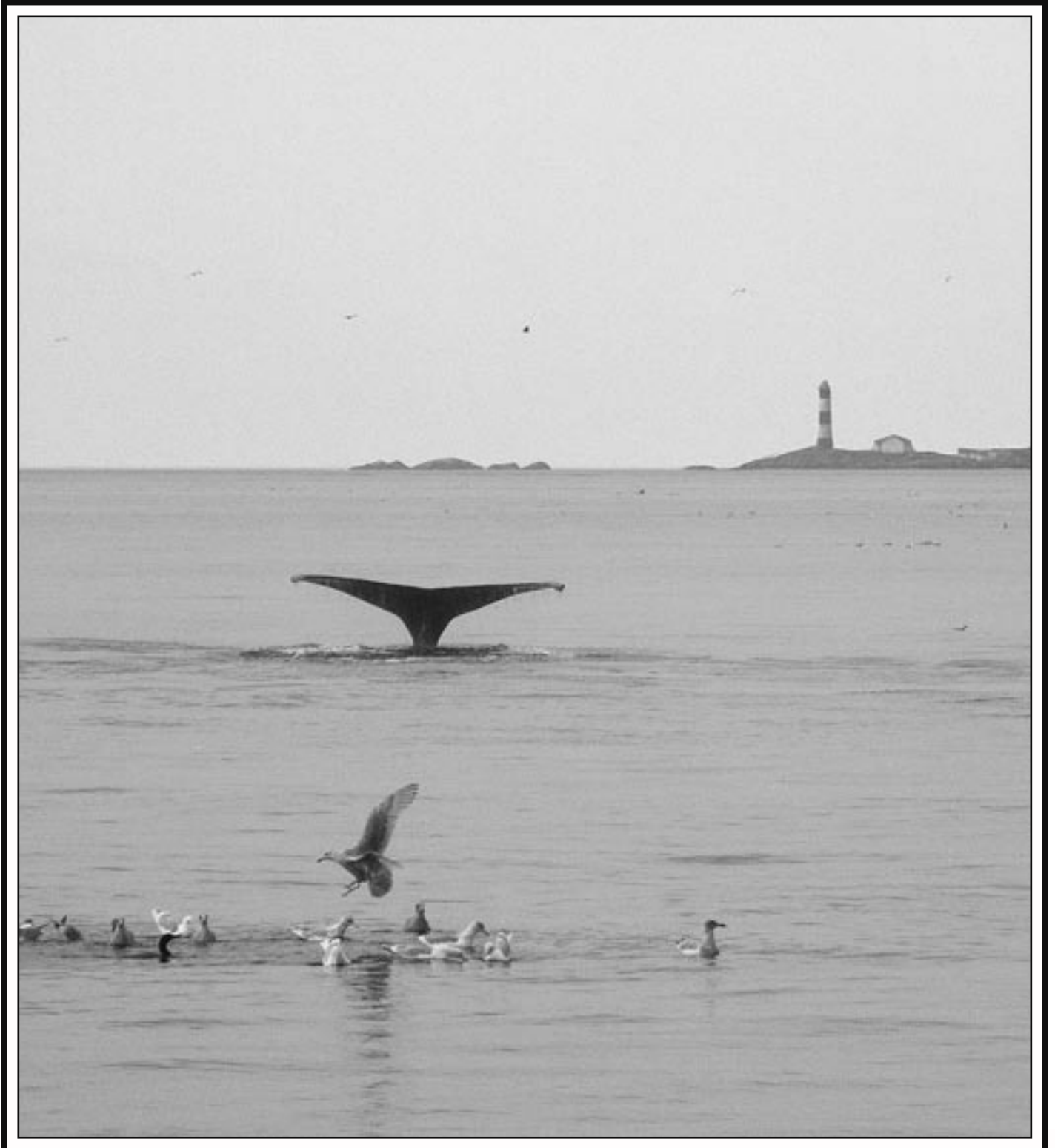




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The Victoria NATURALIST

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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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For membership information and renewal, please contact Darren Copley, 479-6622, or write to Membership Committee c/o The Victoria Natural History Society, Box 5220, Victoria, BC, V8R 6N4. A copy of our membership form is available on our website <www.vicnhs.bc.ca>.

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COVER PHOTO: Marine and terrestrial ecosystems, a mammal and at least two different species of birds – this photograph taken on a Society field trip (page 8) really captures a “naturalist's moment”! *Photo: Neil Boyle*

Sadly, British Columbia has just lost one of our longest-term thinkers: Bert Brink passed away on November 29, 2007. The spring edition of the *BC Nature* magazine will remind us of Dr. Brink's incredible contributions to what makes this province Super, Natural BC., but for those who don't realize his impact, one only has to look at the network of protected areas in this province to see his thoughtfulness.

Contrast Dr. Brink's perspective with the evidence of chronic short-sightedness everywhere around us: our latest coastal forest “plan”, oil and gas “exploration” and “extraction”, port expansions, airport “improvements”, houses on agricultural land, my rotting asphalt shingle roof that should have been metal – profit-driven, cost-saving, gotta-get-re-elected, satisfy-the-masses choices that seem easiest in the short term.

Robert Bateman uses the phrase “thinking like a mountain” to encourage planning on an almost geological timescale, and Victorians can look in any direction and be reminded daily that some people not only think like mountains but also think *of* mountains (and hills). I'm grateful and made hopeful when I look around and see the forested slopes in our midst and on our horizons – views that will remain for our children's children.

And I hope that there are mountainous thinkers among these next generations.

Claudia

To the Rescue: Protecting British Columbia's Rich Biodiversity

By Lindsay Coulter, Conservation Policy Analyst for the David Suzuki Foundation

British Columbia is well known across Canada for being a biologically rich province. It's the very reason many of us love to live here, and why many more come from all over the world to visit. What tends to shock people is the fact that our province lacks legislation to protect our abundant biodiversity. In reality, BC laws protect only 5% of our species at risk and none of them receive essential habitat protection.

How can we stop squandering BC's unique biological inheritance? BC is home to 76% of Canada's bird species, 70% of its freshwater fish species, 66% of its butterfly species, 60% of its conifer species and 41% of its orchid species; we need to safeguard this diversity for our own well being and for that of future generations.

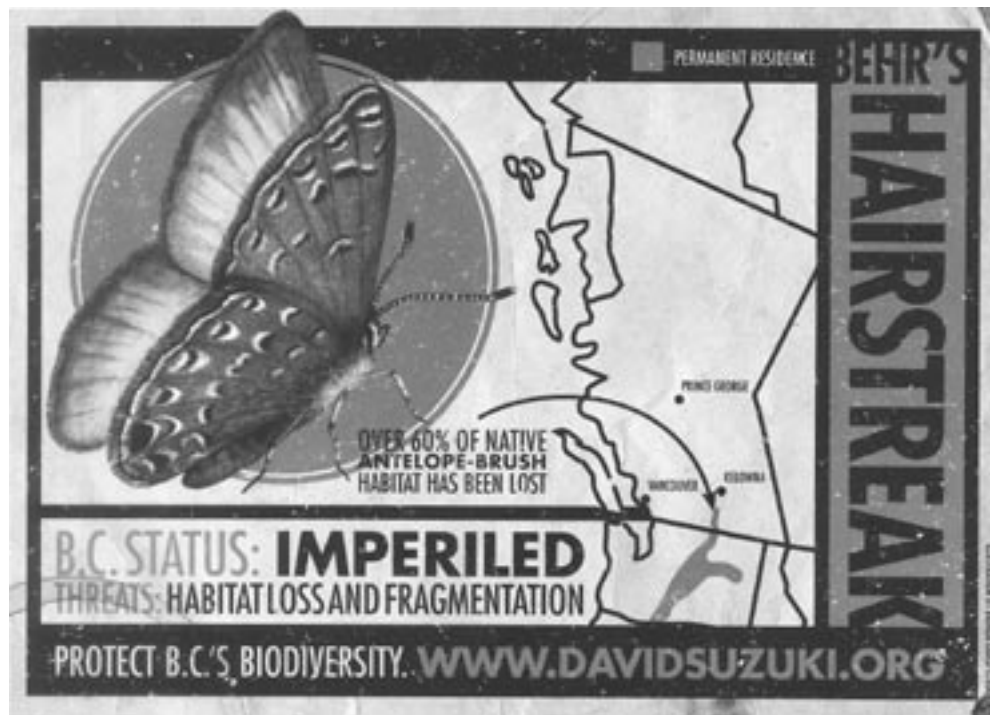
A recent report produced by the David Suzuki Foundation and Ecojustice Canada (formerly Sierra Legal) called *Rich Wildlife, Poor Protection: The Urgent Need For Strong Legal Protection Of British Columbia's Biodiversity*, found 1300 species and subspecies are at risk from disappearing from our province (BC Conservation Data Centre data). This is in addition to the 49 known species and subspecies

that have already been lost (e.g., Dawson Caribou and Greater Sage-Grouse). By major groups, the following are at risk:

- 67% of reptiles and turtles;
- 47% of amphibians;
- 43% of vascular plants and;
- 34% of butterflies.

