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Members are encouraged to submit articles, field trip reports, birding and botany notes, and book reviews with photographs or illustrations if possible. Photographs of natural history are appreciated along with documentation of location, species names and a date. Please label your submission with your name, address, and phone number and provide a title. We request submission of typed, double-spaced copy in an IBM compatible word processing file on diskette, or by e-mail. Having copy submitted digitally saves a lot of time and work for the publications group and we really appreciate the help. If you have an obscure or very old word processing program, call the Editor, Claudia Copley, at 479-6622, or save the text in ASCII format. Photos and slides, and diskettes submitted will be returned if a stamped, self-addressed envelope is included with the material. Digital images are welcome, but they need to be a very high resolution.

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# Contents

2
4
(
2
(
(
2
4
(
(
1 1
~ 4

#### COVER PHOTO:

These mushrooms have come up in a small patch in Rich's yard for several years now and he has not seen them anywhere else. He qualifies this by mentioning that they are so tiny and dark that it would be easy to miss them. He took 56 pictures of them, over a few days, in an attempt to get one that he liked. On the last day, when he had everything set up perfectly, the fly showed up in just the right profile and position to grace the photo. That's when he knew that he had the photo he wanted! (*Editor's note: Although I still have no idea what the mushroom is, the fly on it is a member of the family Mycetophilidae – the fungus gnats - of course! They feed on mushrooms as larvae.*)

Photo: Rich Mably

As part of this year's celebration of our 60th anniversary, the Society did something completely new: we held a photo contest to showcase the skill of our members. The organizers of the event, Donna Ross, Marilyn Lambert, Marie O'Shaughnessy, and Veronica Druce, are to be congratulated for a job well done. Their hard work paid off: the exhibit, hosted by the Goldstream Nature House, looked terrific and was enjoyed by visitors all week. Swan Lake staff and volunteers ably handled submissions, and the difficult task of judging was done by several independent volunteers. This coordinated effort perfectly illustrates the point made by Bruce Whittington in his article summarizing the VNHS in the 1990's to the present day (page 6): we work well with others!

I had an opportunity to see all the entrants, and appreciated the diversity of perspectives (pun intended!). You are a talented group, and I'm sure everyone who entered the contest welcomed the opportunity to demonstrate their ability. In the end, however, someone had to win. Because there were three categories, the glory is shared among a number of individuals. The categories and winners are as follows:

#### Flora

1st – Jo Finlayson – Autumn Under a Garry Oak 2nd – Lyndis Davis – Bracket Fungus 3rd prize – Bruce Whittington – Nootka Rose Fauna 1st – David Pretty – Male Wood Duck 2nd – David Pretty – Heron in the Breeze

3rd prize – Bob Hooper – Anise Swallowtail Larva Habitat

1st - Bob Hooper - Morning Mist

2nd – Marie O'Shaughnessy – Tranquil Moments at Witty's Lagoon

3rd prize — Bob Hooper – First Frost

The overall Grand Prize winner was Bob Hooper for his piece entitled *Morning Mist*, and the People's Choice Award went to David Pretty for *Male Wood Duck*.

Congratulations to all the winners, and thank you to everyone who entered the contest and/or helped organize it! Check out the winning submissions on our website: www.vicnhs.bc.ca, and watch for entries being used in future issues of the magazine.

Claudia

# **President's Message**

Tt's hard to believe that the year, VNHS's 60th, is almost over. We hope you have enjoyed the events and articles L commemorating this important milestone. A note of appreciation goes out to all who made this year special the field trip leaders, event coordinators and the members who participated. The highlights of the year certainly include two days filled with activities: the 60th anniversary picnic held in June and the multi-field trip day held in September. It was gratifying to see botanists, birders, marine enthusiasts, insect seekers and geologists enjoying a wide variety of field trips in a single day. As a result of these successes, the Board has decided to hold a picnic again next year. This picnic will be the focal social event for 2005, replacing the banquet normally held in February. Several members have told us the banquet was becoming difficult for them due to the expense and the need for evening driving. We hope a picnic will allow more people to attend. Details on the

2005 picnic will be available in the new year.

As this year comes to an end, VNHS will be looking to the future. In particular, we'll be developing our role in nurturing the next generation of naturalists. Victoria is blessed with many excellent resources for children and families: Swan Lake Nature Centre, Goldstream Nature Centre, CRD Parks, and the Young Naturalists' Club, to name a few. However, as schools experience funding cutbacks and tightening of the curricula, there are fewer and fewer opportunities for those children without "naturalist" parents to learn to value their natural surroundings. VNHS will be working with other groups to find a way to show students that their environment is worth learning about and loving. There will be several calls for assistance. I encourage all VNHS members to do what they can to keep our love affair with nature going for another 60 years.

Ann Nightingale



Participants in the Multi-Field Trip day held out at East Sooke Park this past September. Photo: J. Cam Finlay.

# September 25, 2004: The Big Field Trip At East Sooke Park

By Joy Finlay

The kettle boiled! On top of Beechey Head, the hundreds of Turkey Vultures were awesome, as always. In between sightings we got acquainted with other "hawk-watchers" from near and far.

All this is hopefully to be expected, but when I asked someone if the big block of cement we were both leaning against was a remnant from war time and gun placement, it was a real bonus. Now I learned why the path we walked followed an old road, right to the base of our "hawk-watch" perch. Meeting Joan was a real extra: a terrific addition to an excellent day of natural history events.

Joan grew up on Aylard farm. She and her siblings each had a calf to look after and 12 beaches to explore. The farm was leased to Gladys and Bert Drew for 30-40 years as a dairy and chicken farm. The milk was picked up three times a week where Becher Bay Road meets East Sooke Road Coming from a farming background in Manitoba, I wondered how they kept the milk cans cool with no electricity and no cold winters to make ice. In Manitoba we had an ice house to keep the cream cans cool until shipping day. My query brought an obvious answer: they kept them in the cool springs nearby.

The Capital Regional District purchased the land for East Sooke Park in the early 1970's so it has been a park for almost as many years as the VNHS has been in existence. There is a big story in this big park!

I then hurried off to join the geology walk. Wow, those big dark boulders on the beach are gabbros with feldspar and pyroxene crystals shinning in the sunlight. We were standing on ocean crust that formed 63-50 million years ago. If rocks could talk, what a story these rocks could tell!

The day was just a sampler, but what a good one. Let's do it again and again. There are sights to see and so much history to delve into.









A "kettle" of Turkey Vultures. Photo: Ann Nightingale

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# From the '90s to a New Century

By Bruce Whittington

s the 1980s slid into the 1990s, life for the VNHS continued apace, but there was change in the wind. The old ways continued; it's true. The *Victoria* Naturalist from that decade is full of familiar field trips, and stories of the travels of members to exotic places. There is poetry and humour, and an impressive store of art and photography by the members.

As VNHS approached its 50th anniversary in 1994, the society became acutely aware of change in the natural world around us, a more rapid and worrisome change than what our society was familiar with. More and more, we began to learn of the threats of introduced species: purple loosestrife, bullfrogs, grey squirrels, and even zebra mussels. We learned, too, about declines in threatened species like the adder's tongue fern and the Purple Martin, and the threatened Garry Oak ecosystem that so quintessentially says "home" to us. Our members rallied, not once, but in many ways, to help sustain the natural world that had brought us all together.

The VNHS Parks and Conservation Committee took on an enhanced and increasingly important role as our natural world began to succumb to relentless development pressure. Under the leadership of Tony Embleton, the committee tackled many projects. Environmental monitors followed events in their own areas, and PACS also began to use members' skills to assess and inventory sensitive habitats in advance of development. In 1992, a survey of Martindale Flats was completed - the results of which influenced decisions about widening Lochside Drive, ten years later. Michael Carson undertook bird surveys at Blenkinsop Lake, Viaduct Flats, and Rithet's Bog.

Out of the PACS inventory projects grew the Greenways Inventory Committee. Led by Embleton and Norm Mogensen, over the years it has grown, surveying many significant habitats on southern Vancouver Island. Today it is called the Green Spaces Project, and it has won environmental awards for its work.

VNHS members have contributed to many other projects like monitoring eagle nests, Camas Day and the Esquimalt Lagoon Stewardship Inititative.

In other conservation initiatives, VNHS played a lead role. In 1993, the Society hosted the Ensuring Liveability in Victoria conference, which focused attention on the need for habitat protection, and in 1995 VNHS established Habitat Acquisition Trust, a dedicated organization with the mandate to do such work.

In 1993, VNHS volunteers began banding migrant songbirds in a project that became a major migration monitoring site in Canada. In 1999, the project took wing under its own organization: the Rocky Point Bird Observatory Society.



