



CMI Member Bulletins
For April 2010 – February 2011

About this archive

Members of the Columbia Mountains Institute of Applied Ecology receive regular news updates by email. Content is presented in "digest" style, and includes items of interest to people working in the various fields of applied ecology in southeastern British Columbia. Members send information about publications, conferences, web sites, funding opportunities, job postings, etc. to the CMI office, where it is compiled and sent out in a bulletin at the rate about one per month. Members also receive advance notice of courses and conferences.

This document is an archive of CMI Member Updates sent between April 2010 and February 2011.

April 29, 2010

1. CMI News

We are pleased to announce our Board of Directors for 2010:

Doug Adama, Golden
Marc-André Beaucher, Creston
Kevin Bollefer, Revelstoke
Martin Carver, Nelson
Patrick Daigle, Victoria
Jenny Feick, Victoria
Leigh Anne Isaac, Cranbrook
Irene Manley, Nelson
Mike Miller, Vernon
Tara Szkorupa, Cranbrook
Paul Sneed, Castlegar
Natasha Thorpe, Revelstoke
Gregg Walker, Revelstoke
Del Williams, Victoria
Brendan Wilson, Shoreacres

This is the first time we've had a full Board of fifteen Directors! We're glad there is so much enthusiasm out there for the CMI!

[Annual Researchers' Meeting and AGM in Castlegar, May 12](#)

Abstracts for the presentations, posters, and field trips are now on our website. We still have some time slots available, so please send me your abstract if you've got something to share. Submission guidelines are [here](#). Our AGM will happen right after lunch. We will review 2009 and look forward to hearing your suggestions for future directions.

[Online GIS Workshop and GPS Unleashed Course](#) in Castlegar, May 13 and 14.

We are still taking registrations for both days, although there are only three spots left for the GPS Unleashed course. We are pleased to partner with Selkirk College for these events.

We have a limited number of rooms available at the Kekuli House student residence for these May events (\$30 per night for a single room, bring your own bedding). Please let me know if you want a room and I will send you the forms. Pat Rodrick at Selkirk College needs the forms back by May 1.

Our **Aboriginal Cultural Awareness** course held last week received high ratings from the 14 participants. Bob and Anne Moody used a variety of educational approaches to explain Aboriginal culture, and the group discussion added to the learning. At present we do not plan to host the course again this fall, but we will if there is enough demand, so drop me a line if you want us to offer it again.

Registrations are now open for all three of our upcoming statistics courses. Our stats courses fill quickly, so please register soon if you want to be sure of a spot.

[Introduction to R Software](#), with Dr. Joe Thorley of Poisson Consulting in Nelson.
August 24-25, 2010 in Revelstoke

[Statistics for Biologists: A Refresher Course](#), with Dr. Carl Schwarz from Simon Fraser University.
September 21-23, 2010 in Revelstoke

[Trend Analysis and Environmental Impact Analysis](#), with Dr. Carl Schwarz from Simon Fraser University.
September 28-30, 2010 in Revelstoke. We've set up this course so you can take the only first two days, which is Trend Analysis, or take all three days, to include the EIA component.

Remember that we have a Call for Presentations open until May 31 for our fall [Human Dimensions of Natural Resource Management](#) conference.

Our CMI Members' Updates for the last year have been archived on our website. [Click here](#) to view the archive.

2. Employment opportunity

Resource Conservation Technician II
Parks Canada
Wage: \$47,619 - \$57,932 per annum, 37.5 hours/week
Closing date May 2

Reporting to the ecosystem scientist the successful candidate will assist with surveillance, monitoring and liaison responsibilities associated with the field units contaminated sites program and physical works projects to ensure that construction/remediation activities meet environmental standards as outlined by project environmental assessments; to assist in follow-up and restoration of contamination and pollutant releases resultant of motor vehicle accidents along highway corridors; work will involve dealing with deadlines, multiple and competing priorities, and reliance on others for information. Please refer to [Job Posting](#) and [Statement of Qualifications](#) documents for the details.

3. Documents and websites of interest

Cumulative Impacts of Natural Resource Development on Ecosystems and Wildlife: An Annotated Bibliography for British Columbia

Judi Krzyzanowski and Pedro Lara Almuedo FORREX Series 26, 2010.

<http://www.forrex.org/publications/forrexseries/fs26.pdf>

Natural resource activities at different spatial and temporal scales have cumulative effects on ecosystems and biodiversity that are not yet thoroughly understood. This bibliography draws on selected work from multiple disciplines and sectors to provide a holistic and critical view of impacts relevant to British Columbia's ecosystems and wildlife. It illustrates the diversity of cumulative effects approaches, the breath of potential impacts, and the complexity of interactions that occur within a shared land base.

Determining the Value of Forests: An Economic Measure

Solana-Rivera, C. 2010. Sustainable Forest Management Network Research Note Series No. 61.

http://www.sfmnetwork.ca/docs/e/RN_En61_EconomicValuation_Solano-Rivera.pdf

Environmental valuation is a relevant and useful technique in sustainable forest management. Foresters need to understand the concept of value as used in economic analyses to understand how economic tools can be used to manage natural resources and develop public policy. Resource managers need to recognize the different types of values that forests provide and understand that different methods must be used to directly measure or indirectly determine these values. This research note outlines the concept of economic value and its importance, the different types of values, how they are measured, and how this information is used in developing policy or evaluating projects.

Water, Wetlands and Forests: A Review of Ecological, Economic and Policy Linkages

Convention on Biological Diversity

<http://www.cbd.int/doc/publications/cbd-ts-47-en.pdf>

To mark World Water Day 2010 and highlight the need for clean water, the Secretariat of the Convention on Biological Diversity has published a new report. The report, produced in collaboration with the Secretariat of the Ramsar Convention on Wetlands and other partners, aims to foster better awareness of the crucial role that forests and wetlands play in sustaining the availability and quality of water critical for human well-being.

The above documents were listed in recent e-newsletters issued by FORREX. You can subscribe to FORREX mailing lists at: <http://forrex.org/tools/maillinglists.asp>

First Nations Language Tutor

<http://firstvoices.ca/>

Would you like to learn how to pronounce First Nations words properly, or at least learn how to say a few polite words such as hello and thank you? Or read about a First Nation culture in your area? Maybe play a game in a First Nations language? This is an excellent website.

Citizen Science Central

<http://www.birds.cornell.edu/citscitoolkit>

This American website is hosted by the Cornell Lab of Ornithology. It is a toolkit for many kinds of Citizen Science projects. They've just made a section on projects, resources, and connections between citizen science and climate change.

Fisher Wildlife Habitat Decision Aid for British Columbia's Interior

Extension Note, FORREX's BC Journal of Ecosystems and Management, Volume 10 number 3

Richard D. Weir and Pedro Lara Almuedo

http://www.forrex.org/JEM/ISS52/vol10_no3_art5.pdf

This Wildlife Habitat Decision Aid summarizes the latest scientific and experiential information that forestry practitioners, including silviculture planners and operational foresters, need to consider when managing for fisher habitat requirements. This information was obtained through an extensive literature analysis and discussions with experts in fisher ecology in British Columbia. Most information on fisher ecology in this extension note was derived from studies conducted in the Cariboo, Williston, Chilcotin, and South Peace regions.