Not surprisingly, the distribution of species at risk is not spread evenly across the province. Instead, they appear as "hotspots". The highest numbers of endangered species in BC are found in the Forest District of Okanagan-Shuswap or the Okanagan Valley: 273 species and subspecies at risk. The other three prominent "hotspots" are Southern Vancouver Island, the Lower Mainland, and the southern Rocky Mountain Trench.

BC laws and policies are failing our species. We need stronger laws and policies that require protection of species and their habitats. It's that simple. Provincially, 99% of our land base is under provincial jurisdiction. This means that



the federal *Species at Risk Act* (SARA) cannot address our dilemma, because it only applies to migratory birds and aquatic species, or species that reside on federal lands.

The loss of biodiversity across the globe is resulting in the degradation of ecosystem services; our very life support system. And it's not only economic commodities like the production of food, fuels and fibres that will suffer, but also services that regulate our climate, disease outbreaks, and wastes. Then there are those services many take for granted, like nutrient cycling and water purification. Perhaps most near and dear to people's hearts are the aesthetic, recreational and spiritual opportunities afforded by biodiversity.

In concert with an improved protected areas strategy and conservation-based land-use planning in species at risk "hot-spots", we would like to see the provincial government adopt strong endangered species legislation. To learn more about

our campaign to get strong endangered species legislation for BC, visit the David Suzuki Foundation website: <http://www.davidsuzuki.org/Conservation/Endangered_Species/British_Columbia/default.asp>.

Here you can:

- View our 12 species at risk postcards and order your own free set;
- Download Rich Wildlife, Poor Protection: The Urgent Need For Strong Legal Protection Of British Columbia's Biodiversity report;
- Fill out a "take action" letter to the Premier;
- Read stories from other Canadians about why they value BC's biological wealth and;
- Find a speaking event near you!

Lindsay Coulter can be reached at lcoulter@davidsuzuki.org or 604-732-4228

VNHS Awards Call for Nominations

VNHS members contribute to the Society in many ways. Some write articles for the *Naturalist*, some lead field trips, others serve on the board or on other committees. There are some who go out of their way just to make sure other members can continue to be a part of Society activities, by visiting shut-ins, or driving others to Society functions.

The Victoria Natural History Society Board of Directors established the Distinguished Service Award in 1988. This prestigious award is meant to honour those members who have given freely of their time over a long period, in a variety of ways for the Society. Any member of the Society can nominate any other member who in their opinion merits this honour.

The VNHS Distinguished Service Award is given annually to members who have shown such dedication. The Society may also bestow Honourary Life Membership on a member whose involvement with VNHS has been exceptionally long and dedicated. Please consider nominating a member, and send your nomination to the Society's address, or give it to one of the directors. **Nominations should be forwarded by February 28, 2008.**

All nominations must be in writing and should be signed by at least two members of the Society. A brief biographical sketch and a description of the contributions and achievements of the nominee, along with his or her address and telephone number, should be included. The Awards Committee reviews the nominations and makes recommendations to the Board of Directors, which grants the awards.

VNHS Distinguished Service Award Recipients

- 1989 Lyndis Davis, David Stirling, Katherine Sherman
1990 Anne Adamson, Charles Trotter, Robb Mackenzie-Grieve
1991 Ed Coffin, Mark Nyhof
1992 David Fraser, Margaret Mackenzie-Grieve
1993 Giff Calvert, Harold Pollock
1994 Kaye Suttill
1995 Bryan Gates, Bruce Whittington
1996 Gordon Devey
1997 Michael Carson
1998 No recipients
1999 Tony Embleton, Dorothy Henderson
2000 Tom Gillespie, Marilyn Lambert, David Pearce
2001 David Allinson, Beverly Glover, Hank Vander Pol
2002 Norm Mogensen
2003 Bob Chappell
2004 Oluna and Adolf Ceska
2005 Rick Schortinghuis
2006 Phil Lambert, Tom Burgess
2007 no recipients

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Mrs. Lyndis Davis, Mr. Tony Embleton, Mr. Tom Gillespie, Mrs. Peggy Goodwill, Mr. David Stirling, and Mr. Bruce Whittington.

The Changing Ethics of Nature Watching

By Ann Nightingale

L *Leave nothing but footprints. Take nothing but photos*”. I can remember the first time I ever saw such a sign, less than half my lifetime ago. I have been fascinated by nature since I was a child. One of my earliest memories was of an iridescent green and orange beetle in the driveway of my Esquimalt home. I spent much of my childhood turning over rocks at the beach, collecting shells, taking tadpoles home to watch them grow into frogs and many other activities that are frowned upon in the 21st century. I’ve been pondering the evolution of the ethics of nature observation and why this revolution is happening.

We are finally realizing what impacts humans have on the other species on this planet. No one alive at the time ever would have believed we could cause the demise of abundant species such as the Passenger Pigeon or bison. Early naturalists weren’t considered worth their salt if they didn’t

have huge collections of their targets, be they birds, plants or insects. Can you imagine us approaching a school group today and encouraging them to find and collect bird nests and eggs? (This is actually illegal now.) Collecting animals, from the tiny to whale-sized for exhibition in zoos was common. Many people attribute their own interest in nature to their experiences at such venues. Now, keeping animals in captivity or displaying them in circuses is generally frowned upon. A recent letter to the editor of the *Times-Colonist* admonished people for leaving trails in the parks to touch the trees, and instead told them to “walk with their eyes” as their footsteps may damage the root structure. Nature is increasingly becoming something that is “look, but don’t touch”.

The number of naturalists and others using natural areas seems to be increasing. Perhaps it wouldn’t matter



Birdwatchers. Photos: Ann Nightingale

if 100 people took tree cones from a park to make decorations but if 10,000 did, it could have implications. There is a double-edged sword to a world full of naturalists; they want to preserve natural areas, but may be killing them with their interest. Vancouver Islanders don't seem to be as enthusiastic about bird "twitching" as they are in Europe, but still a rare bird will bring out a couple of dozen keeners who trample grass, break shrubs and otherwise inadvertently damage the area. What effect must the hundreds of people have on the habitat when a rarity draws a crowd in the UK?

Technology is also contributing in some interesting ways. While it's no longer acceptable for the average naturalist to collect specimens, more and more people are taking up digital photography. Today's cameras can produce near professional shots with very little effort. How many birds and other animals are getting harassed, and how many plants trampled so that everyone can get that perfect postcard shot? It seems that leaving only footprints and taking only pictures may not be enough to protect natural areas. Of course, the Internet and cell phones make it simple to get the word out about an interesting specimen, and within hours, the crowds arrive.

Many obviously destructive practices routinely occur. In Oregon, dune buggies are still allowed on many beaches. Pheasants are regularly released at the Dungeness National



Native beach morning glory (*Convolvulus* or *Calystegia soldanella*) grows on sandy beaches and dunes in our region and is very vulnerable to trampling. It is on our provincial blue list.

Vancouver Islanders don't seem to be as enthusiastic about bird "twitching" as they are in Europe, but still a rare bird will bring out a couple of dozen keeners who trample grass, break shrubs and otherwise inadvertently damage the area.

Wildlife Area in Washington, so that they may be shot by hunters. Many estuaries on Vancouver Island are still open to hunting and dog training. Mountain bikers and four-wheel drive vehicles commonly tear up the ground in natural areas. And while it's no longer appropriate to dig up plants in most natural areas, we don't hesitate to bulldoze those same areas. Just look at recent commercial and housing developments in Greater Victoria if you need examples.

On the other hand, some nature lovers are going to great lengths to minimize their effect on wild areas and animals. They not only stick to the trails, but also give the animals and birds the "right of way", not approaching too closely, or making noises such as "pishing" to attract their attention. The Federation of BC Naturalists' brochure on seabird survival suggests that observers back off at the first indication that seabirds notice their presence. Personal blinds (originally designed for hunting) are being used by nature observers to make their own presence less obtrusive.

Still, we often participate in activities that seem innocent, but may be negatively affecting the natural resources we treasure. Or not. Should we be feeding birds? Removing downed trees from parks? Collecting fossils and rocks? Putting our hands in tidepools? Stopping forest fires? Building single-family dwellings? The list is endless.

There is a cruel irony in the changes that are being made to the way we interact with nature. While we bemoan that the next generation is suffering from "Nature Deficit Disorder" and call for a need to get children back outside, we are doing more and more to prevent them from actually coming in contact with natural spaces, plants, and animals. In some ways we are turning the zoo around, putting the humans in viewing area boxes or on fenced trails where they can only observe nature from behind the imaginary glass.

Do humans have a place in nature, or as a recent book suggests (*The World Without Us*, by Alan Weisman), would the world be better off without us? I'm certain that the answer is somewhere between where we are now and the world without us, but that balance point may not be discovered in our lifetime. And so, for now, we may have to tread even more lightly than we may personally think necessary to ensure there is a bit of nature remaining in the future. I wonder what the new signs will say?

BC Coastal Waterbird Survey Helped by VNHS Pelagic Trip to Clover Point and Race Rocks, 14 October 2007

By Neil Boyle

We've belonged to the VNHS since we moved to Victoria, and we have been doing the BC Coastal Waterbird Survey since Tasha Smith recruited us at a VNHS Wednesday evening meeting several years ago. For those of you who don't know about the survey, all the information you could want can be found at the Bird Studies Canada web site <<http://www.bsc-eoc.org/regional/bcwaterbirds.html>>. Every month of the year, on the second Sunday, or as close as we can get, we go out and count all the birds we can see from Harling Point to Clover Point. Some mysterious person somewhere takes the information from all the surveyors in the province and correlates and analyzes and, I hope, makes good use of it. But we don't get involved in the fancy math or the decision-making. We are just the grunts who collect the data: what birds are where and how many are there.

