade feeder, a bit of string, pieces of suet or just an empty tin. We have had Harris' Sparrows and White-throated Sparrows at the feeder, and watched orioles raising their young in springtime. The little birds that often amuse us are Bewick's Wrens.



Bewick's Wren Night Roost

©Marge Crowther

continued on page 11

Marine Adaptations No.2 Exposed Daily

By Leah R. Ramsay

The border between land and ocean (intertidal) is home to a group of organisms that have to deal with alternating exposure to air and to salt water for varying amounts of time. This plays havoc with the physiology of the organisms that live there. As most intertidal organisms have evolved from marine ancestors, the adaptation made to intertidal life is made in respect to the terrestrial lifestyle (Carefoot 1977). A few of the problems facing animals in this habitat are desiccation, temperature stress, freshwater stress (taste a tidepool after a heavy rain!), pounding waves, reduced feeding times, and changing light regimes, the latter being particularly notable for algae. I will deal with the first problem here.



Goose Barnacles

©Leah Ramsay

The desiccation problem is tackled in various ways. Animals that are able to seal themselves off and retain a small amount of water are able to stave off desiccation for longer periods of time; these include barnacles, mussels and limpets. Their ability to withstand desiccation helps to determine at what level in the intertidal they will live, this being closely tied to their ability to survive thermal shock (heat and cold). The ideal spots lower in the intertidal are hotly vied for. For example, the small barnacle *Chthamalus dalli*, which you find high up, can do very well at lower spots on the shore; however, the larger whiter Acorn Barnacle, *Balanus glandula*, can not survive long periods of exposure and must live lower down. *B. glandula* out-competes the smaller barnacle at the lower levels, forcing it to live in the less desirable upper intertidal. Goose-neck Barnacles, *Pollicipes polymerus*, are found in areas of high wave intensity (eg. Port Renfrew) and rely on water pouring off of rocks to bring them their planktonic feed. They therefore can be found at any level in the intertidal where crevices occur (Kozloff 1973). The hard plates of these barnacles can "seal" shut, as they may occur in areas with exposure to the air (see photo). Snails have an operculum - or protec-

tive lid that is attached to their foot-that is pulled tightly shut during low tide. This "closed tight" habit also protects the animals from fresh water. Soft-bodied organisms like anemones contract themselves to be as small as possible, making a smaller surface area available for evaporation. Highly motile organisms, like the Shore Crab, *Hemigrapsus nudus*, will also react behaviourally, by staying under rocks or algae, in crevices or in tidepools. The cells in certain seaweeds are able to withstand severe desiccation, being able to dry out until crisp (unlike my houseplants). One of the common brown algae found around Victoria, *Fucus* was found to be able to live through losses of up to 91% of its available water (Kanwisher 1957) and the green sea lettuce *Ulva lactuca* losses of 77% and not show any ill effects.

Temperature is closely linked to desiccation. Extremes in either direction can speed this process up. In fact all of the problems listed near the beginning of this article are inter-linked, along with competition between the different species, making the intertidal a fascinating and complex area to study. (All of the examples that I used here were from the rocky intertidal; the sand and mudflats deal with these problems slightly differently.)

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Will the Real John Forster Please Stand Up?

By Harold Hosford Contest Winner

Having made more than my share of typographical errors in my time, I'm not going to join the jackals yapping at the heels of our editor about last month's faux pas on Forster's Tern. No, I'm going to take advantage of his misfortune and reveal a couple of interesting little tid-bits about the Forster of Forster's Tern--Johann Forster, that is.

Most of my references agree that Johann Forster was born Johann Reingold Forster in 1729, in Germany. He studied for the ministry, served as a pastor of a church near Danzig, and worked in Russia and in England where, in 1772, he was chosen to accompany James Cook on his second voyage of exploration in the Pacific.

After his circumnavigation of the globe, he returned to England, served in various capacities, and then was urged by the British government --to leave the country. He did so in 1880, and returned to Germany where he served as a professor of History and Mineralogy at Halle until his death in 1798 at the age of 69.

So far so good. All agree on these basic facts. Where the record begins to come entangled is when we try to discover what kind of a man Forster was. The word "urged" above suggests something. It was used by Ed Greeson in his book *Words For Birds* and referred to some difficulties Forster got into in England regarding writing up his account of his experiences on Cook's voyage. It seems that as part of his contract he had agreed not to publish his account until the official Admiralty account had been published. As usual, the "official" publication was "delayed." Forster fumed at the delay and made such a nuisance of himself that the British got fed up and invited him to depart.

Other than this, Greeson gives a fairly positive account of Forster the man. Not so Alan Villiers in his magnificent *Captain James Cook-- a sailing captain's interpretation of Cook and his accomplishments*. Villiers draws much of his factual material from Dr. J.C. Beaglehole's *Journals of Captain James Cook*, but colours his presentation with his own long experience "before the mast."

Beaglehole first refers to Forster when Forster was chosen to go with Cook and describes him as, among other things, "a litigious and quarrelsome fellow indeed." Villiers goes on to say: "If Admiralty had set out deliberately to inflict upon Cook and everybody else in the *Resolution* the most troublesome, useless, and energetically hostile a shipmate it was possible to find, they could not have made a better choice."

Beaglehole, a "perceptive chronicler and most mild of men," according to Villiers "finds even his quiet pen slipping hot with wrath across the page...at the infliction of so

perverse a wretch on the unfortunate and long-suffering Cook." Beaglehole summed up his portrait of Forster with: "Dogmatic, humourless, suspicious, contentious, censorious, demanding, rheumatic--he was a problem from any angle. From the first to the last...he was an incubus. One hesitates, in fact, to lay out his characteristics, lest the portrait should seem simply caricature."

That was one Forster; there seems to have been another.

In the austral summer of 1773, somewhere south of the Roaring 40's, Cook lay near death from something he describes in his journal as "bilious choleric." His stomach had been in knots for weeks, throwing up whatever he tried to eat. He was so weak he could not stand. His whole digestive system had broken down under the assault of a sea diet composed to a large extent of sea "horse"--supposed to be beef--dosed with nitrate, and greasy, repulsive salt pork. Cook was dying.

Just when the crew had given up hope for their leader, Forster stepped into the breach. Forster had a pet dog, a Tahitan animal, plump and cereal fed. He offered his dog to save the Captain. A soup was made, Cook ate it--and kept it down. He ate a bit of boiled leg--and kept that down. From that moment he began to recover. In Villiers' words: "Word rushed through the ship; smiles broke upon the anxious faces of every man and boy aboard--smiles for Cook, smiles for the irascible old Mr. Forster too."

So, every time you see a Forster's Tern, which won't be often in these parts, give a thought for old John Forster--with one "e", that is.

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Growing Native

By David F. Fraser

Ocean Spray (*Holodiscus discolor*) in the Garden.

One of the mainstays of early summer bloom in our garden on Salt Spring Island are the several large specimens of Ocean Spray we have lining the driveway and backing the Rhododendron beds. Ocean Spray is a very showy native shrub, coming into bloom just as the very last of the Rhododendrons are beginning to fade. This deciduous shrub (also known as Creambush *Rockspiraea*, Meadowsweet, Indian Arrowwood) is closely related to the *Spiraeas* and, in my opinion, just as showy as any of that widely cultivated genus.

It is especially attractive to the gardener who has a site with poor soil just past the reach of the hose, for it is quite tolerant of drought - though admittedly the production of blooms is better on those plants that get a little extra water in dry summers. While its main value is the showy display of cream-coloured flowers, the dried flower heads have been considered as an attraction in themselves (Spurr 1978). If you find them objectionable I've had some success in shooting off the spent flowers with a strong jet of water.

Propagation.

Holodiscus is seldom available in our local nurseries, and it is most easily acquired by lifting small seedlings which often appear in profusion around established plants. The young leaves are similar in colour and shape to the parents and identification is usually not a problem. I have not had great success in germinating seeds, which are usually sown as

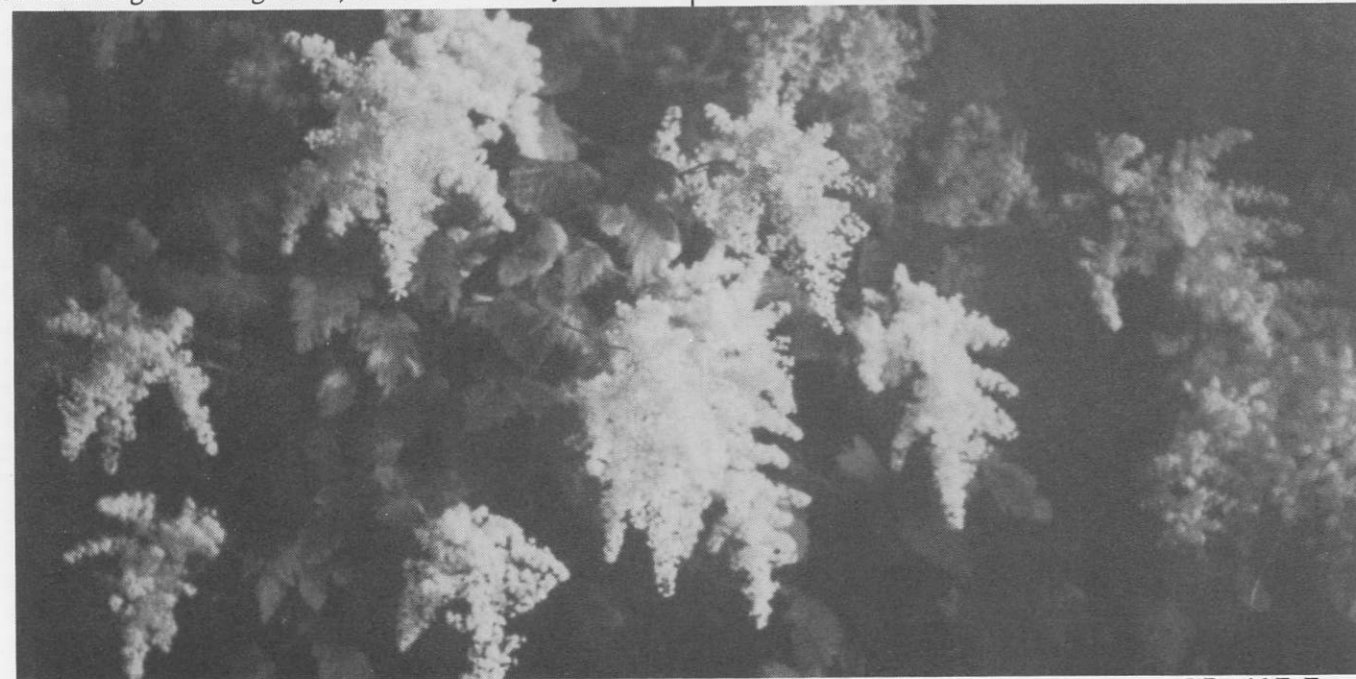
whole achenes (Stickney 1974), probably because the percentage of viable fruits is usually quite low - often lower than 10% (King 1974). A cold moist period prior to germination has been reported for this species (Stickney 1974). Cuttings of firmed-up softwood will root under mist in a coldframe in late July, August or September and I can usually count on about 60% rooting success. Layers are reported to be a reliable method of propagation as well (Everett, 1964). While seedlings are most readily available, especially-choice specimens are probably best propagated asexually. A very small number of the plants in and around Victoria have flowers that age to a pretty, subtle pink shade - these too would probably best be acquired with cuttings or layers.

