THE TELEOGRAM

Wisconsin Chapter
American Fisheries Society Newsletter

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Compiled by Chapter Members.
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President's Message

Hello everyone, spring is here, but I wish someone would tell that to Mother Nature. I spent the last weekend of March in the Milwaukee area for training, and of course got to drive home in a blizzard. The Thursday before that, I had a chance to grill out in Madison with Mr. Welke and Mr. Kanehl after picking up equipment for stream shocking, mid 50's, sunny, go figure. And as I write this message we are under a winter storm warning in Bayfield County for up to 12" of snow!

First of all, I would like to thank everyone that attended the 38th Annual Meeting in Duluth, Minnesota. With this being a tri-chapter meeting with our colleagues in Minnesota and Ontario it turned out to be quite the affair. We had 349 people registered, 92 presentations during 4 con-current sessions, 12 posters, a special showing of the Omnimax movie, Mysteries of the Great Lakes and as usual, our socials that were good times for catching up with old friends and making new ones. Special thanks go out to the usual crew for helping out with registration, raffle and moderators/AV folks. I would also like to thank Dennis Scholl for setting up the Omnimax show, we had over 125 people attend, and also to Ron Bruch for introducing the movie and giving a background about how it all came to be. If you haven't seen Mysteries of the Great Lakes, grab your kids, relatives and friends and do so. It is worth the money and is very entertaining. A quick reminder to all Wisconsin AFS members to make sure you are involved as much as possible with the meetings, even if it is something as simple as helping out with paper judging (see Don Bush or Sue Beyler), registration (Tim Simonson) or just giving some muscle when needed. We had the final conference call with the planning committee last week and we are going to end up in the black for the meeting. WIAFS hasn't gotten the check yet but should be in the $2K area.

While on the subject of the meeting I think this is a good time to send out a "great job" to our student subunits for their hard work in helping out with the meeting and the presentations they gave. Bill Franzin, AFS president, was able to attend the meeting and congratulated all three chapters for having a good representation of students at the meeting. He also enjoyed meeting the students and regular members at the banquet.

Of course while everyone is gearing up for spring surveys and scratching our heads as to how we are going to get the work done with limited help, no funding for temp or LTE hires, frozen budgets, and hiring freezes, somehow the work will get done. Maybe one or two surveys will be cut back and less travel will occur, but somehow the work always gets done, and that is because of the dedication I have come to know from the amazing folks who have chosen this profession to make a living. John Kubisiak's message in the December 08 Teleogram talked about the monetary value a healthy natural environment has, and I hope the stimulus package President Obama has put forth will help us keep a healthy natural environment here in Wisconsin and in the rest of the nation. I again urge the membership to be an active participant in government, both local and national on projects related to the environment.

I can't believe it has been over a year now that I was elected president and had worked on the planning committee for the 38th Annual Meeting. Time keeps marching on and I hope all of you keep up the "good spirits" I see when meeting you, hug your family and friends and keep true to yourself. I will sign off for now, with a fond farewell to my yellow friend Zach pictured with this message. It will be one year ago April 13th that I lost my hunting buddy of 12 years to cancer and appreciate every moment he had to share with me.

Glenn Miller

Editor's Note

Well, perhaps this issue is a bit tardy…and I apologize for that, however, like Glenn mentioned above, spring survey work needs to get done. Anyway, each issue I ask readers for submissions…and I am again doing so. Please get me your ideas, articles, and stories. This is YOUR newsletter and it can only be as good as you make it.
Article submissions/ideas can be emailed to me at: jordan.weeks@wisconsin.gov or give me a call at 608-785-9002. I'm always interested in where the fish are biting or if you need deer eradicated from your property. See you on the water!

Announcements

More can be found on the AFS webpage

Meeting Announcements:

June 10-12, 2009. Midwest RAS and NADF Aquaculture Field Day and Vendor Fair, Bayfield, Wisconsin

July 20-24, 2009. 3rd National Conference on Ecosystem Restoration, Los Angeles California.

July 28-30, 2009. WI-AFS sponsored Fisheries Conservation Genetics Workshop, held in conjunction with the Centrarchid, Esocid and Walleye Technical Committees of the AFS North Central Division joint meeting in La Crosse, Wisconsin.

August 30-September 3, 2009. AFS Annual Meeting, Nashville Tennessee

Awards:

President Glenn Miller would like to recognize a colleague and friend for his hard work and dedication to the fisheries profession. This past summer Dave Vetrano was awarded Trout Unlimited's Conservation Professional Award at their 2008 Annual Meeting held in Snowbird, Utah. Dave's hard work on the trout streams in the Driftless Area has been ongoing for 30 ?!? years now. Hundreds of miles of stream work, lunker structures, wild brood stock production instead of hatchery stocks and his willingness to work with others has brought this well deserved recognition to Dave. The following is the nomination letter that was sent to Trout Unlimited to acknowledge the hard work he has undertaken.

TROUT UNLIMITED

Professional Trout Conservation Award

Nominee: **Dave Vetrano, Fisheries Supervisor**
Wisconsin Department of Natural Resources, West Central Region
3550 Mormon Coulee Road
LaCrosse WI 54601

To the Trout Unlimited Awards Committee:

The Driftless Area of southwest Wisconsin, southeast Minnesota, northeast Iowa and northwest Minnesota features almost 10,000 miles of spring creeks and rivers from the Mississippi to the Bad Axe. Those resources need champions, committed to protection and restoration of those waters and the fisheries they contain. For over 30 years, the coldwater streams of Wisconsin's Driftless Area have been championed by Dave Vetrano, the Wisconsin DNR's West Central Regional Fisheries Supervisor, working in the area around LaCrosse, Wisconsin. He is our nominee for TU's National Trout Conservation Award for Professionals.

In 1957, one of Vetrano's DNR predecessors wrote that in light of the extensive degradation of the region due to historic land use practices and erosion, it was unlikely that the regions streams would support a trout fishery in the future. Vetrano and hundreds of volunteers wouldn't accept that death warrant, and have turned many of the streams in the region into homes for healthy, self-sustaining brook and brown trout fisheries for which ample public access is available. As a result of that work, anglers spend over $640 million a year across the region to fish restored trout waters, according to a TU survey released in April 2008.

