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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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Contents

VHNS Summary for 2007	
<i>By Ed Pellizzon</i>	4
The British Columbia Breeding Bird Atlas: A Return to the Tradition of Bird Watching	
<i>By Ann Nightingale</i>	5
2008 VNHS Award Recipients.....	7
Valentine Count Soars to New Heights	
<i>By Jan Brown and Alan MacLeod</i>	9
Exotic Herpetiles in British Columbia	
<i>By Gavin F. Hanke</i>	10
Flight Pen Takes Off at Wild ARC	
<i>By Tracy Anderson</i>	16
Welcome to New Members.....	16
Arbutus or Madrone, <i>Arbutus menziesii</i>	
<i>By John Fitch</i>	17
VNHS Fieldtrip Report: Birding Rithet's Bog	
<i>By Kevin Slagboom</i>	18
Knockan on Heaven's Door	
<i>By Todd Carnahan</i>	19
Letters	20
Calendar of Events	21
Bulletin Board.....	23

COVER PHOTO: Slender toothwort, *Cardamine nuttallii*.
Photo: James Miskelly

For many of us, spring must be the most exciting time of the year. Everything seems as new as if we were seeing for the first time. Every new bloom seems a triumph of nature. Every beast and bird returning from distant lands or deep slumber is celebrated like the sudden arrival of a long-lost friend. Walking through the woods and meadows in the spring, we feel a swelling of joy and lightness that are unparalleled in other seasons.

As we drift deeper into summer, some of our springtime feelings subside. Our long-lost friends, so recently rediscovered, come to be treated more like family; we're glad to know they're there, and happy if we get to see them from time to time. However, the joys and passion of the spring fade a little. What do we do to rekindle our springtime feelings? Many of us turn to other locations or other species groups that we are less familiar with. Without the intimate knowledge that we have in our homelands (or home creatures) everything seems as new and exciting as the spring.

This spring, I feel like I've followed this pattern too many times. With great familiarity comes a danger. We risk forgetting that every bloom *is* a triumph of nature, that every beast and bird should be celebrated *at all* opportunities. I think that rather than looking to new species groups or new locations, I should be looking deeper into the lives of the creatures that I already know well. There are an infinite number of unanswered questions about even our most common species, not to mention almost infinite chances to just celebrate their presence. The BC Breeding Bird Atlas project described in this issue provides an opportunity to get out and really get to know some of the creatures that you may think you know already. This kind of approach, applied to different species and different questions, could allow us to find that flush of spring in our veins throughout the seasons.

James Miskelly

VNHS Summary for 2007

By Ed Pellizzon, Past President

2007 was a very productive year for the VNHS. There were 59 field trips with some new ones, including Heritage Trees and a Mount Washington weekend with Agnes Lynn, kayaking Discovery Island and Chain Islands Ecological Reserve with Rick Schortinghuis, and a Pelagic Birding trip to Race Rocks with Ed Pellizzon. Bill Dancer and Rick Schortinghuis kept the Tuesday morning and Saturday morning field trips interesting by visiting almost every birding area around Victoria, averaging about 10-12 persons per trip, and Derrick Marven was a great leader for our Duncan trips. A special thanks to all those that have lead and participated in VNHS field trips. We also had an excellent year of presentations which included the Seaweed Lady, Alpine Flowers of Mongolia, a presentation on The Coastal Waterbird Survey, the Mushrooms of Observatory Hill and The Bats of BC to name a few.

The VNHS donated \$4000.00 to Goldstream Nature house and \$4000.00 to Swan Lake to assist with interactive

displays. The Anne Adamson viewing platform at Viaduct Flats was finished this year with just some signage and a viewing scope left to complete.

Our board members were very active within the society. Clare Aries has been compiling chapters for a new up to date version of *The Naturalists Guide to the Victoria Region*, John Henigman has been our liaison with the Federation of BC Naturalists, Claudia Copley has been responsible for the fantastic issues of *The Victoria Naturalist* newsletter, Darren Copley has been taking care of membership duties and working with the construction association to complete the Adamson viewing platform, James Miskelly is our Swan Lake representative and vice president, Gordon Hart has been keeping our books in order as our treasurer, Tracy Anderson has been our secretary, Ann Nightingale has taken care of the Christmas Bird Count the VNHS web site and RPBO, Wendy Tyrrell has been our liaison with H.A.T and takes care of billing for advertising, and Bryce Kendrick keeps us up to date with the Mycological Society.

Thanks also to Phil Lambert and Adolf Ceska for taking care of Marine Night and Botany Night Presentations and Tom Gillespie and Phyllis Henderson for distribution of *The Victoria Naturalist*.

You will notice some minor changes to the board in 2008. With Darren Copley coming in as the new president, I will be fulfilling my duties as past president, and will still be coordinating presentations for Natural History Night and Birders Night. Cheryl Mackie is new to the board and will be our secretary, taking over for a departing Tracy Anderson.

Thank you to all who have participated in our programs and volunteered your time for the society, it is appreciated.



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The British Columbia Breeding Bird Atlas:

A Return to the Tradition of Bird Watching

By Ann Nightingale

Many modern birders have become collectors of lists as well as observers of nature. It might even be safe to say that for many, the list has become the thing. The British Columbia Breeding Bird Atlas project will appeal to those who like to keep lists and to those who prefer their birding at a little slower pace. For the next five breeding seasons, it's not going to be enough to see or hear a bird. We're asking naturalists to stop, look and listen for evidence of breeding behaviour. Birdwatching! Imagine that!

Beginning this spring and continuing until 2012, atlasers throughout the province will be keeping track of courtship, nesting, and chick rearing activities of their avian neighbours. Through the atlas reports, we will be compiling a comprehensive picture of which species currently breed in each area of the province. BC has been divided into 10 km square blocks, each with a designated code. Each block falls into a region covered by a local administrator, whose job it is to recruit volunteers, receive all of the reports and make sense of the information. I have the good fortune to be the Regional Coordinator for Region 18, Southern Vancouver Island and the Gulf Islands. In this region, there are 44 squares... and we are one of only two regions in the province where 100% coverage is expected!

I am looking for three kinds of birders to help with the project:

- **The casual observer:** Birders (or even non-birders) who don't wish to spend a lot of time on the project, but who may be able to submit reports on the birds in their yards or that they come across on the way to doing something else.
- **The atlaser:** More serious participants who will go out and actively search for breeding birds. Atlasers can report birds from any square; they are not limited to a specific location. However, they will be asked to provide the square number in which they have made the observation. You'll need to know where you, and the birds, are!
- **The square "owner":** Squares will be assigned to atlasers who want to take things to the next level. The square "owner" will commit to survey in their square for at least 20 hours during the breeding season. They will also do a 15-stop point count to listen for and look for all of the species at each pre-determined location. And finally, the



square owner will estimate the number (within given ranges) of breeding birds of each species in their square.

I should add here that I am not alone in looking for volunteers! There are regional coordinators throughout the province that are looking for help with this project. If you will be traveling in BC during bird breeding season, they also would appreciate your observations.

So, when should you be looking and what exactly should you be looking for? This is a *breeding* bird atlas, so, of course, we are looking for evidence of breeding. Most of the observations will occur during April through June, although earlier observations will be necessary for some species. We aren't asking people to scour the bushes and trees looking for nests. If you do happen to find a nest, please don't disturb it! We don't want to contribute to breeding failures!

There are several different kinds of evidence that will allow us to assign birds into one of four categories: Observed, Possible Breeder, Probable Breeder, or Confirmed Breeder. While our ultimate goal will be to confirm as many species as possible, the other categories are important, too.

Within each category, there are several kinds of evidence. Atlasers will be asked to note exactly which kind of evidence was observed. The goal is to record the highest level found within each atlas square. In other words, once a nest with young for a particular species has been found in a square, we don't require further reports on that species from that square. The following chart shows the evidence within each category.

BREEDING EVIDENCE

(listed in increasing confidence level)

OBSERVED

- X Species observed/heard during its breeding season but in non-breeding habitat (no evidence of breeding). *Presumed migrants should not be recorded.* Note that this code is rarely used, as birds tend to occupy nesting habitat during the breeding season.

POSSIBLE BREEDING (least confidence)

- H Species observed during its breeding season in suitable nesting **habitat**.
- S **Singing** male present, or breeding calls heard, during its breeding season in suitable nesting habitat.

PROBABLE BREEDING

- M **Multiple** singing males (seven or more) found during one visit within the same square, during the breeding period in suitable nesting habitat. Most species listed as (M) can be upgraded during other visits. Use with caution to avoid counting migrants.
- P **Pair** observed during their breeding season in suitable nesting habitat.
- T Permanent **territory** presumed through registration of territorial song, or the occurrence of an adult bird, at the same place, in breeding habitat, on at least two days, one week or more apart, during its breeding season. Use discretion when using this code. "T" is not to be used for colonial birds, or for species that might forage or loaf a long distance from their nesting site e.g. Belted Kingfisher, Turkey Vulture, and male waterfowl.

- D Courtship or display between a male and female or two males, including courtship feeding or copulation.
- V Adult **visiting** probable nest site.
- A **Agitated** behaviour or anxiety calls of an adult.
- B **Brood** patch on adult female or cloacal protuberance on adult male.
- N **Nest**-building or excavation of nest hole (woodpeckers and wrens). Both groups may build dummy or roosting nests, so nest building alone is not enough to confirm breeding.

CONFIRMED BREEDING (most confidence)

- NB **Nest building** (by all except wrens and woodpeckers) or adult carrying nesting material
- DD **Distraction display** or injury feigning.
- NU **Used nest** or egg shell found (occupied or laid within the period of the study).
- FY Recently **fledged young** (altricial species) or **downy young** (precocial species), including young incapable of sustained flight or moving long distances.
- AE **Adults leaving** or **entering** nest site in circumstances indicating occupied nest but contents unknown (including birds on nest and entering nest cavities.)
- FS Adult carrying **faecal sac**.
- CF Adult **carrying food** for young.
- NE **Nest** containing **eggs**.
- NY **Nest** with **young** seen or heard.

Each atlaser will receive a copy of the Atlassing Guidelines (or can get it online) as well as maps and forms for recording their observations. Most of the data will be entered online (we hope!) which will allow everyone to see the status of each species in each square very quickly.