Since this is one species that usually disappears under the developer's bulldozer, large specimens may be available from time to time, should you be willing to dig them up. I've successfully moved large dormant shrubs after cutting them back severely.

This species of shrub is seldom used in our area, despite the fact that it is showy, easily grown and has been cultivated elsewhere as early as 1827 (Rehder 1940).

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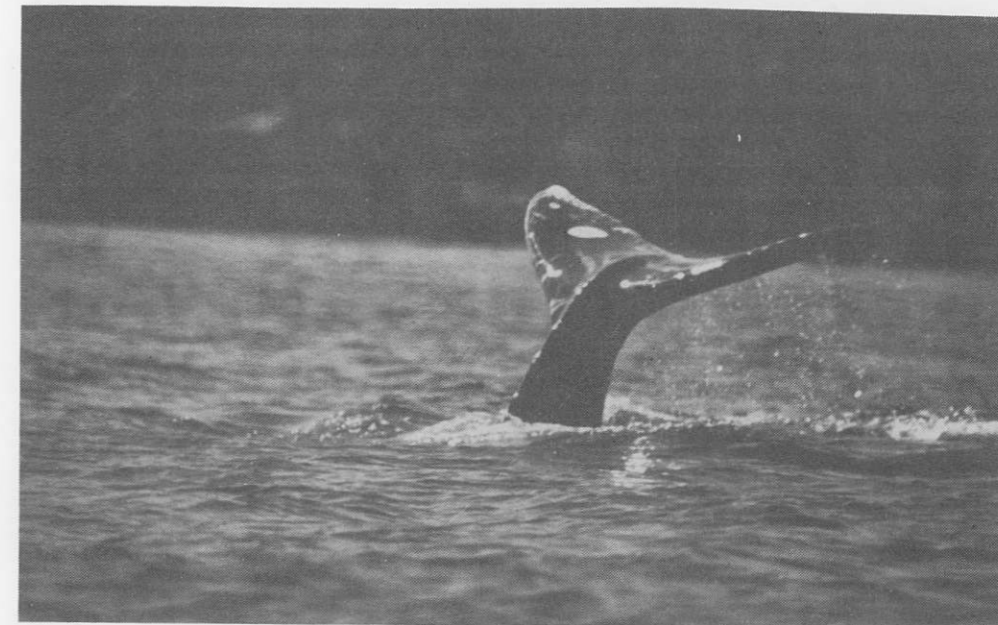
Ocean Spray puts on a spectacular show

©David F. Fraser

In Search of the Gray Whales

By Robin William Baird

Seeing gray whales in B.C., like seeing killer whales, is something that one can do easily, compared to the efforts one must extend in trying to sight some of the more uncommon marine mammals found locally. Right now we are experiencing the northward migration of the gray whales from their calving and breeding areas off Mexico to their feeding areas in the Bering Sea and Arctic Ocean off Alaska and the Soviet Union. Some gray whales also spend time in British Columbia feeding, even staying year round, rather than making such a long and energy-consuming migration.



Gray Whale in Barclay Sound

Robin William Baird Photo ©1985

I recently spent nine days giving a total of 20 slide shows and whale-watching hikes at Pacific Rim National Park, as part of the First Annual Pacific Rim Whale Festival. The Festival was timed to coincide with a peak during the northward migration of gray whales. From the observation deck in the Wickaninnish Centre in the park, we were able to observe up to 50 or more animals moving past in a few hours. Several times small groups of whales would stop and begin feeding; milling around in shallow water, their tail flukes and pectoral flippers occasionally breaking the surface, they stirred up the bottom sediments, attracting hundreds of gulls to feed. Seeing the occasional breach from shore was exciting as well.

One of the reasons gray whales are so easy to observe is their method of shallow-water feeding. They are a bottom feeder, the only whale to do so, and they feed very close to shore. For those who have seen an excellent film made

several years ago by local researchers, showing a gray whale feeding in Grice Bay near Tofino, this is quite obvious. This whale was feeding in water less than 10 feet deep. Sticking its head against the mud, it was sucking up large mouthfuls of mud and the organisms which dwell in it. When the tide went out the mudflats were exposed, leaving the indentations from the whale's feeding obvious to all.

Individual gray whales, like many other species, can be photoidentified. Victoria resident Jim Darling completed his Masters degree on gray whale photoidentification at UVic in the early 70's, using the resident west coast population for his study. Identifications are made using the unique pigmentation patterns, scars and clusters of barnacles on the back of each whale.

If you want to see gray whales easily, just drive to the Ucluelet/Tofino area and take on the charter cruises, or watch from shore. While I was in the area I was able to get out with Shari Bondy of InterIsland Excursions in Tofino. Several days earlier they had had an encounter with a "friendly" gray whale. This perhaps was the first "friendly" encounter of the season in B.C., but hopefully not the last. These "friendly" whales actually approach boats and allow the occupants to touch them and even to pick whale barnacles or whale lice off their backs. Why these whales do this, nobody knows. The whalewatchers in the InterIsland Excursions' Zodiac had even seen a minke whale during one of their recent trips. On my trip we saw several cow/calf

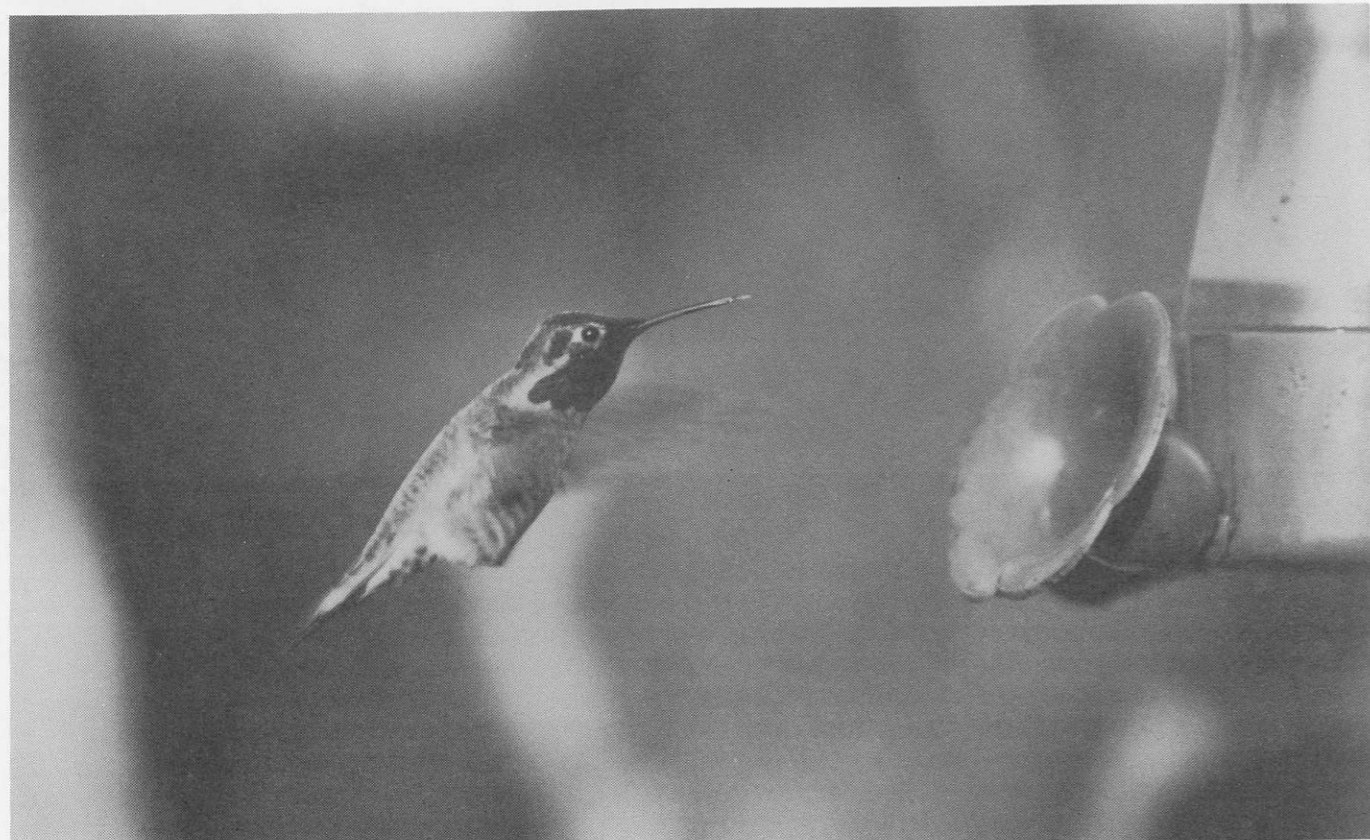
gray whale pairs moving on their trek, slowly northward.

If you want to stay closer to home and see gray whales, watch carefully whenever you are on the waterfront. Gray whales have spent months on end feeding in areas around Victoria in previous years. One spent a summer off Beacon Hill Park, and several were off the coast between Sooke and Jordan River all year last year. Sightings in Oak Bay and Cordova Bay are not uncommon. Assuredly, there are gray whales around this area right now. Some of these whales may have been here for several months or more, and some will be staying throughout the summer and maybe longer. Without binoculars, all you may see is a cloud of vapor as they spout in the distance. They lack a dorsal fin, and usually travel singly or in very small groups, making them harder to distinguish, than, say, killer whales, but the adults may reach a size of fifty feet, something hard to miss.

Hummingbird Friends

By Margaret Mackenzie-Grieve

Of all the birds that visit the garden the Anna's Hummingbirds are my favourites. These tiny creatures can be seen all the year round. Each bird seems to have its own special branch to perch on, usually near a feeder or perhaps a red flowering currant. On a sunny day at the end of February a little female Anna's was sitting in a bush in the front garden. High up in the cloudless sky a male Anna's soared until he was just a speck; then, making his mating display flight, he circled down with a loud pop like the cork coming out of a bottle.



Anna's Hummingbird (male); location 3

©Mark Nyhof

Hummingbirds have a special fascination for everyone. We have visitors from different parts of Canada and many other countries. Birders who came to see rare birds such as the Rustic Bunting at Jordan River or the Kittlitz's Murrelet at Ogden Point paid us a visit, and watched with delight as the male Anna's black head with a flash turned to iridescent magenta. Some birders come complete with camera on tripod and enjoy an afternoon waiting for that moment which in their opinion is just right. Christmas cards arrive hoping the hummers are wintering well.

Mike Shepard brought our most unusual visitors, a group from Japan. Only the Japanese could have had such an im-

pressive array of cameras and binoculars. Although it was raining, the little birds performed well. The leader, it transpired, was the "Roger Tory Peterson" of Japan and had his own T.V. programme.

About ten years ago a Scottish birder from Glasgow was introduced to us by Vic and Peggy Goodwill. Each year he returns to Victoria for a few days' birding. Before we go to some of his favourite spots such as Witty's Lagoon we get our priorities right. What do we discuss? Why, hummingbirds, of course. In May our Scottish friend will return once more. We look forward to his visit and remember with pleasure how these tiny birds have given us the opportunity to meet so many people.

