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### VICTORIA NATURAL HISTORY SOCIETY





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Members are encouraged to submit articles, field trip reports, natural history notes, book reviews, etc. Please include photographs or illustrations if possible, along with a suggested caption and photo credit. If digital, images need to be high resolution: a minimum of 1200 x1550 pixels, or 300 dpi at the size of photos in the magazine. We prefer electronic submissions in an IBM compatible word processing format. Anything submitted in hard copy will be returned if a stamped, selfaddressed envelope is included with the material.

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# Contents

By Darren Copley4
VNHS Awards: Call for Nominations5
Rock Wrens on Salt Spring Island  By Karen Ferguson
A Mid-September to Mid-October Holiday  By Bill Dancer
Blue Skies and Blue Feathers – The Scattered Blues  By Jeannette Bedard
Hummingbirds at Swan Lake  By Geoff Barnard
Welcome to New VNHS Members23
Saanich Park Volunteers and Restoration of Natural Areas
By John Henigman14
Annual Bird Report  By Jeremy Tatum
Hat Tricks
By Brandy Patterson, Habitat Acquisition Trust
Bulletin Board
Calendar of Events

### **COVER PHOTO**

February is when Anna's Hummingbirds begin nesting in our region. Head to p.10 to learn (among other things) how the brilliant colours of hummingbirds are accomplished, and p.13 to read about hummingbird nesting activity at Swan Lake, or the calendar (p.23) to find out about a field trip dedicated to them. Photo: Marie O'Shaughnessy

Happy New Year to me – I am once again in the welcome position of having more content than room! I am happy to relinquish space to promote the bird courses (below), "co-presented" this year by the VNHS and Rocky Point Bird Observatory. Due to my negligence, the last issue was missing the usual fall call for award nominations (p.5). Please do take some time to nominate a deserving member of the Society – we love to recognize individuals for their hard work.

Claudia



# 2011 **Birding Courses**



Here's a chance to support the Victoria Natural History Society and the Rocky Point Bird Observatory while learning about our local birds. These programs will be taught by experienced trip leaders who have volunteered their time, and the proceeds will support the conservation activities at Rocky Point Bird Observatory. Please note the lower prices for VNHS members (yet another reason to join the Society!).

### 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 3, 2011 and follow with six Saturday morning field trips from March 5 to April 16. The cost will be \$95 for nonmembers and \$65 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 10, 2011, with the two long weekends skipped. The cost is \$105.00 for non-members and \$75.00 for members. The course is limited to 15 participants.

### Beyond **Beginning Birding**



To register, please go to < <a href="http://rpbo.org/">http://rpbo.org/</a> >or contact birding@rpbo.org. If you have any questions, please contact Ann Nightingale at 250-652-6450 or motmot@shaw.ca.







# **President's Message**

### By Darren Copley

'm not going to say that I can't believe another year has gone by, because I can believe it. It seems every year gets L fuller and fuller, but I'm not complaining. Many of the things that are filling my days are very rewarding. I've had an incredible year of getting out into the field with the Royal BC Museum, volunteering to help inventory rare invertebrates from around the province. This year included a trip to the Nature Conservancy's Darkwoods property in the West Kootenays, where we found one of the least collected orders of insects in North America: Gylloblattids, also known as Rock Crawlers, and several other important finds. I've also had an opportunity to work with BC's spider expert, Dr. Robb Bennett, who has been mentoring me in identifying spider samples that were collected in the Gulf Islands in 1989, including many from the national park, long before it ever was a park. Curious how many species of spiders there are in BC? Check out the BC spider page on Efauna <www. geog.ubc.ca/biodiversity/efauna/spiders.html>.

Robb is one of those incredible biologists that worked for the provincial government as a researcher, but he spent his time volunteering to help increase our understanding of the spider fauna of BC. Robb was recently declared "redundant", and no longer works for the Ministry of Forests. This has happened to many other biologists in the Ministries of Forests and Environment, as this current regime dismantles what little environmental protection we have. It appears the goal of these 'reorgs' is to make the permitting process less onerous for industrial projects. Hopefully many of you are following these changes with more politically-active organizations such as Ecojustice.

Another highlight for me in 2010: the biology students that I taught this year. For the *Vertebrates of BC* course at the University of Victoria, students are required to go on field trips as part of learning to identify the tetrapod vertebrates of BC. This year, the students were conspicuous in their interest in learning about our incredible natural history. As part of the foundation of biology, natural history can inspire a student to continue on in biology and conservation. This is certainly where I first got the nature bug.

The class field trip this year that really stood out for me was to the lower mainland (Reifel and Boundary Bay), where every student had an amazing time learning about how important these areas are for wildlife. At Reifel we crossed paths with the annual VNHS field trip, and it got me thinking that next year we should combine the trips so our members can help mentor some university students. Hopefully some of my students will come out to our club meetings and field trips. Please make them feel welcome, and do your part to inspire the next generation of naturalists.





Darren and Robb exploring NCC's Darkwoods property (left), and photo-documenting the "grylloblattid habitat" (right). *Photos*: Claudia Copley

## **VNHS Awards**

### **Call for Nominations**

NHS 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, 2011.

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
- 2008 Ann Nightingale
- 2009 No recipients
- 2010 Gordon Hart, Agnes Lynn

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Dr. Bill Austin, Mrs. Lyndis Davis, Mr. Tony Embleton, Mr. Tom Gillespie, Mrs. Peggy Goodwill, Mr. David Stirling,

Mr. Bruce Whittington



# **Rock Wrens on Salt Spring Island**

### By Karen Ferguson

had a delightful experience this summer observing a pair of Rock Wrens on Salt Spring Island. I certainly wasn't expecting to see my first Rock Wren when I was birding that morning, as Salt Spring is outside their normal range (see Notes).

June 23, 2010 promised to be a pleasant day, beginning with a lovely pink sunrise and clear skies. I was enjoying the first songs of Olive-sided Flycatchers as they reached me from the forest near and far, when I heard a voice that was new to me. I immediately began to track the unknown singer, who sang a wide variety of phrases, repeated three to six times. The song riffs ranged in quality from dry, electrical, well pronounced phrases, to soft bell-like trills. Intrigued, I searched and finally saw the singer perched on top of a boulder. A Rock Wren! There he was, head thrown back, long curved beak open to the sky, with throat feathers that pushed out and vibrated, as his song rang over the landscape. As is often the case with wrens, I marveled at the volume and force of sound from such a small bird.

Soon after I found the male, a second Rock Wren, I assumed to be female, flew up from the grass and began to explore the crevasses and gaps between the nearby boulders. The male flew towards her and she joined him in the air, where they tussled in flight, fell to the ground and disappeared in the tall grass for about five seconds. The male flew out first, landed on a rock and resumed his song. The female appeared soon after, perched on a rock, preened, and bobbed up and down with the deep knee bends characteristic of the species.

I watched them for some time and saw that the male had many different perches he sang from, which he visited on rotation. His territory was oval shaped and covered approximately two hectares. In between singing bouts the male made short forays into the grass to feed. I chose a position, near one of his rock perches, sat down, and waited for him to show up. On closer inspection of this rock, I saw that it was well decorated with his droppings, which increased my confidence that I had picked a good location for a close encounter. I didn't have to wait long before he appeared and immediately began to sing. After delivering his delightful concert, he flew down to the ground within eight feet of me and began to preen. He cocked his head to look at me and seemed undisturbed by my presence. He soon began to forage amongst the rocks. It was wonderful to be so close to this little fireball of a bird as he went about his business.

The following evening I observed the pair as they walked, hopped, and climbed amongst the boulders. This was the last time I saw both birds together and I wondered if this was because the female was tight on a nest, hidden somewhere in the rocks. The only record of Rock Wrens nesting in our area was from 1970, when a pair successfully raised five young in Genoa Bay near Duncan, which, as the Rock Wren flies, is not so far from Salt Spring.

My interest in Rock Wrens continued to grow as I read more about them. I was not surprised to learn that they nest in cavities or crevices among rocks. It was their curious behavior of building pavements or walkways that really



Rock Wren. Photo: Simon Henson

In Canada, Rock Wrens breed mainly in the southern interior of B.C. and Alberta. In B.C. they concentrate in the Okanagan and Similkameen River valleys.

caught my imagination. They build walkways with flat stones and other objects which lead from their nest site to the entrance of their nest cavity and sometimes beyond. The nest itself may also sit on a base built of rocks. The following list has a surprising variety of objects collected by a pair to build their nest base and pavement on Farralon Island in California: "1,665 objects including 492 small stones and one safety pin, two pieces wire, two pieces of scissors, 10 pieces of battery zinc, two fishhooks, two pieces of glass, one piece of leather, four copper tacks, two pieces of limestone, four pieces of plaster, 12 pieces of shingles, nine bits of abalone shells, 20 bits of mussel shells, 106 nails, 227 bits of flat iron, and 769 pieces of rabbit, fish, and bird bones" (Lowther et. al. 2000). Both sexes are involved in these constructions, but it is the female alone who builds the nest cup made of grass, wood, bark, moss, and hair, which she lines with rootlets, hair, wool, and spider silk.