Those of you who have birded the south coast of Victoria from Ogden Point to Cattle Point will know who the usual suspects are. If you have been birding long enough in Victoria, you'll remember when the sewage outfall off Clover Point, a great collecting point for pelagic birds, was close enough that you could identify with a spotting scope many of the birds clustering there. Many of us now lament the extension of this outfall, which makes the gathering point of the pelagic birds just a little too far for even a good scope and better eyes than mine to identify the flocking avian feeders. So the survey is a



Northern Fulmar. *Photos: Ted Ardley*

little limited. Our scope and our eyes, amateur as they are, are good enough for the birds on the shore and out to about a kilometre, if the weather (and the birds) really cooperate. The birds further out than that are all blurry flocks of dots.

If you've ever done fieldwork collecting biological data, you will recognize the frustrations. Accurate data collection needs to be done at times that aren't always convenient and submitting the data takes time away from bird watching. The easy part is the definite identification, and most birds fall into that category. But the temptation to fudge things needs experience and perseverance to overcome. Just because that Bald Eagle was here yesterday doesn't mean that it gets recorded in the survey today, and while I really want that bird to be an albatross, I will accept what my rational brain tells me and list it as a Glaucous-winged Gull. And I will double-count every flock to get as close to the correct number as I can.



But what about the maybes? The peep that just won't stand still long enough to confirm its leg colour, the gull that could be a Western or maybe a Western-Glaucous-winged cross, the cormorant that won't do something to separate the Pelagic from the Brant's? And those female ducks in basic (non-breeding) plumage? Who can tell them apart in a glaring sun on choppy water half a kilometer out into the Juan de Fuca Strait? And what about the high-speed alcid flocks just at the outer limits of visibility? So we record what we see and sometimes note what we think we see under comments.

There is an aphorism among doctors that goes something like, "You only diagnose what you know." If you've never heard of it, or never seen it, it is hard to identify it correctly. And the human brain loves to pigeon-hole (dove-hole?) things. If it looks like a Thayer's Gull and it flies like a Thayer's Gull and it sounds like a Thayer's Gull, it probably isn't the Glaucous-winged Gull I first thought it was. These are all problems that tend to get solved, one at a time, as some more experienced birder than us drops a pearl of wisdom and we usually note it with, "Ahhh. So that's what that bird is!"

So what about those mysterious huge flocks of far out in the Strait, birds that seem to never approach near enough to be identified? Finally some of the mystery cleared when Ed Pellizzon arranged a pelagic trip from the inner harbour to Race Rocks and a bunch of us fought our way to the front of the line to be on it. First stop, off Clover Point, and many of those distant clusters of gulls turned out to be the usual suspects, Glaucous-winged Gulls and California Gulls, but many of them weren't. Bonaparte's and Westerns and Thayer's and Heermann's abounded. And those tiny high-speed footballs in lines were Common Murres! And the unidentifiable diving brown blobs, Rhinoceros Auklets. And this is where the Brandt's Cormorants and Pacific Loons hang out. Not all those birds out there even made it as dot birds in a scope on the shore. The few Red-necked Phalaropes dancing about were much too small to be seen that far away.

The bird of the day turned out to be a lovely theory shot down by an ugly fact. A brown gull soaring across the water on stiff brown wings, the tip of one almost touching the water, did a wonderful imitation of a Sooty Shearwater, and it was only a quick photographer (credit to Ted Ardley) catching its face that gave it away as another member of the second best bird species of the day, a Northern Fulmar.

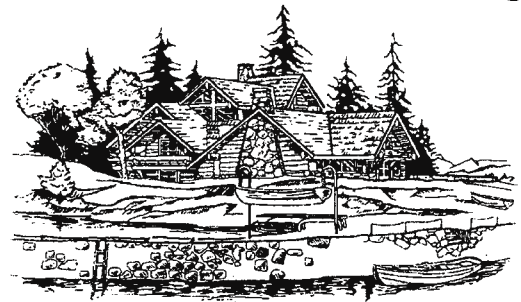
Oh, yes, there were some mammals out there too, accounting for some of the barely discernable dark surface bumps seen through the scope from shore. There were more seals about than I had suspected, and they tended to watch and leave. Several fish-killing sea lions attracted gulls to the scattered results of their messy feeding habits. A few hump-back whales distracted the less-than-committed birders.

So some mysteries were solved and some of those far away birds are now a little clearer, at least in our minds. And the final unsolved mystery? What species were all those gulls on the south side of Race Rocks?

Pearls of wisdom about Juan de Fuca Strait pelagic birds from those wiser than me:

- Lines of cormorants flying low over deep water are likely Brandts.
- Lines of high-speed footballs flying low over deep water are likely Common Murres.
- Pairs of fast tiny dot birds over deep water could be Marbled Murrelets.
- Ancient Murrelets look like Marbled Murrelets but fly slower in flocks of five to seven.
- Pacific loons fly with a downward kink in the necks.
- Red-necked Loons have straight necks in flight.

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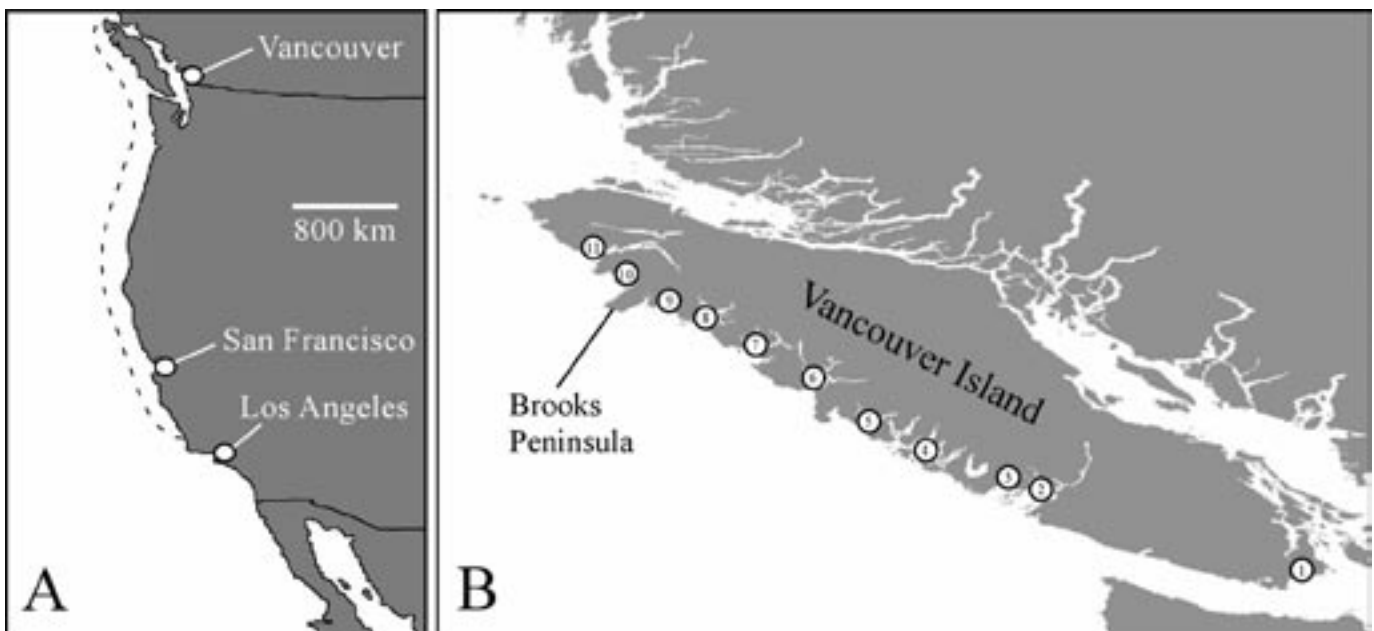
European Green Crabs (*Carcinus maenas*) – Well-established Along Vancouver Island’s Western Coastline

By Gavin Hanke, Curator of Vertebrate Zoology, Royal BC Museum
and Graham Gillespie, Department of Fisheries and Oceans, Nanaimo

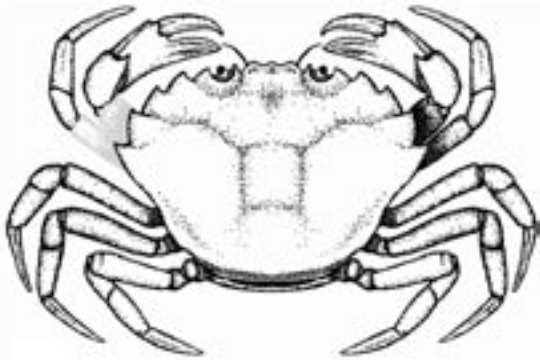
Exotic animals are getting a free ride everywhere people travel. Some animals arrive and get released by accident, while others are shipped intentionally, and worse yet, are released intentionally. In 1999 the first European Green Crabs (*Carcinus maenas*) were found along the west shore of Vancouver Island (Useless Inlet, Barkley Sound) and in Price Bay, near Esquimalt (Gillespie *et al.* 2007; S. Behrens Yamada, pers. comm.) Since then, their numbers appear to have increased dramatically, partly through recruitment of young to the population, and also because of the increased efficiency and intensity of surveys aimed specifically at this invasive species. Recent crab surveys performed by Department of Fisheries and Oceans staff (see: Gillespie *et al.* 2007) have been very successful, and their results to 2006, and most of what follows on the biology of Green Crabs is taken from their status report.

