

Jane Hoek, Tyeer Photo

## Newsletter #7

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### NEW SUPPORT STAFF



#### **Erica Close**

is our new soil and vegetation scientist. Erica recently returned to Smithers having completed a masters degree in land reclamation from the University of Alberta. She has a strong

interest in soil-plant interactions and native plant restoration; her other research interests include non-timber forest product development and management, invasive species management, forest understory plant ecology, mycorrhizal ecology, and forest biogeochemistry.

Erica is an outdoor and nature enthusiast who enjoys exploring the Bulkley Valley and living in the midst of a full food chain.



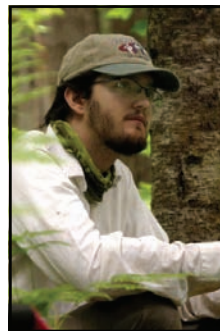
#### **Beth Henderson**

has been working at the BV Research Centre since May as a research assistant. She is a recent graduate of Sir Sandford Fleming College in Ontario

where she completed the Fish and Wildlife Technology program. During the summer and fall she helped out with the field work associated with Rasmus Astrup's projects and now is helping process the collected samples.

Last winter Beth enjoyed snowshoeing in the Babines. One aspect of her work that she has most appreciated has been the opportunity to explore more of the forested areas around Smithers - more great areas for snowshoeing and hiking.

The BV Research Centre is having an extremely busy and productive year, with twenty-six confirmed projects for the 2007-2008 fiscal year. The total dollar amount awarded to the Centre for these projects is close to \$1.5 million, which made it possible to hire extra staff on a seasonal or longer basis. In all, the Centre has employed ten scientists and assistants this year, including two summer co-op students. They are: Megan Adams, Rasmus Astrup, Matthew Bryan, Denise Bustard, Erica Close, Al Gamble, Tlell Glover, Beth Henderson, Marie-Lou Lefrançois and Aaron Trowbridge. One of the goals of the BV Research Centre is to provide local opportunities for young and new scientists, both to maintain our exceptional community of researchers and specialists in natural resources and to encourage others to move to the area. We are pleased to be achieving that goal. We encourage you to visit our web site at [www.bvcentre.ca](http://www.bvcentre.ca) for further information, as it is updated regularly.



CO-OP STUDENTS, MATTHEW BRYAN AND MEGAN ADAMS  
PHOTOS: AMANDA FOLLETT

Three of the Centre's projects are highlighted in this newsletter, selected both for their broad interest value to Bulkley Valley residents as well as to illustrate the expanding diversity of Centre projects relating to ecosystem and community sustainability. **Steve Osborn** has developed [Valleyvision.ca](http://Valleyvision.ca) and **Deborah Cichowski**, with two projects, is investigating the impacts of the mountain pine beetle epidemic on caribou.

**NEW SUPPORT STAFF**  
(cont'd)



**Mary-Lou Lefrançois** began working as a researcher at the BV Research Centre this fall. She comes to us from the University of Quebec at Montreal where she graduated with a masters in forest ecology. Her

thesis study examined light interception and crown architecture of temperate forest trees using the model SORTIE.

At the Centre, Marie-Lou is involved with a project looking at the effect of the spatial distribution of trees in the initial conditions of the SORTIE model. As well, she is working with Phil Burton as a research associate at UNBC on a project studying the selectivity of the mountain pine beetle at different stages of outbreak.

Marie-Lou first visited the Bulkley Valley in 2002 while planting trees, and happily settled in Smithers in June of 2007 with her husband Nick and daughter Vivian.

For more about our Staff go to the [Our People/Staff](#) section of the Centre's web site [www.bvcentre.ca](http://www.bvcentre.ca)

You can also meet them at:

**HAPPY HOLIDAYS  
SOCIAL**

**BV Research Centre Office,  
1188 Main Street**

**Friday, December 14th**

**4.00 to 6.00 p.m.**

**Snacks and refreshments will be served.**



The Valley Vision web site is an innovative project that will develop linkages between all levels of planning within the Bulkley Valley region, and facilitate a coordinated approach. This project has been initiated with private local funding. Ongoing maintenance for the project will be sought from planning bodies and other sources.