Recommended web sites for plant identification, information, and photographs

The Native Plant Society of BCs list serv had a recent flurry of discussion about people's favourite plant-related websites. Here is a list of the recommended websites most useful for southeastern BC. I will put these links into the "Links" section of the CMI website for your future reference. If I've missed some of your favourites, please let me know.

E-Flora BC

<http://www.geog.ubc.ca/biodiversity/eflora/>

E-Flora BC is a GIS-based biogeographic atlas of the vascular plants, fungi, algae, bryophytes and lichens of British Columbia that now includes more than 8,000 individual atlas pages.

Flora ID Northwest

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

Flora ID Northwest's computerized plant keys contain complete descriptive information for all vascular plant species known to grow in British Columbia and the Pacific Northwest (both native and naturalized introduced species). Produced by the Native Plant Society of BC. Purchasing information is at:

<http://www.npsbc.org/floralDnorthwestform.pdf>

PLANTS Database

<http://plants.usda.gov/index.html>

The PLANTS Database provides standardized information about the vascular plants, mosses, liverworts, hornworts, and lichens of all North American plant species, with range maps and up-to-date taxonomic treatment.

Flora of North America

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

FNA presents for the first time, in one published reference source, information on the names, taxonomic relationships, continent-wide distributions, and morphological characteristics of all plants native and naturalized found in North America north of Mexico. The Flora will appear in 30 volumes and will be available in print and on the Web.

University of Washington / Burke Museum Image Collection (plants and lichens)

<http://biology.burke.washington.edu/herbarium/imagecollection.php>

This image collection contains the most comprehensive online collection of photographs and information for the plants and lichens of Washington. Developed and maintained by the University of Washington Herbarium, this site brings together the photographs from numerous photographers and botanists from around the state. Photographs are accompanied by distribution maps, descriptions, synonymy, and additional resources.

Pacific Northwest Wildflowers

<http://www.pnwflowers.com/>

Operated by Mark Turner of Bellingham, Washington, co-author of the book "Wildflowers of the Pacific Northwest". Contains about 7000 photos, including nearly all those illustrated in the field guide, and many others as well.

Central Washington Native Plants photo gallery

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

Operated by Thayne Tuason. Not comprehensive, but includes photos of about 400 species of Central Washington plants.

4. Courses

Invasive Plant Training Program

7 days - \$50 Registration Fee

Nelson Training Session: May 11-14 and May 17-19 (inclusive)

This program is for under-employed resource workers looking to diversify their job skills.

This workshop will broaden options for future job opportunities. Participants will spend 7 days learning about invasive plants: what they are, how to id them, how to collect important information for resource managers, and how to control them (including pesticide application and an exam for certification). Certificates will also be awarded for those who complete the training. For more information, or to register, go to <http://www.invasiveplantcouncilbc.ca/news-and-events/261-free-skills-training-for-resource-workers> or call 250-392-1400. This training program is considered an asset for JOP candidates applying for a job.

Invasive Plant Training Program: Refresh and Build
(1 day - free)
Nelson Training Session: May 20th

This program is for participants from the 2009 Invasive Plant Training Program, or for resource workers with a solid background in invasive plants or previous work experience. This one-day program will review identification of key plants and issues, building on information in the 7-day program. New content will focus on specific plants in the area, and aquatic invasive plants. There will be a field session in the afternoon.

For more information, or to register, go to <http://www.invasiveplantcouncilbc.ca/news-and-events/261-free-skills-training-for-resource-workers> or call 250-392-1400. Registration is required to be eligible for the limited number of seats.

See you at our Annual Researchers' Meeting and AGM in Castlegar, on May 12!

May 25, 2010

Hello CMI Members,

Many thanks to our members who have sent in their membership renewal. For those of you who haven't renewed, this will be the last e-newsletter you receive until I hear from you. (If you are part of a corporate membership, I will be sending out invoices next week for your renewal.) Details about memberships are [here](#).

Our Annual General Meeting was held in Castlegar on May 12. You can review our 2009-2010 Annual Report on our web site [here](#).

Our Annual Researchers' Meeting held on May 12 attracted 34 people, to hear 10 presentations and take part in a walk on the grounds of the Selkirk College Campus and out to the confluence of the Kootenay and Columbia Rivers. I'm hoping to have the meeting summary and abstracts available for download in the next week or so. Many thanks to our President **Brendan Wilson** for being our Master of Ceremonies. We'd also like to thank the **Kootenay Association for Science and Technology** for sponsoring our lunch. **Selkirk College** supported our Annual Researchers Meeting and also the two mapping courses by allowing us the use of their facilities.

On May 13 and 14, the **Online GIS for Stewardship and Citizen Science** workshop was taught by Ian Parfitt with assistance from Brendon Wilson and Keyes Lessard, and the **GPS Unleashed - Making the most of your GPS and free mapping software course** was taught by Keyes Lessard and Chris Gray. Both events were fully subscribed with over 20 people each. Evaluation comments were positive and we anticipate the course will be offered again, either through CMI or Selkirk College. There were requests for sequels for each event.

1. Your comments are requested...

Plant ecologist Dr. Michael Miller has offered to teach a course titled **Introduction to Matrix Population Models and PopTools**. We have posted the course description on our website and we would like your comments on the course content. [Click here](#) and see the gray box at the top of the page for the link to the course outline. Is this a course that would interest you? Can you suggest changes to the course content? Send your comments to office@cmiae.org.

2. Job Opportunity

Program Officer for Alaska & British Columbia

Organization -- Wilburforce Foundation

Deadline -- 12 Noon Pacific Daylight Time, June 10, 2010

[Details here.](#)

3. Resources

Identifying Birds with Dendroica

Now hosted by Environment Canada, this is an outstanding birding resource. This interactive website was developed to help students, volunteers, professionals, and the general public improve their birding skills by learning to identify birds by song or sight, particularly so that they can participate in nature survey and monitoring programs. Each bird is presented with several photos and several bird songs, so you can pick up on the local colours and dialects. This innovative technology will enhance birders' ability to collect information for a large variety of Citizen Science programs, such as those administered by Bird Studies Canada and our partners. The site includes bird species from Canada, the United States, and Mexico, and features photographs and sound recordings. Registered users can select lists of species to study, such as all the breeding (or non-breeding) species in a particular region, or species with a particular song type.

To register for a free account and to explore the Dendroica resource:

<http://www.natureinstruct.org/dendroica/>

New Spatial Data Data Available from GeoGratis

The Government of Canada has released a number of new spatial data products, including CanVec, CanTopo and Toprama web map services.

[Details here.](#)

Mountain Caribou Compendium has moved to Selkirk College in Castlegar

The Mountain Caribou Compendium is a set of over 180 journal articles, reports and other information about the ecology and management of southeastern British Columbia's Mountain Caribou populations. Most of it is from early research and reports that are not available on-line. You can see a listing of the contents on our [website](#). Our office has been home to the Mountain Caribou Compendium for over five years but it was not getting much use. We have donated the collection to the library at Selkirk College in Castlegar.

Canadian forest certification map published

<http://www.certificationcanada.org/maps/>

An interactive map of all certified areas in Canada has been produced by the Forest Products Association of Canada. The map reflects data in the 2009 year-end Canada Certification Status Report and shows forest area covered by the CSA, SFI and FSC forest management certification systems. Viewers can see versions of the map differentiated by certification standard and by province. The minimum size of certification area mapped is 5,000ha.

