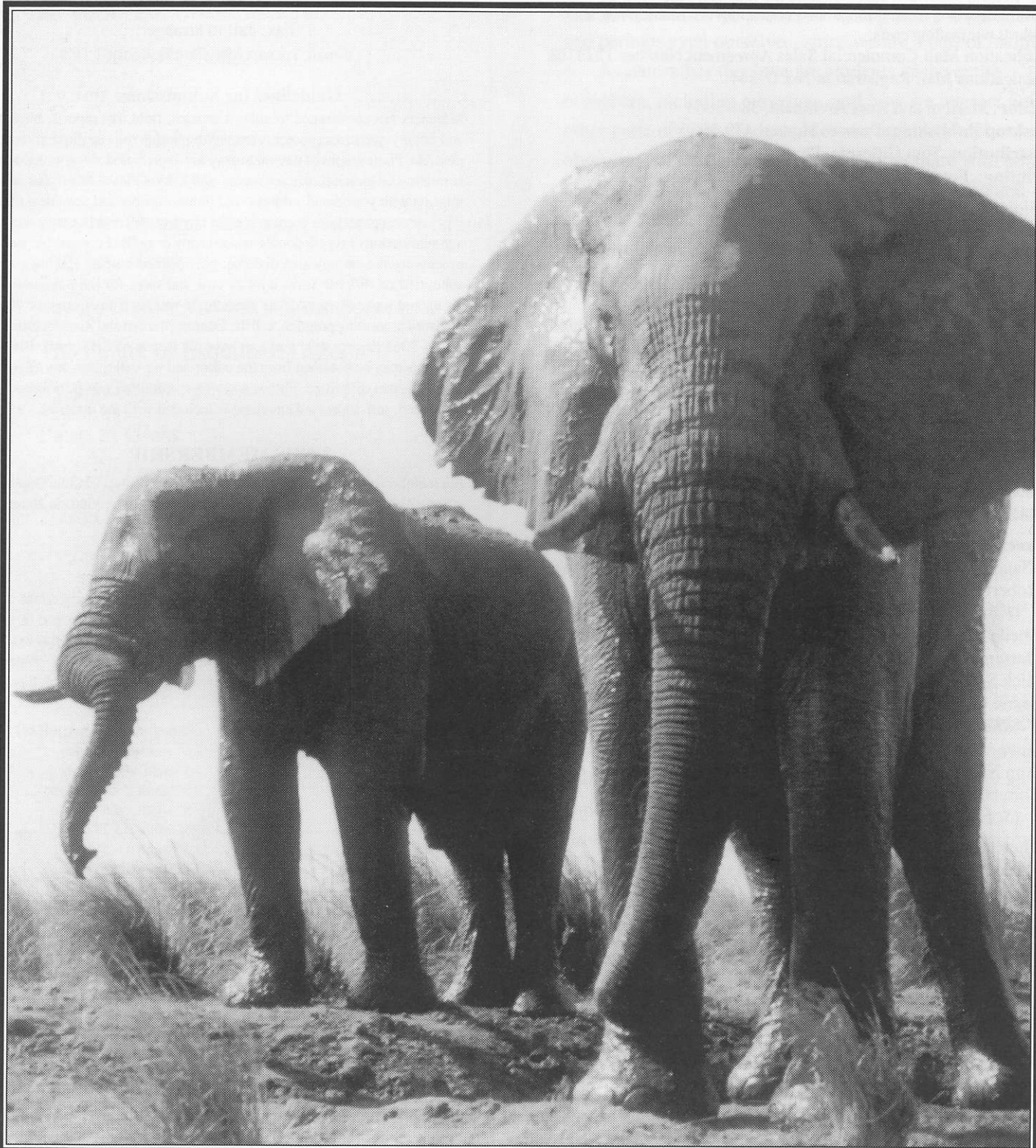




The Victoria NATURALIST

MARCH
APRIL
2001
VOL 57.5

VICTORIA NATURAL HISTORY SOCIETY



Published six times a year by the
VICTORIA NATURAL HISTORY SOCIETY,
 P.O. Box 5220, Station B, Victoria, B.C. V8R 6N4
 Contents © 2001 as credited.
 ISSN 0049-612X Printed in Canada
 The *Victoria Naturalist* acknowledges the financial support of the
 Government of Canada through the Publications Assistance Program
 towards our mailing costs.
 Publication Mail Commercial Sales Agreement Number 1273108
 Publications Mail Registration No. 09841

Editor: Marilyn and Ross Archibald, 384-3063
Desktop Publishing: Frances Hunter, 479-1956
Distribution: Tom Gillespie, Phyllis Henderson
Printing: Fotoprint, 382-8218

Opinions expressed by contributors to *The Victoria Naturalist*
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Annual Subscription Rate, *Victoria Naturalist* \$20.00

RARE BIRD ALERT: 592-3381 VNHS EVENTS TAPE: 479-2054

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Deadline for next issue: April 2, 2001

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A NOTE FROM THE EDITORS

What is a naturalist? Our newsletter has the word "natural-
 ist" in the name, but what exactly does it mean? Natural
 history, in one dictionary, is "the study of plants and
 animals." Naturalist is defined in two separate dictionaries
 as "a student of plants and animals." Vinson Brown writes:
 "The study of nature is simply the study of the natural
 world around us, the rocks, plants, animals, stars, climate,
 and perhaps even ourselves, since we are a part of nature."

As naturalists then, we are students of the entire
 ecosphere, including ourselves, and how we interact with
 other parts of it. As students, do we continue simply
 observing, or has the time come for us to share with other
 humans the things we have seen? Keeping detailed and
 accurate records of our observations provides information
 from which we can deduce trends, good or bad. Each bit of
 a puzzle is necessary and important.

The VNHS Greenspaces project is an excellent exam-
 ple of observing, then recording observations in a manner
 that will be useful in future attempts to preserve ourselves,
 and our place in the ecosphere. Counts like the Butterfly
 Count and the Bird Counts can provide indications of
 changing conditions. Equally important is the simple
 recording of our observations in written form, whether it is
 in a diary or an article for *The Victoria Naturalist*. Some
 present day ecological restorationists delve into archives
 for journals, letters, and maps that might indicate what
 species or ecosystems existed in a location they wish to
 restore to past condition.

The recent HELP MELP campaign highlights how
 difficult it has become for the provincial Ministry of
 Environment Lands and Parks to carry out its conservation
 and preservation tasks. It is increasingly clear to many that
 volunteers and non-professionals can, and must play an
 important role in recording our natural history. The
 Greenspaces is one project that is showing this to be true.

We can no longer rely on official institutions to
 describe our natural world; perhaps we never could. In our
 not so distant past, each one of us needed to be a naturalist
 for survival. It seems to us that we may have come full
 circle, and that each one of us must not only observe the
 world around us, but we must share our observations
 with others.

Marilyn and Ross

A Taste of Africa

By Lyndis Davis

We knew we had arrived! A friend from England and I spent just over two weeks in Africa last August. We started our tour in Victoria Falls, Zimbabwe, stayed at two Safari Lodges in northern Botswana, and then went on to Cape Town and the coast north of that city to see the flowers. Our lodge (hotel) near Victoria Falls was about 15 minutes out of the town, built on a ridge overlooking the veld. The ground fell away sharply from our balcony, and we saw baboons and impala as soon as we stepped onto it.

There were also several new birds on the shrubs growing close by. We were tired after our overnight flight from London and had not even unpacked when our "birding guide", Chris, knocked at our door to introduce himself and to see how enthusiastic we were! Of course Chris could tell us what birds we were seeing from our balcony — Blue Waxbills, Tawny-flanked Prinia, Red Billed Quelea, and Sacred Ibis over by the water hole, to name a few. He then offered to take us out to try and find the Paradise Whydah that he knew was near the river but we would not have a chance of finding anywhere else. We did find the Whydah but they were lacking their long tail feathers, which are their breeding plumage.

Chris is an excellent birder. He has made a grid for a large area around Victoria Falls. Each square of his grid is 1/2 km by 1/2 km, and he records all the birds that he sees whenever he goes out. He also enters them in the appropriate grid. He has records going back 12 years! Chris can tell you where you would be most likely to find a specific bird

(perhaps even down to the exact tree), or the numbers of any species in any given area.

We spent a morning at Victoria Falls. There is so much spray around the cataract that we got quite wet. The gorge that the water falls into is very narrow; you only see the river at the base of the 355 foot falls from beside the Devil's Cataract. We also get an overview of the area by going up to about 1000' in a tethered balloon.

Chris offered to take us out on the river, in a friend's boat, to do some birding and see some animals. We had a wonderful afternoon on the Zambizi River above the Falls. Hippo, crocodiles and elephants were "common" — but oh so thrilling! The skipper knew just how close he could go to them — and took us very close. There were many birds too — I could not keep up with writing down their names as so many of them were new to me, and therefore, the letters that we use here were useless! Chris gave us a list when we returned to the lodge.

On our return trip, we pulled into a bay on an island. We watched a crocodile with the outboard motor shut off. When it was time to go, the motor was started, put in gear, but the boat was not moving in either forward or reverse. Inspection of the raised outboard revealed that the propeller had fallen off! We had to get a tow back to the dock, as no one wanted to try diving for it!

Chris took us for a full day trip to a safari lodge, run by friends of his, about 75 km from Victoria Falls. They were very welcoming hosts and assigned a guide to take us up river on the Zambizi to find birds. We saw masses. African

species of herons, ibis, storks, plovers, kingfishers, ducks, geese, cormorants eagles, vultures, and best of all a Saddle-billed stork — which looked to have been put together by a committee. It is a large stork, with a big red bill that has a broad black band around it, and a yellow shield at its base. Black legs with pink knees and feet complete the ornamentation. Everyone must have had their say!

On an afternoon safari drive, we saw many birds. Chris took us to a specific tree to see a Pearl-spotted owl — which turned out to be a Barred Owl. As we were watching that bird, a Pearl-spotted flew into the tree next door! Two for the price of one! The only animals we saw were a herd of female elephant and young. They crossed the track ahead of the van. I thought we would stop 30 yards or so away, but no, we drove closer and closer until we were less than 10 yards away. An awesome sight! No need to use the zoom on the camera.

We watched the sun go down and elephants come to drink at the river, from a hide. On the way back to Victoria Falls in the dark we were fortunate to have a leopard cross the road ahead of the car. As it stopped in the grasses at the side of the road for several minutes we were able to get the headlights onto it (and take a couple of photos). We also saw a wild cat, a porcupine and a hare.