I returned on June 29 and again on July 15, with the hope that I might see the adults carrying food into a nest site, but alas I didn't, although the male still sang on territory. The private property was a high elevation location with an open habitat of grass, rock outcroppings and, to the Rock Wren's approval, a large boulder field. With my new understanding of what to look for and a growing curiosity about a possible nest, I searched the boulder field to find external evidence of a pavement leading into a nest cavity. I didn't have time to cover the entire area and, unfortunately, I came up emptyhanded.

I tore myself away that day with the awareness that it would be my last visit until late August, as I was heading off for a much needed summer holiday. The bond I had developed with these characters, as well as my interest in whether they had nested, led me to think of the wrens often while I was away. I made one last visit on August 30 and found one ragged, molting adult, foraging and preening in the same location. There was no sign of a second adult or juveniles. Unfortunately, the Breeding Bird Atlas won't receive a confirmed breeding code this year for this rare Rock Wren occurrence, but perhaps next year they will be back. I certainly will keep an eye out for their return.

### Notes

In Canada, Rock Wrens breed mainly in the southern interior of B.C. and Alberta. In B.C. they concentrate in the Okanagan and Similkameen River valleys. Breeding has also been recorded at Ashcroft, 150 Mile House,

Williams Lake, and Perkins Peak in the western Chilcotin. Most migrate southward from these areas, which are at the northern limits of their breeding range and there are records of individuals who have remained as residents.

On the coast, the first and only breeding record was in 1970, from Genoa Bay near Duncan, where a pair successfully reared five young. Non-breeding records from the coast include one individual seen in 1988 on Mt. Tuam, Salt Spring Island and one bird at McMicking Point, Victoria in 2004. The Victoria Natural History Society Annual Bird Report has records that include, one seen at Island View Beach, Victoria in 2005 and another individual, also at Island View Beach, 2006-07.

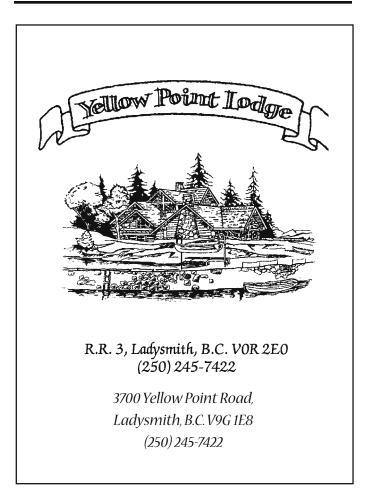
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# A Mid-September to Mid-October Holiday

By Bill Dancer

y wife and I spent from mid-September to mid-October on holiday in London, the Scilly Isles, Bath, and the Yorkshires (North Yorkshire and Yorkshire in England, these days). In that month I had two days of serious birding, one on the Scilly Isles at the end of September and the other in Yorkshire in mid-October.

I visited two sanctuaries in east Yorkshire: North Cave and Fairburn. Both of these sanctuaries have mixed habitat with wader habitat predominating in the former and the latter being best described as covering all habitat bases. By far the most memorable sighting for me at North Cave was seeing 30+ Common Snipe feeding on a small soggy island of grass with coloured relief being supplied by a similar number of Green Plover (aka Lapwing), a male Yellow Hammer and the ultimate, but somewhat uncommon, "little brown jobbie", a Twite.

Of note was the fact that the County Council were spending a lot of money on North Cave, expanding the shorebird habitat by filling in and controlling water levels in an adjoining and recently decommissioned gravel pit. There was

work being done at Fairburn as well, including expansion of the sanctuary and some dry-stone walling. One of the best sightings in Yorkshire happened on our last day: a Red Kite flying over Nidderdale close to Pateley Bridge and being harassed, inevitably, by a corvid.

A visit to the Scilly Isles (owned in total by the Duchy of Cornwall) meant going from tourist mode to twitcher mode. That's what the locals refer to the first three weeks in October, and for good reason. These islands form the extreme southwestern landmass of England and it is during these three weeks that you get the lifer vagrant migrants passing over. The Scilly Islands, as well as enjoying the most southerly latitude, are in the warm Gulf Stream, so climate-wise have much in common with the climes of Africa, Australia, and South American. In common parlance, Tresco Abbey gardens are a veritable jungle, complete with Golden Pheasants! For those that have not been to the Scilly Isles I would really recommend going there, it is like another world and certainly far from the madding crowd.

I had a secret weapon of which I had no knowledge when



Scilly Isles garden. Photo: Bill Dancer



Sanderling. Photo: Darren Copley

starting out on my day's birding on Tresco. This island, while still within the Duchy of Cornwall, is the only island that is on ongoing lease to a third party: the Dorrien-Smith family. In fact, five generations of that family. The first generation, Augustus Smith, had leased the whole Scilly Isles group in 1834 and, in 1922, all but Tresco had reverted back to the Duchy of Cornwall. But I digress.

My secret weapon appeared shortly after starting out good and early in the morning. He was easy to spot, his multiple high-end optics gave him away. He turned out to be Dick Filby, one of the U.K.'s better known birders. I had heard from the first birders I met that there may be what they thought was a Buff-breasted Sandpiper on a newly ploughed field up the road. Dick had not seen this bird in passing and he was willing to retrace his steps. Sure enough, it was strutting across the said ploughed field – a lifer for me. I will not dwell on subsequent events but let's just add that on one small beach there were 12 Bar-tailed Godwits, 20+ Ringed Plovers (almost identical to Semipalmated). Curlew Sandpiper, 30+ Sanderlings, Curlew, Red Knot, Dunlin, Ruddy Turnstones, and a White Wagtail. On Bryer Island, just across the way: Sandwich Terns, Mediterranean Gulls, and Little Egrets. I saw 25 of these latter in total, scattered across Tresco. Another unexpected sight was an Arctic Skua. It spent half a day gliding between the islands. Ah!! but what did I miss? Well, Spoonbills on Tresco and, more disappointing, a Wryneck on Bryer.

Some general observations: corvids, particularly Jackdaws, Crows, and Rooks are everywhere, and the same goes for Wood Pigeons. Raptors, both in overall numbers and variety of species, are certainly far more numerous than I can remember from the 1960's. Bird species generally, whether by introduction or the more frequent appearance of vagrants (many of which seem to get established e.g. Purple Herons), seem to be increasing all the time. Google "Shropshire Birder" – it is run by Jim Almond, a well known twitcher. He recently got two lifers in Norfolk: a Pallas Warbler and Red-flanked Bluetail, and in Devon met up with a Green Heron with photos to prove it. Not to mention earlier in the year lifers and a pending Pallid Harrier.

My total species count on the two days was 95 but should (for the Tuesday Birders' benefit!!) have been 100.

As an aside and totally non-natural history related: We went to Bath Abbey where one of the highlights was a showing of 30 or so diptyches which portrayed the New Testament in the form of illuminated scroll and translation into needlework. Three years of work! The artist, Sue Simmonds (now living in the U.K.), is actually from Vancouver Island



# Blue Skies and Blue Feathers – The Scattered Blues

By Jeannette Bedard

hen I look around, I see lush greens of temperate rain forest, rich browns of fertile soil, lively vellows in fluttering butterflies, and luscious reds in ripe berries – but not a lot of blues. If the sky is clear, it's the biggest blue object around, extending from horizon to horizon. Water reflects the blue of the sky, adding another layer of blue. On a lucky day, I'll catch a glimpse of a Steller's Jay showing off it's blue and black plumage, or a shimmering silver-blue dragonfly will dart by. I might even see a rare blue flower. On a gray winter day, the blue eyes of my favorite companion may be the only brilliant blue around. Other natural places have their own blue components, but in general, blues aren't common in nature. In fact, worldwide there just isn't a lot of natural blue pigments, thus the blues we see are often the result of optical properties within an object. These colours created as the result of an object's structure are called, creatively, 'structural colours'. Blue is a very common structural colour, and to understand why we'll need to start with some optics.

Sunlight is called 'white light' because it appears colourless. Within this colourless light lurks the full colour spectrum. Once, people thought white was the fundamental colour of light, and colours formed when something was added into the light. This theory was changed after the careful experimentation and observations of Sir Isaac Newton. Around 1670, Newton shone light through a prism, creating a rainbow of hues on the other side. From this result, he concluded that white light contains all colours and that the prism simply separates them. Therefore, colour results from interactions between an object and light.

