

# Oystercatcher

NEWSLETTER

Spring 2009

# PRESIDENT'S POINT OF VIEW by Zeke Blazecka

BIRDS IN MY BACKYARD by Nieke Visser

For those who were not able to attend the AGM in January here are a few activities from 2008 that I think you might ponder:

We donated \$1000 towards the purchase of the Creekside property, as well as \$50 to the Trans-Canada Trail in the name of each deceased Club member.

Our spring trip to Naramata was a great success due to Fred Powell, the Radfords and the Kings; for our 2008 fall trip we encouraged members to attend the FBCN AGM in Sorrento.

We partnered with Island Pathways to build the pathway along Lower Ganges Road from Blain to Wildwood. Judy Nurse did sterling work in managing the project money, and many Club members volunteered their time on site.

We partnered with others for two of our social evenings, learning about BC birds and about rafting on the Colorado River. This partnering looks like a winner for the future.

We experimented with Sunday walks and hikes. Sadly the experiment was not a great success and so we are back with Tuesday activities only.

Gil Schultz coordinated the annual bird count again this past December. George Wachmann spent some time coordinating a visit to a Cowichan Valley winery in June.

Nieke Visser encouraged us to produce 4 issues of the Oystercatcher this year. Well done to all who contributed.

Our website is now a Club fixture thanks to Gloria Murphy and the picture contributions from all Club members.

The executive committee saw some new faces and familiars faces that switched positions:

Teresa Hitch is now nature coordinator; Brian Radford takes care of the trails; John Heddle is our treasurer and Nieke Visser is the BC Nature director. All other positions stayed unchanged. For a complete list, please refer to page 3. We were able to fill all vacancies thanks to these volunteers.

I will start with a short update on the Anna's Hummingbird that featured in the winter issue. As Gil Schultz mentions in his report on the Christmas bird count (see page 3), the Anna's population on Salt Spring has significantly increased from 15 reported sightings at the last count to 38 at this year's count. Apparently, the protracted snow fall and the cold have not significantly affected them. Or would a mild winter have yielded an even greater increase in sightings? Who knows...

As mentioned before we have two female Anna's and one male visiting the feeders on a regular basis. The male now has changed his normally dark "head dress" to brilliant red, an indication that the breeding season is here. We are looking forward to seeing the little ones in a few weeks.

In March, the male Rufous Hummingbirds are due to return while the females usually arrive a couple of weeks later. Anna's are year-round residents, so they will still be around but likely more in the background. You may not see them at the feeders as frequently as before, if at all. They will feed on flowers and insects leaving the stage to

View from Mt Tuam Photo: Lynn Thompson



This newsletter is a published by the Salt Spring Trail and Nature Club, PO Box 203, Ganges PO, Salt Spring Island, BC, V8K 2V9. Website: www.saltspringtnc.ca

the more feisty Rufous.

Lately I had an accident in my backyard. Two Varied Thrushes were chasing each other and in a moment of inattention, one flew right into my not so clean window with a big bang. He fell to the deck and lay upside down seemingly for dead. I ran outside and picked him up. But apparently there was still some life in him: suddenly he wriggled his way out of my hands and quickly shuffled underneath the railing only to fall to the ground below. Carefully not to scare him any further, I walked around to find him sitting upright. That was a good thing; when a bird has an accident like this, they are likely to survive provided that they are in an upright position with their head at the highest point. Thus a brain aneurysm will be prevented that otherwise could kill the bird. Because he was already in that position, I let him be expecting a full recovery. Indeed, after sitting in this position for a bout 15 to 20 minutes, he flew away into the nearby cedar.

Photo Nieke Visser

It was not the first time this happened. Over the years we rescued numerous birds, from junco's to towhee's to finches to chickadees, and even one rufous hummingbird that I once found on its back on the drive way. He too was gone within 10 minutes after being put upright. But sometimes you run out of luck, as happened to a Brown Creeper that we found on the patio.