With a new emphasis on conservation, one might think that the face of VNHS had changed. The face was the same, but was now perhaps showing some of the signs of maturity. The old face still shone through in what VNHS does best - introducing people to nature.

Conservation work, whether it is done by VNHS or its "offspring", costs money, and our society has put new energy into a variety of fundraising projects. A new tradition was begun by Dannie Carsen with the Couples Count, held in celebration of ... couples, on Valentine's Day weekend, of course. Raffles have become regular fundraising events, with proceeds from these and other efforts generally being used to support conservation work.

The Victoria Naturalist continued in its dual role. It was the medium for coverage of upcoming events, and also accounts of how some of those events unfolded. Many issues were laden with numbers, the results of Christmas Bird Counts, Spring Counts, and Butterfly Counts. These were less stories about the events themselves, but more a part of the magazine's other side: that of natural history journal.

All of these data, having gone into print, are now available to the world of amateur naturalists and professional scientists, to further the efforts to protect our wildlife. The data came from other sources too. For example, "everyone" knows that House Sparrows will kill Violet-green Swallows and take over their nest sites. But Orval and Joan Oppertshauser took the time to write to the magazine, putting their observations into print, and thus into the record.

The magazine also published many superb articles about the natural history of our region. Some introduced us to species that many did not know existed, like freshwater jellyfish, and the lake lamprey. Others covered more familiar subjects, like Heather Waye's articles about the Western Garter Snake. Waye was a recipient of the Alice M. Hay scholarship which VNHS established in 1993 through a bequest from the Hay estate.

Several editors kept the quality of the magazine high

through this period, with Warren Drinnan devoting a remarkable eight years to the job. The Society, however, recognized both the demands on the editors, and the benefits of the electronic age, and began to use the services of desktop publishers. The early work of Robert Allington has been continued since 1996 by Frances Hunter. The quality of the magazine speaks for itself.

With a new emphasis on conservation, one might think that the face of VNHS had changed. The face was the same, but was now perhaps showing some of the signs of maturity. The old face still shone through in what VNHS does best - introducing people to nature.

Our strong program of field trips and evening programs has continued to grow. In addition to local outings, there are trips further afield to places like Hurricane Ridge, and Boundary Bay. Surrounded by water as we are, our society spends a lot of time learning about marine life. Many writers contributed articles to the magazine under the byline of "The Pacific Octopus". Organized programs became regular events in 1995 with the first Marine Night. Phil and Marilyn Lambert are still bringing excellent speakers to an enthusiastic crowd.



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The VNHS bird checklist was updated in 1994, and again in 2001, the result of thousands of observations by our members. A digital VNHS appeared on computer screens too, at www.vicnhs.bc.ca; a new way to reach out to existing and new members alike.

So VNHS continued the range of activities that brought it into the 90s, but realized that there was more that the society and its members could do. The response was a new flexibility. Take on the roles that we are capable of doing; share the load with other conservation organizations where we can enhance our combined strengths; foster the growth of new organizations to handle tasks that are beyond the mandate of VNHS.

It is a healthy organization that sees itself not in isolation, but in the larger context, and it is with this selfassurance that VNHS has entered the 21st century, and its seventh decade. It has been a remarkable sixty years, certainly something VNHS can be proud of, and we can be proud to be a part of it. The hard work, really, has already been done; the next 60 years should be easy.

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#### CHRISTMAS SPECIAL for ALL VNHS MEMBERS

The Victoria Naturalist Vol. 61.3 (2004) 7

# **Movement Patterns of Song Sparrows**

### By Amy Wilson

urrently, research is being carried out in the Southern Gulf Islands focusing on bird conservation. We are interested in the movement of Song Sparrows (Melospiza melodia) among the islands. Along the coast, many Song Sparrows are resident, meaning that they breed and over-winter in the same area, allowing for detailed population studies. For more than thirty years, Song Sparrows have been colour banded as nestlings on Mandarte and several smaller islands in the vicinity. By giving each bird a unique colour band combination, when we re-sight this bird, we know its background, such as where it was born and who its parents are. Yet once birds leave the islands which we monitor, unless they are sighted, their fate is unknown. Therefore data that would be extremely helpful to this study would be any sightings of colour-banded birds. These valuable observations would let us know just how far a Song Sparrow disperses.

Birds are given three colour bands and one metallic band; these bands are assigned in a unique order, allowing each bird to be individually identified upon sight. Each colour band is 4 mm tall and made of a light plastic. Colours that we use are: light blue, dark blue, green, yellow, red, purple, orange and white. You could also see birds with bands which are horizontally striped. If the colour combination is visible, then the real key is to determine which band colours are on which leg and which band colour is above or below, as illustrated in the figure. A and B are not equal and are distinguished by order: A has the blue over the red band on the left and the metal band is over the white band on the right and in **B** the red is over the blue on the left and the white band is over the metal band on the right. Order **B** is also illustrated in the photo.

Lastly, colour bands can be difficult to see and is it also extremely helpful to know if colour-banded Song Sparrows were seen, (even if the exact colours were not visible), because then we have some idea of the dispersal range. Any reports or sightings would greatly appreciated!

I can be contacted with any sightings or any questions at: song.sparrow@gmail.com

Amy Wilson PhD Student Centre for Applied Conservation Research 4061-2424 Main Mall, Forest Sciences University of British Columbia Vancouver, BC V6T 1Z4

Phone: 604-822-1256





### By Peg Frank

The Friends of Ecological Reserves (FER or simply Friends) is a volunteer-based environmental organization originally created in the early 1980's to promote the interests of the ecological reserves program in British Columbia. We do this by raising public awareness of

- the program and by raising funds to be used to:
- 1. support researchers in and around ecological reserves;
- 2. support wardens and the warden function within ecological reserves;
- 3. prepare and circulate a regular newsletter
- 4. educate the public regarding the important features of ecological reserves, including plant and animal conservation.

We are now also finding ourselves dedicated to ensuring that those areas set aside in legislation as reserves for representation of provincial ecosystems and protection of species and habitats are acknowledged in provincial planning strategies as areas needing continued protection.

About 150 ecological reserves are scattered throughout the Province. This number changes when new reserves are created and when federal protection encompasses provincial reserves, such as the southern ridge of Saturna Island and Brackman Island, which now fall under the new Federal Marine Park. Ecological reserves provide protection for pine forests, bird colonies, basalt columns and riparian communities, among other important features or ecological communities. All reserves should have a local warden who makes regular trips to the reserve and an annual report to the Ministry responsible for the reserves, but many are without. Please contact us if you live near a reserve and would enjoy volunteering as a warden.

While membership in the Friends of Ecological Reserves society is open to anyone for a small annual fee, the number of members has seldom exceeded 200. This is likely because much of the membership plays an active role in Friend's annual activities. Many Friends are wardens, charged with ensuring stewardship of each of the approximately 150 Ecological Reserves. Some Friends sit on the Board and make decisions about research, annual priorities and field trips, among other administrative duties. Other Friends provide educational support on field trips. We have a wonderfully informative newsletter, which is sent to all members three times a year by regular post and is also posted on our web site.

Over the years, Friends have made contributions to many of the B.C.'s special places. The Khutzeymateen wilderness was one of the first areas where Friends focused its support.



Following that, wilderness and old growth forests on Vancouver Island, particularly intact watersheds, became a focus of research and advocacy work. Currently, the central coast has received much needed attention. At times the political climate has been favourable to establishing new ecological reserves, and Friends joined forces with other groups to promote protection of areas such as the Klaskish, Robson Bight, the Galiano bog and grasslands in the Chilcotin.

In the public education arena, Friends have created four poster/placemats that reflect the species and ecology of the province's Douglas Fir forests, Garry oak meadows, grasslands and alpine meadows. We also encourage members to participate in annual educational field trips to existing reserves and areas that represent ecosystems similar to those found within the province's protected ecological reserves. We are always available for public lectures on ecological reserves and the importance of the province's reserves, as well as the role that BC plays in the global protection of representative and unique ecosystems.

One of Friends greatest pleasures is to provide financial support to scientific research projects on, around and about ecological reserves. We do this through a simple annual application and granting process. Recently we have supported Dr. Jane Watson with her ongoing sea otter research; Dr. Tom Reimchen and Katie Christie and their coastal fish/forestry/ ecology studies; and Erica Wheeler and her research on the rare slim-leafed onions. We have also supported research on the dynamics of Garry oak ecosystems and protected areas in the south Okanagan. Friends also provide funds for annual Vicky Husband Scholarships to students enrolled at the University of Victoria's Environmental Studies program.