WALCOTT AREA OF BULKLEY VALLEY FROM BARRETT HAT  
PHOTO: STEVE OSBORN

Residents of the Bulkley Valley are regularly offered opportunities to participate in planning processes hosted by municipal, regional and provincial agencies. Development proposals and "bottom-up" planning initiatives also arise from time to time. Valley Vision offers help in navigating existing plans and promotes communication among residents, planners and developers toward a comprehensive vision for the valley's future.

The primary focus for this project is the web site. The site is a user-friendly portal to existing planning information and a repository for the information and views needed for building a long-term, valley-wide vision. Brochures, a printed guidebook and conferences will also be used to enhance communication about planning and among the planning community.

Check out the web site at [www.valleyvision.ca](http://www.valleyvision.ca). You will find a primer on planning processes, a brief history of events that shaped the present Bulkley Valley communities and a number of planning resources. Each page has a place to leave comments or add information. The web site is and will always be a work in progress. It relies on your input to fill in gaps and articulate a future that is as good as or better than the one we are currently enjoying.

Valleyvision.ca is administered by the BV Research Centre and is consistent with its role in supporting sustainability in the region.

## SEMINAR SERIES

Dec. 12th, 2007

**Erica Close**

*Understanding Boreal Forest Productivity in Saline Soils: One of Many Challenges Facing Oilsand Mining Reclamation*

Jan. 9th, 2008

**Jim Pojar**

*Conservation planning in a changing world: New national park in northern British Columbia - southern Yukon?*

Jan. 23rd, 2008

**Sybille Haeussler**

*Not quite chaos in Beijing: An introduction to complex systems science*

Feb. 6th, 2008

**Brian Fuhr & Gordon McGee**

*Northcoast LRMP - from where, to where: theory and reality*

Feb. 20th, 2008

**Frank Doyle**

*Herschel Island*

Mar. 5th, 2008

**Rasmus Astrup, Aaron Trowbridge, Erica Close**

*The effects of site type and light availability on height increment of individual juvenile trees*

Mar. 19th, 2008

**Don Morgan**

*Ecosystem Services in an Uncertain World*

Apr. 2nd, 2008

**Ian Sharpe**

*Bioassessment of Forest Harvesting Effects in the Babine Watershed*

Apr. 16th, 2008

**Rick Budhwa**

*First Nations and Consulting Archaeology in BC: Emerging Trends and the Evolution of Practice*

Apr. 30th, 2008

**Deborah Cichowski**

*Effects of mountain pine beetles on terrestrial lichens*

May 14th, 2008

**Deborah Cichowski**

*Effects of mountain pine beetles on caribou winter habitat use and foraging strategies*

For more information, go to the [Seminar Series](#) section of the Centre's web site [www.bvcentre.ca](http://www.bvcentre.ca)

## RESPONSE OF CARIBOU TO THE MOUNTAIN PINE BEETLE EPIDEMIC

The Committee on the Status of Endangered Wildlife in Canada has recently listed as *threatened* all caribou in the Southern Mountains National Ecological Area, which includes the Tweedsmuir-Entiako population. One of the greatest threats currently facing this and most other northern caribou populations in BC and Alberta is the impact of the extensive mountain pine beetle (MPB) epidemic. Two critical questions that need to be answered regarding the effects of MPB on caribou are:

- How will caribou winter habitat be affected by MPB attack?
- How will caribou habitat use and migration be impacted by the MPB epidemic?

Two ongoing BV Research Centre studies are helping to answer these questions.

One project addresses the question of how MPB affects caribou by looking at how terrestrial lichens, an important caribou winter food, respond to the epidemic and whether eventual blowdown will impede caribou movements. This project was initiated in 2001 and takes place in the East Ootsa and Entiako areas, which are the wintering grounds of the Tweedsmuir-Entiako caribou population. During winter, caribou select mature lodgepole pine forests where terrestrial lichens are abundant, and forage primarily by cratering through the snow to obtain terrestrial lichens.



ADULT BULL CARIBOU (NORTHERN ECOTYPE)  
FEEDING ON TERRESTRIAL LICHENS  
PHOTO: ART TWONEY

The project monitors various vegetation responses to MPB attack and MPB management logging, with an emphasis on terrestrial caribou forage lichens. The project also assesses stand structure, changes in coarse woody debris as an indicator of movement barriers, and regeneration. The

## CONSIDER STANDING FOR THE CENTRE'S 2008-2009 BOARD OF DIRECTORS

A new board will be elected by the membership at the AGM. Board membership is an opportunity to help shape the future direction of the Centre.