Accidents like this are very hard to avoid. And not cleaning your windows

does not really help. After an incident like this, the bird often lies on its side or on its back. It is thought that the impact causes a bruise and blood accumulates around the brain. When the bird's head is down, the pressure of the bruise will increase and may eventually kill the bird. However, if you are around when it happens, it is worthwhile to come to the rescue: pick-up the bird, position him upright and make sure its head is supported so that the pressure around the brain subsides. Chances are the bird is gone within 15 minutes, likely nursing a headache, but no bird has come back to tell me!

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# Islands Trust Fund by Zeke Blazecka

One of the advantages of belonging to the Trail and Nature Club is that sometimes you uncover little nuggets of useful information. Here is what the Islands Trust Fund told me in their letter to the Club last year.

The Island Trust Fund is a conservation land trust operating since 1990 to protect natural areas on the islands and waters between the mainland and southern Vancouver Island, including Howe Sound and as far north as Comox. The Fund offers tax incentive programs for conservation covenants and land donations. By donating your time, money, land and voice to conservation, you can help to protect the places that make the Gulf Islands so naturally wild, beautiful and loved. At least that is what the letter said.

So what does this information have to do with the

TNC? Well, the Fund annually monitors 70 properties in which it holds an interest. either in the form of a conservation covenant or simple ownership. On Salt Spring one of those areas is the lower north side of Mt Erskine and as it happens the TNC is the Manager for that area, and has been since 2001. What that means is that TNC is responsible to monitor trail conditions, identify encroachment from surrounding lands, and erect and maintain signage telling visitors to stay on trails and mind the



Varied Thrush recuperating from a collision accident

fire hazard. Who knew, except those who signed the management agreement in 2001? Now you know.

If you want to know more, you can contact the Fund in a number of ways. The toll free phone number is 1-800-663-7867. Their website is **www.islandtrustfund.bc.ca** Their email contact is **itfmail@islandstrust.bc.ca**. Their mailing address is:

Islands Trust Fund, 200-1627 Fort Street, Victoria, BC, V8R 1H8.

NEW MEMBERS	Janice Dickie Greg Taylor	Jehanne Kirwin Betty-Lou Lake
N A I	Hilde Dieterich	
Norma Andrew		Mary Patricia Morgan
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Owen Benwell	Susan Good	Sandra DeAthe
Sally Carr	Marilyn Harding	Kees Ruurs
Myra Bourne	Bill Harding	Margriet Ruurs
Phil Bysher	Bill Harrington	Sheila Sayer
Merridy Dennis	John Jefferson	Beverley Serfaty
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Nighean Anderson	Brian Kier	Keith Cloete

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# 2008 CHRISTMAS BIRD COUNT RESULTS by Gil Schultz

Knee-deep snow, frozen ponds, overcast skies and temperatures in the 0° to 4° C range were the order of the day for the annual Christmas Bird Count held on Salt Spring Island on December 27, 2008. Despite the conditions, 59 brave birders tramped along road sides and waded through 40 cm of snow in fields to collect data for this year's count, along with 53 feeder counters. Amazingly, these 112 volunteers managed to spot 11,688 birds spread across 92 species. How does that compare to other years? Well it doesn't match up to the 16,745 seen last

year, but is very similar to the count totals between 2005 through 2007.

Some of the highlights this year include the fact that the 16 red-breasted sap suckers seen is the highest number on Christmas Bird Count in the last 10 years. In addition, 38 Anna's Humming-birds were seen which smashes the record of 15 last year. In zone 2, the Fulford East/Ruckle Park area, four sooty shearwaters were spotted which again is a novel report.

Top number this year, with a total count of 2478, goes to the American robins which were seen feeding in large flocks in arbutus trees all over the island. Second place goes to dark-eyed juncos at 1347 followed by chestnut-backed chickadees (727), spotted towhees (499) and pine siskins (487). In terms of ducks, American widgeons took top spot at 498 followed closely by

Fox Sparrow at the feeder on Dec 22, 2008. being a regular visitor, this one was likely counted too! Photo Nieke Visser



mallards at 448 and buffleheads at 403. The ring-neck ducks that are usually very abundant on St. Mary Lake were down in the low 100 range this year but they are continuing to increase in numbers in January and may simply have been late in taking up their temporary residence there. Western grebe counts continued to be low (20) as in the past several years and continue to show a decline from the 600-700 seen during Christmas bird counts ten years ago.