This year is a very exciting one for Friends because we have a co-op student working with us to create a State of the Ecological Reserves Report. Morgan MacCarl, from the University of Victoria biology department, will take the time to look at each ecological reserve, its original goals and current management plans, as well as the provincial system as a whole. She will look at information available in government files and from wardens, as well as what research has been done and where more information is needed. Our crystal ball tells us that this report will provide information that will assist Friends and government in making decisions about where and what management activities and research are of the highest priority and where to best advocate for limited resources and what to support within our organization: research, additional wardens, public awareness, etc.

While ecological reserves have legislation which provides for their protection, Friends are concerned about activities around the reserves and the current de-emphasis on ecological values and long-term sustainability or the integrity of individual reserves and the system as a whole. We look towards a more informed and brighter future. For more information about the Friends please visit our web site at www.ecoreserves.bc.ca. Editor's note: This article is reprinted from Volume 46, Number 5 of the Victoria Natural History Society's newsletter (March/April 1990), as part of our 60th anniversary celebrations. One article from each of the last six decades appeared in each of the six issues of our newsletter produced in 2004. Enjoy!



# **Parasitism in the Flowering Plants**

### By Job Kuijt

The question of what is, and what is not, a parasite, is a difficult one in both the animal and plant worlds. In the animal world especially, every biologist seems to have a pet concept of what parasitism is all about, and the concept strains to contain such situations as we find in the "social parasitism" of the European Cuckoo and our cowbirds, the life of the "parasitic" jaegers, mosquitoes, ticks, infectious protozoans, and the highly reduced crustacea of the genus *Sacculina*. In plants, similarly, there are few, if any, common denominators. Is the fungus partner of a lichen parasitic on the algal component? Or is it the other way around? Or perhaps both ways? Since I am focusing on the parasites among the flowering plants, I can take some shortcuts in this morass by defining parasites in that group on the basis of the specialized structures that such plants use to penetrate living host tissues to provide anchorage and a source of water and nutrients. This diagnostic structure is called the **haustorium**. In other words, I am limiting the concept of parasitism in the higher plants to those that have haustoria.

Paradoxically, this is not to deny that parasitism of various sorts does occur outside this definition. Normal plant life cycles in most groups contain one or more phases that are obligately parasitic on each other. In the seed plants, for



Western Dwarf Mistletoe (Arceuthobium campylopodum f.campylopodum, Family Viscaceae), parasitizing a Lodgepole Pine (*Pinus contorta*) in Lund, B.C. (Right) Close up showing fruit. *Photo Credit*: Donalda S. Redford. Photos provided by Sharon Godkin.

example, the developing embryo is parasitic on the surrounding tissues. Obviously, to refer to all seed plants as parasites because of this makes no sense. A definition based on the haustorium also leaves out carnivorous plants like sundew, bladderwort, pitcher plants, and others, for that mode of life is a very different one.

Even many professional botanists have difficulties accepting that such "obvious" parasites as Indian Pipe (Monotropa) and Pine Drops (Pterospora) are, in fact, not parasites at all. Such plants are highly advanced saprophytes that have lost all chlorophyll and obtain organic materials from decaying humus via the collaboration of a mycorrhizal fungus; but there is no sign of any haustorial organ on the part of the vascular partner. The same thing is true for the coralroot orchids. The argument that the mycorrhizal combination is, after all, a form of parasitism once again backfires, even though there is much truth in it: it turns out that the vast majority of vascular plants have mycorrhizal associates, and calling them all parasites on their fungus partners destroys the usefulness of the concept altogether. If we follow this line of argument we will have to call all conifers, blueberries, and alders parasites, and we would have to invent a different term for plants with haustoria.

Another item that needs to be clarified is that of **epiphytism.** Plants that grow on others are not necessarily parasitic even if, as sometimes is the case, their effect is one of smothering the "host's" branches. The so-called Spanish moss of the deep South (not a moss at all, but a relative of the pineapple and not to be confused with the long, pendulous lichens in B.C.) and many of its tropical relatives are such epiphytes, as are vast numbers of orchids and ferns. They simply use the tree for support, but do not penetrate its tissues or take materials from it. Some of our coastal ferns and other plants behave the same way.

The haustoria of true parasites range in size from a fraction of a millimeter to a foot or more in some tropical mistletoes. In some of the more advanced groups such as broomrapes and mistletoes, the tip of the seedling's radicle (*young root*) transforms itself into a haustorium when it comes into contact with host tissues. In others, such as all the herbaceous parasites of the figwort and sandalwood families, haustoria are formed only as small, lateral organs of young roots. The single (primary) haustorium may sometimes become quite large; the multiple (secondary) haustoria are frequently ephemeral and replaced every growing season, even if the plant is perennial. Some of our broomrapes have both primary and secondary haustoria. In one of our parasitic groups, the dodders, the haustoria are formed from the twining stem only, as there is no root system at all.



Some representative haustoria (host tissues shaded): (1) Young broomrape (*Orobanche*) plant, its main haustorium below the inflorescence bud and numerous additional, small haustoria on the slender roots. (2) Paintbrush (*Castilleja*). (3) Haustorium of groundcone (*Boschniakia*) as seen in longitudinal section, showing vascular connection to a salal root. (4) Bastard toadflax (*Comandra*). (5) A mature haustorium of dodder (*Cuscuta*) in longitudinal section, showing vascular connections to vascular tissues of the host stem below.

The internal structure of haustoria is sometimes rather simple, as in some broomrapes and in many parasitic figworts such as the paintbrushes. In those cases, it seems mostly a matter of tapping into the host's xylem tissues which carry water and minerals; a direct xylem bridge always seems to be present in such cases. That no specialized connection is present for the phloem (sugar-conducting tissue) seems reasonable for the green hemiparasites, which are photosynthetic themselves. The fact that many (or most) holoparasites (for example, our groundcone, *Boschniakia*) have no real phloem connection, however, remains a continuing puzzle and we do not know how, or via what tissues, the sugars that are necessary for the parasite's growth are transported from the host.

In some other parasites, like our bastard toadflax, the haustorium turns out to be one of the most complex organs in the plant world; its development being only poorly understood. For example, a glandular cavity is formed in the centre which is a continuing puzzle to students wrestling with a functional explanation. Little, if any, of this complexity is visible from the outside of this simple-looking, saddle-like structure.

One further development has taken place in the dwarf mistletoes, the only native mistletoes occurring in Canada. When the haustorium penetrates the tree's living tissues it fragments immediately, growing into delicate, branching strands in various directions, and invading an ever-expanding part of the host stem. The haustorium in such cases is no longer a single, unified organ. This **haustorial system** has some of the characteristics of a fungus mycelium. At certain times, this haustorial system produces mistletoe shoots that emerge from the host bark. Zoologists acquainted with the remarkable crustacean parasite *Sacculina* will be struck by the close parallel, as in both cases the parasite consists of nothing but a fragmented, absorptive system internal to the host and the reproductive structures that emerge from it.

In what groups of vascular plants, then, has parasitism in this sense evolved? Probably in about nine different places in the system – surprisingly, all in the dicot group of flowering plants. There are no parasitic ferns, fern-like plants, conifers, or even monocots. We do not know why that is so, for monocots otherwise have been at least as adventurous evolutionarily as dicots (except for the striking fact that there are no carnivorous monocots, either). In the dicots, a number of parasitic families are only found in tropical and subtropical regions, some representing fantastic, mushroom-like or otherwise extraordinarily reduced plant forms.

Does a parasitic plant kill its host? There is no simple answer to that question but, generally, the answer is: no, it does not. The host may be seriously weakened or stunted and this, in turn, may make the host vulnerable (or attractive) to secondary parasites or other attacking organisms. Dwarf mistletoe infections, for example, may attract bark beetles. The more direct effect of the parasite depends upon the intensity of attack and the size and vigour of the host. A single mistletoe plant on a large tree has no measurable effect; but many mistletoes on a small host may well cripple and deform it for life and prevent it from reproducing. Biologically, of course, it would make little sense for a parasite to kill its host; that would be a form of suicide.

The vast majority of parasitic flowering plants are totally unimportant economically, having evolved a balanced parasitism with native plants in their natural surroundings. But in cultivated fields over large stretches of the Old World, some extremely serious parasitic angiosperms exist. A couple of the broomrapes of the Mediterranean are in that category, and can utterly devastate crops of various legumes and others. Witchweed, especially in the semi-arid African Sahel, makes cultivation of desperately-needed millets and other crops nearly impossible over vast areas. A broomrape in Southeast Asia wreaks havoc in sugarcane fields. In the Pacific Northwest, the dwarf mistletoes are serious forest pathogens, decreasing both yield and quality of many conifers. Nevertheless, it needs to be said that such instances, on the whole, are highly exceptional.

