



The Victoria NATURALIST

NOVEMBER
DECEMBER
2006
VOL 63.3

VICTORIA NATURAL HISTORY SOCIETY





The Victoria NATURALIST

Published six times a year by the
VICTORIA NATURAL HISTORY SOCIETY,
P.O. Box 5220, Station B, Victoria, B.C. V8R 6N4
Contents © 2006 as credited.
ISSN 0049—612X Printed in Canada

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Desktop Publishing: Frances Hunter, 479-1956
Distribution: Tom Gillespie, Phyllis Henderson
Printing: Fotoprint, 382-8218

Opinions expressed by contributors to *The Victoria Naturalist* are not necessarily those of the Society.

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VNHS Website: www.vicnhs.bc.ca

We acknowledge the financial support of the
government of Canada through the Publications
Assistance Program. PAP Registration No. 9841

Canada

SUBMISSIONS

Deadline for next issue: December 1, 2006

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Guidelines for Submissions

Members are encouraged to submit articles, field trip reports, natural history 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. 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 high resolution: a minimum of 1200 x 1550 pixels, or 300 dpi at the size of photos in the magazine.

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COVER PHOTO:

Slime molds are no longer considered fungi, although they do share some characteristics with that kingdom. This picture shows the fruiting body stage rather than the mobile plasmodial stage. A website dedicated to cool photos of these bizarre organisms can be found at <http://www.plant.uga.edu/mycology-herbarium/myxogal.htm>. *Photo: Darren Copley*

These past two months have been filled with fish stories –and not the tall tales about the one that got away. Fish nowadays don't seem to be escaping – not from our nets, our impacts, but also hopefully not our notice (page 10).

From federal-level decisions refusing to be signatories on the UN-proposed moratorium on bottom trawling to provincial-level decisions in the works regarding fish farms; fish are in the news.

When a journal as prestigious as the *Proceedings of the National Academy of Sciences* publishes an article by a graduate student (Martin Krkosek, a PhD candidate at the University of Alberta Centre for Mathematical Biology), about the enormous impacts open-net pens have on wild salmon, what more can government officials require as proof?

Although the BC government's Special Committee on Sustainable Aquaculture is only accepting written submissions about salmon farming until October 31, it won't be too late to express an opinion directly to the premier if you'd still like an opportunity to comment: premier@gov.bc.ca or Office of the Premier c/o PO Box 9041, STN PROV GOVT, Victoria, BC V8W 9E1.

And, in the meantime, the salmon are running at Goldstream and local schoolchildren are witnessing it (page 21).

Claudia

In Search of the Elusive Humpback

By Gerald Graham

On the southern tip of Gil Island, a short boat ride from where the *Queen of the North* sank earlier this year near Hartley Bay, there exists a whale research station operated year-round by Hermann Meuter and Janie Wray. Alumni of Paul Spong's OrcaLab on Hanson Island, Hermann and Janie have been researching cetaceans, principally humpbacks and killer whales, full-time since 2002. This September I spent a fascinating week as their guest, venturing out on the water just about every day, helping to record whale songs from their acoustics lab, and learning more about threats to the whales.

In the course of my very enjoyable stay, I was lucky to see several humpbacks and a few killer whales, plus two colonies of Steller sea lions, an elephant seal, and numerous Dall's porpoises. And while I did not see the fabled spirit bear that roams nearby Princess Royal Island, other

visitors to the region did. Nor did I see any wolves. But, what I did see was many of the 64,000 returning pink salmon that returned to Gil Stream this year to spawn. I watched in utter amazement as the females desperately sought to lay their eggs in the stream bed, before breathing their last breath, as Janie patiently filmed the scene from the shore. Unfortunately, the number of pinks returning to other rivers and creeks in the region is way down this year.

This is normally a good time of year for spotting and recording humpbacks in the area, as they bulk up on their way back down to Hawaii after a summer of feeding in more northerly climes. Of the estimated 20,000 humpbacks worldwide, roughly 5,000 make the Northeast Pacific their summer residence. Of these, approximately 200 frequent the waters around Gil Island, including the appropriately-named Whale Channel, Squally Channel and Wright Sound.



Humpback Whales using bubble nets to capture their prey. Photo: Bruce Whittington

This fall, however, the bulk of the local population seems to have gone to some of the more inner channels, such as Ursula and Douglas, where Janie discovered more than a dozen individuals in recent days.

Cetacealab's three sets of solar-powered hydrophones continuously monitor the sounds of the orcas and humpbacks, from Money Point in Wright Sound, Borde Island in Whale Channel, and just in front of Cetacealab in Taylor Bight. Hermann and Janie have a five-year record of the presence of these whales in the area, where they are, the kind of activity they are engaged in, what pod they are from, and their abundance. The value of their work is incalculable; no one else is doing anything remotely as ambitious in such an out-of-the way, pristine, though hostile environment.

Hermann and Janie eat, breath, and sleep whales. Loudspeakers are wired throughout their cabin, which includes the acoustics studio and their living quarters. Thus, if the whales start singing during the night, the sound will undoubtedly wake the intrepid researchers, prompting them to get out of bed and run down to record them. There is even a loudspeaker outside their cabin, just in case they are not in the house when the singing begins.

Meuter and Wray also spend as much time as they can out on the water, looking out for the whales, and observing their behaviour up close and personal, as it were. In the summer, when the weather is good, they are out almost every day; in winter, they are lucky to get out one week in three. The rest of the time, they just tough it out in the comfort of their cabin *cum* research station, compiling statistics, catching up on paperwork, applying for research grants, etc.

Currently, there are two looming threats to the whales of the area, as well as to Cetacealab's research program. One is a project called Batholiths, which, if approved, will entail three weeks of continuous seismic booms in and around

Douglas Channel in the fall of 2007. The other is Enbridge's Gateway pipeline and Kitimat tanker terminal proposal which, if it gets the green light, could see supertankers regularly transiting Wright Sound, Squally Channel and Whale Channel with their cargo of Alberta crude oil by 2010. Both of these projects pose significant risk to the health and existence of the whales, whether from the interference they will cause to their echolocation and feeding habits, or, in the case of the Enbridge project, from the oil spill threat and the risk of ship strikes.

If you would like to learn more about Cetacealab and the whales of Caamano Sound, and are concerned about the fate of the whales in light of the impending projects, visit the lab's web site at www.cetacealab.org. Cetacealab is also a registered charity in British Columbia, which means that all donations are tax-deductible. Hermann and Janie heavily rely on public donations to pay for equipment, maintain the lab, and sustain their unique research program.

Welcome to New VNHS Members

Our Society grew by 12 new members since the last issue. The following agreed to have their names published in our "welcome" column:

David L. Johnson
Gemini Drive
birds, wildlife, field trips

**Donna Wong and
Bill Revelle**
Pembroke Street

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A Cat's Urge To Kill, Natural? Absolutely. Letting Your Cat Indulge That Urge, Absolutely Not.

By Angela Deering

As I watch our two new kittens, Yoda and Cecil, race from one end of the house to another pouncing, jumping and disemboweling any object they can get between their paws, I admire their pure predatory instincts. Of course they love to snuggle up on the couch and eat the latest delicacy out of can, but at the same time I know if they were let outside they would have a substantive impact on the wildlife in the greenspace I live adjacent to. I have made the decision that they will be indoor cats and spend their lives inside where they will be safer and will not be able to impact wildlife.

Some would argue that other factors are more significant in declining wildlife populations, such as habitat loss and fragmentation and they would be correct in these assumptions. Assuming, however, that the impact of domestic cat populations on wildlife is not important would be wrong: free-roaming cats add to the pressures exerted on wildlife.

