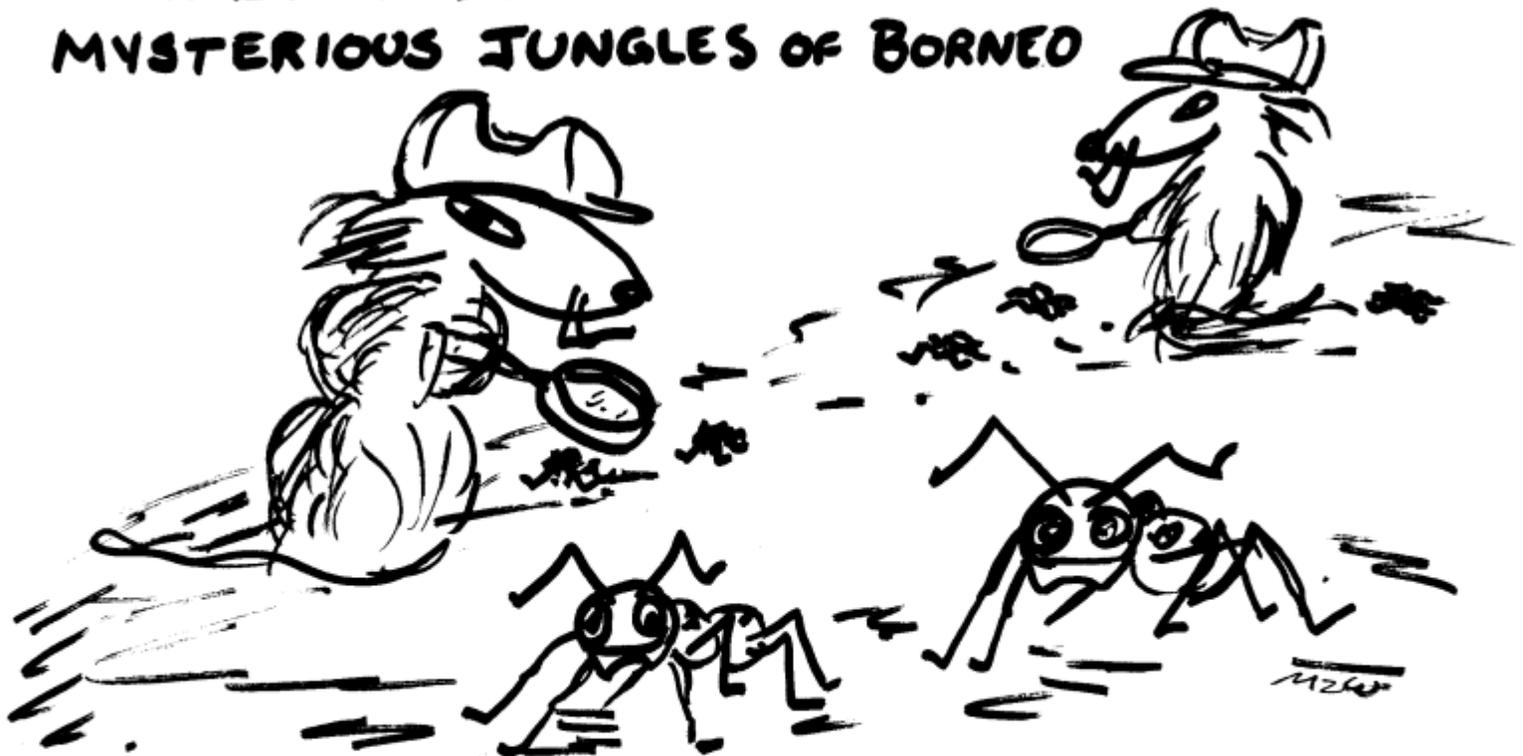


MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS
JANUARY + FEBRUARY 2011 NEWSLETTER

TUES FEB 22
S.I. NATURE HSE 7:30

—COME AND SEE—
ROB HIGGINS + OTHERS ARE
CHASING INSECTS IN
MYSTERIOUS JUNGLES OF BORNEO



COMING
SOON

• THE ANTS AND.....