Vetrano's work for Wisconsin DNR has included spearheading several hundred miles of stream restoration projects, developing a team of restoration specialists to carry out projects, developing the LUNKER instream overhead cover structure (of which thousands have been built and installed across the region), and inspiring numerous groups, including TU chapters, to work on stream projects and raise money to support them. He also undertook a wild trout brood stock study at a time when many hatchery fish were being stocked in the region. Though the study wasn't supported by higher-ups in the department, it showed fish spawned from wild brood stock were hardier when released in the wild and could contribute to healthy stream-spawned trout fisheries. As a result, hatchery brood stocks are no longer used in the Driftless Area streams, and where stocking is used to supplement wild fish populations, they are from nearby stocks of wild brood fish.

But Vetrano didn't stop with his work assignments, and that commitment has been a key to the success of restoration efforts across the four states in the Driftless Area. He has spread the word about the Driftless Area's history and management potential far across the Midwest, traveling frequently to speak with TU chapters and other groups from Chicago to Minneapolis. He has given hundreds of talks to conservation groups and has enlisted them in conducting stream projects across the region. When a biologist or technician in Iowa or Minnesota is stumped with how to proceed on a topic, Vetrano's door and phone line have been open for consultation. He has hosted statewide and regional fisheries tours and explained to them how stream projects can be done, and has welcomed opportunities to incorporate multispecies restorations (such as turtles, snakes, birds and native plant species) into watershed restoration work. A Minnesota DNR tour with two busloads of scientists, technicians, researchers and ecologists came to tour Wisconsin streams in 2003, and in the ensuing conversations, Vetrano played a major part in addressing concerns about the ecological role of watershed restoration for many species, including trout.

Had it not been for Vetrano's urging, local conservation groups and TU chapters and federal and county agencies would not have started working on the West Fork of the Kickapoo River to bring it back to health as a trout river. It is now a nationally-known trout stream, a Mecca for trout anglers, and one of "America's Best 100 Trout Streams", according to a TU-sponsored book written by John Ross.

In the mid-1990s, when TU's second Home Rivers initiative began in the Kickapoo River watershed, Vetrano could have sat on the sidelines and watched from his DNR office. But he became an active partner and made that project better by his suggestions and support.

When TU volunteers began work in 2004 to plan what came to be known as the TU "Driftless Area Restoration Effort", Dave Vetrano took a weekend of his own time to help with the planning effort. Throughout DARE's existence, he has been a valued advisor and partner. He has taught at each one of the Annual TUDARE Chapter Project Planning Workshops, and has worked with chapters, counties, conservation groups and contractors to upgrade their restoration project skills. His encouragement and insight have been invaluable to TUDARE.

For his career of contributions to the conservation of the Midwest's coldwater fisheries, Dave Vetrano has gone beyond his job description and the call of duty. For all that, he deserves the thanks of Trout Unlimited and is a worthy nominee for the National Professional Conservationist Award. –Bill Heart & Duke Welter

2009 Equal Opportunities Section (EOS) Travel Award-Application Form

Use this form to apply for the EOS Travel Award to attend the 2009 Annual Meeting of the American Fisheries Society to be held in Nashville, Tennessee, from August 30-September 3, 2009. Additional information regarding the EOS Travel Award and meeting arrangements can be found at www.fisheries.org.

The AFS Equal Opportunities Section is leading an effort to increase participation in the Society by graduate and undergraduate students from underrepresented groups, including women and minorities. Travel grants not to exceed $500 each will be awarded on a competitive basis to assist these students with expenses incurred when attending the annual meeting. **Funds are not distributed in advance.** Students must be present at the Equal Opportunities Society section luncheon and business meeting in Anchorage to receive the funds.

The EOS encourages application from students who have not attended AFS meetings in the past. We will support award recipients during the meeting through orientation and mentorship, if desired by the student. There are wonderful networking opportunities, technical sessions, continuing education, trade show displays, and career/job opportunities, and graduate school opportunities at the meeting. We can also assist students with finding additional travel support, if needed. We look forward to hearing from you!

Please complete the entire form and send by **email or mail** to:

Gwen White-IDNR Division of Fish & Wildlife
402 W. Washington St., Rm W273
Indianapolis, IN 46204, Tel. 317-234-4407, gwhite@dnr.in.gov

Completed applications must be emailed or postmarked no later than May 15, 2009. Award decisions will be made by June 15. Limit answers to the space provided.

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The Emmeline Moore Prize

The American Fisheries Society (AFS) has established a new award, named after the first female AFS president, Emmeline Moore (1927-1928), to recognize career achievement in the promotion of demographic diversity in the society. This award will be presented to an individual who demonstrates strong commitment and exemplary service to ensuring equal opportunity access to higher education in fisheries and/or professional development in the broad range of fisheries science disciplines.

Qualified nominees must exhibit clear evidence of service and commitment to diversity initiatives, including a strong research or fisheries management leadership background, public understanding of diversity issues, technical and popular writing, and inspirational leadership.

Candidates should also have enunciated principles that lead to greater

involvement of under-represented groups in fisheries science, education, research or management. Nominees for the award are restricted to AFS members. A nomination package should include a detailed letter of support (maximum three pages) describing the nominee's accomplishments and including evidence of involvement in diversity initiatives given the criteria noted above. The main letter of nomination can be supported through several signatures or up to three additional letters of support can be submitted. Please include in the nomination letter, the nominee's title and full contact information (i.e. address, e-mail, phone etc.) to complete the package.