Thanks go out to all the zone coordinators and counters who helped collect the information for another year. The numbers have been forwarded on to Bird Studies Canada where they become part of the national data set. The Christmas Bird Count is a terrific event and one in which birders all across the country can be proud.

# Stewart Island/Rakiura - Land of Glowing Skies

Pictures and text by Barbara Appleby

Stewart Island is New Zealand's third largest island and lies 20 miles across Fovaux Strait at

47 degrees South. The bush covered island is 45 miles long by 25 miles across. Here you will find New Zealand's longest trail: the North West Circuit which is 129 km. Supported by 10 Department of Conservation huts (DoC), spaced a days walk apart, these huts offer bunks with mattresses, tables, tank water, a wood burning stove for heating and toilets. You need to supply your own cooker, fuel, utensils, pots and food. The huts are \$5 each with the exception of Port William and North Arm huts which are part of the Rakiura Great Walk. These huts are \$15 each. You can buy a Backcountry Pass or Hut Tickets from DoC. I met a few trampers who were trying to do the track in 4 days, some in 8; I chose 10 days and would recommend at least 13 if you have the time. This leaves you extra



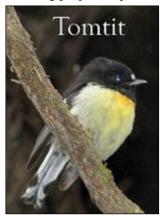
days to climb Mt Anglem (980m) and Rocky Mountain(549m) or relax at Mason's Bay. The latter being a good spot for 'kiwi sighting'. The hope of seeing a NZ Kiwi in the bush is probably the number one



reason why most people come to visit Rakiura.

There are plenty of other native birds here as well: Tui, Tomtits, Grey Warblers, Korimako (Bell Bird), Stewart Island Robin, Kakarikis (Red Crowned Parakeet), Kereru (New Zealand Pigeons), a variety of seagulls, Terns and in the village of Oban lots of KaKas. The latter bird is a very large parrot-like bird with beautiful tawny gold and red plumage.

The North West Circuit is a very, very rugged track. Suitable if you are fit, well equipped and well experienced and don't mind mud, bog, muddy bog and boggy mud, lots of water crossings, wind and thick bush. It is the most challenging tramp, bush walk, hike I have ever done - full stop. It was both physically challenging, as I was carrying a pack with at least 20 kg and mentally challenging as the track is well worn. The smooth contour lines on the map do not represent, in any way, the true amount of ascent and descent your joints endured each moment of each day. I've yet to work out this calculation but a profile of the track would be an interesting project to plot out. At some distant point in time.



The first two days involved walks of four hours each, the track was fairly level and relatively dry. (I was fortunate to enjoy two weeks of very little rain during this tramp; locals were crying about the drought). Then came four days of walking 6 hours. My body was feeling fitter each morning and the pack was feeling a little lighter. December 24 and 25 were the most rugged and

longest days were I walked 8 - 9 hrs, with breaks each day. Christmas Day finished with a very long 2.5 hour walk down Mason's Bay and then a 30 minute walk up Duck Creek. The kilometres for that day were supposed to have been 15, but I was in such a state of walking meditation that I continued down the beach once crossing Duck Creek! It was when I reached Martins Creek that I realized my error. I added 3 km to an already very, very long day. Thankfully I had my wee bottle of 'restorative' Oamaru single malt scotch; that along with my dehydrated lamb, veggies and mashed potatoes and Christmas pudding made everything alright again.