We now understand that white light is made up of tiny waves (which are simultaneously tiny particles if you want to add complexity). Light waves travel at the same speed but can have different wavelengths, that is, the distance between successive crests. Our brains perceive the different wavelengths as different colours. The longer wavelengths form reds, oranges, and yellows, and the shorter wavelengths form greens, blues, and violets. If you could watch waves of light pass by, more waves of blue would pass compared to waves of red – this means that the blue light has more energy. Light travels outward from its source, the sun, in a straight line until it collides with something. This collision could release all the hues in the spectrum or just a select few.

Scattering describes how light is diverted from its original straight path. Light scatters in two ways: coherent and incoherent. When scattering is coherent, spectacular effects such as iridescence can occur. Like a ball bouncing back from

a flat wall, the light reflects precisely because the reflecting surface is geometrically regular. Similar colour light waves augment each other, further intensifying the effect. An iridescent feather's colour can change depending on viewing angle, a phenomenon easily observed in a Anna's Hummingbird gorget. Incoherent scattering resembles the result of throwing a rubber ball at a pole – it could bounce away in any direction. In this case, the scattering objects are randomly distributed relatively far apart. Scattering at one object occurs completely independently of the scattering at the other objects. Both coherent and incoherent scattering occur regularly in nature and can provide the mechanism for creating blue colours.

### **Blue Skies**

On a sunny day, we perceive blue blanketing the sky, but, in reality, the sky has no colour. When traveling towards us, sunlight first hits the earth's atmosphere. Earth's atmosphere is primarily composed of nitrogen (78%) and oxygen (21%) with bits of dust, water vapour and some inert argon, among other things. Water vapour, and dust are the physically biggest components of the atmosphere, and are relatively large compared to the wavelengths of light. When light hits the water vapour and dust, it is reflected in different directions, but the light remains white. So why does the sky appear blue?

In 1810, Goethe gave this explanation: "If the darkness of infinite space is seen through atmospheric vapours illuminated by the daylight, the blue colour appears." His theory said colour comes from something within the atmosphere during the light of day. About the same time a more scientific inquiry was being made into the nature of scattering light. John Tyndall showed in an 1869 lab experiment that the blue hues of the sky could be created when white light was scattered by tiny particles. A few years later in 1871, John William Strutt, also known as Lord Rayleigh, was the first to describe the actual mechanism that makes the sky appear blue: it is a result of the tiny gas molecules of the atmosphere instead of the larger dust and water vapour.

When light collides with a gas molecule the results are different than when light hits a relatively large dust particle. Gas molecules are tiny compared to the wavelengths of light – several thousand times smaller. When light strikes a molecule, that molecule absorbs a specific wavelength (or colour) of the light's energy and later re-emits the same colour in all directions; a process called Rayleigh scattering. This type of

scattering is an example of incoherent scattering. Lord Rayleigh discovered that molecules absorb energetic light (blues) at a much greater rate than less energetic light (reds).

Most of the longer wavelengths of light pass through our atmosphere unaffected, resulting in the full spectrum of sunlight with a higher ratio of blue wavelengths from the scattering. For this extra blue light to make the sky appear a brilliant blue, a dark background is required. Fortunately, beyond our atmosphere is the blackness of outer space, which makes an ideal dark background. The combined effect of the extra blue light and the black of outer space results in a sky that appears blue.

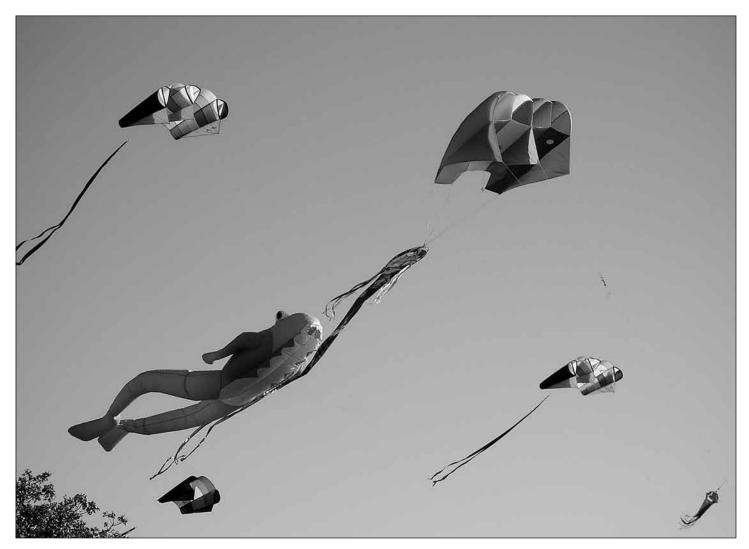
If you shift your gaze towards the horizon, the brilliant blues give way to paler colours and perhaps even white. The light reaching you from near the horizon passes through much more atmosphere, so the scattered blue light is scattered again and again, reducing its intensity. This is another consequence of Rayleigh scattering. Preferential scattering of blue light by our atmosphere occurs everywhere, not just above us. For example, light reflected from your hand to your eye is affected by this scattering, but the effect is so minuscule we can't detect it. Over a longer distance, like from Victoria to

the Olympic Mountains, there is enough atmosphere to superimpose a blueish haze on our view of the mountains.

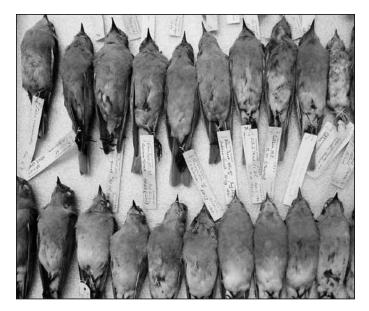
### Blue Feathers

Blue feathers have evolved in many species of birds. A Blue Jay's plumage is an excellent example, and you can see the blue of a Steller's Jay in your own backyard. A male Mountain Bluebird has blue plumage of this type, along with the head feathers of the male Lazuli Bunting. We know that feathers don't contain blue pigment, so the colour must be a result of the feather's structure.

In the late 1800's, just after the discovery of Rayleigh scattering, naturalists used this new concept to explain why blue feathers were blue. Since they didn't have the tools to examine the nanostructure (structure in the order of a billionth of a meter) of a feather, naturalists assumed that within the feather there existed transparent cells full of particles that were tiny enough to create Rayleigh scattering. Like the sky, blue light would be more efficiently scattered. These transparent cells would also contain pigments to absorb the longer wavelength colours. As a result, to our eyes these birds would appear blue.



Kites being flown on a clear day with an exceptionally blue sky. Photo: Jeannette Bedard



A drawer of Mountain Bluebirds from the Royal British Columbia Museum. Photo: Gavin Hanke

Because Rayleigh scattering is incoherent, it produces the exact same colour irregardless of the observation direction. Since blue feathers in natural light don't change colour depending on what direction the naturalists looked at them, the assumption that their colour was formed through Rayleigh scattering seemed valid. But, in the 1930's, scientists examined a a non-iridescent blue feather under a directional light source. Colour variations were observed as the light source was moved – an iridescent characteristic that called into question the hypothesis of Rayleigh scattering making the feather blue.

By the 1940's, a cool new gadget came on the market – the electron microscope. Now naturalists could directly examine the internal nanostructure of blue feathers. Based on this first look, they interpreted the internal feather structure to contain randomly spaced objects. This meant scattered light would be incoherent, giving support to the hypothesis of Rayleigh scattering. It took decades of further research to change this hypothesis and, in the meantime, many textbooks were written explaining that blue feathers were the result of Rayleigh scattering. By the 1970's, scientists finally determined that the nanostructures were, in fact, not fully random. Instead they were a quasi-ordered matrix - not quite the perfect order of iridescence but not the full randomness required for Rayleigh scattering. Under natural light from all directions, like sunlight, these feathers appear to be the same colour from all directions. However when a directional light is shone on blue feathers the colour will change depending on the light direction.

Since the colour of a Steller's Jay's feather comes from its internal structure on a tiny scale, a damaged feather would lose its blue colour. The dark pigments in the feather, that act to help show off the blue, would make a damaged feather look almost black. So if you are lucky enough to find a Steller's Jay feather, take care of it.



A blue eye is blue because of Rayleigh scattering. Photo: Jeannette Bedard

### Conclusion

Gaining an understanding why something is the way it is in nature is not always a direct path. We know the blues found in nature are often the result of the object's internal structure rather than pigments, however the actual blue-making process can vary. Although the blue of the sky and the blue of a feather can look like the same colour, the mechanism involved is very different. The two optical phenomenon involved in making these blues are Rayleigh scattering and coherent scattering.