We went on to two safari lodges in Botswana, the first in the Chobe National Forest and the second on the north Okavango. We could not have been better looked after and the accommodation, food and drink were excellent, as were the safari drivers. They knew exactly where to find animals, and were excellent birders, which I had not expected. Maybe when they realized my interest, they made more effort to find the bush birds and spend more time watching the larger ones. We covered miles of track in safari vehicles that were open Land Rovers with extra, higher, seating and a canvas roof added. There were many highlights: a herd of zebra, moving through the bush, strung out over a mile; elephants crossing the river; the small ones having to swim; watching elephants

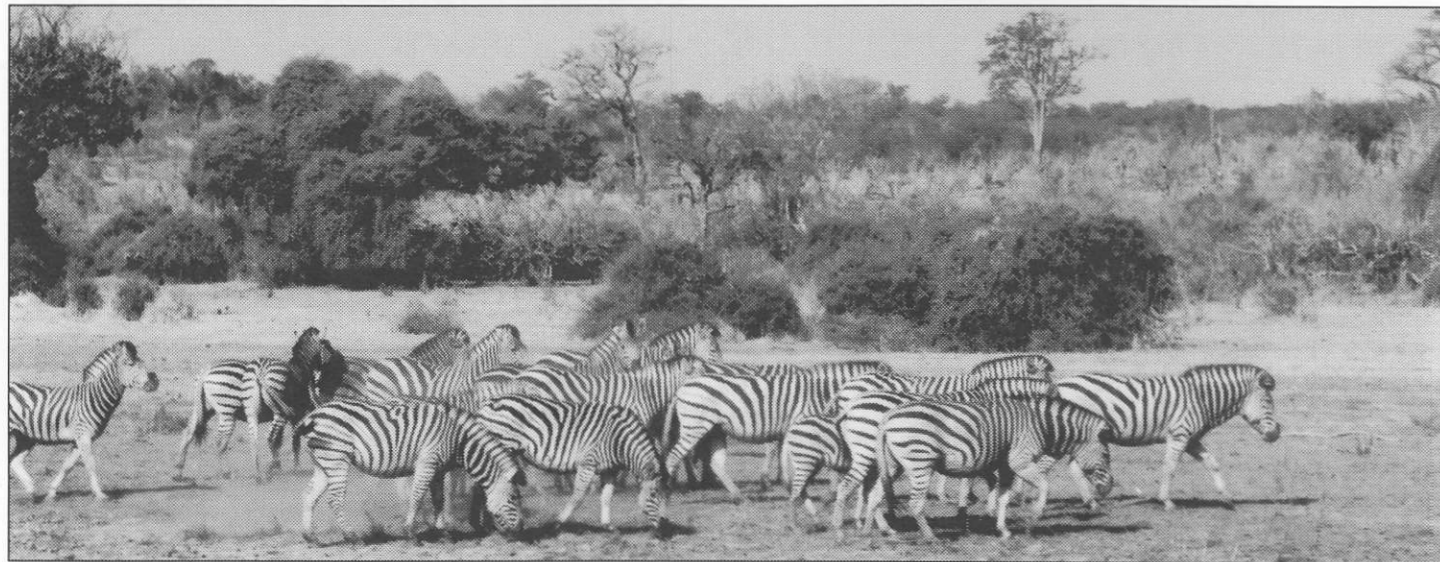
at mud-holes cooling off by spraying mud over themselves; three giraffes drinking at a waterhole in the sunset light; lions lazing in the shade, digesting last night's kill; two male lions walking side-by-side down the track towards us.

Our driver pulled off the track to let them pass, they came so close to me that I could have reached down and touched them. Four times we circled around, moved ahead of them, and stopped to watch them pass. There were herds of impala, buffalo, liechwe, wildebeest, and waterbuck, as well as individual kudu, sable and bushbuck. And birds! We watched a swamp fig that was used by vast numbers of birds as a roost — marabou and yellow-billed stork (both species nesting in the fig), cattle and great egrets, reed cormorants, and darters. At sundown we watched, as hundreds of birds arrived to roost in the fig, for the night.

We regretted our short time at the safari lodges, but had to leave for our visit to Cape Town. It was the end of winter in the south and the weather turned wet and cool as we arrived. The cloth was down on Table Mt. but it lifted briefly the next day. We could not go up in the cable car as they were putting in a new cable, so we had to settle for photos from the harbour. At Cape Point we watched the breakers, and we visited Kirstenboch Botanical Gardens, which has a lovely setting on the slopes of Table Mt.

Another guide took us up the west coast to see the flowers which cover areas of the West Coast Park with spectacular displays of orange, red, mauve and white, when the sun is out. We did not see it at its best but got a good idea of what it could be like. We visited a Cape Gannet nesting colony, saw flamingoes in the sewage lagoons (where else), and little Red Bishops at the side of the road. The Cape Town Aquarium was most interesting too, particularly as our guide was a diver and knew all about the fishes displayed.

I feel so fortunate that I was able to do the trip to Africa. Seeing animals that I have only seen in pictures or on TV was a real thrill — I feel that I can relate to them much better now.



Zebras on the safari drive, Muchenfe Safari Lodge in Chobe National Park. Photos: Lyndis Davis



Male lions at Xakanaxa Camp.



Collared and red-headed weaver.

The Gypsy Moth Dilemma

By Yorke Edwards

Gypsy moths may have come to Vancouver Island to stay. A few years ago a hundred or more of their eggs were unknowingly transported to our island, the egg mass perhaps stuck on a vehicle or on an imported wood product from an eastern forest. In the United States the moth is a national disaster. Millions of dollars have been spent so far on spraying with little success in eradicating the species, or stopping its spread across the northeastern states.

The story begins in 1869 when one man imported gypsy moths from Europe to Massachusetts, hoping they would cross with silk moths. They failed to cross but a few escaped. Those few were the beginning of the current disaster

In the beginning, a slow invasion of the moths occurred within Massachusetts. Then, through the years they entered slowly into adjacent Connecticut and New York. Beginning in the 1970s, and for reasons unknown, they more rapidly covered New York, then swept westward deep into Pennsylvania and New Jersey, advancing from five to 15 miles a year. Spreading fast for gypsy moths, they munched across 13 million acres of forest, leaving behind countless completely leafless trees. The reasons for their rapid and destructive

invasions across the mainly hardwoods forests, in contrast with their previous years of small but steady advances, are unknown. At the same time, they spread south into Maryland and Virginia. Through these years of the ever-expanding range of the moth, the northeastern states have been spraying their forests, with little success.

Gypsy moth larvae eat tree leaves, and some may eat them on Vancouver Island this spring. For at least two years there has been little local information distributed to tell us much about the degree of the Gypsy moth problem. Spraying has been done, and there have been media reports of a brief verbal battle between those people wanting the spray, and those who did not. No one seemed to have solid facts about the spray's destructive ability for creatures other than just moths and butterflies.

Official reports said that the spray would kill only a few kinds of non-target insects, so the priority was to save the

trees from being eaten; with what result? What trees are at risk? Douglas Firs? Horticultural species? Oaks? No one seemed to have hard facts about the rest of the island's creatures, including non-target other insects, birds, mammals and people.

The male moth is about an inch long, mostly brown, and a strong flier. The female is larger, mostly white, and cannot fly. Each female that lives through winter deposits 500 to 800 eggs onto almost anything nearby, most onto tree trunks, but some choose fences posts, porches, cars, trucks, camper vans, logs, almost anything; then they die. The hatching

larvae are astonishingly destructive. They grow to about two inches long and are sparsely haired. When numerous, they devour all leaves from all trees eaten. Hiding by day and feeding by night until about June, they then pupate.

It is said that they eat the leaves of about 400 kinds of trees and shrubs that grow in the northeastern United States. The United States government has listed the tree species eaten by Gypsy moths, and those not. Eaten are: maple, elm, apple, alder, birch, poplar, willow, and especially oak. They will also attack pines and spruces. Those not eaten are:

ash, sycamore, butternut, black walnut, dogwood, and balsam fir. Many of these trees are native only to eastern North America, but some have been planted in the west, especially in villages and cities.

Gypsy moths love oaks. In Canada and the United States there are about 60 species of oaks, which are divided into two groups: black oaks and white oaks. Our Garry oak is in the white group. Of all the hundreds of plant species that gypsy moth larvae eat, their preference is the leaves of the white oaks. Garry oak leaves are the larvae's favorite food.

Stopping the eastern spread in such a huge area appears to be an American impossibility. On Vancouver Island, the moths appear to be restricted to a small area. Perhaps aerial spraying using Bt (*Bacillus thuringiensis*) is the main hope of saving our trees, especially our oaks. But then, rare species of insects in the same area are worth saving too. It seems that we lose whether we spray or we don't.

The story begins in 1869 when one man imported gypsy moths from Europe to Massachusetts, hoping they would cross with silk moths. They failed to cross but a few escaped. Those few were the beginning of the current disaster

2000 Butterfly Count

By Jeff Gaskin

Victoria's Butterfly Counts were conducted the usual number of seven times last year. The areas covered by this year's counts are similar to the Victoria Christmas Bird Count, covering from Brentwood Bay and Island View Beach in the north, west to Goldstream Park, and south to Witty's Lagoon. There were over 80 participants, similar to last year.

A total of 28 species of butterflies were recorded last year, which is down by 4 from 1999 and is down by 2 from 1998. The total number of individual butterflies tallied amounted to 14,476, which compares to 16,350 in 1999 and 17,169 in 1998. Thus it can be concluded that both the

number of species and number of individual butterflies in Victoria is on a downward trend.

Among the highlights this year were: the 4 Hydaspe Fritillaries and 6 West Coast Ladies observed by Rick Schortinghuis seen while motoring the Highlands roads near Caleb Pike Road and Jocelyn and Lone Tree Hill Parks. A high number of Moss' elfins were found in April, generally the only month of the year when one can see this species. They were seen in Brentwood Bay (1), Thetis Lake Park (5), and Metchosin (1). Four Rosner's Hairstreaks were again seen in their usual spot near Goldstream Park (Derrick Marven and Gerry Ansell) and a Veined White, a common

Continued on page 8

2000 Butterfly Counts

Species	April	May	June	July	Aug	Sept(1)	Sept(2)	Total
Anglewing species						1		
Anise swallowtail	12	54	30	33	34	6	4	173
Blues species		26						26
Brown Elfin	25	27	5					57
Cabbage White	320	1122	740	2016	3141	1581	658	9578
Elfin species		2						2
European Skipper				5	20	1		26
Gray Hairstreak		4	6	3	6	2		21
Hydaspe Fritillary		1			4			5
Lorquin's Admiral			11	212	156	5	1	385
Milbert's Tortoiseshell	4		5	4	3		2	18
Moss' Elfin	6							6
Mourning Cloak	6	15	3	1	3	2	1	31
Mylitta Crescent	1	28	8	7	30	30	20	124
Pacific Orangetip	13	28						41
Painted Lady			3	6	2	4	1	16
Pale Swallowtail		18	60	55	4			137
Pine White			4	9	169	39		221
Proterius Duskywing	1	27	4					32
Purplish Copper		4	49	9	82	150	44	338
Red Admiral		1	5	4	6	18	12	46
Rosner's Hairstreak		3	1					4
Satyr Comma	23	29	13	6	5	2	2	80
Skipper species						20		20
Spring Azure	193	1008	87					1288
Sulphur species						1		1
Two-banded Checked Skipper	2	3						5
Vancouver Island Ringlet		4	16	7	29	37		93
Veined White	1							1
West Coast Lady					6			6
Western Tiger Swallowtail		24	122	239	57	3	1	446
Woodland Skipper				25	949	253	21	1248
Total	607	2428	1172	2641	4706	2155	767	14476

butterfly north of Duncan, but rare in Victoria, was seen in Brentwood Bay by Linda Gilkeson.

Although Victoria escaped any further spraying of gypsy moths last year, it is clear species found usually in April and May, Pacific Orange Tip, Satyr Comma, and Mourning Cloak seem to have suffered from previous spraying. Cabbage Whites were a little more abundant than usual. Lorquin's Admirals, Pine Whites, and Woodland Skippers, which suffered catastrophically due to the Gypsy moth spraying of 1999 have rebounded slightly. However, the European Skipper, a butterfly only recently introduced to Victoria in the mid 1990s, and which increased significantly the next few years before practically being obliterated in 1999, increased from one in 1999 to still only 26 last year.

I'm very thankful to people who kept a close eye on neighbours' Buddicia bushes, Verbena and other flowers, and were able to give us more Red Admirals than usual in the September counts.

I want to thank my crew of Gordon Hart, Anne Knowles, and Joan Inglis for their help in mailing and stuffing envelopes as well as phoning participants. Without them, I would have had a hard time completing these surveys. I also express my thanks to Derrick Marven for his excellent coverage of Goldstream Park. Colleen O'Brien's persistence in finding the majority of our Propertius Duskywings and Gordon Hart, Diane, Guy, and Marge Crowther and Joel Ussery for their hard work and efforts.

In 2001, unfortunately, I will no longer be able to

coordinate the Butterfly Counts. If anyone would like to take up the responsibility, please let me know before April 1st of this year, so that the matter can be discussed before the 2001 counts proceed.

