Newsletter of the Northeastern Division of the American Fisheries SocietyAugust 2010 Volume 26 Issue 2ed. Ann B. Grote and Phillip E. Dionne

President's Message

The Northeastern Division held its annual meeting in Newton, Massachusetts this April during the 66th Annual Northeast Fish and Wildlife Conference. Budget shortfalls have led to restrictions on travel for many state agencies, and the Conference, similar to last year, was reduced for the second year by a day to two and a half days, and was run Sunday, April 25 through Tuesday, April 27. The Division still succeeded in having a quorum at our annual business meeting. About 40 members attended the business meeting and were addressed by AFS President Don Jackson on recent and future initiatives by AFS. AFS First and Second Vice-Presidents Bill Fisher and John Boreman also attended the meeting. Desmond Kahn, Awards Chairman, announced that Forrest Bonney was the recipient of the President's Award, Roy Miller was the recipient of the Meritorious Service Award, and the Diadromous Conference Committee, which was responsible for the 2007 International **Diadromous Fishes Symposium and its** resulting 2009 AFS publication, was the recipient of the Division's Special Achievement Award.

At the conference Monday evening banquet, I presented Dr. Victor Crecco with the Dwight Webster Memorial Award, the NED's highest honor. Dr. Crecco was recognized for his many contributions in the areas of fisheries science and management and for his decades' worth of work on anadromous and marine fishes in the Northeast. Dr. Crecco currently holds the position of Program Specialist with the Connecticut Department of Environmental Protection. William Whitmore of the University of Rhode Island won Best Student Paper Award for his presentation "A look ahead at catch shares and the future of New England groundfish management: Will ITQs follow sectors." Yoichiro Kannowon from the University of Connecticut won Best Student Poster entitled "Evaluating effects of water withdrawals and impoundments on fish assemblages in Connecticut streams."

The John Moring Student Travel Awards went to Justin Davis, a Ph.D. candidate at the University of Connecticut (Storrs), Department of Ecology and Evolutionary Biology, and Sara M. Turner, Master of Science candidate at the State University of New York (Syracuse), College of Environmental Science and Forestry.

Recent elections for the Division officers resulted in election of John Arway (PA) as President, Phil Downey (VT) as President-Elect, and Randy Jackson (NY) as First Vice President, and Brian Murphy (CT) was elected Division Representative to the AFS Nominating Committee. John Cooper remains as Division Secretary/Treasurer, since that Office is elected on a two year term. The new Division officers will assume their duties immediately after the National AFS Annual Meeting being held this September in Pittsburgh, Pennsylvania.

Our Secretary-Treasurer, John Cooper, presented information that showed our financial reserves have somewhat declined due to both stock market declines and also to the fact that our expenditures have been exceeding our income. However, we have considerably slowed down the decline by moving our investments into the more stable bond market, reducing expenditures, and receiving some income from the sale of the new AFS publication on Diadromous Fishes titled *Challenges for Diadromous Fishers in a Dynamic Global Environment* that was recently completed by the Division's Diadromus Committee.

During the Conference itself, the Plenary Session on Monday morning presented talks on the conference theme (*Climate Change and* Wildlife Conservation – Adaptation and *Mitigation*). Division Program Chair Mark Tisa (MA) organized excellent sessions on freshwater, marine, and diadromous, fishes. There were other good sessions on conservation engineering, and habitat management, and a group under the Division (Robert Beal, ASMFC; Gary Shepherd, NMFS, Wilson Laney, USFWS, and I) organized a comprehensive session on northeast striped bass science and management. We are planning to turn the presentations from that session into an AFS publication that will fill a need to bring knowledge of Atlantic coast striped bass biology and management up to date. In addition, the publication will benefit readers by offering expert perspectives on influences and management practices, and their effect on striped bass restoration and management.

The NED website, has information on Division Offices, Awards, Committee Chairs, and Division Procedures, and a section where each Chapter in the Division can post news (http://www.fisheries.org/units/ned/). Chapter presidents, please update this site with your latest chapter news. These postings also provide links to each chapter's website. Thanks to Greg Kozlowski, our webmaster, for keeping our website up.

As I mentioned before, the AFS Annual meeting this year will be in Pittsburgh

Pennsylvania, the exact dates are September 12-16, 2010. The meeting is in our Division geographic area and the Division has provided a \$1,000 donation to help support student activities at the Pittsburg meeting, and also has organized a full day symposium on Ecosystem Approaches to Marine Fisheries Science and Management to be held during the meeting on Wednesday September 15th. Thanks to Michael Fogerty, William Overholtz, and Jason Link for organizing that symposium.