So, which of these mechanisms is responsible for blue eyes? Rayleigh scattering is the culprit this time. Eyes appear blue when there are only small amounts of melanin present in the iris. Melanin is the pigment that makes the iris brown – a complete lack of melanin results in the pink eyes of an albino. When light passes into an minimally pigmented iris, tiny protein particles in the eye act just like the gas particles in the atmosphere: blue wavelengths are preferentially scattered and the eyes appear blue.

### **Further Reading**

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# **Hummingbirds at Swan Lake**

### By Geoff Barnard

started birding in 1991 when I retired and moved to Victoria. In North Bay, Ontario, birds came to the yard, showed up around the lakes I fished, and chickadees and ravens would appear while I was cross-country skiing. Just part of the scenery.

Then came Swan Lake, a short walk from our first condo, with bird walks on Wednesdays and Sundays, as they are today. All the volunteer leaders were instructive and patient with us beginners. David Allinson and Max Steinberg continued in this style, until they had to give up. After a few years apprenticeship with these great birders, I became the leader by default. I had to give up much of my activity in 2007.

March 17, 1996 was a great day: a woman named Liz found a hummingbird nest near the nature house. It took us a while, but we decided it had to be a Rufous Hummingbird. It was supposed to be too early for them, but Ann Scarfe called a couple of VNHS experts, and they agreed. The nest was on a low branch of a grand fir, and in a wind would rise and fall about two feet. The young fledged happily.

Otherwise, hummers were scarce during those years. There would be a quick movement, rarely a pause for feeding, occasionally a positive identification. In 1998, we had our first Anna's on territory. He became "Old Faithful" – always to be seen by a short detour toward Nelthorpe Road. I don't recall a display flight.

And then came the population surge (Table 1.).

I had been sending reports to BC Nest Survey for some time and reported that an Anna's had taken over the 2006 Rufous nest, unfortunately disappearing after about a week of incubating. Wayne Campbell emailed that this was a most unusual event, possibly a first.

Table 1. Swan Lake hummingbird records

Year	Anna's Hummingbird		Rufous Hummingbird	
	nests	on territory	nests	on territory
1998		1		
1999		1		
2000	1	2	2	
2001	1	3		
2002	2	5		
2003		7		
2004	4	9		
2005	5	13	1	
2006	11	11	1	
2007	2			



Anna's Hummingbird. Photo: Ted Ardley

A few days later he found in his archives that on May 5, 1985, Enid Lemon, another VNHS member, had found a Rufous nest at Blenkinsop Lake, which produced two young. The following year, on April 10, she found an Anna's using the same nest and feeding two young. These fledged April 28 and became the first Anna's breeding record for British Columbia.

# **Welcome to New VNHS Members**

Our Society grew by 10 new members since the last issue. The following agreed to have their names published in our "welcome" column:

### Jenna Cragg Balmoral Road Pacific northwest natural history, hiking, diving, tidepooling

Warren Steck Yale Street Botany and ethnobotany, moths of Canada, conservation

# Saanich Park Volunteers and Restoration of **Natural Areas**

By John Henigman

This article is about the *Garry Oak Restoration Project* (GORP), and the work done by District of Saanich volunteers. GORP is an exciting ecological restoration and public education program. It also provides opportunities for post-secondary students to do research, and community members to reclaim our native oak woodlands and meadows from a heavy blanket of invasive plants. Were it not for volunteers, GORP would not exist. Check out GORP at <www. saanich.ca/gorp/>.

### **About the Saanich volunteers**

The District of Saanich runs a volunteer program called "Pulling Together". This program supports volunteers in the community who want to do ecological restoration in natural areas. Volunteers do a huge amount of work in Saanich parks related to maintaining and restoring natural areas. The volunteers are regular people, some having a lot of background in ecological restoration, and others with only the things they've learned as volunteers. Most are focused on a particular park that is in their neighbourhood. They provide a few hours a week (some a lot more) working in the park, removing invasive plants like Scotch broom or garlic mustard, and sometimes planting native plants according to restoration plans developed in partnership with Saanich Parks' staff.

GORP has always operated as a separate program, but it is becoming more harmonized with the other volunteer activities under Pulling Together. Have a look at the

Indian plum (Oemlaria cerasiformes). Photos: Darren Copley

Saanich website for more information. There you will see phone numbers to get more information about volunteering with Pulling Together and GORP.

There are about 15 different groups, with 80 or so regular members of *Pulling Together*, working at 31 different sites. On top of that are the nine GORP sites and GORP's own group of volunteers and site stewards, many of whom volunteer at other Saanich park sites as well. In total, more than 300 people per year volunteer with Saanich Parks on a regular or occasional basis. In 2009, these volunteers logged approximately 3000 hours, and in 2010 they removed almost 34 tons of invasive plant material.

Each Pulling Together group and GORP site has a volunteer Lead Steward; responsible for overseeing the work the group does and for liaising with Saanich staff. Lead Stewards have been trained for their role and they work hand-in-glove with Saanich staff. Most Lead Stewards have been around their chosen site for a long time, and have been working with municipal staff to refine plans, develop goals, and work safely with their group.

Lead Stewards oversee volunteer Restoration Assistants, who are registered members of *Pulling Together* or GORP, and who form the bulk of each work party. Many Restoration Assistants focus their efforts in the park near where they live. However, in the case of GORP, Restoration Assistants work in a variety of sites with different Lead Stewards to get a diversity of experience.

Shepherding all of this volunteer effort is a Coordinator of



Sea blush (Plectritis congesta).

Volunteers who, along with the Saanich Natural Areas Technician, ensures things go well. The work must be conducted safely, up to WCB standards, and it must be organized around planned goals and done when biological conditions are right, so that wild flowers are not trampled or nesting birds disturbed. Municipal staff attend all GORP work parties and sometimes *Pulling Together* work parties, providing tools and equipment, sometimes seedlings for planting, and hauling away the piles of invasive plant material removed by volunteers.

Pulling Together and GORP volunteers are recruited from the community, local schools or the University of Victoria, local service clubs like the Rotary, Girl Guides, Boy Scouts, or from members of the community who use these natural

Volunteer safety is a big deal. Lead Stewards must get a criminal record check. All registered volunteers must wear the safety vests provided by Saanich and gloves. Sometimes goggles are required. Work sites must be assessed for tree hazards, and work timing must take fire risk, fisheries sensitivity, and rare species into account. As you would expect, everyone must sign a legal waiver.

### The Garry Oak Restoration Project sites

GORP has been a program within Saanich since 1999, and its vision is to have all Saanich residents be active Garry oak ecosystems stewards. It's a public education program about the restoration of Garry oak ecosystems. Parcels within Saanich Parks have been identified and given status as restoration demonstration sites to encourage community support and education opportunities. The process is like a "living laboratory", where we can all learn what works best to achieve Garry oak ecosystem restoration. There are usually 2-4 work parties at each site each year, and volunteers under the Lead Steward's guidance are allowed to work in pairs on their own time as well.

The most important feature of GORP is that it endures



Garry oak (Quercus garryana) leaves.

and slowly builds towards its vision to have all residents be active ecosystem stewards. Over the years, many people (including a lot of children), have visited GORP sites, and have learned about Garry oak ecosystems. Lots of people have spent time removing invasive weeds and planting native plants, and this aspect of GORP remains very strong.

In the past, Saanich erected signs in all of the GORP sites to welcome visitors and explain the program. I noticed some of the signs, but in some sites they have been lost. As well, the original hope was that students and professors from local universities would find a good fit in the GORP sites to do research. A number of research projects have been undertaken over the years but, as is often the case when students move on, follow-up and reporting results has been lacking. Saanich continues to issue several permits for research on park lands each year, and some of these yield benefits for Garry oak ecosystem conservation.

At present, there are nine GORP sites, some well known Saanich Parks and others that are more hidden. One of the main purposes of GORP is for residents to visit the sites and become acquainted with the ecosystems and restoration activities. I encourage you to go visit the GORP sites and have a look at what is slowly emerging from the overburden of blackberry vines and sea of broom. Not all the sites are crowd pleasers yet – GORP is a work in progress.

Here is brief description of the sites and how to find them. You can also check out <a href="http://www.saanich.ca/gorp/sites">http://www.saanich.ca/gorp/sites</a>. html> for official site descriptions and maps.

Camas Park: This is a narrow strip of Garry oak along the north side of McKenzie Avenue. adjacent to the intersection with Cedar Hill Cross Road. The best place to park is by the intersection of Cedar Hill Cross Road and Cumberland Road, which you reach from Borden Road. This bit of Garry oak woodland has lots of camas, indian plum, snowberry, and even elegant rein orchid. Some experimental planting of native grasses was done at the site in 2008. Lots of Scotch broom, oyster plant, blackberry, and cyclamen to remove.