Determining the value of forests: an economic measure

Sustainable Forest Management Network Research Note 61

http://www.sfmnetwork.ca/docs/e/RN_En61_EconomicValuation_Solano-Rivera.pdf

This research note introduces forest managers to the concept of economic valuation, an economic technique used to manage natural resources and develop public policy. Foresters need to understand the concept of value as used in economic analyses to understand how economic tools can be used to manage natural resources and develop public policy. Resource managers need to recognize the different types of values that forests provide and understand that different methods must be used to directly measure or indirectly determine these values. This research note outlines the concept of economic value

and its importance, the different types of values, how they are measured, and how this information is used in developing policy or evaluating projects.

Google Earth Critters on You Tube

Just a bit of entertainment here.... at our **Online GIS for Citizen Science and Stewardship** workshop last week, instructor Ian Parfitt shared this link with us. [This is a YouTube video](#) that zooms in on animals in Africa, as they are seen on Google Earth, and it is set to music. It took a very dedicated person to look at all of Africa on Google Earth!

4. Conferences and courses

BC Grasslands Council 10th Anniversary

Festival in the Grass

June 12, 2010

Lac des Bois Grasslands, near Kamloops

This is a free community event in the Lac du Bois grasslands with field trips, children's events and interactive exhibits. Details are [here](#).

Grassland Ecology Workshop in Lillooet

June 4-5, 2010

Hosted by the Native Plant Society of BC. Join ecologist Don Gayton in this workshop to learn more about native grassland ecosystems, grass taxonomy and grass identification. A classroom session takes place Friday night and a field session happens on Saturday. For more details, [go here](#). Workshop almost full.

June 15, 2010

1. CMI News

We've chosen the talks for our fall conference [Human Dimensions of Natural Resource Management](#). I will be updating the website with the abstracts later this week. We will be opening for registrations in early July. *CMI is looking for corporate sponsors*, so if your organization would like to sponsor a coffee break or some other portion of the conference, please give me a call.

Many resource managers are now required to collect public input for their management plans. We've invited Ajit Krishnaswamy from FORREX and Simon Fraser University to teach his course on [Public Participation Skills for Natural Resource Managers](#). Registration is now open for this 1.5 day course in October. The course will be held right before the Human Dimensions conference on October 4-5, 2010.

The [Trends Analysis and Environmental Impact Assessments](#) statistics course in September is full, but as there are usually a few people who have to cancel, I'd like to gather a few names for a wait list. We still have room in the [Introduction to R Software](#) course and [Statistics for Biologists - A Refresher Course](#).

If you have an interest in restoration, you will want to take the [Soil Bioengineering](#) or [Ecological Approaches to Invasive Plant Management](#) courses in September. Both courses include one day of classroom theory and one day of hands-on work in the field, and include an excellent manual for future use. Both are suitable for continuing credits for Pesticide Applicators, in that these techniques are could be part of an integrated pest management program.

2. Job Postings

Tipi Mountain Native Plants

Tipi Mountain Native Plants Ltd. is looking for a person to fill the position of Operations Manager. Their ideal candidate is highly organised, entrepreneurial, has a university degree in the plant sciences or horticulture (or other) and is experienced in running a production horticulture facility. Must be literate in the Microsoft Office environment and have a valid driver's license and vehicle. It is hoped that you will have strong skills in research and native plant identification and in running an Argus System. They are seeking to fill this position on an ASAP basis. This posting is open until the position is filled. Please send your covering letter and resume with three references Jenn@Tipimountain.com 250-427-7010.

Ecosystems Consulting - Full time Registered Professional Biologist Position

Ecosystems Consulting is a green energy company focused on providing environmental services in biology, environmental science, environmental assessments, and First Nations community development, for projects in the renewable energy sector. We are looking for a senior registered professional biologist to join our team. This position can be filled from almost every location in the province with a preference to central BC or Vancouver. Responsibilities include project management, planning, study design and monitoring through to project completion. Requirements: At least 5 years of operational experience in wildlife studies with a strong foundation of provincial RISC inventory methods and provincial best management practices; At least 5 years of project management experience: Experience working with bats and familiar with setting up bat study designs for wind farms; Ornithology experience and familiar with bird migration radar sampling methods for wind farms; Experience with both the provincial and federal environmental assessment process; Operational experience in fisheries biology would be an asset.

Please send resume and a detailed cover letter providing relevant work experience to Jesse Anaka, j.anaka@ecosystemsconsulting.co.uk 250-552-0957. Closing date is August 1st. If a candidate is found prior to the closing date the position will be filled at that time.

3. Wildlife Values Survey

Pollution, climate change, human encroachment...Wildlife have to navigate many harms. Intentional and unintentional activities can all greatly affect their conservation and welfare. What is YOUR VIEW? Researchers at the University of British Columbia are interested in knowing what wildlife professionals know, believe, and value about wildlife in BC. You can help the team develop effective tools for public participation that contribute to wildlife policy development and communications. **A public survey will be run separately in July, so you are encouraged to share this survey, but only with other wildlife professionals at this time.** The survey is confidential and no personal contact information is required with the exception of an email address. To participate, you must register on "YourViews" using an email address as this ensures that consent is received and your data is protected. However, the email address is not accessible to the researchers or linked to your data in the analysis. The survey will take 10-20 mins of your time. Go to: <http://www.yourviews.ubc.ca> to register and then select the "Wildlife Values Survey – Navigating Harm" to start. Preliminary results may be presented at the CMI's Human Dimensions of Natural Resources Conference October 6-7, 2010. If you have questions please contact survey coordinator and PhD student Sara Dubois at sara.dubois@ubc.ca

4. Resources

The carbon conundrum - fire and fuel management in fire-prone forests

Authors: P.W. Daigle and C.C. Dymond

Source: Forest Science Program

Series: Extension Note 97, 2010

Natural resource managers face a conundrum: when do fire management activities increase sources or sinks of greenhouse gases? This extension note describes forest carbon dynamics and approaches for dealing with carbon stocks and flows while managing for fire and a full range of natural resource values.

<http://www.for.gov.bc.ca/hfd/pubs/Docs/En/En97.pdf>

Research Branch Topical Contact Information

<http://www.for.gov.bc.ca/hre/topics.htm>

The BC Ministry of Forests and Range has posted a listing of Research Branch researchers, their areas of specialization, and their contact numbers.

Subscribe to a FORREX list serv

<http://forrex.org/tools/maillinglists.asp>

FORREX uses a variety of email lists to keep clients informed of relevant news, events, and publications. You can sign up to receive newsletters on various topics, such as conservation biology, forest resources, watersheds, socio-economics, and more. Highly recommended.

Ian Adams, Past CMI President and biologist at Interior Reforestation, writes....

For several years I have written a natural history column in local East Kootenay newspapers, called The Raven's Croak. After a bit of a hiatus, I resurrected it last fall and hope to keep it running for the long term. It's currently run in our local daily newspaper, the Cranbrook Daily Townsman. A few people not living in Cranbrook have asked to read my bi-weekly musings, so I've set up the columns as a blog. Check it out here: <http://theravenscroak.blogspot.com>

For those of you more inclined to the science of ecology, I've also started writing reviews of journal published papers for a new site, Conservation Maven <http://www.conservationmaven.com>. For the biologists here, I highly recommend the site (and not just because I'm writing for it) for reviews of interesting, applied papers.