Hope to see you in September in Pittsburgh,

Paul Perra paul.perra@noaa.gov



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Upcoming Meetings



Fellow AFS NED members, we are pleased to announce that the 2010 national meeting will be held in the Northeast Division in Pittsburgh, Pennsylvania. The following announcement advertises the meeting and hopefully you can plan to attend. We are still looking for volunteers to help with program planning so if you have the interest and the time, please contact the meeting's general chair Leroy M. Young, Jr., Director, Bureau of Fisheries, Pennsylvania Fish and Boat Commission, 450 Robinson Lane, Bellefonte, PA 16823, 814-359-5177 (Office), levoung@state.pa.us to volunteer.

Welcome AFS 2010 Attendees!

There's no place like Pittsburgh, Pennsylvania, for the 140th meeting of the American Fisheries Society.

Join us downtown **September 12-16, 2010**, at the spectacular Westin Hotel and the David L. Lawrence Convention Center.

Pittsburgh is renowned for its arts, entertainment and recreational opportunities. With fabulous dining, world-class museums and innovative art galleries, Pittsburgh is one of the top travel destinations in the world. Sporting opportunities are diverse. Pittsburgh is home to Super Bowl Champion Pittsburgh Steelers, Stanley Cup Champion Pittsburgh Penguins and the Pittsburgh Pirates. On the water, enjoy fishing along Pittsburgh's river banks for bass and other game fish.

Explore beyond the city. You will find solace in the mountains of western Pennsylvania for hiking or native brook trout fishing. Try white water rafting in the rapids of the Youghiogheny River.

With so much to see and do, you'll find Pittsburgh is a city with a warm and welcoming atmosphere. We look forward to seeing you in September 2010. Link for AFS 2010 meeting: <u>http://www.fisheries.org/afs10/index.php</u>



12th Flatfish Biology Conference

December 1-2, 2010

The 12_{th} Flatfish Biology Conference will be held at the Water's Edge Resort in Westbrook, CT on December 1-2, 2010. This series of conferences has provided opportunities for scientists throughout North America and beyond to present their research and findings in flatfish biology. Conference sponsors include the Dominion Foundation, Southern New England Chapter of the American Fisheries Society, and NOAA Fisheries Northeast Fisheries Science Center. A call for papers has been issued with titles to be submitted by July 23 and abstracts by August 27. Please see our website for conference details including registration information:

http://mi.nefsc.noaa.gov/flatfishbiologyw orkshop

or contact Renee Mercaldo-Allen, Conference Chair, at <u>rmercald@clam.mi.nmfs.gov</u> for additional information.

Notices and Updates



AFS MEMBERS, AFS needs your help!

Do you know a student in a natural resources curriculum or a young professional in your organization? Introduce them to the benefits of membership in the oldest, largest and most influential associations of fisheries professionals in the world:

- Free subscription to AFS monthly magazine Fisheries.
- Reduced rates on journals and books.
- Reduced registration fees at Annual Meeting and symposia.

- Ability to apply for Associate or Certified Fisheries Professional certification at reduced rates.
- Access to AFS's Jobs Bulletin on the Web.

All of these benefits and more for \$40 annually for young professionals (young professional membership extends for three years after graduation).

For \$20 annual membership, students also receive all of these great benefits and, in addition, full access to all AFS journals online: *Transactions of the American Fisheries Society, The North American Journal of Fisheries Management, Journal* of Aquatic Animal Health and North American Journal of Aquaculture. Students also get full access to Fisheries InfoBase, the online catalog of all articles published in AFS journals from 1872 through 2001.

Registration is easy!

<u>New MEMBERS CAN JOIN AT:</u> <u>www.fisheries.org</u> Click on the JOIN tab and following the form instructions.

Get the word out today—Support your society and do your colleagues a favor by introducing them to AFS

Call for Help

NED Members:

I have been asked to provide a talk at a Colloquium of the AFS Student Subsection members to be held at the 2010 AFS meeting in Pittsburgh on September 16th 2010. The purpose of the talk is to provide an NED perspective pursuant to the following overview:

Colloquium Overview

Philosophies of fisheries management, research, agencies, and education have been changing and merging ideas over time. A contemporary understanding of these changes in the context of the history of fisheries as a science is beneficial for students preparing to engage in fisheries science careers. The objective of the 2010 student colloquium at the AFS Annual Meeting in Pittsburgh, PA will be to provide students and professionals in fisheries discussion of past examples, current needs and future directions in the ever-changing realm of fisheries research and management. Specifically, the colloquium will present a historical and philosophical overview of fisheries as a science and then engage in the regional (e.g., Northeast, Midwest) applications of fisheries management and research. This

will be followed by an overall perspective regarding how current university curricula are aligned with the hiring needs of agencies. A final presentation merging the ideas of changing philosophies and the future of fisheries science will close the colloquium. This colloquium will give students a broad overview of:

- Fisheries as a science,
- How fisheries science has changed over time as exemplified by regional case studies,
- How current student skill sets and university curricula are meeting agency needs, and
- How fisheries science is posed to change in the future.

