

BCLSS Newsletter

Volume 4, Issue 1

"Furthering Lake Stewardship Through Communication and Education"

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Okanagan Lake Groupn Advances

On February 1, a small and enthusiastic group met and marked the beginnings of an Okanagan Lake Stewardship Group. Vic Jensen, Ministry of Environment, Lands and Parks, presented a historical overview of Okanagan Lake's water quality. Lionel Dallas, from Osoyoos Lake Water Quality Society, presented the group with a number of successful water stewardship programs and activities that could be easily initiated by the Okanagan Lake Stewardship Group.

Although the numbers were low, the energy was high and the group is in the process of holding a steering committee meeting on February 15, 2001. The steering committee will be working to identify problems, as well as solutions. This will be achieved through increasing public involvement in the decision-making processes that affects Okanagan Lake, as well as through a number of stewardship objectives.

If the Okanagan Lake Stewardship Group is to apply for funding for the coming year it must form a society. Funding would allow them to plan and implement various stewardship projects designed to restore the lake and increase our appreciation of it. Applying to become a Society will be one of the steering committees main goals.

The group hopes to eventually have people representing communities from around the lake. Anyone who is interested in participating on the steering committee or if you want to get involved in future activities, contact:

Tara Tompkins @ 712-1084 or

Heidi Bennett @ 717-1850

E-mail okanag-@yahoo.com.

Web Sites about Recreational Impacts on Fish

Thanks to Fred Lockwood for forwarding sites about recreational impacts on fish!! He also stated the following in an email: "I know that BC Parks in co-operation with DFO and MOELP shut down power boats on the upper Bowron River due to Salmon being disturbed on their redds. I would check with BC Parks particularly Bowron Lake Park Provincial Park, Williams

Lake MOELP and Quesnel DFO. I will check within DFO to see what I can find out. I do know that a lot of people have personal observations of Salmon moving off their redds or not moving up the river because of human activity instream.

<http://research.nols.edu/PDFdocs/AKworkshop.1997.pdf>

<http://www.state.ak.us/adfg/habitat/geninfo/webpage/liepitz.htm>

<http://es.epa.gov/oeca/ofa/cumula.html>

http://www.bcdc.ca.gov/ftppdf/BPA_5-00/APPENDIX_D.pdf see p.29

<http://www.racerocks.com/pearson/racerock/rreo/tourism/louise.htm>

<http://www.who.edu/coastalresearch/boatingimpact/Appendices.pdf> this site is a Bibliography site with lots of references

<http://galveston.ssp.nmfs.gov/efh/FINALEFH.PDF> p.138 marine impacts due to boating

<http://galveston.ssp.nmfs.gov/efh/FINALEFH.PDF> again this is mostly dealing with coastal uses, but has useful info

<http://www.wilderness.net/pubs/183.pdf>

Study: Grazing Strategies Can Ease Riparian Area Impacts

Results from a five-year study offer strong evidence that improved cattle distribution and resulting uniformity of forage use could aid ranchers and land managers in creating grazing plans compatible with healthy riparian areas, according to Tim DelCurto, an Oregon State University range beef cattle scientist.

DelCurto heads an interdisciplinary team of scientists from two Pacific Northwest universities and the U.S. Forest Service who are studying the impacts of managed livestock grazing during summer months on stream ecosystems in eastern Oregon. The study is located at the OSU Eastern Oregon Agricultural Research Center's Hall Ranch east of Union.

The Hall Ranch is bordered by Catherine Creek and one of its tributaries, Milk Creek, which hold Endangered Species Act listed chinook salmon, steelhead and bull trout. Regional recovery efforts, new and old, have made it an emphasis to improve water quality and riparian conditions for listed fish.

"We actually have one of the heaviest densities of chinook salmon spawning in the Grande Ronde Basin," DelCurto said the ranch's Catherine Creek reach.

Fencing off riparian areas, or eliminating grazing, may not always be the answer to protect water quality and fish habitat, DelCurto said.

"It may provide a solution for one problem and create other problems," DelCurto said of fencing off riparian areas. It may limit multiple uses of property, cutting off access for other wildlife and recreationists and limiting agricultural productivity.

One of the study's goals is to identify management actions or tools that can "relieve pressure on riparian areas," DelCurto said, as well as make better use of livestock edibles elsewhere.

"There are certain riparian areas that would be difficult, at best, to have grazing," DelCurto said. Areas with extremely steep slopes make it more difficult to lure cattle away from stream bottoms. And in many instances the upland forage "doesn't compare well with the riparian

forage" so livestock remain focused on the streamside vegetation. That problem becomes particularly acute in the late summer when the upland forage tends to dry up and become less palatable.

The study indicates that it is much easier to achieve uniform distribution of the grazing livestock early in the season. DelCurto said that the cattle actually seem to prefer the upslope vegetation, when it is still lush, to riparian fodder.

"The flip side is that in late season the upslope vegetation is gone, and that's a problem," DelCurto said.

"Over the last few years the research team has focused on mapping livestock distribution in a grazing area that includes a stream in order to find out where cattle migrate in the area during the day," DelCurto said.

The team found that cattle tend to graze in areas a good distance away from the stream during the early morning hours. The cattle then search for water in late morning and finally seek shade, or graze less intensively during hot afternoon hours. Also, cattle tended to spend the afternoon in the same areas as they drank, then move away from the water source in the evening, according to an OSU press release.

The researchers assessed strategies for improving livestock distribution by luring cattle away from streams, DelCurto said.

"We found that providing sources of water (called off-stream water) and salt in grazing areas will draw cattle away from a stream, usually in the afternoon hours," he said.

