

The Outlet



A publication of the Montana Chapter American Fisheries Society

January 2011

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President's Corner

Todd Koel, President MCAFS

Wildlife began moving very early this season with all the driving snow and wind north of Yellowstone National Park. One migration route funnels animals down Little Trail Creek and onto a bench that my family and I live on, five miles north of Gardiner. As I walk out each morning to throw hay to my horses and see all this play out, it occurs to me – I am quite happy to be a *fisheries* biologist in Montana!

While elk wade through snowdrifts, the lake trout of Yellowstone Lake are locked under ice, having their way with what remains of our native cutthroat trout. Despite our best efforts, these nonnative predators have the advantage during more than half of each year – the freedom to roam and feed in a net-free lake with what may be some of the best lake trout habitat on the planet. The remote and pristine setting of Yellowstone Lake, rich with geothermal inputs, provided security for the cutthroat trout as they evolved over thousands of years. Now, these same characteristics present significant scientific and logistical hurdles for the biologists tasked with saving them. In retrospect, perhaps the issues surrounding fisheries in Montana are no less challenging than those of wildlife or other resource disciplines. From aquatic invasive species such as lake trout and zebra mussels to grizzly bear and wolf management, all tasked with managing and conserving our natural resources face evolving challenges on a daily basis.

As fisheries professionals in Montana, how will we work through the complex ecological, political, and socio-economic puzzles that lie ahead of us? Perhaps we all need to make a daily and conscious attempt to think a bit broader? Our President-Elect and Chair, Craig Barfoot, has presented us in this regard with a challenge to “*Save all the Pieces in an Altered Fishscape...*” when we meet this February for the 44th Annual Meeting of the Montana Chapter of the American



President's Corner, continued

Fisheries Society (MCAFS) in Great Falls. Craig has arranged for our meeting at a large, capable venue with unique, provocative plenary speakers. The food, drink, and social time will no doubt exceed expectations – it looks to be a productive and highly thought-provoking meeting.

EXCOM's only worry is over the potential for the meeting to turn fist-to-cuffs.

American society loves reality television, right? So, let's face our reality - we are incredibly passionate about our work. Whether it's providing productive sport fisheries, restoring native species, maintaining biodiversity and natural processes, or managing for the best habitats, water quality, and overall health possible, we are deeply devoted to our professional niches. Yet when someone stands up and suggests that a change in your work is necessary for the greater good, how do you respond?

I have witnessed people face intense resistance when bringing up new ideas or suggesting change at fisheries meetings in Montana. This is unfortunate because adequately addressing the many challenges before us takes a strong willingness to risk failure and break away from the norm. Luckily, fish folks have a great capacity for patience and are, for the most part, genuinely stubborn. It's these traits that ensure that fresh ideas persist and that the change brought forth is at least strongly considered.

Montana has the greatest fisheries and aquatic resources in the U.S. as well as one of the best entities out there to ensure its stewardship – you, as members of the MCAFS! But listen, it's our past approaches and attitudes have led us to the issues we are dealing with now. We will keep what resources we have only by embracing fresh ideas and implementing change. Our power to make things better will come from working together through close collaboration and partnership.

The over-arching opinion from this president's corner is that each MCAFS member, every day, should attempt to take a broader view and look for ways to work together. Complement each other, even across jurisdictional boundaries. Together we can do it. Work safely and have a great 2011, Todd

MCAFS 2010 Annual Meeting Recap and Awards

Trevor Selch, Awards Chair MCAFS

The 43rd Annual Meeting of the Montana Chapter of the American Fisheries Society (MCAFS) was held in Bozeman, Montana, February 8-12th, 2010. The theme of the conference was "Linkages across Landscapes: The Ecological Role of Fish in Montana." As usual, the meeting was well attended and the quality of the presentations was outstanding.



A plenary session began with a look at the historic contexts of modern research and management pertaining to fish and human culture. The session then explored the importance of landscape and population diversity for ecosystem services associated with fishes, examined relationships between fish and benthic communities and aquatic and terrestrial linkages, and concluded by illustrating the importance of cutthroat trout to grizzly bears in Yellowstone, and changes in aquatic species introductions with evolution for MSY to ecosystem-based fisheries management. The general meeting agenda included stimulating papers ranging from amphibians to lake trout suppression, as well as presentations on ecology to restoration.

MCAFS 2010 Annual Meeting Recap and Awards, continued

Preceding the conference were two continuing education workshops organized by Continuing Education Chair Matthew Corsi. The topics of these workshops were Taxonomy and Identification of Eastern Montana Prairie Fishes and Structured Decision Making and Adaptive Management in Fishery Management.

Craig Barfoot, a biologist with the Confederated Salish-Kootenai Tribes, was elected to serve as President Elect of the Montana Chapter. He will assume this role in September.