I would welcome any NED member's perspective with regard to these issues and will try to weave them into an interesting talk for new and future members. Please email your thoughts and comments directly to me at the following email address.

Thanks,

John Arway, President-Elect AFS NED jarway@state.pa.us

New York Chapter Update

Matt Sanderson

The New York Chapter held its annual meeting in Lake George, NY, February 10-12, 2010. The meeting focused on "New York's Fisheries Heritage." Robert Daniels from the New York State Museum was the keynote speaker. During the meeting the Chapter held a Fish ID Workshop. This course was designed to teach fish identification techniques for many of the non-game species of New York State, with emphasis placed on the more difficult taxonomic families. Over 120 people attended the meeting and workshop despite a difficult budgetary environment.

Two awards were recognized at our annual meeting on February 11, 2010. The Conservationist of the Year award was given to Ronald Urban, of the New York State Chapter of Trout Unlimited. The Professional Achievement Award was given to Douglas Sheppard, of the New York State Department of Environmental Conservation. Doug was recognized for his more than 35 years of service to the conservation of New York State's fisheries resources and his many years of service to the American Fisheries Society.

The chapter executive committee has been planning for the next annual meeting to be held in late January or early February in the Rochester, NY area. The theme is Aquatic Habitat Restoration. If you have experiences with aquatic habitat restoration projects or assessments and would like to speak on the topic, please contact Matt Sanderson at <u>mjsander@gw.dec.state.ny.us</u>. A survey of the membership was conducted to determine the topic of this year's workshop. If you have ideas, please contact Chris VanMaaren at: <u>ccvanmaa@gw.dec.state.ny.us</u>

UMaine Student Subunit Update

David Kazyak

This spring, the UMaine Student Subunit maintained a busy schedule. Members of the UMaine Student Subunit have donated their time to research, conservation, and public education projects throughout the community including presenting lessons to students for the Penobscot River Keepers, assisting in Atlantic salmon smolt migration research, teaching fly fishing at the Maine Chapter of Trout Unlimited Youth Trout Camp, helping to install a NOAA fisheries Alewife monitoring weir on Sedgeunkedunk Stream, and manning a booth at the annual Penobscot River Revival Festival.



Robert Hogg (UMaine AFS), Tara Trinko, and Trent Liebich (both NOAA Fisheries) constructing an Alewife monitoring weir on Sedgeunkedunk Stream.

Photo courtesy of Stephen Coghlan

The Unit co-hosted several guest speakers, including visits from Ben Letcher and Steve McCormick of the Conte Anadromous Fish Research Center. Student members had the opportunity to meet these individuals and discuss fisheries topics over food in an informal setting.

Additional social activities included two highly productive ice fishing trips on a local pond to kick off the semester, providing fodder for a superb fish fry. We also hosted a bowling competition between our student subunit and the UMaine Student Chapter of The Wildlife Society. Additionally, the UMaine Student Subunit sponsored a fly-tying club, which is open to any member of the UMaine community, has continued to meet weekly. We wrapped-up the semester and welcomed the summer field season with a fisheries cookout, with contributions of game meat and other wild foods from our membership.

UConn Student Subunit Update

Kevin Job

The past year has been a productive one for UCONN AFS, the University of Connecticut's student sub-unit of the Southern New England Chapter. Most members major in Natural Resources, with the Fisheries and Wildlife Conservation concentration, but we also have members from other majors as well as a few graduate students. Public outreach and service projects have always been something we try to do in our chapter and this year was no different. We coordinated group stream cleanups this school year along two different streams which flow past campus and from which the University diverts their water supply. We also had a few members who went above and beyond by helping to teach the public about our fish resources at different public events.

Our biggest group event was the Fenton River stream clean-up in which we cooperated again this year with the student chapter of the Soil and Water Conservation Society, which resulted in two pickup truck loads of waste removed



Photo courtesy of Mike Turner

UConn AFS members stand with a truckload of waste they removed during a fall stream cleanup on the Fenton River (From upper left moving clockwise: Nick Pastore, Joe Cassone, George Maynard, Kevin Job)

from the river and surrounding riparian area. Our second clean up occurred this spring in a heavily utilized fishing area on the Willimantic River. This clean up was done a week before the opening day of trout season to ensure anglers young and old could appreciate the beauty of this area whilst enjoying some early season trout fishing.

Each year in Willimantic, the nearest urban area to UCONN, the Willimantic Whitewater Partnership hosts a River Fest to focus attention on ongoing efforts to redevelop the cities' riverfront by creating public spaces and removing the old mill dams.

Photo courtesy of the Willimantic Whitewater Partnership Inc.