This promises to be a very exciting project, and it will provide important information as we deal with climate change, habitat change, and (human) population growth in British

Columbia. There is also a lot more information, including maps, data received to date, forms, and instructions for data entry on the project at the Atlas website.

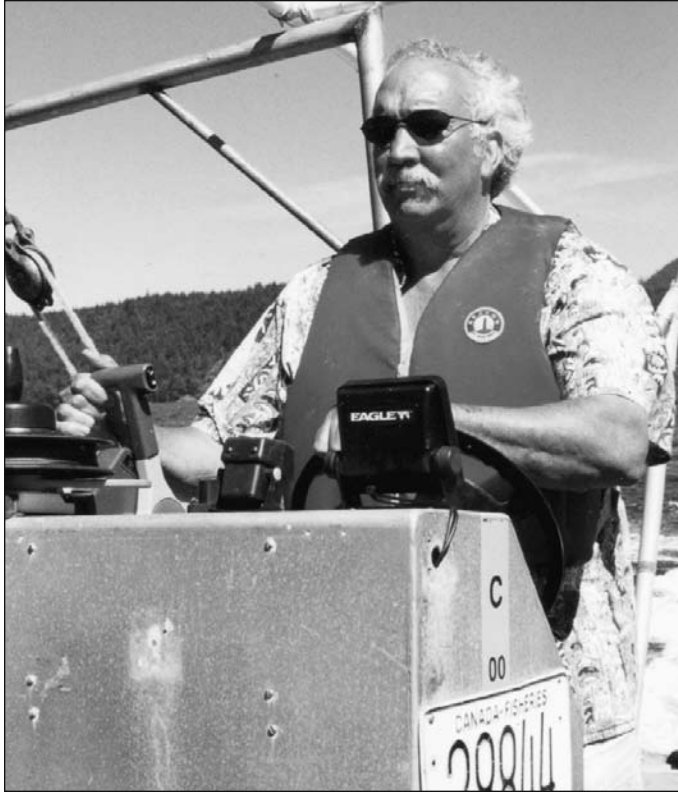
If you are interested in being a part of this project, please register on the BC Breeding Bird Atlas website (<http://birdatlas.bc.ca>) or contact me at 652-6450 or at Motmot@shaw.ca.

2008 VNHS Award Recipients

(Presented at the VNHS AGM)

Honorary Life Membership: **BILL AUSTIN**

Bill Austin completed his PhD at Stanford in 1966, and has lived in B.C. since 1967. He founded the Khoyatan Marine Laboratory in 1974, doing basic and applied research in marine biology, and providing identification services. His public service role began in earnest in 1991, when he founded the Marine Ecology Centre, which has now operated for 17 years as a non-profit educational facility. He established the Centre in a floating house, full of microscopes and aquaria, home to living representatives of many marine phyla. The float house sat for many years in Cowichan Bay, providing educational services for thousands of schoolchildren. A few years ago, Bill was persuaded to move the Centre to Sidney, and has continued and expanded his efforts in marine ecological education and awareness; about 1,000 school groups, 300 other groups and many



Captain Bill out on the water. *Photo provided by Bryce Kendrick.*

members of the public have visited the station since 1991. The concept for the new Marine Centre, soon to be installed in spacious quarters in the hotel at the foot of Beacon Avenue in Sidney, drew its inspiration from Bill Austin's many years of dedication.

For many years, Bill has operated a number of marine eco-tours every summer, taking many people of all ages by boat to ecologically interesting sites throughout the southern Gulf Islands at good low tides, and introducing them to the wonderful intertidal biodiversity of these special places. He has also taken groups on memorable field courses to places like Bamfield and the Broken Group off the west coast of Vancouver Island. Bill has also given many talks and workshops on marine ecology. He has devoted thousands of hours to the Centre and its programs, and has probably done more than any other individual to raise the consciousness of residents of the Saanich Peninsula to the priceless marine heritage that surrounds them.

He is a specialist on marine sponges of the northeast Pacific (about 300 species) and the brittle stars of the north-east Pacific (about 50 species). He is a Research Associate of the Vancouver Aquarium, a Life Member of the Georgia Strait Alliance, and a member of the Biological Society of Washington, D.C., the Western Society of Naturalists, the Southern California Association of Marine Invertebrate Taxonomists, the Association of Systematics Collections, the Northwest Aquatic and Marine Educators (NAME), and the Cowichan Estuary Preservation Society.

In recognition of his efforts to promote the study and appreciation of natural history in our region, the Board of Directors is pleased to grant Bill Austin an Honorary Life Membership.

Distinguished Service Award: **ANN NIGHTINGALE**

Ann has been a member of the VNHS since 1997 and an active member of the VNHS board for the last 8 years. In this time she has held positions as:

- President and Past President for VNHS
- Coordinator for the Victoria Christmas bird count
- Coordinator for the Saanich Peninsula area of the Saanich Peninsula – Salt Spring Island Christmas bird count
- Area leader for the Sooke Christmas bird count
- Web master for the VNHS web site
- Ann also maintains the web site and develops new programs for recording all activities related to the VNHS (bird counts, butterfly counts, etc)



Ann banding Northern Saw-whet owls at Rocky Point.
Photo: Ed Pellizzon

- Coordinator for the Federation of B.C. Naturalist AGM (held at the University of Victoria)
- One of the compilers for the Rare Bird Alert
- Co-leader for the birding course offered by the VNHS
- Raffle Coordinator at the VNHS monthly meetings
- And most recently, has become the Interim President of the Rocky Point Bird Observatory

In addition to all of the above Ann frequently writes articles for *The Victoria Naturalist* and leads field trips. She has just assumed a five-year commitment as the Coordinator for the Southern Vancouver Island, B.C. Breeding Bird Atlas.

In thanks for her tireless efforts on behalf of the Victoria Natural History Society, the board of directors is pleased to present Ann Nightingale with a Distinguished Service Award.



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Valentine Count Soars to New Heights

By Jan Brown and Alan MacLeod

The number 99 has fresh significance for the friendly competitors who look forward to the annual VNHS Valentine Couples Birdathon. No longer will the number evoke only memories of the great Gretzky. Now and forever it will also bring to mind the day that a pair of newcomers entered the Valentine race and blew its socks off. Guy and Donna Monty were down from Parksville visiting Victoria friends and decided it might be fun to spend the morning of February 10 chasing birds with other players in the eleventh annual Valentine Couples Birdathon.

Despite their having to go about their business in unfamiliar territory, they marched out and beat the previous high count in this event by a whopping nine species. Guy and Donna said that good fortune accompanied them all morning, starting early with four owl species on Humpback Road in Metchosin. But you have to be good to be lucky and this Parksville pair is obviously very, very good.

For their effort Donna and Guy will have their names inscribed on the Anderson Trophy, whose permanent home is the Swan Lake Nature Centre. They also won a dinner-for-two gift certificate provided by the JBI Pub/Blackfish Cafe of James Bay.

Apart from providing an excuse for couples to indulge their passion for birding, the Valentine event is a fundraiser for VNHS conservation efforts. Every year restaurateurs and other business people generously sponsor prizes for the event.

Sometimes a tally of 75 might be good enough to win the grand prize but in 2008 that figure left the runner-up couple, Gail and Andrew Harcombe, two dozen species behind the Montys. Still, Andrew and Gail were happy enough to choose dinner for two at Swans Pub in Victoria as their prize. The Harcombes also won the bird-of-the-day prize, a gift certificate from Science World of Oak Bay, for the Barn Owl they found in Central Saanich.

There was stiff competition for bird of the day. Some of the other worthy candidates were the Montys' Northern Saw-whet Owl and Northern Pygmy-Owl at Humpback Road, the gang of 30 Western Meadowlarks spotted in Central Saanich by two couples, and an astonishing singing Northern Shrike in the Martindale Flats area found by Barbara and Mike McGrenere.

At 73 species the McGreneres won third place; they selected a sack of premium bird feed provided by the Victoria Bird House of Sidney. This year we handed out a special 'low-carbon' prize to Barbara Begg and Dave Stirling. They did their count entirely on foot within a 75-acre area around Barbara's North Saanich home. Though their haul was only a third the number of the winners, it's a fine back yard that



Guy and Donna accepting the Anderson Trophy. *Photo provided by authors.*

includes such worthies as Great Horned Owl and Trumpeter Swan. Their prize was a 20-pound bag of premium birdseed donated by Wild Birds Unlimited of Saanich.

That wasn't the end of the prizes. The record-setting aggregate total of species seen during the event was 116. Winners of the prize for coming closest to guessing that figure were, again, the Harcombes but they generously gave that prize, a grow-your-own teapot garden donated by the folks at the Victoria Bird House, to the next-best guessers, Gladys and Jerry Anderson. Jerry is the master bird-carver who produced the Anderson Trophy.

At the post-count gathering in the Swan Lake Nature Centre there seemed to be strong consensus that this year's birdathon was a roaring success. Despite a sour forecast the weather cooperated, the birding was excellent, and VNHS conservation efforts were advanced.

If you need assurance that the annual Valentine birdathon is great fun, just ask any of the participants.

As co-organizers of this event, with Jerry and Gladys Anderson, we seek prize donations only from businesses we want to support. We thank all of the business people who helped make this birdathon another success and we encourage VNHS members to patronize our sponsors.

Exotic Herpetiles in British Columbia

By Gavin F. Hanke, Curator of Vertebrate Zoology, Royal BC Museum

Most herpetiles (amphibians and reptiles) in British Columbia arrived by northwestern dispersal during the last few thousand years. Natural dispersal is slow and somewhat predictable in comparison to the spread of exotic species by humans. Exotic species introductions are increasingly recognized as a global problem threatening the integrity of both aquatic and terrestrial ecosystems, and the pet trade plays a key role in this process (Padilla & Williams 2004; Lever 2003). Southwestern British Columbia with its mild winter climate is one of few places in Canada where a diversity of exotic pets may prosper, especially herpetiles from temperate North America, Europe and Asia.