The rapid destruction of tropical forests will also leave its mark on the world of parasitic flowering plants. The largest flower in the world, a Sumatran species of *Rafflesia* nearly a metre in diameter, may already have been extinct for decades, and all other species of this extraordinary genus are seriously endangered. It is almost certain that some mistletoes, being obligately dependent upon trees, are already extinct and that many others are sure to follow in rapid succession. The glorious rare Andean mistletoe with brilliant red and yellow tubular flowers nearly a foot in length, which I saw in southern Ecuador four years ago, may never again be seen by a specialist. These and numerous other exotic parasites are, of course, only some examples of the vast biological diversity going up in smoke in the tropics every day.

In B.C., there are five groups of flowering plants that are parasitic: one subfamily of the figwort family (Scrophulariaceae), the broomrapes (Orobanchaceae), the dodders (Cuscuta), the sandalwood family (Santalaceae), and one of the mistletoe families, nowadays called Viscaceae. These represent modes of parasitism that are very different, and I hope to write a brief account of each of these in the future.

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# Deer? Oh Dear...

By Sharon Godkin

hat do we have here? I wondered as I shipped the oars and lifted my binoculars. My attention had been caught by a patch of reddish buffy colour in the narrow strip of green vegetation sandwiched between the granite cliff and the beach of jumbled boulders. Yes, it looked like a deer. I was aware that our coastal Columbian Blacktail deer (*Odocoileus hemionus columbianus*) normally has a light reddish buffy summer coat, and that some populations are lighter than others; but something seemed odd about this animal.

Cautiously I rowed as close to the shore as possible and again trained the binoculars onto the obliviously browsing cervid, It was standing hip deep in the fringe of salal above the high tide drift, facing directly away from me, and browsing the shoots of a small Arbutus tree growing against the base of the cliff. I noticed a small tuft of cream hair projecting from its left hip area, and wondered if it was the final spot of a fawns coat to moult; being a current year fawn could account for the light coat, but the deer seemed to be full adult-size. The basal half of the tail, which was all I could see above the salal, was normal "deer" colour but lacked any black. Even fawns show the characteristic tail colouration (Kozloff, 1995). The back of the neck and head were very light, and the large pink ears flashed against the deep glossy green of the Arbutus leaves as it plucked foliage. PINK ears?? I definitely had to see the rest of this animal! I had to constantly put down the binoculars and re-position the skiff as a slight onshore breeze kept threatening to crunch it into the rocks, so my observations were necessarily intermittent.

Eventually it left the Arbutus and moved to my left, browsing on something low behind the salal. Only its back and occasionally the waving tips of its ears were visible. Several times it hunched up and jerked, as though it may have been coughing. Was this beastie ill? Did it have mange, or some other loss of hair, to account for the pink sunburned-looking ears?

Finally the sounds of my oars alerted it. It scanned towards and past me, looked back at me for a few seconds, decided nothing was amiss and resumed foraging. Weird!

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What a strange face! It seemed pinkish with no eyes or nose. and the animal acted as though it couldn't see very well. Getting the binocs on it again, I cursed the obscuring salal and the continually drifting skiff. However, the breeze soon carried my scent to the animal, and it turned to face me, squinting intently and rotating its big bright pink radar ears. "Huff! Huff!" it snorted, blinking and squinting myopically. Spooky! The entire face was pinkish, (sunburned?) like it had little (or hyaline) hair. Wisps of white hair curled into the ear bases. but there were no other distinct white markings on the face. The nose was eraser-pink with a few black specks (ticks?). The eyes were hidden under half-closed, frequently blinking lids, which initially seemed bald. I finally realized the normally thick lashes were present, just almost colourless. Only the pupils showed black; the irises were either very light golden amber or white – the impression of colour could have been from the overhanging lashes. It was a weird feeling, looking into goat eyes in a deer body! From its behavior, I'm sure the animal could not see very well, and that its eyes were light sensitive. Soon it relaxed and returned to leisurely feeding.

After a while it wandered up a narrow cliff-edge ledge and disappeared behind a gnarled Douglas fir, permitting me a view of the entire animal. Its chest, neck, and legs were white or creamy. The tail had no black at all; normally it should be "decidedly black except for its basal portion" (Kozloff, 1995). There was no white rump patch as would be present on a mule deer (O. hemionus hemionus), anyhow, this interior species is unlikely to have been in this area. This sighting occurred 6 Sept. 2004 on the mainland just north of Mile Rock, a rocky islet north of Lund on the Sunshine Coast. Once home, I searched books and queried people about albinism in Blacktail deer, without success. "Google" returned a plethora of references to colour variations and albinism in the closely related Mule deer, but none for our coastal subspecies. So I ask you, the most observant and knowledgeable group of people I know: Have any of you seen or heard of a Blacktail deer like this?

#### **Literature Cited**

Kozloff, Eugene N. 1995. Plants and Animals of the Pacific Northwest. An Illustrated Guide to the Natural History of Western Oregon, Washington, and British Columbia. University of Washington Press.



# **Christmas Bird Count 2004**

### Saturday, December 18, 2004

### By Ann Nightingale

The last "big" VNHS event of our 60th anniversary year will be the 2004 Christmas Bird Count. To celebrate, we have set a very special goal: 160 species during the count week and a total of 260 participants. This goal is just on the border of being possible, so all help will be greatly appreciated.

VNHS holds the Canadian record for species counted on a single Christmas Bird Count at 152. A few years ago, Ladner tied this record. This would be a terrific year to reclaim the title.

To succeed, we will need to get all of the regular birds, plus have some good luck and good spotting for a few rarities. A list of all 217 species seen since the late 1950s will be posted on the VNHS website. A special page has been set up for this year's count: www.vichns.bc.ca/cbc/

In addition to our regular counting teams, I am looking for people willing to set out for hard-to-find species. This will include a special **marine squadron** to find unusual birds offshore, **hill climbers** in search of Blue Grouse, Townsend's Solitaires and other high elevation species and **chasers** to go after birds reported on the Rare Bird Alert before and during count week. I am also looking for a few hardy souls willing to do a bit of "**big sitting**"– hanging around some of Victoria's key birding spots for a few hours during the count day.

Feederwatch will also be a big component of this year's

Area	Name	Leader	Phone	Email
1	Butchart Gardens - N. Highlands	Warren Drinnan	652-9618	drinnan99@telus.net
2	Central Highlands	Rick Schortinghuis	652-3326	shylo@islandnet.com
3	Goldstream - Finlayson Arm	Alan Burger	479-2446	aburger@uvic.ca
4	Thetis Lake - Hastings Flat	Gordon Hart	721-1264	gordh19@shaw.ca
5	Langford Lake	Glen Moores	655-3772	gmoores@islandnet.com
6	Albert Head - Triangle Mountain	David Allinson	391-1786	passerine@shaw.ca
7	Esquimalt Lagoon - Mill Hill	Derrick Marven	250-748-8504	marven@shaw.ca
8	Esquimalt Harbour	Camilla Smith	479-4950	CamillaS@hotmail.com
9	Portage Inlet - The Gorge	Paul Levesque	995-1404	tuff-puffin@shaw.ca
10	Victoria Harbour	Naira Johnston	370-2374	naira@uvic.ca
11	Beacon Hill Park	Tom Gillespie	361-1694	twg@horizonnet.ca
12	Oak Bay	Mike Edgell	656-5998	dadv@uvic.ca
13	University - Cadboro Bay	Marie O'Shaughnessy	598-9680	isis_mosh@shaw.ca
14	Ten Mile Point - Arbutus Rd	Andy Stewart	477-1328	andy.stewart@shaw.ca
15	Gordon Head - Mt. Douglas	Ev Miyasaki	656-8066	emiyasaki@shaw.ca
16	Swan Lake - Cedar Hill	TBA	652-6450	motmot@shaw.ca
17	Blenkinsop Lake - Panama Flats	Cheryl Mackie	479-4083	bcmackie@pacificcoast.net
18	Elk Lake - Cordova Bay	Colleen O'Brien	388-4520	cob@shaw.ca
19	Prospect Lake - Quick's Bottom	Dave Fraser	479-0016	arenaria@islandnet.com
20	Martindale - Bear Hill	Brent Diakow	656-3190	brent@oceanusplastics.com
21	Zero Rock (ocean)	Barry Byers	382-0750	byersbarry@hotmail.com
22	Chain Islets (ocean)	Bruce Whittington		fieldnat@pacificcoast.net
23	Juan de Fuca (ocean)	Ron Bates	386-1264	rbates@bc1.com

VNHS holds the Canadian record for species counted on a single Christmas Bird Count at 152. A few years ago, Ladner tied this record. This would be a terrific year to reclaim the title.

count. **Feederwatchers** are asked to report the maximum number of each species they see at their feeders during the count day. You can report your birds online using a form on the website, by email to motmot@shaw.ca, or by leaving a message at 652-6450.