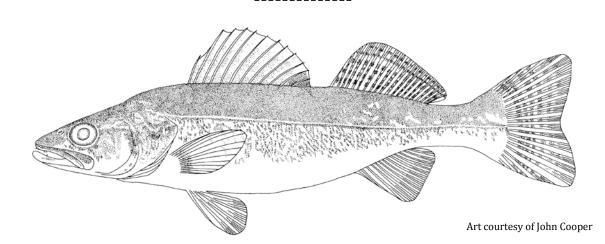


Left to right, UConn AFS members Benjamin Gahagan, George Maynard, and Yoichiro Kanno stand behind the "Fishes of the Willimantic River" exhibit at the Willimantic Whitewater Partnership's River Fest.

This past year, UCONN AFS was asked to display native fish from the river and talk to residents about the fish found in their downtown. We electrofished up some species representatives (with UCONN Institutional Animal Care and Use Committee approval, of course) and displayed them in a 55-gallon aquarium along with a posterboard, and had a great time. We also staffed a booth with the UCONN student chapter of the Wildlife Society at the East Hartford Cabela's store where we distributed information about UCONN's fisheries and wildlife program in the Department of Natural Resources and the Environment.

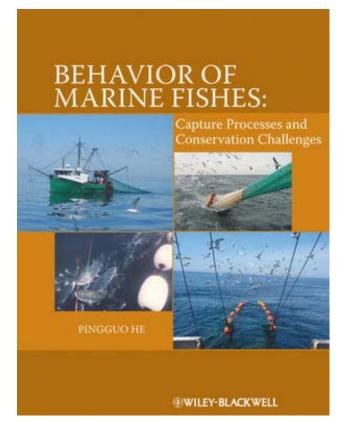
Our immediate past-president, Joe Cassone, deserves special mention as he has now volunteer instructed his first kids fishing clinic through the Connecticut Aquatic Resources Education program.

Many UCONN AFS members are working for the Fisheries Divisions of the Connecticut Department of Environmental Protection as seasonals this summer, and we will start regular meetings and activities again in the fall.



Recent Publications

Behavior of Marine Fishes: Capture Processes and Conservation Challenges



List price: \$199 Available at:

http://www.wiley.com/WileyCDA/Wiley Title/productCd-0813815363,descCddescription.html

A new book on marine capture fisheries titled "*Behavior of Marine Fishes: Capture Processes and Conservation Challenges*", edited by Pingguo He, formally of University of New Hampshire, now with University of Massachusetts Dartmouth, has just been published by Wiley-Blackwell. The book includes three parts: (1) locomotive and sensory modalities relevant to capture; (2) fish behavior near fishing gears; and (3) conservation challenges in marine fisheries. Thirteen chapters in the book were written by twenty-two leading researchers in the field and reviewed by fourteen well-known experts, representing a total effort and wisdom of thirty-six global scientists from sixteen countries from Asia, Europe and North America.

Understanding fish behavior in relation to capture processes in marine capture fisheries is of fundamental importance to reducing bycatch and discards, and to enhancing marine fisheries conservation efforts. A thorough understanding of this allows commercial fishers to more effectively capture target species while reducing the catch of unwanted species. The book provides the reader with principles, patterns, and characteristics on fish behavior and fish capture processes using several types of important commercial fishing gears. The book also highlights conservation challenges facing the marine capture fisheries in efforts to maintain sustainable use of marine resources and to reduce negative impacts to the marine ecosystem. The book will be a valuable reference for researchers, fishing gear technologists, fisheries managers, students, and conservationists.

Ecology of Subadult Lake Sturgeon in the Winnipeg River, Manitoba

Kelly Sparks, k.sparks@unb.ca

I have been a member of AFS for five vears and am in my final year of graduate studies at the University of New Brunswick in Canada. I am currently studying lake sturgeon ecology on the Winnipeg River in Manitoba, specifically dealing with the subadult life phase. My ongoing passion for sturgeon began with the pallid and shovelnose sturgeon on the Mississippi River while working for the Missouri Department of Conservation. Moving to Oregon to explore the west, I was fortunate enough to work on a collaborative project with the Oregon Department of Fish and Wildlife, on the Rogue River, to assess the local population of green and white sturgeon. I was then offered the opportunity to further my education in New Brunswick and happily jumped on board for this new adventure.

My education is being funded by Manitoba Hydro and it has been a wonderful experience to work with a hydroelectric company that is concerned with their local fish populations. We currently have a gap in the data set for subadult lake sturgeon, which I am classifying as the time when sturgeon leave the nursery areas until they become sexually reproductive adults. This additional data will help with mitigation projects for the future as well as existing management practices. The 41 km research area is impounded by Slave Falls Generating Station upstream and Seven

Sisters Generating Station downstream. The upstream portion of the impoundment contains high densities of juvenile lake sturgeon that are showing a very slow growth rate, with the more downstream areas containing much lower densities that are growing at much higher rates, showing an opposite relationship between the former and growth (Barth *et* al., 2009). Adult lake sturgeon also appear to favor the upstream half of the impoundment; however, fish appear to be less gregarious than juveniles, with aggregations only occurring during the spring spawn and in late fall. Interestingly, a long term netting program carried out by resource managers suggests that adult numbers are relatively low.