Cabbage Whites ... in November?

November 1st, 2000 marked the first year on record in which a Cabbage White butterfly was seen in Victoria (by yours truly); or have any readers, or people you know of seen one later than this? Ordinarily, the Cabbage White is an abundant butterfly in the Greater Victoria area from late March to October 10th. After October 20th they become rare. Up until this year they had never been heard of or seen in Victoria after October 31st. My sighting came from careful and diligent persistence at the Capital City Allotment Gardens on Kent road in Saanich.

According to our records the Red Admiral, was seen twice this past November, on November 6th and 14th. This butterfly is usually recorded annually in November, but generally with only one to four sightings. One was probably the same butterfly that was at a residence at 4718 West Saanich Road and observed by homeowners Guy and Marge Crowther. This particular Red Admiral also happened to be Victoria's last recorded butterfly of 2000.

There were no other butterflies seen from November 15th to December 31st. However, if any of our readers know of any, particularly Mourning Cloaks, Anglewings, Milbert's Tortoiseshells or other Red Admirals please let me know.

Under the Oaks, *Quercus garryana*

By David Stirling

Much has been written about Victoria's Garry Oaks. [See recent issues of the *Victoria Naturalist* cited at the end of this article] Through most of these writings there is an undercurrent of gloom. The oaks are vanishing. They are being threatened by a variety of pests and diseases. Their turf is being developed into huge sheets of tarmac, giant box stores and sunny condominiums. True, but is it all bad?

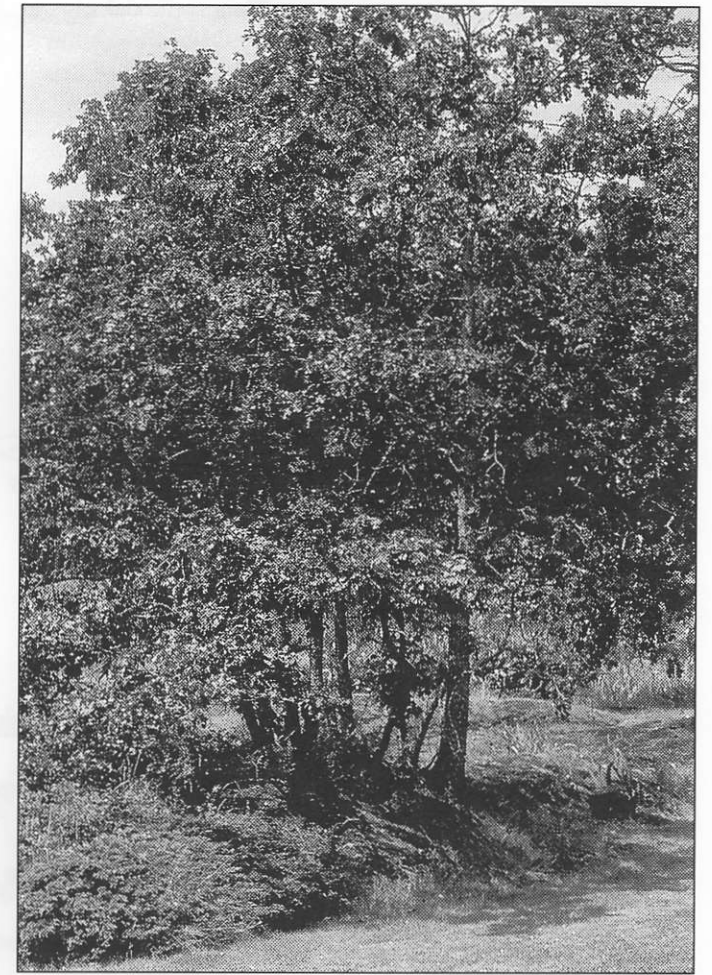
The Garry Oak is a hardy, resilient, drought resistant species, growing on substrate that ranges from loamy flat land to almost solid rock. Southward it ranges, below 1,000 metres west of the Cascades, through Washington and Oregon to Northern California, where it is usually called Oregon White Oak. Some of the finest trees in the Columbia River bottom lands reach a height of up to twenty-eight meters and a diameter of nearly two meters.

I would like to present a more positive view of the future of Victoria's oaks. "Pests" and diseases are all part of a unique ecosystem. An oak is not just a tree. It is a marvelous, complex community of fungi, aphids, mites, wasps, spiders and most noticeable — a host of voracious defoliators. In nature, an important factor limiting the regeneration and living space of the oak may be our common native coniferous trees, especially the drought resistant Douglas-fir, *Pseudotsuga menziesii*, that occupies the same habitat, eventually overtopping the oaks and preventing further regeneration.

One example of the interaction between oak 'pests' and Douglas-fir is brought into historical perspective by Hans Roemer in an article about the oak and fir forests in the ecological reserve and Mount Maxwell Provincial Park on Saltspring Island. In 1980 and again in 1994-95 a major infestation of the Western Oak Looper, *Lambdina fisellaria*, stripped the leaves from 60 to 100 per cent of the oak trees. After finishing off the oak leaves, the starving loopers proceeded to defoliate the associated and adjacent Douglas-firs. Most oaks survived but the firs, many subjected to secondary attacks by bark beetles, died. Roemer sums up by saying "... the deciduous woodland community ... creates its own space!"

On southern Vancouver Island we can see this process in the small, open, deciduous woodlands on rocky knolls — the oak-balds — surrounded by encroaching Douglas-firs that have taken over the best soils. Perhaps, defoliators, although regarded as a pest to individual trees, are really species friendly by helping to keep the firs in check. Of course this applies only in natural woodlands, not in the city.

I lived in the oak heights of north Quadra during the massive looper outbreaks of the 1980's. After several years the outlook for the oaks seemed bleak. Masses of twigs and branches, deprived of nourishment and now redundant in their job of holding leaves out to the sun, died and dropped off.



This picture illustrates the toughness and resilience of the Garry Oak. Thirty years ago this "bush oak" was cut down to a chunk of wood clinging to a rock in order to placate a neighbor who objected to his view being diminished. It resprouted just in time to be denuded to a skeleton by several years of defoliator infestation. Now, with thirteen stems, the major one thirty feet tall, it is looking good.

Nubs of new twigs supporting fresh leaves shot out only to be devoured by famished loopers. Dead branches that remained on the tree became nesting sites for chickadees, nuthatches and Downy Woodpeckers. Evening Grosbeaks, feeding on the larvae, were never so abundant. Spring flowers, enjoying more sunlight, blossomed. Now, in the year 2001, all except one tree, have recovered. The oaks are looking good but there are subtle changes to the crowns. The gnarls, whorls, twists and zig-zags, beloved by cartoonists, are new growth produced by the trees in response to munching "worms." In November, these bare twisty crowns produce a distinctive song when assaulted by the gales of winter.

Perhaps, pests and diseases need not concern us too much. There are other positive signs. We now have a Garry Oak Inventory. Individual trees and groves have some



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10:00 a.m. to 3:00 p.m.



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- * Native Plants of the Horticultural Centre - Hoke Holcomb
- * Low Demand Irrigation System in our Native Plant Garden - Willie MacGillivray
- * Using Native Plants in your Ornamental Garden - Brenda Costanzo
- * Native Orchard Mason Bees - Gord Hutchings



Swan Lake Christmas Hill Nature Sanctuary

3873 Swan Lake Road, Victoria, B.C.

For more information: 479-0211



A complete plant list and description of presentations is available on our web site - www.swanlake.bc.ca

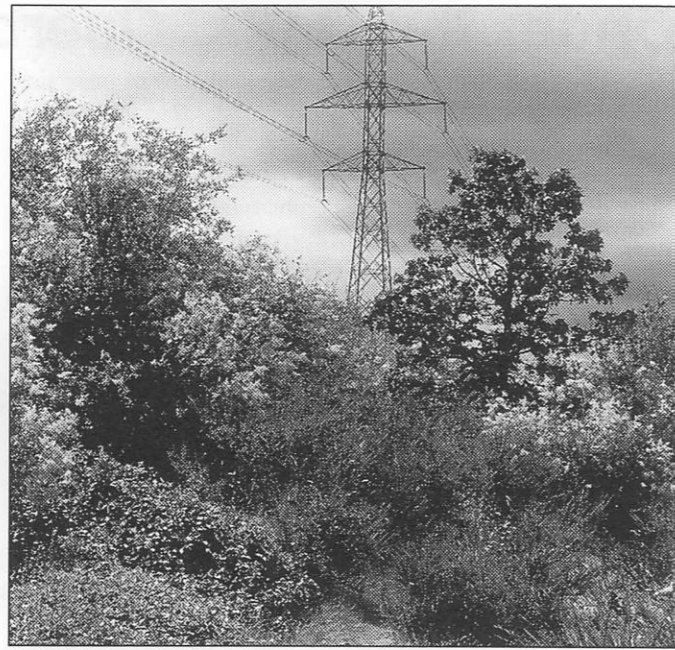
protection under municipal laws.

Nevertheless, friends of the Garry Oak must remain vigilant. We must save the few remaining oak-balds and oak-meadows that are under constant threat. Can we influence councils to make it mandatory to plant some oaks in new developments? Unfortunately, Garry Oaks are seldom planted as ornamental or shade trees on the grounds of new subdivisions and commercial developments. Oaks grow slowly, they don't have colorful foliage and they don't produce a burst of spring blossoms. Tidy people are not amused by trees that start dropping leaves as early as Coombs Country Festival Days and barely end by Remembrance Day. How can the Garry oak compete in our rapidly spreading artificial world with eastern and offshore exotics? Perhaps, that bold newcomer, the Gray Squirrel, will help.

Further Reading:

Chapman, Gayle. 2000. The Plight of the Garry Oak. *The Victoria Naturalist* Vol. 57.1, Victoria Natural History Society, Victoria, BC.
Culross Peatie, Donald. 1950. *A Natural History of Western Trees*. Houghton Mifflin, Boston.

Edwards, York 2000. Oaks in the Grassland Edge. *The Victoria Naturalist* Vol. 57.1, Victoria Natural History Society, Victoria, BC
Roemer, Hans. 2000. An Ecosystem Creating its Own Space? *Visions*, Vol., # 3 BC Parks, Victoria, BC.



Vigorous, young Garry Oaks are growing on the hydro line right of way in the Highlands. BC Hydro should be persuaded to prune but not destroy these trees if and when they threaten the lines.