5. Conferences and courses

Presentations from 5th Annual Applied Biology Conference

May 5-8 2010, in Kelowna

You'll find all the 2010 AABC speakers' bios and PowerPoint presentations [here](#). Scroll down to the bottom of the page and you'll find links to each presentation.

Presentations from Non-Timber Forest Resources: Linking Research, Policy and Economic Opportunities

November 6, 2010

Nanaimo BC

The Centre for Non-Timber Resources at Royal Roads University hosted this one-day forum on Non-Timber Forest Resources. The 15 speakers in the forum included business owners who shared practical experience, researchers and government representatives who discussed ecology and management, consumer perceptions, and policy, and representatives of a range of innovative development and support initiatives. View the presentations [here](#).

CKIPC Annual Weed Tour: When Good Gardens Go Bad

June 23, 2010m 9:30 am - 2:30 pm

Meet at the Boat Launch of Kokanee Creek Provincial Park at 9:30 a.m.

You are invited to join the Central Kootenay Invasive Plant Committee for a walking tour of Kokanee Creek Provincial Park. The original Hamilton Estate had beautiful formal gardens. Now abandoned, they have left a weedy legacy that has impeded recovery of native species. Concerted efforts are underway to get high priority invasive species under control. The tour will highlight a number of success stories as well as on-going challenges:

- Horticultural plants gone wild – from herbs to shrubs to trees
- Scotch broom removal and disposal – lessons learned
- Response to the detection of highly invasive mouse ear hawkweed
- Successful habitat restoration by blackberry removal
- Biological control
- Aquatic invaders

Pre-registration is required. Contact Crystal Klym, Coordinator, Central Kootenay Invasive Plant Committee at 250- 352-1160, coordinator@kootenayweeds.com

August 6, 2010

1. CMI News

We are still accepting registrations for most of our fall courses. The "Introduction to R software" course is almost full; please act quickly if you want a spot.

[Introduction to R software](#)

[Soil bioengineering](#)

[Ecological approaches to invasive plant management](#)

[Statistics for biologists - A refresher course](#)

[Public participation skills for natural resource managers](#). This is a new course for us. If you need to conduct a public process for your project you will want to read about this course.

Our fall conference "[Human Dimensions of Natural Resource Management](#)" is now open for registrations. A list of speakers, posters, and field trips is on the web site. More posters and exhibits are welcome. Submission guidelines are [here](#).

The abstracts from our CMI Annual Researchers' Meeting in May are now available on our website as a [PDF download](#). Thanks again to the Kootenay Association for Science and Technology for sponsoring our lunch, and to Selkirk College in Castlegar for allowing us to use their staff lounge for the meeting.

2. Canadian Association of Science Centres internships

Do you need an intern? The Canadian Association of Science Centres has funding available to support science and/or technology interns at any non-profit, for-profit, or non-federal government organization. The Canadian Association of Science Centres is conducting the Science Interns Outreach Project, a part of Natural Resources Canada's Science and Technology Internship Program from August 2010 to March 2011. The Science and Technology Internship Program provides an opportunity to recent graduates in science or engineering to gain relevant and meaningful work experiences within their field of studies. Application deadlines are:

Round 1: August 13th, 2010

Round 2: September 3rd, 2010

Round 3: September 24th, 2010

For details [click here](#).

3. Resources

GeoGratis has new topo maps

GeoGratis is NRCAN's geospatial data. It's available online, at no cost and without restrictions. See [their website](#) for more information and to register.

Ecosystem Valuation

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

This American website describes how economists value the beneficial ways that ecosystems affect people. It is designed for non-economists who need answers to questions about the benefits of ecosystem conservation, preservation, or restoration. It provides a clear, non-technical explanation of ecosystem valuation concepts, methods, and applications.

Environmental Best Management Practices: An annotated bibliography and searchable database.

http://www.stewardshipcentre.bc.ca/index.php/best_management

This project was commissioned by the Lands Management Committee of the BC Conservation Lands Forum. The goal of the project was to provide an easily accessible and searchable bibliography and database of existing information sources that provide guidance on how to manage for a wide range of environmental values - often these practices are termed "best management practices".

3rd International Bear-People Conflicts Workshop Summary

held November 15-17, 2009

Canmore BC

This document is a synopsis of the presentations and discussions at the Third International Bear/Human Conflict and Polar Bear Focus Day. Topics include bear behaviour, bear/human conflict updates, bear management, people management, attractant management, education and training, deterrent and detection tools, community-based programs, and risk and liability. A separate summary of the Polar Bear Focus Day (November 18 in Canmore) is published separately by World Wildlife Fund and Polar Bear International. This report will be posted on the conference site in late August but CMI has permission to make it available to our members now. You can download this 1.3 MB 69 page document at our website, [here](#).

A Crossroads: Highway 3 Transportation Corridor Workshop Summary

Ament, R., Clevenger, T., Darlow, N. and T. Lee. 2008.

Prepared by Miistakis Institute, Western Transportation Institute and Yellowstone to Yukon Conservation Initiative

This report assesses Highway 3 through Crowsnest Pass in Alberta and B.C. and recommends actions, such as signage, fencing, overpasses and underpasses, to help make crossing the highway safer for wildlife. The report can be downloaded, in either a short version or a long version, [here](#).

The Wetlandkeepers Handbook

The Wetlandkeepers Handbook was produced by Fisheries and Oceans Canada, BC Ministry of Environment, and BC Wildlife Federation. It's the manual used for the Wetlandkeepers courses run by the BC Wildlife Federation (see course info below). The manual provides background information on wetland ecology and laws related to wetlands, as well as step-by-step instruction on wetland activities.

Download this 187 page PDF document [here](#).

The Bug Book: A Guide to the Identification of Common Aquatic Benthic Macroinvertebrate Families of California and Western North America (Second Edition)

Cyndi Brinkhurst, Susan McCormick, and Sandra Williamson, 2009, 109 pages

The Pacific Streamkeeper's list serv was all a-buzz about this new book a few weeks ago. I thought CMI members might like to know about this title. See the details [here](#).

Stewardship Centre for BC

<http://www.stewardshipcentre.bc.ca/>

"The Stewardship Centre for BC is committed to working with local communities, local governments and the planning and building professions to champion science-based best stewardship practices for land and water in BC. As good stewardship relies on good decision-making, our work focuses on government, land owners, development and business communities. We also work closely with conservation and environmental organizations and the citizens of BC. " *...from their website.*

4. Conferences and courses

BC Water Symposium

August 30-September 1, 2010

concurrently in Victoria, Kelowna, and Prince George

The BC Government together with UVIC, UBC Okanagan, UNBC and Mathematics of Information Technology and Complex Systems are hosting a BC Water Symposium. The objectives of the symposium are to discuss emerging issues pertinent to water science, to develop new collaborative relationships, and to work together to build the foundations for a Water Science Strategy for BC. In addition, the symposium will expose participants to new ideas and initiatives and provide a venue for sharing knowledge and discussing its application to local issues. For details, [click here](#).