At Mason's Bay, I had organized the restock of food to carry me on to the end of the trail. The plane arrived a little late so Plan B came into play. After walking over to Fresh Water Hut I organized the Water Taxi to North Arm Hut as I needed to make up a day. I was glad for the extra day to relax at Mason's Bay. the restock of food and an easy 4.5 hour walk for the day. I'll have to come back another time to tramp the 7 hours from Fresh Water over to North Arm. The 10th day from North Arm to the village of Oban was a good 5 hr walk with lots of boardwalk to get you up out of the mud. The last 4km are on gravel and sealed roads which is tiring for your feet, but by now all I was thinking about was the miracle of hot running water I would soon be enjoying.

It was a great challenge to end 2008 with, a wonderful way to spend the Christmas Holidays; the best part being the absolute serenity of being the only one in the huts (except Mason's) and almost the only person on the track. I did meet 5 people traveling towards me. Other

than that I had the place to myself. The beaches are stunning with East Ruggedy being my favourite. It is in a perfect location to offer you a great swim in the ocean with a rinse of fresh water from Ruggedy Stream and then only a 30 minute tramp up the sand dunes to the hut.

was a sighting of a lifetime.



My one wish in coming to Stewart Island/Rakiura was to see a kiwi. Usually kiwi's are nocturnal however you have a good chance of spotting them here during the day. Santa brought me my Christmas wish on Dec 24 at 2:11pm when I slipped in the mud, falling back on my pack and startling a kiwi foraging under a Crown Fern. Had I not ended belly up I probably would have tramped right by the fellow. (Couldn't tell if it was boy or girl). Luckily I was able to watch it for a few minutes foraging among the ferns. It

#### Barbara



# BC Nature Conference and AGM April 30—May 2, 2009

As we have not been able to find organizers for a spring trip, attending the BC Nature Conference and AGM is once more suggested as an alternative. This year the event is organized by the Cowichan Valley Naturalists' Society and will be held in Duncan, so overnight accommodation is not an issue for SS Trail & Nature Club members. The program looks very interesting: one of the excursions includes the Mt Tzouhalem Nature Reserve for a splendor of wild flowers as witnessed by the the picture below. Among the speakers I noticed Bruce Whittington about birds and Augie Sylvester about medicinal plants. For the complete program and registration, pick-up a brochure from the Cobbler's box, visit their website or refer to the winter or spring issues of the BC Naturalist magazine. If you are planning to go, please contact me (537-5443) for carpooling.

In addition I like to draw your attention to several camps organized by BC Nature this year. Last fall I took part in one of them (Migratory winter birds at Boundary Bay), and although the weather did not cooperate, the camp itself was quite the experience and I learned a lot about migratory birds. This year there is a choice of camps: (1) Lillooet (Sept. 13-18), (2) Northern Wilderness camp (no date yet). (3) a birding blitz in Manning Park (June 12 to 14) and (4) an exploratory backpack trip with Bev and Bill Ramey in the South Chilcotins (tentatively July 5-11). For more information, visit their website: www.bcnature.ca.



Nieke Visser, BC Nature Director

# NATURE OUTING TO WHITE ROCK/BOUNDARY BAY -- JUNE 7, 2009

Join our first club exchange with the White Rock/Surrey Naturalists ("The Nats") to Boundary Bay, June 7.

**7:15 am--** Long Harbour ferry, walk-on (3 stops). Reservations to be made if needed. **10:20 am--**Our hosts Nats, will meet us at the ferry terminal. Stops at Elgin Heritage Park, and Fieldstone Bakery.

At Crescent Beach, bird watching (purple martins!) with expert ornithologist, and Nat member, Viveka Ohman, at one of Canada's most important birding places, and enjoy World Ocean's Day.

Lunchtime—Bagged or bought lunch.

**3:30 pm-**-Our hosts will drop us off at the White Rock Museum to see "Bounty of Boundary Bay," which is based on the Georgia Basin Habitat Atlas: Boundary Bay book (Nats involved).

**5:00 pm--**Walk along the White Rock waterfront to the Old Mill (historic building) for dinner with the Nats, at 'Washington Avenue Grill' (extraordinary ocean views/sunsets). (Bring your Entertainment coupons!)

8:00 pm--Leave for Tsawwassen ferry terminal. Thanks and adieu to our hosts.