With the 2006 listing of lake sturgeon as endangered in the Winnipeg River-English River, under the Manitoba Endangered Species Act (COSEWIC 2009), it is clear that a recovery strategy is required, and it is evident that further research is needed to aid in developing a conservation plan and restoration strategies for the future of the lake sturgeon. One of my key objectives and the main focus is to collect data on subadult age/length that will allow information on abundance to determine if a recruitment bottleneck is occurring at this phase, and also to fill behavioural and ecological knowledge gaps for subadult lake sturgeon. Helping these prehistoric fish has been an amazing journey and watching their continuing story unfold has been a monumental experience in my life. I am excited to see how the ending will unfold.

Photo courtesy of Kelly Sparks



AFS member Kelly Sparks handles an endangered subadult lake sturgeon while sampling on the Winnipeg River

Barth, C.C., Peake, S.J., Allen P.J., and W.G. Anderson. 2009. Habitat utilization of juvenile lake sturgeon, *Acipenser fulvescens*, in a large Canadian river. *Journal of Applied Ichthyology* **25 (2): 18-26.** COSEWIC 2009. COSEWIC assessment and update status report on the lake sturgeon *Acipenser fulvescens* in Canada. Committee on the status of endangered wildlife in Canada. Ottawa. xi + 107 pp. (www.sararegistry.gc.ca/status/status e. cfm).

Anadromous Alosa Research at SUNY College of Environmental Science & Forestry

Karin E. Limburg, SUNY ESF, <u>KLimburg@esf.edu</u> Three species of anadromous alosines -American shad *Alosa sapidissima*, blueback herring *A. aestivalis*, and alewife *A. psuedoharengus* - are at historic lows in much of their range, including New York State. The causes are multiple, although they can be generally parsed to overfishing, bycatch fishing, and habitat loss within nursery rivers and estuaries. We are currently engaged in three research projects to understand these issues, in order to contribute to restoration and management efforts.

Ph.D. candidate Rita Monteiro holds a National Estuarine Research Reserve (NERR) fellowship through the Waquoit Bay NERR in Massachusetts, but is also working at the NERRs in New Hampshire and Maine. With eight study sites arranged on an urbanization gradient. Rita is looking at the effects of land use on growth and recruitment of alewife in New England estuaries. To date she has documented differences in nitrogen stable isotopic ratios and sizes of juveniles along this gradient, as well as condition factor. She'll determine ages, growth rates, and study otolith chemistry to round out the study. Rita is working through The Ecosystems Center in Woods Hole.

In a related vein, Master's student Sara Turner is testing whether otolith chemistry can serve as a good marker of provenance of anadromous river herring (the collective term for alewife and blueback herring) in New York waters, studying the large Hudson River watershed as well as the small watersheds on Long Island that still support alewife runs. Key questions concern what spatial scales can be resolved, and whether juvenile growth rates differ between systems. The study is sponsored by the Hudson River Foundation, and the ultimate goal is to be able to identify New York origin river herring in ocean bycatch. We're collaborating with Queens College and WHOI in this effort.

Finally, Master's student Christopher Nack, a recent recipient of a Hudson River NERR fellowship, is investigating which biophysical factors play important roles in creating good habitat for larval American shad in the tidal freshwater reaches of the estuary. Working with NYSDEC's Dan Miller. Chris selected ten sites representing a range of habitats hypothesized to be of varying habitat quality. With the first sampling season ended, Chris is now engaged in analyzing abundance, growth, and condition of shad larvae collected from each site, and will relate this information to habitat characteristics. The study will help the DEC in their habitat restoration efforts in the Hudson.

Alden to Help Develop Innovative Clean Energy Technologies

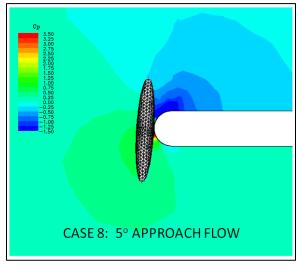
Jonathan Black, Alden Research Laboratory, Inc., <u>jblack@aldenlab.com</u>

Alden Research Laboratory, Inc., in Holden, MA (<u>www.aldenlab.com</u>), will participate in two projects administered by the U.S. Department of Energy for testing the impact on fish of two new clean energy technologies. The contracts are each valued up to \$600,000. Work on both projects is expected to begin within six months.