Chatterton Hill Park: This site is sandwiched between Chatterton Way and the Pat Bay Highway, and is 250 metres south of the Chatterton Way-Dalewood Lane intersection. Get to it via Chatterton Way and park in one of the adjacent business centre parking lots. There are only informal paths in the Park. There are many oaks, including planted saplings, and lots of camas and stonecrop. Work parties regularly remove broom and blackberry, and are trying to tackle the English hawthorn. This site offers a good view of Rithet's Bog, where Rithet's Bog Conservation Society volunteers hold regular work parties.

Feltham Park: This site has lots of mature oaks and a dense understory of indian plum, along with weedy English hawthorn and introduced cherry. It is very difficult to access and even more difficult to traverse. If you visit this site, park at the end of Arrow Road at Hidden Oaks Place, walk down to McKenzie Avenue and view the site from the sidewalk. Work parties remove blackberry, periwinkle, and garden

invasives dumped by its neighbours. Apparently many within the GORP Steering Committee agree that Feltham offers little to the GORP vision and it might be abandoned in favour of another Garry oak site that offers more restoration potential.

**Mahon Brook**: The site is located at the south end of Viewmount Avenue adjacent to Brydon Park and within Colquitz Park and the Centennial Trail system. Seedling oaks have been planted, along with other native plants, and they are doing well. There are also lots of invasive grasses, English hawthorn, Himalayan blackberry, and Scotch broom. Work parties focus on mulching, tree maintenance, and broom removal. It appears to be a site to study how to start an oak ecosystem, but is not my choice to view the rewards of restoration. Some day this site might be oak woodland. It could also be a riparian restoration site.

**Little Mount Douglas**: This site is in Mount Douglas Park and is accessed via Mercer Trail from Blenkinsop Road, where there is limited parking. The lower slopes are a mature Garry oak and Douglas-fir woodland, and the upper slopes are covered with meadow and scrub oaks. There are lots of camas, fawn lilies, and spring gold here – it's a very beautiful place. But there is so much broom. Work parties have been slowly eliminating the broom, although that might seem an illusion. This site tests the endurance of the broom basher volunteers, and Saanich staff, who used to haul the plant material away. To help reduce greenhouse gas emissions, the broom is now being left on site to decay rather than be trucked to distant disposal sites.

Mount Douglas Park summit: This site is just to the west of the Mount Douglas Park summit look-out parking lot, and it is mostly rock with tiny pockets of soil. The old oaks here just look like scrawny bushes, and there are lots of camas and spring gold among them. And lots of broom. Please be careful if you venture out to see the place, there are many cliffs and slippery rocks. Work parties regularly work away at broom removal here.



Fawn lily (Erythronium revolutum).

**Mount Tolmie Park**: This is a favourite place of mine – its Garry oak woodland is in fairly good shape owing to years of broom and blackberry removal. The GORP site focuses on the north-east slope. It is very accessible via Mayfair Drive and a network of trails. In the late spring there is a wonderful show of camas, satinflower, shootingstar, and sea blush. Many, many, hours of invasive plant removal have been put into this beautiful park by volunteers. Recently, students from nearby St. Michaels University School have been coming weekly to assist the Lead Steward, and they've put a big dent in the amount of broom there.

Playfair Park: This is another favourite place of mine. Lots of people have committed their free time to maintain this beautiful park. The GORP site is the Garry oak woodland in the northwest section of the park. Scotch broom and blackberry are not big problems here now. Rather, orchardgrass and white clover are dominating. The orchard grass is pulled or cut by hand and sometimes mowed after the wildflowers have set seed. Check out the beautiful horticultural planting of rhododendrons also in Playfair Park.

Wetherby Park: This site is a tiny park at Cedar Hill Road and McRae Avenue. You've probably driven by many times and never noticed it. There is a grove of mature oaks surrounding a grassy picnic area. Some blackberry, spurge laurel, and orchard grass removal occurs here. A number of oaks, native shrubs, and camas have been planted here.

In summary, Saanich would like its residents to *Pull* Together and to Go Restore. I invite you to visit the GORP sites and let us know what you think.

### Not just about Saanich

Though this article is about a Saanich project, Garry oak site restoration is going on in most of the other municipalities throughout Greater Victoria. Here is some contact information:

Oak Bay has on-going restoration and invasive plant removal projects at two major sites; if you want to volunteer in Oak Bay contact Margaret Lidkea at (250) 595-8084 or mlidkea@shaw.ca.

Volunteer-supported restoration work regularly occurs in Central Saanich, and Bonnie McKenzie, Manager of Community Services, at 250-544-4219, is the contact.

Victoria Parks has a volunteer program and a long list of sites similar to that of Saanich; contact Fred Hook, Parks Environmental Technician at 250-361-0623 if you would like to volunteer with Victoria.

If in Esquimalt, give Andy Katschor, Manager of Parks Services, a call at 250-412-8505 to get involved in their volunteer parks projects.

Many Garry oak restoration projects throughout Greater Victoria are served by Habitat Acquisition Trust (HAT), and they can be contacted at 250-995-2428 or hatmail@hat. bc.ca.

# **Annual Bird Report**

By Jeremy Tatum

ost birdwatchers are by now aware of the *Annual* Bird Report (ABR) for Southern Vancouver Island. Printed versions are available at meetings on Birders' Nights, or from me whenever you happen to meet me (\$3.25). On-line versions are posted at <a href="http://www.">http://www.</a> vicnhs.bc.ca/annualbirdreport.html>. These reports provide a permanent archival record of the birds that have been seen in our area, year by year. For those who are not familiar with the ABR, to the right is a sample page from the 2009 ABR, to give a general idea of its content and purpose. The 2009 ABR gives details of 225 species that were reliably recorded in the area during 2009. Work is in progress on the 2010 ABR.

It needs to be stressed that all who watch birds on southern Vancouver Island, amateur or professional, are invited to send in reports of their observations. Indeed the completeness of the reports depends on all of you doing so. We know that there are some of you out there who have not so far sent any records for publication in the ABR, and it is possible that some birders are not quite sure how to do so. This article is to give birders a guide on how to send in your observations.

The most important thing to say is that, in order for your observations to be published and placed on record in the ABR, it is essential that you actually submit your observations to the ABR! It doesn't do merely to telephone your observations to a telephone hotline, or post them on some Internet site – for the ABR publication, please send your records directly to the Editor of the ABR. And please make sure that you include your name and some contact information, such as conventional or email address, or telephone number, in case there is any query. The preferred method is for you to send them, on paper, by conventional mail, to Jeremy Tatum, 205-1680 Poplar Avenue, Victoria, British Columbia, V8P 4K7. If you prefer to send them by email, that is fine too, provided that you send them as either a .doc file or a .pdf file (jtatum@uvic.ca).

When should you send in your records? The answer in brief is – whenever it is most convenient for you! However, if you also want to make it easy for the Editor, send them in either once a year (in January of the following year) or once a quarter, after, say, March, June, September and December. In any case, if you possibly can, before the end of January of the following year.

What birds do we need records for? Certainly records of birds that are *uncommon or rare*, or common birds that might be seen in the wrong season. We would like the dates of arrival and departure for all migratory species. We like

### Sample Page of the VNHS's Annual Bird Report

### PURPLE MARTIN

Common summer visitor (0; 0, 0, 0)

Progne subis Records from Apr 18 to Sep 3, from Sooke to Ladysmith. Twelve were seen over Swan Lake, and "lots" at Ayum Creek, on Aug 2. TG reports that 130 nesting pairs were distributed in 10 colonies from Sooke to Chemainus. 538 nestlings fledged.

#### TREE SWALLOW

Common summer visitor (0; 0, 0, 0)

Tachycineta bicolor

Records from Feb 5 to Aug 29. Twenty-one were counted at Swan Lake on Feb 26. 75 mixed Violetgreen and Tree Swallows were seen at Cowichan Bay Dock Road, Mar 5. A nest was located at Viaduct Flats on May 24, and an adult was feeding young in a nestbox at Rithet's Bog on June 23. The species was seen frequently at RPBO in the first half of Aug.

### VIOLET-GREEN SWALLOW

Abundant summer visitor (0; 0, 0, 0)

Tachycineta thalassina Records from Feb 26 (three at Swan Lake) to Sept 24, apart from an unstated number of swallows at Blenkinsop Lake on Nov 17 thought to have been of this species but not identified with certainty.

### **NORTHERN**

### ROUGH-WINGED SWALLOW

Common summer visitor

Stelgidopteryx serripennis

(0; 0, 0, 0)

Records from Apr 6 to Aug 25. This species did not appear to be widely reported. The largest counts were 10 at Witty's Lagoon on Jul 15 and 12 at RPBO on Aug 6. One or two were seen regularly at Mount Douglas Beach during the summer.