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Anna's Hummingbird (Calypte anna) on Vancouver Island

By K. Taylor and C. Harper

Anna's Hummingbird has increased its population recently, expanding its range northward along the west coast and eastward in North America. It has been seen as far north as Alaska, and as far east in Canada as Calgary, Alberta. This range expansion is due to the replacement of its natural habitat, containing seasonally-limited food sources, with residential gardens, which flower abundantly throughout the year and often contain artificial feeders that can carry birds over the winter season.

The first reported Anna's Hummingbird for Vancouver Island was at Victoria in 1944; it was reported for three consecutive winters until January 13, 1947. Through the 1950's there were reports for eighteen sightings of these hummingbirds. The first *documented* sighting for the island and for Canada was a male at 2349 Sooke Rd. on August 26, 1958. It was first sighted on August 23 (a similar bird was seen the previous year) and photographed on August 27 by G. C. Carl. In that same year there were sight records of males from Elk Lake (September 1) and Lincoln Rd., Victoria (September 4-5). The first Canadian specimen was of an adult female taken at Comox on January 2, 1968 (BCPM #11293).

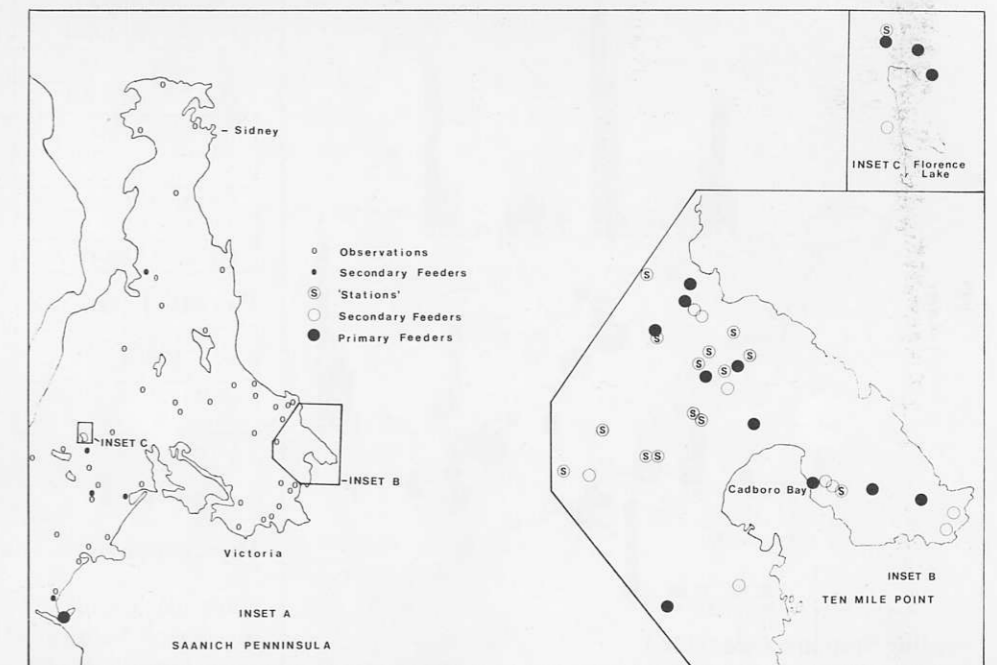
Anna's Hummingbird is now a rare to uncommon resident in the southeast coastal lowlands from Metchosin north to Campbell River. It is most often seen during the winter months, when it is most dependent on artificial feeders, and observations have increased steadily since 1973. On the west coast the species is rare, with sightings at Pachena Point, Bamfield, and the Tofino-Long Beach area. Two observations have come from boats a mile offshore. Extralimital records come from Triangle Island (July 6, 1974) and Sayward (Dec. 29, 1974-April 6, 1975). It is very rare at Sooke, recorded only on the Christmas counts of 1984 and 1985.

On the Saanich Peninsula it is generally uncommon, but it is locally common in the Ten Mile Point-Cadboro Bay-Gordon Head area, and very locally common at Florence Lake. The greatest density occurs in the residential gardens of this first area, which sup-

port many flowering plants, among them Fuchsia and yellow jasmine, and plenty of feeders; the slightly milder microclimate here may also be significant. Although Anna's Hummingbird is a year-round resident, somewhat fewer feeder records (especially of females) are received between mid-April and early August. Three probable reasons for this are (1) the abundant Rufous Hummingbirds are more aggressive at feeders, (2) there is a greater abundance of natural foods available, and (3) there is some dispersal associated with the nesting season (these dates correspond with the nest dates for Washington State: April - July).

Nesting

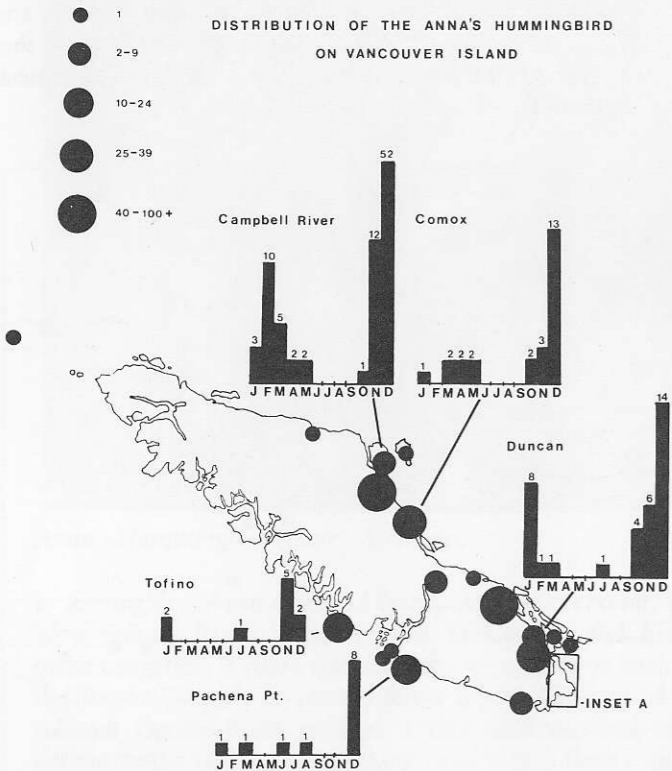
In California, where this species is the common dooryard hummer, there are usually two broods. Nesting may take place in any month of the year, but it usually begins in late January; the second brood will begin two months later. Usual egg dates are February 22 through August 17. The nest may be found in trees, shrubs, forbs or man-made structures at any height from 17 inches to 30 feet above ground level. Nest construction is similar to that of the Rufous Hummingbird, using plant down and spider webs, but it is larger, with stemmy materials used in the walls and fine bird feathers in the lining. The outside is also like the Rufous', camouflaged with lichen, but it may have larger bark chips. One to three eggs, larger than the Rufous', are laid and incubation takes 14-20 days. The young leave the nest after 20-23 days. Only the females are involved in nest construction and care of the young.



The only documented nest found on Vancouver Island -- and in Canada -- was located on July 6, 1958, eight miles from Duncan on the Cowichan River. It contained two eggs. On July 26, a photo was taken of the adult female and young birds. The nest, 3-4 feet up a Red Cedar, was col-

lected and is now housed at U.B.C. At Pachena Bay, another female was observed on a nest about six feet above the ground, near the tip of a Sitka Spruce branch, but no documentary evidence of this sighting was preserved. Females have been frequently sighted carrying nesting material, with dates as early as February 21. Juvenile birds have been reported for Victoria, Vancouver and, recently, Terrace. In the Victoria area, juveniles usually appear in late May or early June through July (there is one report for April 4), when feeder owners report their arrival in the company of adult birds of either sex, landing clumsily on vegetation near the feeders.

NOTE: Since there is only one Canadian nest record, observers should make a special effort to locate more nests. The Ten Mile Point-Cadboro Bay-Gordon Head area is possibly the best area to look, because both sexes are present and in the greatest density. Pay special attention to females carrying nesting materials. If a nest is found, a photograph of the female on the nest, the nest and eggs, or the female and young, should be taken. After it is vacated, the nest should be collected, along with data on plant species and position of the nest site, and sent to the Provincial Museum. Observers should also report all sightings of females carrying nesting materials, and of juveniles, in order to generate a more accurate assessment of nesting dates.



Feeding Stations (See table.)

Territorial Stations

At least fourteen territorial "stations" are known in the Ten Mile Point-Cadboro Bay-Gordon Head area; more certainly exist. Each is used by a particular male, so that a possible count of fourteen males may be made (although three or

four of these may actually be secondary stations). Males use very particular perches at these stations from which to sing, display, and defend their territories. They are not usually in the vicinity of feeders. Primary stations are used throughout the year, and because hummingbirds spend 82% of their time perched and only 18% feeding, the males may reliably be found at their primary stations. One well-known primary station is atop a willow along the Oak Bay Chip Trail in the southeast of the University of Victoria campus; other primary stations are found atop Snowberry bushes between Camelot and Sutton Streets adjacent to University Field, and possibly two at Sinclair and Haro Roads on campus. From the station on the east side of the Mt. Tolmie summit, a male was observed flying toward Cadboro Bay, dropping down into the area a good mile away (possibly visiting a feeder), and returning twenty minutes later.

FEEDING STATIONS

Ten Mile Point-Cadboro Bay-Gordon Head Area:

Location	# yrs present	Avg. #s & Sex	Status (1)
(1) 3950 Tudor	8	2m,1f	2m resident, f winter
(2) 2885 Tudor	7	1m,1f	December-February
(3) 2600 Penrhyn	12	4m, 2f	1m res., 3m & 2f winter
(4) 3085 Uplands	2	1m, 1f, 1m imm.	winter; f occurs May
(5) 3926 Rowley	8	3m, 2f	resident
(6) 2319 Edgelow	2	1m	1m winter, 1f May
(7) 3983 Hollydene	14	2m,2f	absent July-August
(8) 2771 Seaview	5-6	2m, 4f	resident
(9) 2449 Camelot	10-12	2m,2f	absent in summer
(10) 2351 Arbutus	12	1m, 1f	absent May-August
(11) 2361 Arbutus	6+	1m,1f	1m resident, 1f occ.
(12) 2515 Arbutus	12	2m, 2f	unknown
(13) 2340 Arbutus	4	2 unknown sex	unknown
(14) 3919 Woodhaven	9	1m,1f	resident
(15) 2511 Kilgary	12	1m	periodically reported

Florence Lake Area:

(1) 2551 Florence Lk. Rd.	5	2m,2f	1m, 1f res; 1m, 1f absent May-July
(2) 1086 Shaw	6	3m, 2f	absent mid-July to mid-Aug.
(3) Evergreen Terrace	10	2m	unknown
(4) Savory Rd.	5	1m	unknown

Populations on the Saanich Peninsula

Christmas counts of Anna's Hummingbird populations are inaccurate because (1) duplications arise from day-long counts (birds share feeders in close proximity) and (2) not all feeders are known to count participants. A census held between 8:30 and 9:00 a.m. on February 28, 1987, covering the Ten Mile Point-Oak Bay-Cadboro Bay-Gordon Head area produced a minimum of eighteen hummers, six females and twelve males--but with a more probable total

PLEASE HELP US COMPLETE THIS PROJECT!