The native range of the European Green Crab extends from Mauritania in North Africa, north to Norway and Ice-

land, but the species has become established in South Africa, eastern Australia, Japan, Tasmania, the Patagonian portion of South America, and as early as 1817, they had colonized the east coast of North America (and now range from Prince Edward Island to Virginia) (Say 1817, Carlton and Cohen 2003, Gillespie *et al.* 2007). Introductions in the tropics seem to have failed (Carlton and Cohen 2003). Those that arrived in San Francisco Bay around 1989 (Cohen *et al.* 1995), originated from the east coast of the United States (Bagley and Geller 2000). By 2006, Department of Fisheries and Oceans researchers knew that the Green Crab had extended north along our coast to Kyuquot Sound, and in June 2007, they found Green Crabs north of Brooks Peninsula to Quatsino Sound and Winter Harbour. As far as we know, there are no Green Crabs north of Vancouver Island despite this year’s sampling in the Rivers Inlet area south to the region around Port Harvey. Therefore, the present range of the Green Crab in the Pacific Northwest extends from Morrow Bay in



The present range of the Green Crab in the Pacific Northwest, A) the dotted line indicates the entire range of the species from Morrow Bay California to the North end of Vancouver Island, and B) the range of Green Crabs along Vancouver Island as of June 2007; 1= Price Bay, near Esquimalt, 2= Useless Inlet and 3= Pipestem Inlet in Barkley Sound, 4= Clayquot Sound, 5= Sydney and Shelter Inlets, 6= Nootka Sound, 7= Nuchatlitz and Esperanza Inlets, 8= Kyuquot, Tahsish and Kashutl Inlets, 9= Ououkinsh Inlet, 10= Klaskino Inlet, and 11= Winter Harbour and Quatsino Sound. All figures and photos by Gavin Hanke



A drawing of the European Green Crab (*Carcinus maenas*) based on a photograph from the website of the (Oregon Fish & Wildlife Service: <http://www.dfw.state.or.us/mrp/shellfish/crab/Crab_ID.asp>; the bases of the two anterior limbs are shaded light grey to highlight the five 'spines' along the anterolateral edge of the carapace.



A Green Crab with a small white claw – a replacement for a lost claw.

California (approx. 35° 22'N; 120° 51'W) to Winter Harbour, Vancouver Island (approx. 50° 32'N; 128° 00'W).

The first Green Crabs collected on the 2007 survey trip on the CCGS *Vector* were at Spencer Cove in Quatsino Sound (50° 30'N; 127° 52'W) but only a few individuals were caught in that overnight trap set. Based on that trap set, it seemed that the Green Crabs were only a bit more abundant in Spencer Cove than in Oregon (usually around 1 crab per trap in Oregon; S. Behrens Yamada, pers. comm.). However, nearby at the mouth of Denad Creek (50° 32'N; 128° 00'W) in Winter Harbour, one string of traps caught so many Green Crabs, that a student on the team proclaimed her excitement in a manner that did not quite meet Canadian Coast Guard radio standards. Denad Creek also was noteworthy because we found Green Crabs active in daylight just below the tideline even while we were setting traps. The following morning, in the nearby tidal flat and stream channels below Galato Creek (50° 31'N; 128° 01'W), I (G.H.) collected more than 80 Green Crabs on the surface with simple aquarium dipnets – all within an hour. However, the crab traps at that location did far better, with somewhere in the range of 1300 Green Crabs for the day's efforts. In the 2007 survey, fisheries researchers sampled along much of the west side of Vancouver Island, and Green Crabs were found in all major inlets; to date, none have been taken from Sooke Harbour and only one Green Crab from near Esquimalt (Gillespie *et al.* 2007).

Carlton and Cohen (2003) suggest that Green Crabs could have arrived on the west coast of North America in ballast water, hull fouling, in seawater systems on ships, on drilling platforms, transport with bait or food products, accidental release of research or educational specimens, or also unauthorized release for food production; earlier introductions around the world may have resulted from hull fouling or damp beach rock which was used as ballast. The subsequent spread of Green Crabs north along our coastline could have been facilitated by the Vancouver Island Coastal Current (Gillespie *et al.* 2007), but their initial spread north up the

Pacific coastline of the United States was against the normal offshore California Current. The initial northward spread of Green Crabs into our region coincided with an El Niño in 1998, where northward currents of up to 50 km per day occurred in January and February (S. Behrens Yamada, pers. comm.). Elsewhere, their northward spread is known to correlate with warmer ocean temperatures (Gillespie *et al.* 2007), and their range is expected to oscillate with regular climate fluctuations and El Niño events – even though the species can tolerate short-term exposure to water near freezing (Roman and Palumbi 2004). Pelagic crab larvae drift in marine currents and those that settle in favourable habitat, mature and reproduce, and contribute to a new population which acts as a source of more larvae for future dispersal. Most of the planktonic larvae produced in each inlet probably remain in the area, but some become entrained in coastal currents and join the annual larval lottery – northward dispersal in currents which carries the lucky few to new habitat. The Alaska Current may assist Green Crabs to spread north of Vancouver Island (Gillespie *et al.* 2007).

You may be wondering how you would recognize a European Green Crab from among the usual suspects along our coastline? Green Crabs have five triangular 'spines' starting at the widest part of the carapace (shell) and these 'spines' decrease in size towards the eyes. The carapace can be up to 10-11 cm in width, and is dark olive to brown-green with lighter mottled patterns. The underside is yellow to pale green, and individuals nearing their moult are red-brown to orange underneath. The rear leg is considered to be fairly flat in cross-section, and Green Crabs have three forward-projecting bumps between the eyes. The most common local crab to be misidentified as a Green Crab is the Helmet Crab (*Telmessus cheiragonus*), but this native crab has six 'spines' on the perimeter of the carapace and stiff bristles all over the body and legs (Lamb and Handby 2005). Behrens Yamada and Hauck (2001) detail the differences between the European Green Crab and the closely-related Mediterranean Green Crab (*Carcinus aestuarii*).

Along the west side of Vancouver Island, Green Crabs are abundant in creek and river mouths in low salinity water. In the latest sampling trip, traps set in marine water contained larger Dungeness Crabs (*Cancer magister*), Graceful Crabs (*Cancer gracilis*), and/or Red Rock Crabs (*Cancer productus*), but within brackish habitat, Green Crabs were common and the native species were comparatively scarce. In the recent surveys, crab traps were set high in the intertidal zone, and commonly were exposed when the tide dropped. While this attracted a few bears, mink, and eagles, most of the traps remained intact. Green Crabs were found in the open in some locations wandering among eelgrass beds, in larger tidepools, or partially buried in silty, sandy, and gravel substrates in coastal creeks to the high tide line. In other places they hid under rockweed (*Fucus*), woody debris, or under the cover of larger boulders within the lower-most reaches of streams. Water colour didn't seem to influence Green Crab presence; they occurred in streams that ran clear and also in areas which ran rich with tannin-stained water. It has been suggested that predation pressure by adult Dungeness and Red Rock Crabs forces Green Crabs into low-salinity habitat, but Green Crabs also use this sort of environment in Europe, and therefore, perhaps their present habitat selection is in part a "ghost of competition past" in their native East Atlantic habitat. However, adult Green Crabs are able to successfully out-compete juvenile Dungeness Crabs for food and habitat in experimental trials (McDonald *et al.* 2001), so there is a potential for Green Crabs to impact native crab populations.

It is obvious from this year's sampling that late June to early July is the beginning of Green Crab mating season in our waters, as it is in the northern part of the species range in

the western Atlantic (Berrill 1982). On the last day of sampling (July 3rd 2007) in a creek mouth in Toquart Bay, near Hillier Island, we collected several mating pairs wandering around in an eelgrass bed just below the flooding tide. They were active on the surface despite their vulnerable state. Several individuals already were mating and other males had found a female and grasped their future mate with one arm. Females that have not shed their carapace are red-orange in colouration, but once females moult, the pair will mate. Pairs that were mating when caught, often let go of each other when placed in a bucket, but with only a moment of peace, they resumed their reproductive activity. A pair of pleopods (modified abdominal legs) of the male Green Crab are specialized for sperm transfer.

So far no one has done any work on the diet of Green Crabs in British Columbia, but they are known to eat a wide variety of molluscs (including clams) and small crustaceans (Jamieson *et al.* 1998), including the young of Dungeness Crabs, and probably also Red Rock Crabs, Graceful Crabs, and Purple and Green Shore Crabs (*Hemigrapsus nudus* and *H. oregonensis* respectively). Green Crabs are said to be voracious predators and effective competitors for intertidal habitat. Since the diet of this alien species in our province is unknown, perhaps this could form the foundation for a thesis for some aspiring student of exotic species biology. It is obvious from this year, that there will be no problem obtaining specimens for examination.