Wetlandkeepers: Wetlands for the future

October 1-3, 2010

Sparwood BC

BC Wildlife Federation's Wetlandkeepers courses are 2 1/2 day workshops that educate participants about wetland restoration, rehabilitation and conservation, while enhancing the wetland site! Upon community request, BCWF brings the Wetlandkeepers Course into an area to teach wetland mapping, wetland hydrology, amphibian, plant and animal identification and soil sampling. This is a hands-on fieldwork course that will provide participants will technical skills to steward their own wetland. For details, contact Carolyn Ann Budgell wetlands@bcwf.bc.ca

August 30, 2010

1. CMI News

Now that summer is waning, it's time to sign up for our CMI courses and our fall conference. If you have colleagues who'd be interested in registering, please forward this email to them.

September 13-14 [Ecological Approaches to Invasive Plant Management](#)

September 15-16 [Soil Bioengineering](#) (This course may be cancelled due to too few registrations, please act quickly if you'd like to attend)

September 21-23 [Statistics for Biologists - A Refresher Course](#)

October 4-5 [Public Participation Skills for Natural Resource Managers](#)

October 6-7 [Human Dimensions of Natural Resource Management Conference](#). Come and hear how to integrate human behaviours and social values into your decision-making. Our conference sponsors now include Columbia Basin Trust, Parks Canada, and BC Hydro.

Our Trend Analysis and Environmental Impact Assessment course has been full for a while, and we will offer it again in the spring.

2. Job Posting

Species at Risk Biologist, Fisheries and Oceans Canada - 2 vacancies.

Located in Vancouver

Closing Date: September 7, 2010

A pool of qualified candidates will be created as a result of this process and may be used to staff similar positions on an indeterminate, term, secondment, deployment or acting basis throughout the Pacific Region. For details, [click here](#).

3. Kootenay Association for Science and Technology invites speakers

KAST works with Selkirk College's Integrated Environmental Planning Program to host three environmental seminars (luncheons) to the region, to bring together the educational, business and government sectors together to share best practices and update everyone on interesting relevant projects. The meetings are usually held on a Thursday in November, February, and April. If you have information to share, please contact Terry Van Horn, Project Coordinator, KAST at 250-483-5052 or terry@kast.com

4. Reading

BC Auditor General says BC Parks are not meeting key goal [Conservation of Ecological Integrity in B.C. Parks and Protected Areas](#)

2010 Report 3, August 2010, 23 pages

BC's Auditor General has released a report stating that despite its declared intentions and clear vision to conserve the ecological integrity in British Columbia's parks and protected areas, the Ministry of Environment is not successfully meeting this goal. Specifically:

- program plans are incomplete and lack adequate performance measures;
- conservation policies are not being consistently upheld;
- the parks and protected area system has not been designed to ensure ecological integrity;
- management plans are dated and incomplete; and
- little action has been taken to ensure the conservation of ecological integrity.

They also found that the ministry is not publicly reporting on its progress in conserving ecological integrity in the province's parks and protected areas system. While you are visiting the BC Auditor General's website, you may want to download this document, too.

[Public Participation - Principles and Best Practices for British Columbia](#)

And then sign up for our Public Participation Skills course, October 4-5 in Revelstoke!

Tune up your knowledge of bear spray

Do you know the difference between spray for defense against bears and spray for defense against humans? How do you use it? Learn more about bear spray [at this page](#) of the American website of the Centre for Wildlife Information.

An annotated bibliography of scientific literature on managing forests for carbon benefits

Hines, Sarah J.; Heath, Linda S.; Birdsey, Richard A., 2010

Gen. Tech. Rep. NRS-57. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 49 p. [Includes CD-ROM].

[Available here](#).

This document is about the effects of forest management activities and climate-induced changes on the carbon stocks and flows in a stand or landscape. The annotated bibliography was published by the USDA Forest Service. In less than 50 pages, it lists the studies published from 2000-2008, and summarizes their methods and primary results. This bibliography may be useful for anyone seeking to factor carbon implications into land management decisions using best available science. Please note that publications from 2009 forward would require a separate search.

In 2011 the CMI will be hosting a conference on managing ecosystems for carbon benefits. The date and location are to be announced.

Climate Impacts Group newsletter forecasts good skiing this winter

The Pacific Northwest Climate CIGnal

[Issue #22, Summer 2010](#)

The [Climate Impacts Group](#) (CIG) from the University of Washington engages in climate science in the public interest, working to understand the consequences of climate variability and climate change for the US Pacific Northwest, including the Columbia River Basin. CIG's unique focus is on the intersection of climate, science, and public policy – performing basic research aimed at understanding the consequences of climate fluctuations for the PNW, and promoting application of this information in regional decisions.

[This article](#) in their most recent newsletter forecasts a cool, wet winter. Skiing aside, there is lots of interesting information at the CIG website.

5. Courses and meetings

Electrofishing course in Castlegar

Selkirk College is hosting a backpack electrofishing course the third week of September (tentatively September 20th) at the Castlegar Selkirk College campus. This 2-day certification course is an introduction to electrofishing theory, safety and practices. The program meets current Work Safe BC requirements for certification. Emphasis is on safety but the theory and practice of backpack electrofishing is also reviewed. The course runs over two days, with one full day in the classroom. Cost is \$550. More information on this course can be found at: <http://www.mala.ca/nrep/fisheries/courses/ef.asp> If you are interested, please contact Rena Vandenbos, Fisheries Instructor at Selkirk College at rvandenbos@selkirk.ca or 250-365-1279.

East Kootenay Conservation Program, West Kootenay Workshop

Hume Hotel, Nelson BC

October 14, 2010 10:00 a.m. to 4:30 p.m.

The draft agenda includes sessions on the state of the environment (including private land) in the West Kootenay, examples of organizational models that currently are operating well, potential barriers (and possible solutions) to forming an EKCP type organization in the West Kootenay, defining the objectives, expectations and membership of a new West Kootenay focused group, and laying out the next steps to ensure follow-up happens. The workshop is being offered in partnership with the Fish and Wildlife Compensation Program - Columbia Basin and will be facilitated by Lynne Betts of Imprint Creative Solutions. For more information please contact Wayne Stetski at info@ekcp.ca or (250) 581-1122.

East Kootenay Conservation Program AGM and Workshop

College of the Rockies

October 27, 2010

Cranbrook BC

EKCP has confirmed speakers from Victoria, Salt Spring Island, Vancouver and Edmonton to talk about The Economics of Private Land Conservation. The workshop is being offered in partnership with the College of the Rockies and will be open to EKCP partners, interested public and students from the Cranbrook Campus. For more information please contact Wayne Stetski at info@ekcp.ca or (250) 581-1122.

November 18, 2010

Hello CMI Members,

After a busy fall season, and my trip to Australia, I am back at the office. I am working with our Directors and others to set up our events for 2011. If you have suggestions for courses or conferences we'd sure like to hear them. Perhaps you heard of a course that you like us to hold in our region? Perhaps you have a need for new information or you want to update your skills? All suggestions are welcome.

Our Annual General Meeting will be in the spring; date and location are to be announced. We are always looking for opportunities to help our members and others with their outreach. If you or your agency have projects or initiatives to report on, keep our AGM in mind for this.

At our Directors' meeting earlier this week, we decided it's time to increase CMI membership dues. It's been eleven years since we increased the fees! We will be putting out a vote by email about this, just prior to our AGM in the spring.