Counters under 18 years of age and Bird Studies Canada members are invited to participate at no charge. Other counters are asked for a \$5 tax-deductible contribution to offset the costs of the count and follow-up publications.

You don't have to be an expert birder to participate. Novices will be teamed up with more experienced counters. You can help out by acting as a tally person or as a spotter. If you are more experienced, and are wondering about leading a team, we have a couple of leaders looking for interns to take over areas next year.

Most teams start out at first light, and although counting goes on throughout the day, much is completed by noon. For those who are unsure about participating, or who want to tune-up their bird-counting skills, a number of field trips in November and early December will serve as a good practice. In addition, Natural History Night in December will be a review of the winter birds of Victoria – a great opportunity to refresh your memory just before the count.

If you are curious, interested, or need more information, please check out the VNHS website (www.vicnhs.bc.ca) and the international Christmas Bird Count site (www. birdsource.org) or contact Ann Nightingale at 652-6450 or by email at motmot@shaw.ca . If you have a preference for a specific area, you may contact the team leader for the area directly.

In addition, we are asking all the birders in VNHS to keep track of the birds they see during the count week and to report any unusual species to the Rare Bird Alert (592-3381). You never know if we might be looking for a sighting of a Brown-Headed Cowbird or some other "common" bird to reach our count week goal. If everyone pulls together, we should have a memorable count!

After the day of counting is over, there is a post-count gathering to share stories and find out how we have done. This year the gathering is at St. Luke's Church Hall, 3821 Cedar Hill X Rd (at Cedar Hill Rd.) at 7:00 p.m. Any contributions of fingerfoods or treats would be appreciated!

# Letters

To the members of the Victoria Natural History Society, I am writing to thank you for the 2004 Bev Glover

Memorial Scholarship. It is a special honour to receive this award, especially since Bev Glover was such a respected and beloved member of the Biology Department.

Currently I am in my final year of undergraduate studies at the University of Victoria, and feel fortunate to have taken a wide variety of Biology courses. The subject of conservation biology will always be of interest to me.

Sincerely, Colleen Nugent

Dear Victoria Natural History Society, Thank you very much for the Freeman F. King Scholarship. Sarah Baker



# The Dangers of Transplantation as a Conservation Technique

### By Dianne Fahselt

[These are excerpts from an article published in the 1988 Natural Areas Journal 8(4): 238-243. VNHS member Moralea Milne sought the author's permission to reprint them here.]

#### **Danger to Intact Natural Areas**

Transplantation of threatened or rare plants into suitable protected sites has been proposed as an acceptable conservation strategy (e.g., IUCN 1986, Falk 1987). The most straightforward approach introduces rare plants into a location similar to the one at risk. A restoration site would be the wisest choice, but regardless of where the transplants are placed, a natural area must not be manipulated to accommodate them. Why disturb one assemblage of plants in an attempt to relocate others? The large number of rare and endangered species is a result of society's cavalier approach to natural areas in the past. Continued insult to ecosystems will only aggravate the situation and create even more rare entities.

Conservationists are very concerned about rare species, but the inherent values of habitat and communities, while given lip- service, are not equally appreciated. In addition to their role as a haven for particular species, ecosystems themselves are of value and must be perpetuated. As discussed by Whitney (1987) and others, they serve as reference points or benchmarks, outdoor research laboratories, sources of germplasm, and element of natural and cultural heritage. Because of the necessary functions that ecosystems perform, it is senseless to interfere with them for any reason. This is particularly true since there is no guarantee that rare species will be actually "saved" as a result of the disturbance.

Some types of research depend on undisturbed conditions. Insidious changes in ecosystems due to transplantation or other manipulations can confound an unsuspecting investigator attempting to understand basic biological phenomena. Chater (1987) learned accidentally that what he had regarded as a range extension of the uncommon *Polystichum aculeatum* was actually a transplant of unknown origin made by a botanist some years previously. Such unsuspected introductions could give spurious results in studies of nutritional and moisture requirements, allelopathic interactions, or factors controlling distribution.

Another consideration is that in the course of inserting new individuals or floristic elements into a natural area, something previously established often is displaced. Any interference is bound to impinge on the complex interrelationships within an ecosystem. Also we could be wrong about what constitutes an appropriate introduction.

![](_page_8_Picture_8.jpeg)

Above left: Fairyslipper (*Calypso bulbosa*) is an example of a plant that is virtually impossible to transplant due to a complex ectomycorrhizal fungal association. *Photo:* Marie O'Shaughnessy

Right: Menzies larkspur (*Delphinium menziesii*) rarely survives after the first couple of years following a move and is best grown from seed *in situ. Photo:* Marie O'Shaughnessy

Even when it is believed that transplantations are being made into an area where a species once grew naturally, mistakes can be made not only about the proper provenance but about a satisfactory microhabitat or even the suitability of the area itself. An introduction can be slowly eliminated if it is ill-equipped for a site; it can disadvantage other elements in the community if it becomes aggressive in the new setting.

An example of error in judgment can be seen in two parks in southern Ontario where oak savannas were deliberately planted with pine (mainly *Pinus strobus*). The savanna origins of the stands were not understood, and it was believed that pines previously occurred there. After all, one area had long been known as "the Pinery." As a result of an Conservationists are very concerned about rare species, but the inherent values of habitat and communities, while given lip- service, are not equally appreciated. In addition to their role as a haven for particular species, ecosystems themselves are of value and must be perpetuated.

![](_page_8_Picture_14.jpeg)

Prairie Lupine (Lupinus lepidus), a provincially red-listed species (endangered). Photo: James Miskelly

extensive planting operation that took place in the 1950's, 1960', and 1970's, sites now have degenerated to dense, near monocultures of pine with only a few of the original species surviving. In one park a locally rare herb, *Lupinus perennis* has been essentially eliminated along with the rare Karner blue butterfly that feeds upon it (Crabe *et al.* 1988). To prevent the loss of more savanna species and the destruction of one of the rarest ecosystems in Ontario, expensive and labour-intensive pine removal has become necessary to restore the community.

Introduction of pine into parks in southern Ontario was a major effort extending over a period of many years, but lesser introductions also can have an effect. Introductions of even a single fertile individual could ultimately generate a burgeoning population and the full impact of an apparently minor introduction might not be felt until decades or even centuries later (Egler 1983).

#### **High Costs**

Limited availability of funds is often given as a reason for resorting to alternative conservation methods rather than simply setting aside nature reserves. However, alternative approaches can be very expensive when they are properly executed. An example is the substantial cost of creating artificial vernal pools in California to mitigate the effects of urbanization on natural pools; Zedler and Black (1988) concluded that it is not necessarily cheaper to create artificial communities than to preserve the natural ones that are to be destroyed.

#### Unreliability

Since funds are usually limited they should be spent where prospects of success are greatest. Private yards and gardens are ephemeral and not recommended by the World Wildlife Fund Plant Conservation Roundtable (1986). Even constitutional gardens are unreliable as a permanent repository of rare plant due to policy changes over time. As directors come and go, commitments change and old collections disappear to make room for new.

There are also many biological reasons why transplantation could fail and many indications that it does, though much of this evidence is unpublished. For example, in a local provincial park several interesting plants were moved so that the public could see them more easily. The park naturalist noted that while transplants persisted at first, they usually did not increase in number. Gradually most species declined and twenty years later were gone (T. Crabe pers.comm.). All attempts to transplant a threatened Canadian population of *Buchnera americana* totally failed (A.H. Rider pers. comm.); transplanting a distance of even 100 m did not work. Most transplants fare poorly when placed in previously established communities (Lape 1985) and according to Egler (1983) "do best in good Bare Soil."

Better known transplant examples include the rare sedge, Schoenus ferrugineus, in Scotland. Individuals from the last remaining population were moved to avoid inundation in the original habitat (Morton 1982). Though they were moved only a few meters up a lakeshore the transplants persisted for just a short time before they died out. The species is now thought to be extinct in Britain.

[Several more examples of mostly unsuccessful transplants (Cranston & Valentine 1983, Hall 1987, Holland 1980, Hope Simpson 1987, Lape 1985, and May et al. 1982) follow in the original paper.]