Nomination Deadline: *May 31st 2009*

For more information about the Emmeline Moore Prize, or to submit nominations (electronic format preferred),

Contact
Larry A. Alade, Chair
Research Fisheries Biologist
National Marine Fisheries Service
Northeast Fisheries Science Center
Woods Hole Laboratory/Population Dynamics
166 Water Street, Woods Hole, MA 02543
508 495-2085 (voice)
508 495-2393 (fax)
E-mail: larry.alade@noaa.gov <mailto:larry.alade@noaa.gov>

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Wisconsin wins North Central Division Most Active Large Chapter Award

Most Active Large Chapter Award-**Wisconsin Chapter**

Wisconsin Chapter President John Kubisiak receives the Most Active Large Chapter Award from NCD President Jessica Mistak at the 2008 Midwest Fish & Wildlife Conference in Columbus, OH. Also pictured is award presenter Mark Porath.

Jorge Thomas Buening is awarded the Richard Frie Scholarship

My name is Jorge Thomas Buening and I was born in Mobile, AL and moved to Wisconsin when I started high school, winter was a whole new experience. I will be graduating this spring with degrees in Fisheries and Biology and minors in Water Resources and Aquaculture. I have spent my past two summers working at the Genoa National Fish Hatchery located just south of Lacrosse. When at school I enjoy playing sports such as basketball, volleyball, ultimate frisbee and softball. I have also been busy this semester assisting in larval perch research, the Ichthyologic collection and peer advising. I love fishing even with as frustrating as it can be and I hope to someday get the chance to release a giant Muskie that I just finished reeling in.

American Fisheries Society

Fisheries Management Hall of Excellence, Conservation Achievement Award, Award of Merit, and Award of Excellence

Each year the FMS accepts nominations for induction into the Fisheries Management Hall of Excellence, Conservation Achievement Award, Award of Merit, and Award of Excellence. There is a brief description of each award below and more information is on the FMS web site (http://www.sdafs.org/fmsafs/index.html) including past recipients and nomination criteria.

Please take the time to nominate a mentor or colleague who has made significant contributions in fisheries management. Most of you know someone who is deserving of one of these awards. Please consider submitting a nomination by May 15, 2009 in the form of a letter describing the nominee's qualifications for the specific award. Electronic versions of nominations are requested to facilitate Awards Committee review. I look forward to your nominations. Please feel free to contact me if you need more information.

Thanks,
Dirk Miller-FMS President-elect, 5400 Bishop Boulevard, Cheyenne, WY 82006
Dirk.Miller@wgf.state.wy.us, 307-777-4556

CHAPTER T-SHIRTS AVAILABLE

As part of our ongoing chapter fundraising activities the Chapter Raffle and Revenue Chair is happy to announce that a brand new chapter t-shirt design is now available. The design is part of a new series for the fictional International Brotherhood of Electrofishing Boat Operators union. The front of the t-shirt displays the union logo and the back of the t-short depicts a comical electrofishing scene. T-shirts and sweatshirts will be available at the Annual Meeting in Milwaukee, and are available for members and non-members to purchase.

In addition, to help get the word out and generate sales, feel free to download the sales poster to post in your office. Please note that checks should be made out to: American Fisheries Society - Wisconsin Chapter. Revenue from t-short sales will go towards supporting Wisconsin Chapter AFS scholarship funds for students enrolled in an aquatic science programs in Wisconsin.

Notes

Division website…The main AFS office in Maryland recently switched our list service to a new host that has better security and spam filters. Because of this switch the mailing address for the list has changed. The new e-mail address is wiafs@lists.fisheries.org. Please use this e-mail if you want to send e-mail to the entire members of the list service.If you have any questions, let me know-*Bradley T. Eggold*

NCD Newsletter…Please find the Spring 2009 Mainstream Newsletter on our website http://www.ncd-afs.org/ -Tom Slawski

Resolutions Anyone?

Resolutions are being solicited to be presented at the January 2010 annual meeting. If you have a resolution please send it to Phil Moy at **pmoy@uwc.edu** no later than December 3rd so that they we can be put into final form and published in time for the meeting. Thank you.

American Fisheries Society

Organized 1870 to Promote the Conservation, Development and Wise Utilization of the Fisheries

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301-897-8616 * FAX 301-897-8096 * E-Mail: main@fisheries.org, www.fisheries.org

William G. Franzin
President 2008-2009

Donald Jackson
President Elect

March 15, 2009

Glenn Miller
John Kubisiak
Wisconsin Chapter AFS

Dear Glenn and John;

I wanted to thank the Wisconsin, Minnesota and Ontario chapters for inviting me and covering my registration and hotel at the recent tri-chapter meeting in Duluth. You had a great scientific program, lots of camaraderie at the social events and a fun banquet. I must say I have never experienced a banquet quite like that one! My wife and I had a great time and even came away with a couple of prizes. I appreciated the time to meet with chapter members of AFS since really it is at the chapter level where AFS does the most. All of the Minnesota, Ontario and Wisconsin memberships deserve the recognition they have earned in the annual best chapter awards. Keep up the good work and maybe I will see some of you again at the Midwest in Springfield IL this coming December.

Yours sincerely,

William G. Franzin
President, American Fisheries Society

Communicating Science…

Are Minnesota Streams Healthy?

Understanding Our Streams and Rivers

Just as our human health is determined by the factors that influence our bodies, including environment, lifestyle, and healthcare, so too is stream health determined by the combined factors of the stream's configuration, environment, resilience, and our stewardship. A stream, like the human body, has several interdependent features that indicate health of the stream. These features can be grouped into the following **five** components: *shape*, *flow*, *connectivity*, *biology*, and *water quality*.

1. Stream shape

A stream's shape is formed over time through the continuous interaction between water and the watershed, including its size, climate (wet or dry), topography, soil types, and vegetation. The channel is shaped by the predominant flood flow, known as *bankfull* flow, in which the water fills the banks and just begins to overflow onto the floodplain. Natural streams of all types and sizes have a tendency toward a balanced, stable state. In this state, streams transport water and sediment and dissipate the water's energy while maintaining over time their shape: pattern, profile, and dimension (see graphics at right). In other words, when erosion and deposition and scour and fill are balanced, the channel does not widen or narrow, nor does the streambed rise (*aggrade*) or deepen (*degrade*). This does not mean a stream channel's position is permanent; instead, the channel is able to adjust over time as the bends, or meanders, of the channel slowly migrate down the valley. Naturally shaped streams provide aquatic organisms a variety of habitats, like *riffles* (shallow, rocky rapids), pools, sandbars, and backwaters, because of variations in stream depth, width, water currents, and streambed materials.