CMI will soon be accepting credit cards for registration fees. I hope to have this in place for our spring events.

from Jackie Morris, CMI Executive Director

1. Opportunities

Employment opportunities at Interior Reforestation, Cranbrook

- Senior-Intermediate Aquatic/Fisheries Biologist
- Junior Biologist/Environmental Scientist

Application is deadline November 19. For details contact David Struthers, CEO/Manager, 250-426-5300 or dstruthers@intref.bc.ca

Bird Studies Canada seeks Postdoctoral Fellow

Deadline to apply is December 20, 2010

Bird Studies Canada is seeking a Postdoctoral Fellow to conduct research on bird population distributions and trends. The individual will have the opportunity to work with extensive in-house databases that include multiple breeding bird atlases, migration monitoring data, and various other regional and national bird surveys. Requirements include a Ph.D. in ecology with demonstrated interest and expertise in statistical modeling and population ecology, preferably with a focus on birds.

[Click here for Bird Studies Canada website and more information.](#)

Columbia Basin Environmental Education Network Bursary

The Columbia Basin Environmental Education Network has announced that it is again offering bursaries of up to \$500 to support the professional development of *their members*. Membership is free, [join CBEEN here](#). Funds can be used to attend workshops or conferences which will increase your capacity to deliver environmental education programs to residents of the Columbia Basin. All funds must be claimed by June 20, 2011. Bursaries are made available through the financial support of the Columbia Basin Trust, a regional corporation created to deliver social, economic and environmental benefits to the residents of the Columbia Basin. For details, contact: admin@cbeen.org

Science Interns Outreach Project - Canadian Association of Science Centres

Any non-profit, for-profit, or non-federal government organization can apply for funding through this Science Interns Outreach Project, which provides an opportunity for recent graduates in science or engineering to gain meaningful work within their fields of study. Partners can receive a contribution payment for a portion of the intern's salary. The intern is an employee of the partner. The program will

cover 50% of an intern's salary between now and March 31, 2011. Deadline is December 1, 2010. [Click here for more information about the Science Intern Outreach Project.](#)

2. Resources

Webinar: Taking a second look at Biogeoclimatic Ecosystem Classification

Sybille Haeussler, PhD, RPF. University of Northern BC

Tuesday, December 7, 2010 10:30-11:30 PST

The Biogeoclimatic Ecosystem Classification (BEC) system has underpinned terrestrial ecosystem management and conservation planning in British Columbia since the early 1970s. BEC has served us well for 40 years, but is now critically challenged:

- BEC champions in government, academia and the private sector are being laid off or are retiring;
- BEC is based on outdated notions of climax ecosystems in equilibrium with climate;
- The scientific value of the BEC approach is not fully understood by a younger generation of scientists and resource managers, as they grapple with accelerating rates of change.

This important webinar addresses ways to ensure that BEC remains robust and useful in an uncertain future. Everyone is welcome. Teleconference number (toll free): 1 866 596 5278, Conference ID number: 3120346# . Prior to the teleconference, [download the presentation](#) on to your computer. If you have questions about the webinar, contact Don Gayton, Extension Ecologist, FORREX, 250-494-1858, don.gayton@forrex.org .

Y2Y report on climate change adaptation

Yellowstone to Yukon Conservation Initiative has released a report *Moving toward Climate Change Adaptation: The promise of the Yellowstone to Yukon Conservation Initiative for addressing the region's vulnerability to climate disruption*. It synthesizes the latest climate change information throughout the Y2Y region and summarizes the experts' projections for future climate change impacts. The report reviews the latest science tracking human-caused climate change in western North America and concludes that the Yellowstone to Yukon region is warming faster than the global average, experiencing phenomena such as rapidly melting glaciers, earlier spring run-offs, declining snowpacks and earlier bloom dates. All these factors could mean a northward shift of the ranges of many common wildlife species and the disappearance of others. [Download the Y2Y report.](#)

State of the Climate in 2009

National Oceanic and Atmospheric Administration

National Climatic Data Center

July 2010 issue (Vol. 91) of the Bulletin of the American Meteorological Society

In July of 2010, the National Oceanic and Atmospheric Administration released its annual State of the Climate Report. The Report summarizes climate conditions from 2009 and the observations related to key climate indicators, including temperature, sea ice, glaciers, precipitation, greenhouse gases, humidity and cloud cover. The Report also details extreme weather and climatic events over the past year, documenting the El Niño episode, major hurricanes, floods and droughts worldwide. [Download the NOAA report.](#)

Planning For a Sustainable Future: A Federal Sustainable Development Strategy for Canada

Sustainable Development Office, Environment Canada

October 2010

Goals, targets, and implementation strategies are organized under four priority themes:

- Addressing climate change and clean air,
- Maintaining water quality and availability,
- Protecting nature, and
- Shrinking the environmental footprint - Beginning with government.

[Download the Federal Sustainable Development Strategy here.](#)

Natural Capital in BC's Lower Mainland - Valuing the benefits from nature

This report examines the extent of natural capital – the forests, fields, wetlands and waterways in British

Columbia's lower mainland region, and estimates the non-market economic values for the various services and benefits these ecosystems provide. We often do not recognize these benefits or pay directly for these services, so they are undervalued in our market economy. The intent of this report is to provide a preliminary assessment of ecosystem services in economic terms so decision makers and the public can appreciate the true cost of degrading our ecosystems and, conversely, the potential economic benefits of protecting and restoring the region's wealth of natural capital. [Download the Natural Capital in BC's Lower Mainland document here.](#)

3. Conferences and courses

Free Online Training Course — Fish Passage Assessment Methodology

The Ministry of Forests and Range and the Ministry of Environment have developed an online course on the strategic approach to assessing fish stream crossings and remediating crossings that present fish passage problems. The course covers field assessment methodology, as well as reporting, fish biology, culvert basics and legislation. The course takes about six hours to complete. [Access the fish passage course here.](#)

Western Huckleberry Forum – “Seeing the Berries Amongst the Trees”

College of the Rockies, Cranbrook, BC

February 22-23, 2011

Huckleberries are a key component of local ecosystems, cultures, and economies in communities throughout western North America. With fire suppression and changes in the logging industry, huckleberry pickers and natural resource managers have noted declines in the abundance and productivity of the huckleberry throughout its range. Keynote speaker is Dr. Nancy Turner on the evening of February 22. Talks will be on: habitat restoration, forestry and huckleberries, huckleberries and wildlife, historical ecology, fire ecology, and ethnoecology. Registration opens December 2010. For more information contact Andra Forney 250-853-3297 or aforney@uvic.ca.

Invasion of the Aliens - Invasive Plant Council of BC's Public Forum

January 18-19 2011

Delta Vancouver Airport Hotel, Richmond BC

Call for papers is open until November 26. [For details visit the Invasive Plant Council website.](#)

January 10, 2011

1. CMI News

Last week I sent out our Call for Papers for our June conference in Nelson, ***Carbon Management in British Columbia Ecosystems: A search for opportunities to mitigate climate change***. If you missed the announcement you can [view the Call on our website](#). We are looking for presentations, posters, and field trips. Please pass the Call for Papers to your colleagues who might like to make a presentation or attend.

Dr. Carl Schwarz from Simon Fraser University will be offering two statistics courses for us in April.

Trend Analysis and Environmental Impact Assessment, April 12-13-14 in Revelstoke

Design and Analysis of Mark-Recapture Studies, April 18-19-20 in Revelstoke.

Carl's courses always fill quickly. We will be opening for registrations sometime in the next couple of weeks but as CMI members I thought you would want a heads up that these courses are happening. If you need information before then to help with approvals, just let me know and I can send you the description and course outline.

