

BCLSS Newsletter

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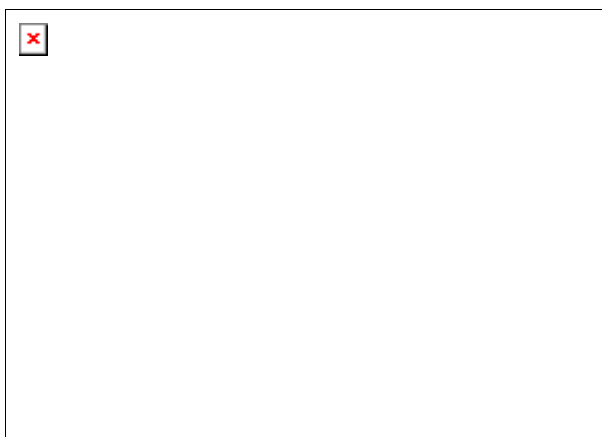
"Furthering Lake Stewardship Through Communication and Education"

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Lionel Dallas of Osoyoos Lake Recieves NALMS Award

Seen receiving award below (second from left) Lionel Dallas was presented a North American Lake Management Society "Award of Technical Excellence in Volunteer Lake Monitoring, Management and Protection" by BC Lake Stewardship Society President Michelle Boshard on December 5th. Boshard received the award on Dallas' behalf at the annual NALMS conference in Miami, Florida to bring it home for Dallas. Also in the picture: far left: Jim Bryan (MELP Pollution Prevention), second from right: Michelle Boshard, and far right: Sage Karras (BCLSS Coordinator). Lionel has been involved in water quality monitoring of Osoyoos Lake for over 10 years, and was a key supporter of the formation of the BC Lake Stewardship Society. The OLVQS has done extensive water quality monitoring, produced and printed a booklet on non-point source pollution for their town, and answer calls from concerned citizens regarding the lake. Also on hand at the presentation was the Mayor of Osoyoos, members of the Regional District Board and fellow OLVQS Members.



Okanagan Lake Foreshore Habitat Protection Project

The BC Lake Stewardship Society has recently put in funding applications to EcoAction 2000, Fisheries Renewal, and Wildlife Habitat Canada to start up a three year program that will educate Okanagan

lakeshore residents about their foreshore habitat impacts, provide them with free home assessments, map current lakeshore habitat and promote conservation and lake-sensitive living. On December 13th, BCLSS received notification from Minister David Anderson's office of Environment Canada that our EcoAction2000 proposal was approved for just over \$68,000. BCLSS has not yet heard back from Fisheries Renewal, HCTF or WHC. The landowner education and habitat-mapping project will occur on all properties around the entire 270 km shoreline of Okanagan Lake in the Okanagan Valley. The first year of this program will focus on the central portion of the lake's shore, due to high population densities. The subsequent years will see completion of the project on the northern and southern ends of the lake. Landowners would be educated on information such as habitat and water quality impacts caused by personal property/household use, current water and fisheries legislation, long-term habitat conservation and protection options, and ongoing stewardship and management initiatives. The money received will go towards hiring a project coordinator and Landowner Contact Agents for the education and mapping portions of the project, which are predicted to reduce the actual pressure that humans put on the lake. Some of the factors in the lake that to be measured over time are water quality variables, reduction in various pollutants to the lake, an increase in shore-spawning Kokanee population, and the amount of improved fish spawning habitat. BCLSS has major partners in this project, which is hoped to develop an easy-to-use template for conducting this project on other lakes around BC. The Living by Water Project will be training BCLSS staff on homesite assessments and providing their Shoreline Ambassador and Pledge program information, while the Land Conservancy will be working with any landowners who might wish to pursue conservation agreements. The Okanagan Nation Fisheries Commission will assist BCLSS in working with leaseholders and lakeshore owners on Indian Reserve around the lake, and the City of Kelowna and Central Okanagan Regional District are supporting the project with staff time and mailing costs. Information collection during the project will be guided by the Ministry of Environment and other government agencies, and will assist in future management of the lake. This project strategically compliments the Ministry of Environments "Okanagan Lake Action Plan" focused on bringing back declining Kokanee populations.