• SING AGM FRI MAR 25 POTLUCK + MORE

• BANQUET FRIDAY APRIL 8TH



The newsletter for the:
Williams Lake Field Naturalists
1305A Borland Road, Williams Lake BC, V2G 5K5

Membership fees: Family (\$30), single (\$25) or student (\$10) memberships can be mailed to the above address. Please complete the membership and waiver forms available at the Nature Centre (250) 398-8532, musktrat@midbc.com or the web site below. For more information about the club please contact Fred McMechan at 392-7680 or e-mail Fred_McMechan@telus.net

Williams Lake Field Naturalists Web Site <http://www.williamslakefieldnaturalists.ca>

Executive of The Williams Lake Field Naturalists: president Fred McMechan, vice-president Jim Sims, secretary Bev Frittenburg, treasurer Katharine VanSpall and directors Nola Daintith, Ordell Steen, Rob Higgins, Rick Dawson and Cathy Koot

Editors: If you have comments, suggestions or articles for the Muskrat please contact Margaret Waring (398-7724), Jim Sims (296-3638) or e-mail us at musktratexpress@midbc.com **Please note the newsletter email address has been changed due to excessive spam.**

Membership Reminder

Thanks too many of you who have renewed your membership for 2011. For the rest, you should be able to find the required forms with the mailing of the last newsletter or the forms can be downloaded from the above web site. Keep your membership current please renew now.

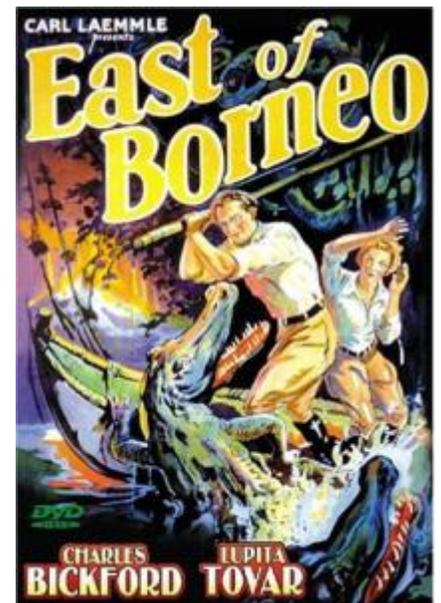
Borneo: Chasing Insects in the most Mysterious Jungles on Earth

Tuesday February 22nd at 7:30pm
Scout Island Nature Centre
Presented by Rob Higgins

August, 2010, Rob travelled to Malaysian Borneo to work with almost 50 other insect specialists from over 20 different countries. For two weeks the scientists spread out through the jungle near the Danum Conservation Area, the largest intact region of lowland rainforest remaining in Southeast Asia. In this presentation, witness Rob's adventures as he travelled through Southeast Asia, brushing back scorpions and hiking through jungle to collect some of the most bizarre and fascinating ants in the world.

Annual General Meeting - Williams Lake Field Naturalists

The AGM for our club will be held on Friday, March 25, at the Scout Island Nature House. The following events will take place:



- 1) a potluck supper will be the first event, starting at 6 pm
 - 2) after the supper the Annual General Meeting will be held
 - 3) an entertaining program will follow the AGM
- More details in the February/March newsletter

Annual Fund Raising Banquet

Friday April 8th

The guest speaker will be Dr. Rob Butler and his talk will be titled “**In Optimism for the Future**” Make sure to set this date aside now so you don’t miss this great Scout Island Nature Centre event. Look for more details in the next newsletter.

Update – BC Nature Spring Conference and AGM

Registrations are starting to come in for the conference. Most of them will come over the next two months. Teresa Myers, Nola Daintith and Kath VanSpall will be busy processing the registrations and preparing the registration packages. Fred has put together a brilliant line-up of field trips, speakers and get-togethers, which you can view at http://bcnature.ca/pages/conferences/AGM_2011/AGM_2011.pdf You’ll see there that the fee is extremely reasonable: \$90 (\$105 after April 8).

Fred McMechan will be looking after the organization of the Silent Auction. If you wish to help with this fund raiser please contact him. Volunteers to help with tasks such as setting up the tables of items and preparing the “bid” forms would be appreciated. Also we would appreciate donations of artwork

We wish to billet people attending the conference. These are lively and often very knowledgeable naturalists from all over BC, so we can expect some delightful company. Jenny Noble has agreed to be the coordinator for this service. If you are willing to billet please communicate with Jenny for details as soon as possible at neptune.noble@gmail.com or 250 747 8535. Most of the registrants will be staying at motels/hotels or campgrounds. The accommodation information has been placed on the BC Nature website, www.bcnature.ca or our club website, www.williamslakefieldnaturalists.ca

During the conference another service will be the offering of nature programs for children at the Scout Island Nature Centre. Attendees who bring children will be able to leave them with the Nature Centre staff while they participate in conference events. Information about this program is available on the two websites shown above.