While your *Felis sylvestris* may look the picture of innocence as he or she lies curled up on a favorite chair, consider the following:

- There are likely 70 million pet cats in North America and 40-65 million feral cats. A total of 135 million.
- Studies have shown that 7.8 million birds are killed by cats in Wisconsin alone each year. A similar study conducted by researchers in the United Kingdom estimated that "outdoor" house cats and feral cats were responsible for killing nearly 78 million small mammals and birds annually in the United Kingdom.
- Species killed by cats can vary, subject to habits of individual cats, time of year, and availability of prey. Roughly 60% to 70% of the wildlife killed by cats is small mammals; 20% to 30% are birds; and up to 10% are amphibians, reptiles, and insects.
- Domestic cats are the primary cause of the extinction of eight bird species native to islands, including the Stephens Island Wren, Chatham Island Fernbird, and Auckland Island Merganser. Domestic cats have eradicated 41 bird species from their New Zealand island ranges alone.



Yoda the kitten. Photo: Angela Deering

There are also a number of myths about free-roaming cats that persist. The first is that well-fed cats don't kill. Well-fed cats kill wildlife because the hunting instinct is independent of the urge to eat. A study of cats hunting versus eating behaviours found that cats presented with a live rat while eating their preferred food stopped eating the food, killed the rat, and then resumed eating the food. Some free-roaming domestic cats have been documented to kill more than 100 animals each year. One well-fed cat that roamed a wildlife experiment station was recorded to have killed more than 1,600 animals (mostly small mammals) over 18 months.

The second common myth is that bellringing a cat stops predation. Birds and other wildlife do not necessarily associate bell ringing with danger. Some cats become very clever about moving so as not to ring the bell while they hunt. As well, bells offer no protection to fledglings and other young. The only solution to address the impact of domestic cats on wildlife is to spay and neuter your cat and keep them indoors.

The final myth is that it is unnatural or cruel to keep a cat cooped up inside all day. Outdoor cats face many dangers each day, traffic, poison, cruelty, becoming lost or stolen, injury and disease. They are also exposed to fleas, ticks and other parasites. Most free roaming cats typically don't live for more than three years. By contrast, indoor cats have much longer average life spans, living on average 12-18 years of age. Of the cats "found" and brought to animal shelters it is estimated that less than five percent are ever reunited with their families.

Yoda and Cecil will join our other two adult cats in the safety and security of our home and live out their lives as indoor cats. Is it unfair to deny them the free roaming lifestyle of many of their counterparts? Definitely not. Yoda and Cecil will never be hit by a car, attacked by another animal, or captured by an irritated neighbour and dumped far away from home. As well, I will be secure in knowing that Yoda and Cecil are more likely to attack my socks than the chickadees at my bird feeder.

References

- American Bird Conservancy - Cats Indoors Campaign! <http://www.abcbirds.org/cats/>
- Humane Society of the United States - Keep Your Cat Safe at Home http://www.hsus.org/pets/pet_care/cat_care/keep_your_cat_safe_at_home_hsuss_safe_cats_campaign/
- National Wildlife Federation, <http://www.nwf.org/nationalwildlife/article.cfm?articleId=768&issueId=61>
- Wisconsin Natural Resources Magazine, <http://www.wnrmag.com/stories/1996/dec96/cats.htm>

How to Make Your Outdoor Cat a Happy Indoor Cat

An information sheet provided by the *Cats Indoors!* campaign of the American Birding Association.

Although it takes patience, an outdoor cat can become a perfectly content indoor pet. Some people make the transition from outdoors to indoors gradually, bringing their cats inside for increasingly longer stays. Other people bring the cat in and shut the door for good. Either way, the key is to provide lots of attention and stimulation while the cat is indoors. Here are some tips to help you in the process:

- Your geographic location may affect your schedule of change; choose a good time of year to bring the cat indoors. In many parts of the country, the easiest time of year to make this conversion is during the cold winter months when your cat is more likely to want to be inside anyway. By the end of winter, your cat may be completely content to remain inside.
- Substitute outside excursions with periods of special play time. Supervised trips out on the patio can also make the transition from outside to inside a little easier. Cats need human companionship to be happy, and when they spend all their time out of doors, they get very little attention. An outdoor cat may welcome the indoors if he or she gets more love, attention, and play.

- To keep your cat occupied indoors, provide secure cat condos which offer interesting places to lounge, play and scratch. You should also provide scratching posts, corrugated cardboard or sisal rope for your cat to scratch. Praise your cat for using them.
- To encourage your ex-outdoor cat to exercise, offer interesting toys, especially those that are interactive. These usually consist of a long pole and attached line with fabric or feathers at the end of the line. Some cats enjoy searching for toys. If your cat likes to explore the house looking for “prey,” hide toys in various places so your cat can find them throughout the day. Be sure that the toys are not so small that they can be swallowed or get stuck in your cat’s throat. Cats also enjoy ping pong balls, paper bags and cardboard boxes.
- Provide your indoor cat with fresh greens. You can buy kits that include containers and seeds to grow, (see Cattail Gardens at www.cattailgardens.com) or plant pesticide-free alfalfa, grass, bird seed, or catnip in your own container. This way, your cat can graze safely and not destroy your house plants. Many cats love cooked string beans or