What's Happening Around BC Lakes

KATHLYN LAKE

Linda Matthews, Ian Sharpe and Remi Odense recently collected sediment cores from Kathlyn Lake for dating and diatom analysis. Ian wrote: Lake Kathlyn yielded 3 nice, but short cores on Friday October 27 2000. Unlike Tyhee Lake, the substrate was consolidated at a shallow depth of about 10 - 15 cm. Their cores ranged from 18 - 27 cm in depth. They are sending the longest one to Queens for diatom / Pb210 analysis, so they can get an indication of the relative influences of natural and land use caused nutrient inputs to the lake. They also obtained 3 samples of recently deposited glacial silt from Club Creek (tributary to the lake), to see if this material is high in P or not. This is important, since the creek has recently been re-routed to provide a mid-summer fresh water source to the lake. It is hoped that this, plus Elodea harvesting (2000 truckloads over last 4 years) will slow the rate of eutrophication. They also lucked into "fall turnover, and will be doing chemistry on a water column profile in the next day or 2, to compare with WQ objectives for nutrients.

SUTHERLAND CREEK RESTORATION PROJECT

The Christina Lake Stewardship Society, in partnership with the Turtle Island Earth Stewardship successfully applied for funding from the Okanagan-Similkameen- Boundary Fisheries Partnership for the Sutherland Creek Fish Habitat Restoration Project for the field-planning portion of the project. The Okanagan-Similkameen-Boundary Fisheries Partnership is Fisheries Renewal BC's delivery agent for the Salmonid Renewal Project in the Okanagan-Similkameen-Boundary region. The Christina Lake Stewardship Society has hired Aquatic Resources Ltd. to produce the restoration plan (prescription). The Christina Lake Stewardship Society would like to thank the many creekside landowners and organizations that submitted letters of support for this project. We will keep everyone informed on the

progress of this restoration project as information becomes available.

If you have any questions regarding the Sutherland Creek Restoration Project, please contact Brenda LaCroix at 250-447-9001 or by email: blacroy@yahoo.com

E-Team Intern Studies Sport Fishing Impact Oct. 30, 2000

BURNS LAKE - An Environment Youth Team intern is working on a fish management project with the Tchesinkut Watershed Protection Society, the Regional District of Bulkley Nechako and the Ministry of Environment, Lands and Parks, Bulkley Valley-Stikine MLA Bill Goodacre said today.

Linda Matthews is interviewing sport fishers, collecting data and educating the public. She is learning to identify different fish species, maintain a database and give presentations. A second intern, Peter Hall, will monitor ice fishing starting in November. "Linda is working to ensure a healthy population of lake trout remains in Tchesinkut Lake," said Goodacre. "At the same time she is gaining skills and work experience that will be invaluable as she builds her career."

The E-Team is a \$9.25-million Youth Options BC jobs program delivered by the Ministry of Environment, Lands and Parks and directed at youth aged 16 to 24. The program has three components: interns, work crews and Eco-ed. E-Team projects must have an environmental or outdoor recreation focus, and 20 per cent of project time must be dedicated to training and developing skills for future employment.

"Through the E-Team, the provincial government forms partnerships to create jobs," said Goodacre.

"The youth who are hired gain experience while they do work that benefits the environment."

"I was in a well paid job at the mill, but it's not what I wanted to be doing," said Matthews, a university graduate who plans to return to college to become a conservation officer. "I think the big thing I've got out of the E-Team is I wasn't that interested in fish before. Before I only wanted to be a conservation officer. Now I think I could be a fisheries officer."

All positions are posted at local Human Resources Canada centers and the Youth Options BC Web site at <http://www.youth.gov.bc.ca> on the Internet. Candidates are drawn from local youth, including traditionally disadvantaged groups. Youth Options BC gives young British Columbians education, skills training and work experience. Other Youth Options BC programs provide young people with assistance starting their own business, tuition credits for community service work, and help looking for their first job.

For more information on the E-Teams or other Youth Options BC programs, please call 1-877-BC-YOUTH or visit the Youth Office Web site at <http://www.youth.gov.bc.ca> on the Internet.

Contact: Ian Sharpe Ben Finkelstein (250)847-7260 (250) 356-7211

BCLSS Internal Affairs

Spring Elections:

BCLSS will, as always, be looking for nominations to the Board. This year, though, we will also be looking for nominations for President, as Michelle Boshard (founding president) will be stepping down. Boshard has indicated she will remain on the Board, but has been elected to the NALMS Board to represent Western Canada and cannot do both. Boshard hopes to address "Canadian Content" issues in NALMS.