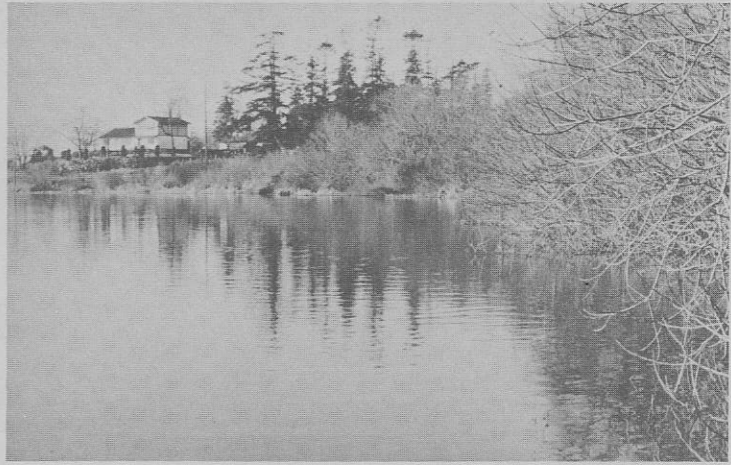
Clip this coupon and send it to:
The Swan Lake Nature House Fund
 3873 Swan Lake Road, Victoria, B.C. V8X 3W1
 Telephone (604) 479-0211

I wish to support the Nature Sanctuary Society with this project as follows:

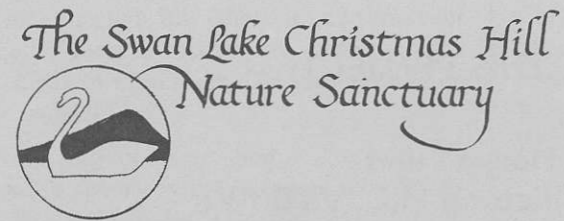
For the Nature House \$ _____
 For the endowment Fund \$ _____
 Total \$ _____

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 Address _____
 Telephone _____

The Swan Lake Christmas Hill Nature Sanctuary Society is a registered charity (# 0452615-59-28). Receipts will be given for any donation of \$ 5.00 or more. Please make cheques payable to the Swan Lake Nature House Fund.



Lake edge and nature house site



NATURE HOUSE FUND DRIVE



The Swan Lake Christmas Hill Nature Sanctuary Society is embarking on a major venture which is vital to the preservation of our natural heritage.

We plan to construct a new Nature Centre Facility, to serve as the focal point for Natural History activities in the Greater Victoria area.

The Present Operation

Since 1975, the Sanctuary Society has provided nature education programs for school children, members of the community, and visitors to the Victoria area. The unique forty hectare site, with its wide range of natural features and habitats and its chip trails and floating boardwalks, attracts visitors throughout the year - including the disabled.

The current Nature House was formerly a family home. The most pressing need is for more space and better facilities for the education programs and related activities currently being offered.

The New Nature House Project

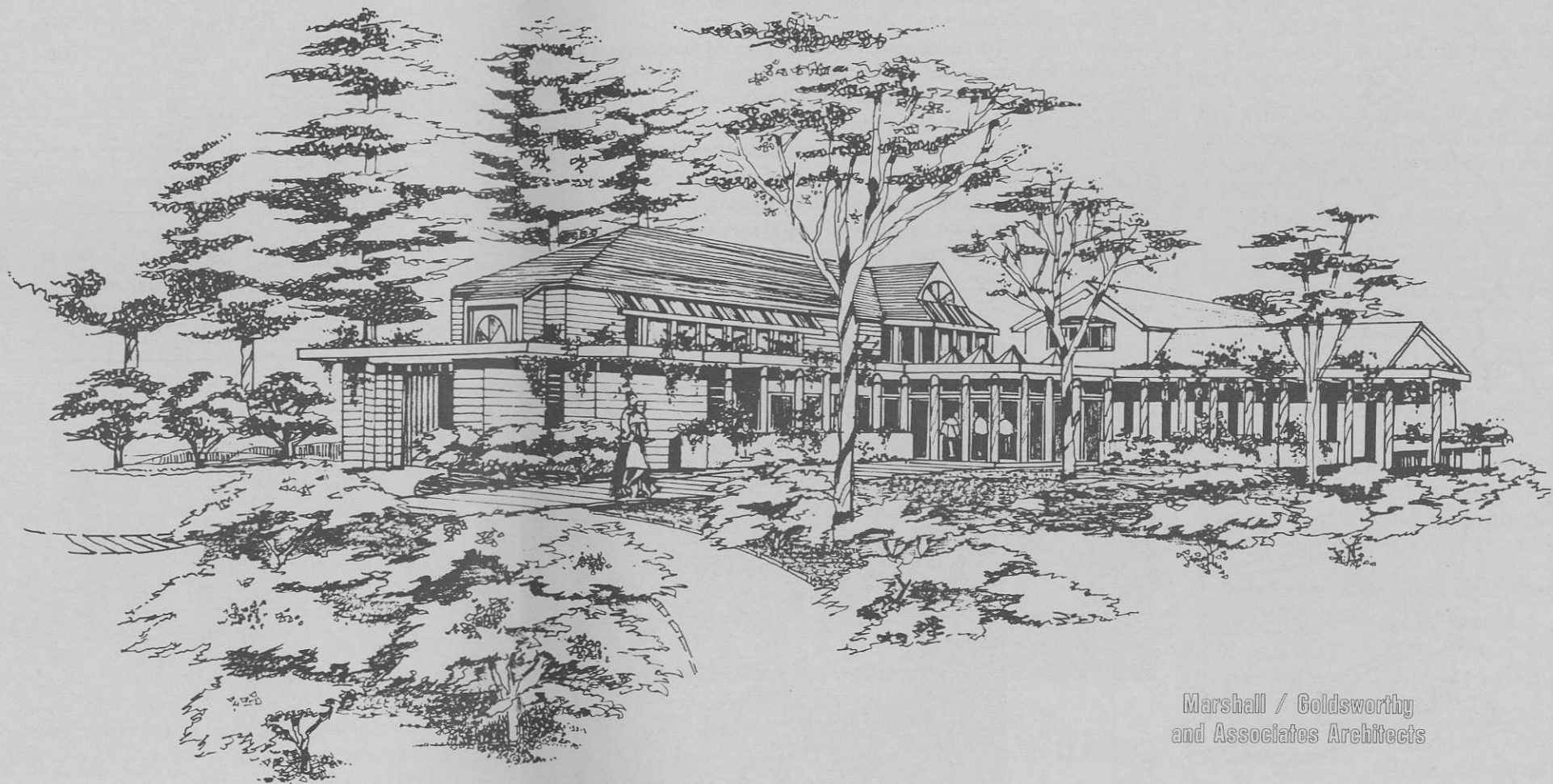
The new Nature House plans provide a total area of 4500 square feet, including the renovated space in the present facility. The plans will include exhibit areas, meeting areas, meeting room, library, workshop, offices and caretaker suite. The project is scheduled to begin in September of 1987 with parking lot construction in the summer, Nature House construction commencing in the fall and renovations to follow. Opening of the new facility is expected early in 1988.

What it will Cost

Construction and landscaping	\$400,000
Initial Endowment Fund for operating costs	\$100,000
	<u>\$500,000</u>

By March 1987 we have in hand or committed:

Municipality of Saanich	\$100,000
Interest on the Saanich grant	40,000
Provincial Lottery Fund grant	121,300
Private Donations	20,000
	<u>\$281,300</u>



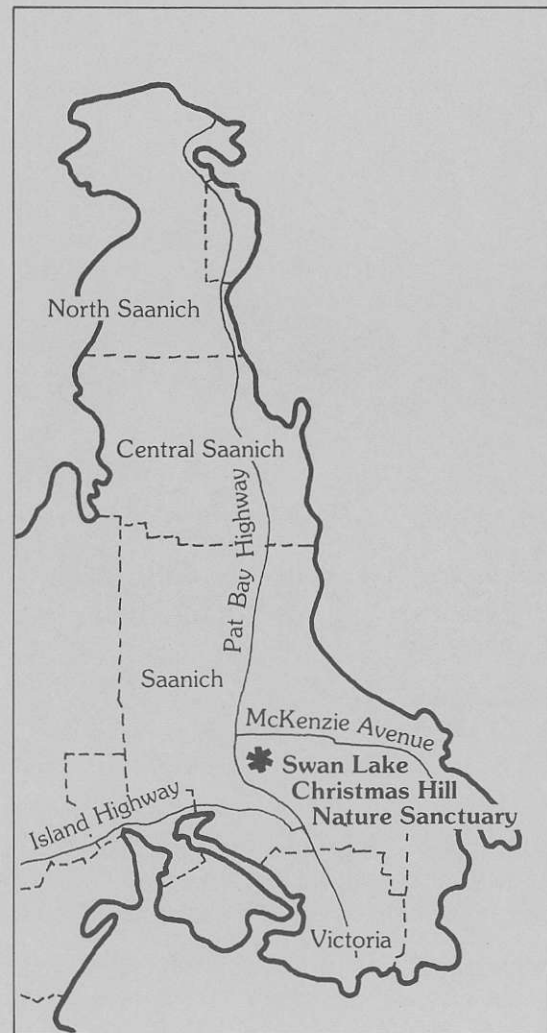
Marshall / Goldsworthy
and Associates Architects

About the Sanctuary

The purpose of the Nature Sanctuary is to foster appreciation of nature and provide experiences that will develop personal responsibility for the care and protection of the environment.

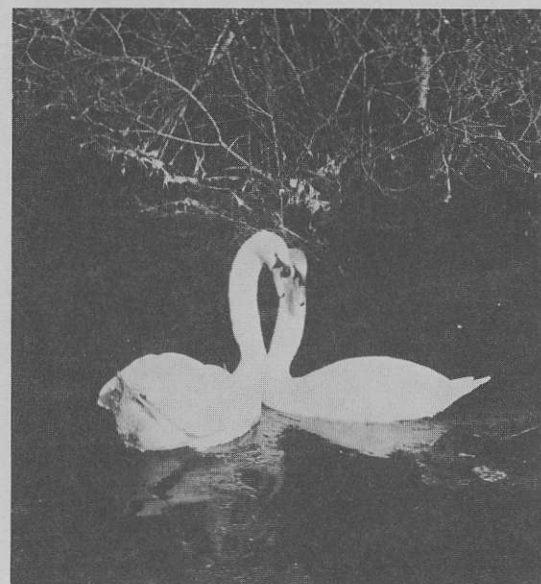
We are a non-profit Society, formed under the Societies Act of B.C., and a registered charitable organization. We operate a 40 hectare Nature Sanctuary located just five kilometers from downtown Victoria.

A two and one half kilometer loop trail, including floating walkways and wharves, provides year-round access to the lake area.