Memorial Bench for Fred and Winnie Bennie

We have decided to place a memorial bench in memory of Fred and Winnie Bennie at the Scout Island Nature Centre. The location of the bench will be along the Bulrush Trail overlooking Otter Point and the marsh. An appropriate inscription approved by the family will be inscribed on the plaque. The bench will be installed in the spring after the frost has left the ground. The cost of the installation is \$784. The family has donated a total of \$300. We wish to give our members an opportunity to contribute some of the remaining balance in memory of Fred and Winnie. If you

wish to contribute any amount please write a cheque payable to “Williams Lake Field Naturalists” and leave it either at the Nature House or mail it to 1305A Borland Road, Williams Lake BC V2G 5K5

Scout Island Nature Centre Report

January 2011

The snow certainly changes the landscape at the Nature Centre. Everything is white and rounded—no sharp corners. It is quieter too. The noise from town is dampened down. What I enjoy the most though is the ability to know what has been out and about. Tracks left by animals and birds are fun to follow and try and figure out the story from the night before. The snow also provides endless entertainment for the preschoolers and the classes that visit. The biggest thrill for them is walking on the lake and marsh. This provides a very different view of the Nature Centre. Anyone know why the lake is not frozen under the snow at the very eastern tip of the island?



Who made this track?

I am already receiving resumes from university students interested in working as summer staff. If you know any young people that might be good candidates for summer staff (full time work May-August), please have them send me a resume. shemphill@wlake.com

I have mentioned in the past that grants from BC Gaming are at an end for Scout Island Nature Centre as well as all environmental groups. It will be very difficult for the Nature Centre to maintain staff and programs through 2011 because of these cuts. I have written letters about this and met with both MLA's asking that funding for environmental groups through Gaming be reinstated. They explain that we can apply under the education category, but there has been no extra money put in this category from previous years. That means others will receive less if we are accepted in this category (a very big if). **You can help.** First, please consider a charitable donation to the Nature Centre for 2011. This will help to ensure that we can again employ 3 university students for the summer. Second, please contact your MLA (Donna Barnett or Bob Simpson) and ask that the funding and the eligibility criteria be reinstated that were in place in 2008. This means reinstating arts and culture, adult sports, and environment groups, and all festivals, at 100% levels and consider reinstating grants for three years to provide stability, predictability and consistency. You can call them, write a letter or email them (bob.simpson.mla@leg.bc.ca donna.barnett.mla@leg.bc.ca).

**Scout Island Nature Centre
2011 Winter Programs
Get Outside and enjoy winter with your group!**

Programs are designed for ages 8-adult. Each program is from 2-4 hours long depending on your request (cost \$3 per person -free for SD 27 school classes)

January-March

- Birds in Winter
- Snow Fun (just what is snow and ice)
- Winter Survival (adaptations that plants and animals have to survive the cold)

April

- Who are the new Birds at the Feeder?
- Plants and Bugs Wake Up

Are you thinking of coming to the BC Nature AGM in May, but you don't have the time because of children (or grandchildren) to take care of? **We can help!**

Children Can Explore the Cariboo Chilcotin Too

Register your children ages 5 - 12 for indoor and outdoor nature exploring at Scout Island Nature Centre during the BC Nature AGM. Children will be divided into two age groups to participate in a variety of active hands-on learning, exploring, and games.

Programs for children will be offered at the following times during the AGM

Thursday May 12, 8:30-5pm

Friday May 13, 8:30-5pm

Saturday 8:30-12 noon and 6-9:30 pm

Sunday 8:30-12 noon

The programs will be run by our teacher naturalists (university students). The cost will be \$15 for $\frac{1}{2}$ day and \$25 for whole day. You need to pre register by calling Sue or Jenny at 250 398 8532 or emailing shemphill@wlake.com

Bird Sightings from the Williams Lake Area

By: Phil Ranson

Three other Christmas Bird counts were conducted over the holidays with the Soda Creek count on Dec 14, Narcosli on Dec 27 and Quesnel on Jan 2. Undoubtedly the highlight of the Soda Creek count was a Sandhill Crane at the Dunlevey Ranch which provided the first local winter record for this species. It was still present up to Jan 3rd. Other highlights from a generally lack lustre count of 33 species was a Ring-necked Pheasant, Goshawk, White-crowned Sparrow and a Boreal Chickadee. The count was completely devoid of forest finches – Redpolls, Crossbills,

Siskins, Pine and Evening Grosbeaks.