In addition to movement through the pet trade, herpetiles also arrive accidentally as stowaways in vehicles, on produce, or on exotic plants; some escape unnoticed, some are kept in captivity, and worse yet, some are intentionally set free. Most pets escape or are released one at a time and, therefore, the probability of reproduction is low, but there is a chance exotic species may transmit disease or parasites to native herpetiles (Garner *et al.* 2006). A surprising number of exotic herpetiles have been found in British Columbia (Table 1), and three species are established. The list in Table 1 probably could be populated with many more exotic taxa

that escape from captivity, or are released intentionally but existed undetected for short periods before death.

Exotic Turtles

July 2, 2005, two yellowbelly sliders (*Trachemys scripta scripta*), a subspecies of slider from the east coast of North America (Carr 1952; Conant & Collins 1991; Ernst 1990), were found in Beacon Hill Park, Victoria. The single female collected in the upper Fountain Pond is now in the Royal British Columbia Museum research collection (Fig. 1A). A second, darkly coloured female was found in Goodacre Lake (approximately 48°24'54"N; 123°21'51"W) (Fig. 1B), and a third with bright facial markings also was found nearby (48° 24' 54"N; 123° 21' 51"W), April 22, 2006. These are the first yellowbelly sliders to be recognized in the province but others may have been released elsewhere. On a sunny day, up to 37 red-eared sliders (*Trachemys scripta elegans*) (Fig. 2A) can be seen basking on the shoreline of Goodacre Lake or floating on mats of aquatic vegetation. All of the turtles in Beacon Hill Park represent pets that were released illegally. Fortunately, the turtles in Beacon Hill Park show no sign of successful reproduction, and

Table 1. Exotic amphibians and reptiles in British Columbia according to Matsuda *et al.* (2006), Corkran and Thoms (1996), Green and Campbell (1984), Gregory and Campbell (1984), Carl and Guiguet (1981), Royal British Columbia Museum (RBCM) collection records, and anecdotes from televised and printed news. AI = accidental import, EC = escape from captivity, ES = established, EX = extirpated, IR = individual release, NA = native populations also in BC, PR = present but not established.

Family	Species	Name	Probable Status	Source
Ranidae	<i>Rana clamitans</i>	green frog	ES	IR
	<i>Rana catesbiana</i>	bullfrog	ES	IR
Emydidae	<i>Chinemys reevesi</i>	Reeve's turtle	EX	IR
	<i>Trachemys scripta scripta</i>	yellowbelly slider	PR	IR
	<i>Trachemys scripta elegans</i>	red-eared slider	PR	IR EC
	<i>Chrysemys picta belli</i>	western painted turtle	NA ES	IR
Chelydridae	<i>Chelydra serpentina</i>	common snapping turtle	PR?	IR
Lacertidae	<i>Podarcis muralis</i>	European wall lizard	ES	IR
Agamidae	<i>Pogonia vitticeps</i>	Bearded Dragon	EX	EC
Elapidae	<i>Pelamis platurus</i>	yellow-bellied sea snake	EX	AI
Boidae	<i>Boa constrictor</i>	red-tailed boa	EX	EC
Colubridae	<i>Lampropeltis getula</i>	common kingsnake	EX	EC
Viperidae	<i>Crotalus mitchellii</i>	speckled rattlesnake	EX	AI
Alligatoridae	<i>Caiman crocodilus</i> ?	spectacled caiman	EX	IR

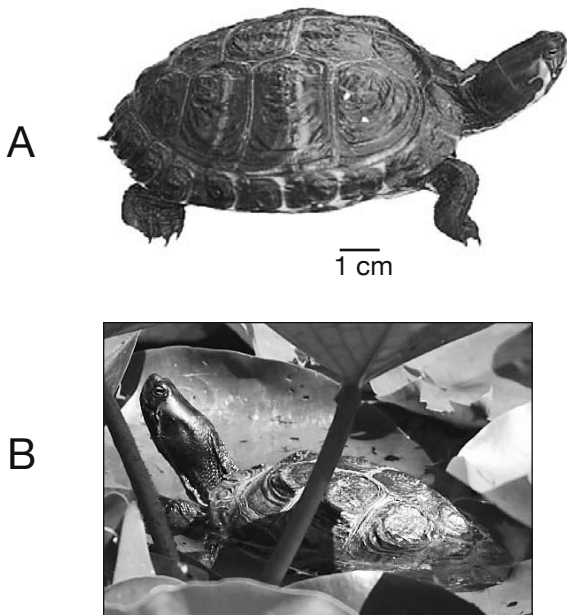


Fig. 1. Photographs of A) the yellowbelly slider (*Trachemys scripta scripta*) from Fountain Lake (RBCM Herpetology #1955), and B) a yellowbelly slider last seen August 13th, 2005 in Goodacre Lake, Beacon Hill Park, Victoria.

I have witnessed a raccoon (*Procyon lotor*) that is adept at catching turtles from the shoreline. With no reproduction and regular raccoon predation, the park population is maintained only by release of pets.

Many Victoria residents assume that the introduced red-eared sliders are the same as the native western painted turtles (*Chrysemys picta bellii*) (Fig. 2B). Most turtles on Vancouver Island and the Gulf Islands are red-eared sliders that were released by ill-informed pet owners. A few painted turtle populations may exist naturally along the southern coast of British Columbia (Matsuda et al. 2006; Gregory & Campbell 1984). Some western painted turtles on the southern islands and Lower Mainland of British Columbia probably represent released pets (Matsuda et al. 2006; Gregory & Campbell 1984). Red-eared sliders are also scattered in the Pacific Northwest to California (Brown et al. 1995; St. John 2002), and across North America east to their native range (Carr 1952; Conant & Collins 1991; MacCulloch 2002; Stebbins 1985). The continent-wide distribution of red-eared sliders is mostly due to their popularity in the pet trade, but also due to their limited use here as food (Carr 1952; Stebbins 1985). Unwanted red-eared turtles have also been released in Japan, Korea, Taiwan, Southeast Asia, Australia, New Zealand, South Africa, Europe, England, and North, Central, and South America, and undoubtedly elsewhere in the world (Lever 2003; Beebe & Griffiths 2000; Branch 1988; Ernst 1990) and also are cultured for food in Southeast Asia.

Until the mid 1980s, most hatchling red-eared turtles died in captivity, because most owners lacked information

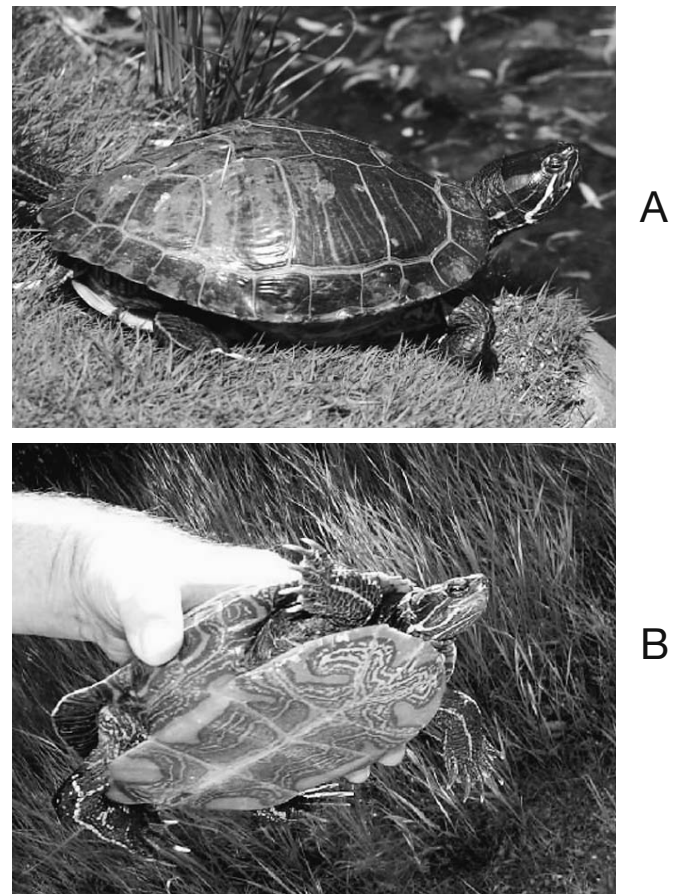


Fig. 2. Photographs of A) red-eared slider (*Trachemys scripta elegans*) from Goodacre Lake, Beacon Hill Park, Victoria, and B) western painted turtle (*Chrysemys picta bellii*) from the Okanagan region, British Columbia; yellowbelly and red-eared turtles have yellow coloured bellies with well-spaced dark blotches

on turtle care, and purchased pet products that were insufficient for the animal's needs (such as the classic plastic basin with its island and palm tree, and freeze-dried ants eggs, which were commonly supplied with pet turtles in the 1970s). However, pet owners now are far more successful with turtle care, given the availability of better pre-packaged turtle food, better literature and also internet resources on turtle husbandry. Female red-eared turtles are larger than males of comparable age and habitat (Carr 1952; Mitchell & Pague 1990) and, not surprisingly, introduced populations of red-eared turtles that I have observed are biased towards females. Pet owners covet turtles that stay small (Bartlett & Bartlett 1996), and therefore I assume the female-dominated introduced populations are a direct result of the larger female turtles outgrowing their accommodation, while the smaller males are kept in captivity because they are easier to house in smaller aquaria.

Although many adult female red-eared turtles exist outside of their native range, in most locations they fail to reproduce even when males are present (Ernst 1990). Nesting red-eared turtles have been found in the western

United States, and in Canada as far north as the Richmond Nature Park in the Lulu Island Bog, Lower Mainland of British Columbia (Brown *et al.* 1995; Sanders *et al.* 2006; St. John 2002), and the Swan Lake Nature Centre on Vancouver Island (G. Barnard, pers. comm. 2005). To date, no hatchling red-eared turtles have been found at the Swan Lake Nature Centre, but the population of turtles in the Lulu Island Bog is growing, apparently from reproduction and continued release of unwanted pets (Sanders *et al.* 2006). Even without recruitment, populations persist for at least 10-20 years and feed on aquatic plants, snails, insect larvae, crayfish, amphipods, fishes, amphibians, carrion, and even will take ducklings on occasion (Carr 1952; Beebe & Griffiths 2000); their impact on aquatic ecosystems spans several trophic levels.