Another Natural History of Vancouver Island

By Thor Henrich

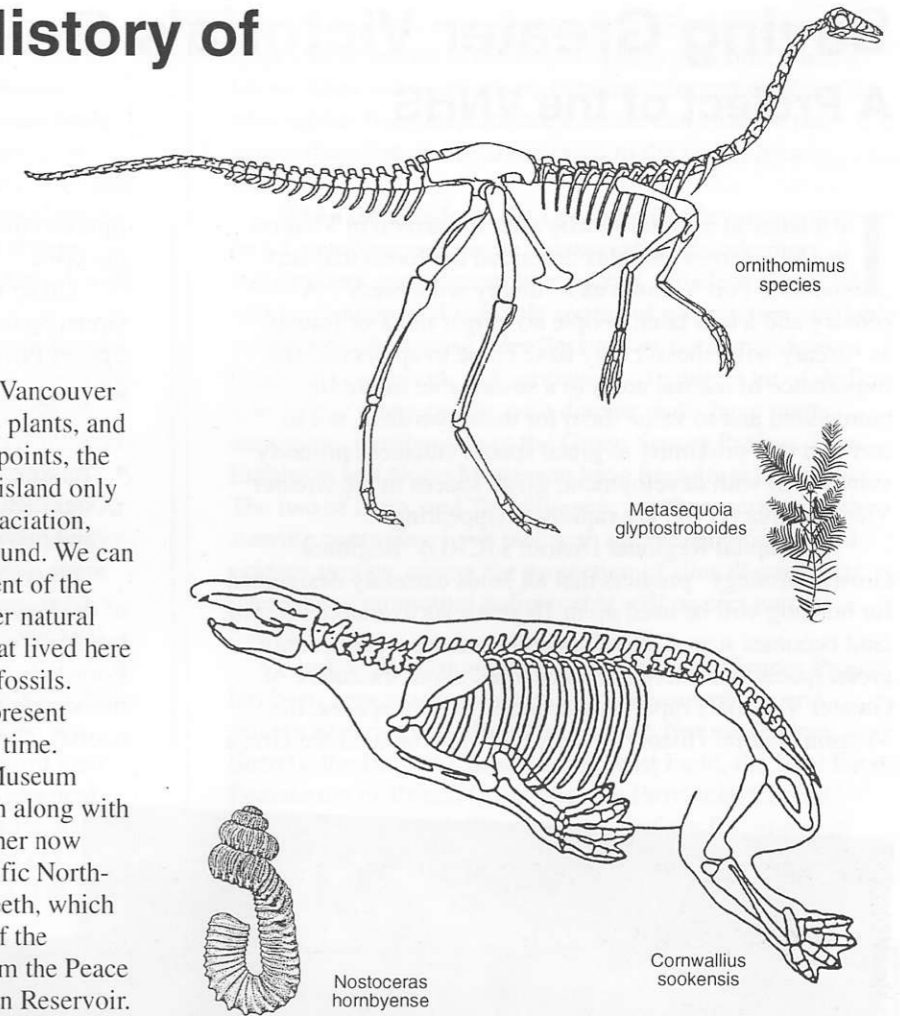
When we seek out the natural history of Vancouver Island, looking for and studying birds, plants, and other biota, we are looking at the end points, the living tips, of the tree of life. If we could see the island only 13 thousand years ago, at the height of the last glaciation, very few of the species we see today would be found. We can infer that today's life has had a history independent of the island itself. In this article we will explore another natural history of Vancouver Island — the ancient life that lived here and left evidences of its existence in the form of fossils. Many different fossils from Vancouver Island represent different branches of life and different periods of time.

The mascot of the Royal British Columbia Museum (RBCM) in Victoria is a woolly mammoth, which along with bison, horses, wolves, cariboo, mastodon, and other now extinct ice age mammals, once inhabited the Pacific Northwest. We know this from their fossil bones and teeth, which periodically turn up in glacial deposits. In front of the museum is a cast of dinosaur tracks, gathered from the Peace River area prior to its being filled for the Williston Reservoir. The RBCM maintains a collection of fossils gathered throughout the province, including Vancouver Island. Amateur and professional palaeontologists in the Victoria Palaeontology Society are dedicated to the collection, preservation, and conservation of the unique fossil heritage of the province. We hold an annual Fossil Fair to educate the public on the importance of provincial fossils. This year's fair will be held at the Swan Lake Nature Sanctuary, March 10-11, from 10 a.m to 4 p.m. The public is cordially invited to attend this event.

Fourteen kilometres west of Sooke, close to Muir Creek, is a fascinating 30 million year old marine fossil site of cliffs, which are eroding into the sea. In addition to many species of molluscs (clams, snails, and limpets), the bones and teeth of early mammals such as 'walking' whales and a kind of 'sea mermaid' are occasionally found. Each year winter storms renew the site, exposing new fossil material along the beach. A field trip to the Muir Creek site will be held later this spring. Contact Thor Henrich or the VNHS program Coordinator for more information (date, time, gathering site, etc.)

Tectonic forces have bent and arched Vancouver Island, so that the some of its oldest rocks have been exposed by erosion in the mountainous area north of Duncan. In this 360 million year old Sicker Formation, are found such limestone reef building organisms as sea lilies, corals, and brachiopods.

More easily accessible and convenient for fossil aficio-



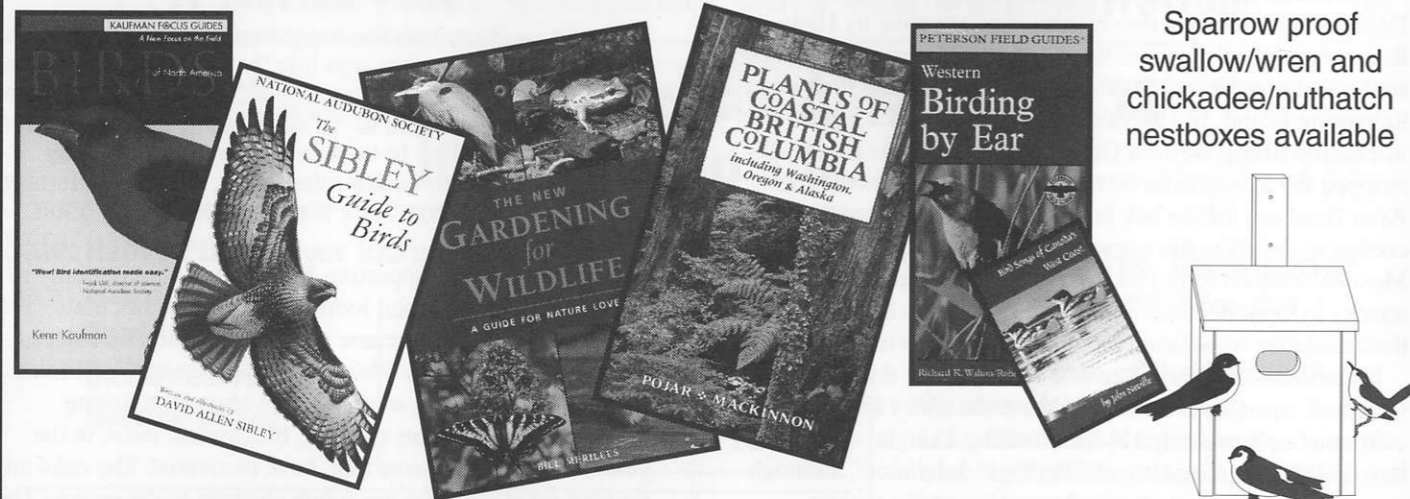
nados are the Upper Cretaceous formations of the Nanaimo Group, found along the eastern shoreline of Vancouver Island, from the Saanich Peninsula to south of Campbell River. Eighty million years ago, the margins of today's Georgia Basin teemed with rich subtropical vegetation, as evidenced by a highly diverse fossil flora of ferns, conifers, palms, and many species of early dicots (flowering plants with 2 seed leaves). A rich marine fauna of crabs, shrimp, clams, brachiopods, sharks, bony fish, marine reptiles (such as marine turtles, plesiosaurs and mosasaurs), and early birds have marked their presence by their fossils, most of which have been discovered in the past ten years. Perhaps the most intriguing fossil recently found was the thirteenth tail vertebra from an ornithomimid ('bird mimic') dinosaur, showing that dinosaurs did indeed live here on the island.

Although very brief and far from complete, it is hoped that this short survey will inspire more interest and understanding of the natural history of the fossils of Vancouver Island.

Join Thor Henrich for an illustrated talk about the palaeontology of Vancouver Island, Tuesday March 13 at 7:30 p.m. Room 159 Murray and Anne Fraser Building UVic.

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Saving Greater Victoria's Green Spaces

A Project of the VNHS

In a letter to a friend shortly after his arrival in Victoria in 1842, James Douglas described the forest that surrounded Fort Victoria as a "dreary wilderness". A century and a half later, people no longer think of forests as "dreary wilderness"; they have come to appreciate the importance of natural areas to a sustainable future for humankind and to value them for their own sake, not to mention that proximity to green spaces enhances property values. But with development, green spaces in the Greater Victoria Area (GVA) are rapidly disappearing.

The Capital Regional District's (CRD) "Regional Growth Strategy" predicts that all lands currently designated for housing will be used up in 16 years. As available housing land becomes scarce, development pressure on remaining green spaces will increase. Concerned about the future of Greater Victoria's rapidly disappearing green spaces, the Victoria Natural History Society (VNHS) initiated the Green

Spaces Project with a vision to protect natural green space in the GVA.

Under the energetic chairmanship of Tony Embleton, the Green Spaces Committee coordinates the work of the Green Spaces Project, which has two missions:

- To identify and inventory the ecological values of all remnant natural areas in the GRA; and
- To seek protection for those remnant natural areas of significant ecological value by the relevant government and private agencies.

Over the past three years, Norm Mogenson, coordinator of the Project's field activities, has trained and supervised hundreds of volunteers in conducting ecological inventories. Priority is assigned to inventorying those natural areas under immediate threat or which are considered to be critical habitat. Through his work on the Green Spaces Project,

Norm has become something of an authority on the native plants and ecology of southern Vancouver Island.

In preparation for conducting an inventory, Norm assembles a group of volunteers each site, and issues them maps, orienteering compasses, measuring tape, and clipboards. The volunteers are taught how to use compasses and maps to run transects through the inventory site and how to identify and record plants along transects. Norm always carries along a pack full of reference books for plant identification.

To inventory a site, a series of parallel transects are run through the property at right angles to a boundary line of the property being surveyed. At measured intervals along the baselines, data is recorded on the data sheets. Since transects must run in straight lines, Norm and his volunteers must climb over or under whatever obstacles stand in the way. At the same time, they must take care not to disturb the ecosystem. But when Norm completes an inventory, he has more detailed and precise ecological data on the site than that gathered by provincial agencies who rely largely on aerial photography with limited ground truthing.

To assure uniformity of data collection and compatibility with data from other sources, the volunteers are also provided with a standard report form on which to record their data. Data reported includes ecosystem type and physical features such as slope, and plant species. In addition, any special or unusual features such as the presence of old growth trees, wildlife trees, possible archeological sites and human disturbances are reported.

Permission from owners is always received before inventories are done on private lands. Some government agencies have been reluctant to allow ecological inventories on land that they may have plans for, but through persuasion they usually grant permission.

Norm has noted things of great interest while conducting his inventories, some of them unrecorded. Among the more interesting is what appears to be a patch of mutant licorice fern that bifurcates near its apex, a stand of Douglas fir of uniform age and size that appears to have grown up in what use to be First Nations "camas farm" and several unrecorded archeological sites.