Many of the crabs collected in the recent survey had damaged limbs, either from combat within the traps or in the wild due to attacks from adult Red Rock Crabs and Dungeness Crabs (Jensen *et al.* 2007). Many had regenerating limb



A mating pair of Green Crabs with the pleopods of the male (top) artificially whitened in Adobe Photoshop. Collected from Toquart Bay near Hillier Island.

buds and claws which were unequal in size. However, we also found two abnormally coloured Green Crabs. One had a single claw that was entirely white and the other was pale and mottled with cream-coloured blotches. Both of these specimens now are at the Royal BC Museum and will be added to the marine invertebrate wet collection.

It is very likely that the Green Crab is here to stay. The questions then remain: What can we do to limit their abundance and impact on our native nearshore fauna? Is there any use for these crabs either for human consumption, for fertilizer, frozen bait, or perhaps as "fish meal" in pet foods? Will local predators (e.g., gulls, crows, mink, river and sea otters, seals, and/or bears) learn to exploit this new food source? As with most of our exotic species in British Columbia, what we know is far outweighed by our ignorance, despite intense trapping surveys. We have to wonder how many other alien species slip over our borders undetected, especially given the recent estimate I heard from Ministry of Environment staff that British Columbia, on average, receives a new alien species every two weeks. Hopefully we can take the same approach as our southern neighbours: in Oregon it is illegal to release any European Green Crabs even if caught accidentally. This same approach could be a useful way to deal with many other exotics, and ideally, reduce the impact of alien species on our natural communities or remove them altogether.

Literature Cited

Bagley, M.J., and J.B. Geller. 2000. Microsatellite DNA analysis of native and invading populations of European Green crabs. Proceedings of the National Conference on Marine Bioinvasions. MIT Sea Grant Publication, Cambridge, Massachusetts.

Behrens Yamada, S. and L. Hauck. 2001. Field identification of the European Green Crab species: *Carcinus maenas* and *Carcinus*

aestuarii. Journal of Shellfish Research, 20(3): 905-912.

Berrill, M. 1982. The life cycle of the green crab *Carcinus maenas* at the northern end of its range. Journal of Crustacean Biology, 2(1): 31-39.

Carlton, J.T., and A.N. Cohen. 2003. Episodic global dispersal in shallow water marine organisms: the case history of the European shore crabs *Carcinus maenas* and *C. aestuarii*. Journal of Biogeography, 30(12): 1809-1820.

Cohen, A.N., J.T. Carlton, and M.C. Fountain. 1995. Introduction, dispersal and potential impacts of the green crab *Carcinus maenas* in San Francisco Bay, California. Marine Biology, 122(2): 225-237.

Gillespie, G.E., A.C. Phillips, D.L. Paltzat, and T.W. Therriault. 2007. Status of the European Green Crab, *Carcinus maenas*, in British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences, 2700: 39 p.

Lamb, A., and B.P. Handby. 2005. *Marine Life of the Pacific Northwest*. Harbour Publishing Company, Madiera Park, British Columbia. 398 p.

Jamieson, G.S., E.D. Grosholz, D.A. Armstrong, and R.W. Elner. 1998. Potential ecological implications from the introduction of the European green crab, *Carcinus maenas* (Linnaeus), to British Columbia, Canada, and Washington, USA. Journal of Natural History, 32(10-11): 1587-1598.

Jensen, G.C., P.S. McDonald, and D.A. Armstrong. 2007. Biotic resistance to green crab, *Carcinus maenas*, in California bays. Marine Biology, 151: 2231-2243.

McDonald, P.S., G.C. Jensen, and D.A. Armstrong. 2001. The competitive and predatory impacts of the nonindigenous crab *Carcinus maenas* (L.) on early benthic phase Dungeness crab *Cancer magister* Dana. Journal of Experimental Marine Biology and Ecology, 258(1): 39-54.

Roman, J. and S.R. Palumbi. 2004. A global invader at home: population structure of the green crab, *Carcinus maenas*, in Europe. Molecular Ecology, 13: 2891-2898.

Say, T. 1817. An account of the crustacea of the United States. Journal of the Academy of Natural Sciences of Philadelphia, 1: 57-63.

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Photo: Marie O'Shaughnessy

K. R. Prior

I've a witty reply
if anyone asks,
those bones in the bathroom,
who do they belong to?

Incongruous
in among
emollient
health and beauty
on the shelves,
take two at bedtime
do not drink
razor soap bandaids

a larger jar,
someone's preserves
picked up
tentatively
click, clop,
gruesome thought
dead ancestor
oh surely not

mine, say I, cleverly,
I got them from an eagle.
in the park, under their tree,
keep a look out, you'll find
pellets: like matted
coarse gray sock wool
knitted up with broken feathers:
bones, feathers, gristle, pelt,
compressed in the crop,
regurgitated
in gawky lumps:
when you've soaked them,
tease them apart
pick out the bones
like Christmas dinner
sticky and stinky
with scraps of flesh

field guides are no good
for getting these guys on your list:
could that have been a squirrel's thigh,
a robin's skull?
we take our daily walks
in a peaceful killing ground:
try keeping a tally,
count the ducklings every day
on the pretty little pond.

the pair bred in
the park again this year,
one eaglet fledged
– well, they at least
passed on their genes,
which really is the only point,
biologically speaking.

as for my little
charnel heap,
take Yorick here,
another predator really:
imagine his domestic round,
how many yards of worm a day?

poor tacky bone,
do you think it would cheer him up
in avian nirvana
if he could think his death was not in vain?
perhaps before the eagle scoffed him up
he'd already donated his seed
to stuff some other ugly raptor's gut.

Bald Eagle Breeding Success 2007

By Marie O'Shaughnessy

It was another great year for the four pairs of Bald Eagles nesting in the Oak Bay/Ten Mile Point area of Victoria. Each nest successfully fledged two young in July 2007.

While each nest had its own charismatic pair of adult eagles, it is interesting to note that all the nests' shapes and sizes were not the same. It has been suggested that there are three distinct shapes to nest design for Bald Eagles, based on choice of nest sites, materials used, supporting structures and possibly age of the breeding pair. Apparently there are peculiarities to eagle's personalities, as in humans, that make for unique differences among pair bonds. Some are so fastidious that they spend hours fiddling with sticks and tidying their territorial space. Others show little concern for their nest and spend far less time on the home front.

After many hours of eagle observation, I have come to the conclusion that all four pairs that I view are very different from one another. Although I am assigned to only two of the four nests, I do watch for differences in behaviours of all eight eagles.

One pair, the "neat freaks", as I call them, certainly prefer a tidy nest structure and remained visible and noisy throughout the breeding season. They have created such a well-designed nest that it withstood the onslaught of the winter storms of 2006. It was also noted to be a new nest, constructed during the months of November/ December 2006 in the same cedar that had supported the original nest. This is the second nest tree in the Oak Bay area that currently holds two nests, one above the other. I believe this was the same territorial pair that had raised two young the previous two years in the lower nest.

Another interesting pair, the secretive ones, came and went quietly with hushed interaction with each other. These two were difficult to observe, and looking at their nest one would hardly have believed an incubating eagle sat within the mass of falling and tangled sticks. Although their nest has been ravaged over the years by the winter storms and looks abandoned, this is not the case. Surprisingly, from this dilapidated cradle of life, came two robust eaglets that fledged in early July. This same nest is one of the earliest in which eggs are laid. Perhaps there are few other suitable trees in the neighbourhood in which to build a new nest. Not far away, this pair did have an alternate nest which does appear to have been abandoned. The breeding season for 2008 will be interesting to observe, for I believe this nest site has seen its last days of productivity.

Another one of the nests is so well camouflaged within the crown of a fir tree that one would never notice it at all. It takes a glimpse of a disappearing eagle into the tree top



Photo: Marie O'Shaughnessy

to pique curiosity. For the past two years two young have fledged from this site.

The fourth nest is situated high in a sparsely branched cedar. The occupants relocated here from the Willows Beach nest site, where, for the past three years, young had been raised. Unfortunately the wind storms have reduced this nest to a sad reminder of its former glory. At the new location the observers below can have a grand view of nesting behaviour. Their nest refurbishing has taken on the appearance of a deep cup like structure, typical of many eagle nests.

All four pair of bald eagles nested in March with one as early as the 4th while another as late as the 16th. Nest duties were generally shared between male and female, but not equally. A 20-30% ratio of male to female incubation duty was average. One pair was particularly noisy, with the female calling her mate repeatedly before he showed up for incubating duties. Other males reported



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for duty and repositioned silently over the eggs without fanfare. Once the eaglets had hatched, the males were diligent in bringing food for the growing family. I observed one male feeding the eaglets while the female flew off for some exercise. Other males just dropped off the food and departed quickly so the female could feed the growing chicks.

Eaglets were visible above the rim of the nest within the first few days of May at two of the nest sites. Interestingly, by the end of the first week of May, one brood of youngsters was left alone for short periods of time. This caused me a great deal of concern because neighborhood crows would descend to the upper branches of the nest tree. Their persistence and bombing raids were relentless. However, even with the crows and a visit from a sub-adult eagle early in the breeding season, two healthy eaglets finally fledged the first and second week of July. The weeks leading up to that historic moment saw the young negotiating the widening boundaries of their nest area, and they became expert "branch managers" in no time. They would hop and jump limb to limb, gaining more height until finally they were at the top of their tree. With new vigor they would call loudly and exercise those enormous wings. Here they would survey their new world with interest.