In addition to red-eared and yellowbelly sliders, the occasional snapping turtle (*Chelydra serpentina*) also is found in southern British Columbia. One large snapping turtle (Fig. 3A) was caught in a ditch near the Fuller Lake Arena, in Duncan. Somehow it escaped and was found dead a short time later. Six snapping turtles were released near Woodward's Landing (south of Vancouver) in 1913, one was collected ten years later, and none of the others were found (Matsuda *et al.* 2006; Gregory & Campbell 1984, Carl & Guiguet 1958). Anecdotal records of other large turtles suggest that large snapping turtles still survive in British Columbia, but appear to be rare, isolated occurrences. Reeve's turtles (*Chinemys reevesi*) (Fig. 3B) also were collected in McCoy Lake near Port Alberni on Vancouver Island, but have not been seen there since 1929

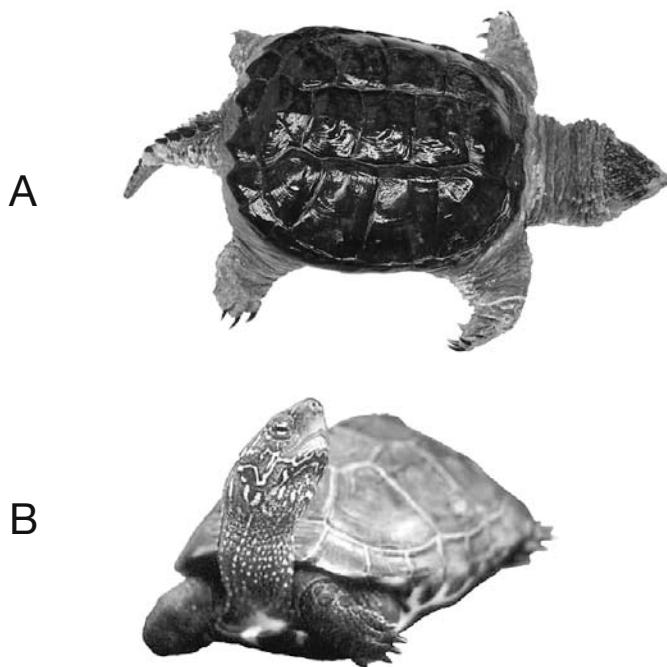


Fig. 3. Photographs of A) common snapping turtle (*Chelydra serpentina*) (RBCM Herpetology #1937) from the Fuller Lake Arena, Duncan, Vancouver Island, and B) a Reeve's turtle (*Chinemys reevesi*).

(Matsuda *et al.* 2006; Gregory & Campbell 1984). European pond turtles (*Emys orbicularis*) have been found in British Columbia on at least one occasion (Matsuda *et al.* 2006).

Exotic Lizards in British Columbia

A few European wall lizards (*Podarcis muralis*) were released on southern Vancouver Island in the early 1970s, and have established a thriving population (Allan *et al.* 2006, Bertram 2004). The original few wall lizards were released when a private zoo closed (Allan *et al.* 2006, Bertram 2004). Female wall lizards on Vancouver Island lay clutches of three to eight eggs per summer, and gravid females are found from May to July, though there is no evidence of multiple clutches from Vancouver Island (Allan *et al.* 2006). Up to 65 eggs have been found together in west Saanich, and these apparent communal nests are used repeatedly (Allan *et al.* 2006). Hatchlings appear in late July.

For the moment, wall lizards are restricted to the area of West Saanich, Triangle Mountain in Metchosis, and Victoria on southern Vancouver Island. Recent reports of individuals in the Gorge area of Victoria in 2007, and occasional reports (so far unsubstantiated) of individuals on some islands in the Strait of Georgia suggest that the species is slowly dispersing. Individual escapees normally would not establish a population. However, gravid females released in a new area could deposit enough eggs to start a new population. Wall lizards disperse rapidly with human assistance (i.e., as pets, or with horse trailers and hay bales, and along corridors of disturbed habitat). Wall lizards also have a distinct competitive edge because they may be active throughout winter on sunny days and do well around human habitation, whereas native lizards are dormant in winter and are losing habitat to urban and industrial development. *Podarcis* species (and possibly other related north-temperate lizards) also have limited freeze tolerance (Burke *et al.* 2002; Claussen *et al.* 1990). The main concern regarding wall lizards is to limit their dispersal, since many landowners enjoy wall lizards on their property as a form of 'chemical free insect control', and any eradication programme likely will meet with resistance.

In 2007, there was a news report of an escaped bearded dragon (*Pogonia vitticeps*) in the Fairfield area of Victoria, but the fate of that lizard was never mentioned. Bearded dragons are tropical and this single individual must have died in winter if not recaptured. Regardless, this example highlights the responsibility of pet owners to properly house their pets, because reptiles tend to be exceptional escape artists.

Exotic Snakes in British Columbia

Larger exotic animals such as the yellow-bellied sea snake (*Pelamis platurus*) that was found in the ballast water of the HMS Cayuga, May 1950 (Fig. 4) are comparatively rare. Fortunately, this venomous snake, which in North America is native to the southern most coast of California, would not have survived the cold North Pacific even if it had arrived live. Also, a *Boa constrictor* that made news when it escaped



Fig. 4. A yellow-bellied sea snake (*Pelamis platurus*) found in the ballast water of the HMS Cayuga, May 1950 (RBCM Herpetology #860).

in the Central Saanich area in 2007 would not survive even a mild winter in Victoria. These 'tropical' herpetiles pose little threat to our environment. Common kingsnakes (*Lampropeltis getula*) have also appeared in Victoria and elsewhere in the province, but these incidents are rare (Matsuda *et al.* 2006).

However, in the summer of 2005, an unidentified "red snake" arrived in British Columbia in luggage on a flight from Mexico; the animal was released to the wild in Metchosin before it could be identified or photographed. It is unlikely that the snake survived the physiological impact of a few hours in the aircraft baggage compartment, and certainly will not find a mate on Vancouver Island. It is alarming that exotic snakes (and other organisms that may be venomous), may be accidentally imported, handled, and even released in residential areas. Matsuda *et al.* (2006) also mention an exceptional case where a speckled rattlesnake (*Crotalus mitchellii*) arrived in Nanaimo as a stowaway in a recreational vehicle from Arizona. These accidental imports are far more likely today with the numbers of aircraft, boats, and recreational vehicles crossing provincial and international borders.

Crocodilia in British Columbia

A single sighting of a small crocodilian in Lookout Lake Park, in the Triangle Mountain area of Colwood, remains unsubstantiated by additional sightings or a specimen (*Times-Colonist* newspaper, Victoria, 29/03/2003). This animal likely was a spectacled caiman (*Caiman crocodilus*), which appear infrequently in the pet trade in British Columbia. Unfortunately, the animal was never seen again, and presumably did not last outside of captivity.

Exotic Salamanders

Aneides vagrans (Plethodontidae) is present in British Columbia and they are closer genetically to salamanders in California, not the clouded salamander in Oregon (Jackman 1998). Wandering salamanders probably invaded prior to European colonization of British Columbia, and Matsuda *et al.* (2006) note that the wandering salamander is too widespread on Vancouver Island to be a recent import (i.e., in mid-to late 1800s). However, Jackman (1998) suggests wandering salamanders could have been introduced with bark imported for tanneries and distributed accidentally by the logging industry; Lever (2003) did not decide one way or the other.

Exotic Frogs

American bullfrogs (*Rana catesbeiana*) were first noted about 1940 in the Burnaby Lake area, and from Sumas in 1948 (Carl & Guiguet 1981). Bullfrogs are abundant on the Lower Mainland from Hope southwest to the Fraser estuary, and scattered from Victoria to Parksville on the east side of Vancouver Island. The American bullfrog is considered to be "disastrous" for the native spotted frog (*Rana pretiosa*), and may be responsible for the decline of the northern leopard frog (*Rana pipiens*) and western pond turtle (*Clemmys marmorata*) where their ranges overlap. Bullfrogs also are known to take lizards, snakes, birds and small mammals (Corkran & Thoms 2006; Leonard *et al.* 1993). Aside from predation and competition between frog species, American bullfrogs carry *Batrachochytrium dendrobatidis*, the chytrid fungus implicated in declining amphibian populations and a few species extinctions (Garner *et al.* 2006). This fungus is established in British Columbia and has been found in western toads (*Bufo boreas*) and Pacific treefrogs (*Pseudacris regilla*) (Garner *et al.* 2006, Annis *et al.* 2004; Muths *et al.* 2003). *Batrachochytrium dendrobatidis* is thought to have originated in African clawed frogs, which have been shipped worldwide in the pet trade and for research since the 1930's (Weldon *et al.* 2004).

Elimination of bullfrogs will be difficult, given their dispersal potential and present population size. In the United States, bullfrogs are exploited as a game animal with regulated seasons, bag limits, and capture technique; the State of Washington considers the bullfrog a game animal, while Oregon considers them a game fish (Leonard *et al.* 1993). Furthermore, their uncontrolled distribution in the pet trade as tadpoles with shipments of goldfish ensures that this species will continue to be a threat regardless of efforts to eradicate them in this province.

The green frog (*Rana clamitans*) has not proven to be as invasive as the American bullfrog and it is uncertain whether green frogs impact native amphibians other than as a competitor for food and/or as carriers of *Batrachochytrium dendrobatidis*. Green frogs were found around Victoria, but Carl & Guiguet (1981) note that these populations may have been eliminated by urban development. Another population is known near Coombs on Vancouver Island (Matsuda *et al.*

2006). The species is doing well on the Lower Mainland, from Hope southwest to the Fraser estuary. Generally, the American bullfrog is more abundant than the green frog, but at the Lulu Island Bog, the reverse is true (Sanders *et al.* 2006). Green frogs probably were contaminants in shipments of bullfrogs to frog farms in the Pacific Northwest (Matsuda *et al.* 2006; Green & Campbell 1984; Carl & Guiguet 1981; Pickwell 1972), and tadpoles of American bullfrogs and green frogs in the pet trade could have been released in British Columbia. Most tadpoles arrive in spring or summer months, and even today with increased awareness of invasive species, homeowners raise tadpoles as pets, or worse yet, release tadpoles in garden ponds or nearby lakes.