The opportunity to acknowledge and honor the exemplary work by individuals on behalf of our aquatic resources across Montana is a unique and important role of MCAFS, and one we take great satisfaction in. Our outgoing Past President, Carter Kruse, was acknowledged for his tireless service to MCAFS. His substantial contributions will be missed. In addition, we had many exceptional nominations for our awards this year, especially Career Achievement and Outstanding Educator. We recognized 14 individuals and one group with the following awards:

- **John Syslo** (Montana State University) was presented with the “Best Student Presentation Award” for his talk, *“An Evaluation of Lake Trout Suppression in Yellowstone Lake, Yellowstone National Park”*.
- **Dan Carty** (U.S. Fish and Wildlife Service) was presented with the “Best Professional Presentation Award” for his talk, *“Efficacy of Terramycin 200 for Fish (Oxytetracycline Dihydrate) for the Skeletal Marking of Rainbow Trout *Oncorhynchus mykiss*”*.
- **Justin Spinelli** (Montana State University) was presented with the Fisheries Information and Technology Section’s “Best Student Poster Award”.
- **Jason Blakney** (University of Montana-undergraduate) and **Matthew Corsi** (University of Montana-graduate) were awarded the Wally McClure Scholarships.
- **Mariah Mayfield** (Montana State University) received the West Slope Chapter of Trout Unlimited student research fellowship grant for her research on the Upper Clark Fork River.
- **Alan Johnstone** was presented with a “Landowner of the Year Award” for his contributions to Montana fisheries.
- The **Lower Clark Fork Watershed Group** was awarded a “Group Achievement Award” for their outstanding work in the basin.
- **Brad Shepard** (Montana Fish, Wildlife & Parks - retired) and **Mike Enk** were presented with “Career Achievement Awards” for their dedicated service to Montana’s Aquatic Resources.
- **Jeff Everett** (U.S. Fish and Wildlife Service) was awarded the “Outstanding Natural Resource Professional Award” for his work in the Big Hole Valley.
- **Dave Hagengruber, Brandon Day, and Nathan Olson** received “Outstanding Educator Awards” for their commitment to fisheries education in Montana.
- **Ladd Knotek** (Montana Fish, Wildlife & Parks) was presented with the 2009 “Outstanding Fisheries Professional Award”, the Chapter’s highest honor, for his leadership and dedication to Montana’s aquatic resources.





MCAFS President Scott Barndt presents Outgoing President Carter Kruse with a "Certificate of Appreciation" for his contributions to MCAFS.



MCAFS Awards Chair Trevor Selch presents Dave Hagengruber with an "Outstanding Educator Award" from MCAFS.



MCAFS Awards Chair Trevor Selch presents Brad Shepard with a "Career Achievement Award" from MCAFS.



MCAFS Awards Chair Trevor Selch presents Ladd Knotek with the 2009 Outstanding Fisheries Professional award from MCAFS.



MCAFS Awards Chair Trevor Selch presents Justin Spinelli with the AFS Fisheries Information and Technology Section, Best Student Poster Award.



**SAVING ALL THE PIECES IN AN ALTERED FISHSCAPE: THE
CHALLENGES AND PRACTICALITIES OF BALANCING NATIVE FISH
CONSERVATION WITH ANGLING OPPORTUNITIES FOR
INTRODUCED SPORT FISHES.**

**The 44th annual meeting of the Montana Chapter
of the American Fisheries Society**

**8 – 11 February 2011
Best Western Heritage Inn
Great Falls, Montana**

HERE'S WHAT WE NEED YOU TO DO:

SUBMIT YOUR ABSTRACT

14 JANUARY IS THE EXTENDED DEADLINE FOR SUBMISSION

But please don't wait until then to submit! E-mail to craigb@cskt.org

For guidance on abstract formatting, visit: www.fisheries.org/units/AFSmontana/abstract.html

BOOK YOUR ROOM

24 JANUARY ENDS OUR HOLD ON A BLOCK OF ROOMS

Filling the Heritage Inn room block reduces costs incurred by YOUR AFS Chapter!

Contact the Best Western Heritage Inn at:

1700 Farm Road

Great Falls, MT 59404

Phone: 406.761.1900 or Toll Free: 1.800.548.8256

REGISTER ON-LINE

31 JANUARY ENDS THE REDUCED-RATE PERIOD

(SAVE MONEY BY REGISTERING EARLY and HELP US GET A TIMELY HEADCOUNT FOR PLANNING PURPOSES AT THE SAME TIME!)

Late registration may not include lunches or banquet

www.mtgs-etc.com/mtafs7.htm

Contact Leo Rosenthal with registration questions: (406) 751-4548; lrosenthal@mt.gov

Outstanding Plenary Speakers – An Excellent Continuing Education Workshop – A Student-Mentoring Session – Exceptional Contributed Papers – A Banquet with Entertainment and More

All in Great Falls!