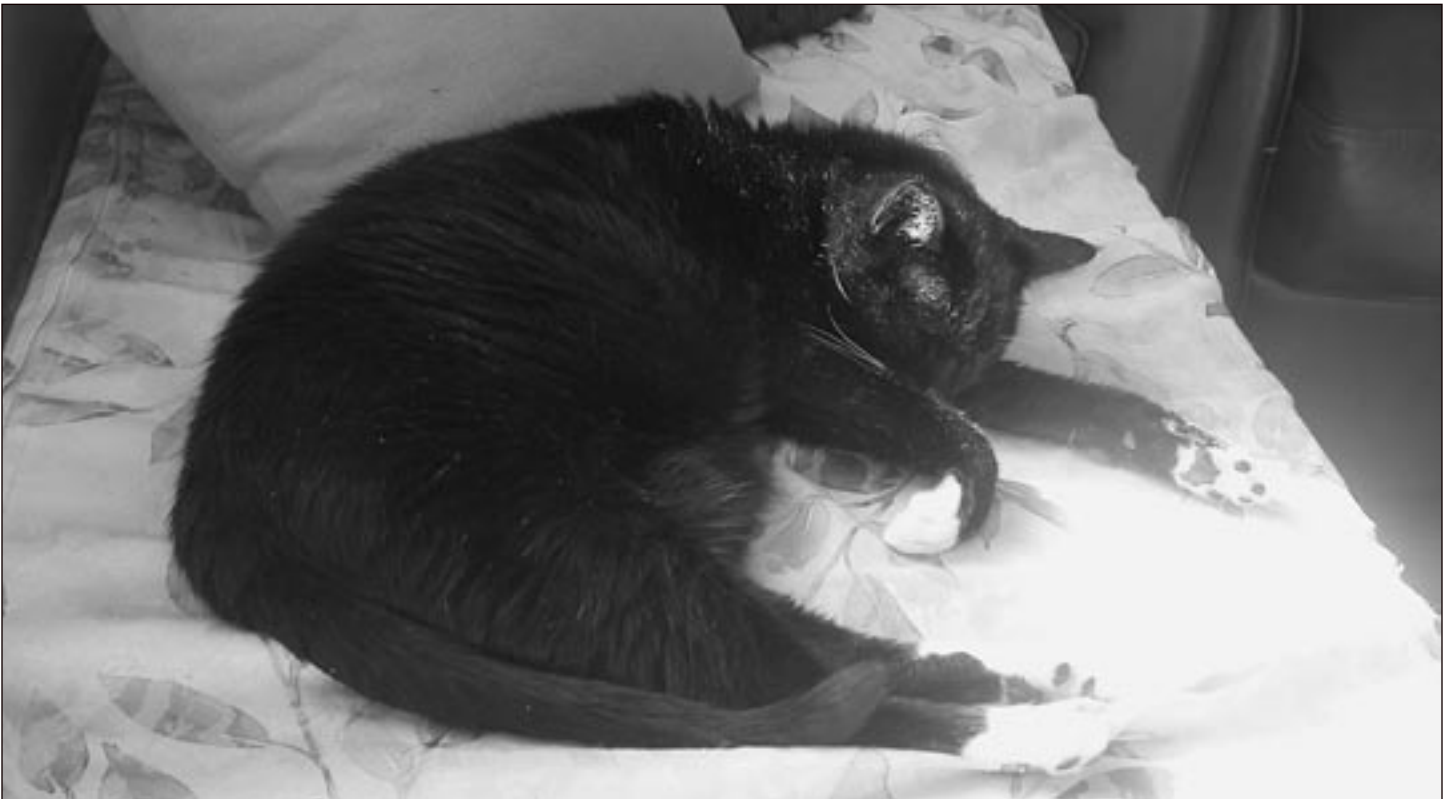


Photo: Claudia Copley

peas cooled to a safe temperature, which is another way to give them greens.

- If your cat remains stubbornly committed to life outdoors, help your cat adjust by providing an outdoor covered enclosure or run that the cat can access through a window or pet door. Such a facility gives the cat some of the advantages of being outside while minimizing the dangers. You can make the outdoor enclosure interesting and appealing by adding objects for the cat to explore, such as tree limbs, multilevel cat condos, tires, toys hanging from branches, and boxes in which the cat can curl up or hide. Check out the following products: *Cat Enclosure Kit*: 1-888-554-PETS, or www.cd pets.com *Kitty Walk* at www.midnight-pass.com, *SafeCat Outdoor Enclosure* at: www.just4cats.com.
- If you cannot, or prefer not to offer your cat a run or enclosure, consider leash-training your cat so you can supervise time outside. Attach the leash to a harness. Your cat may resist leash-training at first, but will eventually accept the leash. Never leave your cat outside unsupervised while on a leash or lead.

Some cats may develop behavioral problems when they are no longer allowed outside. Most of these problems can be attributed to a change in routine that is too abrupt or a lack of attention and stimulation inside. Review your steps and keep working with the cat. Be patient and continue to praise

your cat when playing with toys, using the scratching post and litter pan. If your cat becomes destructive or stops using the litter.

Additional tips for a happy indoor cat:

- Trim your cat's claws every one to two weeks to keep your cat from damaging furniture, rugs and drapes, or glue on artificial nail caps called Soft Paws www.softpaws.com every six to eight weeks.
- Provide one litter pan per cat and scoop the litter pan at least once daily. With non-clumping litter, change once or twice weekly; with clumping litter, change every two to four weeks.
- Many cats enjoy the companionship of another cat or compatible dog of the opposite sex. If you can make the financial and emotional commitment, consider adopting another companion animal for yourself and for your cat.

Adapted from, "All Cats Should Be Indoor Cats" by Rhonda Lucas Donald, Shelter Sense, August 1990, and "From Outdoors to Indoors" by Karen Commings, Cat Fancy, September 1993.

For more information, contact: American Bird Conservancy, Cats Indoors! The Campaign for Safer Birds and Cats, 1731 Connecticut Avenue, NW, 3rd Floor, Washington, DC 20009. Phone: 202/234-7181; Fax: 202/234-7182. E-mail: abc@abcbirds.org. Web site: www.abcbirds.org



Bird Watchers Digest reviewers put the Eagle Optics Ranger Platinum Class binoculars on both their "Best Buy" and "Favorites" lists.

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To: The Executive and Members — Victoria Natural History Society

Re: Buttertubs Marsh Acquisition — A request for your assistance

The Nanaimo Field Naturalists Club is leading a coalition of community organizations in a fund raising endeavour to expand the protected area of the local wetland known as Buttertubs Marsh. Located virtually at the epicenter of the City of Nanaimo, this wetland covers about 100 acres of which 40% is public land (owned by the Nature Trust of B.C. and the City of Nanaimo) and 60% is private. Our long-term goal is, step-by-step, to acquire the private lands to restore Buttertubs to its former natural boundaries (*see map*).

Our first acquisition is a one-acre, riparian old growth coniferous forest, which will be a valuable addition due to its biodiversity. The owner has been very generous in negotiating a price of \$45,000. (approximately \$1 per square foot, or \$10 per square metre) As of today we are halfway (\$22,400) towards this goal.

We are not looking for large donations but we are looking for lots of donations. A strong showing of public support will demonstrate that Buttertubs, and wetlands in general, are valued and appreciated community resources. Therefore we are asking your Club and your members to support this most worthy cause.

Every donation will be acknowledged with a certificate commemorating the contribution. Donations of \$25 or more will be issued a charitable donation receipt. Cheques should be made payable to: T.N.T.B.C. — Buttertubs — in Trust (The Nature Trust of British Columbia) and posted to: Buttertubs, PO Box 125 Nanaimo BC V9R 5K4

The Nanaimo Field Naturalists Club looks forward to your support and asks that you make this request known to your membership. For further information please visit: www.nalt.bc.ca — click **Acquisition Projects** — then click — **Buttertubs Marsh Integrity**.

Thanking you in advance for your assistance,

Yours truly,
Bill Merilees,
Chair, NFNC, Buttertubs Committee

Editor's Note: The Board of the VNHS decided to contribute \$1,000 to this initiative and we hope members of the Society will also support the work of land trusts around the province. They're working hard to preserve places we all enjoy.



Salmon Farming Set to Expand into the Heart of BC's Wild Coast

By Michael Price

The provincial government committee on sustainable aquaculture will wrap-up their public hearings at the Parliament Buildings in Victoria at the end of October. They have been visiting coastal communities throughout the province over the last six months, attempting to assess the favourability of coast-wide expansion of salmon farming.

This is not a new process; we have been through this before. Concerned citizens and biologists have repeatedly informed the government of impacts to wild salmon, shellfish, and other marine life. Yet salmon farms have expanded at a similar rate to the accumulated weight of scientific evidence of its impact on marine biological communities. The heart of BC's wild coast is now targeted by salmon farming corpora-

tions as the next gold rush area, and we as citizens must not sit idly by while the government decides its ultimate fate.

What we know

Salmon farming was born amidst the deep fjords of Norway, and soon spread to remote coastal areas of Scotland and Ireland. The wild Atlantic Salmon that once filled the hulls of fishing boats throughout Western Europe had declined to the point of commercial extinction; farming seemed like the only option. Yet the moment salmon were placed in net-pens amidst the shallow marine environment and adjacent to productive wild salmon rivers, strange events began to occur. Fly fishermen were the first to witness sea trout



Farm pens, Sargeants Pass. *Photos provided by author*



Two sea lice on a young salmon. Scars from other sea lice attachments are also evident.

frantically returning to rivers after only days of migrating to sea; their young bodies infested with sea lice. It was a desperate attempt to rid the infectious parasites, yet their premature return to freshwater proved utterly suicidal. Sea trout populations rapidly plummeted in all areas adjacent to fish farms, and world famous rivers of Ireland and Scotland saw their souls swiftly vanish.