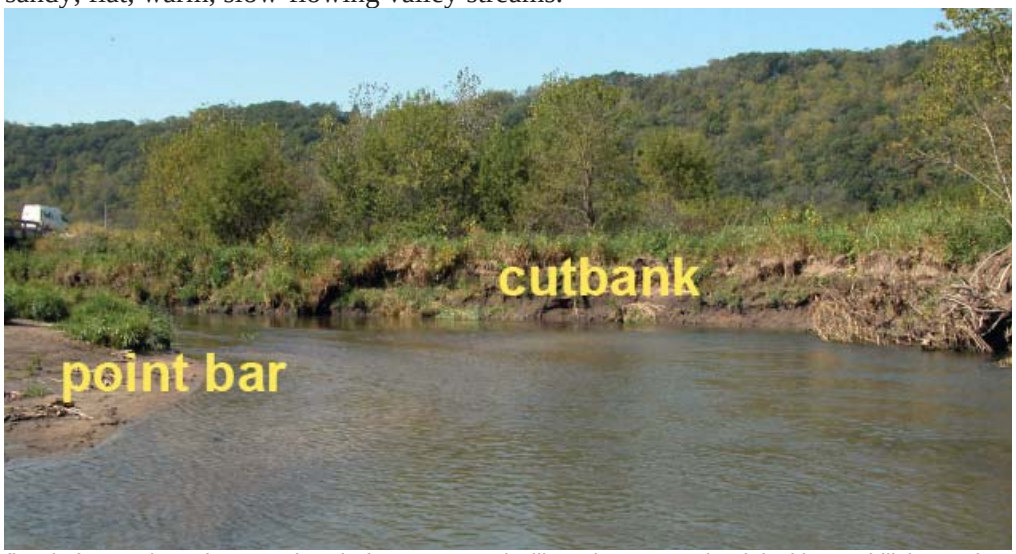
2. Stream flows

Stream flows vary seasonally and interannually depending on snow melt, rain-on snow events, growing season rains, drought, and climatic changes such as increasing temperatures. Variations in seasonal and annual precipitation yield a range of flows that are fundamental to sustaining river ecosystems. Aquatic organisms such as spawning fish have evolved to these seasonal cues. Stream flows are also altered by land-use changes, from agriculture and urbanization to timber harvest. These changes generally inhibit infiltration of precipitation into the ground. Reduced infiltration increases runoff, which increases the volume of water that streams must transport, resulting in stream instability and excessive erosion. In the stream channel, flows vary because of stream features such as *sinuosity* (curving shape), width, depth, and bed and bank materials (e.g., sand, gravel, boulders, vegetation). For example, flows are faster along the outside of bends and slower along the inside of bends. Consequently, strong erosional forces along outside bends form pools, or scours, and cutbanks if the banks are weak; slower flows along inside bends deposit sediment, forming point bars (see photo at left). Streams create bends to reduce the speed of the flows just as a downhill skier carves from side to side down the hillside. Also like a skier gaining speed, the tighter the turns, the deeper the scours or pools left by the stream flow. The strongest stream flow generally follows the *thalweg* (deepest part of the channel), travels from pool to pool or bend to bend, and crosses from one side of the channel to the other depositing sediment, which creates riffles.

3. Stream connectivity

Fragmenting streams with dams and culverts disrupts the *longitudinal connectivity* of a stream. Uninterrupted flow along the entire length of the stream is essential for the proper flow and

exchange of water, energy, sediments, nutrients, and organisms. Structures that fragment streams disrupt the progression of stream habitats from small, shaded, rocky, steep headwater streams to large, sandy, flat, warm, slow-flowing valley streams.



Streamflow is faster along the outer bend of a stream and will erode a streambank lacking stabilizing native vegetation, creating a cutbank. Excessive erosion increases the sediment load of the stream. Streamflow is slower on the inside of the bend, which allows sediment to settle and form a point bar.

Lateral connectivity between the stream channel and its floodplain is crucial to stream health and stability. Floodplains play an important role because this land reduces the floodwater's energy with plants and trees and provides temporary storage space for floodwaters and sediment. Floodplains also provide habitat for various plant and wildlife communities, some of which depend on flood events to reproduce and grow. Floodwaters nourish floodplains with sediments and nutrients and provide temporary aquatic habitat for invertebrate communities, amphibians, reptiles, and spawning fish.

4. Stream biology

Streams are complex networks of terrestrial and aquatic communities. Streams and their floodplains provide diverse habitats including uplands, riparian zones (streambanks), floodplain forests, marshes, fens, oxbow lakes, riffles and pools. The diverse habitats and their plant and animal species are key to maintaining healthy ecosystems. Terrestrial plants, aquatic plants, and aquatic animals in the stream are important to the stream's health. Terrestrial plants in the floodplain and riparian zones strengthen and stabilize the soil; intercept runoff; filter out nutrients, sediment, and other pollutants; and provide habitat. Similarly, aquatic plants protect the shoreline, stabilize the streambed, are a food source, provide refuge, absorb nutrients and contaminants from the water, and produce oxygen. Aquatic animals such as freshwater mussels are important to aquatic systems because they stabilize the streambed by anchoring themselves into the sediment, clean the water of particles and chemicals during their feeding process, and are a source of food and habitat for fish and invertebrates. They also use fish as hosts for their larvae, relying on fish health, abundance, and migration for dispersal. This demonstrates the interconnections of aquatic systems.