In one contract, Alden will assess fish behavior around hydrokinetic turbines and evaluate whether these devices, which generate electricity from moving water, will harm aquatic organisms. Hydrokinetic turbines can be placed in rivers and tidal areas with fast moving water. Unlike conventional hydropower turbines, hydrokinetic turbines do not require placement within dams. Consequently, these devices allow fish to migrate upstream and downstream without the obstruction caused by large impoundments.

The project will generate data on behavior, injury, and survival rates of fish passing through hydrokinetic turbines. Alden and the USGS Conte Anadromous Fish Research Laboratory (CAFRL) in Turners Falls, Mass. will conduct the research on behalf of the lead contractor. Electric Power Research Institute (EPRI) based in Palo Alto, Calif. The research may minimize or eliminate the need for expensive field studies on future hydrokinetic turbine installations. The Federal Energy Regulatory Commission has issued more than 175 preliminary permits for tidal and in-stream hydrokinetic projects in the U.S., though few have moved beyond the conceptual stage.

Image credit: http://www.aldenlab.com/documents/EPRI%20Blade%2 0Strike%20Testing.pdf



Computer simulation of a rigid body being struck by a semi-circular leading edge turbine blade

"Based on studies conducted by New York University in 1986, almost 13,000 megawatts, the equivalent of roughly sixand-a-half nuclear power plants, could potentially be generated by hydrokinetic turbines in riverine environments in the U.S.," says Doug Dixon, program manager of water power research for EPRI. The full generating potential in tidal waters has yet to be quantified in a formal study, but it is significant—though less than 13,000 megawatts, Dixon says.

In a separate contract, Alden will perform field research for a potential ocean thermal energy conversion (OTEC) plant in Hawaii. OTEC converts solar radiation to electric power by using the ocean's natural thermal gradient—the variation in temperature between the ocean's layers—to drive a power-producing cycle. Alden will conduct biological sampling at the proposed warm water intake location at Port Allen, Kauai in order to estimate its potential impact on aquatic life. Alden will also assist in developing a conceptual design for the intake, which, among other results, will help determine a preliminary cost for such a structure. This project is an early-stage environmental feasibility study and the overall goal is to promote the effective and environmentally responsible development of the OTEC industry.

Ocean Engineering and Energy Systems (OCEES) International, Inc. of Honolulu, Hawaii is the lead contractor for this project. OTEC is a promising alternative energy resource for tropical island communities that rely heavily on imported fuel.

Statewide Angler Surveys in the Northeast

Nancy Connelly and Barbara Knuth Cornell University, <u>nac4@cornell.edu</u>, bak3@cornell.edu

Two Northeast states have been busy conducting statewide angler surveys to learn more about their anglers' fishing experiences and their opinions about fisheries management issues. Cornell University's Human Dimensions Research Unit conducted both surveys – New York in 2007-08 and Vermont in 2010.

The Vermont survey asked anglers about their fishing experiences in Vermont in 2009. Data from the survey are currently being analyzed with a full report anticipated later this summer or early fall. Trends in participation in Vermont's fisheries will also be the topic of a talk at the AFS meeting in Pittsburgh.

The New York survey, completed in 2009, found that overall fishing effort in New York has changed little since 1996, with angler effort estimated at 18.7 million days in 2007. Lake Ontario continues to be the most frequently fished water (1.3 million days). Black bass remains the favorite species to fish for in New York. Approximately half of the anglers were satisfied with the number and size of fish they caught on their fishing trips. All of the results from the survey can be found on the NYSDEC website:

http://www.dec.ny.gov/outdoor/56020.h tml.

Penobscot River Fish Community Assessment

Ian Kiraly, University of Maine, ian.kiraly@umit.maine.edu

The Penobscot River drains the largest watershed in Maine, and once provided spawning and juvenile rearing habitats to migratory fish. The construction of dams blocked migrations of these fish and changed the structure and function of fish assemblages throughout the river. The removal of two main-stem dams and improved fish passage at a third dam is anticipated to increase passage of sea-run and resident fishes, and thus fish assemblages should change significantly. The purpose of this study is to quantify preremoval fish assemblage characteristics in the Penobscot River and to track changes within those assemblages during and after dam removal. Most surveys will be conducted using standardized boat

electrofishing methods during late spring and early fall. The electrofishing data will be supplemented with beach seine survey data in order to better quantify juvenile fish abundances, specifically alewife and American shad.



Researchers from the University of Maine boat electrofishing below Veazie Dam on the Penobscot River.

Photo courtesy of Stephen Coghlan

Pre-removal electrofishing data have been collected at established 1,000 meter sites by Kleinschmidt Associates in 2008 and 2009; data collection will continue at those sites and at additional 500 meter sites chosen for stratified-random sampling. These sites are dispersed throughout the river and on major tributaries, from tidal reaches in Hampden to the East Branch Penobscot River near Millinocket, nearly 85 miles upstream. Much effort is focused around the lower main stem dams; the lowest two are to be removed in the near future. Sources of funding through the PRRP include the Penobscot River Restoration Trust, NOAA (ARRA), MDIFW, UMaine, and the Maine Cooperative Fish and Wildlife Research Unit.