At our next Directors meeting on January 17, the Directors will decide where and when to have our **CMI Annual Researchers' meeting and AGM**.

The conference summary for our **Human Dimensions conference** will be available next week.

2. BC Government invites you to review and comment

BC invites public review of carbon offset rules

The BC government is releasing proposed requirements for forest-based carbon offset projects that could help unlock new revenue for forest managers and help industry reduce emissions. The draft Forest Carbon Offset Protocol will guide development of offset projects on private and public land in BC. Forest managers who undertake activities that meet the protocol requirements would generate offsets that they can sell on the carbon offset market. Activities would have to go beyond a “business-as-usual” approach and can include planting trees, restoring forests, harvesting and managing forests in new ways, and protecting sensitive areas from development. The public review period closes on January 31, 2011. Final approval is expected in early 2011. Review the [draft Forest Carbon Offset Protocol](#).

Hectares BC

Hectares BC is a collaborative pilot project created under the BiodiversityBC partnership to test the concept of a new tool for geospatial data analysis in the natural resource sector. The provincial government has a wealth of geospatial data but limited staff and tools for its analysis. Hectares BC allows scientists, researchers, government staff, and others to access and work with geographic information without the need for GIS skills to carry out planning, assessment, reporting, and decision making functions. [Access Hectares BC here](#).

New BC provincial policy on environmental mitigation and offsetting

The BC Ministry of Environment, along with other natural resource management agencies, is developing a new environmental policy on environmental mitigation and offsetting. The purpose of this project is to develop an effective policy to minimize losses of environmental resources resulting from development projects and activities on provincial Crown land, including within parks and protected areas. This policy is intended to guide government staff in providing consistent advice and information to help development proponents mitigate and/or offset environmental impacts. This project is in the early phases of engagement, and the Policy Development Team is inviting input from affected parties. You can find more information about the policy on the [project webpage](#) and you can [comment here](#).

Policy Proposal on British Columbia's new Water Sustainability Act

You are invited to review and comment as this policy develops. Modernizing the *Water Sustainability Act* is about making water laws simpler to understand, communicate, administer, and enforce to respond to current and future challenges. New information about the four goals that are shaping the Water Act review is now online:

- Protecting stream health and aquatic environments
- Improving water governance arrangements
- Introducing more flexibility and efficiency in the water allocation system
- Regulating ground water use in priority areas and for large withdrawals.

[The policy is online here](#).

BC Ministry of Environment staff will explain key features of the Water Sustainability Act in greater detail on the [Living Water Smart Blog](#).

3. International Wildlife Crossing Infrastructure Design Competition

The finalists have been announced for ARC's competition. The aim of the competition is to engage the best and most innovative international, interdisciplinary design teams—comprised of landscape architects, architects, engineers, ecologists, and other experts—to create the next generation of wildlife

crossing structures for North America's roadways. This competition seeks innovation in feasible, buildable context-sensitive and compelling design solutions for safe, efficient, cost-effective, and ecologically responsive wildlife crossings. In doing so, it hopes to raise international awareness of a need to better reconcile the construction and maintenance of road networks with wildlife movement. [Read the finalists' entries here.](#)

4. Rocky Mountain Trench Ecosystem Restoration Program - New web site and resources section

The Rocky Mountain Trench Ecosystem Restoration Program is a long-term undertaking by a coalition of stakeholders working together to restore fire-maintained grassland and open forest ecosystems in the East Kootenay region of southeastern British Columbia. Restoring grasslands and open forests enhances biodiversity, restores habitat for species at risk, improves grazing for cattle and wildlife, improves forest health and reduces the risk of severe wildfire. Their new website includes an online research library that valuable to anyone with an interest in fire-maintained ecosystems, rangeland and restoration practices in BC. [Visit the new web site here.](#)

5. Best practices for managing invasive plants on roadsides

This is a "pocket guide" designed for the use of BC's road maintenance contractors. It was produced by the Invasive Plant Council of BC, and the BC Ministry of Transportation and Infrastructure in 2010. Download the pocket guide here.

6. FORREX free webinars

Assisted Migration February 22, 2011.

Assisted migration has recently emerged as a relevant climate change adaptation strategy in the context of forest management. This webinar will provide forestry practitioners, researchers and conservation practitioners with increased awareness and access to the latest information on assisted migration as a climate change adaptation strategy in forest management in BC. [More details and registration are here.](#)

Getting Ahead of Climate Change – Guiding the Adaptation of Forest-based Communities in Canada February 24, 2011

Most residents of rural forest-based communities in Canada have experienced slow and steady climate and ecosystem changes as well as extreme weather events such as wildfires, floods or high winds that have put property and lives at risk and disrupted community life. The resilience of individual communities will depend on how they adapt to these climate change events. The webinar will identify tools and approaches to enable leaders, planners and community members in small forest-based communities to incorporate climate change adaptation into their community plans, decision making processes, and day-to-day life. [More details and registration are here.](#)

Carbon Management in British Columbia's Forests March 3, 2011

Carbon management is moving rapidly from concept to practice. Although the science is reasonably well understood, the implications for forest operations are still largely unknown. The webinar will provide an overview of policies affecting forest carbon management in BC, evolving institutional and market rules that need to be in place, some viewpoints of key stakeholders on successes, barriers and suggestions for improvement. [More details and registration are here.](#)

7. Non-Timber Forest Resources

FORREX's recent Journal of Ecosystem Management is a special issue on Non-Timber Forest Resources. Includes a guest editorial by Bruce Fraser, Past Chair of the Forest Practices Board. [Download it from the FORREX website.](#)

8. Conferences

Western Huckleberry Forum

College of the Rockies, Cranbrook, BC
February 22nd (evening) and 23rd, 2011
Registrations are now open.

Huckleberries are a key component of local ecosystems, cultures and economies in communities throughout western North America. With fire suppression and changes in the logging industry huckleberry pickers and natural resource managers have noted declines in the abundance and productivity of the huckleberry throughout its range. Keynote speaker on the evening of February 22 is Dr. Nancy Turner, ethnobotanist. [Speaker list and registration are here.](#)

East Kootenay Regional Science Fair and Science Celebration

College of the Rockies, Cranbrook campus
February 23 - 24, 2011.

Mentor the next generation! Organizers are asking for regional scientists to "demonstrate your science" in an interactive way to the science fair participants. This is an opportunity to show the youth of the region that a lot of science takes place in our region and a good number of jobs are created by science-related businesses and agencies. This isn't a request for a trade fair or job fair-type booth, but rather they want interactive demos and displays of the science activities that are behind your business. [For details, visit the science fair website.](#)

2011 Annual Applied Biology Conference

Vancouver Island Conference Centre, Nanaimo, BC
May 4-7, 2011

This is the annual conference of the Association of Professional Biology of BC. Non-members are welcome. *Rainforest to Reef* will examine prevailing problems, ingenuity and successes of biology professionals working with: fin- and shell-fish aquaculture; fish and water stewardship; sensitive area development; marine habitat management; wildlife habitat management; species at risk; invasive species; and habitat conservation. For more information [read the conference brochure.](#)

Happy 2011 everyone, and please keep sending me your information for inclusion in these updates.

February 3, 2011

1. CMI News

Memberships are due for renewal

Please renew your CMI membership. **Now that we take credit cards online**, it's easy. Just go to the [Join CMI](#) page and fill in the form, and at the bottom choose "pay online". Or if you prefer choose the button for me to send you a PDF invoice.