9:35 pm--Ferry to Long Harbour (arrival 11:00 pm).

Space is limited (15), so please register with Teresa (250-538-0978) before May 1. For more information visit the website: <a href="www.saltspringtnc.ca">www.saltspringtnc.ca</a>.

A return visit for the White Rock/Surrey Naturalists is planned for October 4, 2009, and I will need support and hosts for this event.

Teresa Hitch, Nature Coordinator

#### **CALENDAR**

## February 26, 2009 Social Evening

Soaked and Sauntering in Scotland A slide show on hiking in the rain by Zeke Blazecka.

Harbour House Green Room 7:30 pm

# March 26, 2009 Social Evening

Wildflowers of Salt Špring A presentation by Paul Linton United Church 7:30 pm

## April 23, 2009 Social Evening

Hiking on Salt Spring Island A presentation by Lynn Thompson United Church 7:30 pm

> April 30 –May 2, 2009 BC Nature Conference and AGM See page 5.

> May 28, 2009 Social Evening Geology on Salt Spring by Jack Gunn United Church 7:30 pm

## Sunday May 31, 2009 Nature outing

Spring wildflowers of Harewood Plains (Nanaimo) with wildflower expert, Kent Anders. Meet at Portlock Park at 8:30 am for 9 am ferry.

## June 7, 2009 Nature Excursion

Birding trip to White Rock/Boundary Bay, an exchange with the White Rock/Surrey Naturalists:

Call Teresa Hitch for more information 250-538-0978

## June 16, 2009 Strawberry Festival

At Ruckle Park, starting at noon Organized by the walkers. Short pre-festival outings will be organized, watch the Driftwood or the website.

#### September 15-18, 2009 Fall trip to Cathedral Provincial Park.

At this time there are two rooms left . For more information call Nieke at 250-537-5443

October 4, 2009
Nature excursion
Return exchange with the White
Rock/Surrey Naturalists.
More details to follow. Want to help

out? Call Teresa at 250-538-0978

# ECONOMIC GEOLOGY (2): Oil and Gas on the West Coast, or why Oil or Gas Production on the West Coast is unlikely. by Kees Visser, P.Geol.

Although I did receive a few positive comments on Economic Geology (1), I hope it was not too dry, because this article will be, and has to be, a bit more technical. With the information in the previous issues on oil geology, rocks, tectonics and stratigraphy\* I provided, this article should not be difficult, but I will try to paint a simplified picture (although there is a danger in that too).

We know from part 1 that in order to have hydrocarbons you need

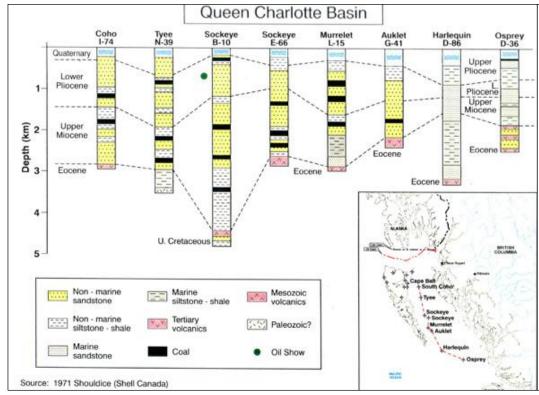
- (a) a mature source rock (where the oil/gas is generated),
- (b) a porous and permeable reservoir (where the oil/gas is preserved), and
- (c) a trap and seal (so that the oil/gas is pooled in the reservoir and cannot escape).

First we have to look at the stratigraphy in the offshore and onshore areas. Fortunately it is similar, in general, in all BC coastal areas, although the official names can be different, and some rocks formations will be absent. Since the oldest rocks are just too deeply buried offshore, they are only visible in outcrop on land. The oldest are Devonian igneous rocks (such as the Mt. Sicker Formation on southern Salt Spring Island) which are overlain by igneous, volcanic and metamorphic rocks of Triassic and Lower Jurassic age. These rocks were not deposited here but far away in the Pacific and were part of the Wrangellia terrain that rafted in and accreted to the Pacific North America plate in middle Jurassic times. I explained this in detail in the issue of Spring 2007.