SW Pennsylvania Recent Projects

David Argent, California University of Pennsylvania, <u>argent@calu.edu</u>

1. Survey of benthic and pelagic fishes in the Middle Allegheny River - this survey combines electrofishing, gillnetting, and benthic trawling (where possible) along a 62 mile reach of the Allegheny River from L/D 9 to Franklin, PA. Many state threatened and endangered species reside in this previously under surveyed reach. 2. Baseline assessment of fishes and water quality in the Monongahela River this survey seeks to resample selected stations along the Monongahela River as a gauge of River health in the face of increasing drilling from the Marcellus shale layer.

3. Assessment of an acid mine drainage treatment facility on Morgan Run - this survey is evaluating the efficacy of an AMD treatment facility to increase the alkalinity of the headwater reaches of Morgan Run.

The First Record of Palaemon macrodactylus (Oriental Shrimp) From the Eastern Coast of North America

Barbara E. Warkentine and Joseph W. Rachlin, SUNY Maritime College, CUNY Lehman College

2010 NORTHEASTERN NATURALIST 17(1):91–102 Abstract - Palaemon macrodactylus (Oriental Shrimp), native to estuarine waters of Southeast Asia, has been reported outside of its native range. The spreading of this species to new regions has been well documented, and its disjunct distribution strongly speaks for its transport being attributed to ballast water. In this paper, we report the first record of *P. macrodactylus* from the eastern coast of the United States and in the estuarine system of New York City (NYC). While this animal has been reported to have crossed the Pacific, and has been found in the eastern Atlantic along the coasts of Spain, France, Germany, and the British Isles, and in the southwestern Atlantic off the coast of Argentina, it has not been previously sighted in the northwest Atlantic. Our preliminary life-history data indicate that the size range for the 98 adult individuals in the 2001 collection was from 2.05 to 5.05 cm, and exhibited a one-to-one sex ratio. The finding of gravid females among these shrimp collected from 2001–2002 and again in 2008 indicates that the oriental shrimp populations in the coastal waters of NYC have become established, and show reproductive activity from May through October. Further studies are required to evaluate whether *P. macrodactylus* poses a threat to native aquatic organisms in this region.

Fisheries in the News

Commerce Secretary Gary Locke Announces Harvest Limit Increases for Northeast Fishermen

NOAA Fisheries July 14, 2010 <u>http://www.noaanews.noaa.gov/stories2</u> 010/20100714 groundfishclosure.html

U.S. Commerce Secretary Gary Locke today announced that he is raising fishing limits on several fish stocks based on new scientific analysis, delivering on a commitment he made to Northeast fishermen and members of Congress. "I directed Dr. Lubchenco to undertake new assessments of several stocks out of concern for the Northeast's fishermen and their families," Locke said. "The full scientific review shows this year's commercial catch limits can be raised and not harm critical stock rebuilding efforts."

The pollock limit was today raised from 6 to 36 million pounds. Previous recent actions have also raised the spiny dogfish limit from 12 to 15 million pounds and

revised the skate limit upward from 67.5 to 90.5 million pounds. Another pending action proposes to increase the red crab limit from 3.56 to 3.91 million pounds. These increases in catch limits were put in place by NOAA, the agency that studies and manages federal fishery resources.

"By working quickly to raise catch limits based on newly available scientific information, we are demonstrating our commitment to help create stable and healthy fishing communities and fisheries," said Dr. Jane Lubchenco, undersecretary of commerce for oceans and atmosphere and NOAA administrator.



Photo courtesy of David Kazyak

Penobscot River Dam Removal, Fish Restoration Project Approved

Kevin Miller From the: www.bangordailynews.com July, 22, 2010

AUGUSTA, Maine — State environmental regulators on Wednesday approved the final of three permits sought as part of a historic dam removal and fish habitat restoration project on the Penobscot River.

The Maine Department of Environmental Protection signed off on the Penobscot River Restoration Trust's proposal to decommission the Howland dam and build a new fish bypass that will enable Atlantic salmon, shad, alewives and other fish to migrate upstream.

The Howland project is part of a larger, \$50 million proposal to remove or bypass three Penobscot River dams, thereby reopening nearly 1,000 miles of habitat to endangered Atlantic salmon and other sea-run fish.

The DEP last week approved permits to decommission and remove the Veazie and Great Works dams, and the Federal Energy Regulatory Commission has already signed off on the three projects.

Now, the Penobscot River Restoration Trust is waiting for U.S. Army Corps of Engineers permits, after which officials can close on the \$25 million purchase of the three dams from PPL Corp. Laura Rose Day, the trust's executive director, said she hopes the Army Corps permits will be issued within several weeks.