It is simply amazing to view these impressive young birds take to the sky on their first flight. Much flapping in the prevailing breeze would ensure the right moment for lift off. On a "wing and a prayer", they would be propelled into the unknown where they would glide in circles around their nest tree. It looked so easy for the moment but the landings were a skill that needed much attention. Finding the right branch to support their incoming weight was a real challenge, and crash landings were a familiar sight. It took days to perfect, but eventually they developed the skill for perfect landings. Gaining strength, grace, and altitude were the order of day. Their expanding horizons allowed for more freedom to explore the neighborhood and soon their presence at the nest tree was minimal. Eventually by the last week of August the families of eagles had left their territories for places unknown. It is assumed they find the returning salmon spawning streams much farther north where food is readily available and where the young are taught most of the skills for survival.

I know all four pairs of adult eagles had returned to their territorial areas by as early as October 2007, and the 2008 breeding season will soon be upon us. With younger adult bald eagles moving into this area it will be interesting to note if all four pair bonds will remain intact. Challenges do occur and older birds can be replaced. The Oak Bay eagles are not young birds anymore. With global warming and the loss of good nesting trees during these rogue winter storms, one has to ponder the question: Will competition for the right to breed become more prevalent and more aggressive? We can only watch and wonder.

Glaucous-winged Gull's Fresh Water Pilgrimage

By Bill Merilees

It is well known that seabirds have the ability to distill fresh water from ingested seawater. Naturalists observe this phenomenon when they see a drop of water about to drip from the tip of a gull's beak. A pair of salt glands, (not the bird's kidneys), which produce this super salty water, are located in grooves above the seabird's eyes. As can be imagined, in a salt-water environment, this adaptation is of considerable importance.

On a visit to Desolation Sound June 15, 2007, and in particular to Unwin Lake, our party observed the continuous arrival and departure of Glaucous-winged Gulls. In ones, twos and small groups they would arrive, land near the centre of the lake, take a few sips of fresh water, then would begin bathing. Bathing completed, they would flap their wings a few times to dry off, then depart towards the south west, the same direction from which they had come. This ritual took about 10 to 12 minutes, with as many 10 to 15 birds being present at any one time. During a 26-minute period (from 4:20 to 4:46 p.m.) 21 gulls were counted arriving. All were adults.

June 15 is approaching the middle of this gull's breeding season and with a large colony at Mitlenatch Island (an estimated 2,100 breeding pairs in 1986), slightly less than 30 km to the south west, this is postulated as the probable source of these birds.

If this is true, then the attraction of clean, fresh water for drinking and bathing to Glaucous-winged Gulls appears considerable. Maps and charts show other fresh water lakes closer to Mitlenatch Island than Unwin, though most appear to be at higher elevations.

In the above context for Mitlenatch Island, one is reminded of that line from the *Rhyme of the Ancient Mariner* "Water, water everywhere and not a drop to drink", seabirds aside of course. Only at Mitlenatch, Unwin Lake is but 30 kilometres away. One might wonder if the energy spent during this flight equaled, or was less than, the energy required to distill the amount of fresh water consumed or, perhaps, these gulls just appreciated the enjoyment of a clean bath away from the family?



Glaucous-winged Gull. Photo: Marie O'Shaughnessy

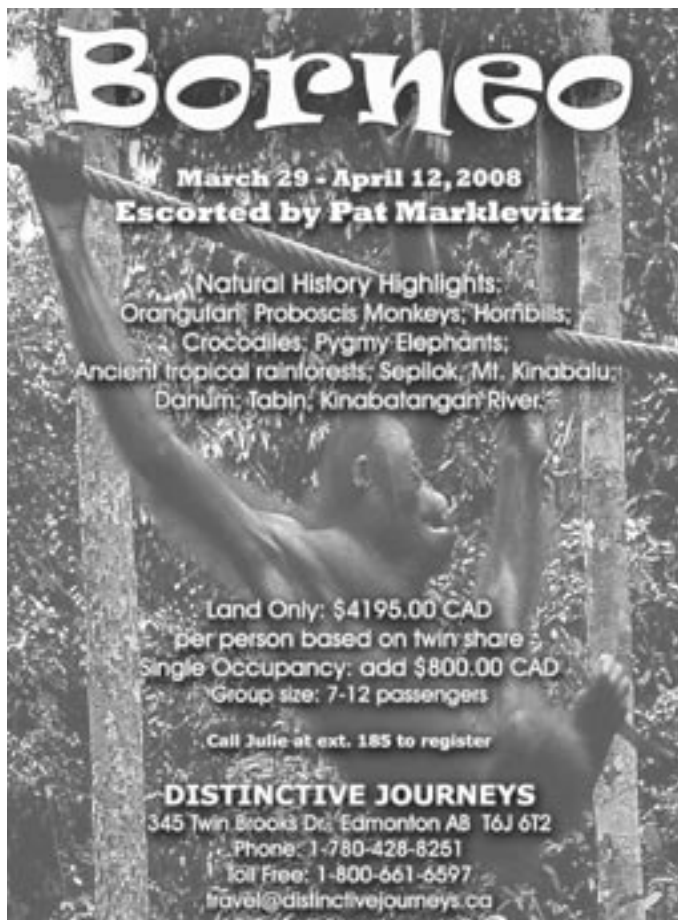


Jim Farrell 477-7291 jamesbfarrell@shaw.ca

Disposable Plastic Shopping Bags: An Ugly Habit of Destruction and Waste

By Lana Popham

Imagine the feeling you get just before lunch. You feel hungry. You feel as though you could eat anything. Sometimes you eat the first thing you can get your hands on. Luckily for us, most things we find to eat are in fact edible. Now imagine you are a sea creature or a sea bird. It is lunchtime and you are famished. You have a hankering for a little jellyfish. You go on the hunt for your lunch. Once a jellyfish is spotted, you gulp it down whole. You don't usually spend much time chewing. You see another and another. After a real feed you feel full and satisfied. But wait...something doesn't feel right at all. You feel full but you are still starving. You try and eat a bit more but you can't. Those last jellyfish are not sitting very well. In fact you feel terrible. Days and days go by. You are so hungry but can't seem eat enough to make the hunger stop. You get weaker and weaker. Slowly you die. You die of starvation. How were you too know those jellyfish were not food?



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They looked like food to you. Those jellyfish were not a meal. They were disposable plastic shopping bags.

This is a sad story and I wish it were not true. This is an experience that will happen to many sea creatures such as fish, whales and sea turtles. This is also the unhappy ending to many sea bird lives. The saddest part of this story is that humans are causing this devastation by manufacturing products like plastic shopping bags. Although there are many other plastic products besides plastic shopping bags that are causing distress in the oceans, disposable plastic shopping bags are one product that we can easily live without. We have many options. We can use a variety of reusable shopping bags in every way that we use disposable ones. This is one product that we don't need in our environment.

Disposable plastic bags are a wasteful habit that we have developed since the 1970's. The statistics about their usage are alarming. In North America 100 million plastic bags per week go to landfills. And the problem is that so many more don't. They escape into our environment. Plastic bags can take between 15 and 1,000 years to break down in the environment. And if this next fact doesn't stop and make you think, nothing will. Each year, an estimated 500 billion to 1 trillion plastic bags are consumed worldwide. That translates to over one million per minute.

The bad news is endless and overwhelming but there is also some good news. The more public pressure we can put on our governments, local and otherwise, the more bags we can keep out of our environment. I am going to speak with the CRD to request that they ban disposable plastic grocery bags from the CRD by the end of 2008.

Do you want to be a part of the solution by helping ban disposable plastic shopping bags?

Join me in my campaign by sending me an email of support at barkingdog@shaw.ca. I am trying to collect 1,000 letters by the end of January 2008. I will be presenting these letters to all Municipal councils and the CRD Board of Directors in the Greater Victoria Area. I will be asking our CRD to take this concern seriously. Perhaps banning these bags is only part of the answer. Perhaps a plastic bag tax will be more effective. Whatever the solution will be, it is time to figure it out. I think a year is plenty of time to do that. Let's hope plastic shopping bags will be a smaller part of our lives by the end of 2008. We won't be the first ones to do this. This is a trend that is happening worldwide. Take a look at Ireland, New Zealand, and even other towns in Canada.

To find out more information about this campaign please visit my website at www.lanapopham.ca.

The Coastal Invasive Plant Committee – Your Own Regional Weed Committee!



By Wendy Tyrrell, Coordinator

Did you know that there is a regional non-profit group whose mandate focuses entirely on the issues, impacts and regional efforts of invasive plant management in coastal BC? If not, I would like to introduce you to the Coastal Invasive Plant Committee, *aka* the CIPC!

The CIPC is a non-profit society formed in 2005, with over 500 stakeholders representing local citizens, all levels of government, representatives from First Nations, conservation groups, utilities, private industry and others who share a common concern about the increase and impact of non-native plants in the Coastal region of BC. The purpose of the CIPC is to improve the effectiveness and efficiency of invasive plant management in the region by promoting coordination and cooperation between agencies and land occupiers and providing educational and resource information to the public. The CIPC, along with 22 other weed committees work closely together and with the Invasive Plant Council of BC to ensure that collaboration occurs on all levels.