Are you or someone you know interested in being on the BCLSS Board? The requirements for the two-year Directorships are keen interest in lakes, keeping in regular touch (and learning about) your local lake groups and participating in one of our four new committees. If you are interested in nominating someone or putting your name forward, please contact Chris Maundrell (Northern BC Director and Nominating Committee Chair) at (250) 785-0632 or email the BCLSS at bclss@hotmail.com.

Spring Conferences:

The BCLSS upcoming 2001 spring conference will be held in Williams Lake. Watch for details in newsletters to come!

Committees:

The BCLSS Board has now developed committees to more effectively deal with issues. Please contact the following people with concerns relating to their issues:

Business and Membership Committee: Chair, Chris Maundrell. (250) 785-0632

Conference and Events Committee: Chair, Lisa Westenhoffer. (250) 847-7304

LakeKeepers Program Committee Chair, Rick Nordin. (250) 387 9517

Special Projects Committee (OK Lake Project) Chair, Niki Paille. (250) 377-7647

You can also reach these people by emailing us at bclss@hotmail.com.

National Water Crisis Forecast

By Andrew Nikiforuk

Calgary -- Pollution, habitat destruction and climate warming will compromise Canada's freshwater supplies so dramatically in the next 50 years that freshwater fisheries could disappear and drinking-water supplies will be in a state of crisis, warns one of the world's leading water experts. Without increased funding for freshwater research and a national water strategy, fresh water will become Canada's foremost ecological crisis early in the 21st century, says University of Alberta water ecologist David Schindler.

In a highly damning and frank science paper that will be published this fall in the Canadian Journal of Fisheries and Aquatic Sciences, Dr. Schindler squarely blames Canada's "cavalier attitude" toward water on government cutbacks and "the tiresome, juvenile turf war" between federal and provincial politicians for the relentless decline of the nation's water supplies.

According to Dr. Schindler, that steady decline has been accelerated by a warming trend that will not only affect availability of water but will seriously disrupt river flows. Dr. Schindler, one of Canada's most respected scientists, has impeccable credentials and a reputation for highlighting serious environmental problems with straight talk. His research on acid rain and the lake-killing properties of phosphates in the 1970s and 1980s helped write environmental legislation around the world and received the equivalent of two Nobel Prizes from Swedish foundations. In his most recent study, the 59-year-old ecologist predicts that the combined effect of climate change, acid rain, human and livestock wastes, increased ultraviolet radiation, airborne toxins and biological invaders will result in the degradation of Canadian freshwater on a scale hitherto unimaginable.

John Smol, a prominent freshwater scientist at Queen's University who reviewed the study, says Dr. Schindler hits the nail on the head. "People don't appreciate the impact of multiple stressors on our water supply and we have a history of underestimating problems. And when you put all these things together, nasty things tend to happen," he said.

In an interview with The Globe and Mail, Dr. Schindler said that, "People tend to think that the documented rise in temperature of one to two degrees across the country isn't a problem. What they don't realize is that this rise over a prolonged period can be very dramatic." His study outlines just how warming temperatures can diminish water quality and quantity even in a nation boasting 10 per cent of the Earth's fresh water. Recent warm spells have caused glaciers to thin and recede in the Rockies, the source of most of Western Canada's drinking water. Further recessions may jeopardize Prairie water supplies, he argues. Rising temperatures also enhance evaporation. In fact, the evaporation rate for many

Ontario lakes has increased by 30 per cent in recent years. Even shipping has been affected by falling water levels in the Great Lakes. Wetlands are particularly vulnerable to rising evaporation rates and Dr. Schindler predicts that many lakes on the Prairies will disappear as they did during a warm period 4,000 to 6,000 years ago.

These trends, in turn, will lower the ability of freshwater lakes and rivers to dilute animal waste, pathogens and toxins. Warmer waters will also displace cold-loving fish such as lake trout. Pollution, habitat destruction, over fishing and climate warming have all played a role in almost wiping out sports fishing across southern Canada. Some studies now indicate that the number of species going extinct in freshwater lakes and rivers is almost equal to the number of extinction's quieting tropical forests. Climate warming also helps to spread non-native species such as zebra mussels. Many scientists believe these biological invaders have already turned the Great Lakes into a "fish zoo."