5. Water quality

Water quality includes the chemical, biological, and physical characteristics of water. Good water quality is maintained by natural channel shapes and flows, naturally vegetated riparian zones, a healthy biological community, and proper stewardship. The most common pollution sources in

Minnesota are sediment, herbicides, insecticides, industrial chemicals, sewage effluent (outflow), and fertilizers. Some of these sources such as industrial and sewage effluent are point sources, which are identifiable, local sources that are relatively easy to monitor and regulate. Others are nonpoint sources such as herbicides and fertilizers, which are contaminants from sources that are much harder to assess and regulate. Healthy stream systems ensure good water quality and are paramount to human and ecological health. This crucial resource provides drinking water from lakes and rivers for many cities, in addition to habitat for wildlife, fish, and aquatic organisms, some of which are valuable food sources.

How do stream alterations affect the five components of stream health?

Structures in a stream, such as dams and culverts, and some land use practices in a watershed can significantly affect the five components of natural, healthy streams: shape, flow, connectivity, biology, and water quality.

How structures affect stream health

Shape: Dams, culverts, and handmade structures alter the natural stream pattern, dimensions, and profile. The water fl owing over a dam is "sediment hungry," leading to scouring or down cutting the streambed and erosion of streambanks. Dams also create unnatural reservoirs upstream that slowly fill with settling sediment.

Flow: Dams and improperly sized or placed culverts limit the flow of water, energy, sediments, and nutrients downstream. These structures also lock the channel in place, which restricts the stream from adjusting to maintain stability.

Connectivity: Dams and perched culverts create barriers that disrupt the flow downstream and prevent fish migration upstream to spawning, over-wintering, or other habitat areas. Levees and dikes disconnect the channel from the floodplain, forcing the channel to carry flood flows.

Biology: Dams create reservoirs or impoundments that initially flood and eventually bury critical wildlife habitat. Dams and levees also disrupt the flow and exchange of material longitudinally and laterally on which biological communities depend.

Water quality: In the upstream reservoirs, contaminants and nutrients accumulate, which ultimately degrades water quality.

How land use practices affect stream health

Shape: Digging ditches converts headwater streams into unstable straight trenches and increases the stream slope. This leads to excessive erosion upstream and sediment deposition downstream of the ditched area. Removal and degradation of natural riparian vegetation weakens streambanks, resulting in excessive erosion and ultimately a change in stream shape.

Flow: Irrigation from streams can lower streamflows to potentially critical levels, especially during dry periods when water levels are low and aquatic communities need refuge. Urbanization and tiling on farmland funnel excess rainwater directly into streams, forcing the streams to carry higher, fl ashier flows.

Connectivity: Connection to the floodplain is commonly degraded or removed. Floodplains converted to farmland, pasture, or developments do not effectively dissipate or store floodwaters. Riparian zones that are farmed, mowed, grazed, deforested, or developed replace natural and diverse vegetation with crops, lawns, bare soil, and pavement.

Water quality and Biology: Excessive erosion of topsoil commonly degrades water quality, primarily by decreasing water clarity. Field and lawn fertilizer and manure inputs add excess nutrients to streams, causing extreme plant and algal growth followed by decomposition that extracts oxygen from the water. Pesticides, herbicides, and insecticides have been found at dangerous levels in streams. Research indicates that these chemicals kill aquatic organisms, inhibit reproduction, and upset hormones in animals in addition to a multitude of adverse physiological effects.

Land use: (above) Parking lot runoff, (bottom center) eroded fields, and (bottom right) unvegetated ditches transport pollutants and excess sediment to streams. Dams and culverts: (top left) A handmade dam disconnects fish from upstream migration and alters the streamflow. (top right) A perched culvert also inhibits fish passage and disrupts the longitudinal connectivity of the stream.

To what extent have we disturbed Minnesota streams and watersheds?

Minnesotans take great pride in and enjoy the state's 92,000 miles of large and small streams. However, throughout our history, humans have had a growing impact on our streams and watersheds due to a booming population and technological advancements. The following are a few examples of the extreme changes that have degraded stream health in Minnesota: Nearly one-third of the streams have been converted to ditches. Nearly 18,000 miles of tile are added to farmland in Minnesota every year. That is nearly three-fourths of the circumference of the earth. More than 900 dams greater than 6 feet in height and hundreds of smaller (low-head) dams have been built on Minnesota streams. More than 56 percent of the landscape has been converted from native prairies, wetlands, and forests to farmland and urban areas. These land-use changes and resulting changes in stream shape lead to excessive streambank or streambed erosion and degraded stream health. These impacts, in addition to climate change, lead to increased erosion and deposition, altered hydrology, more frequent and destructive flooding, degradation of aquatic and riparian habitat, and decrease in species diversity. Moreover, these effects have huge economic impacts. In the deep loess soils (highly erodible, windblown fine sediments) of western Iowa there has been an estimated $1.1 billion in damage to private and public infrastructure due to channelization and ditching. In Minnesota, flowing water carries off more than 60 million tons of upland topsoil each year. That amount would fill the Metrodome with topsoil 21 times every year. Consequently, stream stability is crucial to our environment and our own well being.

How can you and the community correct stream disturbances and improve stream health?

As individuals, riparian landowners can restore, protect, and maintain naturally vegetated riparian buffers and floodplains realizing that rivers are dynamic. However, many stream health problems are the result of widespread land use issues. In these cases, communitywide efforts are needed for recovery to begin. Watershed planning engages citizens, landowners, businesses, local governments, interest organizations, and other agencies. Watershed protection and planning becomes effective through cooperation toward long-term goals like improving water quality, reducing surface runoff, reducing soil loss, improving habitat, restoring natural biodiversity,

and allowing for sustainable development. Furthermore, focusing on a watershed scale makes it easier to integrate social, economic, and cultural factors into planning and implementation efforts.

Additional information

The Healthy Rivers instructional CD and resource sheets on stream health, such as techniques to stabilize a streambank, are on the DNR web site. Research sources are available on request.