Leopard frogs (*Rana pipiens*) are alien to Vancouver Island, but were found in ponds near Coombs in the 1970s (Matsuda *et al.* 2006). They may be extirpated now. Elsewhere in the province, native leopard frog populations are declining drastically, and this species is red-listed. Leopard frogs are cultured in southeastern British Columbia and released to try to repopulate the Creston Valley Wildlife Management Area (Adama & Beaucher 2006).

Two other native frog species have been translocated outside of their native range within the province. The Pacific treefrog was introduced to Graham Island (Queen Charlotte Islands) for nostalgic reasons. A boy dumped treefrog tadpoles from Como Lake into a pond on Graham Island; this introduced population is flourishing and has spread across most of the island (Matsuda *et al.* 2006). Matsuda *et al.* (2006) also note that red-legged frogs from the mainland were introduced to the Port Clements area on Graham Island. While these may be native species to British Columbia, they should not have been released. The Queen Charlotte Islands lacked frogs until now; the introduced frogs certainly must be impacting native insect populations, but this has yet to be studied.

Hidden Threats and Exotic Pets

Herpetological contaminants in shipments of exotic pets and misidentified specimens are fairly common in the pet trade, and pose a threat which is hard to track or regulate. In one obvious case, a brown coloured, spiny skink resembling the Philippine *Tropidophorus grayi*, (see: Pianka & Vitt 2003, p. 222) was misidentified as “blue-tongued skink” (e.g., *Tiliqua* sp.). This particular case may simply result from a distributor or pet shop owner within Canada who is particularly bad at reptile identification, a distributor trying to fool unwary pet shop owners, or worse, is a case where the imported species slipped over an international border under a false name. In another case, one African sand snake (*Psammophis sibilans subtaeniatus*) and two brown vine snakes (*Oxybelis aeneus auratus*) were imported together in 1991, and were labelled as garter snakes on the packing invoice. Both species have longitudinal stripes, and the pet shop staff were unaware they imported, and were handling, mildly venomous, rear-fanged snakes. One vine snake was preserved intact and is in the teaching collection of the

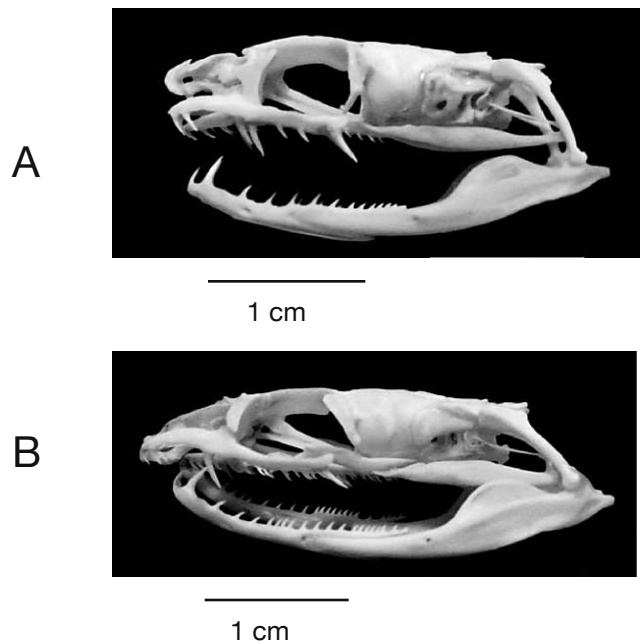


Fig. 5. Skulls of A) an African sand snake (*Psammophis sibilans subtaeniatus*), and B) one of two brown vine snakes (*Oxybelis aeneus auratus*) imported to Canada as garter snakes (i.e., *Thamnophis* sp.). The second brown vine snake (MZH581) is preserved in the herpetology collection, Department of Zoology, University of Manitoba.

University of Manitoba’s Zoology Department, and the other two snakes were prepared as skulls (Fig. 5), and will be housed at the University of Alberta’s Biological Sciences Department.

In the late 1980s, several specimens of *Scaphiodontophis* (possibly *albonuchalis*) also crossed into Canada but were labelled as “half-and-half” snakes (presumably named by the distributor). These few snakes starved, but had been imported because they were colourful, regardless of whether food was available for the species. Another company imported a “Honduran milk snake”, which may have been *Erythrolamprus mimus* (false coral snake). A mildly venomous bite to an employee was an ample reminder that common names are misleading, and that distributors do not necessarily know, nor properly indicate, what species are being sold. Definitely, this is a case of “buyer beware”.

Imports arriving under false names may be harmful to humans or harmful to the environment, and so tighter controls at international borders are needed. Fortunately, most pet herpetiles are sold individually and the few that escape or are released generally fail to reproduce, either from a lack of mating opportunity, or because of our harsh winter climate over most of Canada. Given the mild climate and vulnerability of southwestern British Columbia to exotic herpetiles, a comprehensive provincial list of prohibited species is necessary, and should emphasize North American, European, and Asian taxa that survive north of the 30th parallel, and those that survive in subalpine to alpine habitat.

Monitoring all provincial border crossings to prevent exotic species from entering British Columbia is impossible, so control is entirely dependent on public assistance and careful identification of species when transferred over international borders. Once in Canada, exotic organisms can be transferred across provincial boundaries without any inspection or enforceable regulation. Even pet shops across the province sell softshell and emydid turtles (such as the red-eared slider) in direct contravention of existing wildlife laws of British Columbia, and so a large scale education program will be needed to effect change. Species introductions, authorized or not, are irreversible, and it is far easier not to release, than to control or eliminate exotic species once established.

Acknowledgements

Thanks to K. Sendall for information on the Snapping Turtle found in Duncan and the yellow-bellied sea snake. Thanks also to B. Horn for data on the brown vine snake catalogued in the collection of the Department of Zoology, University of Manitoba. Thanks to Lyle Olsen and Mike Pingleton for permission to use images of the western painted turtle and Reeve's turtle.

References

Adama, D.B. & M.A. Beaucher. 2006. Population monitoring and recovery of the northern leopard frog (*Rana pipiens*) in southeast British Columbia. Report to the Columbia Basin Fish and Wildlife Compensation Program. Nelson, B.C. 28 pp.

Allan, G.M., C.J. Preypchan, & P.T. Gregory. 2006. Population profile of an introduced species, the common wall lizard (*Podarcis muralis*), on Vancouver Island, Canada. *Canadian Journal of Zoology*, 84: 51-57.

Annis, S.L., F.D. Dastoor, H. Ziel, P. Daszak, & J.E. Longcore. 2004. A DNA-based assay identifies *Batrachochytrium dendrobatidis* in amphibians. *Journal of Wildlife Diseases*, 40(3): 420-428.

Bartlett, R.D., & P.P. Bartlett. 1996. Turtles and tortoises. Barron's Educational Series, Inc., Hauppauge, U.S.A. 119 pp.

Beebee, T.J.C. & R.A. Griffiths. 2000. Amphibians and reptiles: A natural history of the British Herpetofauna. HarperCollins Publishers, London. 270 pp.

Bertram, N.A. 2004. Ecology of the introduced European wall lizard, *Podarcis muralis*, near Victoria, British Columbia. M.Sc. Thesis, University of Victoria.

Branch, B. 1988. Field guide to the snakes and other reptiles of southern Africa. Ralph Curtis Books Publishing, Sanibel Island, U.S.A. 326 pp.

Brown, H.A., R.B. Bury, D.M. Darda, L.V. Diller, C.R. Peterson, & R.M. Storm. 1995. Reptiles of Washington and Oregon. Edited by R.M. Storm & W.P. Leonard. Seattle Audubon Society, trailside series. Seattle, U.S.A. 176 pp.

Burke, R.L., A.H. Hussain, J.M. Storey, & K.B. Storey. 2002. Freeze Tolerance and Supercooling Ability in the Italian Wall Lizard, *Podarcis sicula*, Introduced to Long Island, New York. *Copeia*, 2002(3): 836-842.

Carl, G.C., & C.J. Guiguet. 1981. Alien animals in British Columbia. Handbook 14, British Columbia Provincial Museum. Victoria, British Columbia. 103 pp.

Carr, A. 1952. Handbook of turtles: The turtles of the United States, Canada, and Baja California. Cornell University Press, Ithaca, U.S.A. 542 pp.

Claussen, D.L., M.D. Townsley, & R.G. Bausch. 1990. Supercooling and freeze tolerance in the European wall lizard *Podarcis muralis*,

with a revisional history of the discovery of freeze-tolerance in vertebrates. *Journal of Comparative Physiology B. Biochemical, Systemic, and Environmental Physiology*, 160(2): 137-143.

Conant, R., & J.T. Collins. 1990. A field guide to reptiles and amphibians, eastern/central North America. Houghton Mifflin Company, Boston, U.S.A. 450 pp.

Corkran, C.C. & C. Thoms. 2006. Amphibians of Oregon, Washington, and British Columbia. Lone Pine Press, Vancouver, British Columbia. 176 pp.

Ernst, C.H. 1990. Systematics, Taxonomy, Variation, and Geographic Distribution of the Slider Turtle. pp. 57-67. in: Gibbons, J.W. (ed.). The history and ecology of the slider turtle. Smithsonian Institution Press, Washington, U.S.A.

Green, D.M., & R.W. Campbell. 1984. The amphibians of British Columbia. Royal British Columbia Museum Publication, Victoria, 100 pp.

Gregory, P.T., & R.W. Campbell. 1984. The reptiles of British Columbia. Royal British Museum Publishing. Victoria British Columbia. 102 pp.

Jackman, T.R. 1998. Molecular and historical evidence for the introduction of clouded salamanders (genus *Aneides*) to Vancouver Island, British Columbia, from California. *Canadian Journal of Zoology*, 76: 1570-1580.

Leonard, W.P., H.A. Brown, L.L.C. Jones, K.R. McAllister, & R.M. Storm. 1993. Amphibians of Washington and Oregon. Seattle Audubon Society, trailside series. Seattle, Washington. 168 pp.

Lever, C. 2003. Naturalized reptiles and amphibians of the world. Oxford University Press, Oxford, England. 318 pp.