"We would very much like to be removing Great Works, or at least beginning that project, sometime next summer," Day said.

The Howland proposal has proved to be the most controversial of the three due to concerns that invasive northern pike also will use the new fish bypass, threatening the prized brook trout and landlocked salmon fisheries upstream of the dam.

Bangor Daily News File Photo by John Clarke Russ.



Great Works Dam, viewed from the east side of the Penobscot River

Dana Murch, dams and hydropower specialist at the DEP, said he received comments opposing the Howland project from the Piscataquis County commissioners, the Millinocket Fin & Feather Club, and former state fisheries biologist Paul Johnson.

The department received no comments in opposition to the other two projects, and

the vast majority of comments on the Howland dam were supportive of the project, he said.

The DEP permit for Howland acknowledges the potential for harm to native fish species should northern pike use the bypass to access the upper reaches of the Piscataquis River and the West Branch of the Penobscot River.

"Project decommissioning and bypass channel operation should not result in any significant harm to resident fish resources provided that the applicant takes appropriate measures ... to create and-or maintain barriers to the upstream movement of northern pike and other invasive fish at strategic locations in the Piscataquis River watershed."

Pike are a non-native species similar to the pickerel but much larger and with a voracious appetite. They have been introduced illegally by fishermen to other Maine lakes, ponds and rivers, including some lower tributaries to the Penobscot.

Groups will have 30 days to appeal the DEP decision to either the Board of Environmental Protection or Maine Superior Court.

Loophole in Fisheries Act Allows Dumping of Toxic Mining Waste into Canadian Lakes

Friday, June 4, 2010 http://naturecanadablog.blogspot.com/2 010/06/loophole-in-fisheries-actallows.html

The Sandy Pond Alliance, a coalition including Council of Canadians, Mining Watch Canada, the Newfoundland and Labrador Natural History Society, the Sierra Club of Canada - Atlantic Chapter, along with scientists and activists in Newfoundland & Labrador, today launched a legal challenge against the federal government for allowing the dumping of mining waste into Canadian lakes and rivers.

The announcement was made at press conferences held simultaneously in St. John's and Ottawa this morning. The dumping of mining waste into pristine lakes and rivers converts them into "tailings impoundment areas", rendering them industrial waste basins that are generally unsuitable as wildlife habitat. Despite prohibitions on polluting waters known to be fish habitat listed <u>under section 36 (3) of the federal</u> <u>Fisheries Act</u>, this practice is permitted under section 5.1(a) and Schedule 2 of the Fisheries Act's Metal Mining Effluent Regulations (MMER).

Nature Canada is aware of the environmental issues surrounding the Metal Mining Effluent Regulations and will continue to monitor the progress of the Alliance's court case as it moves forward.

<u>Water bodies listed under Schedule 2</u> of

the MMER are found across Canada, meaning that the environmental repercussions of these regulations are not isolated. We encourage the public to learn more about this issue and become informed in the debate.

Today's press release by the Sandy Pond Alliance's follows:

Coalition takes federal government to court to protect lakes

The Sandy Pond Alliance, a coalition including the Council of Canadians, Mining Watch, the Newfoundland and Labrador Natural History Society, Sierra Club Atlantic, along with scientists and activists in Newfoundland launched a legal challenge against the federal government today for allowing the dumping of mining waste into Canadian lakes and rivers. The announcement was made at press conferences held in St. John's Newfoundland and Ottawa this morning.

The Sandy Pond Alliance will argue in the Federal Court of Canada that a loophole in the Fisheries Act that has led to metal mining companies seeking permission to dump toxic waste into lakes since 2006 should be deemed illegal.

"We will argue that this regulation violates federal law," says Newfoundland-based lawyer, Owen Myers. "The principal function of the Fisheries Act is the conservation of fish and aquatic ecosystems. The challenged regulations essentially amend the Act by regulation which is unlawful."

While the coalition emerged out of efforts to protect Sandy Pond, a lake near Long Harbour, Newfoundland, the issue is of national significance.

"We started this campaign in Newfoundland to protect all lakes being threatened under this loophole in the Fisheries Act," says Bill Montevecchi, University Research Professor, Memorial University of Newfoundland.

Among the threatened lakes are Fish Lake in British Columbia, in the heart of Tsilhqot'in territory, and Bamoos Lake, just off the northern shore of Lake Superior near Marathon, Ontario.

"We are not opposed to mining, but allowing the destruction of healthy bodies of water is unconscionable," says Ken Kavanagh Council of Canadians chapter chair for St. John's and Director of the Sandy Pond Alliance.

The court case is expected to be heard in St. John's Newfoundland and Labrador in the Fall.

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May 2008 – July 2010 (updated July 27, 2010)



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