Field and hedgerow studies

The Sanctuary provides a haven for wildlife surrounded by an urban setting. The flood plain around the lake is an ideal habitat for wintering waterfowl, while the lake itself attracts many diving birds, raptors and shore birds. Resident mammals include the river otter, muskrat, mink and racoon. Abundant hedgerows and fields provide feeding and nesting areas for numerous small birds. Native vegetation ranges from marshy lake-edge communities to rocky outcrop Oak and Arbutus communities.



of 20-25 birds. Unfortunately, there were insufficient census-takers to cover all of the territorial stations and secondary feeders simultaneously with the main observation points, which would have produced more individuals and a more accurate census of the area. In order to avoid duplication, the exact duration of each individual bird's visit to each location, its sex, the unique throat patterns of females, and the proximity of neighbouring feeders were all assessed. Three or four males and one female were recorded on stations at the University campus, a high density even though all stations there were not covered. A similar count held at Florence Lake on February 21 produced three males and two females sharing all three feeders there. Adding to these a minimum of four other individuals scattered around the peninsula, a minimum total population of 27 Anna's Hummingbirds is reached, with a possible maximum of 35-40 birds.

NOTE: The observations recorded on the eastern portion of the Vancouver Island map are of numbers of individuals as taken from B.C.P.M. Sight Record Cards, except for Nanaimo, which is represented only by Christmas count results. The card records represent only a fraction of all occurrences, however, and they are heavily weighted toward the winter months, when more birds are seen at feeders and when observer interest is high. For example, the Campbell River checklist lists Anna's Hummingbird as an occasional resident; compare this with the graph generated from sight record card figures. The graphs should, however, give a fair indication of species range and centres of abundance (feeder locations).

We would like to thank: the staff of the B.C. Provincial Museum for use of the Bird Atlas, Anna's Hummingbird summary, and bird bibliographies, and for assisting in the use of the Sight Record card files and the Nest Record Scheme; Vic Goodwill for his immaculate record-keeping; all feeder owners for their patience and assistance; all census-takers; and Lyndis Davis for additional stations.

continued from page 3

One early spring these wrens had a nest in an empty peanut tin which we had nailed to the front of our garage among the ivy. After they had hatched and flown, we discovered a very tame Bewick's Wren on her nest at the back wall of the garage, and there she sat in full view, atop a pile of tire chains looped over an old rusty nail. After this nest was finished, we observed the Bewick's Wren flitting in and out of the garage. To the left of the entrance is a tall pile of honey supers and the little wren would disappear up over the top of the boxes, where she had hidden her nest. Three successful nests?

One spring we had delayed putting down our sundeck rug because a wren had started a nest in the end of it while it was hanging below the deck for winter. There's a wild red currant bush growing under there, and on one end of a branch in a sideways position my husband had stuck a large "defused" hornet nest, thirty-eight inches in circumference, which had been built in the hawthorns that edge one side of our property. At dusk one fall evening I happened to look through the downstairs window above the laundry tubs and noticed the hornet nest wiggle and jump, then into the pointy end of the nest went the wren for the night. A few more shakes and all was calm. This performance was repeated every evening until nesting season, and when that was over and fall arrived, back to the hornet's nest, now a bit tattered, came our wren.

As I write this, it is a rainy January day, but soon will come springtime, and the wrens will create others of their kind, to delight our eyes and ears in days yet to come.

MISSING

The society is trying to track down a microscope and a slide projector which have gone missing. If you have these items or know of their whereabouts, please contact a board member.

THE NATURALIST'S GUIDE TO THE VICTORIA REGION

Edited, with Contributions, by
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Oldsquaw Holiday

By Gordon Hooper

The small cabin of our Piper Chieftain reverberated to the roar of the twin engines as the pilot pushed forward the throttle and we raced down the tarmac. Gaining height, a panoramic view of Whitehorse, nestling on the narrow shelf beside the swift-flowing Yukon River, spread out before us, with the old stern-wheel paddle steamer "S.S. Klondike" showing white against the bank. Then off in the distance to the left we thrilled to the sight of Lac LaBerge, recalling its association with Robert Service and the fabled Sam McGee.

As we settled down for the one-and-a-half hour flight, which would take us 400 miles N.E. to a wilderness landing strip at Macmillan Pass in the Mackenzie Mountains, I reflected back upon how the idea of this unusual holiday had come about. Turning the pages of the Fall issue of *Nature Canada*, we read of Old Squaw Lodge near the Yukon/NWT border. "Gyrfalcons perch on the gatepost," it stated among other attractive details...and that settled it. We booked!

Looking out of the window as we flew onwards over a sea of mountains, we spotted the Pelly River carving its way down a narrow valley. Then, towering above all, came Keele Peak with sheer ice and snow-covered sides rising far above our small aircraft by more than a thousand feet. "We will be making a sharp bank to the left as we make our descent into the narrow head of the pass," the voice of the pilot alerted us. A smooth landing followed, and then we were alighting into the almost primordial silence of a vast and lonely land. There to meet us was our host Sam Miller and his assistant Dave Dickson. Sam is a former wildlife biologist with the N.W.T. government, whose research subjects include the Mackenzie Mountain grizzly population, gyrfalcons, Dall sheep, and muskoxen. Dave was formerly Dean of Medicine at the University of Calgary, and he has a wide knowledge of Yukon/N.W.T. flora and fauna.

Very shortly the other three members of our party arrived in a small Piper aircraft, and all seven of us climbed into a waiting van and started along the narrow dirt road. The Canol Road was constructed during the war, when a pipeline was built to bring oil from Norman Wells down to the Alaska Highway. The first twenty miles was not bad, since it is included in the Yukon section that is still maintained. However, just before entering the completely abandoned N.W.T. portion we had to transfer to a heavy 4-wheel drive open truck, and from then on it was a wild ride. All the bridges over the creeks and rivers have long been washed out, and we consequently had to slowly descend and plough through the water before climbing the opposite bank at an alarming angle. As the truck lurched and jolted in and out of innumerable deep potholes we were bounced and shaken like peas in a pod. But they were a great bunch

with a keen sense of humour, and we alternately uttered choruses of groans and laughter as we went.

Finally the Lodge came into sight, located on high ground with a truly magnificent view over a vast area of alpine tundra plain dotted with lakes and encircled with mountains. With its comfortable observation lounge, complete with two telescopes mounted before the large windows, the Lodge is a superb place for a natural history oriented holiday. While touring the pages of the Guest Register we noted the signatures of Lyn Hancock and of Kaye & Dennis Suttill. Each morning we would assemble on the veranda with a packed lunch, binoculars, camera, and in my case telescope & tripod. Then Dave would lead us on an all-day hike, sometimes using the truck at the outset.

The first day we wandered along very slowly, starting up the hill immediately behind the Lodge. Every few steps we paused with delight as Dave pointed with his walking stick at one species of wild flower after another, giving each their common and Latin names. While others kept kneeling to focus and click their cameras, looking for all the world like so many Moslems at prayer, my eyes were on higher things, such as the Golden Eagle soaring against a background of snowclad peaks. Now and then an Arctic ground-squirrel would stretch to full height and eye us with interest. We all thrilled to the sight of Long-tailed Jaegers sweeping past with their repeated cries of 'kree kree', while Savannah Sparrows, Pipits, Horned Larks and Cliff Swallows added to our lists. On the ground we concentrated on trying to make our heavy hiking boots avoid Alaska Violets, Narcissus-flowered Anemones, Moss Champion, Alp Lily (*Lloydia serotina*), Mountain Avens, Shooting Star, Rose Root, Spring Beauty (*Claytonia tuberosa* Pall) and Shrubby Cinquefoil with its intensely yellow flowers, to name but a few.

Soon after, we observed three Woodland caribou lying on a patch of snow above us. Two of our younger members circled up above them, and eventually the caribou arose and moved downwards to join two others. They started to move off with that typical rhythmic trotting pace that seems so effortless and graceful. Then, not far from us, they paused to gaze in our direction, and we delighted in the picture they made, with the magnificent bull especially, holding his regal set of antlers in proud display. Later we paused for lunch and Dave showed us where a grizzly had torn up the ground while digging out an Arctic ground squirrel burrow. Near us was growing a fully mature Net-veined willow, which at only one inch in height was already seeding. Leading us to a sheltered depression Dave next showed us the only conifer he had found in the area, a spruce that stood exactly eight inches high although fully grown. Before we reached the Lodge again a Long-tailed Jaeger kept circling and stooping over and around us. Then we had the thrill of finding its single large egg, in plain view, with two cleanly demarcated shades of green with dark brown spots.

The third day saw us making a long climb up a narrow ravine, down which raced a mountain stream, to the summit

of Poppy Ridge. Three Golden eagles were observed (one carrying twigs), and both Willow and Rock ptarmigan. While we were enjoying lunch and gazing out over the tundra and lakes far below, Dave drew our attention to the top of a boulder which is used by Gyrfalcons and Golden eagles as an observation post. Small bones littered its surface. An interesting sight on the return trip was seeing a Long-tailed Jaeger harassing a lone caribou; a final determined stoop resulted in the animal rearing up on its hind legs and trotting off.



View From Oldsquaw Lodge

©Gordon Hooper

"Permafrost!" declared Dave the following morning as he thrust his trusty walking stick down into the tundra. At a depth of eight inches it produced a dull thud. Our hike was to be four miles to Old Squaw Lake and our introduction to a new ecosystem. It was, we found out, to be a traumatic revelation of what was involved in walking steadily over this different terrain! From one tall tussock to another one strode, and when no convenient tussock was available for the next step, one dropped two feet or so into a hollow, then up again. A far cry from our walking of the previous days. It was interesting to see the many hillocks which had been heaved up by the frost, and everywhere flowers were in profusion. Birds in evidence featured a Grey-crowned Rosy Finch in full breeding plumage, Lapland Longspur, Golden Plover, and both Rock and Willow Ptarmigan. On the lake were Oldsquaw Duck, Northern Phalarope and Dowitcher, and both Pectoral and Stilt Sandpiper moved on the shoreline. Later a Smith's Longspur and a Wandering Tattler were added, while a Say's Phoebe gave me a 'lifer'. We were rather a weary bunch who returned to the Lodge at 5:30 p.m., rejoicing in the knowledge that it was Bath Night. As all water has to be trucked to the building, this event occurs only twice a week.

Of the remaining days, one in particular remains in my memory, when we slowly ascended to the top of Little Brother mountain. On the approach we walked round the edge of a small swamp, above which a great swirling cloud of mosquitoes danced. From them emitted a high-pitched shrilling whine that filled the air with a crescendo at once fascinating and alarming. We were relieved that they showed no interest in us. Later, I followed Dave along the base of a cliff-face near the summit, and he showed me the den of a wolverine. Peering inside, we noted strewn bones

that included the jawbone of a Hoary marmot and the hoof of a caribou. The nights never got completely dark, and about 10:30 that evening there was a knock on our door and a voice shouted, "Wolves spotted from the balcony!" Doors were flung open, and people wearing dressing-gowns and in various forms of undress ran from their cabins clutching binoculars, and raced up the stairs to the observation room. "Just disappeared below the knoll," the original observer informed his panting audience, and continued with "Two adults, crossed the road just a short way down." Ah well! At least someone saw them.