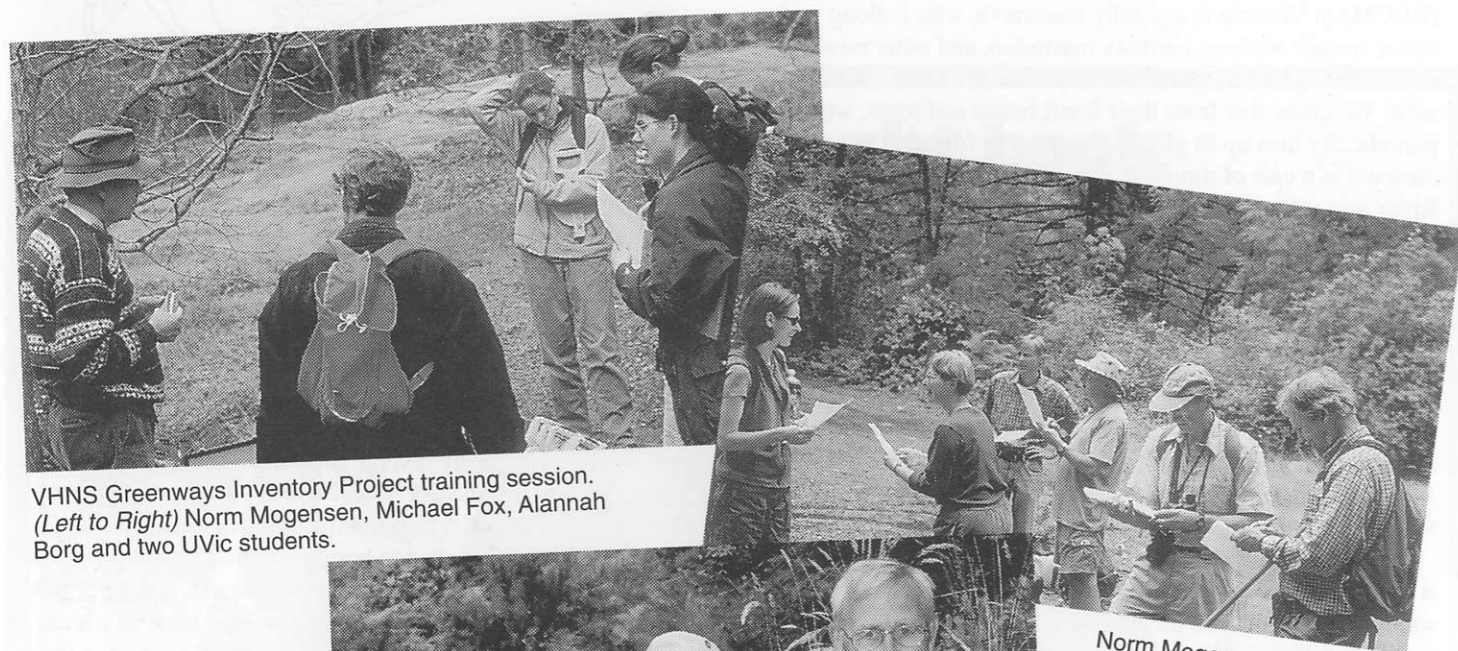
The data that have been gathered over the three years of the Project's existence is soon to be entered into a computer database for use with a Geographical Information System (GIS). Unlike traditional maps on which all landscape features appear on a single sheet, GIS can generate maps showing only those landscape features that are of interest. For example, GIS generated map might show only terrain features such as lakes and waterways. Then a second map could be printed (or presented on a computer screen) superimposing a second layer of interest such as vegetation patterns, and over that a third layer showing roadways and settlement patterns.

Once the data from the Green Spaces Project have been entered into a GIS system, a web site will be established making the data accessible from anywhere in the world. Craig Mont, the CRD's Habitat Steward, will include an information layer in the CRD's GIS based Green Atlas that

flags the sites inventoried by the Green Spaces Project. The flags will be linked to the Green Spaces web site. When a Green Atlas user wants more detailed information about a site that has been inventoried, the user can click on the appropriate flag and be transferred to the Green Spaces website.

When the data from the Green Spaces Inventory are on a Green Spaces website, conservationists, planners, stakeholders, government bureaucrats and elected officials will have a new and valuable source of information available at the click of a mouse. Needless to say, the Green Spaces Project has required, and continues to require a lot of dedication. While many people with diverse skills have made important contributions to the Green Spaces Project, Tony Embleton and Norm Mogenson have been its prime movers. The two of them, and Tom Burgess, another member of the steering committee have met with municipal officials and citizens groups, urging the protection of sites of particular interest and promoting policies that will protect natural habitat.

Funding for various aspects of the Green Spaces Project has been generously provided by numerous public and private agencies including: the Victoria Natural History Society, the Habitat Conservation Trust Fund, the Real Estate Foundation of British Columbia, the Provincial Capital Commission, Canada Trust's Friends of the Environment Foundation, the Public Conservation Fund, the Federation of B.C. Naturalists, and ESRI Canada.

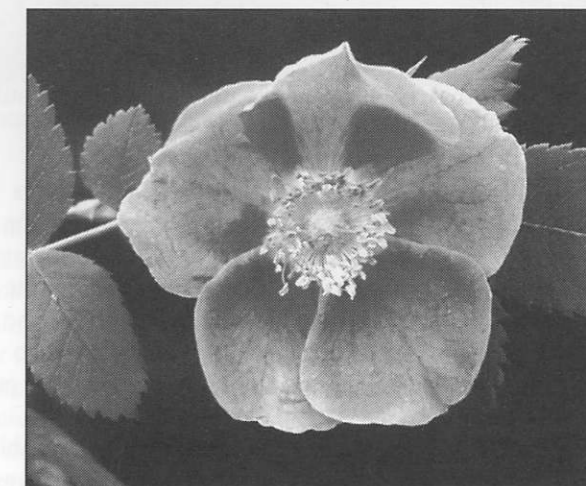


VHNS Greenways Inventory Project training session. (Left to Right) Norm Mogenson, Michael Fox, Alannah Borg and two UVic students.



Taking a break. (Left to Right) Tony Embleton, Norm Mogenson, Tom Burgess and Harvey Williams.

Norm Mogenson (far right) training volunteers



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The Future of Esquimalt Lagoon

By Ann Nightingale

A message on the Rare Bird Alert prompted me to go to Esquimalt Lagoon to look for a bird reported as a "probable Western Sandpiper". If this was a valid report, it was the first shorebird seen at the Lagoon for five years, so well worth an investigation. The year is 2015 and I arrived shortly after 8 am, without thinking about rush-hour traffic. Although it was easy to get a spot in Park 'n Ride lot 2, next to the DND house, getting across the road took almost ten minutes. While I waited, I surveyed some of the changes that had occurred over the last fifteen years or so.

The shape of the beach itself was very different. The long tip of the Coburg Peninsula had washed away over the years, and a retaining wall had been built to protect the house from suffering the same fate. The sandy beach was only about half the depth it used to be, and the only driftwood on the beach was neatly arranged into borders of picnic sites. Solid rock was now exposed where sand dunes rose in the past. The old gravel mining dock to the west was long gone, as was the mine. Most of the Royal Bay development was complete, and the coastal roadway, which I was now trying to cross, was one of the most-used accesses to Victoria. At low tide, it was still possible to walk along the beach, and, by my estimate, there were at least 200 people, with at least as many dogs, taking advantage of today's conditions.

As great as these changes seemed, they were small in comparison to what had happened to the Lagoon (as we still like to call it) itself. The development of the fields off of Lagoon Rd. had necessitated changing the water flow of several small creeks. With the introduction of sewers, this flow was rerouted to provide sufficient volume to keep the sewers functioning. Before long, the west end of the lagoon became mud flats, then eventually dried up. The salt in the soil prevented much vegetation from taking hold. With the reduced water flow, and encroaching land, rowing was no longer taking place on the Lagoon, although the markers put in place to protect the migratory waterfowl could still be seen. When the new road was put in, there was considerable debate over the need to keep the salt water entering the west end of the Lagoon. In the end, instead of replacing the bridge, the channel was dammed and floodways installed to allow freshwater overflow to escape. Occasionally during a very high tide, salt water would sneak back into the Lagoon.

With Colwood Creek now the main source of water for the Lagoon, it had become decidedly more a fresh water pond than a salt-water lagoon, but not really either. The Royal Colwood Golf Course had made serious reductions in their use of fertilizers and pesticides, but the residual runoff was still having an effect on plant and animal life in the Lagoon.

Luck was with me today, and within fifteen minutes of

getting to the Lagoon side of the road, I found the bird. Indeed, it was a Western Sandpiper. I wondered quietly whether this was the beginning of the rehabilitation of the Lagoon, or just a case of a tired vagrant stopping for a quick rest. And I wondered if anything could have been done in the past to protect this area.

On January 16, the Victoria and Esquimalt Harbour Environmental Action Program (VEHEAP) hosted an introductory meeting to discuss the future of the Esquimalt Lagoon. The wide variety of landowners and users has made it difficult to co-ordinate a plan for the Lagoon area. Representatives of the Esquimalt Lagoon Enhancement Association (ELEA), Canadian Wildlife Service (CWS), Department of National Defence, Parks Canada, City of Colwood Council, Fisheries and Oceans Canada, Public Works Canada, Habitat Acquisition Trust, Victoria Natural History Society, Royal Roads University, Capital Regional District, and local residents and landowners were present at the meeting. The agenda covered environmental issues, jurisdictional issues, the migratory bird sanctuary and most importantly, the desire for a co-ordinated approach to the management and development of the lagoon.

Esquimalt Lagoon is located east of the southern tip of Vancouver Island, and west of Esquimalt Harbour. Protected by the Coburg Peninsula, the Lagoon is a natural resting place for waterfowl and shorebirds. The Lagoon and surrounding lands are officially a migratory bird sanctuary under the stewardship of the Canadian Wildlife Service.

Esquimalt Lagoon has long been a gathering place for humans as well as birds. Early records show that the area was important to the First Nations community before European settlement. In the early 1900's, the Dunsmuir family developed Hatley Park, now the site of Royal Roads University, as a private estate. The federal government purchased land surrounding much of the lagoon in 1940. The Hatley Park estate was used for officer training until Royal Roads Military College closed in 1994. Royal Roads University assumed responsibility for the Hatley Park property under a leasehold agreement in 1995. The federal government maintains jurisdiction over much of the area through the Department of National Defence and Parks Canada. Several private landowners also control land adjacent to the Lagoon.

Today, Esquimalt Lagoon is a popular destination for a wide variety of Victoria residents and visitors alike. Easily accessible by car or bicycle, the lagoon attracts picnickers, partyers, dog-walkers, joggers, history buffs, rowers and kayakers, birders, and even the occasional swimmer.

The representatives at the January 16 meeting provided interesting information about the lagoon — its history, physical characteristics, current uses, "wishes" of the various

groups for future uses, effects of distant properties on the lagoon, ideas for preserving habitat, and contributions the various organizations could make. Tidbits included records of changes in the physical characteristics of the Lagoon and Coburg Peninsula. For instance, although the peninsula appears on the earliest of maps, submarine ecology suggests that it may have once been open at both ends. This would have resulted in a much different environment, as the sea could flush the lagoon with each tide change. The current peninsula has been dramatically affected and enlarged by the gravel mining operation to the west. Much of the sand on the beach today has drifted there from the mine. When the mining is discontinued and the area is residentially developed, there is a strong probability that the peninsula will shrink.

Given the diversity of users, there will likely be differences of opinion over the best uses and direction for the area. However, those in attendance at the meeting strongly

Pains of Glass

By Paul Levesque and Laurie Savard

On January 24, 2001 at Birders night, the ever-observant David Allinson pointed out to us a large bird print on one of the south facing windows in Begbie 159. The following Friday we returned to the windows for a closer look. To our horror one of the windows had nine bird prints and the row of windows had a total of sixteen bird prints. In the photo, you can see the outline of the bird's head, eye, breast and wings. We measured the wingspan of the print in the photograph and consulted with Andy Stewart; the print is most likely from a Cooper's hawk. From reported Cooper's hawk deaths, where the cause of death was apparent, Andy has found that collisions with windows to be the leading cause of death for Cooper's hawks. The other 15 bird prints are more difficult to identify to species, a few could be Cooper's hawk and some look like thrushes, a search of the ground below the windows produced a pine siskin wing and a primary from an American robin. This set of windows was checked for evidence of bird strikes once in September, October and in December 2000, at each inspection there appeared to be little evidence of bird collisions. The majority of the 16 bird prints on the window at the end of January were made in the last two weeks of December 2000 and the first three weeks of January 2001.

Why is this set of windows such a hazard to birds? The answer may be that there is another set of similar windows on the north side of the room that give the perception of a flight corridor, or perhaps the southwest exposure produces a strong reflection of the surrounding forest that fools the birds. This reflection may increase in December and January with the lower angle of the sun. The answer is not clear, but what is clear is that the black cardboard raptor silhouettes that are on the windows are less than 100% effective.

supported the development of a co-ordinated plan. VEHEAP has conducted an ecological inventory of the area to provide a baseline against which changes can be evaluated. VNHS has already taken some positive steps: in 2000, Kevin Storey installed Purple Martin boxes on the Royal Roads University docks; a commitment has been made to provide interpretive signage at the Lagoon; and a checklist of birds for the Lagoon and adjacent area is being developed. The Canadian Wildlife Service has already offered to work with VNHS to produce the signs.