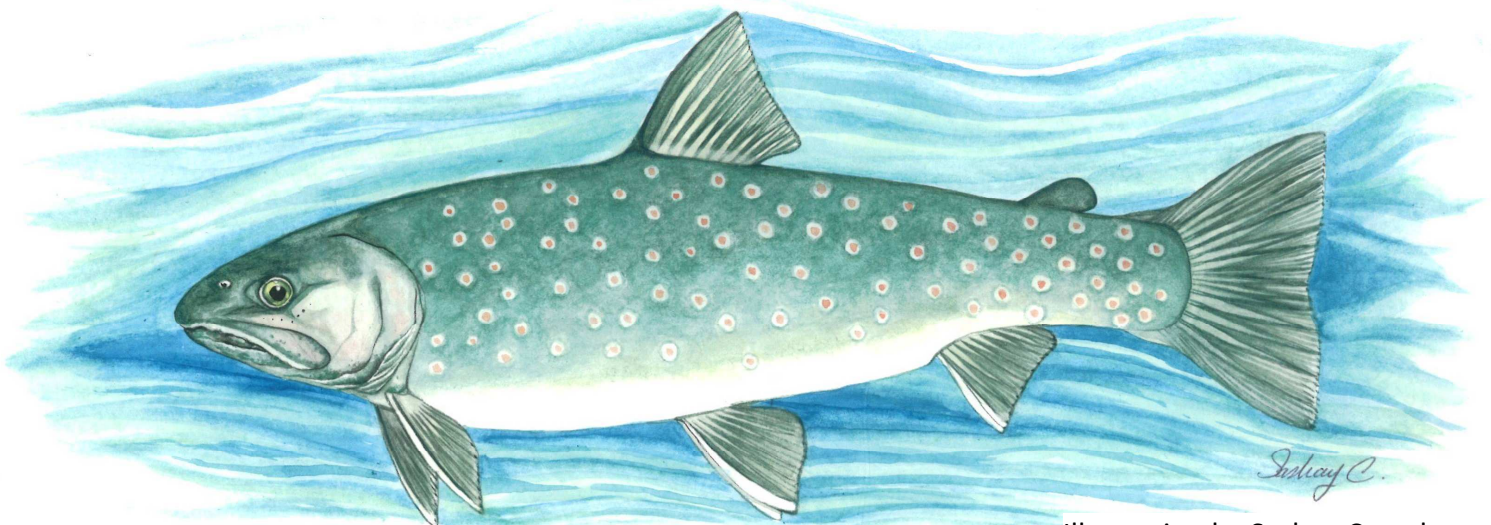


Illustration by Sashay Camel

Plenary Session Speakers

Wednesday 9 February

Thompson Smith

Confederated Salish and Kootenai Tribes

Bull trout and systemic change in Western Montana: the hidden origins of our ecological crisis

Richard Mayden

Saint Louis University

The voyage of discoveries in the rugged Sierra Madre Occidental of Mexico: the biodiversity and conservation of newly discovered trout species

Anders Halverson

University of Colorado Center of the American West

Rainbow trout and American fisheries management: how did we get here and what have we learned?

Dan Vermillion

Montana Fish, Wildlife and Parks Commission

Taimen and taimen conservation efforts, blending science and economics to establish a viable, catch and release taimen fishery as an alternative to more destructive resource extraction industries within the Eg Uur watershed

Mike Lewis

Montana Fish, Wildlife and Parks

Attitudes, opinions, and perceptions of Montanans regarding Montana's native fish

Brad Shepard

B.B. Shepard and Associates

Using science to make fish conservation decisions

Plenary Session Speakers, *continued*

Bruce Rich

Montana Fish, Wildlife and Parks

A pragmatic approach for conserving native fish AND providing angling opportunities on common biological and social landscapes

Wade Fredenberg

U.S. Fish and Wildlife Service

Trash fish to trophy - how bull trout have evolved in the public eye, with the aid of the ESA

Bruce Farling

Montana Trout Unlimited

Fun to catch, fun to study, fun to respect – The conservation-minded angler's perspective on going native

Todd Koel

National Park Service

Fish Management Challenges and Opportunities at Glacier and Yellowstone National Parks

Continuing Education Workshop

Tuesday 8 February

Collaboration and Conflict Resolution in Natural Resource Management

Date, time: Tuesday 8 February, 8:30am – 5:00pm

Cost: \$50 (Lunch included)

Instructor: Dr. Matthew McKinney

Matthew McKinney is Director of the Center for Natural Resources and Environmental Policy at The University of Montana. His work focuses on collaborative approaches to natural resource and environmental policy. During the past 20-plus years, he has designed, facilitated, and mediated over 50 public processes on issues related to federal land, water, fish and

Continuing Education Workshop , *continued*

wildlife, land use, regional planning and resource management, and other public issues. He received a Ph.D. in Natural Resource Policy and Conflict Resolution from The University of Michigan. He has published numerous articles in journals and books, co-authored *The Western Confluence: A Guide to Governing Natural Resources* (Island Press, 2004), and teaches workshops, seminars, and courses on natural resource policy and public dispute resolution. This promises to be a great interactive workshop for professionals and students alike, covering both the theory and practical application of collaboration and conflict resolution in natural resource fields.

Registration: www.mtgs-etc.com/mtafs7.htm

Schedule at a Glance (Tentative)

Tuesday 8 February, starting at 8:30am

Continuing Education Workshop
Lake Trout Working Group Meeting
Welcome Social

Wednesday 9 February

Plenary Speakers Session
Excom Subcommittee Meetings
Plenary Speaker Appreciation Social

Thursday 10 February

Contributed Papers Session
Business Meeting Luncheon
Poster Session
Student Mentoring Session
Awards Banquet

Schedule at a Glance (Tentative), *continued*

Friday 11 February

Contributed Papers Session

For additional information contact meeting chair Craig Barfoot at:
Email craigb@cstk.org

MAKE A DONATION TO THE RAFFLE

Please consider donating something to the annual raffle fundraiser. The proceeds from the raffle are used to fund scholarships and to generate funds for the student subunits. The raffle is always an entertaining part of the banquet evening, so help make this another fun year by donating art, books, trips, etc.

For more information contact John Syslo at the MSU Subunit or Morgan Sparks at the U of M Subunit:

jsyslo@montana.edu; morgan.sparks@umontana.edu



Set your sights on attending next year's Annual Meeting in the beautiful Pacific Northwest. With its focus on "New Frontiers in Fisheries Management and Ecology: Leading the Way in a Changing World," the conference will provide a wonderful opportunity for fisheries professionals to meet, exchange information, catch up with friends, and find inspiration.