All too soon the week came to a close, but as it turned out we were to be given one final bonus. With our baggage already loaded on the truck, a grizzly was spotted from the lounge. Binoculars showed him clearly in the distance, and the two scopes in the window swung in unison, showing a large adult really making the sods and dirt fly as he energetically and powerfully dug out a burrow. On the way out we saw a moose, giving us one more species, and as a grand finale Sam had us stop for lunch where a rock-slide housed an active colony of pikas. It was delightful to sit and watch them scampering into their dens with mouths full of grass and flowers.

VANCOUVER ISLAND Winter Bird Report - 1 December 1986 - 28 February 1987

By David F. Fraser

This is a brief summary of the 86/87 Winter Bird Report for Vancouver Island. The report has been compiled by several people: A. Loons thru Ducks - Jerry and Gladys Anderson, Mike Edgell; B. Vultures thru Cranes - Bruce Whittington; C. Plovers thru Puffins - David F. Fraser, Leah R. Ramsay & Tracee O. Geernaert; D. Doves thru Thrushes - Lyndis Davis and Anne Knowles. The original report is filed at the Provincial Museum, the V.N.H.S. library, and a copy is sent to the regional editor of *American Birds*. The data for the report is extracted from sighting cards submitted from Vancouver Island birders. The report is only as complete as the information received, and birders are urged to submit sightings cards. SIGHTINGS FOR MARCH, APRIL AND MAY must be received by 31 May to be included in the next report. Anyone wishing more information regarding sighting cards may phone Dave Fraser at 652-5934. Completed cards can either be brought to or dropped off at Swiftsure Tours Office, 119 - 645 Fort St., Victoria, or dropped off/mailed to myself at 7355 Tomlinson, Saanichton, B.C. V0S 1M0. All cards are forwarded to the B.C. Provincial Museum and used in their records.

LOONS thru DUCKS:

A Yellow-billed Loon was reported several times from Deep Cove, North Saanich from 14 Dec (Keith Taylor) through to the first quarter of February. Eared Grebes were unreported this winter except during Christmas Counts - any reports of Eared Grebes would be appreciated.

The Ibis that was reported last fall at Port Hardy stayed at the trailer court throughout the winter (fide H. & R. Williams) providing the first over-wintering record for British Columbia. It was identified as a WHITE-FACED IBIS from photos sent from the BCPM to U.S. experts. Ibises in North America have been doing peculiar things lately (see Lehman 1986 'The Changing Seasons'-Am. Birds 40(5):1174-1179; this individual adds a new wrinkle.

There were several reports of White-fronted Geese overwintering this year, and a Snow Goose was seen on 15 Dec. at Somenos Flats, near Duncan (Ron Satterfield). A Blue-phase Snow Goose wintered at Jim's Pond near Cowichan, but an obviously useless wing makes one wonder if this bird got there under its own steam. Brant wintered in larger than average numbers with reports in every month of this reporting period. Our resident American Black Duck was seen on its usual haunts of Goodacre Lake in Beacon Hill and the Harrison Yacht Pond. Gadwall wintered in increasing numbers this year, with reports coming in from the traditional Quick's Bottom along with Somenos Lake, Beaver Lake, Martindale Flats, and Buttertubs Marsh near Nanaimo.

VULTURES thru RAILS:

Two adult Turkey Vultures were seen on the very early date of 18 Feb. over Saanich Inlet (Barbara Begg), and an Osprey was seen by J. & G. Anderson over Patricia Bay on 29 Jan., adding to our list of earlier-than-usual spring migrants for 1987. Northern Harriers (all females or immatures) were found in the fields between Wallace Dr. and Keating X Rd. (m.ob.), Cowichan Estuary on 23 Jan. (BRG) and on fields along Central Saanich Rd. on 21 Feb. (J. & RS). A report of an adult Golden Eagle over Ross Bay on 5 Jan. by RS was the only one received. Scattered reports of American Kestrels came from the Saanich Peninsula, Sooke and even the corner of Douglas and Bay St. (BW)! Birders gave no reports of Gyrfalcons this winter; however, falconers reported at least one sighting of a bird in the Saanich area 'this winter' (via Ben Wallace).

Grouse were very poorly reported. Interestingly, Salt Spring Island's CBC recorded 485 California Quail compared to Victoria's 139 - and in the pouring rain too! No Mountain Quail were reported from any of their suspected haunts. Late Feb. reports of Virginia Rails from Quick's Bottom (RS) and Nanaimo's Buttertubs Marsh (G. Gillespie), along with our CBC count of 9, indicates that small numbers probably overwintered.

SHOREBIRDS thru ALCIDS:

Spotted Sandpipers were recorded on the Victoria CBC (one) and the Sooke CBC (two) but no other reports were received. Three reports of Whimbrels were received during this reporting period, one on 17 Dec. at Esquimalt Lagoon, Colwood (J & RS) and one on 21 Jan. and 17 Feb. at Ten Mile Pt., Saanich (RS). Rockpipers: the Turnstones, Surfbird and Rock Sandpipers seemed low this year (RS); most worrisome is the low numbers of Rock Sandpipers, with only three reports this winter - 3 on Race Rocks, 7 Feb. (Robin Baird), 4 on 15 Feb. at Cattle Pt., Oak Bay (B.R. Gates), and 2 on 17 Feb. at Cattle Pt., Oak Bay (RS). Very early or overwintering (?) were 6 Western Sandpipers seen with a Dunlin on Coburg Peninsula, Colwood, 27 Feb. (Brent Diakow). A Long-billed Dowitcher was reported on 31 Jan., Tofino, flushed from the ditch alongside the road (G.E. Gillespie). A Bonaparte's Gull made it on the Victoria CBC and one was seen on 1 Feb., Tofino (GEG). Bruce Whittington and Ken Morgan reported a Herring Gull X Glaucous Gull from the Hartland Ave. Landfill, Highlands, on 18 Feb. Glaucous Gull reports included a first winter bird on 11 Jan., Goldstream River Estuary, and one on 7 Fe. at the Hartland Landfill (KT), and a second winter bird on Martindale flats on 29 Jan. (DFF, E.C. Lofroth).

GREAT BLACK-BACKED GULL:

One bird on 18 Feb. matching the description of this species was seen at Hartland Landfill, Highland District. Bird was seen by BW (field notes included) and Ken Morgan; Morgan is familiar with this species. BW recognized a study skin from the teaching collection at the University of Victoria of this species as being similar in mantle colour and mantle-to-primary colour contrast to the bird seen. This would be the first record of this species from British Columbia. Subsequent efforts to relocate this bird have been unsuccessful. Keep your eyes open!

B.R. Gates noted that 400 Ancient Murrelets were off Ten Mile Pt. on 6 Dec., moving in small groups into and

about Baynes Channel. Perhaps a daily movement, as BRG reported that a similar passage of birds had been seen previously.

DOVES thru WOODPECKERS:

A late report of an immature BLACK-BILLED CUCKOO seen 30 August 1986 on Frank Island off Chesterman's Beach near Tofino by George Smith, Glen Gould and Merrily Corder. Field notes are brief, but detailed enough to indicate that an immature BLACK-BILLED CUCKOO was involved. This is the first record for Vancouver Island.

Band-tailed Pigeons were well reported from the Salt Spring Island CBC, with 27 individuals. High counts of 22 Mourning Doves on Central Saanich Rd. in late Jan. were received (B. Begg, M. Peas and M. Cudney). There were no reports of Barn Owls outside of the Victoria CBC count of one bird. Victoria had two Short-eared Owls on the CBC, and reports of single birds on the Saanich Peninsula were scattered throughout Jan. and Feb. Reports of single Northern Saw-whet Owls on 15 Feb. at Munns Rd. (BW & ALM), 18 Feb. at Hartland Ave. Landfill (BW) and one heard nightly 21-25 Feb. near Saanichton (E. Lofroth, DFF, L.R. Ramsay) were received.

PASSERINES:

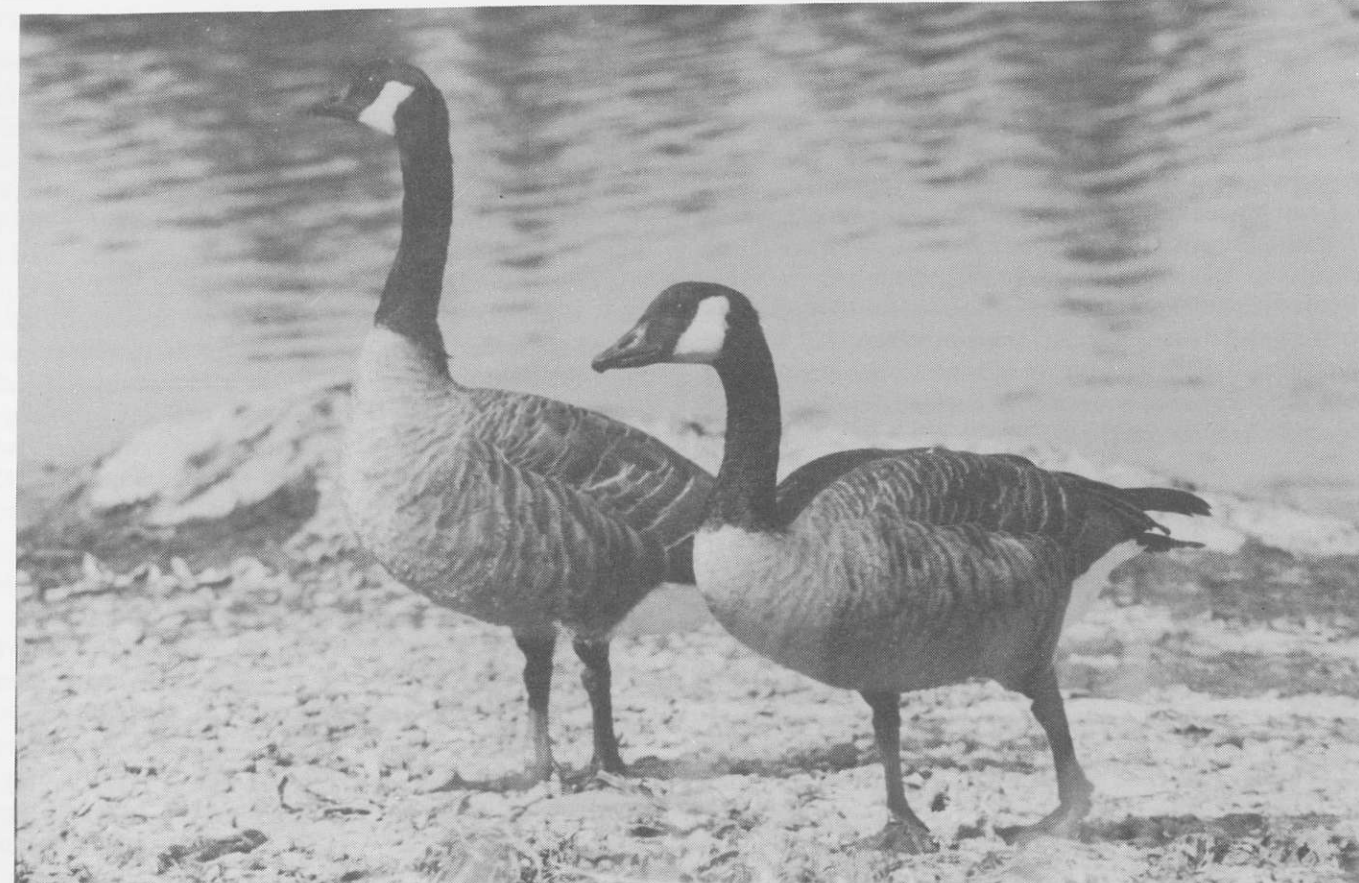
One or two Horned Larks were reported from Central Saanich Rd. between 26 Jan. and 13 Feb. A very early Tachycineta swallow sp. was seen on 29 Jan. in Central Saanich but could not be identified (DFF, LRR). Otherwise, the first Tree Swallow report came with 38 on 17 Feb. at Blenkinsop Lake (ALM), and the first Violet-green with 2 there on 17 Feb. (J & RS). For the second year in a row, a

White-breasted Nuthatch wintered in our area, this time at 3450 Carter Dr., Saanich (B. Pellow, m. obs.). A single report of one at 545 Transit Rd., Oak Bay, by G. Cook is suspected to be for the same bird. First reports of Western Bluebirds came from Pears Rd. on 10 Feb. (H. Colburn). A Twosend's Solitaire was seen on Mt. Tolmie by R. Mackenzie-Greive on 18 Dec.