VEHEAP will be coordinating meetings and email communications over the next few months. Plans are underway for public information sessions and activities later this spring. There will be a variety of opportunities for volunteers interested in working on this project. If you would like to help, please contact Ann Nightingale at 652-6450.

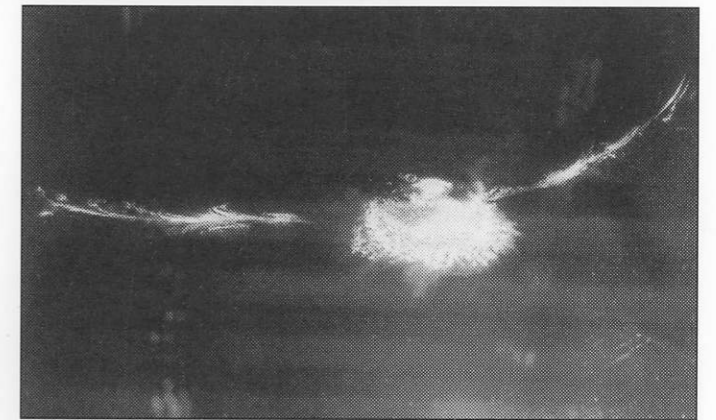


Photo: Laurie Savard

There are ways we can reduce the number of fatal collisions with birds and windows. First, try to identify hazardous windows in your home and workplace by closely looking for the smudges that are left on the glass from bird collisions and looking on the ground at the base of windows for feathers or dead birds. Record your findings. Do not overlook structures like greenhouses and the glass panels that are incorporated into sundeck and porch railings. As in the case of the windows in Begbie 159, it may take a number of months of monitoring to recognize a window as hazardous. Once you have identified a hazardous window, try keeping the blinds or curtains closed when the room is not in use. Continue to monitor the window for signs of bird collisions. If keeping the blinds and curtains closed eliminates the bird collisions, you have found the solution! If keeping the blinds or curtains closed has little affect, the problem maybe a result of reflected light. Shading the window with landscape changes, fences or perhaps awnings, may solve this problem. A word of caution, placing houseplants on the inside of the window may make the window a more attractive flight corridor. If you have any other solutions we would like to hear from you.

2000 Christmas Bird Count

By Dannie Carsen

I remember a sinking feeling as I searched vainly for dark specks through the wall of rain on the Cordova Bay waterfront last December 16, 2000. It was our annual Christmas Bird Count but I couldn't find many birds! Sadly, the birds stayed under cover or inshore and the result was the lowest count total since 1979! Field counters saw 50,036 birds while feeder watchers observed only 3,951 birds (one third of last year). Total birds observed was 53,987, roughly half the 102,346 observed in 1999. Only 131 species were seen, the lowest since 1985, and much less than last year's total of 139. Victoria has slipped from being the highest count in Canada not so long ago!

The 2000 CBC will be remembered for the number of all time lows for species such as Common loon (16), Horned grebe (7), Western grebe (4), American Widgeon (2,288), Northern shoveler (37), Green-winged teal (183), Harlequin duck (59), White-winged scoter (16), Black oystercatcher (9), Pigeon guillemot (11), and Marbled murrelet (4). There were 8 near record lows, 10 lows for recent years, and a number of uncommon and rare birds that were not observed at all such as Redhead, Northern harrier, and Evening grosbeak! Count week birds included Eared grebe, Ruddy duck, Spotted sandpiper, and Red-breasted sandpiper.

We started the day with cloudy skies and fairly warm temperatures (2-8 C) and stayed dry until 10:30 a.m. Then, the rain began and continued for most of the day. Strong southeast winds of 30-50 mph made it extremely difficult to observe waterfowl and shorebirds along the coast. It was very rough for Ron Bates and crew who were counting offshore in a boat. Snow blanketed the Malahat and Saanich Peninsula the night before and reduced participation for the count. The number of field counters was down to 156 from

180 last year. Feeder watchers also turned out in fewer numbers (only 111 versus 181 for last year). I appreciated the fortitude of the 156 field counters who came, saw, and were drenched! If you stayed past 1:00 p.m., you are to be especially commended. I thought about the joys of feeder watching at 1:30 p.m. as I stood facing a howling wind and lashed by rain while taking a last check on Mount Tolmie. The work of feeder watch coordinators Cam Finlay and Lyndis Davis (and the feeder watcher phone team) was greatly appreciated!

Notable species were a Northern fulmar observed from Tower Point by David Allinson (2nd record) a Sora seen in wet fields near Island View Beach by Brent Diakow (2nd record), and a Sandhill crane spotted on Martindale Flats (2nd record). The Iceland gull observed by Bruce Whittington at the Hartland Land Fill will be a first record for the Victoria count if accepted as a separate species by Bird Studies Canada. The new *Sibley Guide to Birds* does show Iceland Gull separately from Thayer's Gull.

As usual, the Martindale/Bear Hill group had the highest area species count with 87 species (including an American tree sparrow and a Palm warbler). The stalwart Albert Head/Triangle Mountain group with only two members observed second highest area number with 74 species (including a Northern fulmar).

After the Count, we gathered to join in the traditional camaraderie at a new location, the Gordon Head Community Centre, with refreshments organized by Barbro Baker and Joan Gowan. Thanks Barbro and Joan!

A compilation of the 2000 count data is available in Excel format from the Editors or Dannie Carsen if you would rather not wait until the next issue of the *Naturalist* (the data arrived too late for inclusion in this issue).

Welcome to New Members

JANUARY AND FEBRUARY

Daniel and Barbara Drefs

Hillside Avenue (Birdwatching and native plants)

Gail Clarke

Bewdley Avenue (Birds)

Robert Harrison

Hughes Road (Birds)

Doreen Hunter

Bazan Bay Road

Mary Lynn Kavanagh

Meredith Crescent (Birds)

Michael Simmons

Babbington Lane (Birds)

Valerie Hawkins

Alec Road (Birds, indigenous plants, marine habitats and inhabitants)

Ellen Dickinson

Scott Black

Moss Street (Birds)

Nest Observations at Swan Lake

By Geoff Barnard

I've been leading bird walks around Swan Lake for some years. Early last spring I saw an Anna's Hummingbird nest. This is an unusual event at Swan Lake, but the consequences were major. I got the idea of listing the nests I saw, and filling out reports for the British Columbia Nest Record Scheme. The Anna's nest succumbed to predation after the young hatched, but a Rufous built beside the trail at head height just along the path. That nest also succumbed, but she built right on the stub of twig that was left, and raised two young. I was able to record the first egg, the first hatchling, and the day the first one had gone. The next day one of my regular birders saw the mother chase the remaining one away.

She said the apparent violence of the attack was horrifying. The mother drove her bill at the fledgling, and then beat it with her wings. It took about twenty-five minutes for the young one to realize it was time to go!

Eight Bushtit nests showed up, two Robins, five Marsh Wrens each constructing several nests. An active Chickadee in an old Downy Woodpecker hole, two sites with Cedar Waxwings carrying nesting material, a couple of Bewick's Wrens. Just as I felt overloaded, a Tree Swallow started feeding young, and a Violet-Green Swallow was building. While I watched the Chickadee hole, I noticed a pair of Ravens sneaking back and forth overhead, and a few shifts of position revealed that they were already feeding young, at least two, and one still brown. I thought it rather nice of them to commemorate the twenty-fifth anniversary of the Nature Sanctuary by nesting here.

So I made notes, one page, two, three, etc., in tabular form with the dates and type of nest and location. Then I had to invent a code for building, complete, brooding, feeding, carrying fecal sacks, and anything else that happened. My birding for about two months was limited to jogging from one site to the next.

By August I was quite relieved that nothing else was happening, and then on 30th the leaves fell off an Indian Plum, revealing a nest with a fluffy little bird sitting close by. A long wait, and a Cedar Waxwing showed up to feed it and the tinier ones in the nest. Regrettably, this late brood failed to survive. There were no birds to be seen the next day.

Then came fall, and all the report cards for these nests had to be filled in. The sites have all been entered in the site map, so we know where they all were, and we have added a couple of new nest records for the lake.

For 2001, I hope to recruit some people to check and record more details of nesting around the lake. Ideally two to four hours a week at one nest would give more detail of hatching and departure dates, and at some sites more than one species nest can be seen. We don't go off the trails for observations, but it is surprising how much can be seen at a distance.

Anyone interested in helping out?

Tel: Geoff 477-7775 email:gwgbarnard@home.com or

Joan Cowley, Volunteer at Swan Lake

Tel: 479-0211 email:jcowley@swanlake.bc.ca

The Goldstream Artshow (Sept. 14 to Oct. 7, 2001) — Yet Another Chance to Help!

The biennial art exhibit at the Goldstream Provincial Park Visitor Centre would not be possible without the dedicated contributions of dozens of volunteers, artists, and the support of the local community. Yes, it's that time again! In the past, members of the Victoria Natural History Society have volunteered their time to make this show a success. These tireless efforts go towards supporting stewardship activities in the Greater Victoria region through BC Parks and the Habitat Acquisition Trust. If you can support this great cause, please contact the Volunteer Coordinator.

While we're on this topic, the art show committee is seeking a volunteer coordinator. This involves great organizational skills and a working telephone. Some other key volunteers are also needed to help out with advertising/promotions, sponsorship, wine and cheese opening night, etc... Anyone who wishes to be more involved can contact Darren or Claudia Copley at dccopley@island.net (479-6622).

"The Nature of Island Artists" is held at the Freeman King Visitor Centre (in Goldstream Provincial Park) and showcases artists from Vancouver Island and the Gulf Islands. The exhibit aims to increase public awareness of the importance of conserving natural areas through the use of a medium that is accessible to all: art. Approximately eighty artists participate in the show, with a diverse array of styles and media. The Visitor Centre itself provides a spectacular venue, but it is the beautiful artwork that really transforms it. Previous contributing artists have included such well-known names as Robert Bateman, Fenwick Lansdowne, Carol Evans, Mark Nyhof, Sue Coleman, Jim Gilbert, and Lissa Calvert.

Brant Wildlife Festival Big Day Birding Competition Wrap Up

Our heartfelt THANK YOU to all birders who came to participate in Big Day 2000! Our 10th anniversary brought great weather, the best birding weather in many years. The 9:00pm Friday starting was different this year to allow for Owling, which proved to be productive — 5 species in total. We agreed with comments regarding the PV Flats Cup — perhaps better explanation would be in order. Congratulations to all Big Day Winners. May your luck hold through 2000! It seems that everyone enjoyed the new venue for our wrap up and the food was terrific.