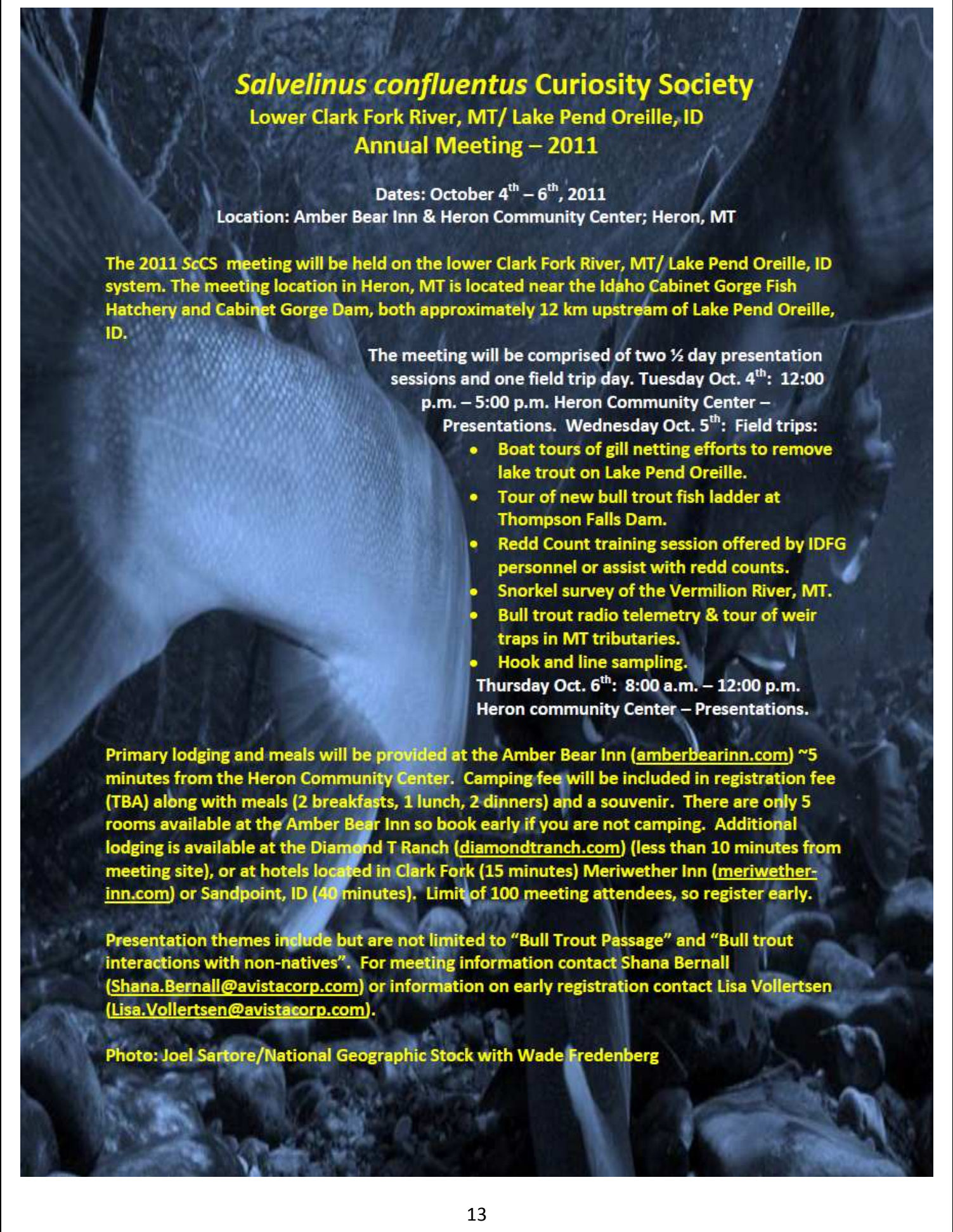
AFS President Wayne Hubert, Meeting Co-Chairs Cleve Steward and Larry Dominguez, and Program Co-Chairs Craig Busack and Dave Ward invite you to attend the 2011 AFS Annual Meeting at the Washington State Convention Center in Seattle, Washington. With magnify-cent Puget Sound at its doorstep and Mount Rainier and the towering Cascade and Olympic mountain ranges visible in the distance, the Emerald City offers both scenic splendor and myriad recreational opportunities. The Convention Center is within walking distance of the vibrant Seattle waterfront, with its jumble of shops, restaurants, art galleries, and the world famous Pike Place Farmers Market. There are a multitude of shopping venues, sights, and experiences to enjoy when not engaged in meeting activities. You'll want to extend your stay to allow time to visit Puget Sound, the rugged Olympic peninsula, and other fabulous nearby destinations.

The 2011 AFS Annual Meeting Annual will provide a unique forum for participants to explore the many multidisciplinary aspects of fisheries science and management. In addition to the high caliber and eclectic mix of symposia, contributed papers, and poster sessions for which AFS meetings are known, the 2011 meeting will feature a broad range of technical, social, and legal topics that are of national and international interest, including measures to recover from massive man-made and weather-related catastrophes and to ensure the long-term sustainability of fisheries resources. Regional topics will highlight efforts to protect and clean up Puget Sound and address emerging issues related to the Columbia River, salmon recovery, and watershed management. We encourage those involved or interested in fisheries science and management, marine and freshwater habitat protection, or fisheries-related recreation to contribute to this important meeting.