Goals and Objectives of the CIPC:

Raise awareness and educate the public, government agencies, and other land managers about invasive plants and their impacts in coastal BC by holding workshops, creating brochures, and other outreach materials

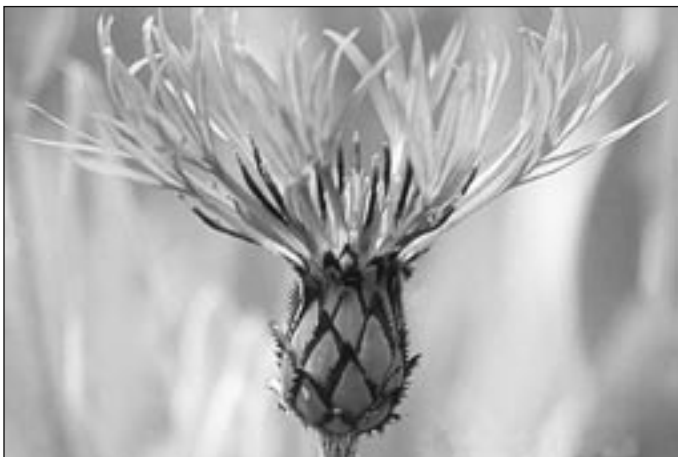
Prevent the further introduction and spread of invasive plants in the region through outreach & education, mapping/inventory and coordinating early detection and management practices

Promote coordinated and collaborative management of invasive plants between agencies and land occupiers by coordinating workshops and training sessions and promoting communication between stakeholders

Provide a conduit for information on invasive plants via our website, email account and weed reporting hotline

As the coordinator for the CIPC, and a member and director with the Victoria Natural History Society, I have the wonderful opportunity to work with many of VNHS members in the world of invasive plants! I hope that you will take a moment to check out our website at <www.coastalinvasiveplants.com> or call our weed hotline at 250-857-2472 to report an invasive plant or find out more information about invasive plants in your region.

Most importantly, I encourage you to come to our Annual Forum in late February to learn more about the CIPC and invasive plants efforts in your region, and to participate as a CIPC member in forming our Action Plan and Priority Species List for 2008! For more details, and to ask about becoming a member of the CIPC, contact Wendy at info@coastalinvasiveplants.com. Hope to see you there!



Spotted Knapweed (*Centaurea biebersteinii* (syn. *maculosa*)). Photo: Louis M. Landry



Daphne or Spurge Laurel (*Daphne laureola*). Photo: Jamie Fenneman

Great Backyard Bird Count is Great Opportunity to Connect with Nature

In February, volunteers throughout the U.S. and Canada are invited to “Count for Fun, Count for the Future!”

Millions of novice and accomplished bird watchers can make their fascination with nature add up for science and for the future during the 11th annual Great Backyard Bird Count, led by Audubon and the Cornell Lab of Ornithology. During February 15-18, 2008, anyone can count birds from wherever they are and enter their tallies online at <www.birdcount.org>. These reports create an exciting real-time picture of where the birds are across the continent and contribute valuable information for science and conservation.

“These volunteers are counting not only for fun but for the future,” said Tom Bancroft, Chief Science Officer for Audubon. “It’s fun to see how many different kinds of birds can be seen and counted right in your backyard or neighborhood park. Each tally helps us learn more about how our North American birds are doing, and what that says about the health and the future of our environment.”

“The Great Backyard Bird Count is a great way to engage friends, family, and children in observing nature in their own backyard, where they will discover that the outdoors is full of color, behavior, flight, sounds, and mystery,” said Janis Dickinson, Director of Citizen Science at the Cornell Lab of Ornithology.

People of all ages and experience levels are invited to take part wherever they are – at home, in schoolyards, at local parks or wildlife refuges, even counting birds on a balcony. Observers count the highest number of each species they see during at least 15 minutes on one or more of the count days. Then they enter their tallies on the Great Backyard Bird Count web site <www.birdcount.org>.

The web site provides helpful hints for identifying birds. Participants can compare results from their town or region with others, as checklists pour in from throughout the U.S. and Canada. They can also view bird photos taken by participants during the count and send in their own digital images for the online photo gallery and contest.

In 2007, Great Backyard Bird Count participants made history, breaking records for the number of birds reported, and the number of checklists. Participants sent in 81,203 checklists tallying 11,082,387 birds of 613 species.

“Literally, there has never been a more detailed snapshot of a continental bird-distribution profile in history,” said John Fitzpatrick, Director of the Cornell Lab of Ornithology. “Imagine scientists 250 years from now being able to compare these data with their own!”

Already, the count results show how the numbers of some birds species have changed in recent years, such as a decline

in Northern Pintails and an increase in Hooded Mergansers, consistent with trends from the Christmas Bird Count and Breeding Bird Survey.

“People who take part in the Great Backyard Bird Count see the results of their efforts in the news and in bird conservation work taking place across the country, said Audubon Education VP, Judy Braus. “Whether the counts occur at home, at schools or nature centers, they’re more than engaging and educational science activities for young people and adults, they’re a way to contribute to the conservation of birds and habitat nationwide.”

For more information on how to participate, including identification tips, photos, bird sounds, maps, and information on over 500 bird species, visit <www.birdcount.org>.

Visit Wild Birds Unlimited for a wide selection of binoculars, featuring Vortex Optics and Eagle Optics!



The Vortex VIPER 10x42 has been named **"BEST OF THE BEST"** By Field & Stream Magazine '07.

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Letters

I would like to express my sincere thanks for being chosen as the recipient of the Victoria Natural History Society's award. I am in my last semester of study for a co-op Bachelor of Science in Biology and I would never have been able to complete my education debt-free without the generous contributions from donors like you. You have allowed me to pursue my dreams of higher education and for that I am deeply grateful. I wish you all the best in your coming year.

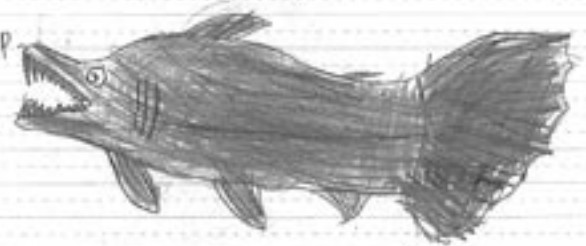
Sincerely, Nuri Nolla

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

To: Goldstream Provincial Park
Dear Goldstream Team,
Thank you for teaching our class about the first people and salmon.
I learned that female chum salmon have a black stripe on their side and male chum salmon have purple spots on their sides.
I also saw them mating!
From Gabrielle

Dear Chums,

Thank you for letting us see the salmon run. It was cool when the guide dissected the salmon. Luke saw an eagle and told me. In the Nature house I really liked the box where you pulled the salmon's skin. I was also cool the way a bracelet was made out of stinging nettles. I really enjoyed this field trip.



By Cameron

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 Christmas Hill 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.

JANUARY

Tuesday, January 1

FIELD TRIP

Birding Swan Lake

Join **Bill Dancer** for a New Year's Day birding walk around Swan Lake. Meet at 9:00 a.m. at the main parking lot at Swan Lake. Call Bill at 721-5273 if you need more information.

Tuesday January 8

NATURAL HISTORY PRESENTATION

Gifts of Haida Gwaii

Join **Bruce Whittington** as he shares his images and experiences amid the wildlife and Haida heritage sites of Gwaii

Haanas National Park Reserve in southern Haida Gwaii in the Queen Charlotte Islands. We meet at 7:30 p.m. in Room 159 of the Fraser Building at UVic. Everyone is welcome and bring a friend.

Tuesday, January 15

BOTANY NIGHT

Plants and Landscapes in the Wakhan Corridor of Northeastern Afghanistan

Except to his earliest friends in Victoria, it has been a well-kept secret that **Hans Roemer** once traveled to this remote area between the Hindukush, Pamir and Karakorum Mountains. This will be a very different perspective on a part of Afghanistan, the country that is the centre of attention these days. Swan Lake Nature House, 7:30 p.m. Everyone welcome, bring your friends.

Wednesday January 23

BIRDERS' NIGHT

The Sandhill Cranes of Coastal BC

The Sandhill Cranes that are part of the Pacific flyway population nest on the BC coast from northern Vancouver Island all the way to Alaska. **Krista Rossingh** has been studying this population, the ecosystems necessary for their survival, and documenting some of the unique behaviors of these coastal cranes. Come and hear about this amazing species. We meet at 7:30 p.m. in room 159 of the Fraser building at UVic. Everyone is welcome.

Saturday, January 19

FIELD TRIP

Birding Jocelyn Hill

Join **Mike McGrenere** in birding Jocelyn Hill in the Highlands. This trip could produce some rarities such as Pine Grosbeak, Townsend's Solitaire or Golden Eagle. This trip is weather dependent so we will be meeting opposite the entrance to Beaver Lake Park on Elk Lake Drive at 8:00 a.m. Bring a lunch. Call Mike at 658-8624 if you need more information.