The Narcosli Count, centred between Quesnel and McLeese Lake had 35 species and the regions first wintering Eurasian Collared Dove as well as 6 Mourning Doves and a couple of Golden Eagles. Quesnel, with 42 species, had a Harris's Sparrow, 2 Rusty Blackbirds, 3 Wilson's Snipe and 250 Brewer's Blackbirds, which for some reason have deserted the Williams Lake Bird Count.

Other birds of interest reported over the period include a Great Gray Owl seen by Jim at the junction of the Horsefly and Likely Roads on Christmas Eve; a Hawk Owl and a couple of Pygmy Owls on the Sheep Creek Hill on December 22 seen by both Sandy and Kris; a Barred Owl was reported by Sharon in Riske Creek on Jan 9. On Jan 8, Kris watched a Short-eared Owl being chased by a crow over South Lakeside for one of very few reports this winter.



Trumpeter Swans in Horsefly Bay on Quesnel Lake

Boots, Saddles, and Birds: Holiday Atlassing in the Itcha Mountains

by John G. Woods, Region 25 (Chilcotin) Coordinator for the BC Breeding Bird Atlas

The BC Breeding Bird Atlas provides a great motivation to visit new country—to explore those blank places on the map where little is known about birds. In July, 2010 as part of an Atlas-inspired holiday expedition by packhorse, I fulfilled a dream to visit one of these voids in my experience: the Itchas Ranges north-east of Anahim Lake in the Chilcotin.



Climbing towards a pass that we hoped would be snow-free

Part plateau and part mountains, the Chilcotin Atlas Region sprawls across 4,830 km² of much-loved country. Here dry grasslands and dense forests of pine and spruce reach westward from the Fraser River to wind-swept alpine tundra along the eastern margin of the Coastal Range. This also is volcano country. Evidence of past lava-flows can be seen in the dissected cliffs along the Fraser and Chilcotin rivers. Hole-riddled lava rock is everywhere. Part of a volcanic belt stretching eastward from the coast, the Itcha Range is an isolated shield volcano rising above the surrounding plateau-lands. Roadless and high elevation, the Itchas offered both an adventure by horseback and chance to learn about birds in an area rarely visited by bird-watchers.

Our party of seven arranged this bird-atlassing trip to start literally at the end of the road at the Six Mile Ranch, home base for the Itcha-Ilgatchuz Mountain Outfitting. For hosts Wanda Dorsey and Roger Williams, the atlassing team was a bit of a novelty combining cowboy boots with binoculars and volunteering an endless stream of bird-names.

The trip started with introductions (to our horses) and adjustments to our gear (do I keep my binoculars around my neck or in my horn-bag?). Full of anticipation, we set off for the high country on the morning of July 2nd complete with three guides, and twenty horses! While Roger & Wanda kept us en route through a maze of forest and wet meadows to our first campsite, our GPS units provided us with the essential information for bird-atlasing: the coordinates of the atlas squares we were passing through.

After a long first day in the saddle, we stopped at “Lester’s Camp” (named after Wanda’s father) and were treated to the sight of a single caribou making inquisitive forays into the meadow below us. At Wanda’s camp kitchen the coffee pot was always on and no-one has ever gone hungry. Later that evening, two grey-cheeked Thrushes began singing from the edge of camp. This was my first experience with this northern species and I have a vivid memory of a unique combination of grey-cheeked and hermit thrush songs drifting through the tent as I slipped in and out of sleep that first night.

In a pattern that repeated itself for the next six days we eased into a routine of early-morning point counts around camp followed by riding through the spectacular volcanic alpine of the Itchas each day. After two nights at a campsite, we travelled through mountain passes to a new location that combined forage and water for the horses within easy reach of the alpine.

While the birding-watching and bird-listening could sometimes be challenging—think wind, snow, rain, flies, and restless horses, we were treated to many moments of discovery. Singing savannah sparrows and horned larks frequented the open tundra (I had no idea that savannahs could be so common in the alpine). On several occasions we spotted or heard ptarmigan—both white-tailed and willow. Although rumored also to live in these mountains, rock ptarmigan eluded us and we are still searching for our first rock ptarmigan Atlas breeding-record in the Chilcotin.