None of this was conveyed to coastal communities along Canada's west coast when the salmon farming industry first crossed the Atlantic Ocean. However, like the sea trout, strange biological occurrences were soon witnessed that had never been observed before. The initial hint came when a cohort of wild Pacific salmon returned to spawn, and were found laden with open wounds caused by a highly contagious bacterial infection. Ironically, this infection was only observed in salmon farming areas, and it wasn't long before the first signs of sea lice surfaced.

Juvenile pink and chum salmon are unique in that they migrate from natal rivers to the open ocean when they are only a few weeks old, and lacking the protective armour of scales. Throughout the Broughton Archipelago off the northeast tip of Vancouver Island, these juveniles must swim past farms to reach the nutrient-rich outer sea. It is apparent that nearby fish farms have become reservoirs for sea lice, and are severely infecting juveniles as they migrate through the area. In a study documented by a local biologist, 75% of juvenile pink and chum Salmon became infected with lethal levels of sea lice as they migrated through farm areas. When this generation returned to spawn eighteen months later, only two percent arrived. The population declined from three million individuals to less than 200,000 within a single generation. This collapse was specific only to rivers of the Broughton Archipelago, as farm-free regions all along BC's coast recorded high spawning numbers.

Eyebrows began to rise, and biologists soon recorded evidence of Atlantic salmon escaping from farm net-pens. Although the true number of escapes is unquantifiable, more than one million are reported to have escaped between 1992 and 2002, with additional unaccounted-for losses estimated at a further one million. Farmed salmon continue to escape because of the precarious nature in which they are kept, as predators, storms, and human error enable escape events. The Canadian government and salmon farming industry have tried to calm public fears by stating their assurances that although this exotic species may escape, they will not

survive; nor will they return to rivers to spawn as they would in the Atlantic. Moreover, we have been repeatedly assured that even if escaped Atlantic salmon spawn, their progeny will not survive.

The reality, however, is that every political assertion made over the years has proved false. Escaped Atlantic salmon have been found as far north as Alaska where no salmon farms exist. They are currently found in all major drainages on Vancouver Island, competing directly with wild salmon for spawning habitat and food, predating on wild salmon fry and eggs, and successfully reproducing in wild salmon spawning rivers. The only mystery remaining is whether wild-spawned Atlantic salmon juveniles are capable of going to sea and returning as adults to complete their life cycle. Although the Canadian government and farming industry fervently deny this possibility, escaped Atlantic salmon are poised to colonize wild salmon spawning rivers along BC's entire coast.

Impacts on wild salmon and their marine environment as a result of salmon farming in BC extend far beyond parasite infestations and escaped exotic fishes. Scientists have revealed the transfer of diseases from Atlantic salmon to wild Pacific salmon, aversions of marine mammals to regions where farms disperse high amplitude sound, direct killing of seals, sea lions, and sea otters in close proximity to farms, impacts on Pacific herring, and elevated mercury levels in rockfishes near farms. Many studies in Europe have also identified extensive nutrient and chemical contamination on benthic communities beneath farm pens. Given time and a focused research priority, the actual extent of habitat degradation caused by salmon farming in BC will surely be highlighted.

The independent scientific community does not refute the evidence of impacts caused by salmon farms on marine biological communities. What we often read in local newspapers, and hear on radio and television, is a confusing contortion of the truth by government and industry leaders. The public must realize that research results are always *suggestive*, never *conclusive*; that science is never *exact*, only *approximate*, and it is the weight of evidence from several studies combined that is important. This weight of evidence has enabled the scientific community to conclude that sea lice from farms are infecting wild fish, escaped Atlantic Salmon are competing with wild Pacific salmon, and salmon farming in BC is significantly impacting our marine environment.

The Heart of the Matter

There are currently 85 farms in operation around Vancouver Island, situated primarily along the east coast. So densely packed are farms in areas such as the Broughton Archipelago that even Norway (the mother country of salmon farming) forbids the level of concentration due to the associated impacts on the marine environment. Salmon farming is a multinational industry whereby three corporations (soon to be two) own 80% of BC farms. These corporations are now pressuring our provincial government to allow them to expand their salmon farming operations into the wild and relatively unspoiled central and north coast.

This area of Canada's forgotten coast is all that Vancouver Island once was, and more. It is a place where the wandering roots of towering trees tickle the bellies of millions of healthy wild salmon. Grizzly bears saunter along forest trails worn smooth by their ancestors; weathered spires of Sitka spruce and redcedar trees more than 1500 years in age pierce the skies above lush forest floors; rainforest wolves swim between oceanic islands in search of deer and marine mammals washed ashore. This ancient temperate rainforest is the largest and most intact of its kind in the world. It exists as humanity's window into the past, where the rich assemblage of organisms is the result of over 10,000 years of evolution. The process began when glaciers of the Pleistocene epoch melted, and the remote convolution of myriad rainforest islands continues to shape the area's biological communities. Abundant rainfall saturates the region and coalesces into tens of thousands of tributary streams. These streams spill forth unto the marine environment below, and it is at this junction, where rainforest meets ocean, that five species of Pacific salmon continue to transcend two contrasting worlds.

We have come to realize that Pacific salmon are one of the most important biological contributors to BC's coastal rainforest. During every stage of a salmon's life cycle, more than 190 species of plant and animal benefit from their abundance: salmon eggs support numerous species of seagulls, diving birds, and freshwater fishes; migrating juveniles feed Great Blue Herons, loons, river otters, and rockfishes; adults on the open ocean sustain harbour seals, sea lions, and killer whales. As salmon begin their arduous return to rivers to spawn, terrestrial predators like grizzly bears, wolves, and black bears haul their spent bodies into the forest as uncontested meals. Lying along stream banks and spread throughout the forest, the salmon's decaying remains provide food for aquatic and terrestrial insects. The progeny of these insects will then hatch the following spring in time to sustain migrating songbird populations. The remaining nutrients percolate into the soil, ultimately feeding the plants that encompass salmon forests (the very rainforest that provide habitat for salmon to procreate and survive).

There is more at stake here than simply an unquantified degree of impact on wild salmon. Industrial-scale salmon farming threatens to convert a marine environment of unfathomable biological wealth into yet another diminished coastline. The activity further threatens



Scientists have revealed ... direct killing of seals, sea lions, and sea otters in close proximity to farms, impacts on Pacific herring, and elevated mercury levels in rockfishes near farms.

a rainforest as dependent on wild salmon for nutrients as it is on rainfall.

Wild Pacific salmon are the pillars of BC's coastal environment. They are the focal group by which future generations will gauge whether we desired an industrial-managed planet of tree plantations and fish farms, or whether we valued one of the last remaining wild areas above all else. We have allowed the plunder of our oceans, the neurotic over-harvest of salmon, and the removal of intact valley forests for timber. To allow expansion of salmon farming into Canada's forgotten coast is to trade Mother Nature herself for yet another homogenised, industrial, mass-produced commodity.

The government committee on sustainable aquaculture is requesting the public's opinion as to whether to allow the expansion of salmon farming into the remote central and north coast. I urge you to speak out in favour of all that is wild and remaining in our coastal province, and write to the committee demanding an immediate moratorium on this industrial activity. Pristine environments can only lose their virginity once; fish farms threaten to take it away.