Obviously many wild plants flourish in gardens and may persist there for many years; however, success with any given species is not predictable (Keddy 1983). Detailed environmental requirements are not usually known, and even if every aspect of the physical support system could be suitably reproduced, it would be almost impossible to assemble the appropriate genotypes of microbes, insects, plants, and other biological associates in the natural community. Rare plants often have an extremely narrow ecological amplitude, and this may well be the reason why they are rare. What appear to be negligible differences between growing conditions at the original location and some chosen transplant site may be critical ones that preclude establishment.

[In the next sections of the article Dianne Fahselt discussed "False Sense of Security," and "Undermining of Preservation Efforts."]

#### Value of Transplantation

Transplantation is not, of course, universally inadvisable. Clearly it can be a valuable tool for the stabilization of disturbed areas (e.g., Diamond 1985, Falk 1987) such as dune systems, eroding roadsides, mine tailings, and old fields, and some of the more successful revegetation projects do involve the use of native species (Miayawaki et al. 1988). Such applications are commendable, as long as valuable natural areas are not depleted in the course of supplying stock for reestablishment and as long as the finished product is not regarded as a satisfactory replacement for a long-established and finely tuned natural ecosystem. As pointed out by Zedler & Black (1988) artificial habitat cannot replace natural habitat.

In spite of the problems associated with it, transplantation is used along with seeding to culture rare species, as recommended by the Canadian Plant Conservation Program, the Center for Plant Conservation in the United States, and similar organizations in other countries. However, this should be done only if it is impossible to prevent relevant habitats from being destroyed and only if plants are transferred to locations other than natural areas.

DIANNE FAHSELT can be reached at Department of Plant Sciences, University of Western Ontario, London, Ontario, Canada N6A 5B7 [dfahselt@uwo.ca]

#### References

- Chater, A.O. 1987. Cautionary tale II. Botanical Society of British Isles News 47: 22.
- Crabe, T., R. Bonenberg, R. Klinkenberg, & B. Tegler. 1988. Pinery Provincial Park resource management strategy. Pinery Provincial Park, Southwest Region, Ministry of Natural Resources, London, Ont. 57 p.
- Cranston, D.M. & D.H. Valentine. 1983. Transplant experiments on rare plants species from Upper Teesdale. Biological Conservation 26: 175-191.
- Diamond, J. 1985. How and why eroded ecosystems should be restored. Nature 313: 629-630.
- Egler, F.E. 1983. The nature of naturalization: II. Studies in naturalization 1925-1980. Publication No. 6, Claude E. Phillips Herbarium, Delaware State College, Dover, Del. 145 p.
- Falk, D.A. 1987. Integral conservation strategies for rare plants. Natural Areas Journal 7: 118-123.
- Hall, L. 1987. Transplantation of sensitive plants as a mitigation for environmental impacts. Pp. 413-420 in Elias, T.S. [ed.] Conservation and management of rare and endangered plants. California Native Plant Society, Sacramento, CA
- Holland, P.G. 1980. Transplant experiments with trout lily at Mont St. Hilaire, Quebec. Journal of Biogeography 7: 261-267.
- Hope-Simpson, J.F. 1987. Cautionary tale III. Botanical Society of the British Isles News 47: 22-23.
- International Union for Conservation of Nature and Natural Resources (IUCN). 1986. Recommendations passed at Botanic gardens and world conservation strategy. IUCN Conservation Monitoring Center, Kew, UK.
- Keddy, P.A. 1983. Transplanting rare plants to protect them: a plant ecologist's perspective. The Canadian Botanical Association Bulletin 16: 13-15.
- Lape, F. 1985. On transplanting native plants. Garden 9: 23.
- May, D.E., P.J. Webber, & T.A. May. 1982. Success of transplanted alpine tundra plants on Niwot Ridge, Colorado. Journal of Applied Ecology 19: 965-976.
- Miyawaki, A., K. Fujiwara, & S. Okuda. 1988. The status of nature and re-creation of green environments in Japan. In: Miyawaki, A. et al. [eds.] Vegetation ecology and creation of new environments. Tokai University, Tokyo.
- Morton, J.K. 1982. Preservation of endangered species by transplantation. The Canadian Botanical Association Bulletin 15:32.
- Whitney, G.G. 1987. Some reflections on the value of oldgrowth forests, scientific and otherwise. Natural Areas Journal 7: 92-99.
- World Wildlife Fund Conservation Roundtable. 1986. Conservation guidelines. Natural Areas Journal 6(3): 3132.
- Zedler, P.H. & C. Black. 1988. Species preservation in artificially constructed habitats: preliminary evaluation based on a case study of vernal pools at Del Mar Mesa, San Diego County. Unpublished manuscript, department of Biology, San Diego University, San Diego, CA.
- See also the Canadian Botanical Association Conservation Policy Statement (1987) "Transplantation as a Means of Preservation" at http://www.sru.edu/depts/artsci/bio/jgc/positio1.pdf (published version in: Natural Areas Journal 8(4): 243-244. 1988.)

# Victoria Checklist **Report:** 2002, 2003, 2004

By Bryan R. Gates

The Victoria Bird Records Committee met on November 2, 2003 and again on July 31, 2004 to review recent reports of birds that were "New", "Vagrant" or "Accidental" to the Victoria and Southern Vancouver Island Checklist of Birds. This report summarizes decisions of the committee. Committee members during this period were David Allinson, Barbara Begg, Darren Copley, David Fraser, Bryan Gates and Bruce Whittington. An earlier report entitled Victoria Bird Checklist Report, 2000, 2001 was published in The Victoria Naturalist Vol. 61.1 and gives the background, purpose, and procedures of the Records Committee.

Committee Decisions: The following accounts are primarily from sightings reported in 2003 and early 2004, but include some older reports that have been brought forward from earlier deliberations. Observers who submitted documentation examined by the committee are listed in the "accepted" accounts. The first name listed is, to the best of the committee's knowledge, the person who discovered the bird.

A. New Species Accepted (To be added to the next revision of the checklist).

Red-Faced Cormorant - To be added to follow Doublecrested Cormorant.

03-043: Single adult seen from Coho ferry on BC side of Juan de Fuca Strait, Dec. 14, 2003 – Scott R. Atkinson, Lake Stevens, Washington. The observer is familiar with this species, having worked in western Alaska and the Russian Far East. The committee was made aware of other reports of a Red-faced Cormorant seen on the Washington State side of Juan de Fuca Strait about this time.

Iceland Gull - To be added to follow Thayer's Gull on the basis of 8 records dating from 1984 to January 2003. The relationship between the two recognized races of Iceland Gull (Larus glaucoides glaucoides and L.g. kumlieni) and Thayer's Gull (Larus thayeri) continues to baffle world ornithologists. At this time, both are recognized as separate species by the American Ornithological Union (AOU). Outside experts have reviewed the most challenging of the following records and have indicated acceptance as Iceland Gull. 03-009e: Single immature seen and photographed at Hartland Landfill, 1984 - Keith Taylor and others. This record was not accepted by the Victoria Bird Records Committee earlier, but upon review by outside experts is now accepted. This constitutes the first record of Iceland Gull for the checklist area.

**00-010:** Single immature seen and photographed on Bench Rd., Duncan, Feb. 21-22, 1998 and later - Derrick Marven, Marie O'Shaughnessy, Bryan Gates.

03-009a: Single immature seen and photographed at Clover Point, Mar. 9, 1999 - Jimmy Steele (Great Britain).

00-011: Single adult seen Clover Point, Mar. 13, 2000 - Ron Satterfield.

03-009b: Single adult seen and photographed at Race Rocks, Dec. 23, 2001 - Alan MacLeod.

03-009c: Single immature seen and sketched at Goldstream River, Oct., 2002 to Jan. 5, 2003 - David Fraser, Bruce Whittington.

03-009d: Single 1st winter bird seen at Clover Point, Jan. 5 to 25, 2003 – Michael Shepard, Bryan Gates. 03-009f: single 2nd winter bird seen and

photographed at Tod Creek Flats, Jan. 3, 2003 - Bruce Whittington.

(Additional Iceland Gull reports that were not accepted by the committee included:

00-031: single adult seen at Clover Point, Apr. 21, 2000 03-009g: single immature seen and photographed at Clover Point, Jan. 23-25, 2001.

Crested Auklet - To be added to follow Cassin's Auklet. 03-019: Single 2nd year bird seen and photographed in Pedder Bay, Sept. 21, 2003 - Amelie Rousseau, Jukka Jantonen, Barbara Begg, Bryan Gates, Bruce Whittington.

Chestnut-Sided Warbler – To be added to follow Yellow Warbler.

**03-003:** Single adult male seen and photographed on Summit Hill Park, Saanich - Keith Taylor, Bruce Whittington, Dannie Carsen.

Ovenbird -1st and 2nd records. To be added to follow American Redstart.