DNR Contact Information

DNR Stream Habitat Program is described
on the Ecological Services website:
http://mndnr.gov/eco/streamhab
The DNR Waters website:
http://mndnr.gov/waters
DNR address in St. Paul:
500 Lafayette Road
St. Paul, MN 55155
DNR Ecological Services: (651) 259-5100
DNR Waters: (651) 259-5700

Conferences, Seminars and Training

Midwest RAS Workshop and NADF Aquaculture Field Day & Vendor Fair

June 10 -12, 2009 Bayfield Pavilion, Bayfield Wisconsin

Northern Aquaculture Demonstration Facility Red Cliff

Sponsored by:
UW-Stevens Point College of Letters & Science
Northern Aquaculture Demonstration Facility
UW– Extension
UW-Madison/Aqua Program
North Central Regional Aquaculture Center
In Conjunction with:
Wisconsin Aquaculture Association, Inc.

With Lake Superior, the world's largest freshwater lake, as our backdrop, the **Midwest Recirculating Aquaculture Workshop, Aquaculture Field Day and Vendors Fair** will be fun, informative and provide opportunities to exchange ideas with others. This includes three days of great events:

- 2 days of RAS sessions in Bayfield, including NADF Tour
- Optional narrated 2 hour Apostle Islands Charter Boat Tour
- Aquaculture Vendors Fair - see what's new and talk with manufacture reps about their products
- Wisconsin Aquaculture Industry Advisory Counsel (WAIAC) Meeting
- Wisconsin Aquaculture Association (WAA) Quarterly Board Meeting
- Wisconsin Aquaculture Association Fish Fry Picnic

June 10-12, 2009 Registration

Name: _____
Business Name: _____
Street: _____
City: _____
State: _____ Zip: _____
Phone: (_____)_____
Email: _____

Workshop - includes workshops, breaks, lunch and handouts, Friday picnic
Number people attending
___ $75.00/person, WAA member
___ $100/person , non member
___ WAA Annual Picnic— free

Optional—Thursday Evening Cruise
___ $35/adult ___ $25/spouse,
___ $15/child, under 18 yr.

Friday Picnic Only
___ $9 per person for non WAA members

Please let us know if you are attending any of these activities so we can plan accordingly
You may pre-register and pay at the door. If you don't pre-register, there will be a $15 late fee

Checks: Payable to WI Aqua Assoc (WAA)
Credit Card #_____
Credit card expire/security code_____
Billing Address if different than above
_____

Send to:
WAA, PO Box 1408, Bayfield, WI 54814

Lodging:

Any lodging facility with specials will be listed on WisconsinAquaculture.com. When booking by phone, mention you are attending the **Aquaculture Workshop.** For details on individual lodging properties or to check on availability, you may go to the Bayfield Chamber web site at www.Bayfield.org Workshop special prices will not be on the Bayfield Chamber's site.

WI-AFS sponsored Fisheries Conservation Genetics Workshop this summer to be held in conjunction with the Centrarchid, Esocid and Walleye Technical Committees of the AFS North Central Division joint meeting, July 28-30, 2009 in La Crosse, Wisconsin.

Some of you who are members of WI-AFS will have seen this announcement before but we wanted to offer this class to all who might be interested. Please note the deadline date for registration below if you want reimbursement from this fiscal years budget. As always please seek your supervisors approval before registering for the class to ensure reimbursement.

The 1.5-day workshop on Fisheries Conservation Genetics will take place July 27-28, 2009 at the Best Western Midway in La Crosse. The class instructor will be Dr. Brian Sloss of UW-SP. Further class information and registration materials are attached or can be located at http://www.wi-afs.org/

The registration deadline for the Genetics class is June 26, however if you wish to reimburse your registration costs from this fiscal year please have your registration material and payment to me no later than June 1 so that I can send out a receipt and you can put in your paperwork for reimbursement. Checks should be made payable to WI-AFS.

If you have any questions regarding this class please give me a call or send an email.

The Technical Committees will have the theme of species interactions and multi-species management, although talks on any topic of interest to the committees are encouraged. The Technical Committee meetings are a great place to meet some of the top specialists from around the region. The meeting is small and fairly informal, with 10 or 15 technical presentations and some good discussion. Further information and registration materials for this meeting are attached or can be located at http://www.ncd-afs.org

If you have questions regarding the technical committee meetings please contact John Kubisiak.

Justine Hasz-Continuing Ed Chair
Senior Fisheries Biologist
Bureau of Fisheries Management
Wisconsin Department of Natural Resources
473 Griffith Ave.
Wisconsin Rapids, WI 54494
Tel: 715-421-7845
Fax: 715- 421-7830
Email: Justine.Hasz@wisconsin.gov

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Fisheries Conservation Genetics Workshop
Sponsored by Wisconsin Chapter American Fisheries Society

Instructors:
Brian Sloss and Ryan Franckowiak
Wisconsin Cooperative Fisheries Research Unit, University of Wisconsin, Stevens Point.
Dates:
Monday, July 27 (12:30 – 4:30 pm)
Tuesday, July 28 (8 am – 4 pm)
Location:
Best Western Midway, LaCrosse WI http://www.midwayhotels.com/la_crosse/ Room rates are $70 for single and $80 for double occupancy. Includes breakfast; complimentary boat slips are available. Call the hotel directly at 608-781-7000 for reservations and mention that you are attending the American Fisheries Society meeting.
Course Fee:
AFS Chapter member: $100.00 ($75 for students); non-member $110.00. Course fee includes refreshments, Tuesday lunch, and a copy of text: Population Genetics: Principles and Applications for Fisheries Scientists, Eric Hallerman, ed. (reduced $ if you already own the book)
Synopsis:
The goal of this workshop is to acquaint fishery management professionals with the uses, application, and finer details of molecular genetic analyses and conservation genetics and their role in integrated, science-based management of our natural resources. Participants will undergo an intensive review of genetic principles and learn about recent advances in the field of molecular genetics and how this impacts our ability to assist resource management efforts. Goals of the workshop include a working knowledge of the common molecular markers used in fish genetics, why these different markers are necessary, when these different markers are successfully employed, and how sampling scheme/design is an integral facet of a successful experimental design. Specific measures of genetic diversity will be explored in order to demonstrate the usefulness and complimentary nature of genetic data to traditional demographic data in managing our aquatic resources. Finally, a regional overview of recent genetic work will be used to demonstrate practical applications of genetics research in fisheries management. **Registration deadline is June 26.** Pre-registration is required.