Write to:
Robin Austin (committee chair)
Room 224, Parliament Buildings
Victoria, BC V8V-1X4
Email: aquaculture@leg.bc.ca

2006 Christmas Bird Count Information for the Region

By Ann Nightingale

Beginning on Christmas Day 1900, ornithologist Frank Chapman, an early officer in the then budding Audubon Society, proposed a new holiday tradition—a “Christmas Bird Census” that would count birds in the holidays rather than hunt them. So began the Christmas Bird Count. These efforts have allowed hobbyists and scientists to monitor population trends and to get just a little closer to nature during the Christmas season.

More than 1,800 communities in North America are assigned standardized 15-mile diameter circles in which to count all the birds they can in a single day. In our area, this covers almost all of the greater Victoria region, so we need plenty of help. 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. There are a few “keeners” who go out looking and listening for owls in the pre-dawn hours, and a few teams of boating birders who check out the offshore waters, weather permitting and suitable boats available. Feeder counts can be reported via the VNHS website.

Last year, we had 180 counters and tallied 65,001 individual birds, our second lowest total in the last 10 years. Despite the lower numbers overall, a few species did produce record highs: Wood Ducks continue to prosper at Mystic Pond, Anna's Hummingbirds are spreading throughout the region, Turkey Vultures and Barred Owls are becoming regular entries on our lists, and Hermit Thrushes also hit a new high count. Cackling Geese also had a record year, thanks to the AOU reclassification to a species in 2004.

The bird that caused me the most distress last year was a Snowy Owl, seen on the Victoria waterfront for several days before and after the count. We didn't get it on count day, though. Perhaps it wasn't there. Or perhaps we weren't thinking Snowy Owl – we didn't hear that it was in the area until after the count day. So this year, I am making a special request for everyone to report known locations of owls in the two weeks before the count. Let's see how many individuals and species of owls we can tally up this year!

For those who are unsure about participating, or who want to tune-up their bird-counting skills, a number of field

Christmas Bird Count 2006

Give A Hoot! ***

Victoria

Saturday, December 16, 2006

Saltspring Island/Sidney

Sunday, December 17, 2006

Sooke

Saturday, December 23, 2006

Duncan

Monday, January 1, 2007

***New location for Victoria Post-Count Gathering

trips in November and early December will serve as a good practice.

If you are curious, interested, would like to see lists and pictures of the region's winter birds, or just need more information, please check out the VNHS website (www.vicnhs.bc.ca/cbc/) and the Christmas Bird Count site (www.birdsource.org) or contact Ann Nightingale at 652-6450 or by email at motmot@shaw.ca for the Victoria or Saltspring/Sidney counts; Denise Gubersky (dgubersky@telus.net; 642-3996) for the Sooke count; Derrick Marven (marven@shaw.ca; 250-748-8504) for the Duncan count. If you have a preference to count in a specific area, you may contact the team leader for the area directly.

After the day of counting is over, there is a post-count gathering to share stories and find out how we have done. Our usual location is not available this year, so we will be holding the post-count gathering at the Gordon Head United Church Hall, 4201 Tyndall Ave. (Longtime counters will remember this location!) Any contributions of fingerfoods or treats would be appreciated!

2006 Christmas Bird Count areas

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	TBA	652-6450	motmot@shaw.ca
4	Thetis Lake – Hastings Flat	Tracy Anderson	386-5229	t_anderso@hotmail.com
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	Donna Ross	384-5327	hoshihana@shaw.ca
10	Victoria Harbour	Ed Pellizzon	881-1476	edlps@telus.net
11	Beacon Hill Park	Tom Gillespie	361-1694	twgille@telus.net
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	Jeremy Tatum	477-1089	jtatum@uvic.ca
16	Swan Lake – Cedar Hill	Bill Dancer	721-5273	dcdancer@shaw.ca
17	Blenkinsop Lake – Panama Flats	Cheryl Mackie	479-4083	bcmackie@pacificcoast.net
18	Elk Lake – Cordova Bay	Mike McGrenere	658-8624	mcgrenere@shaw.ca
19	Prospect Lake – Quick's Bottom	Dave Fraser	479-0016	arenaria@island.net
20	Martindale – Bear Hill	Brent Diakow/Ann Nightingale	652-6450	motmot@shaw.ca
21	Zero Rock (ocean)	TBA	652-6450	motmot@shaw.ca
22	Chain Islets (ocean)	Marilyn Lambert	477-5922	lambert@pacificcoast.net.
23	Juan de Fuca (ocean)	Ron Bates	386-1264	rbates@bc1.com



Bushtit in blooms. Photo: Ron Hoppe. An entry in the VNHS 60th Anniversary Photo Contest.

Research Shows that Plants Like a Path to Biodiversity

By Cornelia Dean

Editor's Note: This was published in The New York Times: 5 September 2006

For years, ecologists have theorized that establishing landscape corridors to connect otherwise isolated plant and animal habitats would encourage biological diversity. Now researchers working in South Carolina have demonstrated it, at least with plants.

The researchers, who report their findings in the current issue of the journal *Science*, surveyed dozens of test plots in forested areas of the Savannah River Site, a 310-square-mile

swath of southeastern South Carolina originally set aside to produce nuclear weapons for the military. (The plots are now managed by the federal Forest Service for pine production.) The researchers surveyed their sites regularly starting in 2000 and found that, over time, there was more plant diversity in patches connected by corridors than in other patches, even if they had the same total area or the same amount of “edge” space between cleared and wooded areas.

Patches connected by landscape corridors “had 20 percent more species of plants than unconnected patches,” said Ellen Damschen, the lead author of the report and a postdoctoral fellow at the University of California, Santa Barbara. The finding is important, ecologists say, because the fragmentation of wild land by human activities is one of the most important threats to biodiversity. More and more, landscape managers are incorporating corridors into their plans, but there is relatively little data on effectiveness. “People have done corridor experiments with fruit flies in bottles, but that’s hardly the sort of thing that is going to be very compelling to a wildlife manager,” said Stuart L. Pimm, a professor of conservation ecology at Duke University, who is familiar with the new study.



Morning mist. Photo: Bob Hooper. The overall grand prize winner in the VNHS 60th Anniversary Photo Contest.

Patches connected by landscape corridors had 20 percent more species of plants than unconnected patches.

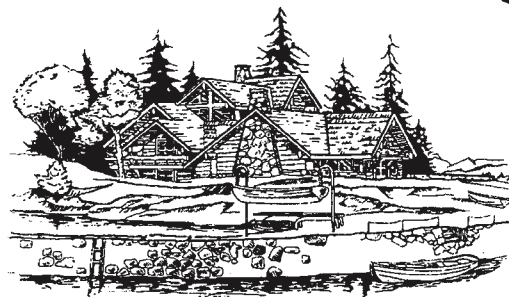
“Were the results surprising? No,” he said. “But it’s the kind of example that’s going to go into a textbook because this shows that corridors work instead of us just thinking that they work.”

Wildlife corridors have been established in areas like the Rocky Mountains, but researchers there are still studying whether the ones linking protected areas from the Yukon to Yellowstone actually improve wildlife diversity. “It is surprising that we would see such a dramatic change over a short time scale,” Dr. Damschen said. But the research, also carried out by scientists from several other universities, shows that “plants can change relatively quickly through their interactions with the landscape and the animals that interact with them,” like birds and rodents that disperse seeds or insects that act as pollinators. In part because the corridor-connected patches have more varieties of birds, insects and animals like mice, she said, “the number of seeds that reach a patch that’s connected by a corridor is higher.”