### BANK SWALLOW

Rare summer visitor (0; 0, 0, 0)

Riparia riparia

One was reported by three experienced observers, and described convincingly by IC, at Swan Lake, July 29–30. One was

watched.



Purple Martin. Photo: Marie O'Shaughnessy

to know the dates when the first individual members of migratory species appear, and when the last late stragglers are seen. But, at least as important as these very early or very late individuals, we want to know the dates after which the bulk of a particular species has arrived or departed. You will find a calendar available at <a href="http://www.vicnhs.bc.ca/">http://www.vicnhs.bc.ca/</a> annualbirdcount.html> very useful for this – but please do not send your completed calendar to the Editor of the ABR – just send the relevant dates. What about common, resident species? Well, certainly if you have some interesting observation of a common resident species, such as an albino robin or a hybrid junco, or an early nesting record, or an unusual midwinter song, or particularly huge numbers, such things are certainly of interest. Please do not send pages and pages of records of every time you saw a common resident bird of the sort that can be seen by any observer anywhere on any day of the year, such as a Song Sparrow, or a Spotted Towhee or a Northwestern Crow or a Glaucous-winged Gull. Long lists of such species cause a huge amount of extra and unnecessary work.

What information is required for each observation? For all species the following four pieces of information are needed. If any one of these data is missing, the record cannot be used, and it causes a lot of extra work in trying to run down the missing piece of data. So please check that the following data are given for each observation that you submit:

- English *name* of the species, in full. Please do not use abbreviations, four-letter codes or scientific names.
- Location where the birds were seen. If you know the Municipality, please include it.
- Date when the birds were seen. Please write the month in letters. A date such as 3/5/11 is too ambiguous.
- Approximate *number* of birds. For flocks, an exact number is not expected – just your best estimate.

In addition, field notes and other details are mandatory for the following categories of birds:

- Species that are rare or uncommon.
- Common species that are seen in the wrong season.
- Species that are hard to identify or are frequently misidentified.

There are several problems that make it difficult for me to produce comprehensive lists of species in each of these categories. Rare species, of course, include species that have never before been seen in the area, but they also include species that have occurred several times, but are not recorded every year. Long-eared Owl, Red-naped Sapsucker, and Pine Grosbeak would be examples. What about species that you don't see that often, but which could scarcely be called "rare", such as, for example, Evening Grosbeak? One can always name "borderline" species such as these, but a good policy is: If in doubt, make field notes. They may be superfluous, but it can't do any harm to make them.

"Wrong season" birds include such things as House Wrens, Barn Swallows, or Swainson's Thrushes in winter, or Red-breasted Mergansers or Northern Shrikes in summer.

Which birds are "hard to identify"? Again, it is difficult to produce a definitive list, but examples include the dowitchers, accipiters, eagles, scaups, golden plovers, and sandpipers. These groups, when not accompanied by field notes, are not considered for publication in the ABR. Because everyone is aware of the difficulties and pitfalls in identifying these groups, always include carefully-prepared field notes for these submissions.

If a rare bird appears, often someone manages to get a photograph. It does not need to be a portrait of awardwinning quality – even a poor photograph is very helpful in confirming the identification of a rare bird. Therefore photography is encouraged, but only if it can be accomplished without unduly disturbing the bird, especially during the nesting season. A photograph, however, is *not* a requirement for acceptance of a record of a rare bird. Where a photograph is not obtained, however, we are totally dependent on the field notes made by the observer. I should mention that we certainly do not have a policy of automatic rejection of single-observer sightings. Indeed it is more important to have careful field notes from a single observer than reports from many observers, but without any accompanying details.

So – what is required of helpful field notes? The most important thing: Carry around a notebook and a pencil with you at all times. Think of your notebook and pencil as being as essential to you as your binoculars. Think of coming across a rare bird when you haven't got your notebook as being as disastrous as not having your binoculars. Field notes should be made at the time of the observation, when you are looking at the bird, or at most within minutes of the observation.

Apart from the actual description of the bird, there are some other details that are helpful, such as: How far away was the bird? How long was the bird under observation for? A few seconds? Minutes? Half an hour? Did you have a clear, unobstructed view? Light conditions? Was the sun behind you, or was the bird silhouetted against such a glare that you couldn't really make out the exact colours? It is

slightly helpful to know what previous experience you have had with this or with similar species. Some recorders ask what book you used, but I am really only interested in what features you saw on the bird that you were looking at.

So, how do you set about making a description of a bird that you are looking at? It certainly helps a great deal to know the correct names for the parts of a bird. The amount of detail I can get when I am writing notes depends on how well I can see the bird, and for how long. Under favourable conditions, I generally start with the bill (shape, length compared with head, colour of upper and lower mandible, colour of base and tip). Then I work over the head – frons, crown, supercilium, eye colour, throat, side of head, malar streak. Then to breast, belly, vent. Then the back and the rump, and the wings, looking especially for wing bars. Tail, of course, upper surface and under surface, and outer tail feathers. The size of the bird is also important, and the most helpful estimate of the size of a bird is if you can compare the size with another nearby bird that you could watch at the same time.

If you don't think that you can get down all that detail, let me tell you that I almost never manage to get it all down myself! You just have to do what you can. Song, call notes, behaviour, habitat, etc., are also obviously helpful. If you have never done it before, try practising on a robin.

The next thing that you will probably want to know is: How are reports of rare, unseasonal, or difficult birds processed and assessed before publication in the ABR? In fact the great majority of records are easy. It is perfectly obvious that they are valid and acceptable records, or that they are not. How do we treat the more difficult or marginal ones?

First, if a report of a rare, unseasonal, or difficult bird is received with no details at all, it isn't actually "rejected". What happens is that it is immediately entered into a folder labeled "Details Pending". It remains in that folder until the relevant details are supplied. Until such details are supplied, the folder is not opened. After the ABR is finally published, the "Details Pending" folder is erased. No one ever looked at the record. It was neither accepted not rejected.

The Bird Records Committee is responsible for adding new species that have never occurred before to the local Checklist, but for most reports of rare, unseasonal, or

difficult birds for which an immediate assessment is not obvious, my practice is to send the report, with all details supplied, to one or (usually) two experienced referees, who are not told the name of the observer. This latter policy is a little controversial, for some recorders argue, and often very persuasively, that the reputation of the observer is paramount. I recognize the strength of this argument, but I find that I am in the end swayed by two contrary arguments. One is that I myself will not be put into the position of making a personal judgment as to who is a competent observer and who is not. I will not judge whose observations can always be accepted without question and without field notes; whose observations can be considered only if supported by field notes; and whose observations are to be rejected no matter what. In many cases I simply do not know the observer or his or her reputation, but, even if I do, I will not place myself in a position of sitting in judgment over anyone. I assume that, if an observer is truly competent, he or she will supply field notes anyway. Another point is that placing undue reliance on the reputation of an observer is likely to lead to laxness of standards in dealing with observations submitted by observers supposed to be "good", and unfair rejection of reports from observers whom the Editor or referees happen not to know.

I must stress that, what the Editor and the referees look for in field notes are simple statements of what the observer saw on the bird that he or she was looking at. We sometimes get "notes" such as "The Sharp-shinned Hawk can be distinguished from the Cooper's Hawk because its eye is in the middle of its head, whereas the eye of the Cooper's Hawk is somewhere else". These are not field notes. We are not testing your knowledge of how to distinguish one bird from another, nor are we asking for a lesson on how to do so. All we want to know is what you saw on the bird that you were looking at.

I hope I have not made this sound too daunting. In practice, very little is needed. We just want to know what features you saw on the bird that enabled you to identify it. So, let's all help to make the 2010 ABR a little fatter than earlier ones, and let's try to make the ABR more complete by hearing from all who watch birds on southern Vancouver Island.



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### **Hat Tricks**

# Making Connections by Saving Mary Lake



By Brandy Patterson, Outreach & Fund Development Coordinator

Creating Conservation Legacies

ocated in the beautiful Highlands and along Millstream Creek, Mary Lake sits in the midst of a treasured 107-acre parcel of endangered dry coastal Douglas-fir forest, wetland, riparian, and rocky outcrop ecosystems. It is also a critical block of land needed to complete and connect significant regional trail and wildlife corridor networks in the Sea to Sea Green/Blue Belt. Preserving Mary Lake will mean an important and long-awaited connection to Finlayson Arm, allowing people and wildlife to travel from Francis King Park through Thetis Lake and Gowlland Tod Parks. Mary Lake also provides habitat for wildlife, including a number of rare and endangered species such as the red-legged frog and Great Blue Heron (both on British Columbia's blue list of species of special concern).