Name:

_____

Work Affiliation:

_____

AFS Affiliation: Member of _____ Chapter (AFS Chapter or Parent Society membership)
Address:

_____

Email:

_____

Workshop cost ____ AFS Chapter Member - $100.00
____ Non-Member - $110.00 (includes WI Chapter membership)
____ Student - $75.00
Pre-register by June 26 with Justine Hasz, 715-421-7845 Justine.Hasz@wisconsin.gov
Payment will be collected at the door or may be sent to:
Justine Hasz-WIAFS Continuing Education
473 Griffith Avenue, Wisconsin Rapids WI 54494

NORTH CENTRAL DIVISION OF THE AMERICAN FISHERIES SOCIETY

JOINT MEETING

Centrarchid, Esocid and Walleye Technical Committees

CENTRARCHID TECHNICAL COMMITTEE
John Nelson, Immediate Past Chair John.Nelson@wisconsin.gov

ESOCID TECHNICAL COMMITTEE
Jim Diana, Chair jimd@umich.edu
Rod Pierce, Chair-Elect Rod.Pierce@dnr.state.mn.us
Ed Braun, Immediate Past Chair EBraun@dnr.IN.gov

WALLEYE TECHNICAL COMMITTEE
John Kubisiak, Chair JohnF1.Kubisiak@wisconsin.gov
Donna Hanen Muhm, Immediate Past-Chair Donna.Muhm@dnr.iowa.gov
Justin Van De Hey, Chair-Elect Justin.VanDeHey@sdstate.edu
Donna Hanen Muhm, Secretary Donna.Muhm@dnr.iowa.gov

Website: http://ncd-afs.org/

2009 SUMMER MEETING AND FIRST CALL FOR PAPERS

DATES: July 27-28, 2009 - Fisheries Conservation Genetics Workshop (WI Chapter AFS)
July 28-30, 2009 – Joint meeting of Centrarchid, Esocid and Walleye Technical Committees

PLACE: Best Western Midway, LaCrosse, Wisconsin

ACCOMODATIONS: A block of rooms has been reserved at the Best Western Midway in LaCrosse WI
http://www.midwayhotels.com/la_crosse/ Room rates are $70 for single and $80 for double occupancy. Includes breakfast; complimentary boat slips are available. Call the hotel directly at 608-781-7000 for reservations and mention that you are attending the American Fisheries Society meeting.

Monday, July 27 (12:30 – 4:30 pm) – Conservation Genetics workshop (see separate announcement)
Tuesday, July 28 (8 am – 4 pm) – Conservation Genetics workshop
Tuesday evening – 5 pm social (we're working on Pearl Street Brewing)
Wednesday (8 am – 4 pm) – Technical Committee presentations and discussion.
Wednesday evening – 5 pm fried catfish dinner at Goose Island County Park. Fishing available.
Thursday (8 am – noon) – Technical Committee wrap-up and separate business meetings.

PRELIMINARY COST (subject to change): $50 – Technical Committee joint meeting ($25 students), including
Tuesday social, Wednesday lunch & evening fish-fry and breaks.

CALL FOR PAPERS: The topic of this summer's meeting will be species interactions and multi-species management.
Other topics of interest are also encouraged. The summer meeting is a great forum for informal exchange of
information about fisheries biology and management. **Submit the title and topic of your presentation with your**
meeting registration by June 26. Presentations will be allotted 15 minutes plus 5 minutes for questions and
transition and should be sent to Donna Muhm in PowerPoint format by July 17.

Please register by June 26, 2009 with Donna Muhm, Donna.Muhm@dnr.iowa.gov Meeting fee will be collected at the door (cash or check only).

Stream Health and Restoration Workshops
- 2009 -

Natural Channel Design in Dam Removal & Fish Passage
June 8-12, Fergus Falls, MN

Fluvial Geomorphology & Stream Classification
July 13-17, Redwood Falls, MN

Stream Restoration
August 17-21, Fergus Falls, MN

As rivers become more widely recognized and appreciated as valuable natural resources, the responsibility to better understand these systems takes on greater importance. The Minnesota Department of Natural Resources offers workshops that teach the basic functions and processes of rivers, the Rosgen method of stream classification, assessing and monitoring river health, and natural channel design river restoration. These workshops are designed for natural resource professionals whose work involves rivers directly or indirectly as well as those who are engaged in watershed-wide resource management issues. Workshops are hands on experiences and each one requires students to complete fieldwork, data analysis, and present their findings.

What We Offer
We offer a series of four stream-related workshops. The first course, Fluvial Geomorphology and Stream Classification, is a prerequisite for the subsequent courses. This workshop is typically offered every summer. The Stream Assessment and Monitoring course is a prerequisite to Stream Restoration workshop. These workshops are offered in alternating years. The Natural Channel Design in Dam Removal and Fish Passage workshop is being offered for the first time this year. All courses include both classroom lectures and field exercises, and all run from mid-day Monday through mid-day Friday.

Equipment Needed
Laptops, USB (jump) drives, and scientific calculators are required for all courses to facilitate data sharing, analysis and presentation preparation. Chest waders are required for fieldwork, but in some streams and weather conditions students find hip waders, wet suits or swim suits with a pair of wading shoes or sandals more comfortable. Mosquito repellent, rain gear, sunscreen, and water bottle are also recommended. All other necessary field gear to complete the course will be provided.

Fluvial Geomorphology and Stream Classification
Rivers and streams have predictable dimensions, patterns, and profiles. This course discusses the fluvial geomorphological processes involved in creating and maintaining these parameters, as well as the fundamental hydrology and hydraulics of rivers. We also focus on the skills necessary to properly determine a stream segment's type, including the essential tools for classifying streams to Levels 1 and 2 using the Rosgen classification methodology. Upon completion of this course, students will have the skills necessary to classify a stream reach, greatly facilitating communications among river managers worldwide. Students will also have a firm knowledge of the functions and processes that are critical to a river's health. This class will be held in Redwood Falls, Minnesota this year, 13-17 July.