MacCulloch, R.D. 2002. Amphibians and reptiles of Ontario. McClelland and Stewart Limited, Toronto Ontario. 168 pp.

Matsuda, B.M., D.M. Green, & P.T. Gregory. 2006. Amphibians and reptiles of British Columbia. Royal British Columbia Museum Handbook Series, Royal BC Museum publishing, Victoria, British Columbia. 266 pp.

Mitchell, J.C., & C.A. Pague. 1990. Body Size, Reproductive Variation, and Growth in the Slider Turtle at the Northeastern Edge of its Range. pp. 146-151. in: Gibbons, J.W. (ed.). The history and ecology of the slider turtle. Smithsonian Institution Press, Washington, U.S.A.

Muths, E., P.S. Corn, A.P. Pessier, & D.E. Green. 2003. Evidence for disease-related amphibian decline in Colorado. *Biological Conservation*, 110: 357-365.

Padilla, D.K., & S.L. Williams. 2004. Beyond Ballast Water: aquarium and ornamental trades as sources of invasive species in aquatic ecosystems. *Frontiers in Ecology and the Environment*, 2(3): 131-138.

Pianka, E.R., & L.J. Vitt. 2003. Lizards, windows to the evolution of diversity. University of California Press, Berkeley, U.S.A. 333 pp.

Pickwell, G. 1972. Amphibians and reptiles of the pacific states. Dover Publications, New York, U.S.A. 234 pp.

Sanders, C., N. Davis, A. Jacob, & M.I. Reid. 2006. Chapter 16: Status and Inventory of the Amphibians and Reptiles of the Lulu Island Bog. in: Davis, N. & R. Klinkenberg (editors). 2006. A Biophysical Inventory and Evaluation of the Lulu Island Bog, Richmond, British Columbia. Ecology Committee, Richmond Nature Park Society. Richmond.

<http://www.geog.ubc.ca/richmond/city/inventory2002.htm>

Stebbins, R.C. 1985. A Field guide to western reptiles and amphibians. Peterson Field Guide Series. Houghton Mifflin Company, Boston, U.S.A. 336 p.

St. John, A. 2002. Reptiles of the northwest, British Columbia to California. Lone Pine Publishing, Renton, U.S.A. 272 pp.

Weldon, C., L.H. duPreez, A.D. Hyatt, R. Muller, & R. Speare. 2004. Origin of the Amphibian Chytrid Fungus. *Emerging Infections Diseases*, 10(12). 2100-2105.

Flight Pen Takes Off at Wild ARC

By Tracy Anderson

This is two years late but at least now I have some news to go along with this thank you to all those VNHS members who helped build Wild ARC's flight pen. In the nearly two years that we have had it, it has been an immense asset to our rehabilitative capabilities. Birds that we used to have to send away to other facilities for flight-testing can now go through the entire process here and not have to undergo the stress of transport. The pen is 20 metres long and 10 metres wide. It has a solid centre partition down the middle and now has four sets of sailcloths on pulley systems so that we can divide it into as many as four separate pens.



The (relatively) new flight pen at Wild ARC. A Great Blue Heron rests after a workout in the flight pen. Photos provided by author.

Since it has been operational, we have flight tested and conditioned eagles, hawks, owls, ravens and Great Blue Herons. We have fledged young Great Blue Herons, Red-tailed Hawks and even gulls in it. The birds come to us with fractures, head trauma and soft tissue injuries, often due to impacts with vehicles or buildings (windows). Some stay only a few days and others stay for several months healing from their injuries.

One known success story: we received a young Red-tailed hawk in the summer of 2006. She was found to have a fractured humerus. A veterinarian inserted a metal pin to hold the bone aligned while it healed. She did really well and was released, after spending quality conditioning time in the flight pen. This year we received a Red-tailed hawk that had been hit by a vehicle. She was stunned but otherwise relatively unscathed. She wore a federal band and I recognized the sequence. I knew she was one of the two Red-tailed hawks that we had released in 2006. She turned out to be the one that had been pinned! She had lived and thrived for nearly a year and was now growing in the red tail feathers that signify her as an adult of her species. We sent her on her way after a few days. Thanks to all who helped make that possible.

This was also a record year for eagles for us. We rehabilitated and released six Bald Eagles and recently we got a surprise, in the form of a young Golden Eagle.

Welcome to New VNHS Members

Our Society grew by 15 new members since the last issue. The following agreed to have their names published in our "welcome" column:

Christina Ball
Linden Avenue
birds, evolution, marine

Carolyn Williston
Slater Street
birds, plants

Gail, Bob and Ted Krickan
Thompson Avenue
birds

Robb Paterson
QUESNEL
birds

Gord Arich and Hope Walsh
Hampshire Road
nature and gardening

Bill Austin
SIDNEY
marine studies

Kent Anders
NANAIMO
native plants

June Slack
Hilda Street
art, sewing, birding

Amy Medve
Meadow Place
birds

Kathe and Ivan Parsons
Rocky Point Road
general nature

Arbutus or Madrone, *Arbutus menziesii*

By John Fitch

Icons of the coast, these trees are told at once by the colours of trunk and limbs, well known in the paintings of E.J. Hughes: the bark is reddish-brown when mature, but then it peels off, revealing green and yellow-orange, which reddens again. An oversized member of the Heather family, *Arbutus* has roots that are tough and tenacious, clamping their hold on layers of rock, while the trunk leans over the water, pushing the green world out to its furthest limit. Often the trunk is oddly twisted, as if it were corkscrewed into the rocks. And often a trunk or branch will snake away from the base for thirty feet just above the ground, to reach the light --a wonderful place for kids to clamber over limbs that are smooth and brown and bare like those of a sturdy suntanned mother. Like the roots, the flowers are those of a Heather, miniature urns; in April and May they are massed in creamy or green-white clusters, set off by the glossy dark-green leaves. Back from the shore, the trees grow taller; you will see the floating clouds of flowers sixty feet up in the forest canopy.

But they love the challenge of rocky places, the arid summits of hills and mountains. In the Great Flood, so the story runs, all of Saanich was drowned by the rising seas, except the top of Mt Newton. There the sole survivors took refuge, and there, according to Chief Philip Paul, an arbutus rooted on the very summit provided a place to secure their canoe, lest it be lost in the swirling floods. Since that time the mountain is called Place of Refuge in the Saanich tongue, ŁÁUWELNEW; and the people still do not burn arbutus wood in their stoves, mindful of the service the tree provided.



Arbutus. Arbutus menziesii. Photos: Darren Copley

Notes: For the tenacious roots as typical of Heathers see Briony Penn, *A Year on the Wild Side* (Victoria, B.C. 1999) 161. The Saanich story of the Great Flood is recorded by Jim Pojar and Andy MacKinnon, *Plants of Coastal British Columbia* (Vancouver 1994) 49, and by Nancy J. Turner, *The Earth's Blanket* (Vancouver & Toronto 2005) 50-1. The translation of ŁÁUWELNEW as "Place of Refuge" appears in Dave Elliott Sr., *Salt Water People: a Resource Book for the Saanich Native Studies Program* (Saanich 1983) 65.

VNHS Fieldtrip Report: Birding Rithet's Bog

By Kevin Slagboom

It's been a while since I've had the opportunity to go birding with a Saturday morning group. Fortunately, this morning it worked out that I could join the VNHS trip around Rithet's Bog in Saanich.

As we arrived, the sun was poking out behind the clouds and adding a bit of warmth to an otherwise cold morning start. Rithet's Bog is a popular walk and, not surprisingly, our group swelled to more than 24 keen birders with a mix of new birders as well as a few experienced spotters. Great to see everyone.

So, to get started, the group listed the immediate common species, which included a Ruby-crowned Kinglet singing for us. As we made our way to the duck marsh, Anna's Hummingbird and Marsh Wren made appearances. The wind was calm, so we could all have a good opportunity to hear the calls of the birds around us.

At the duck marsh we came upon Northern Shoveler and Green-winged teal. Also right out in front was a Pied-billed



A ducky scene at the marsh along Chatterton Way.
Photo: Kevin Slagboom

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Grebe, who was initially resting and looking like teal until it popped its head up. Off at the tree line, a Cooper's Hawk perched in a tree and a Turkey Vulture teetered in. For a few moments, a crow decided to mob the vulture and move it along. Back on the marsh, things were a bit quiet. It was cool and not much was happening yet. A few swallows were flying above the marsh but not much else.

Working our way to the southwest corner of the bog, we were treated with a Virginia Rail calling out, which was nice and clear.

Scouting the south side of the bog was a bit quiet, but one Anna's male did the 'pop' for us while others perched on their territory.

Things picked up when we reached Fir Tree Glen at the east side of the bog, moving into the Douglas-fir forest. Both Fox Sparrow and Golden-crowned Sparrow gave us a preview of their song. We discovered a Chestnut-backed Chickadee using a nest box (hurry, no a House Sparrow). The forest itself was fairly quiet, but a troop of Red Cross-bills came in and chattered away in the upper canopy.

Near the end of our walk, on the way back to our cars, a sharp eye spotted a male Rufous Hummingbird (I bird a missed, thinking it was another perched Anna's so no investigating with binoculars). Great to see a Rufous at the end of the walk, as that was one species I'd hoped to see.

Thanks to Marie for leading an enjoyable outing.

Further Reading

<http://www.rithetsbog.org/>

<http://www.vicnhs.bc.ca/bird.obs.rithets.bog.html>

Knockan on Heaven's Door

By Todd Carnahan

Victoria has some of the most beautiful city parks in the country, especially during the spring wildflower bloom. One of these lesser-known heavenly sanctuaries is Knockan Hill Park.

This spring *Habitat Acquisition Trust* (HAT) is working with local residents and municipalities to protect and restore Knockan Hill Park, which contains some of the last Garry oak meadows in Victoria. The *Friends of Knockan Hill Park Society* (FKHPS) invited HAT to provide community outreach services to more than 400 residents bordering the park. The goal of this project is to raise awareness about the high value of natural areas for biodiversity and community health. This project is part of HAT's award winning *Good Neighbours* strategy to protect our region's last remaining significant habitats. Many VNHS members will remember some of HAT's previous projects around Mill Hill, Mt Douglas, Colquitz Creek, and other urban Shangri-las.