WINTERING WARBLERS:

This year's mild winter has allowed several species of warblers to linger into the winter season. Orange-crowned Warblers may have overwintered successfully, with 1 on the Victoria CBC and 2 on the Sooke CBC, and a 12 Feb. sighting at UVIC (J & RS). Many reports were received of the hardy Yellow-rumped Warbler which overwintered at Piedmont Dr., Saanich, and both the Victoria and Sooke CBCs had 3 each of this species. A Common Yellowthroat was found on the UVIC campus on 28 Dec. and 1 & 2 Jan. (KT, J & RS).

This winter was also good for our regular-but-uncommon sparrows. Lincoln's Sparrows were reported in good numbers. And at least two and probably three Swamp Sparrows wintered with an Adult at McAnnaly Rd., near Ten Mile Point from 18 Dec. (BRG) joined by an immature on 1 Jan. Willow Way Trail had a Swamp Sparrow from 25 Jan. to 1 Feb. (BRG & C. Harper, m. obs.). White-throated Sparrows were reported from Oak Bay (BRG & J. Gates), Cadboro Bay (A. Knowles) and Saanich (J & RS). Harris' Sparrows were found at Willow Way Trail, Saanich, throughout the latter part of Dec. and Jan.



Canada Geese

©Beth McLean



Saw-whet Owl. Always a difficult big day bird to get.

©Mark Nyhof

A Winter Big Day in Victoria

By Alan MacLeod

One of the first items I turn to in the Wednesday Globe and Mail is Peter Whelan's column, "Birds". It is always interesting reading, but his December 3 effort was not just interesting, but inspiring too. In that column, Peter wrote about efforts by Toronto-area birders to see 100 species of birds in their area over the three-month period starting December 1. That gave me an idea which got just the shot in the arm it needed when Ron Satterfield phoned at about the same time to suggest we do a winter "big day".

The idea of a big day is enough to increase my adrenaline flow at any time, but, coming as it did just as I had read Whelan's column, Ron's suggestion was especially tantalizing. It prompted a question: would it be possible to accomplish in one day at Victoria what it would take our poor refrigerated friends in greater Toronto three whole months to achieve?

Past Christmas Bird Count results certainly make it plain that more than 100 species are present in Victoria at this time of year. Our CBC's are always above 120 at Victoria, and occasionally in ideal years they have approached the stratospheric 140 mark. But of course these are numbers achieved by as many as 120 observers in 40 parties, each combing a relatively small area over an eight-hour period.

What could one party accomplish in a race through the entire greater-Victoria area on one of the shortest days of the year? Some years ago I recall a local birding wizard claiming that one party would be hard-pressed to get even 90 species in a single-day winter outing at Victoria. At that time Dave Stirling joined Harold Hosford and I on my first-ever big day. We proved the wizard right: we got only 83. But that was long ago and I learned that day that while a pint of good scotch may be excellent tonic for cold weather, it is hazardous for a party's bird-finding dedication.

So I asked myself again, what could a single-minded party obtain on a winter day in greater-Victoria? On Saturday, December 6, Ron Satterfield and I resolved to find out.

A standard feature of any big day of mine is a pre-determined list of the species it is reasonable to look for at that time of year. Given the tribulations of a big day, it is never possible to get every one of the birds on such a list but it does help to focus one's mind on what is possible. My May "should-get" list for Victoria includes 155 species and the May big day record here is 135. When I compiled my December "should-get" list I found it contained exactly 120 entries. Given our May experience, that seemed

to suggest we had a shot at 100.

December 6 was a very good day for a big count: relatively mild, almost windless, mostly cloudy in the morning, with increasing sunny breaks in the later afternoon. However, Robbie Burns' lines about best-laid plans are never so germane as they are on a big day. Some of the birds we "should" have got, and didn't, were Pileated Woodpecker, Bushtit, Red-breasted Nuthatch, Brown Creeper, Water Pipit, Cedar Waxwing, Pine Siskin, and American Goldfinch. Perhaps there is justice in the cosmos, however, because we also picked up several surprises, unexpected birds that turned up at the right time and place. These included two Black Brant --very unusual for December--as well as a surprisingly high total of 22 Mourning Doves, a Northern Pygmy-Owl calling at Goldstream Park, a Red-breasted Sapsucker, 15 Yellow-rumped Warblers, and a pair of Brown-headed Cowbirds.

And what about the "bottom line"? Did we accomplish in one day what the long-suffering Torontonians must endure three cold months to get? Well, by the time Ron and I walked off the Ogden Point breakwater, having tucked Rhinoceros Auklet away on our list, the answer was a clear-cut yes. Our total was 106 species. That's not the sort of number to intimidate a southern-Ontario birder in May. But now that May is gone we can perhaps be forgiven a tiny measure of smug self-satisfaction at knowing there's no place like Victoria in winter.

Swimmer's Itch

It's a Pain, But a Fascinating Parasite Story

By Robert A. Cannings

Don't do it, I told myself, you may be sorry! But those dragonfly larval skins clinging to the rushes out in the pond were rare in my collection, and I couldn't help myself. I had to collect them. Of course, I had neglected to bring my waders, so in I went, bare legs and all, up to my knees.

The next day, as I had feared, I had swimmer's itch--and for me it's not just an itch, it's not funny. I guess I never learn, because I have contracted this curse six or seven times in my escapades around fresh water. The first time was when I was ten or twelve; I developed a lovely rash after swimming in Okanagan Lake. Each subsequent episode was worse. This a time I had a nasty case on my legs, complete with centimeter-wide blisters capping terribly itchy red lumps. They reminded me of infected black fly bites - huge ones. After a couple of weeks and a litre of calomine lotion they disappeared. That was in early June; in October, I still could see brown patches on my skin that mark the sites of infection.

That happened in a little pond near Nanaimo, but you can contract swimmer's itch in many bodies of water, large and small, all over southern British Columbia, at least as far north as Prince George. The main necessary ingredient is snails; nothing will happen without snails. The second necessity is the periodic presence of some sort of vertebrate, usually ducks. The culprit itself, one of various parasitic flatworms of the family Schistosomatidae, commonly called blood flukes, has a complicated life story (Hoeffler 1977).

The vertebrate, the primary host, passes the parasite's eggs in its feces into the water. Each egg contains a fully developed secondary stage called a miracidium. The eggs hatch and the miracidia swim about seeking snail hosts. If they fail to find an appropriate snail (families Lymnaeidae or Physidae), they die within twelve hours.

Miracidia burrow to the digestive gland where after a month or so hundreds of cercaria larvae are produced. Cercariae are about 0.75 mm long and sport a forked tail. When these active swimmers are shed into the water by the snail, usually in spring and summer, that's the time to stay out of the water. The trouble is, that's when we want to wade and swim.

Off the cercariae go, swimming in search of a bird or mammal. If they are successful, they attach to the host's skin with oral suckers, penetrate the epidermis and lose their tails. Now we call them schistosomulae. Their odyssey is almost over. They migrate through the blood vessels to the

lungs, then into the hepatic veins of the liver where they mature into worm-like adult male and female flukes. After mating, the females travel to the intestinal wall where their eggs are laid, pass into the gut, and are expelled. The body tissues of both snail and vertebrate are damaged by these different stages. In the vertebrate, the function of the liver and intestine may be severely hampered.

Some aspects of the story are not well known. Most species of flukes have rather definite snail and vertebrate hosts, but many of these still are not documented. A few species are reported from British Columbia, but much work remains to be done. In the early 1950's when a severe outbreak of swimmer's itch threatened tourism at Cultus Lake, a study found at least five species of flukes (Adams 1955). Cercaria physellae attacked the snails *Physa occidentalis* and *P. conformis*; evidently its primary hosts are various ducks. *Cercaria stagnicola* was found in *Lymnaea emarginata*, a snail that inhabits clean sandy beaches free of vegetation. Since this is a snail likely to be found at popular swimming beaches, perhaps my first Okanagan encounter with swimmer's itch was courtesy of *C. stagnicola*. Small songbirds such as finches are probably the primary host of this species.

Also found at Cultus Lake was a still-unnamed form whose primary host is a mammal such as a mouse, mole, mink or muskrat. Two new species of schistosome cercariae were discovered in the 1950s study (Edwards and Jansch 1955)-*Trichobilharzia adamsi* and *Cercaria columbiensis*. Both develop in the snail *Physa cf conformis*; *A.T. adamsi* probably uses ducks as its primary host while *C. columbiensis* is likely found in finches or other small birds.

So what is swimmers'itch? Humans are accidental hosts for these particular blood flukes. The cercariae penetrate the skin but die just beneath the epidermis, leaving a protein residue. Subsequent exposure initiates an allergic reaction to these foreign substances, a reaction that increases in severity with each succeeding experience. Dermatitis results, and all degrees of reaction from mild and local to severe and systemic have been reported. Some lucky people may not be reactive and can wade and swim in infected waters with impunity. Remedies applied after the fact are largely ineffective - rough towelling, alcohol rub-downs, and chemical repellants are evidently of limited value (Hoeffler 1977).

Although blood flukes whose natural hosts are birds and small mammals cause uncomfortable allergic reactions, they do not develop successfully in humans. Luckily for us, these are the only species occurring in temperate regions such as Canada. In parts of the tropics (eastern Asia, Africa, the Middle East, the West Indies, and northern South America), humans are the primary host of several species of flukes closely related to the ones that cause swimmer's itch. These tropical flukes cause schistosomiasis, severe and chronic disorders of various organ systems (Encyclopaedia Britannica 1979). Damage to the liver and urinary tract is especially common. The recent proliferation of

irrigation projects throughout these areas of the tropics has spread snails and their fluke parasites. About two hundred million people suffer from schistosomiasis throughout the world - next to malaria it is mankind's most serious parasitic infection.