Stream Assessment and Monitoring
This workshop is designed to teach natural resource professionals to effectively determine a stream's health, or condition, and to monitor it over time. Concepts taught include monitoring design and evaluation, sediment transport, causes and rates of erosion, use of biological indicators, and understanding riparian vegetation. Techniques used include surveying,

Pfankuch's Stability Rating, biological sampling, Bank Erosion Hazard Index, bank pins and bed chains, introduction to suspended and bedload sediment sampling methods, and reconnaissance and screening levels of the WARSSS riparian and channel monitoring techniques. Students completing this course will be able to quantitatively describe a river's condition in terms that other professionals can understand. These skills also enable a researcher to monitor a river's condition over time in a non-subjective manner. This class will not be offered in 2009.

"Natural stream channel stability is achieved by allowing the river to develop a stable dimension, pattern, and profile such that, over time, channel features are maintained and the stream system neither aggrades or degrades." -Rosgen, 1996

Stream Restoration
This workshop is designed to teach natural resource staff to plan and construct stream improvements and restorations using natural materials and designs, while working with the river's natural processes rather than against them. Project types discussed will include bank stabilization, dam removal, dam conversion to a rapids, culvert placement, restoration of meanders to straightened channels, and fish bypass channels around dams. In addition to classroom lectures and field observations, students will design and construct a restoration project on a laboratory stream model. After completing this course, students will be able to work with other professionals to design and implement stream improvement projects on the ground from beginning to end, using a natural stream approach.
This class will be held in Fergus Falls, Minnesota this year, 17-21 August.

Natural Channel Design in Dam Removal and Fish Passage
This course will cover the range of dam effects on river ecology, alternatives for restoration and design criteria for dam removals and natural channel based fish passage. Lecture topics will include: fish hydrodynamics, fluvial processes, culvert design, fishway design, river restoration following dam removal, permitting, construction, and monitoring. A bus tour will provide visits to a number of projects, as well as opportunities to actually snorkel within fishways and observe passing fish. Students will visit a dam and develop conceptual fish passage designs that will be tested in a physical model.
This class will be held in Fergus Falls, Minnesota this year, 8-12 June.

For questions about the workshops, contact:
Amy Childers
MN DNR - Ecological Resources
Stream Habitat Program
Phone: 218-739-7576 x 233
Amy.Childers@dnr.state.mn.us

Demographic Diversity in Natural Resource Science Professions

Towards an Inclusive Scientific Democracy

139th Annual American Fisheries Society Conference

When: September 2-3, 2009
Location: Nashville, TN
Purpose: The goal of the symposium is to address some of the academic and occupational realities

pertaining to under-represented populations in fisheries and natural resource science professions.
The symposium will highlight some of the challenges and successes of existing programs for
students from under-represented groups with aptitudes for the sciences.

For more information regarding the conference, visit www.fisheries.org.

For more information, contact:

Larry A. Alade, Chair
EOS President
Phone: 508-495-2085
E-mail: Larry.Alade@noaa.gov
www.fisheries.org/units/eos

Officers and Committees

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renschenk01@northland.edu

Committees

Awards, Don Bush-**donald.bush@wisconsin.gov**, & Sue Byler-**susan.beyler@wisconsin.gov**

Communications, Jordan Weeks-**jordan.weeks@wisconsin.gov**

Continuing Education, Justine Hasz-**justine.hasz@wisconsin.gov**

Fisheries Action Network (FIN & FAN), Joe Hennessy-**joseph.hennessy@wisconsin.gov**

Membership, Tim Simonson (chair)- **timothy.simonson@wisconsin.gov**, & Phil Moy (aquaculture liaison)
pmoy@uwc.edu

Nominations, Kurt Welke (chair)- **kurt.welke@wisconsin.gov**, Joe Hennessy-**joseph.hennessy@wisconsin.gov**

Raffle & Revenue, Steve Gilbert (chair)- **stephen.gilbert@wisconsin.gov**, Kendall Kamke- **kendall.kamke@wisconsin.gov**, Dennis Scholl- **dennis.scholl@wisconsin.gov**, Gervase Thompson- **gervase.thompson@wisconsin.gov**, & Bill Gobin-**William.gobin@wisconsin.gov**

Resolutions, Phil Moy-**pmoy@uwc.edu**

Scholarship, Pete Segerson-**peter.segerson@wisconsin.gov**

Environmental Issues, Joe Hennessy-**joseph.hennessy@wisconsin.gov**

Web Coordinator, Brad Eggold-**bradley.eggold@wisconsin.gov**

Join Now!

Active membership in the Wisconsin Chapter of the American Fisheries Society will provide many opportunities to advance your growth as a fisheries professional and allow you a greater voice in shaping the future of Wisconsin fisheries. The quarterly news letter and the ability to network with other fisheries and aquatic resource professionals from government, academia, fish culture and the private sector will keep you abreast of all the latest techniques and issues.

You do not have to join the parent society to be a Wisconsin Chapter member and the annual $10.00 membership fee is an unbelievable bargain. Student memberships are free to those who request it.

_____

Please send complete form and a check for $10.00 payable to AFS Wisconsin Chapter:

American Fisheries Society, Wisconsin Chapter
PO Box 1846
Madison, WI 53701-1846

These dues are for Membership during the year **20_____** (indicate calendar year)

Name:

_____

Address:

_____

Phone: _____e-mail:

_____

Student (NO CHARGE)? Yes ____ No____

Are you a member of national AFS (parent society)? Yes ____ No____

A copy of our newsletter is now available on our web site:

www.wi-afs.org

Congratulations and welcome aboard!

THE TELEOGRAM

Wisconsin Chapter American Fisheries Society
PO Box 1846
Madison, WI 53701
Fall 2008 Issue