All of these events are occurring at a time when funding for Canadian freshwater research, once the envy of the world, has reached all-time lows due to federal and provincial cutbacks. "Water quality has become another casualty of federalism," Dr. Schindler explained. "Outside of the Great Lakes, there is little federal involvement on water quality." And the provinces just aren't picking up the slack, he said. "The question must be asked 'What agencies today [are doing] science to protect the public interest?'"

Ontario's Dorset laboratory, once a world leader in acid-rain research, has been so severely cut that it can't even afford to have someone answer the phone. "Politicians have hidden the critical nature of these cuts behind the standard caricature of lazy, overpaid and under worked civil servants, causing the public to shout 'hooray,' without questioning what might be lost," Dr. Schindler writes. "I personally find the lazy civil servant image to be infuriating, for many government scientists are among the hardest working individuals in society."

From the Globe and Mail

Biogeoclimatic Ecosystem Classification

The following is a link to the new Biogeoclimatic Ecosystem Classification (BEC) web site: <http://www.for.gov.bc.ca/research/becweb/becinfo/>. This comprehensive source of information about BEC includes: how the system works, applications, codes, maps, projects, publications, software, staff, and related links. The site will be updated on a regular basis, so check often for new information and components.

For those of you who need a handy reference to valid BEC codes, check out BECdb at: <http://www.for.gov.bc.ca/research/becweb/becinfo/standards-becdb.htm> This Access 97 database contains up-to-date, valid codes and names for Zone, Subzone, Variant, Phase, Site Series and Site Series Phase, by Ministry of Forests Region.

Things Going on Around BC

WANTED: 1,000 KM OF SHORELINE PROTECTED OR RESTORED BY 2005!

Let's work together to reach this goal. The Living By Water Project will help you motivate individuals and groups across the province to improve the health of shorelines in BC. Through the Shoreline Conservation Pledge Program, individual waterfront residents and concerned citizens are asked to make a personal commitment of their own time and energy to help protect and restore shorelines. Their model form is easy to use and helps people identify specific actions they can undertake in their homes or on their shoreline properties. People can mail or fax them the completed forms or make an online pledge at www.livingbywater.ca/Pledge_Form.htm. You can distribute pledge forms at events or through your

other outreach programs.

SHORELINE AMBASSADOR PROGRAM

For those working with people whom live, work or play by water - The Living By Water Project invites you to participate in the Shoreline Ambassador Program. Whether you use it to supplement current activities or to launch future initiatives, the program will help you reward the achievements of individuals of all ages, and motivate people to action. Together with the Shoreline Conservation Pledge, the program provides a framework for gathering baseline information to monitor and evaluate the number of pledges made and the meters of shoreline protected, conserved and restored across Canada.

COMOX CONFERENCE IN MAY

The popular bi-annual workshop for Pacific Streamkeepers, Fish Enhancement Volunteers and Watershed Stewards will be held in the Comox Valley May 11-13, 2001!

Although those dates sounds a long way away, a dynamic steering committee has begun the planning for a fun weekend-long gathering of folks from across the Pacific Northwest who are working on projects to sustain salmon populations and watershed health.

Community Workshop 2001 is being coordinated by Project Watershed and Chris Bruels is Coordinator. Volunteers Stewart Duncan, Gord Tooker, Michele Jones, Jack Minard, Judy Ackinlose, Heather Johnstone, Jitka Petruzek, Don Chamberlain and Shirley Jorgensen are involved as Steering Committee members and Bryan Allen, DFO Community Advisor is contributing his vast experience within this community and with conferences that have been held previously in other regions.

We welcome your participation too! Right now we are seeking volunteer participation on several sub-committees. These include Workshop Selection, Fundraising, Program Workbook, Site Tours, and Entertainment. Please call Chris at 339-1619 and she will connect you with the committee member who is coordinating that area. If you have a specific task that you would like to do but don't want to be involved with a committee, also call and we will happily fit you in.

Following the tradition of "local open houses" arranged in the surrounding area of the Workshop, we want you to think about the projects you might want to see featured to the rest of the province and let us know. Of course, we invite you to attend the workshop itself as well, and more detail about how to register will be forthcoming. There is so much great work in the Comox Valley to boast about, this is our opportunity to shine!