Here's why you want to renew now - The Directors have decided that it's time to increase our membership

fees. It's been ten years since we did this! But the rates won't go up until the AGM in May, so renew now to keep your membership active at the current rate.

Our **Annual Researchers' Meeting and AGM** will be May 12 in Kimberley this year. Early next week I will put out the Call for Papers, Posters, and Field trips. Non-members are welcome to attend. Many thanks to our meeting sponsors - [Interior Reforestation](#), [Keefer Ecological Services](#), and [Tipi Mountain Native Plants](#). CMI Directors Leigh Anne Isaac and Tara Szkorupa have been setting things up for this meeting. Regarding the **Annual General Meeting** portion of the day, you will hear soon about the call for nominations for Directors, and the vote on increasing registration fees. (We do our voting by email before the meeting, because most members can't make it to the AGM).

We've just opened for registrations for Dr. Carl Schwarz's upcoming stats courses in April in Revelstoke, [Design and Analysis of Mark-recapture Studies](#) and [Trend Analysis and Environmental Impact Assessments](#). There are 16 spots per course and both courses are about 1/3 full already. Please sign up soon if you want to participate.

The Call for Papers for our [Carbon in British Columbia Ecosystems](#) conference (June 15-16 in Nelson) is open until March 31.

2. Work and grant opportunities

Call for Applications – Student Awards for Ornithological Research

<http://www.sco-soc.ca/studentawards.htm>

Applications for the various Student Research Awards offered annually by Bird Studies Canada and the Society of Canadian Ornithologists are due by February 15, 2011. Awards sponsored in whole or in part by BSC include: the James L. Baillie Student Research Award, funded by proceeds of the Baillie Birdathon and the Fred Cooke Student Research Award, offered jointly by BSC and SCO. These awards are open to students conducting ornithological research at a Canadian university.

Science Horizons Youth Internship Program

<http://www.ec.gc.ca/scitech/default.asp?lang=En&n=B58899DC-1>

Science Horizons is a Government of Canada program aimed at advancing research and achievements in the field of environmental science while giving young people the opportunity to develop knowledge, skills and experience that will prepare them for sustainable employment in environment based careers. Through funding and collaborative partnerships with successful applicant organizations, Science Horizons and these organizations offer promising young, post-secondary graduates hands-on experience working on environmental projects lasting from 6 months to 1 year. During these projects, they are guided under the mentorship of experienced scientists and program managers. Up to a maximum of \$12,000 in Science Horizons funding is available for each approved project. The website explains how both employers and interns can apply. Deadline is February 28.

Request for Proposals: Know Your Watershed - Phase 2 Delivery

http://portal.cbt.org/uploads/careers/Final_KYW_Phase_2_RFP_CBTWAT05.pdf

In 2010 Columbia Basin Trust launched a regionally-based water stewardship education initiative called Know Your Watershed. This hands-on, experiential learning opportunity is offered free to grade 8 science classes in the CBT area and features two classroom sessions and a full-day field trip. CBT has issued a Request for Proposals for delivery of Know Your Watershed to 12 schools in 2011. This opportunity will be of interest to educators with an interest in water-based curriculum and experience in managing a project of this scope. For information visit the above website or contact Charlene Desrochers Assistant, Water Initiatives, cdesrochers@cbt.org Phone: 1 250 344 2911 Toll free: 1 800 505 8998. Deadline: February 25, 2011

3. Resources

Biodiversity Atlas Update now online

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

A new version of the Columbia River Basin Biodiversity Atlas has just launched. It includes GIS- and text-based information on 32 species of management concern, three ecosystems and three "influences" (including the latest information for conservation properties in the region). The Atlas is managed by [Selkirk College's Geospatial Research Centre](#) in partnership with major funders including the Fish & Wildlife Compensation Program, Columbia Basin Trust, The Nature Trust and a multi-stakeholder steering committee. For more information, or to explore data sharing or partnership opportunities, contact Ian Parfitt, Coordinator, at info@biodiversityatlas.org or 250-304-6524.

State of British Columbia's Forests (Third edition) now available

http://www.for.gov.bc.ca/hfp/sof/2010/SOF_2010_Web.pdf

This document is the sustainable forest management report for British Columbia. Detailed information and assessments are provided for 91 indicators, grouped into 24 topic areas. The purpose of the report is two-fold: 1) to provide information on the condition of British Columbia's forest and range resources, and the environmental, social, and economic values associated with these resources; and 2) to provide an assessment of that information.

A New Climate for Conservation: Nature, Carbon and Climate Change in British Columbia

http://www.davidsuzuki.org/publications/downloads/2010/NewClimate_report_DSf.pdf

This document explores the role of nature conservation in a climate action strategy for ecological adaptation (Part 1) and ecological mitigation (Part 2), with the key recommendation to develop a comprehensive and integrated Nature Conservation and Climate Action Strategy for the Province of British Columbia (Part 3). This report was commissioned by the Working Group on Biodiversity, Forests and Climate, an alliance of ENGOs including: B.C. Spaces for Nature, Canadian Parks and Wilderness Society, David Suzuki Foundation, ForestEthics, Land Trust Alliance of B.C., West Coast Environmental Law, and Yellowstone to Yukon Conservation Initiative. Forest Ecologist Dr. Jim Pojar, who prepared the report, has extensive professional experience in applied conservation biology, forest ecology, sustainable forest management, ecological land classification, and conservation, with a wealth of field experience throughout British Columbia.

Free Conservation Biology text book

<http://www.conbio.org/publications/consbioforall/aConservation%20Biology%20for%20All%20reduced%20size.pdf>

Sodhi, N. S. and P. R. Ehrlich (Eds.) Conservation Biology for All. Oxford University Press (2010)
In support of this year being the International Year for Biodiversity, Oxford University Press made a Conservation Biology textbook available. This is a 350 pp book (6.4 MB) and it's free.

4. And two more items...

Winner chosen for International Wildlife Crossing Infrastructure Design Competition

<http://www.arc-competition.com/finalists.php>

Those of you who are following this competition will want to know that the winning submission was: HNTB with Michael Van Valkenburgh & Associates with Applied Ecological Services, Inc. View their submission [here](#). Their entry was unanimously chosen by a jury of five leading experts in landscape architecture, engineering, transportation and ecology for their use of ordinary materials, such as concrete, in an extraordinary way. HNTB and MVVA's design is cost effective, modular, easy to construct, provides greater material control, and uses a unique built-in drainage system. Estimates suggest the crossing can be built for roughly half, on a cost per unit basis, of the current cost to build the structures that are in Banff National Park.

Notice of Public Consultation in March 2011 for the BC Hydro Integrated Resource Plan

http://www.bchydro.com/planning_regulatory/irp.html

BC Hydro is inviting the public, First Nations, and stakeholders to participate in the upcoming consultation on development of its Integrated Resource Plan. They want to hear from you about setting the course for a clean energy future. While British Columbians are doing more than ever to conserve electricity, B.C.'s overall electricity use is expected to continue to increase as a result of projected population growth and increased demand in the industrial sector. Public, First Nations, and stakeholder consultation is being undertaken from March 1 to April 30, 2011, to gather input on development of the draft Integrated Resource Plan. You can attend one of the meetings around the province or review and comment on-line.