Thanks to all our generous sponsors:

Bushnell Sports Optics Worldwide
Seaview Resort, Qualicum Beach
Mid Island Wildlife Watch Society
Blasting Impressions, Parksville
City of Parksville

Thanks also to our caterer:

Black & White Catering & Party Rentals

Species of Note, rare, seldom seen, or early

spring migrants:
Red-throated Loon Northern Pygmy,
Eared Grebe Barred & Northern
Black Swan Saw-whet Owls.
Osprey Pacific-slope Flycatcher
Northern Harrier Tree, Violet-green,
American Kestrel Northern Rough-winged,
Peregrine Falcon Cliff & Barn Swallows
Blue & Ruffed Grouse Mountain Bluebird
Virginia Rail Townsend's Solitaire
Sora Hermit Thrush
Surfbird American Pipit
Rhinoceros Auklet Lincoln's & White-throated
Western Screech, Sparrow
Great Horned,

Totals and Results:

15,000 Scoters at Nanoose Bay
Daily Brant counts: approx. 2,000
High Brant count for the season:
approx. 5,000
Bird of the Day:
White-throated Sparrow
Four Quacks, Victoria
Story of the Day: "Abducted by
Aliens"/Colleen O'Brien of Northern
Hurriers, Sidney
Most species:
116 species Get A Lifers, Victoria
Most Owlly: 3 Owls McDucks
Parksville Flats Cup: 31 species
Slothful Swifts: 146 species
71 birders made up 17 teams
Total species: Parksville Flats Cup,
All teams - 42
Big Day Binocular Winner:
(8x42 Elite Bausch & Lomb)
Bob Houston, Four Quacks, Victoria

#/ Species	Team	#Owls
76	Spring Peepers - Nanaimo	0
76	Stray Feathers - Parksville	0
78	McGee Dees - Victoria	1
81	Albirdees - Port Alberni	0
81	Slothful Swifts - Nanaimo	1
83	The Long & Short of It - Albion	0
83	Four Quacks - Victoria	2
84	Northern Hurriers - N. Saanich	0
91	Rolling Turnstones - Victoria	0
91	Valley Trumpeters - Union Bay	1
97	Plucky Ducks - Victoria	1
97	Surf Scopers - Victoria	3
100	Hawk Owls - Victoria	3
103	McDucks - Alert Bay	3
107	Vagrants - Port Alberni	2
116	Get A Lifers - Victoria	3

PARKSVILLE FLATS CUP

31 - Slothful Swifts
23 - Old Country Twitchers
22 - Stray Feathers

Poster Competition Prize Presentation

The well appointed lounge area of Government House was the scene of a special awards ceremony at 5 p.m., Friday, 12th of January 2001. The VNHS was asked as the representative of the Federation of B.C. Naturalists to join the Lieutenant-Governor Garde B. Gardom and Federal Minister of the Environment, David Anderson in honouring third place winner in the National Shoreline Poster competition, Hannah Valdis Eddy.

Marie O'Shaughnessy Publicity Director, Bob Chappell, Director and F.B.C.N. Representative, joined Tony Embleton, Chair VNHS Green Spaces Project, as representatives of VNHS Our hardworking President, Bruce Whittington, was on vacation at that time and missed out on this special event. Members of Hannah's family were part of the gathering as well as representatives of the Veins of Life.

Marie O'Shaughnessy assisted Minister David Anderson in presenting Hannah with a Shoreline Ambassador certificate, and a tent and sleeping bag donated by Mountain Equipment Co-op. Both the Lieutenant Governor Garde B. Gardom and Minister Anderson spoke in appreciation of the youth of

Canada that help promote a greater awareness of the need for environmental protection, conservation and stewardship. Marie O'Shaughnessy read a letter to the group from co-founders of The Living by Water Project, Sarah Kipp and Clive Callaway who were unfortunately unable to attend.

The National Shoreline Poster Competition that was the focus of this event is one of several initiatives of The Living by Water Project, funded by the Canada Millennium Partnership Program. Its objective was to inspire Canadian youth aged ten to seventeen to get involve in protecting and restoring shorelines, and to encourage them to depict in artwork humans and wildlife in harmony together. Almost 200 entries were received, making judging very difficult due to the excellence of each poster. Hannah Valdis Eddy is seen in the photo below with V.H.N.S. representatives. Following the Ceremony, refreshments were served and a special tour was offered of rooms on the main floor of Government House. This was a special occasion for us all, and a proud opportunity for the VNHS to be represented.



Tony Embleton, Bob Chappell and Marie O'Shaughnessy with Hannah Valdis Eddy.

Summer Volunteer Park Host Opportunity

BC Parks South Vancouver Island District

BC Parks, South Vancouver Island District, is seeking a **Volunteer Park Host for Narvaez Bay Protected Area on Saturna Island**. The posting is from **June 28 - September 4, 2001**. Park host duties are to greet park visitors, assists park visitors to enjoy their stay, recording visitor statistics, and inform and educate visitors about rules and regulations. The park host camp site is located a short walk from the beach at Narvaez Bay and accommodates a trailer and electrical hook-up.

For further information and an application form see the BC Parks website at <http://www.elp.gov.bc.ca/bcparks/involve/get.htm> or contact:

BC Parks
South Vancouver Island District
2930 Trans Canada Highway
Victoria, BC V9B 6H6
Phone 1-250-391-2300 or Fax 478-9211

You are invited ...

to join

David Stirling and Terry & Rosemary Taylor

on the Vancouver Natural History Society's

eleven-day bus tour,

May 17 to May 27, 2001,

to southern Alberta and Saskatchewan.

We will visit the Tyrell Museum (world famous dinosaur exhibits), Head-Smashed-In Buffalo Jump, Dinosaur and Writing-on-Stone Provincial Parks, Grasslands National Park and the Cypress Hills.

Prairie Wild Flowers, Avocets, Prairie Dogs.

Cost: \$1,180, single supp. \$425.

Contact Terry or Rosemary Taylor [604]-228-9966 before March 15.

New Natural History Courses

Here's a chance to support the society while learning a bit more about natural history. These programs will be taught by experienced VNHS trip leaders who have volunteered their time. The proceeds will support VNHS conservation and education activities. Please note the lower prices for members (yet another reason to join!). We are interested in offering other courses but require more leaders to come forward. Please call Darren Copley at 479-6622 if you have any suggestions.

Beginning Birding



An easy introduction to the pursuit of birding for those with little or no previous experience. The emphasis will be on bird identification in the field. We'll start with an illustrated lecture on March 8, 2001 and 6 Saturday morning field trips from March 15th to April 21st. Cost for the seven sessions will be \$65.00 for non-members and \$45 for members.

Take the next step beyond the basics of identification. Our group of local VNHS experts places an emphasis on birding by ear and the identifying field marks of those difficult groups and species. This course includes 8 very diverse field sessions around Victoria led by 8 different leaders. Sessions run on Thursday or Sunday mornings beginning on April 5th. The cost is \$95.00 for non-members and \$65.00 for members. Each session is limited to fifteen.

Beyond Beginning Birding



If you have any questions, or would like to register, call Darren Copley at 479-6622. More detailed brochures will be available in the new year.



**Victoria Natural
History Society**





HAT Tricks

By Andy MacKinnon, President

We at HAT are excited to be a part of the recent conservation successes on southern Vancouver Island. HAT is a supporter of The Land Conservancy's campaign to purchase 3400 acres of land in the Sooke Hills. This was given a tremendous boost by the Capital Regional District's (CRD) commitment of \$3 million over the next three years. We are all hopeful that the federal government will make a major contribution as well. The CRD will also receive a significant parcel of land that was donated to the Nature Conservancy of Canada by Timber West. These initiatives, combined with other projects like HAT's purchase of the Ayum Creek estuary, are all helping the Sea-to-Sea Green/Blue Belt vision to become a reality.

HAT continues to fundraise for the purchase of Laughlin Lake on Galiano Island, with the Galiano Conservancy Association, and Islands Trust Fund. Your donations are welcome — please call the HAT office for the complete story about the Laughlin Lake project.

HAT is pleased to welcome two new directors to its board.

Peter Heron is a Retired Professor of Organizational Theory and Heritage Regional Planning, and a member of the Advisory Planning Commission for the City of Colwood. Peter was previously Western Vice-President of the Canadian Parks and Wilderness Committee and Chief Park Naturalist for Jasper National Park.

Marc Bell is a retired Plant Ecologist and Professor in the Biology Department at the University of Victoria. He was instrumental in establishing the Environmental Studies department at UVic, and is a specialist in landscape restoration.

We have hired two well-qualified co-op students from Uvic to work on our projects. **Tara Todesco** is coordinating "Connecting for Conservation in the CRD". This project, funded by InVOLve BC, will develop a web-based database of conservation groups in the CRD, and also hold a one-day networking forum for these groups on April 21st. If you are involved in a conservation group in the CRD and have not heard about this, please call Tara at the HAT office (995-2428) for information.

Meagan Christie has been hired to work on Phase Three of the Tod Creek Watershed project. Her activities will include coordinating a Purple Martin nest box project on freshwater lakes, and conducting a landowner contact stewardship program with waterfront and streamfront property owners in the watershed. This project has received funding from EcoAction 2000, VanCity Savings, the Victoria Foundation, Oracle Corp., and many HAT donors.

Our Executive Director, **Bruce Whittington**, is presenting a series of slide shows called "From Cockles to Cacti" to residences and activity centres for seniors. This project was made possible by the Willard and Elva Dawson fund within the Victoria Foundation.

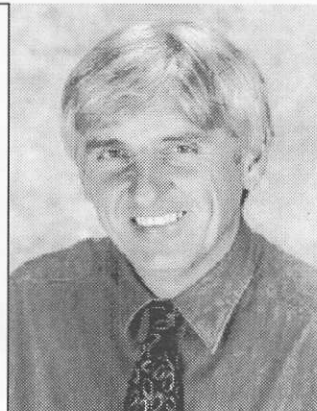
HAT is growing by leaps and bounds, and of course we have noticed some growing pains too. 2001 will be an important year for HAT, and we would like nothing more than to have all VNHS members join us as we grow. Please give us a call at the office if you'd like to know more about our work.



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Zonotrichia*

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perfect nesting site – condo, single
family home or seasonal retreat.*

*Jim Farrell
DFH Real Estate Ltd.
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President's Report

By Bruce Whittington

It was a grim day. A leaden mist moved to fill the gaps between pelting raindrops, and sodden snow. My mission (and I had chosen to accept it) was to count the gulls at the Hartland Landfill site, on the Victoria Natural History Society's annual Christmas Bird Count.

The landfill was once a winter haven for gull-watchers, but recent installations had succeeded in discouraging all but a few hundred of the die-hard birds from lingering near the garbage. Pulling up my hood, I mused that this was not the cordial event that Christmas Bird Counts had been at the start, a century or so ago.

Wiping my nose again, I stopped, my attention drawn to one gull, almost concealed behind a black rock. Its head came up, very pale, and as it shifted, I could see that its mantle was the colour of milky tea; a juvenile, but so pale. A quick look at the rest; they were darker, yes, by a long shot.

The bill was dark, but — (wet Kleenex on the binocular oculars; how many customers have I told not to do this?) — yes, there: the colour was paler towards the base, a dark horn colour.

It turned its head, and raised a wing high. As it drew the outermost primary through its bill, it struck me: the tips of all the primaries were white, almost pure white, but for small dark markings like arrowheads in the centres. This was not a dump-variety, Glaucous-winged Gull.

The scope came out, and the rain stayed. The equipment held up, but still the bird would not move from behind the rock. A deep gully separated bird and birder. With no prospect of a better look, I brought my camera out of its case. Wiping the scope's eyepiece, I placed the camera lens against

it, and focussed. Exposure. One-sixtieth. One-thirtieth. One-sixteenth. Yikes. One-eighth. One quarter of a second. With little hope, I snapped a couple, wiping the mist and rain from the glass in between.

At the end of the day, I went to the books, and pored over the accounts for Iceland Gull. It had to be this, but as certain as I was, I knew it had little chance of being accepted as a valid sighting. A difficult species, seen by a single observer, under poor conditions. An Iceland Gull? No doubt in my mind.

I was surprised to see that my slides showed — an immature gull. A little fuzzy, but there it was, its head in profile. Not a textbook Iceland's head shape, but still quite delicate. A little more research found me measuring eye diameter, and bill length, to determine the ratio. And does it fit Iceland Gull? Glaucous? Glaucous-winged?

The record was submitted, along with the other gull numbers from the landfill. It has also been written up, and the best slide copied, for the VNHS Bird Records Committee, where the sighting will be judged. Will it become an accepted record for Victoria? Will it appear on the new VNHS bird checklist?