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- Robert A. Cannings is Chief of Biology at the B.C. Provincial Museum

Birding Trip Reports

Birding Field Trip to Esquimalt Lagoon, February 8

by Jeff Gaskin

Leader: Jeff Gaskin. Weather: overcast but very mild. Participants: 18. Some of the highlights were: 330 Western Grebes on Royal Roads; 4 Canvasbacks, a male Eurasian Wigeon and one other wigeon showing hybrid characteristics, and 60 Scaups on Esquimalt Lagoon; and 22 American

Goldfinches and 2 White-crowned Sparrows on Lagoon Rd. at Ocean Blvd.

Birding at Blenkinsop Lake

by Jeff Gaskin

Saturday February 28 was a bone-chilling day to be looking at birds, but nevertheless approximately 20 members of the Natural History Society appeared and so did the birds. A Ring-necked Pheasant seen in the distance, a California Quail heard and a Robin perched on a fir tree were the first birds we listed. After that the birds made their presence known almost immediately as there were, along Lochside trail, something like 32 Bushtits, about 5 Bewick's Wrens, and 8 Song Sparrows, both Golden-crowned and Ruby-crowned Kinglets (the Ruby-crowns were heard singing their fast little tune), 2 Downy Woodpeckers, and 8 Killdeer seen flying over. Al and Barbara Irwin noted an accipiter hawk which was seen later on, and we all agreed that it was a Cooper's Hawk.

At the end of the trail looking over the lake, Ring-necked Ducks were everywhere. I think I counted at least 40, and there may have been more. A male Common Merganser, which sped along like a motor boat, a male Gadwall, a female Hooded Merganser, 3 Canada Geese, 2 Mute Swans, Mallards, Green-winged Teal and some Coots rounded out our list of waterfowl seen that day.

As we walked back from the lake 3 Brown Creepers which had been missed were seen at the start of the trail in company with some Golden-crowned Kinglets. Afterwards a small group of us, a total of 7, continued on to Mt. Douglas where we had our lunch. There two Varied Thrush, a dozen Chickadees, the odd Winter Wren and three more Brown Creepers were seen. Thanks to Art Durkee, a pleasant morning's outing was enjoyed by all and 45 species were either seen or heard.

Birding Trip to Keating X Road and Wallace Drive, March 15

By Lyndis Davis

Twenty-one members joined Bruce Whittington to bird the hedgerows and wet fields in the area between Keating X Rd. and Wallace Dr. The birding was rather disappointing, with 26 species seen. The highlights were 3 species of hawk - a Northern Harrier, Red-tailed Hawk and Cooper's Hawk. We also found a Lincoln's Sparrow, 5 Meadowlarks and about 5 Eurasian Skylarks, two of which were singing - lifers for some in the group. Many thanks, Bruce.

Upcoming Programs

Please meet at the location indicated for each trip. No cars can be left at Mayfair Lanes. For field trips BRING A LUNCH and be equipped for changes in the weather. Always phone the rare bird alert: 382-5562 the week before a trip you plan to take, in order to obtain full particulars or details about changes (sometimes unavoidable) that have been made. On V.N.H.S. trips participants usually pool vehicles to reduce parking problems and costs. A considerable fuel bill can be run up on a trip, consuming 5 to 10 cents a km. The Board suggests that these costs be shared with the driver. Contact Lyndis Davis at 477-9952 if you want to borrow the Society scope for a scheduled trip.

May and June Programs

Saturday, 2 May: Botany trip to Mount Tzouhalem, near Cowichan, with Adolf and Oluna Ceska. Meet at Helmcken Park and Ride at 9:00 A.M.

Sunday, 3 May: Cowichan Estuary Birding with Bryan Gates. Meet at Helmcken Park and Ride at 8:00 A.M. or at Robert Service Memorial at 9:00 A.M.

Sunday, 10 May: Birding at Quick's Bottom with Harry Davidson (479-1286). Meet at Mayfair Lanes at 8:30 or at Quick's Bottom at 8:50 A.M.

Tuesday, 13 May: A short History of People and Whales on the B.C. Coast - an illustrated talk by Dave Duffus. Bring a friend and help the V.N.H.S. participate in Marine Awareness Month. General Meeting will follow. Newcombe Auditorium, B.C. Provincial Museum at 8:00 P.M.

Saturday, 23 May: Botany trip to South Wellington and Nanoose Hill, just south of Nanaimo, with Adolf and Oluna Ceska. Meet at Helmcken Park and Ride at 8:00 A.M. sharp.

Sunday, 24 May: Birding at Mt. Newton, south slope, with Barbara Begg (656-5296). Meet at Mayfair Lanes at 8:00 A.M. or the leader at 8:30 A.M. at the Saanich Fairgrounds.

Wednesday, 27 May: Birder's Night Picnic at 7355 Tomlinson at 6:00 P.M. Turn off Stellys X Road just east of the school. Bring your binoculars or spotting scope, something to B-B-Q, plate, cutlery, and a drink. Phone Lyndis (477-9952) if you have not put your name on the sign-up sheet for what else to bring.

Saturday, 30 May: Birding at Tugwell Lake with Keith Taylor (595-5561). Meet at Helmcken Park & Ride at 7:00 A.M. or at the Pay-and-Save-Gas Station, Sooke at 8:00 A.M. If it's wet at 7:00 A.M. the trip is cancelled.

Sunday, 14 June: Birding at Spectacle Lake with Hank Van Der Pol (658-1924). Meet at Helmcken Park & Ride at 7:30 A.M. or at Spectacle Lake Parking Lot at 8:00 A.M.

Saturday, 27 June: Birding at Francis Park with Allan McLeod. Meet at Helmcken Park & Ride at 7:00 A.M. or at Francis Park Nature House at 7:15 A.M.

Some upcoming July Programs....

Anyone with ideas for field trips or other programs for the summer months? Suggestions for leaders and ideas welcome - phone Dave Fraser at 653-5934.

Sunday, 12 July: Natural History trip to Hurricane Ridge. Enjoy a day high up in the wildflower meadows of Hurricane Ridge. With a preciously short growing season, many species are in flower simultaneously. We'll look for marsh marigolds, monkey flowers, avalanche lilies and some endemics known as magenta paintbrush, Flell's violet and Piper bellflower. Wildlife in the area includes mountain goats, Olympic marmots, black-tailed deer, gray jays and horned larks. The view down to the Strait of Juan de Fuca and across to Vancouver Island alone is worth the trip! Bring your camera as the opportunities for photography are endless. Come explore Washington's Olympic Mountains. Cost \$48 per person for non-members, \$43 for members. Includes ferry fare and land transportation. Leader: Marilyn Lambert. Phone 388-4227 for reservations.

Welcome to New Members

- Jan. 28, Karen Uldall-Ekman, recently moved to Victoria; has no car, would like to join a car pool for bird-watching field trips. Phone her at 388-6891.
- Jan. 29, Barbara Witt, looking forward to receiving The Victoria Naturalist.
- Jan. 29, Joyce Burns, of Esquimalt; interest in hiking, birds, bicycling, canoeing, and walking.
- Jan. 29, Gladys Craig, of McKenzie Ave.
- Feb. 4, Phyllis Bailey, of Austin Ave., near Colquitz and Portage Inlet; looking forward to the field trips.
- Feb. 4, Mr. A.G.Henderson, of Foster St. in Esquimalt.
- Feb. 9, Tracey D. Hooper, of Burbank Cres., near Royal Oak Shopping Centre. Tracey's article (in the March-April issue of The Naturalist) won the Lodge Accommodation Contest.
- Feb. 9, Miss M. Marion Williams, of McClure St., just east of downtown.
- Feb. 10, Miss Frances Druce and Miss Elizabeth Trimmer, of Newport Ave., Oak Bay; interested in bird-watching and flowers.
- Feb. 17, Mr. and Mrs. B. & J. Emms, of West Saanich Rd.; interested in birds and marine life.
- Feb. 23, Dick and Sallie Phillips, of Sunnygrove Terr.; particularly interested in botany.
- Feb. 24, Judy Root, of Shadywood Dr., Royal Oak; likes marine biology, botany, ornithology.
- Feb. 26, Becky Ames, of Moss St. near Fort.
- Mar. 3, Earle and Donna Mahaffy, of Hillside Ave.; interested in birding and field trips.
- Mar. 3, Maureen Milburn, of Fulford Harbour, Saltspring Island.
- Mar. 5, Ann Scarfe and family, of Gordon Head. Welcome back! Interested in wildflowers, spinning and weaving, and gardening. Ann was formerly a research biologist.
- Mar. 10, Brian and Patricia Wood, of Sluggett Rd., Brentwood Bay.
- Mar. 10, Patricia Spence, of Rambler Rd.; particularly interested in outings.
- Mar. 19, Richard and Sally Wait, of West Saanich Rd., Saanichton.
- Mar. 19, John Cleophas, of Clement Rd.; a beginner in bird-watching and wildflowers.

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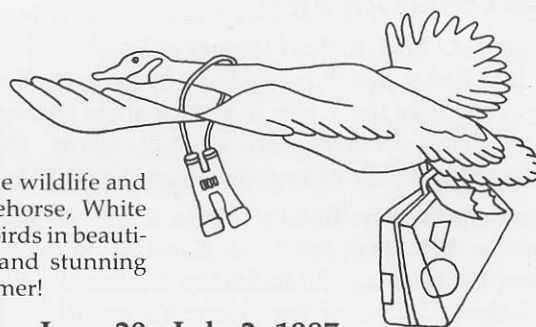
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SUMMER NATURE TOURS

YUKON-HAINES TRIANGLE June 13 - 20, 1987

June is the time to visit the Yukon. Winter snows have disappeared from the lowlands, the infamous mosquitos and biting flies have not yet emerged, the sun provides nearly 24 hours of daylight, and the wildlife and flora are at their best in these precious summer days. Visiting Whitehorse, White Pass, Kluane National Park, Atlin and the Haines Triangle, you'll see birds in beautiful breeding plumage, colorful expanses of mountain wildflowers and stunning glacial and alpine scenery. Enjoy a special visit to the Yukon this summer!



DEMPSTER HIGHWAY WILDLIFE

June 20 - July 2, 1987

Experience one of Canada's last frontiers as we tour the north country to view flora & fauna along the Dempster Highway. From Whitehorse we travel the boreal interior of the Yukon, climb the Ogilvie and Richardson Mountains, cross the Arctic Circle, then follow the highway to its northern terminus at Inuvik. From here we fly to Tuktoyaktuk on the shores of the Beaufort Sea. Learn firsthand about the area's history and native culture, and observe the wonderful array of birds, mammals, and arctic flowers inhabiting the north. This is truly a fabulous adventure!

SOUTH OKANAGAN ECOLOGY

July 4 - 9, 1987

Explore the lovely South Okanagan Valley and surrounding hills and learn about the natural history of this unique area. Based in Okanagan Falls, B.C., participate in lectures, workshops and field trips to study the forests, deserts and wetlands. Nesting songbirds, summer wildflowers, reptiles, amphibians and ecology will all be subjects for observation and discussion.

LIFE AT THE TOP

July 9 -12, 1987

Discover life in the alpine areas of the Cascade Mountains in B.C.'s Manning Park. Featured will be the biology of alpine plants and animals; what and who they are and how they have adapted to live in this difficult environment. Enjoy the beauty of the area while naturalists share their knowledge with you in an informal but memorable fashion. Join us for a fascinating look at life at the top!

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