Although officially protected as a municipal park, Knockan Hill still faces increasingly unholy threats that could profane its biodiversity and habitat values over the long term. Invasive species, isolation from other natural areas, soil erosion, and blasphemous recreational uses impact the park's sensitive ecosystems.



Creating Conservation Legacies

Local residents play a crucial role in park protection. Citizens can make a real difference in the park's health through simple actions on their own land and on Knockan Hill. Interested homeowners can get a free information package, a unique map of the area, and a confidential visit by HAT biologists. Eco-friendly neighbours are eligible to join HAT's network of virtuous Habitat Stewards throughout our region. If you live between Helmken Rd, Wilkinson Rd, and the Galloping Goose, give us a call at 995-2428.

Many super natural events are planned in and around the park for residents and students. In May and June, HAT's speaker series highlights the spring wildflower bloom, ecological functions, and native history of these rare habitats. Topics include divine insect pollinators, native plants for food and medicine, nature photography, celestial tree care, and naturescaping for wildlife.

HAT is also planning a naturescape garden tour that features some of the most saintly landscaping practices for drought tolerant, wildlife friendly gardens. Students and boy scouts will pursue activities like building bird boxes, invasive plant management, and nature tours. Five angelic students at Royal Roads University have partnered with Saanich and View Royal to create a park management plan to guide park activities over the long term. HAT welcomes inquiries from local groups interested in hands on learning activities that support this revered park's integrity.

Project sponsors that answered our prayers include the District of Saanich, the Town of View Royal, BC Gaming Commission, Telus Community Investment, and TD Canada Trust Friends of Environment Foundation.

Habitat Acquisition Trust

PO Box 8552

Victoria, BC V8W 3S2

Phone: 250-995-2428

Email: hatmail@hat.bc.ca

www.hat.bc.ca

Great camas, *Camassia leichtlinii*. Photo: Darren Copley

Letters

Dear Sir or Madame,

I would like to thank you for creating the Freeman F. King Scholarship for biology students with a focus on natural history and field studies. This award has given me a huge boost, financially and personally. Not only has it provided me with the funds to continue my study of biology (particularly ornithology), but it has also given me a motivational boost; it is nice to get recognition for my hard work! I will be completing my BSc with a major in Biology and a minor in Environmental Studies this year, and I am so proud to be able to finish my undergraduate studies with an honour like this.

My studies at the University of Victoria have truly deepened my love of the natural world in all of its glorious complexity. The more I learn, the more I want to know! At UVic, I have had the opportunity to explore habitats as diverse as hydrothermal vents and the boreal forest. I have tried to take a wide range of classes covering a diversity of natural subjects, and while I have discovered new fields of interest, notably marine invertebrates, I always return to my underlying passion for birds.

In elementary school, I was convinced that I was going to be a marine biologist until a fourth grade science unit on birds. From that moment on, birds have been my passion! I am an avid birder, I have been the Sunday morning bird walk leader at the Swan Lake Nature Sanctuary here in Victoria for four years, I have taken banding courses and have volunteered at the Rocky Point Bird Observatory, and I have worked with the BC Purple Martin Stewardship and Recovery Program for two summers in a row. I have always dreamed of combining my passion with a career. The Freeman F. King Scholarship is a sign, to me, that I am on the right path. This award has encouraged me to seriously pursue my study of ornithology, especially in the field. There is so much out there to explore!

Thank you, Kelsey Low

To the Victoria Natural History Society,

Thank you so much for your generous bursary!!

It will help me so much this winter as the cost of being a student is so high and there is no time to work! I am honoured with your selection and thank you for your recognition. This gift will allow me to continue to be involved in the community and volunteer with NGO's!

Many Thanks!, Ainsley Brown

To whom it may concern:

I wanted to thank you for choosing me as a recipient of the Samuel Simco Bursary. I was born and raised in Victoria and started to attend the University of Victoria in 2004, fresh out of high school. I have always had a passion for animals since a young age and have decided to pursue it as a career, but more importantly as a life passion. I am currently enrolled in the Biology Majors program and volunteering/working at the Central Saanich Animal Hospital. I have been given a job at

the hospital on Sundays, working in the boarding area of the hospital taking care of the animals that stay for long periods of time. My favourite part of volunteering in the treatment area of the hospital is assisting in holding the animals and watching the surgeries. I have applied to the Veterinary Medicine Program at the University of Saskatoon and I am waiting for an interview. During my summer off between the years at UVic, I work two jobs to support myself. This financial aid that you have given me will help me complete another year at the university, and give me a chance to reach my goal to become a veterinarian. Thank you.

Sincerely, Beverly Morrison

Dear VNHS,

Let me extend my sincere thanks to the Victoria Natural History Society for the Alice M. Hay Scholarship. It is exceptional that the Society offers this generous award to graduate students at the University of Victoria, and I am honoured to have received it this year. I'll tell you a little about myself, so the Society knows where its money has gone.

I grew up on small Canadian Forces Bases where I was always surrounded by nature and wildlife. A move every two to three years ensured that I saw much of Canada's natural diversity. The intrigue spawned by this parade of habitats and wildlife led me into the field of ecology, and the habit of changing ecosystems every few years. I have spent a decade as a terrestrial ecologist, doing research on tree squirrels (still my favourite for their pluck), bats, marten, fisher, and wolverines; and managing black bears, caribou, and moose. It was always intuitive to me that to conserve species one must conserve habitat, so my research has focussed on habitat selection by mammal species for the purpose of habitat conservation and species management plans.

A taste of Vancouver Island as a child in CFB Comox left me wanting more, so I moved myself and my family from Alberta to the Island in 2004 to study sea otter recolonisation for my Ph.D. I gathered field data on sea otter and pinniped abundance and distribution in Clayoquot and Nootka Sounds in the summers of 2005 and 2006, and spent the winters learning about marine coastal systems. I realised that there were principles developed in terrestrial mammal ecology that had yet to make their way into the sub-discipline of marine mammal ecology. I was thus inspired to design a research project to bring together habitat selection research on sea otters, seals, and sea lions on the west coast, as well as data I'd collected on marten, fisher, and wolverines in the Alberta foothills. This cross-species comparison of the spatial scales of habitat selection will be my Ph.D. dissertation.

As with most activities involving environmental conservation rather than exploitation, gathering funds for this research has never been easy. This makes me appreciate the contribution of the Victoria Natural History Society all the more. I have given several lectures on my research as a member of UVic's Speaker's Bureau; if the Society were interested in having me speak sometime, I would be honoured to have the chance to repay them in this small way.

My sincerest thanks, Jason T. Fisher

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.

MAY

Friday, May 2

FIELD TRIP

Saltspring Botanical Adventure

We enjoy the local wildflowers but sometimes it is nice to just venture a bit farther afield to see what grows on our nearby Gulf Islands. This trip is intended as an exploratory trip, dabbling in a few areas that have been recommended as having a diverse selection of wildflowers. Please note some trails may be steep and challenging but will be taken at a leisurely pace to enjoy the habitat. Bring a stick and wear sturdy shoes. We will carpool to catch the 9:00 a.m. ferry, returning around suppertime. Participants will be expected to share in transportation expenses. Bring a lunch and drinks for the day. No pets please. You must register for this event to assist in planning. Contact **Agnes** at 721-0634 and leave your name and contact info or, preferably, email her (thelynns@shaw.ca) to obtain final details.

Saturday, May 3

FIELD TRIP

Camas Day in Beacon Hill Park

This annual event will include guided walks for Birds at 7:00 and 9:00 a.m., Wildflowers at 11:00 a.m. or 1:00 p.m. and Archaeology at 11:00 a.m. or 1:00 p.m. Walks are about one hour each. Meet at the flag pole atop Beacon Hill. Jointly sponsored by VNHS and Friends of Beacon Hill Park Society. No pets please. Contact **Helen** at 478-0239 or email **Agnes** at thelynns@shaw.ca for more information.

Sunday May 4

FIELD TRIP

Birding Little Saanich Mountain (The Observatory)

Come and join **Ed Pellizzon** on a birding walk up and around Little Saanich Mountain, this is an excellent place to see lots of migrant species of birds, some in the process of building nests. Meet at 7:30 a.m. Call Ed at 881-1476 if you need more information.

Sunday, May 4

FIELD TRIP

Spring Flowers on Christmas Hill

Join Nature Sanctuary Site Manager, **Willie MacGillivray**, for an informative walk up Christmas Hill. Meet at the Swan Lake Nature House at 1:00 p.m. and find out what's blooming in the Garry Oak ecosystem.

Saturday, May 10

FIELD TRIP

Birding Royal Roads and Esquimalt Lagoon

Join **Ann Nightingale** for a birding walk around Esquimalt Lagoon. You should see a good variety of shorebirds and passerines in their migration. Meet at the south end of Esquimalt Lagoon by the washrooms at 7:30 a.m. This is a five hour walk. Bring a snack and a drink. Call Ann at 652-6450 for more information. No pets please.

Sunday, May 11

FIELD TRIP

Witty's Lagoon Songsters

Join **Dannie Carsen** for a foray around Witty's Lagoon for some great ear birding and good views of warblers and vireos. Meet at the parking lot off Metchosin Road at 7:00 a.m. Bring your lunch and a beverage, we will stop at the picnic tables after the walk is over. For further information, contact Dannie at 544-2117 or dcarsen@shaw.ca.

Friday, May 16

FIELD TRIP

Birding Viaduct Flats and Quicks Bottom

Please join us in birding Viaduct Flats and Quick's Bottom. Meet at 7:00 a.m. in the parking lot at the foot of Viaduct Avenue which is off of Interurban Rd. Call **Rick Schortinghuis** 652-3326 if you need more information. Leader TBA.

Saturday, May 17

FIELD TRIP

Birding Swan Lake

Join **Bill Dancer** in birding Swan Lake. There should be a good variety of migrants coming through. Meet at 7:30 a.m. at the main parking lot. Call Bill Dancer at 721-5273 if you need more information.

Saturday, May 17 and Sunday, May 18

Victoria Butterfly Count

We are always looking for keen-eyed volunteers so get out your field guide! **James Miskelly** is the count coordinator; give him a call at 477-0490.