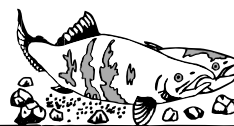
Some ecologists had feared that the landscape corridors might also help spread invasive species, but that did not seem to happen on the test plots, the researchers wrote. They said that areas connected by corridors “retain more native species than do isolated patches, that this difference increases over time, and that corridors do not promote invasion by exotic species.” That may be, Dr. Damschen suggested in an interview, because invasive species “are really good at moving and don’t need corridors.”



Jim Farrell 477-7291 jamesbfarrell@shaw.ca



3700 Yellow Point Road,
Ladysmith, B.C. V9G 1E8
(250) 245-7422



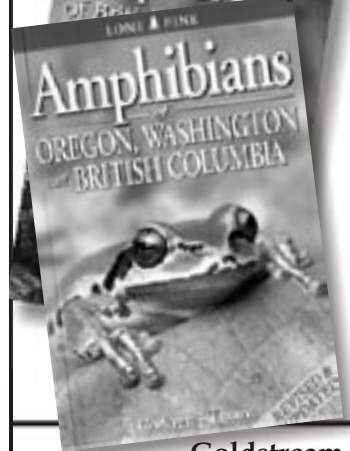
Goldstream Park Bookstore

At the Goldstream Park Nature House

Get the low down on herps with the latest from the Royal BC Museum and the newly revised, all colour, Lone Pine Amphibians Guide.

Proceeds support environmental education at Goldstream Park.

Free delivery to VNHS gatherings!



Goldstream Nature House
Open daily 9:00 am to 4:30 pm
478-9414 - goldstreamnaturehouse.com

Butterflies of British Columbia

By John Acorn and Ian Sheldon
Lone Pine (2006)

Review by James Miskelly

The 2001 release of Cris Guppy and Jon Shepard's *Butterflies of British Columbia* was a great event for butterfly watchers in this province. Finally, we had a complete treatment of all known BC species, with ecological information on each that was both thorough and regional. The problem? The size and layout of the book severely limited its use as a field guide. Those searching for a local field guide turned to Robert Pyle's *The Butterflies of Cascadia*. Here they found a rich trove of Pyle's prose, and an excellent field guide for Washington and Oregon, but not a good guide for BC. Only southern BC was covered and, even there, treatment ranged from incomplete to dismissive. Now at last, BC's butterfly watchers (also known as butterfolk or lepers) have a real field guide that covers the whole province and is easy to carry. *Butterflies of British Columbia* is written by John Acorn, illustrated by Ian Sheldon, and published by Lone Pine.

Butterflies of British Columbia includes all species known from British Columbia except the viceroy (extirpated in the early 1900's) and Edith's copper (first recorded in BC within the last few years). The number of species recognized is similar to the Guppy and Shepard book, and Acorn has accepted most of the splits first made in that book (including some that are not yet widely accepted). Each species' entry includes at least one illustration of the butterfly as it would appear in nature, some general remarks, alternate names, similar species, a list of larval host plants, habitat, flight season, a description of diagnostic features, and a range map. The tone of the writing is casual but engaging and rigorous. What else would you expect from the Nature Nut? The general remarks are interesting, if a little heavy on taxonomy. Taxonomy is a common topic among butterfolk, but can be confusing or annoying for beginners. However, the list of alternate names that are included with each species should relieve any confusion, especially since all alternate names are included in the index. The lists of larval host plants are not exhaustive, and in some cases the most common host plant for our area is not even on the list. Those with particular interest in butterfly ecology or butterfly gardening will find the Guppy and Shepard book to be their best resource. As with any book, the text of *Butterflies of British Columbia* does contain a few obvious errors. For example, there are a few cases where the range as described in the text does not match the range map, and anyone who spends time in the mountains will take issue with the claim that Anna's blue is extirpated from Vancouver Island.



Zerene Fritillaries. Photo: James Miskelly. An entry in the VNHS 60th Anniversary Photo Contest.

Ian Sheldon's illustrations are truly spectacular, and it is worth buying this book just to look at the pictures. All butterflies are illustrated in natural poses (some in flight!) to aid in field identification. In addition, there are small inset illustrations of similar species for quick comparisons. With a few species, Sheldon may have been working from faded specimens, as colours or patterns that are generally bold and obvious in the field are not as clear in the illustrations. This makes some species look more similar in the book than they look in the wild.

As someone who comes at butterflying from a conservation perspective, my biggest problem with this book is the simplistic approach to conservation issues. Acorn repeated muses that species that enter BC only in the south Okanagan are likely to expand their ranges as the climate warms, ignoring the realities of massive habitat destruction. But, of course, this book was not written as a treatise on butterfly conservation. Everyone who spends time thinking about butterflies will enjoy pouring over a book like this and clucking over discrepancies with their own point of view. In general, this is a wonderful book, which will undoubtedly further the study and appreciation of butterflies in our province. Buy the Guppy and Shepard book for detailed biological information, buy the Pyle book for the prose and insights in butterfolk culture, but buy this new book as a field guide and for a comparatively light-hearted treatment of the joys of butterfly watching.

References

- Acorn, J. and I. Sheldon. 2006. *Butterflies of British Columbia*. Lone Pine Publishing.
- Guppy, C. S. and J. H. Shepard. 2001. *Butterflies of British Columbia*. Royal BC Museum and UBC Press.
- Pyle, R. M. 2002. *The Butterflies of Cascadia*. Seattle Audubon Society.

Watch for Colour-banded Cooper's Hawks

A study of urban-nesting Cooper's Hawks has been underway in Greater Victoria since 1995. To date over 1,200 of these hawks have been banded at about 75 nest sites. You can greatly assist this research project by watching for and reporting observations of these banded hawks.

Colour-bands are uniquely coded with two vertical alphanumeric characters (i.e. letter over letter, number over number) and are placed on the left leg (see illustration). To provide ease of visibility, these codes are repeated three times around the circumference of the band. Bands can be read at a distance of about 20 m with binoculars or up to 75 m using a spotting scope. Red bands were placed on females and black bands were put on males. If you observe one of these marked hawks, please record the band colour and code, date and time, whether it was in adult or juvenile plumage, as well as the location.

Please report all sightings, even if you were unable to determine the band code.

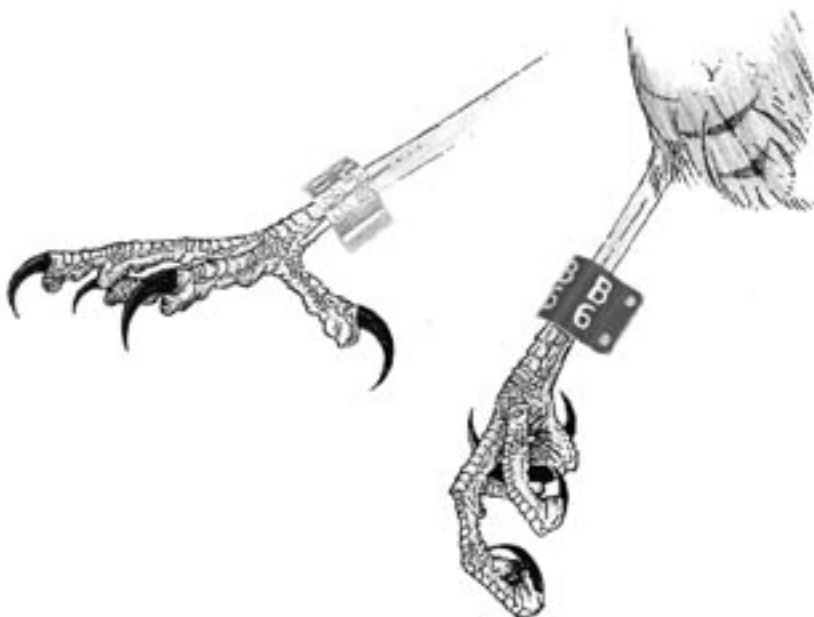
To date >2,000 observations of these marked birds have been reported in southwestern BC from as far away as Parksville on Vancouver Island and Delta on the mainland coast. A few recoveries have also been reported from Washington, Oregon, Nevada, and California. However, over 95% of year-round sightings come from the Greater Victoria and Saanich Peninsula areas. Many of these hawks were observed in the vicinity of backyard bird feeders.