In the study, the distribution of cattle that had the stream as the only water source was compared to the distribution of cattle with access to off-stream water and salt. Cattle with the stream as the only water source were, on average, 150-200 feet away from the stream from 3 to 9 p.m. Cattle in the off-stream water group tended to be, on average, 350-400 feet away from the stream from 3 to 9 p.m.

"This isn't necessarily a new finding," said DelCurto. "We've known for years that providing off-stream water and salt draws cattle away from streams as they graze.

"The difference here is that we're quantifying what the cattle actually do as they graze, how far they go from the stream and how long they stay away," he said. "Careful, accurate measurement of these behaviors hasn't been done before."

This type of carefully detailed research is important, DelCurto continued, because livestock managers have always said "this or that grazing strategy works."

"The response from critics has been, 'how do you know it works'," DelCurto said. "What's lacking in the debate is hard data and that's what we're generating with the study."

Research team members are Mike McInnis, range scientist, and John Tanaka, range economist, Oregon State University; Patrick Momont, beef cattle nutritionist, and Neal Rimbey,

range economist, University of Idaho; and James McIver, forestry specialist, USDA Forest Service.

The study also focused on timing of grazing and biological indicators in and near the riparian zone.

"Timing of grazing is a measurement of grazing time versus resting time along with consideration of where cattle move as they graze on a day-to-day and seasonal basis," DelCurto said. "This information will help our understanding of what cattle do, depending on time of season and weather conditions, when a stream or creek lies within their grazing range."

The study of biological indicators includes what DelCurto calls "green line stability," or the condition of stream banks. In the study researchers classified stream banks as covered (with vegetation) and stable (not broken down by the weight of livestock trampling); or uncovered (vegetation removed by grazing) and unstable (broken down by trampling).

Researchers compared a non-grazed control area with grazing areas where cattle had access to off-stream water sources and grazing areas with a stream as the only source of water for cattle. The research team found that the amount of uncovered/unstable streambank increased due to grazing in both experimental treatments, but increased less (3.5 percent) in grazing areas with off-stream water. Uncovered/unstable streambank increased 8.6 percent in grazing areas with a stream as the only water source.

"Our research results support the conclusion that streams in grazing areas with off-stream water and salt have better stream bank stability and retain more vegetative cover than streams in grazing areas with no off-stream water or salt," said DelCurto. "This finding supports the contention that application of strategies to improve livestock distribution can reduce livestock impacts on riparian areas."

Over the previous four years, this research received funding from the Environmental Protection Agency Agriculture in Concert with the Environment program, the Blue Mountain Natural Resource Institute, and the U.S. Department of Agriculture Sustainable Agriculture Research and Education program.

Current research is focused on animal factors, such as age, lactation, stage of lactation and breed, that may influence distribution patterns and resource use, DelCurto said.

Taken from:
THE COLUMBIA BASIN BULLETIN:
Weekly Fish and Wildlife News
Jan. 26, 2001

What You Can Do

"It's not easy being green. . . "

But it's easier now thanks to a website recently launched by Environment Canada's Outreach

Programs, which provides information to help individuals and groups from across Canada meet the challenge of adopting more sustainable practices.

Check out What You Can Do: Down to Earth Choices for Sustainable Living at www.ec.gc.ca/eco/main_e.htm to find tools and information for groups and individuals who are starting to get involved in environmental issues within their communities. Formerly known as the Millennium Eco-Communities site, the new name and a new layout reflect feedback we've received from users of the site. The website is featured in this week's EnviroZine (www.ec.gc.ca/EnviroZine).

If you have comments or ideas for information or new features you'd like to suggest for the site, we'd like to hear from you: eco@ec.gc.ca or call Katherine Bembem at (819) 994-6461. We encourage you to visit the site often, as new features will be added regularly.

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.

Events and Dates to Remember...

March 17th - Cranbrook

Project WET (Water Education for Teachers) is an international water science and education program for educators of students in grades K-12 that is sponsored by contributions from diverse public and private organizations. The goal of Project WET is to facilitate and promote the awareness, appreciation, knowledge and stewardship of water resources through the development and dissemination of classroom-ready teaching aids and the establishment of state and internationally sponsored Project WET programs.

A date for the program is booked for Cranbrook March 17th 9:00 am to 4:00 pm at the St Mary Band Hall (on mission road across from the new golf course). The cost is \$30 per person.

To register or get more information call 1-800-387-9853

Website: <http://www.nalms.org/bclss/www.env.gov.bc.ca/hctf/wild.htm> E-mail: wild@gems5.gov.bc.ca

April 5 - 7 - Spokane, WA

The Washington Chapter of NALMS is hosting a conference scheduled for April 5 - 7 at the Shilo Inn in Spokane, WA. Also, on Wednesday the 4th there is a Hydrolab calibration workshop, which is free and sponsored by Electronic Data Solutions (208-324-8006,

lecdata@elecdata, com). Thursday and Friday will feature some keynote talks by some of the big names in lake research and concurrent sessions on a range of topics. Saturday is the lake association sessions, which Dave Lamb will be chairing.

The registration brochures apparently went to the printer Feb 1 so BCLSS should receive one soon. If you are interested, contact BCLSS and we will forward registration info via email. The full conference registration fee is \$100 and there is no charge for the Saturday sessions.

June 2 - 3 - Williams Lake

The BC Lake Stewardship Society will be hosting its Northern annual conference at Chimney Lake on June 2nd and 3rd. This years theme is 'Partnerships for Quality Lakes'. The first day will consist of presentations and the second day will be a workshop. More information will be provided in the following newsletter as well as on the web page in the near future, which will also include attendance forms. If you have any questions, email bclss@hotmail.com.