Of course our horse-birding was interrupted each day by a healthy lunch break—typically in a sheltered copse of evergreens with wind-swept krumholtz margins. As we sipped coffee and munched lunch-goodies, pure-toned golden-crowned sparrows provided the entertainment in an abundance that I’d never before experienced.



John and Phil Enjoy a cup of Wanda's Coffee

While our goal was simply to learn about birds in a road-less area while contributing to the Atlas and enjoying a packhorse holiday, surprises are always fun and probably the highlight “find” of the trip was a small colony of American golden-plovers with flightless young in a high-elevation basin—a first record for the Atlas and an example of the value of exploring “blank places” on the map.

Another bird highlight taught me a lesson in keeping an open mind. Late one afternoon soon

after we returned from a long day-ride in the alpine, Wanda reported that she had been hearing a “dove or owl” hooting or cooing around camp throughout the day. I assured her that we were too high for pigeons and doves (a mistake) so we concentrated on trying to figure out what type of owl it might be. That is, until the next morning when Wanda excitedly pointed to the bird above our heads—a Eurasian collared-dove. While I’ve had widespread reports from across the Chilcotin of this species, finding one in a completely wilderness setting was a major surprise.

One of the challenges of alpine bird-atlasing across the province is timing. To gather data on breeding birds we need to be afield early enough to overlap the breeding season (June through early July), but late enough for winter snows to have melted from the passes (late June). Our trip (July 2-8) may have missed peak singing activity as many species appeared to be well-advanced in their breeding cycle with just-fledged young. But luckily for us, alpine bird song continued throughout the mornings with the precipitous fall-off in activity happening in the early afternoon.



We rode by a female white-tailed ptarmigan with chicks as we arrived at this little lake

Like the majority of British Columbia, easy access in the Chilcotin is mostly limited to major highways and logging roads at mid to low elevations. You can clearly see this when you look at the bird maps on the Atlas website. Bird records are concentrated along Hwy 20 and major logging roads. This leaves many areas, especially alpine areas, in need of attention over the last two years of the Atlas survey period (2008-12).

Opportunities to combine adventure holidays with much-needed atlasing abound in the Chilcotin. Backpacking is possible in a number of areas and several backcountry lodges offer cabins—a warm fire is very welcome after a chilly morning of point counts. Several packhorse outfitters organize trips to remote places and may be willing to arrange a special bird-watching trip for you and your Atlas-minded friends. There also are great opportunities for floatplane access into lakeside cabins located in or near the alpine.

We are already organizing another Atlas-holiday by packhorse in 2011. This time we’ll explore the Ilgatchuz Range—another isolated shield volcano to the west of the Itchas...

(Ed. Note: For suggestions on remote areas suitable for atlasing holidays and other areas in the Chilcotin needing Atlas input contact John through the Atlas website: www.birdatlas.bc.ca. Here you also will be able to view the latest versions of the maps for each nesting species in the province.)

Galls

From “A Guide to Nature in Winter” by Donald W. Stokes

Research by Sue

Galls are deformations of plants caused by insects and used by them for food and protection while developing. There are over 1,500 insects in North America that cause gall formations. Most likely everyone has seen galls, but few may have recognized them as such. Many are

evident in summer as swellings, growths, or discolorations on the leaves of trees and plants; still others are more clearly seen in winter as deformations of twigs.

Galls have received scientific attention for three main reasons: they often interfere with agricultural productivity, particularly that of wheat; believe to be examples of tumorous growth, they are studied from the viewpoint of cancer research; and the life histories of the gall-makers are often unusual and intriguingly complex.

But even with this interest and study, the process of gall formation is still unclear and the life histories of the majority of gall-makers remain a mystery. The closest we can come to explaining gall formation is to say that the insect disrupts the normal growth of a plant either through physical irritations or chemical secretion. Around the insect, the plant grows a deformity, which the insect then uses for food and protection while developing.

Some galls have just one maker, others harbor many individuals. A number of insects use galls made by others. Those that do not hurt the gall-maker are called inquilines; those that kill the gall-makers are parasites. Even after a gall is left by its maker it is used as a shelter by many other insects, especially in winter. These galls are in turn opened by birds and mammals seeking the insects inside. As you look for the galls included here you will certainly find many others, and will begin to realize what a common phenomenon gall formation is.