03-018: Single adult window-kill (fresh) collected at 6659 Welch Rd., Central Saanich, Sept. 1, 2003 - Jane Hansen, John Satchwell.

04-006: Single adult male, seen and well heard at 1605 Newton Heights, Saanichton, June 10, 2004 - Sheila Mosher, Barbara Begg, Bryan Gates, David Stirling.

Prothonotary Warbler - To be added to follow American Redstart.

03-008: Single adult, probable window kill, found freshly dead on Pandora at Government St., Victoria, Nov. 16, 2001 - Shane Ford.

### Hooded Warbler - To be added to follow Common Yellowthroat.

03-016: Single adult seen during Duncan Christmas

Bird Count on Glenora at Miller Rds., Duncan, Dec. 28-31, 2002 – Mike McGrenere, Rick Schortinghuis.

Nelson's Sharp-Tailed Sparrow – To be added to follow Grasshopper Sparrow.

**03-040:** Single bird seen and photographed at Viaduct Flats, Oct. 8 to 10, 2003 – Chris Saunders, Ted Ardley, Barbara Begg, Bruce Whittington.

**B. Additional Records Of "Accidental" Species Accepted** (to be added to the next revision of the checklist)

#### Pink-Footed Shearwater - 4th record

**00-047:** Two birds seen from Coho ferry in Juan de Fuca Strait, Sept. 24, 1999 – David Allinson and others.

#### White-Faced Ibis - 3rd record

**03-001:** 7 adults seen and photographed at Somenos Marsh, Duncan, May 14 to 29, 2001 – Sid and Emily Watts, Barbara Begg, Derrick Marven.

#### Prairie Falcon - 3rd and 4th records

**03-017b:** Single immature seen off McIntyre Rd., Central Saanich, Aug. 2-3, 1996 – Bruce Whittington, David Pearce, Barbara Begg. (Initially not accepted, this record was reopened after receipt of additional supporting documentation. It was then accepted). **03-017a:** Single adult seen over Rocky Point, Metchosin, Apr. 12, 2003 – David Allinson.

#### Hudsonian Godwit - 5th record

**03-029:** Single immature seen at Esquimalt Lagoon, Sept. 26, 1999 – Barry Gatten, Jeremy Gatten.

- Elegant Tern Continues as "Vagrant" 00-018: Single adult seen and videotaped at Clover Point, Victoria, Sept. 5, 1997 – Dannie Carsen.
- Blue-Gray Gnatcatcher 2nd record 03-014: Single bird captured, banded and photographed at RPBO, Aug. 6, 2002 – Laurie Savard.
- Brewer's Sparrow 2nd and 3rd records
  03-012: Single bird seen and photographed at Clover Point, May 15, 2002 – Chris Saunders, Bryan Gates, Marie O'Shaughnessy, Barbara Begg, Bruce Whittington.
  03-038: Single bird seen on Wilseem Rd., Duncan, Sept.

11, 2003 – Derrick Marven, Bill Wilson (Calgary).

#### Rose-Breasted Grosbeak – 4th and 5th records 03-004: Single immature male seen and photographed at 2500 Florence Lake Rd., Langford – Audrey Taylor, Bryan Gates.

**04-007:** Single adult male captured, banded and photographed at Rocky Point Bird Observatory (RPBO), Jul. 18, 2004 – Ann Nightingale.

Indigo Bunting - 6th record, thus changing status to "Vagrant"

![](_page_10_Picture_19.jpeg)

Rose-breasted Grosbeak. Photo: Ann Nightingale

**00-045:** Single adult male seen on Metchosin Rd. at Latoria Rd., Colwood, Sept. 27, 1998 – David Allinson.

Brambling – 6th record, thus changing status to "Vagrant" 03-028: Single winter female seen and photographed at feeder, Davis Rd, Highlands, Winter 1998 – Paul Statham.

# C. New Species Not Accepted Or Awaiting Further Documentation

(Note: The names of the person(s) reporting are not included here. Those having documentation or supporting information about the following records are urged to submit that information to the committee).

#### **Common Eider**

**03-006:** Single adult female seen off Clover Point, Sept. 6, 2001. Although this visiting European birder is familiar with the species, at the time of the sighting he was under the impression that Common Eider is a common winter species along this coast. In fact, it is extremely rare in British Columbia. Campbell *et al.* (1990) accept only 2 records for the province, one of which was from northeastern Vancouver Island. The committee was reluctant to add a new species on the basis of the documentation received.

#### Arctic Loon

**03-011:** Winter adult seen from a ferry near east entrance to Active Pass, Mar. 9, 2002. Given the movement of the ferry and distance to the bird, and the fact that the observer was only reasonably confident that it was an Arctic Loon, the committee agreed that a species new to the checklist should not be added on this evidence.

#### **Northern Parula**

**03-015:** Single bird captured, banded and photographed at RPBO, Aug. 23, 2002 – David Woodward. Additional documentation arrived after

the committee met; the record will be reviewed at the next meeting of the committee.

#### **Hoary Redpoll**

**03-010:** Single bird seen among a large flock of Common Redpolls near Somenos golf range, Duncan, Jan. 13, 2002. Although seen by 4 observers, only two reports were received. The possibility of a leucistic bird was not eliminated; and bill description was not convincing. Further documentation is invited. Given the difficulty of field identification of this species, and lack of photographs, the committee was reluctant to add a new species on the basis of evidence at hand.

#### Yellowhammer

**04-004:** Single adult male seen on Normandy Rd., Saanich, April 8, 2004. Well seen and photographed by a number of observers, the identification of this European species is not in question. However, it is a common cage bird species, with no record of natural vagrancy into any part of North America. It was judged to be an escaped bird.

#### D. Additional Records Of "Accidental" Species Not Accepted Or Awaiting Further Documentation

#### **Snowy Egret**

**03-032:** Single adult seen at Quick's Bottom, Saanich, July 6, 2002. (This bird was apparently well seen by 2 or more observers, but documentation received so far is incomplete. Observers are encouraged to submit their reports. This is potentially the 5th record for this species).

#### **Gray Catbird**

00-005: Single bird, heard-only, at Rocky Point, Sept. 20, 1999. (No documentation).
03-007b: Single bird seen at Rocky Point, Sept. 18, 2003 (No documentation – withdrawn).
03-007a: Single bird reported at Shangri La, Saanich, Sept/Oct, 2001 (No documentation).

### Welcome to New Members

#### Lanaye Baxter

Christmas Avenue birdwatching, photography,

Barbara and Bill Dexter Kimta Road

Kimta Road

Felice Griffiths View Street birds, hiking

#### Carol Hale Belmont Road *birds, botany, marine*

Jacquie McLeod Ross-Durrance Road natural history, environmental education

**Adam Taylor and** 

Les and Diane Leitch

Stonington Place

**Kem Luther** 

Sooke Road

Scott Mair

Grange Road

flora

#### **Black-Throated Blue Warbler**

**03-013:** Single bird seen on Blanshard near Mayfair, Victoria, June 28, 2002. (Further documentation of this bird is on hand and will be reviewed at next meeting).

#### **Yellow-Breasted Chat**

**03-002:** Single bird seen and videotaped on Craigdarroch Rd., Victoria, May 20, 2001 – Bob Stewart, Bryan Gates, others. (This will likely prove to be a valid record. Efforts are underway to relocate the video).

#### **Clay-Colored Sparrow**

**03-042:** Single bird seen on Sunnygrove Terr., Saanich, Nov. 25-26, 2003. (Further documentation of this bird is now on hand for review at next meeting).

#### **E.** Concluding Remarks

The committee once again reminds all birders that they can contribute to our knowledge of bird numbers and population trends in this area. The local checklist is revised frequently and should reflect the latest information available. You are encouraged to document any sighting of a species that either does not appear on the local checklist or is classified as "Accidental" or "Vagrant". A Rare Bird Report Form can be accessed at the Society's web page, www.VicNHS.bc.ca Please complete the form to the best of your ability. Your description should include only what you actually saw or heard in the field. Photographs – even of marginal quality – are strongly encouraged. Your reports can be given to any committee member or sent by email to Bryan Gates at bgates@pacificcoast.net

#### **References:**

Campbell, R. Wayne, Neil K. Dawe, Ian McTaggart-Cowan, John M. Cooper, Gary W. Kaiser and Michael C.E. McNall. 1990. *The Birds of British Columbia – Volume One: Nonpasserines*. Royal British Columbia Museum and the Canadian Wildlife Service. 514 pp.