The most interesting part of these rocks is a Jurassic Kunga shale which is the main potential source rock on the West Coast with 5 to 10 % total organic carbon content and capable of generating 4 gallons of oil from 1 ton of shale. The only stain of oil in well "Sockey B-10" (see Economic Geology 1, winter 2008 issue) was fingerprinted with this shale. The Kunga shale comes at the surface in some spots on Graham Island (northern Queen Charlotte Island).

These "Wrangellian" rocks are overlain by up to 2800m of volcanic rocks, sandstones and shales of Mid/Upper Jurassic and Cretaceous age. The Upper Cretaceous consists of sandstones, topped by conglomerates of the Queen Charlotte Group or the Nanaimo Group. The basal sands are potentially good reservoirs. The Cretaceous in turn is overlain by a thick (up to 6000m) Tertiary sequence of shales and sandstones with a volcanic rock at the base which could potentially form a seal above the Cretaceous sand. Most sands in the Tertiary are poor reservoirs. All wells drilled offshore only encountered Tertiary rocks.

For Vancouver Island and for the Georgia Strait, the Strait de Juan de Fuca, and the Gulf Islands area I can be short. The Kunga source rock is not present; hence there is no source rock and therefore no hydrocarbons; and that is the reason why no oil company ever had any interest in this area. The only exception is the Fraser delta. As any other delta in the world it is possible that there is oil and gas deep in the delta subsurface, but I am not familiar



A roughly north to south cross section through all the off shore wells in the Hecate Strait, which Shell drilled before 1974. Note that all wells penetrated only the Tertiary (Eocene, Miocene and Pliocene) and Quaternary. Only the deepest well, Sockeye B-10 just scratched the top of the Cretaceous at almost 5000m depth. The oil show is just a small oil stain in a non-reservoir quality sand.

Note: the different border interpretations by Canada (black) and USA (red) on the small map. Canada uses the original Russia/USA sales document map, whilst the USA looks at equidistance from shorelines.

with its geology and moreover its closeness to Vancouver and other environmental factors will probably preclude any further exploration

In the seventies Shell drilled six wells offshore West Vancouver Island (the Tofino Basin) and encountered a very thick Tertiary sequence of deepwater shales and sands with no hydrocarbons or potential source rocks. Some gas was found, but was is a so called gas hydrate, which is methane trapped in water molecules at a depth of over 1000m under sea level in sub zero temperatures. This gas reserve may be large, but the gas is not properly pooled, and of low density. It is similar to the permafrost gas in the Arctic. We are technically still far away (if ever) to capture such gas. To my knowledge no company is researching this at present.

The Winona Basin (between Vancouver Island and the Queen Charlotte Islands) has not yet been explored, but will likely be similar to the Tofino Basin. Water depths of 1000m plus are already prohibitive here.

This leaves the Queen Charlotte Basin and the Dixon Entrance, between the Queen Charlotte Islands and the Mainland and Alaska respectively. Here we have proven source rock in the Kunga shale as well as potential reservoirs in the Upper Cretaceous and possibly a few in the Tertiary. Shell drilled 8 wells (see Fig. 1) in the QC Basin which were all dry, except for a minor oil stain in the Upper Tertiary (Pliocene) in well "Sockey B-10" (see both figures). Core samples from these wells proved the same as the outcrop samples on Graham Island. These Tertiary sandstones are not suitable as reser-

voir because of poor porosity and permeability. The Cretaceous sands which lie at least 2000m deeper could prove better reservoirs (a conclusion drawn from studies of these sands where they come to the surface). However, this would be very deep for an offshore well in a hostile environment with very low chance of success.

But the most important factor for the low probability of oil/gas reserves is the young and still active tectonics in this area. There is a high probability that any trapped oil/gas in the past has leaked through openings in existing faults or through newly formed faults. In case something remains trapped, the size of the pool would become smaller and smaller.