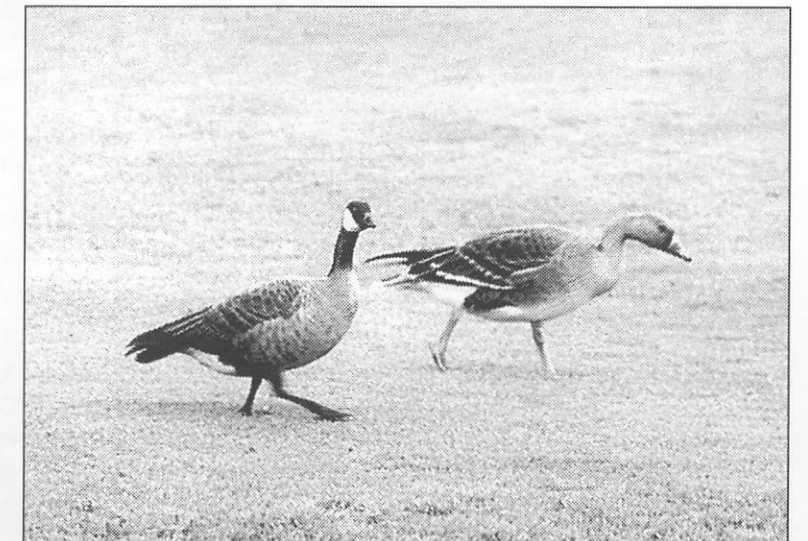
The VNHS is the common thread through all of this, from amateur birder to Christmas count, and from records committee to checklist. It's a measure of how seriously we as naturalists take our pastime. We do it for pleasure, yes, but we go a step beyond. That's why I haven't missed a Christmas Bird Count in nineteen years. And I won't be missing the next one, either.

The Odd Couple

By Bob Houston

These two geese, a Lesser Canada Goose and a Greater White-fronted Goose spent about a month together on the Victoria Golf Course last September; feeding and resting together. There were few other geese around, but if any did appear, the two stayed apart and didn't mix with the newcomers. They eventually disappeared.

I think the Odd Couple aptly described them.



CALENDAR OF EVENTS

REGULAR MEETINGS are generally held on the following days. **Board of Directors:** the first Tuesday of each month (directors' meetings are held at Swan Lake Nature Sanctuary); **Natural History Presentations** (formally known as the General Members Meeting): the second Tuesday at 7:30 p.m., in Begbie 159, University of Victoria; **Botany Night:** the third Tuesday, 7:30 p.m., Swan Lake Nature Centre; **Parks and Conservation Committee Meeting:** the third Wednesday, 7:00 p.m., Swan Lake Nature Centre; **Birders' Night:** the fourth Wednesday, 7:30 p.m., Begbie 159, University of Victoria. **Marine Night:** the last Monday, 7:30 p.m., Swan Lake Nature Centre. Locations are given in the calendar listings. Telephone the VNHS Events Tape at 479-2054 for further information and updates.

MARCH

Tuesday, March 13

Annual General Meeting

Bring your ideas, questions, or criticisms to the annual general meeting. The meeting will not be long or tedious — perhaps only 10 minutes if there are enough of you there to vote! Room 159, Murray and Anne Fraser Building (ex Begbie), UVic, 7:30 p.m.

Tuesday, March 13

VNHS Natural History Presentation

Natural History Of Fossils Of Vancouver Island

Vancouver Island has a fascinating natural history in the form of fossils, evidences of past life. Come to an illustrated talk by **Thor Henrich**, a new member of the VNHS and current Chair of the Victoria Palaeontology Society. Emphasis will be placed on marine animals and terrestrial plants of Upper Cretaceous times (80 million years ago), and on the geological events which led to their preservation. Thor will include topics of interest to marine biologists, birders, and botanists. We'll see you at 7:30 p.m., Room 159, Murray and Anne Fraser Building (ex Begbie), UVic. Bring a coffee mug and a friend; non-members are welcome.

Thursday March 15

Marine Birds

Did you know that murres can dive to 180 metres? Do you know how they can do that? Would you like to know the truth about wettable cormorant feathers? Marine Birds is a course for naturalists and enthusiasts. Learn where to find and how to identify marine birds. Discover fascinating secrets about how they live and feed. The emphasis will be on unique and interesting biological and behavioural information that will capture the imagination of both amateurs and professionals. The course is instructed by **James Clowater**, an ornithologist specializing in the behavioural ecology of marine birds. Sessions begin on March 15, 2001, meeting Thursdays 7 - 9 p.m. at Swan Lake Nature House. Cost is \$70.00 for five 2-hour sessions. An optional 3-hour field trip may be included for an additional cost depending on participation and charter fees. Call Swan Lake to pre-register (250) 479-0211.

Saturday, March 24

Birding at Rithet's Bog

Join **Marie O'Shaughnessy** for a birding walk around Rithet's Bog. There should be swallows around, and perhaps the first Rufous Hummingbirds returning to spar with resident Anna's Hummingbirds. Meet at 8:00 a.m. on Dalewood Lane (Just off Chatterton Way in the northwest corner of the bog). Call Marie at 598-9680 for more information.

Wednesday, March 28

Birders Night

Murray and Anne Fraser (ex Begbie) 159, UVIC. **Kevin Storey** of the Wildlife Branch will present a slide illustrated talk on the program to re-establish the Purple Martin in British Columbia — *Spring Sounds of Success*. Join us to learn what you can do to attract this communal nester to your area. Everyone is Welcome. Bring a friend, a novice birder and your binocular.

APRIL

Tuesday, April 10

VNHS Natural History Presentation: Bob's Funniest Home Videos (of the Wildlife Kind) Owls, Swallows, Salmon and maybe Eagles: Video Bloopers of the Wild Kingdom

Bob Chappell, engineer extraordinaire, presents wildlife footage of all kinds. Bob has designed and built video camera systems in nestboxes, up trees, in a barn, and even in the Goldstream estuary. Fortunately for us he spends hours editing the miles of tape down to the juicy bits. Bob has footage of things never seen before by human eyes. Come discover what goes on when you're not watching! The meeting starts at 7:30 p.m., Room 159, Murray and Anne Fraser Building (ex Begbie), UVic. Bring a coffee mug and a friend; non-members are welcome.

Saturday, April 14

Birding Bald Mountain on Lake Cowichan

Join **Alan MacLeod** and **Jan Brown** for a birding hike to spectacular Bald Mountain on Lake Cowichan. Mid-April is prime time to hear Blue Grouse and look for migrating Mountain Bluebirds. Gray Jay is regularly found here; Golden Eagle and Townsend's Solitaire are possible, and a good show of spring wildflowers is guaranteed. Bald Mountain is not for the faint of heart or unfit. Come equipped with good hiking boots, prepared for a 500 metre climb over rough, sometimes very steep terrain, and ready to feast on magnificent views over Lake Cowichan and surrounding ranges. Meet at the Helmcken Park and Ride at 5:30 a.m. or at the Kaatza Forestry Station Museum parking lot (125 A South Shore Road, Lake Cowichan) at 7 a.m. Bring lunch, sufficient water, and plan to be on the mountain for 6 hours or longer. For details phone Alan or Jan at 382-3854. **Trip will run Sunday April 15 if it rains on Saturday.**

Sunday, April 15

Spring Wildflowers around Cowichan Lake

Come along with **Marilyn Lambert** for a wildflower exploration of the Cowichan Lake area. This time of year we expect to see some amazing displays of both pink and white fawn lilies, trillium, and wild ginger. Meet at the Helmcken Rd. Park-and-Ride at 9:00 a.m. Phone Marilyn at 477-5922 for more information.

Saturday, April 21

A Natural History Walk in Uplands Park

Join **Joy and Cam Finlay** for a guided walk in Uplands Park to see spring wildflowers, birds and butterflies. Meet at Cattle Point at 8 a.m. Call Joy or Cam at 479-9833 for more information.

Saturday and Sunday, April 21 and 22

Gardening for Wildlife

A Native Plant Gardening Sale and Demonstration

A selection of over 2,900 native plants (more than 100 species) are available at this special weekend event, as well as seeds, books, bird feeders and nesting boxes. Workshops, presentations, demonstrations and displays on gardening with native plants and developing wildlife habitat in urban settings are included in the admission price. A special presentation will be given by **Bill Merilees**, author of "The New Gardening For Wildlife." Swan Lake Christmas Hill Nature Sanctuary, 3873 Swan Lake Rd., Victoria. 10:00 a.m. to 3:00 p.m. each day \$3.00/day — \$5.00/weekend pass. Friends Members Free. Phone: 479-0211. Contact: Terry Morrison, Ann Scarfe. The Swan Lake Christmas Hill Nature Sanctuary is a Registered Charitable Organization.

Sunday, April 22

Wildflowers and Birds on Jocelyn Hill

Join **Carrina Maslovat** (botany) and **Rick Schortinghuis** (birds) for a memorable hike up Jocelyn Hill. At this time of year Jocelyn Hill can be a good location for Townsend's Solitaires. There is an amazing diversity of wildflowers in bloom and the panoramic views from the top are breathtaking. Pack a lunch and a drink, and be prepared for a strenuous hike. To sign up for this hike please call Rick at 642-3596 or Carrina at 592-2733.

Sunday, April 22

Camas Day Walks — Beacon Hill Park

9:00 a.m. only — Join **Tom Gillespie** on a *Birding Walk*. 11:00 a.m. and 1:00 p.m. — *Archaeology Walk* with **Grant Keddie** of the Royal BC Museum. *Legends of the Songhees Walk* — leader TBA. *Wildflower Walks* with **Adolf Ceska** and **Chris Brayshaw**. For more information contact: Tom Gillespie (VNHS) 361-1694 or Helen Oldershaw (Friends of Beacon Hill Park) 592-6659.

Wednesday, April 25

Birders Night

Our popular spring Members Night will begin with a bird identification quiz by **Marie O'Shaughnessy**, followed by brief slide or overhead presentations by other members, including perhaps you. If you can contribute, please call **Bryan Gates** at 598-7789 or the Rare Bird Alert at 592-3381. Everyone is welcome. Bring a friend, novice birder and your binocular.

Saturday, April 28

Birding Mt. Douglas Park

Join **Kevin Slagboom** in searching for spring arrivals and the emerging wildflowers and butterflies on the slopes of Mt. Douglas. There will be some climbing so bring good footwear, a snack, and some water. Meet at the main parking lot at Mt. Douglas at 8:00 a.m. Phone Kevin at 658-0940 for more details.

Saturday, April 29

Wildflowers on Nanoose Hill

Join **Hans Roemer** for a guided walk up Nanoose Hill (located on Nanoose Harbour, just north of Lantzville) to see the beautiful displays of spring flowers. Be prepared for a strenuous hike and be sure to pack a lunch and drinking water. Meet at the Helmcken Park and Ride at 8 a.m.



Young Naturalists

VNHS is in the process of arranging a youth program (youth to be accompanied by their parent or guardian). Anyone interested in volunteering some time to work with this group please contact **Sheila Mosher** at 652-3502.

Represent VNHS on a committee

The Parks and Conservation Committee of VNHS are looking for a volunteer to sit on the Rithet's Bog Management Committee.

Contact **Sheila Mosher** at 652-3502 for more information.

R.R. 3, Ladysmith, B.C. V0R 2E0
(250) 245-7422

Expires: Dec-01

Claudia and Darren Copley
675 Beaver Lake Road
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TAKE FLIGHT

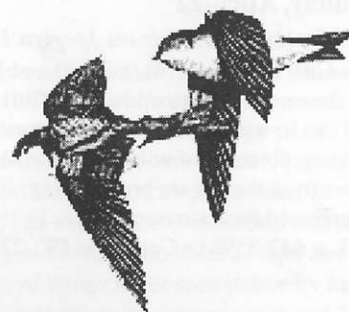


The essential guides to British Columbia's Butterflies and Birds...

The Birds of British Columbia Volume 4 - Passerines

Wood-Warblers through Old World Sparrows

R. Wayne Campbell, Neil K. Dawe, Ian McTaggart-Cowan,
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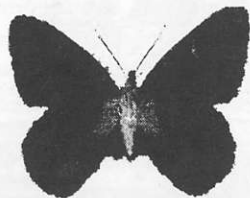


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