Christine Mion Spring Bay Road

Janet M. Mort Wallace Drive *birds* 

Calvin Parsons Rankin Road marine and First Nations

Mary Robichaud Hilda Street *birding*  Audrey Roburn Croft Street environmental education

**Debi Wade** Drake Road *birds, native plants* 

### CALENDAR OF EVENTS

REGULAR MEETINGS are generally held September-April 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: the second Tuesday at 7:30 p.m., in Murray and Anne Fraser 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., Murray and Anne Fraser 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. The VNHS Calendar also appears on the Internet at: http://www.vicnhs.bc.ca.

#### **NOVEMBER**

#### Saturday, November 6 Musical HATs! Metchosin Community Hall (4401 William Head Rd)

An evening of fantastic music, food and drink! Doors open at 7 p.m. and the music begins at 7:30 p.m. Tickets are \$15.00 and available at the HAT Office #316 - 620 View Street - 995-2428.

#### **November through December**

#### Glorious Goldstream Offers World-Class Salmon-Viewing

Goldstream is a world-class salmon-spawning stream with thousands of chum salmon returning between October and December. These chum salmon have traveled thousands of kilometres in their four-year lifetime and are at Goldstream to continue their life cycle by spawning in the river. Good years have seen as many as 60,000 salmon return home to the Goldstream River. The Visitor Centre is open daily this fall/winter from 9:00 a.m. to 4:30 p.m. Weekend activities at the Centre include fish printing, salmon slide shows, videos, and interpretive programs on the hour from 10:00 a.m. to 2:00 p.m. Hot coffee and baked goods are available at the book/ gift store and the fire is usually lit to warm you after a walk along the river to see the spawning salmon. Don't miss seeing our new Salmon Cam in the river. Volunteers always needed, please call 478-9414 to see how you can help.

#### Sunday, November 7 Pelagic Birding on the M.V. Coho

Mike McGrenere will lead this trip on the M.V. Coho on its regular sailing across the Strait of Juan de Fuca. The crossing takes 1-1/2 hours and is the best opportunity to see birds such as Shearwaters, Fulmars, and Phalaropes, which are usually found further out to sea. We will be birding from the bow of the boat so dress warmly. Bring a lunch and meet at the Black Ball Ferry terminal in the Inner Harbour at 10:00 a.m. for the 10:30 a.m. sailing of the M.V. Coho (allow plenty of time for parking). Ferry cost is \$24.00 CDN return, and it is essential to have two pieces of ID with you for customs, one with a photograph. We'll return on the 2:00 p.m. sailing.

#### Saturday, November 13 **Botany Field Trip**

#### Top Secret Location in the Heart of the Saanich Peninsula Join Adolf and Oluna Ceska in exploration of some nice old growth forest. Meet at 9:30 a.m. at the end of Durrance Lake Road off Wallace Drive. Bring a lunch and water, we should be back around 3:00 p.m. We will see some of the nicest old-growth Douglas-fir forest you can see around Victoria.

#### Saturday, November 13

#### **Musical HATs! Prospect Lake Community Hall** (5358 Sparton Rd)

An evening of fantastic music, food and drink! Doors open at 7:00 p.m. and the music begins at 7:30 p.m. Tickets are \$15.00 and available at the HAT Office #316 - 620 View Street - 995-2428.

#### Sunday, November 14 **Birding Martindale Flats**

Late migrants, winter arrivals, and raptors should make for some great birding with Brent Daikow (656-3190). Meet at the farm market at the corner of the Pat Bay Highway and Island View Road at 8:00 a.m. GUMBOOTS are MANDATORY!!!!!!

#### **Tuesday, November 16**

#### Botany Night - Summer 2004 in the Yukon and Atlin

Join Judith Holm, Adolf Ceska and Oluna Ceska for an update on their floristic work in southern Yukon and northern BC, as well as hear about what went on at this year's Botany BC meeting, held in Atlin. Everyone welcome! Swan Lake Nature House, 7:30 p.m.

#### **Thursday November 18**

Chris Czajkowski, who lives on the east side of the Coast Range around Nimpo Lake, and has authored several books about her adventures, will be giving a slide show at the David Lam Auditorium, University of Victoria, 7:00 p.m. Cost \$6.00.

#### Sunday, November 21

#### Snow Geese at Riefel Bird Sanctuary

Come and see the annual Snow Goose spectacle at Riefel Bird Sanctuary. Every November thousands of Snow Geese stop over in this part of the Fraser River Delta. Past trips have produced over 100 species of birds for the day. Participants will carpool from in front of the Elk-Beaver Lake Regional Park sign on Elk Lake Drive at 6:00 a.m. for the 7:00 a.m. ferry sailing. We will return on the 5: 00 p.m. sailing. Cost should be about \$40.00 per person. Bring a lunch. Call your leader, Rick Schortinghuis (652-3326), if you need more information.

#### Wednesday, November 24 Birders' Night - The Spotted Owl in British Columbia - How Long Can this Go On?

Jarred Hobbs of Victoria has been concentrating his professional studies on owls in this province for a number of years, with recent emphasis on the endangered Spotted Owl. Join us as he presents a slide-illustrated program on the Spotted Owl, its ecology, habitat and future. Everyone welcome, 7:30 p.m., Fraser 159, UVic. Bring a friend and your coffee cup.

### Monday, November 29

#### Marine Night - TBA

There will be a speaker for Marine Night but as of the newsletter deadline a speaker had not been arranged. Please consult the Marine Night website at <http://pacificcoast.net/~plambert/page2.html> or phone the VNHS events tape (479-2054) for details closer to the date.

#### DECEMBER

#### **December through February** The Eagles Have Landed!

Visit the Nature House on the estuary at Goldstream Provincial Park during this year's Eagle Extravaganza. There are excellent viewing opportunities as hundreds of Bald Eagles feed on spawned-out salmon carcasses. The Nature House is open daily all winter from 9:00 a.m. to 4:30 p.m. There will be birds of prey exhibits and great eagle viewing through spotting scopes and video cameras. Call 478-9414 for information on special programs and guest speakers happening most weekends! Record your own footage on our Eagle Cam. Volunteers always needed, please call 478-9414 to see how you can help.

#### **Tuesday**, December 14

#### VNHS Natural History Presentation - Winter Birds of Victoria

With the Christmas Bird Count coming up on December 18, this slide presentation will show the bird species likely to be seen (and a few that are unlikely to be seen) during the count week. Novice birders and feeder watchers may find this refresher particularly useful. and experienced birders may find the "where are they now" slides interesting. Join Ann Nightingale as we do a CBC review. 7:30 p.m., Fraser 159, UVic Everyone welcome.

#### Saturday, December 18

Victoria Christmas Bird Count Contact Ann Nightingale 652-6450 or motmot@shaw.ca

#### **Tuesday**, December 21

Goldstream Winter Solstice Lantern Festival Celebration Call 478-9414 for details. The winter solstice marks the shortest day and the longest night of the year. The sun appears at its lowest point in the sky, and its noontime elevation appears to be the same for several days before and after the solstice. Join us at the Nature House as we usher out the long nights of winter!

Monday, December 27 Sooke Christmas Bird Count Contact Jack McLeod 642-5369 or jmmjem@shaw.ca

The Goldstream Nature House is looking for any Sony Hi-8 or better quality video cameras with remote control capability (remote not required) to use for wildlife viewing. We also require working VCRs. Tax receipts available for all donations but will also consider purchase of used units. Contact Darren at 478-9414.

Are you going on one of the field trips? Willing to pick up a

### **JANUARY, 2005**

### Saturday, January 1

Happy New Year!!!

Get your New Year off to a great start! A great excuse to start a new bird list! Join Rick Schortinghuis for a birding walk in the Lavritz Park, Viaduct Flats, Quicks Bottom area. Bring a lunch. Meet at 10:00 a.m.at Layritz Park, (the access is off Wilkinson Road), Call Rick at 652-3326 if you need more information.

#### Saturday, January 1

**Duncan Christmas Bird Count** 

Contact Derrick Marven 250-748-8504 or marven@shaw.ca.

![](_page_11_Picture_52.jpeg)

### **BULLETIN BOARD**

VNHS member in James Bay? If yes, please telephone 384-7553. Thank you for your consideration.

Lyndis Davis would like to let members know that she has handcrafted Christmas cards as well as greeting cards and photo cards for sale. Contact her at 744-5750

![](_page_12_Picture_0.jpeg)

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# Two evenings of fantastic music, food and drink!

Saturday, November 6: Metchosin Community Hall (4401 William Head Rd) Saturday, November 13: Prospect Lake Community Hall (5358 Sparton Rd)

Doors open at 7 p.m. and the music begins at 7:30 p.m.

Tickets are \$15.00, and available at the HAT Office #316 - 620 View Street - **995-2428**.