The same story is valid for the Dixon Entrance. In addition, there is also the problem of a border dispute with the USA, making it even more unlikely for any exploration work.

In summary, we can say that in the event of a lifting of the moratorium, any exploration work undertaken by oil companies will be extremely unlikely because of the lack of source rock in many areas, young and active tectonics, deep reservoirs, no hydrocarbons ever found, border dispute, federal/provincial dispute over offshore resources, UN protected areas (such as unique sponge reefs), native claims, hostile environment (deep water and large waves) and strong local environmental concerns.

\*The way in which rock strata are arranged, and the chronology of their formation.

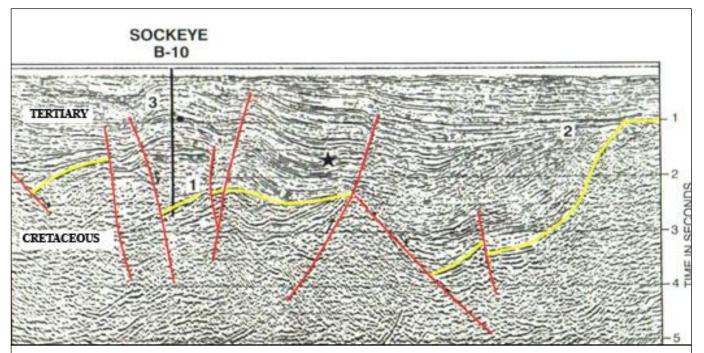


Fig. 2 A seismic line, West to East across the Hecate Strait and over well "Sockeye B-10" Seismic nicely shows the geological structures; faults (red) and Cretaceous/Tertiary contact (yellow) are geological interpretations. The dot shows where the oil stain was found in the well. Note that seismic does not show gas or oil but only geological structures. The depth is indicated by time in seconds. One second roughly corresponds with 1000m. Horizontal scale is about 100km.

#### GENERAL INFORMATION

The Salt Spring Trail & Nature Club features Tuesday outings September through June at three levels of ability. The monthly schedule of outings and events is published in the Driftwood on the last Wednesday of the month and on our website at

www.saltspringtnc.ca. On the fourth Thursday in October, November and February through May, the Club meets at 7:30 pm at the lower hall of the United Church. The Club is affiliated with BC Nature and Nature Canada.



Ramblers enjoy walking without pressure with frequent time-outs" to take pictures, to examine plants, flowers, rocks, fossils, and from time to time sample local restaurants. Members of any level of fitness are welcome. Ramblers start at

Walkers move at a more relaxed pace. They usually try to avoid long steep climbs and will stop to catch their breath along the way. Outings generally cover 8 km or less and end by 2:00pm.

10:00 am and usually end by 1:30 pm.



Hikers like long, adventurous and occasionally quite strenuous hikes, and like to gain a bit of altitude. They need strong boots and a good but not excessive level of fitness. Hikes usually start at about 10:00 am and end between 2:30 to 3:30 pm.

Nature excursions are normally organized every month except December led by an expert naturalist and are open all levels.



Membership: Annual dues are \$20 per person. All members must sign a waiver annually. Send completed membership and waiver forms with your cheque to the Membership Secretary, PO Box 203, Salt Spring Island, BC, V8K 2V9, or drop them off at the Cobbler's box, attention Barry Spence.

Taxi fare: Members are encouraged to carpool during outings and reimburse the driver as follows:

On-island trips: North of Duke Road: \$2 per passenger; South of Duke Road: \$3 per passenger; Ruckle Park and non-paved roads: \$4 per passenger.

Off Island trips: \$0.30 per km per vehicle plus ferry

Spring/Fall trips: No club policy.

Moving? Change of email address? Please let your Membership Director know a.s.a.p. Email: sspence@telus.net; telephone: 537-2332.

Your comments or contributions are welcome. Please email them to Nieke Visser: niekevisser@shaw.ca or leave them in the Cobbler's box.



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