To protect and conserve this important property, the Mary Lake Conservancy must raise \$4.31 million – of which \$1 million must be raised by January 2011. The Save a Square Metre at Mary Lake campaign was launched on October 24,

2010. 'Selling' square metres of forest for \$10 and square metres of waterfront for \$40 has made it easy for everyone to help conserve Mary Lake for future generations. To support this campaign online, visit <www.SaveMaryLake.com> to pick your square metre(s) using the interactive map and leave your mark for the world to see! Please consider purchasing square metres as gifts for friends and family.

Once the purchase price of the property is raised, Mary Lake will become a prized treasure for the world to enjoy. It will continue to remove carbon from the atmosphere as a natural carbon sink, provide a home to thousands of species, and allow anyone visiting British Columbia's Capital Region an opportunity to view nature as it was meant to be...natural.

HAT is helping with this campaign by accepting donations and getting the word out. We encourage all residents of the CRD to join us in Saving Mary Lake!

Habitat Acquisition Trust, PO Box 8552, Victoria BC V8W 3S2. Phone: 250-995-2428. <www.hat.bc.ca>



Olympic Birdfest 2011 April 8-10, 2011 in Sequim, WA

A bird watching vacation for beginners to experts, from leisurely strolls to active hikes. Bird for a few hours, or all day ... from the dawn chorus to the evening owl prowl. We will wake you with coffee, nourish you with locally grown organic food, and celebrate a traditional salmon bake.

Enjoy the show from guided birding trips, boat tours, a silent auction, banquet, and many other presentations. Our festival has a full slate of extraordinary offerings awaiting you.

BirdFest program information and registration can be found at www.olympicbirdfest.org Or email opas.birdfest.info@gmail.com



San Juan Islands April 10-12, 2011, Sequim, WA

Join the Olympic Peninsula Audubon Society this spring for a three-day cruise through the spectacular San Juan Archipelago. Cruise to Roche Harbor Resort and San Juan Island. whale-watching along the way. Picnic on Sucia Island State Park, and cruise home via dramatic Deception Pass.

Contact 360-681-4076, or email opas. birdfest.info@gmail.com. Register at www. olympicpeninsulaaudubon.org

### **BULLETIN BOARD**

People love their coffee and cookies!!!! Volunteer(s) are needed to prepare refreshments for Natural History Night – the second Tuesday of each month, January through April 2011. The job is easy – you will receive all the necessary equipment and supplies. Each night you purchase cookies and milk. You arrive 30 minutes in advance to make the coffee and set up, you collect the money and clean up afterwards. Proceeds go to supporting the VNHS. Advantages: it gets you out of your house to wonderful presentations on a wide variety of natural history topics, you get to meet great like-minded people, make friends, and learn about the natural world we inhabit. Please contact Donna if you are interested in this volunteer position: hoshihana@shaw.ca

Raptor Identification Workshop with Bill Clark, international raptor expert: Saturday, January 15 and Sunday, January 16. This two day workshop is being hosted by Rocky Point Bird Observatory. Saturday will be a full day in the lab learning how to identify and age raptors. Sunday will be a field trip to Delta/Boundary Bay to put your newly acquired skills to the test. Details are available on the Rocky Point website at http://rpbo.org or by contacting Ann Nightingale at motmot@shaw.ca or 250-514-6450. Cost is \$220 including field trip transportation from Swartz Bay.

Year-round Tuesday Morning Birding Group. The Tuesday Birding Group meets every Tuesday at 9:00 a.m. at the foot of Bowker Avenue on the waterfront in Oak Bay, they then decide where they will go birding that morning. The Tuesday Birding group has been around for more than 50 years. Call Bill Dancer at 250-721-5273 for more information.

Every Wednesday and Sunday Bird Walk. Meet at the Swan Lake Nature Sanctuary parking lot: 9:00 a.m. – 10:30 a.m. For everyone!

Bird Checklist to be updated in 2011. The last Checklist of Birds for Victoria and Southern Vancouver Island was

published by VNHS in May 2001. It's time for an update, and this time around, there will be a major overhaul to the list. Not only has the American Ornithological Association changed the names of a few birds, they've also rearranged the order since our last printing. The VNHS Bird Records Committee is going through all of the reports and photos they've received, but it's clear that there are some birds that were definitely seen, but never officially reported. Now's a great time to scour your photo files and field notebooks for those uncommon or rarer birds that might result in a change to the checklist. You can submit your reports and photos online or by mail to the VNHS (address on the back of the magazine.) There will likely be more than 20 new species added to the list this time around. We've also seen population changes that will affect the bar graphs. To view a copy of the current checklist, or to see what birds are under review by the Bird Records Committee, please visit the VNHS website at <a href="http://naturevictoria">http://naturevictoria</a>. ca> and follow the links to the Bird Checklist page.

### Swan Lake Christmas Hill Nature Sanctuary courses.

For more information <www.swanlake.bc.ca> or call 250-479-0211. Marine Birds - A Course For Naturalists And Nature **Enthusiasts**: Learn where to find and how to identify marine birds and discover fascinating secrets about how they live and feed. Love Among the Feathers: The romantic adventures of our local waterbirds are examined in this entertaining 90 minute multi-media presentation by local bird biologist, James Clowater.

Olympic Birdfest Sequim, WA and a San Juan Island Cruise: April 8-10, 2011 – A bird watching vacation for beginners to experts, from leisurely strolls to active hikes. Stay on for a three-day, two-night birding/sightseeing cruise of the spectacular San Juan Archipelago: April 10-12, 2011. Contact 360-681-4076, or email opas.birdfest.info@gmail.com. Register separately at <www. olympicpeninsulaaudubon.org>. BirdFest program information/registration at <www.olympicbirdfest.org>.

### 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., 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., University of Victoria. Marine Night: the last Monday, 7:30 p.m., University of Victoria. Locations are given in the calendar listings. The VNHS Calendar also appears on the Internet at: <a href="http://www.vicnhs.bc.ca">http://www.vicnhs.bc.ca</a>, and is updated regularly.

Codes for Field Trip Difficulty Levels: LEVEL 1 — Easy walking, mostly level paths. LEVEL 2 — Paths can be narrow with uneven terrain. LEVEL 3 — Obstacles in paths requiring agility or steeper grades. LEVEL 4 — Very steep, insecure footing or longer hikes requiring good physical condition.

### **JANUARY**

Saturday, January 1

**EVENT** 

**Duncan Christmas Bird Count** 

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

Saturday, January 8

FIELD TRIP (LEVEL 1)

Birding Esquimalt Lagoon

Join **Rick Schortinghui**s in birding this hot-spot for wintering waterfowl. We should see loons, grebes, swans, diving ducks, and dabbling ducks. Meet at the north end by the bridge at

8:00 a.m. For those that are interested, we will go to Royal Roads afterwards. Call Rick at 250-388-2454 if you need more information. Everyone welcome.

### Tuesday, January 11

NATURAL HISTORY PRESENTATION

From Barnacles To Birders: The Ogden Point Breakwater The Breakwater is an easily accessible microcosm of the astonishing marine biodiversity found on the southwest coast of B.C. All 1,700 hectares of Victoria Harbour, including Ogden Point, were designated a Migratory Bird Sanctuary in 1923; the roughly triangular area between the breakwater, Holland Point and the outer edge of Brotchie Ledge are a protected area. Anny and Val Schaefer will share stories and photos of the cultural and natural assets over, under, and beneath this James Bay landmark. 7:30 p.m. in Room 159 of the Fraser Building, UVic. Everyone welcome. Bring a friend and a coffee mug.

### Saturday, January 15

FIELD TRIP (LEVEL TBA)

### Saturday Morning Birding

Call the Rare Bird Alert, 250-704-2555, or click 'Rare Bird Alert' on the VNHS website <www.vicnhs.bc.ca> on the Thursday or Friday before to find out this week's location. Usually start at 8:00 a.m., rain or shine. For more details, call Rick at 250-885-2454 or email Agnes at thelynns at shaw.ca. Everyone welcome.

### Tuesday, January 18

**BOTANY NIGHT** 

### Sport – In Nature and In Wilderness

In two parts, **Derrick Ditchburn** will present a rich variety of his photographs of plants, insect, wildlife, and nature. Swan Lake Nature House, 7:30 p.m. Admission is free and everyone is welcome. Bring a friend!

### Wednesday, January 19

**EVENT** 

### HAT's Office Warming & Open House

Come help Habitat Acquisition Trust 'warm' their brand new office space with refreshments and good company and learn what they have planned for 2011, from 3:00 p.m. until 6:00 p.m., 827 Broughton Street. Visit < www.hat.bc.ca> for more information.