Blueberry Stem Gall

In many books this gall is called Huckleberry Stem Gall, but it is most common on Blueberry bushes. A gall wasp, or Cynipid (*Hemadas nubilipennis*), causes it to grow. The gall starts forming in early summer and is initiated in the cambium, the active growing layer, of young twigs. Its growth deforms the twig by making it bend downward. By fall, the gall is red-brown and kidney shaped. In spring it will become riddled with holes bored by emerging adult wasps, showing that the gall is polythalamous – containing more than one chamber. Some flies are also known to habit this gall as inquilines. In winter you may find both this year's and last year's galls, the former brown and smooth, the latter gray, riddled with holes, and farther back on the twig.



Old gall showing wasp emergence holes.

Goldenrod Ball Gall

The Goldenrod Ball Gall is an abrupt round swelling on the plant stem. It is common; sometimes it will be present on most of the Golden rod of a given field, occasionally with more than one on a single stem. The gall is caused by the larva of a small spotted-winged fly (*Eurosta solidaginis*.) After mating, the female fly lays its eggs on the new stems in late May and June. The egg hatches, and the larva burrows into the stem. Here it continues to hollow out a chamber slightly larger than its body size, while the plant forms the gall around it. It is mature by the onset of winter and over winters in the larval form. In spring the larva resumes activity by eating a tunnel just as far as the outside layer of the gall. It then reenters its chamber, where it pupates. The adult fly crawls out the hole and bursts through the outer skin of the gall. Thus, normally the Goldenrod Ball Gall contains its maker in winter. But there are many other insects that regularly take advantage of the helpless larvae. In this case small beetles often enter that galls and eat the larvae before hibernating in the galls themselves.



Spruce Pineapple Gall

Spruce Pineapple Galls form at the tips of Spruce branches where new growth is occurring and remain on the tree until the branch is shed. They look like miniature pineapples, between ½ and 1 inch long; often spines of old needles protrude from them. The gall insect (*Chermes abietis*) belongs to the aphid family, a group which tends to have extremely complex life cycles involving what is called “alternation of generations” Parents A lays eggs, which develop into parent B. Parent B lays eggs, which in turn develop into a new parent A. The two generations may resemble each other or may be totally different in appearance. Therefore, it is often difficult to trace the life histories of aphids. Some other aphids are even more difficult to follow since they may have as many as five distinct generations before a return to parent A.



Spruce Pineapple Gall

The Spruce Gall maker has only two generations, which complete their cycles in a single year. But, as if to offset this simplicity, *Chermes abietis* has no males in its species; all reproduction is parthenogenetic (partheno=virgin, genetic=birth). The cycle starts in fall with a winged female, parent A, which flies to a spruce and lays eggs at the base of the needle buds. These eggs hatch into wingless female nymphs, parent B, which eat the spruce needles in fall and over winter at the base of the spring needle buds. In spring they resume feeding, and the needles swell and grow together, forming the gall. Soon the nymphs lay eggs, which hatch, feed on the needles, enter the gall, and emerge as winged females. These are parents A, which fly to new spruces and start the cycle over. Thus the galls are not occupied in winter, but are used in spring by generation A.

Willow Petaled Gall.

One of the most beautiful winter galls, the Willow Petaled Gall, looks like a gray flower at the tip of a Willow shrub. These galls are often numerous, frequently seen on the same plant as the lovely Willow Pine Cone Gall. The Willow Petaled Gall is believed to be caused by the gall midge *Rhabdophaga rhodoides*; it starts forming in late spring and early summer when the plant is actively growing. Little is known of the gall's life history, except that the loose petals undoubtedly harbor many hibernating insects during winter. This gall is believed by some to be composed of modified leaves bunched together with no stem elongation in between.

Video Camera Needed

Some of our summer staff last year participated in a video training course and produced an excellent video to publicize Scout Island Nature Centre. Through this program we have acquired a couple of video tapes full of wonderful footage taken around the centre. In order to access this video we need a video camera that uses mini DV cassettes for a couple of days in order to convert the video to DVD format. If you can provide a camera please contact Jim at 296-3638 or muskratexpress@midbc.com

The editors thank all of you who have contributed to another edition of the Muskrat Express.