Sunday, May 18

FIELD TRIP

Birding the Power Line off Stewart Mt. Rd.

Meet at the mailboxes on Stewart Mountain Road, which is off Millstream Road, at 7:00 a.m. It's a great place to see warblers, vireos and flycatchers. Call **Rick** at 652-3326 if you need more information.

Monday, May 19

FIELD TRIP

A Natural History Cycling Tour of the Galloping Goose Trail (Sooke Potholes to Leechtown)

Join **Rick Schortinghuis** on a cycling tour into the Sooke Hills. We will enjoy the flowers, birds and scenery along the way. Meet at the Galloping Goose parking lot 2.3 km up Sooke River Road at 8:00 a.m. Bring a cool drink and a lunch. Call Rick at 652-3326 for more information. No pets please.

Saturday, May 24

FIELD TRIP

Piers Island Exploration

This is a new adventure to a private Gulf Island just near the Swartz Bay Ferry. We have some local residents of the island who will meet us there and show us around this tiny jewel. The private properties are all around the waterfront and there is a trail encircling the island at the back of the properties with the native vegetation left intact in the centre of the island. There should be lots of birds and wildflowers as well as beaches to explore. We will take a specially scheduled ferry over to the island at about 10 a.m. and return about 3 p.m. We'll wander around the path to a shell beach, have our lunch and complete the loop back to the ferry. No pets please. You must preregister for this event. Cost is about \$10.00 for the ferry. Space on the ferry is very limited and the trip will only happen if we get a minimum of 10 people confirmed a week before the event. It is dependent on good weather, as high winds would cancel the outing. VNHS members will get preference. Dress for the weather. Bring a lunch, snacks and plenty to drink. No pets please. Contact **Agnes** at thelynns@shaw.ca or 721-0634 to register or for more information.

Saturday, May 24

FIELD TRIP

Birding Mt. Tolmie

Join **Kevin Slagboom** in search for migrating warblers, flycatchers and possible Lazuli Bunting. Late May is a great time for unexpected migrants and Mt. Tolmie historically has been one location where rare species tend to show up. We'll spend a few hours combing the upper trails in our search. There will be some hiking up and down the sloped tails so please wear good walking shoes. Park in the gravel parking lot near the top and we'll meet at the top of the hill at 7:15 a.m. Call Kevin at 658-0940 for more information.

Sunday, May 25

FIELD TRIP

Birding Blenkinsop Lake

Join us in birding the Blenkinsop Lake area and Lochside Trail. Meet at the south end of the bridge at the end of Lochside Drive at 7:00 a.m. Call **Rick Schortinghuis** at 652-3326 for more information. No pets please. Leader TBA

Friday, May 30

FIELD TRIP

Birding Mount Newton

Birding Mount Newton's south slope. We should see Black-throated Gray Warbler, Black-headed Grosbeak, and Western Tanager as well as many other migrant and resident birds. Meet at the corner of Haldon road and Newton Heights at 7:00 a.m. Leader TBA. No pets please.

Saturday, May 31

FIELD TRIP

Birding the Jordan River area

Join **Rick Schortinghuis** for a trip out to Jordan River. In the past it has been a good hot spot for rarities in the spring and fall. It's a great place to hear the Fox Sparrow's singing in the spring. Meet at the Helmken Park and Ride at 7:00 a.m. Please bring a lunch. Please call Rick at 652-3326 if you need more information.

JUNE

Sunday, June 1

FIELD TRIP

Birding the Duncan area

We will try to find a Red-eyed Vireo and other Warblers, Vireos and Flycatchers. Meet at Helmken Park and Ride at 7:30 a.m. or at the Cowichan Bay Dock Rd at 9:00 a.m. Call **Rick** at 652-3326 if you need more information.

Saturday, June 7

FIELD TRIP

Enjoying the Last of the Season at Eagle Heights

Visit an area northwest of Shawnigan Lake that needs protection for its unique habitat. It has interesting native grasses and other late wildflowers such as Clarkia. We might have time to look for some of the things that Pojar & MacKinnon refer to as 'oddballs' if the weather is good. Meet at Helmcken Park and Ride at 9:00 a.m. to car-pool. Bring a lunch, snacks and plenty to drink for an approximately 5-hour outing. No pets please. Contact **Agnes** at thelynns@shaw.ca or 721-0634 for more information.

Saturday, June 7

FIELD TRIP

Birding Mt. Douglas

Please join **Mike McGrenere** in birding Mt. Douglas. Meet at the corner of Lockside Drive and Lohbrunner Rd at 7:30 a.m. Please wear good hiking boots, it's a fairly strenuous hike. We should get a good number of warblers, flycatchers and vireos, also Western Tanager, House Wren and Chipping Sparrow. Call Mike at 658-8624 if you need more information.

Sunday, June 8

FIELD TRIP

Birding the power lines and the ponds at the hydro substation alongside Francis King Park

Join **Rick Schortinghuis** and **Barry Gatten** on a walk along the power lines that border Francis-King Park and the area around the hydro substation. We will be stopping to look at the flowering shrubs, butterflies, and birds along the way. This is a great area to hear or see most of the warblers, vireos and flycatchers we have in our area. Bring a lunch and a drink and meet at the nature house on Munns Road at 7:00 a.m. This will be a 4-5 hour walk. Call Rick at 652-3326 for more information. No pets please.

Saturday, June 14

FIELD TRIP

Birding Little Saanich Mountain (The Observatory)

Come and join **Ed Pellizzon** on a birding walk up and around Little Saanich Mountain. This is an excellent place to see lots

of migrant species of birds, some in the process of building nests. Meet at 7:30 a.m. Call Ed at 881-1476 if you need more information.

Saturday, June 21

FIELD TRIP

Butterflies in the Duncan area

Join **Derrick Marvin** in looking for butterflies in the Duncan area. Meet at the Helmken Park and Ride at 9:00 a.m. to car pool. Others can meet Derrick at Somenos Marsh at 10:00 a.m. Bring a lunch and a drink; we are going to take up most of the day. Call Derrick at 250-748-8504 if you would like more information.

Saturday June 21 and Sunday, June 22

Victoria Butterfly Count

We are always looking for keen-eyed volunteers so get out your field guide! **James Miskelly** is the count coordinator; give him a call at 477-0490.

Sunday, June 29

FIELD TRIP

High Jordan River Bogs

We plan to investigate the area high above Jordan River. Checking out the fascinating bogs around Jordan Ridge will probably take up the whole day, although we might have time for another stop along the way. Be prepared in case of cold or wet weather and bring high rubber boots (hiking boots not good enough). Bring lunch, snacks and plenty to drink. You must pre-register for this trip after June 1 due to transportation limitations. Guaranteed spot if you are willing to bring your high-clearance or 4-wheel drive vehicle for carpooling! We will probably meet at Helmken Park and Ride at 8:00 a.m. to car-pool. Bring a lunch, snacks and plenty to drink for an all day outing. No pets please. Contact **Agnes** at thelynns@shaw.ca or 721-0634 to register or for more information.

BULLETIN BOARD

Letaka Safaris

Last September Bryan Gates gave a presentation on a trip VNHS members took with Letaka Safaris to Botswana and Namibia. At that time we also asked for donations for a Birding Big Day fundraiser for bird conservation in Botswana. We collected \$175.00 that evening and sent it to Letaka Safaris. Grant and Brent Reed of Letaka Safaris send their thanks for the generous donations.

Letaka Safaris is presently planning another trip for VNHS members. The proposal for this trip is to go east into Zimbabwe and Mozambique. If you are interested, go on line at <http://members.shaw.ca/shshea/Index.mht> or phone Rob Gowland at 592-8905 or Cheryl Mackie at 479-4083 (after May).

Attention Butterfly Fans!

The unique butterfly exhibit by Annie Pang will be returning to the Nature House at Swan Lake, April 24th to August 22nd, 2008. Annie, who is both a photographer and a poet, has created a display of 17 different species of butterflies, partnered with poetry. All butterflies were photographed within the Greater Victoria area during the 2007 season. Come and enjoy this original collection of butterfly 'poetographs'.

Botany BC 2008: May 15–May 18, 2008

Botany BC will be based out of Powell River on BC's Sunshine Coast. Field trips will visit sites around Powell River including Texada Island and possibly Savary Island. Botany BC is an annual meeting of botanists and plant enthusiasts of British Columbia and is open to anyone interested in plants. Registration and detailed program are posted to the website: (<http://members.shaw.ca/dmeidinger/botanybc/>). For more information, please contact: Elizabeth Easton (250) 953-3488 e-mail: Elizabeth.Easton@gov.bc.ca

Volunteer for Nature

Come enjoy the spring season at Swan Lake and share the fun with visiting school groups. Volunteer Assistant Naturalists are now being recruited for programs through April and May. Contact Joan at 479-0211 or email: volunteer@swanlake.bc.ca

Saturday Birding Group

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.

BC Nature (the Federation of BC Naturalists)

has a new address. It is:

BC Nature (Federation of BC Naturalists)
c/o Heritage Centre
1620 Mount Seymour Road
North Vancouver, BC V7G 2R9

Phone: 604-985-3057

Email: manager@bcnature.ca



17th Annual CAMAS DAY

WHEN: Saturday May 3, 2008, 9:00 am – 2:00 pm

WHERE: Beacon Hill Park (walks begin at flagpole on top of Beacon Hill)

Guided Walks (each 1-2 hours long)

Rick Schortinghuis, Victoria Natural History Society

7:00 am, Birding Walk

Tom Gillespie, Victoria Natural History Society

9:00 am, Birding Walk

Adolf Ceska and Brenda Beckwith, Ecosystems Scientist (Ethnobotany)

9:00 am, Wildflower Walk

Adolf Ceska and Brenda Beckwith, Ecosystems Scientist (Ethnobotany)

11:00 am, Wildflower Walk

Grant Keddie, Curator of Archaeology, Royal BC Museum

9:00 am, Native History of Beacon Hill Park

Grant Keddie, Curator of Archaeology, Royal BC Museum

11:00 am, Native History of Beacon Hill Park



Sponsored by the Victoria Natural History Society and Friends of Beacon Hill Park
For more information, call Helen Oldershaw (592-6659) or email Agnes Lynn (thelynns at shaw.ca)