### Saturday, January 22

FIELD TRIP (LEVEL TBA)

### Saturday Morning Birding

Call the Rare Bird Alert, 250-704-2555, or click 'Rare Bird Alert' on the VNHS website <www.vicnhs.bc.ca> on the Thursday or Friday before to find out this week's location. Usually start at 8:00 a.m., rain or shine. For more details, call **Rick** at 250-885-2454 or email **Agnes** at thelynns at shaw.ca. Everyone welcome.

### Sunday, January 23

FIELD TRIP (LEVEL 1)

### Exploring Mary Lake Native Trees and Shrubs

One of the most exciting new properties that we have a chance to save is Mary Lake in the Highlands. **Bob McMinn**, who has been involved with the preservation of the natural areas of the Highlands for many years, will be our guide. This is a

unique opportunity for those who like to enjoy the natural surroundings but have difficulty with challenging terrain. There are many gentle trails, but good walking shoes will make your visit more comfortable. Bring a snack and a drink if you wish. We will meet at the gate at 1772 Millstream Road at 10:00 a.m. just past the Finlayson Arm Rd. turnoff. No pets please. Contact Agnes at thelynns at shaw.ca or 250-721-0634 for more information.

### Wednesday, January 26

BIRDERS' NIGHT

### Murrelets on Kodiak Island, Alaska

In 2010, Jenna Cragg spent two months studying Kittlitz's and Marbled Murrelets in a remote part of Kodiak Is., Alaska, as a pilot study for her M.Sc. project on the breeding ecology and coexistence of these two species. Kittlitz's Murrelet is a rare and poorly understood seabird found only in Alaska and Eastern Russia. Although its global population is less than 25.000 birds and rapidly declining, it has not yet been listed as Endangered under the U.S. Endangered Species Act. The goal of the project is to develop population monitoring protocols for both Kittlitz's and Marbled Murrelets in Alaska, by adapting population monitoring methods used to census Marbled Murrelets in B.C. Join Jenna as she describes the challenges and triumphs of working in a beautiful, remote, and (at times) inhospitable landscape. We meet at 7:30 p.m., Room 159 of the Fraser Building, UVic. Everyone welcome. Bring a friend and a coffee mug.

### Saturday, January 29

FIELD TRIP (LEVEL 4)

### Reifel Bird Sanctuary and Boundary Bay By BICYCLE

This a great time of year to see wintering raptors in the lower Fraser Delta area: 20 species are possible and 10 would make for a good day! Meet at the Swartz Bay Ferry terminal at 6:30 a.m. for the 7:00 a.m sailing. Cost is \$31.50 return. We will return on the 5:00 p.m. sailing. This trip is weatherdependent. Dress warmly and bring a lunch. Please call Rick at 250-885-2454 to register.

### Monday, January 31

MARINE NIGHT

Changing Community Composition and Seasonality: Zooplankton Responses to a Shifting Ocean Climate Dave Mackas, Research Scientist at the Institute of Ocean Sciences, will discuss the role of climate as a driver of the productivity and structure of regional marine ecosystems. He has a zooplankton time series of more than 30 years, providing evidence of large climate-linked changes, allowing predictions about survival and reproductive success of commercial fish, marine mammals, and sea birds. Meet at 7:30 p.m. in Room 159 of the Fraser Building, UVic. Everyone welcome. Bring a friend.

### **FEBRUARY**

Saturday, February 5

FIELD TRIP (LEVEL 4) Saturday Morning Birding Birding Elk Lake and Beaver Lake Join Rick Schortinghuis in this 10 km birding walk around Beaver and Elk Lake. Elk Lake is a great place to see

Canvasbacks, Redheads, and Ruddy Ducks in the winter. Meet at the main parking lot at Beaver Lake at 8:00 a.m. Call **Rick** at 250-885-2454 if you need more information.

### **Tuesday, February 8**

NATURAL HISTORY PRESENTATION

Wolves: Icons of the Wilderness

Rick Page became enthralled with wolves as a teenager when he came face to face with one in Ontario. He went on to do his doctoral research on the moose and wolves of Isle Royale, the longest predator-prey study on the planet. Rick will explore humanity's love-hate relationship with the wolf, their status as an endangered species, and their role in endangering other wildlife in BC. We meet at 7:30 p.m. in Room 159 of the Fraser Building, Vic. Everyone is welcome.

### Saturday, February 12

FIELD TRIP (LEVEL TBA)

Saturday Morning Birding

Call the Rare Bird Alert, 250-704-2555, or click 'Rare Bird Alert' on the VNHS website <www.vicnhs.bc.ca> on the Thursday or Friday before to find out this week's location. Usually start at 8:00 a.m., rain or shine. For more details, call **Rick** at 250-885-2454 or email **Agnes** at thelynns at shaw.ca. Everyone welcome.

### Sunday, February 13

### 2011 Valentine Couples' Birdathon

This is your opportunity to share a morning's birding with your valentine, enjoy a bit of friendly competition with other birder couples, and support VNHS conservation efforts while you are at it. The object of the exercise is to get out in the VNHS bird checklist area – whether by car, bicycle, or on foot – to find as many species as possible between the hours of 6:00 a.m. and noon, then meet afterwards at the Swan Lake Nature Centre library to share accounts of your adventures with other participating couples. Couples can look forward to a typically fabulous array of prizes, headlined by the chance to have their names inscribed on the Anderson Trophy. The \$10 entry fee goes to VNHS conservation efforts. For details contact Alan MacLeod, 250-382-3854 or bigadore@gmail.

### **Tuesday, February 15**

**BOTANY NIGHT** 

Species vs Superorganisms: The Two Century Quest for Ecosystem Concepts and Borders

**Kem Luther**, an environmental writer, takes us on a two hundred year slideshow jaunt through the rise, fall, and resurrection of the core ideas behind definable ecosystems. From Darwin's species to Clements's "organicism" to Whittaker's gradients to BC's homegrown biogeoclimatic mapping, he follows the struggle between two concepts, the species of the positivists and the ecosystems of the idealists, for the hearts and minds of environmental scientists. Swan Lake Nature House, 7:30 p.m. Admission is free and everyone is welcome. Bring a friend!

### Saturday, February 19

FIELD TRIP (LEVEL 1)

### Birding Viaduct Flats

Join Rick Schortinghuis at this great year-round birding spot. This time of year it is all about the waterfowl – Rick's record is 17 species of waterfowl in one visit. There are a lot of other birds to see as well. Meet at the VNHS viewing tower at the end of Viaduct Avenue at Interurban Road at 8:00 a.m. Call Rick at 250-885-2454 if you need more information.

### Sunday, February 20

FIELD TRIP (LEVEL 1)

### The Winter Hummers of Cadboro Bay

Join the Lynns in their garden from 8:00 to 10:00 a.m. to check out the Anna's Hummingbirds that stay all winter. We hope to have special guest **Cam Finlay** to tell you about banding hummingbirds. See what encourages them to stay over the winter. The males will be doing their aerial shows although the females should be on their nests by then. Address is 3913 Woodhaven Terrace, Ten Mile Point. No pets please. Dress warmly. Contact Agnes at thelynns at shaw.ca or 250-721-0634 if you need more information.

### Wednesday, February 23

**BIRDERS' NIGHT** 

### Ed and Ted's Texellent Adventure

Come and join **Ed Pellizzon** and **Ted Ardley** as they share their pictures, videos and stories of the birds of the Corpus Christie area of Texas, where Ed and Ted travelled to for spring migration in April 2010. We meet at 7:30 p.m. in Room 159 of the Fraser Building, UVic. Everyone is welcome. Bring a friend and a coffee mug.

### Saturday, February 26

FIELD TRIP (LEVEL TBA)

### Saturday Morning Birding

Call the Rare Bird Alert, 250-704-2555, or click 'Rare Bird Alert' on the VNHS website <www.vicnhs.bc.ca> on the Thursday or Friday before to find out this week's location. Usually start at 8:00 a.m., rain or shine. For more details, call **Rick** at 250-885-2454 or email **Agnes** at thelynns at shaw.ca. Everyone welcome.

### Monday, February 28

MARINE NIGHT

NEPTUNE Canada: Transforming Ocean Science Mairi Best, Associate Director of the NEPTUNE Canada Project, will describe this regional cabled ocean observatory across the northern Juan de Fuca Plate in the northeastern Pacific. With installation of the first suite of instruments and connectivity equipment in 2009 and 2010, this system collects integrated data on physical, chemical, geological, and biological features of the earth-ocean system. Meet at 7:30 p.m. in Room 159 of the Fraser Building, UVic. Everyone welcome. Bring a friend.



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