Please report Cooper's Hawk observations to:

**Andy Stewart
Wildlife Biologist
3932 Telegraph Bay Road
Victoria, B.C. V8N 4H7**

Phone: (250) 387-9780 or 477-1328

E-mail: andy.stewart@shaw.ca



This example colour-band would be recorded as “**B over 6**”. Red bands signify it is a female and black bands indicate it is male. These bands are always on the left leg. U.S Fish and Wildlife bands are on the right leg of all colour-banded hawks. The numbers on these aluminum bands can not be read except when in hand.

HAT Tricks

30 Year-old Kills Veteran in Park

By Geoff Huber, HAT Outreach and Restoration Specialist



There was no murder weapon, motive or witness. The old tree suffered a lingering death.

This phenomenon has been increasing at an alarming rate since colonists first set foot on this great island. “Conifer in-growth” is dramatically altering Garry oak woodlands all over the CRD and little is being done to stop it.

“Conifer in-growth” is a natural process called forest succession, where conifer trees grow from under and shade out slower growing, shorter broadleaved trees. In our region this is occurring at the borders of Douglas fir forests and Garry oak and Arbutus woodlands. In the past, indigenous peoples of the region frequently burned Garry oak meadows to maintain deer, berry, acorn and camas stocks. Today, this sustaining disturbance is gone and “conifer in-growth” is continuing unchecked.

Less than five percent of the rare and endangered original Garry oak ecosystems remain in our region. If you find sapling conifers growing up through your veteran oaks and arbutus, consider calling an arborist to assess the threat they pose to your high value trees. Also watch for increasing conifer shade on your native camas lily meadows.

Habitat Acquisition Trust
PO Box 8552 Victoria BC V8W 3S2
(250) 995-2428, hatmail@hat.bc.ca
www.hat.bc.ca and
www.conservationconnection.bc.ca
(Your online directory of conservation organizations and events in the CRD.)



Shade-killed arbutus. *Photo: Tod Carnahan*

Letters

Letters of appreciation for the books donated to school libraries through the VNHS School Project.

Happy International Day for the Preservation of the Ozone Layer!

I want to express our great appreciation for all the VNHS advocacy work you're taken on in the past year in local schools. It hasn't gone unnoticed. The Field Guides you donated to our Library are invaluable to our collection and fascinating to everyone. Your volunteer experts have been into our classrooms, exciting students about the natural world.

As well, my students were thrilled with the beautiful and informative "Enjoy the Outdoors" Perpetual Calendar. You can only imagine how proud they were. Also, without your calendar, I wouldn't have known that today was International Day for the Preservation of the Ozone Layer!

I feel your work directed at youth is of utmost importance and commend you for your efforts.

Sincerely

Pat Miller, Teacher Librarian, Prospect Lake School

Dear Mr. Defayette and the Victoria Natural History Society,

On behalf of the staff and students at Frank Hobbs Elementary School, I would like to thank your Society very much

for your kind donation of books to our school. These will make a wonderful addition to our library and will be enjoyed by countless students and adults who share your keen interest in our natural environment. Your generosity is truly appreciated.

With thanks,

Nancy Taylor, Librarian, Frank Hobbs Elementary School

To whom it may concern,

I am greatly honoured to have received the **2006 Bev Glover Memorial Scholarship** and would like to express my extreme gratitude.

I am a 4th year Biology Major at the University of Victoria and with your generous support I will be completing my Bachelor's of Science in this upcoming year. Currently my career focus is in pest management, especially in the areas of invasive or alien insects and plants. In addition, I have a keen interest in conservation and biodiversity research, which may also influence my future career choices.

This scholarship will help to alleviate the financial stress of university and allow me to further concentrate on my studies. Thank you very much: your gift is greatly appreciated.

Sincerely,

Meghan Bland



Caught in the act. Photo: Marie O'Shaughnessy. An entry in the VNHS 60th Anniversary Photo Contest.

Letters of thanks from school children who have visited Goldstream Provincial Park during the annual salmon run (on now!). The VNHS contributes financially to these programs.

Dear Victoria Natural History Society,

My name is Emma and I am a student in grade six at St. Patrick's Elementary. We went on a field trip to Goldstream park in October. I really enjoyed it when we went on the nature walk. I also thought that the movie was cool too. In the movie I learned a lot like on how they can tell if a wolf ate the fish or if it was a bear, and I also never knew that there is such thing as a spirit bear (it is a white bear). I also never knew that the fish could help a forest grow. I want to thank you for being a sponsor of the Goldstream education programs for students. Sincerely, Emma Thomson

Dear Victoria Natural History Society,

My name is Julie Gerein and I am a student at St. Patrick's Elementary. Our grade six class went on a field trip to Goldstream park in October. On this trip we learned about how the salmon affect the rest of the forest. I really enjoyed spending time at Goldstream and learning more about the salmon and all the other wild life at Goldstream. I want to thank you for being a sponsor of the Goldstream education programs for students.

Sincerely,
Julie Gerein

Dear Victoria Natural History Society

My name is Jeremy Bernoldy and I am a student in grade six at St. Patrick's Elementary. We went on a field trip to Goldstream park in October. I enjoyed watching show and looking at dead salmon. I learned that the salmon provide nitrogen to the trees. I want to thank you for being a sponsor of the Goldstream education programs for students.

Sincerely, Jeremy Bernoldy

Dear Victoria Natural History Society,

My name is Maggie and I am a student in grade six at St. Patrick's Elementary. We went on a field trip to Goldstream park in October. I enjoyed watching the video about wolves coming and eating the salmon and pulling it in the forest to fertilize the trees. I learned that wolves only eat the head of the salmon and the bears eat the brain and eggs of the salmon. I want to thank you for being a sponsor of the Goldstream education programs for students. Thank you very much.

Sincerely,
Maggie Ling

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 at 7:30 p.m.); **Natural History Presentations:** the second Tuesday at 7:30 p.m., in Murray and Anne Fraser Building, Room 159, University of Victoria; **Botany Night:** the third Tuesday, 7:30 p.m., Swan Lake Nature House; **Birders' Night:** the fourth Wednesday, 7:30 p.m., Murray and Anne Fraser Building, Room 159, University of Victoria. **Marine Night:** the last Monday, 7:30 p.m., in Murray and Anne Fraser Building, Room 159, University of Victoria. 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>, and is updated regularly.

NOVEMBER

Sunday, November 12

FIELD TRIP

Birding Martindale Flats

Late migrants, winter arrivals, and raptors should make for some great birding with **Brent Daikow**. Meet at the farm market at the corner of the Pat Bay Highway and Island View Road at 8:00 a.m., park along Lochside Drive north of Island View Road. Gum boots are mandatory!!!!