Support AFS and indulge yourself by coming to Seattle next September. We guarantee your experience will be a memorable one.

Visit <http://www.fisheries.org/afs2011/> for the most up-to-date information.





***Salvelinus confluentus* Curiosity Society**
Lower Clark Fork River, MT/ Lake Pend Oreille, ID
Annual Meeting – 2011

Dates: October 4th – 6th, 2011

Location: Amber Bear Inn & Heron Community Center; Heron, MT

The 2011 ScCS meeting will be held on the lower Clark Fork River, MT/ Lake Pend Oreille, ID system. The meeting location in Heron, MT is located near the Idaho Cabinet Gorge Fish Hatchery and Cabinet Gorge Dam, both approximately 12 km upstream of Lake Pend Oreille, ID.

The meeting will be comprised of two ½ day presentation sessions and one field trip day. Tuesday Oct. 4th: 12:00 p.m. – 5:00 p.m. Heron Community Center – Presentations. Wednesday Oct. 5th: Field trips:

- Boat tours of gill netting efforts to remove lake trout on Lake Pend Oreille.
- Tour of new bull trout fish ladder at Thompson Falls Dam.
- Redd Count training session offered by IDFG personnel or assist with redd counts.
- Snorkel survey of the Vermilion River, MT.
- Bull trout radio telemetry & tour of weir traps in MT tributaries.
- Hook and line sampling.

Thursday Oct. 6th: 8:00 a.m. – 12:00 p.m. Heron community Center – Presentations.

Primary lodging and meals will be provided at the Amber Bear Inn (amberbearinn.com) ~5 minutes from the Heron Community Center. Camping fee will be included in registration fee (TBA) along with meals (2 breakfasts, 1 lunch, 2 dinners) and a souvenir. There are only 5 rooms available at the Amber Bear Inn so book early if you are not camping. Additional lodging is available at the Diamond T Ranch (diamondtranch.com) (less than 10 minutes from meeting site), or at hotels located in Clark Fork (15 minutes) Meriwether Inn (meriwetherinn.com) or Sandpoint, ID (40 minutes). Limit of 100 meeting attendees, so register early.

Presentation themes include but are not limited to “Bull Trout Passage” and “Bull trout interactions with non-natives”. For meeting information contact Shana Bernall (Shana.Bernall@avistacorp.com) or information on early registration contact Lisa Vollertsen (Lisa.Vollertsen@avistacorp.com).

Photo: Joel Sartore/National Geographic Stock with Wade Fredenberg



AMERICAN FISHERIES SOCIETY MONTANA CHAPTER



REQUEST FOR GRANT APPLICATIONS RESOURCE ACTION FUND (RAF) - 2011 \$10,000 TOTAL AVAILABLE

The Resource Action Fund (RAF) was established by MCAFS in 1989 and has provided over \$140,000 to support projects relating to Montana's aquatic resources. Originally designed to support small outreach and on-the-ground projects proposed by Chapter members, the fund has evolved to consider all types of RAF proposals, including habitat, management, conservation, fish passage, research, and data management projects from both members and non-members. Focus areas include projects showing clear benefit to native and special concern species.

RAF grant applications must clearly state how the proposed project will provide at least one of the following:

- Benefits to one or more of Montana's native species of special concern;
- Short and/or long term benefits to Montana's or regional fisheries resources;
- Support of the objectives of the MCAFS; or
- Relevance to ongoing and previous work in the area.

Applicants must submit their applications by January 15 to the current chapter president (todd_koel@nps.gov) for consideration at the upcoming Great Falls annual meeting, during the business meeting/luncheon on February 10th. The EXCOM will review the proposals prior to the business meeting and provide the membership with an EXCOM recommendation. The membership attending the business meeting will approve or decline the RAF requests after considering the EXCOM's recommendation.

Forms for submission and additional evaluation criteria are available on the MCAFS web page: <http://www.fisheries.org/units/AFSmontana/raf.html>

All RAF requests with merit will be posted on the MCAFS web page upon receipt. Members are free to provide comments regarding pending RAF applications to any member of the EXCOM.



Wally McClure Scholarship

The Montana Chapter of the American Fisheries Society will be presenting two Wally McClure Student Fisheries Scholarships this February at our annual meeting in Great Falls, Montana. The McClure Scholarships will be awarded to individuals pursuing a graduate or undergraduate degree in aquatic natural resources from a University/College in Montana.

Please visit the MCAFS website for scholarship, membership and meeting details. The McClure Scholarship application is posted in two places on the web – under the “grants” tab, and also at the home page under AFS business news.

<http://www.fisheries.org/units/AFSmontana/index.html>

2011 Awards for MCAFS—start nominating now!

The deadline for nominations is 15 January 2011.

Categories include:

- Outdoor Writers or Reporters
- Educators
- Landowners
- Groups, Organizations or other Individuals
- Career Achievement
- Natural Resource Professional
- Outstanding Fishery Professional

Send letters of nomination to Trevor Selch at:

tselch@mt.gov

Montana Fish, Wildlife & Parks
P.O. Box 200701
Helena, MT 59620-0701

West Slope Chapter of Trout Unlimited Student Research Fellowship Grant



The West Slope Chapter of Trout Unlimited (WSCTU) is committed to the National TU mission of conserving, protecting and restoring North American trout and salmon and their habitats. WSCTU accomplishes this mission on a local level through a dedicated board of directors and a wonderful group of

volunteers. This Missoula, Montana-based chapter participates in various activities to fulfill its mission from legislative involvement to financial support of important restoration projects. The chapter is currently providing a \$2,000 Research Fellowship Grant for a student who is working towards the management, conservation, protection, or restoration of trout in western Montana.