Looking forward to great community involvement to create a remarkable weekend.

Chris Bruels Comox Valley Project Watershed Society

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Mail: Box 3007 Courtenay, BC V9N 5N3 Ph: 250-339-1619 Fax: 250-339-9619 Office: 156 Manor Dr. Comox

### **Canada Breaks Vow to Save Species: Biologist**

The Ottawa Citizen, Wed 06 Dec 2000, Tom Spears

One of three finalists for Canada's richest science prize, the \$1-million Gerhard Herzberg Canada Gold Medal, says the Endangered Species List has grown 40 per cent longer since Canada signed an international promise to protect these species. Biologist David Schindler of the University of Alberta says freshwater fish, frogs and the water creatures they eat are the hardest hit. And he says it's time for Canada to enact a federal law protecting endangered species, something the Liberal government has

promised since 1993 but not yet done. Mr. Schindler is best known for his studies adding pollutants to whole lakes in northwestern Ontario, where he proved that pollutants -- acid rain, pesticides and phosphate in detergents -- really do kill lakes. Though accepted today without question, these ideas met stiff resistance until his work in this Experimental Lakes Area. He joins University of Ottawa chemist Howard Alper and York's David Regan as finalists for the Herzberg medal, to be awarded tomorrow at Rideau Hall. Now he says in a paper that Canada has failed to act on its 1992 promise to protect "biodiversity", made at the famous Earth Summit in Rio de Janeiro. "Since the Rio Convention of 1992, the number of 'species at risk'; in Canada has increased by nearly 34 per cent," he writes in his paper, "The Urgent Need for Endangered Species Legislation in Canada." And he noted yesterday in an interview that the list has grown again: This week the federal-provincial committee that draws it up added 11 new species, bringing the total to 364 plants and animals. "Canada always likes to present the image that it is doing better than other countries at protecting the environment," Mr. Schindler's paper says. But he points to an "erosion of environmental protection:" since the 1970s, with cuts in science research funds and a "conspiracy of silence" as cabinet ministers ignore the problems. Waterways are under special stresses, he writes: Dams, sediments, industrial waste dumping and draining wetlands are all to blame. "For various freshwater groups, from 21 to 49 per cent of species are 'at risk' on this continent," he wrote. "In Canada, over 70 per cent of temperate wetlands have been destroyed. It is a wonder that we have not lost more species, based on our blatant disregard for protecting freshwaters."

Three times since 1995 the Liberals have launched an endangered species act that hasn't passed, he notes. Twice (including this fall) a bill has died because of a general election. He says it's time now for the Liberal to tackle the problem, especially by preserving the habitat of endangered creatures. And he criticized scientists as well: "As a group, we (ecologists) are a rather curious lot. A high proportion insists that doing 'pure' science is the only scientifically worthwhile approach, and simply don't think it's worth dirtying their hands with 'management' problems. "I doubt whether we have time for pure science to fumble its way to solving endangered species and other pressing environmental problems." Scientists who wait for final and absolute proof of every detail will lose the battle, he says. "The intuition of experienced ecologists is likely to be the best that we can get, when problems beyond the understanding of science occur." Mr. Schindler concludes his call for federal action. The Herzberg prize comes from the Natural Sciences and Engineering Research Council (NSERC), the federal funding body for scientists. It takes the form of a guarantee to top up a researcher's existing NSERC research grants to a minimum of \$1 million.

### **Got Questions or News?**

The BCLSS is a place where our members can exchange information, ideas and experiences. We need to hear what's going on in the lake in your corner of the world, and encourage you to send us your information!! The BCLSS also wants to help your group with questions you may have about your lake. If you are considering forming a group, the BCLSS can make that task a little easier by providing your with information on what lake stewardship is, what to consider in forming a group, and how to get things going.

### **Membership Renewal**

It is that time of year again when memberships come due. The BC Lake Stewardship memberships expire on December 31, 2000 and are renewable for January 1, 2001. If you have been a past member of the BCLSS, we encourage you to come back again. If you have not been a member of the BCLSS, we encourage you, your group or organization to become a member of our society. You can find a membership form on the back of one of the brochures enclosed with this newsletter. You can also print a membership form from our website at [www.nalms.org/bclss](http://www.nalms.org/bclss) and go to the 'Membership' link at the top of the page.