Tuesday, November 14

NATURAL HISTORY PRESENTATION

My Life with Wild Animals

Lyn Hancock of "There's a Seal in my Sleeping Bag" fame is coming to show slides and tell anecdotes of her wildlife encounters, like rescuing a hypothermic Black Bear caught in a rip tide in Johnson Strait, you will also hear stories from her soon to be released book "Tabasco the Saucy Raccoon" We meet in the Fraser Building at the University of Victoria, at 7:30 p.m. in Room 159. This will be a very entertaining evening so bring family and friends.

Sunday, November 19

FIELD TRIP

Pelagic Birding on the M.V. Coho

Mike McGrenere will lead this trip on the M.V. *Coho* on its usual sailing across the Strait of Juan de Fuca and back. The crossing takes 1½ hours and this is the best opportunity to see bird species 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 sailing of the M.V. *Coho* (allow plenty of time for parking). Ferry cost is \$14.00 (US) return (~\$22.00 Can), and it is essential to have **2 pieces of ID** with you for customs, one with a photograph. We'll return on the 2:00 p.m. sailing.

Tuesday, November 21

BOTANY NIGHT

Wildlife Trees of British Columbia.

This is a launching of a beautiful Lone Pine book on wildlife trees in British Columbia. Join one of the book authors, **Mike Fenger**, for this event and have your copy signed! 7:30 p.m. at the Swan Lake Nature House. Everyone is always welcome.

Wednesday, November 22

BIRDERS NIGHT

The Evolution of Birds

Have you ever wondered how the evolutionary leap from

dinosaurs to birds occurred? **Gary Kaiser** will shed some light on that subject with his very entertaining and informative talk. Come to Room 159 of the Fraser building at University of Victoria at 7:30 p.m. and be transported back to the age of dinosaurs.

Saturday, November 25

FIELD TRIP

Snow Geese at Riefel Bird Sanctuary

Come and see the annual Snow Goose spectacle at the Riefel Bird Sanctuary. Every November thousands of Snow Geese stop over in this part of the Fraser 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 with car pooling. Bring a lunch and a drink. Call Rick at 652-3326 to confirm. **Rick Schortinghuis** and **Gabe David** will be your leaders for this trip.

Sunday, November 26

FIELD TRIP

Mushroom Study Session

Rather than a designated leader, your participation is what will make this event a success. Each person will come ready to share knowledge with others. Interested beginners welcome also. Bring your favourite field guide. Please note this is an observation trip, not intended for collecting. However a few selected specimens will be chosen for closer examination. Bring lunch, snacks and drinks for the all day outing. Meet at UVic Parking Lot 6 near the Chapel at 10:00 a.m. (free parking on weekends). No pets please. Call Agnes at 721-0634 or email her (thelynns at shaw.ca) if you need more information.

Monday, November 27

MARINE NIGHT

Marine Molluscan Studies: Thailand to Tonga

Tonight we have two speakers for the price of one! **Dr. Lisa Kirkendale** and **Dr. Peter Middelfart** will combine travel and science in a talk about their exploits in the Indo-Pacific while studying the taxonomy and biogeography of several species of tropical molluscs. Everyone is welcome. 7:30 p.m., Room 159 – Fraser Building, University of Victoria.

DECEMBER

Saturday, December 2

FIELD TRIP

Christmas Bird Count Tune-up

Meet at Helmcken Rd Park and Ride at 8:00 a.m.. Here is a

chance to tune up your winter bird-spotting identification skills. This trip will cover Knockan Hill Park and Hastings Flats and the roadsides in between, so bring your walking shoes, field guide and notepad. Perfect trip for novice or near- novice "CBCers". For more info, call **Ann Nightingale**, 652-6450

Saturday, December 9

FIELD TRIP

Gull Identification Workshop at Goldstream

Learn more than you ever thought possible about the gulls that winter on Vancouver Island. Some come from as far away as the prairies to take advantage of the winter abundance of salmon. Don't be afraid of gulls and use this as an opportunity to practice for the Christmas Bird Count. Meet at the Goldstream Picnic Area parking lot by the Finlayson Road bridge at 9:00 a.m. and bring adequate winter clothing and boots. **Gabe David**: 721-5476

Sunday, December 10

FIELD TRIP

Christmas Bird Count Tune-up

Meet at the foot of Viaduct Avenue and Interurban Road at 8:00 a.m.. We will cover Viaduct Flats and Quicks Bottom and areas in between. Call **Rick Schortinghuis** at 652-3326 if you need more information.

Tuesday, December 12

NATURAL HISTORY PRESENTATION

The Other Side of the Pacific

Bill Merilees has traveled extensively from Japan along the Kamchatka Peninsula, to Nome Alaska, and has lots of slides and stories about the natural history of these areas to show and tell. We meet at 7:30 p.m. in room 159 of the Fraser building at University of Victoria. Everyone is always welcome. Bring a friend.

Saturday, December 16

EVENT

Victoria Christmas Bird Count

See the article in this issue or contact **Ann Nightingale** at

652-6450 (motmot@shaw.ca) or visit our website www.vicnhs.bc.ca/cbc/

Sunday, December 17

EVENT

Saltspring Island/Sidney/Saanich Peninsula Christmas Bird Count

See the article in this issue or contact **Ann Nightingale** at 652-6450 (motmot@shaw.ca) or visit our website www.vicnhs.bc.ca/cbc/

Saturday, December 23

EVENT

Sooke Christmans Bird Count

Contact **Denise Gubersky** at 642-3996 (dgubersky@telus.net)

Monday, January 1

EVENT

Duncan Christmas Bird Count

Contact **Derrick Marven** at 250-748-8504 (marven@shaw.ca)

JANUARY, 2007 ONWARD

EVENT

Birds on the Bay, 2007

Join us for our new year-round seasonal events! Celebrate Boundary Bay – a Site of Hemispheric Importance and Canada's top-rated Important Bird Area out of 597 sites. As a major stopover on the Pacific Flyway, this amazing area features habitats of eelgrass beds, mud flats, estuaries, salt marshes, bogs and streams that support more than 333 bird species, including some rare & endangered. Join Friends of Semiahmoo Bay Society & Partners to explore these special places, see birds and local wildlife, sketch, photograph, kayak, enjoy special events & more. Information: www.birdsonthebay.ca.

BULLETIN BOARD

Are you going to one of the VNHS meetings?

Willing to pick up a VNHS member in the Fairfield area? If yes, then please telephone 382-7202. Thank you for your consideration.

Are you going on one of the VNHS field trips?

Willing to pick up a VNHS member in James Bay? If yes, then please telephone 384-7553. Thank you for your consideration.

Year-round Tuesday morning birding group

Meet at the foot of Bowker Ave. at 9:00 a.m. Birding activities take place at various locations around Greater Victoria. For information, contact **Bill Dancer** (721-5273) or dcdancer@shaw.ca.

New!! New!! New!!

The newly formed Saturday Birding Group

Meet opposite the entrance to Beaver Lake Park on Elk lake Drive at 8:00 a.m. every Saturday (this will change to 7:00 a.m. in April, May and June) and we will decide where we are going to bird when we meet. Everyone is welcome!! For information, contact **Rick Schortinghuis** (652-3326) or shylo@islandnet.com.

Traveling companion wanted

I am seeking a traveling companion from the Victoria area to join me on a group birding trip to Hawaii in March, 2007. The trip is being led by Doug Pratt, author of *Birds of Hawaii* and Curator of Birds at the North Carolina Museum of Natural History. Please contact Marcia: marcias56@hotmail.com or 474-6890.



Misumena vatia, the Goldenrod Crab Spider. Photo: Adolf Ceska