## BV RESEARCH CENTRE AWARDS

Do you know of a researcher, writer, activist, or organization that has made an outstanding contribution to sustainability in northwest BC? Please consider nominating individuals or groups for **The Irving Fox Award** or **The Jim Pojar Award**, which will be handed out to successful candidates at the AGM. Go to our web site [www.bvcentre.ca](http://www.bvcentre.ca) to see a link to the award criteria for each award and how to submit.

## TIMBER GROWTH & VALUE CONFERENCE

We are now accepting registrations for the Timber Growth and Value Conference to be held on **February 6 - 7** at the Smithers Golf and Country Club. The conference program can be found on the [Timber Growth and Value Conference](#) section of our web site [www.bvcentre.ca](http://www.bvcentre.ca).



PHOTO: AMANDA FOLLETT

work is conducted in 79 permanent research plots that were established in four different biogeoclimatic subzones and seven different site series.

Preliminary data from 2003 and 2005 suggest that changes in terrestrial lichen abundance during the MPB epidemic is mediated indirectly through changes in other ground vegetation, rather than directly through changes in canopy condition. Kinnikinnick is proliferating on MPB killed sites and affecting terrestrial lichen abundance. Plots were resurveyed in 2007 to assess whether the dramatic increase in kinnikinnick abundance has continued.

Until this project was initiated in 2001, there was no information available on the effects of MPB on caribou, making it difficult to develop management prescriptions that minimize impacts to caribou.



FEEDING CRATER  
PHOTO: DEBORAH CICHOWSKI

The second project addresses the effects of the MPB epidemic on Northern Caribou habitat use and migration. Radio-collared caribou are being tracked during monthly flights and the site and habitat of located animals described. In addition, several collars are equipped with GPS receivers, which collect location information several times each day. During the winter, snowtracking is used to locate feeding sites, which will be described and compared to those from pre-MPB conditions to assess changes. In addition, basic information on population parameters is being collected. The results will be used to determine the types of restoration activities required for this population.

Because the Tweedsmuir-Entiako caribou population is the first caribou population to experience the current MPB epidemic, these studies will benefit all Northern Caribou populations in BC and Alberta.

## BOARD MEMBERS (2007-2008)

Sybille Haeussler,  
President

Don Morgan,  
Vice-president

Brian Edmison,  
Treasurer

Anne Harfenist,  
Secretary

Phil Burton

Deborah Cichowski

Rosemary Fox

Brian Fuhr

Jim McCormack

Laurence Turney

Jim Pojar,  
Past President

For more on the Board of  
Directors go to the  
[Our People/Board](#) section of  
the Centre's web site  
[www.bvcentre.ca](http://www.bvcentre.ca)

## IRVING FOX MEMORIAL SCHOLARSHIP FOR NATURAL RESOURCES RESEARCH AND MANAGEMENT

The Centre has updated its scholarship policy. Its salient features are as follows:

- The scholarship (currently valued at \$750-\$1000) is awarded to a student enrolled in or entering a full-time or part-time post-secondary program (technical institution, college, university - undergraduate, graduate, post-doctoral), in research or management in the natural or social sciences related to the sustainable use of natural resources.
- Applicants must demonstrate a personal or close family connection to northwestern British Columbia (e.g. be born or raised or have immediate family in the area); be attending a post-secondary institution in the area; be intending to study or undertake research in the area; or have worked in the field of natural resource research and/or management in the area.
- For the purposes of the scholarship, northwestern British Columbia is defined as the area within the Bulkley-Stikine, Skeena, and North Coast provincial electoral districts.
- The deadline for receipt of scholarship applications is May 31 and successful applicants will be notified by July 1.
- Applications will be evaluated by a committee of the BV Research Centre's board.
- Scholarship winners must provide proof of enrolment to receive funding and, if not already enrolled, must enter their program within seven months after notification of receipt of the scholarship. The seven month time limit may be extended to one year if special circumstances apply.

Individuals who have received the scholarship within the last five years do not qualify for the award.

For details on the information that is required to accompany a scholarship application, potential candidates are encouraged to check out the [Scholarship](#) section of the Centre's web site [www.bvcentre.ca](http://www.bvcentre.ca).



**HAPPY HOLIDAYS & HAPPY NEW YEAR**

**Bulkley Valley Centre for Natural Resources Research & Management**

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