All graduate or undergraduate students working on a project in western Montana that supports the mission of WSCTU are eligible for this Grant. Special consideration will be given to students that are enrolled at a Montana university and working in the Clark Fork River drainage.

Interested students should submit a (1) resume, (2) copy of transcripts, (3) a one page summary of their project, specifically addressing how the project relates to the mission of Trout Unlimited, and (4) a letter of support. The Research Fellowship Grant recipient will be required to present the results of their project at a WSCTU meeting within the following year (15 months of receiving the award).

Funds from the WSCTU Research Fellowship Grant must be applied to expenses directly related to the recipient's project or education and in a manner consistent with WSCTU's non-profit status. Such expenses may include research and work performed by the student, supplies, travel expenses, tuition, wages and equipment.

Applications are due **January 21, 2011** and the award will be announced and presented at the 43rd Annual Meeting of the Montana Chapter of the American Fisheries Society (MCAFS) in February. Please send or email applications to:

Trevor Selch, Awards Chair Montana Chapter of the American Fisheries Society
MFWP Fisheries Division
P.O. Box 200701
Helena, MT 59620
tselch@mt.gov

Treasurer's Report from 4/5/2010 to 12/13/2010

Leo Rosenthal, Secretary/Treasurer MCAFS

Total Chapter Assets/ Liabilities

Checking Account	\$14,436.78
Trust Fund	\$27,310.11
Wally McClure Scholarship Fund	\$26,627.53
1-year CD with First Interstate	\$4,180.84
TOTAL	\$72,555.26

Checking Account - First Interstate Bank

Beginning balance 04/05/2010	\$12,493.04
Gains/(Loss)	\$1,943.74
Ending balance 12/13/2010	\$14,436.78

Treasurer's Report from 4/5/2010 to 12/13/2010, *continued*

Trust Fund - PAX World Fund Balance

Beginning balance 04/05/2010	\$38,186.10
Gains/(Loss)	(\$10,875.99)*
Ending balance 01/05/2010	\$27,310.11

Wally McClure Scholarship Fund

Beginning balance 04/05/2010	\$24,597.89
Gains/(Loss)	\$2,029.64
Ending balance 12/13/2010	\$26,627.53

1-year CD - First Interstate Bank (Renewed 10/29/2010)	\$4,180.84
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*Loss for the period is a result of transferring funds to cover RAF's

Bighorn Reservoir and River Benefit from Experimental Operating Criteria for Yellowtail Dam

Ken Frazer, Mike Ruggles, and Brian Marotz
Montana Fish, Wildlife & Parks

The Bighorn River, a tributary of the Yellowstone spanning two states, originates in Wyoming and flows northeast into Montana before encountering Yellowtail Dam. Conflicts over how Yellowtail Dam controls water levels in Bighorn Reservoir and the Bighorn River downstream have drawn battle lines between Montana and Wyoming, affecting flood control, power generation, fish production, and recreation. Stakeholders in both states have requested the US Bureau of Reclamation (Reclamation) modify Yellowtail Dam operations to achieve specific river flows and reservoir elevations. Wyoming requested high reservoir elevations to make a silted-in boat ramp in Wyoming assessable, to benefit the fishery, and to maintain water fowl habitat. From Reclamation's perspective, the new operating criteria limit the annual drawdown, improve reservoir refill, and allow use of a few additional feet of the reservoir pool that was formerly reserved for flood control. Reduced reservoir drawdown maintains fish food production in a larger portion of the reservoir pool that would otherwise be annually dewatered and desiccated. This maintains a larger reservoir volume and area of productive substrate for organisms that annually recolonize the reservoir when the pool refills. The sauger population in the reservoir was recently determined to be a genetically pure donor source for native species management in Yellowtail Reservoir and it remains uncertain how reservoir operation influences natural reproduction.

Immediately downstream of Yellowtail Dam, the Bighorn River is an internationally recognized rainbow and brown trout fishery. Montana requested stable flows in the main channel and side channels that provide important spawning and rearing habitat for juvenile trout. Research has shown that when side channels are dewatered, juvenile trout are forced into the mainstem where they suffer higher rates of predation, resulting in fewer fish per mile in the affected river reach. Unfortunately, operations requested by the stakeholders can seldom be achieved simultaneously.

Bighorn Reservoir and River Benefit..., *continued*

Computer models provide the tools to negotiate peace in what has become an interstate water war. During the last three years, Gordon Aycock from Reclamation's regional office created a computer model designed to establish new operating criteria that optimize conditions in the reservoir when the annual water supply varies from drought to wet. Meanwhile, Montana Fish Wildlife & Parks' (FWP) Brian Marotz, Ken Frazer, and Mike Ruggles, with financial support from Montana Pike Masters, Walleyes Unlimited, and Walleyes Forever of Billings, teamed with Friends of the Bighorn River's Doug Haacke and computer modeler/analyst, Dr. Craig Althen, to independently create a Yellowtail model to optimize conditions in the river and reservoir and compare with Reclamation's findings. Modeling results, which include a margin of error to accommodate inflow forecasting error, were remarkably similar on average. Results indicate that operating rules that adjust, based on water supply, increase the ability of dam operators to meet requirements for reservoir elevations and fisheries flows in the Bighorn River downstream. Perhaps more importantly, computer simulations give the stakeholders in Montana and Wyoming a better idea of which desired operations are physically possible.