Sunday January 20

FIELD TRIP

Royal Roads in Winter

Join Royal Roads University Gardener John Sheridan in a behind-the-scenes meander through the cultivated areas of Royal Roads. This Heritage property contains mature plantings that can be best appreciated in winter when their structure can be seen. Many trees such as the maples in the Japanese Garden date back to the Dunsmuir's in the pre-1920's. Meet in Lot 3 (major parking lot part-way down the hill on right below Hatley Castle) at 10:00 a.m. Bring \$3.00 for pay parking. No pets please. Dress warmly. Contact Agnes at thelynns at shaw.ca or 721-0634 for more information.

Monday, January 28

MARINE NIGHT

The Very Natural History of Sea Otters – The Return of an Extirpated Species.

Jane Watson's talk will outline the history and recovery of sea otters in British Columbia as well as a look at the effects that the sea otter's return is having on rocky nearshore ecosystems. Dr. Watson is an Instructor of Biology and Adjunct Professor at Malaspina University College and the University of British Columbia. 7:30 p.m. Room 159, Fraser Building, University of Victoria. Everyone welcome.

FEBRUARY

Sunday, February 10

EVENT

11th Annual Valentine Couples Birdathon

This annual event is your mid-winter opportunity to enjoy a morning of outdoor birding fun with your Valentine. The object of this friendly competition is to find as many bird species as you can between the hours of 6 a.m. and noon. The pair of spouses or sweethearts having the highest species count can look forward to having their names inscribed on The Anderson Cup; Jerry Anderson's carving of a pair of affectionate Mourning Doves. Once the noon hour strikes we have a convivial get-

together at Swan Lake Nature Centre to compare the day's highs and lows over coffee and treats. We ordinarily manage to persuade various Victoria restaurateurs, chocolatiers and others into donating worthy prizes for the couples having the top three highest counts. Enough largesse is normally left over that we can offer a prize for the day's best bird too – as determined by participants themselves. In addition to the prospect of a fun time, Valentine couples can also look forward to supporting VNHS. Proceeds from the \$10 participation fee go to supporting the Society's conservation efforts. To register or to get more information call **Jan Brown** or **Alan MacLeod** at 382-3854, or reach us by e-mail at leotaj@telus.net.

Sunday, February 10

FIELD TRIP

Boundary Bay and Raptors

Join **Rick Schortinghuis** for a trip to Boundary Bay in Vancouver. We can expect to see large flocks of wintering waterfowl and shorebirds, as well as visit some of the best wintering habitat for raptors in Western Canada. Car-pooling will reduce costs to approximately \$40-\$45 per person. Meet opposite the entrance to Beaver Lake Park on Elk Lake Drive at 5:45 a.m., we will return on the 5:00 p.m. ferry, dress warmly and bring a lunch. To register call Rick at 652-3326.

Tuesday, February 12

NATURAL HISTORY PRESENTATION

The Bleak, the Raw, and the Beautiful

George Sirk is returning for another natural history presentation. He will be sharing his adventure to Bylot, Beechey and Baffin Islands where he saw Bowhead whales, Inuit Villages and the graves of Franklin's men. We meet at 7:30 p.m. in Room 159 of the Fraser building at UVic. Everyone is welcome.

Saturday, February 16

FIELD TRIP

Birding Elk Lake and Beaver Lake

Come for a leisurely 10 km stroll around the loop trail at Elk Lake/Beaver Lake Regional Park. This is a good location to find wintering passerines and waterfowl. Meet at 8:00 a.m. in the main parking lot at Beaver Lake Park on Elk Lake Drive. For more information call **Rick Schortinghuis** at 652-3326. (Leader tba)

Tuesday, February 19

BOTANY NIGHT

Twelve Years of Carpet Burweed (Soliva sessilis) in British Columbia

In 1996, this noxious weed was first reported from Ruckle Park, Saltspring Island and carpet burweed has now spread, almost unnoticed, into some specific habitats in southwestern British Columbia. **Adolf Ceska** documented the history of carpet burweed in BC from the first report till the situation today. Special attention will be paid to the group of rare plants that might be negatively affected by this weed. Can we get rid of this weed? Swan Lake Nature House, 7:30 p.m. Everyone welcome, bring your friends.

Saturday, February 23

FIELD TRIP

Birding the Duncan Area

Join **Derrick Marvin** in birding the Duncan area. Meet at 8:00 a.m. at the Helmcken Park and Ride to car pool or at

9:00 a.m. at the end of York Road which runs beside the golf driving range near the intersection with Beverly Street at the south end of Somenos Marsh. Bring a lunch. Call Derrick at 250-748-8504 if you need more information

Sunday, February 24

FIELD TRIP

Identifying Native Trees and Shrubs in Winter

It should be more like spring by this time with buds starting to burst open but still enough challenge in identifying them before the leaves come out. We will wander around Ten Mile Point, visiting Konukson and Phyllis Parks. Start at the Lynns at 3913 Woodhaven Terrace, off Tudor Ave. Meet at 10:00 a.m. No pets please. Dress warmly. Contact Agnes at thelynns at shaw.ca or 721-0634 for more information.

Monday, February 25

MARINE NIGHT

Past and Present Views on Biodiversity and Marine Resource Exploitation in the Lau Islands, Fiji

Dr. Lisa Kirkendale will talk about a recent project to document the present marine faunas and exploitation patterns by the inhabitants of these islands, and through archeological work, past marine biodiversity and patterns of use. These data will help to determine causes and rates of ecological change and facilitate development of programs for sustainable use of marine resources. 7:30 p.m. Room 159, Fraser Building, University of Victoria. Everyone welcome.

Wednesday, February 27

BIRDERS' NIGHT

Burrowing Owl Relocation Project

The Burrowing Owl Conservation Society of BC has been releasing captive bred owls back into the interior grasslands of BC. **Mike Macintosh** will be sharing the successes of the project so far. Also accompanying Mike will be the project's mascot, **Beaker**. You will want to bring your friends, children, and grandchildren to this presentation. We meet at 7:30 p.m. in Room 159 of the Fraser building at UVic. Everyone is welcome.

BULLETIN BOARD

Saturday Birding Group (CHANGE!!!!!!)

We will no longer be meeting opposite the entrance to Beaver Lake Park on Elk Lake Drive (between Haliburton and Royal Oak) at 8:00 a.m. We will now send out the time and location on the RBA (Rare Bird Alert) (592-3381) on the Thursday and Friday before that week's walk. For more information, call **Rick Schortinghuis** at 652-3326.

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.

Back issues, *The Naturalist* and *Birding* magazines

Available for the asking, complete 25-year sets of *The Naturalist* and ABA's *Birding* magazines from 1980 through 2005. Call **Alan** at 382-3854.

Marine Birds: A Course for Naturalists and Enthusiasts

This series of slide and video illustrated talks is ideal for those interested in learning more about marine birds and bird behaviour. Discover fascinating secrets about how marine birds live and feed. The emphasis of this course is on unique and interesting biological and behavioural information that will capture the imagination of both amateurs and professionals. The course is instructed by **James Clowater**, an ornithologist who specializes in the behavioural ecology of marine birds. Two shoreline fieldtrips are included: March 16 and 23, 9:00 a.m. Call Swan Lake for details and to pre-register: (250) 479-0211. Dates: February 28, March 6,13,20,27, 2008. Time: 7:00-9:00 p.m. Payment: \$89.00 (Friends of the Nature Sanctuary \$80.00), payable February 14.

Baillie Birdathon

Want to have a lot of fun and help birds and nature at the same time? Canada's Baillie Birdathon is the oldest sponsored bird count in North America. It was established in 1976 as a national fundraiser to support the research and conservation of wild birds. Funds raised by participants benefit not only the work of Bird Studies Canada, but also designated bird observatories in the Canadian Migration Monitoring Network, the James L. Baillie Memorial Fund, which provides research grants to amateurs across Canada, and participating conservation and naturalist clubs. All contributions to Birdathon are tax-creditable. For information go to < <http://www.bsc-eoc.org/organization/brdathon.html>>. More than 7,000 people participate in and/or sponsor Birdathon in May of every year. During a 24-hour period in May, they find as many bird species as they can, sponsored at a flat rate, or on a per-species basis. Birders can designate a favourite conservation organization to receive a portion of the funds they raise. Last year Margie Shepherd raised close to \$200 for the Victoria Natural History Society and Bird Studies Canada. Thank you Margie!

Welcome to New VNHS Members

Our Society grew by 5 new members since the last issue. The following agreed to have their names published in our "welcome" column:

Iris Bensari

Earle Street

Alan and Linda Thomson

Esplanade
birds, marine

Elizabeth Dodwell

Bushby Street
birds, hiking, field trips



2008 Natural History Courses



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

Beginning Birding



An easy introduction to the pursuit of birding for those with little or no previous experience. The emphasis will be on bird identification in the field. We will start with an illustrated lecture on March 6, 2008 and six Saturday morning field trips from March 8 to April 26. The cost will be \$75 for non-members and \$45 for members.

Take the next step beyond the basics of identification. Our group of local VNHS experts places an emphasis on birding by ear and the identifying field marks of those difficult groups and species. This course includes eight very diverse field sessions around Victoria led by eight different leaders. Sessions run on Sunday mornings beginning on April 27, 2008. The cost is \$95.00 for non-members and \$65.00 for members. The course is limited to fifteen participants.

Beyond Beginning Birding



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



**Victoria Natural
History Society**