Reclamation's operating criteria were implemented on an interim basis in 2010 and are open to public comment until January 28th, 2011. Regardless of the comments received, these fledgling operations will likely have to be adjusted empirically to respond to extremely high or low water conditions experienced in the future. The next logical step would be to apply similar operating criteria to upstream dams including Boysen and Buffalo Bill reservoirs to optimize and coordinate the entire system.

Lake Helena Willow Bank Stabilization Demonstration

Jeff Ryan

Department of Environmental Quality

The Lake Helena shoreline erosion project is a demonstration of lake shoreline stabilization using bioengineering approach (no rock is used). The project uses a plant-based bioengineering technique (installing dormant willow stems) to stabilize shoreline that is eroding due to ice and wave action. The intention of the project is to restore natural lakeshore habitat which, in turn, will enhance the shoreline's natural capacity to resist erosion. The project is an experiment in the use of bioengineering on Lake Helena as well as a demonstration for bioengineering in lakeshore protection for other landowners faced with similar problems. One hundred feet of shoreline was installed with willow stems in 2010 and another 500 feet will be installed in 2011. Partners in this project include Tom Andersen (landowner), Jo Christensen (designer), DEQ, DNRC, FoxLogic LLC, PPL-MT, L&C Water Quality District, L&C CD, FWP, Bureau of Land Management, Lake Helena Irrigation District and numerous volunteers.

The images below are from Lake Helena, Montana.



Position Announcements

Clark Fork River Watershed Program – Upper Clark Fork Restoration Coordinator

Trout Unlimited (TU) is North America's leading coldwater fisheries conservation organization, dedicated to the conservation, protection and restoration of trout and salmon fisheries and their watersheds. The organization has more than 140,000 members in 400 chapters across North America. TU's Home Rivers Initiative program was created in 1996 to perform collaborative, science-based watershed-scale restoration on coldwater rivers. To date, more than 20 Home Rivers projects have been initiated or completed across the country.

Managers for Home Rivers Initiative projects hold unique and diverse positions. The shortest description of the job is to “make things happen.” In that spirit, TU is hiring an Upper Clark Fork Restoration Coordinator to increase staff capacity for a Home Rivers Initiative project started in 2004. While work elsewhere in the Clark Fork watershed has focused on mine reclamation and native fish habitat improvement on public land, the sociopolitical setting in the Upper Clark Fork dictates that projects will be located largely on private land, and consist of screening irrigation ditches, fish passage improvements, water leasing, water savings, riparian fencing and other projects related to improving agricultural practices and fisheries health. Work may also include road decommissioning, culvert upgrades, mine reclamation and other projects on National Forest lands. The Coordinator will be responsible for all aspects of projects on the mainstem Clark Fork River and tributaries from Missoula upstream to Butte, Montana. A significant focus will be placed upon partnership building with TU chapters and Montana state council, land trusts, state and federal agencies, landowners, local watershed groups, and other non-profit organizations. The Coordinator will work directly under the Clark Fork River Watershed Restoration Director and be based in Missoula.

Job Responsibilities

- Engage TU members and local stakeholders to prioritize projects and initiate planning efforts
- Work closely with state and federal agencies to collect field data for project development and monitoring
- Maintain existing partnerships and ongoing restoration projects with landowners and non profit organizations in the Upper Clark Fork watershed
- Work with TU staff on fundraising, including identifying potential funding sources, drafting grant proposals, and developing relationships with funders
- Manage interns and/or seasonal field technicians
- On-the-ground project oversight and monitoring
- Office administration including grant reporting, invoicing and tracking project budgets

Qualifications

- Bachelor's degree required, Master's degree a plus.
- Professional experience in natural resource management or restoration/conservation project management
- Demonstrated performance in grant writing and other fundraising activities
- Experience in fisheries, water quality or water quantity/flow restoration a plus
- Superior interpersonal skills and ability to work constructively with diverse partners and/or private landowners
- Excellent written and oral communication skills.
- Previous experience with media, or outreach helpful.
- Good organizational and problem solving abilities.
- Ability to work independently while managing complex projects.
- Willingness to travel within the region as necessary.
- Working knowledge Microsoft Office programs strongly preferred.
- Passion for protecting and restoring trout streams and their watersheds.

Compensation:

Competitive salary based on background and experience, including benefits

Application Process

Submit a resume with a letter of interest describing how you meet the qualifications, a brief writing sample, and names of three references to clarkforkriver@tu.org (preferred) or by mail to:

Upper Clark Fork Restoration Coordinator

Trout Unlimited

111 N. Higgins St, Suite 500

Missoula, MT 59802

Applications will be accepted until January 21, 2011. Please no phone calls - TU staff will contact prospective applicants in February, 2011.

Species of Special Concern Co-Chair

The Species of Special Concern Committee has been relatively quiet over the past year. Co-chairs Bob Bramblett and Craig Barfoot both stepped aside at our last meeting in Bozeman, while Greg Hoffman and Tyler Haddix assumed their positions. Greg recently stepped down as well because of other obligations. This leaves only one very inexperienced "co-chair", which obviously isn't the right term if there's only one! The committee is currently lacking a western perspective since Tyler's work focuses on Eastern Montana. Please consider coming to the committee meeting in Great Falls and nominating someone (or yourself) for the vacant Species of Special Concern Committee co-chair position. Hopefully, with both positions full, we can make some progress in 2011!

Tag, You're It!

David Schmetterling

Montana Fish, Wildlife and Parks

Fish and Fishing are Important

In early December, I was one of the 50 or so people standing on the bank of the Clark Fork waiting for the river to muddy. It was a momentous occasion, but one that took me a little while to appreciate. We were gathered there to watch the river get diverted into its reconstructed channel, and the turbid water would be an indication that a century of hard use was coming to an end. It was kind of ironic.

The Clark Fork River is not the pristine river it once was and it does not conjure the travel photo image captioned, "Welcome to Montana" like some of the state's more revered rivers. It is the biggest river in Montana, and probably the hardest used. It is also my favorite river. The headwaters have been subject to hard rock mining and degradation for over a century and its lower reaches are dammed for hydropower. In between, the river has been shortened and straightened from rail and highway development, channeled for irrigation, and pumped with returned waste water from towns and cities along its route. Last month, we watched and heralded the last indignity as the river was exposed and rerouted. Hopefully, this time it will stay for a long while.

It took me a few days' reflection to appreciate the event. In recent years there have been many similar events. There was the filling of the bypass channel, the removal of the powerhouse, the removal of the spillway, the last load of sediment (I missed that one for some reason), and there will be more - each with their own speeches and cameras. Although I become impatient with the ceremonies, I know that these events are important and I am glad we are celebrating them. Events like this don't happen all the time and we need to commemorate the victories, especially when it seems like all we talk about are problems.

Tony Incashola, from the Confederated Salish and Kootenai tribes, reminded me how important this place is, the importance of the work that has gone on here and of the importance of fish and fishing in our lives. To the Salish, where we were standing was known as "the place of big bull trout". I've seen them, handled them, and transported them upstream of the dam in buckets. Eighteen pounds was the largest bull trout we captured at the dam, and historically they were more common and bigger. I have spent summers following these fish, telemetry, snorkeling, watching them spawn and counting their redds. Maybe this will be the place of the big bull trout again, I don't know. Bull trout face a lot of challenges, and the removal of the dam and clean up of the river will certainly help them, but alone it will not guarantee their prosperity.

I hope that Milltown does not go the way of other ironically named places, such as Grayling, Michigan or the Antelope Valley, California, where neither grayling nor antelope still reside (while I'm picking on those two states- Michigan is known as "The Wolverine State" and California "The Golden Bear State," although those animals don't occur in either place anymore). In Milltown, the mill has already closed and I hope "the place of big bull trout" doesn't become the next place that used to have something.

Naming a place for fish illustrates how important fish are to us. Fish and fishing are part of us. We enjoy eating them, catching them, studying them, and sharing stories of them. It is part of us, as a scientific community and as part of our community in general. People care about fish and want to help them.

Tag, You're It! *continued*

An article in the Missoulian showed the cultural importance we put on fish and fishing stories. Shortly after the spillway was removed the governor and some delegates floated this section of river, and the paper reported:

“The first person in more than 120 years to legally float past the confluence of the Clark Fork and Blackfoot rivers and through the channel previously occupied by the Milltown Dam caught an 18-inch cutthroat trout right where the two rivers merge (*Missoulian*, July 4, 2009).”

An 18-inch cutthroat trout is a pretty nice fish - especially for this section of river and one that was symbolic of restoration, recovery, and our heritage. Later, that same fish and event were recalled:

“Gov. Brian Schweitzer recalled catching a 22-inch cutthroat in the bypass channel last year when he led a small flotilla of boaters through the newly opened confluence (*Missoulian*, December 16, 2010).” The fish was not just special and symbolic- it was magical and it grew even larger in memory.

When I give talks about Milltown - my research and monitoring work - I try to mention that the most important thing I have learned is, simply, that a momentous event like this can happen. Something can go from being impossible, impracticable, unfeasible, and politically controversial to complete - in a short time. As former Governor Judy Martz put it, “it is the right thing to do”. And it was. Milltown Dam over 3 million cubic yards of sediments have been removed and the river is in a new channel, making the Clark Fork turbid for a short while.

So, I guess what I am trying to say here is that sometimes the impossible is not, and that 18” fish you caught can grow to become a 22” lunker, and Wade Fredenberg, tag, you’re it.

MCAFS Survey

Scott Barndt, Past-president MCAFS

At long last, here's the MT AFS Member Survey, available at the following link: <http://www.surveymonkey.com/s/FCXPGVK>, and also at the MT AFS website.

As I mentioned in my Outlet column a year ago, the Excom needs your help to understand how best to prioritize our time and resources to best serve you. For example, we've found it very difficult to maintain some services solely based on volunteer effort, including our own. Therefore, if those services are important to you, the Chapter may need to manage its resources in a way that can fund outside sources to provide those services.

This survey is ten questions and can be completed in about 5 minutes. Please take that time to reflect on what you value most about MCAFS and complete the survey. The survey will close **Wednesday, January 26**, at the latest or when 100 responses are registered.

Thanks!

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