

**UMRR-EMP**  
**Long Term Resource Monitoring Program FY13 Activities (Living Document)**  
**(Oct.–Dec.)**

**Publications, Presentations, and Conference Attendance**

Jason Rohweder gave a webinar presentation September 24th, for scientists and managers from the U.S. Army Corps of Engineers' Mississippi Valley Division. The presentation discussed updates Rohweder is making to the geospatial Wind Fetch and Wave modeling tools created at UMESC for the UMRR-EMP.

Jason Rohweder presented, "Application of Wind Fetch and Wave Models for Habitat Rehabilitation and Enhancement Projects - 2012 Update," at the Fall U.S. Army Corps of Engineers' Fish and Wildlife Work Group meeting, November 29 at the Upper Midwest Environmental Sciences Center. Rohweder presented a short history of the project and an overview of the updates that are being made to the tools to increase functionality and efficiency.

David Bornholdt (USGS-MWR), Mike Jawson, and Barry Johnson participated in the quarterly meetings of the Upper Mississippi River Basin Association and the Upper Mississippi River Restoration-Environmental Management Program Coordinating Committee, November 28-29, in St. Paul, MN.

Jeff Houser gave a presentation at the Upper Mississippi River Conservation Committee Water Quality Technical Section 2012 Fall Meeting. The talk was titled: "Patterns in nutrient, chlorophyll, and suspended solids concentrations across channel, impounded, and backwater areas in the LTRMP study reaches.

Greg G. Sass, T.D. VanMiddlesworth, Nerissa N. Michaels, Bradley A. Ray, Tim W. Spier, John Lyons, Joshua D. Stafford, and Randy V. Smith. Is there a native recipe for controlling invasive common carp? South Dakota State University Fisheries and Wildlife Departmental Seminar Series. 10 Oct 2012. Platform Presentation.

Popp, W.\*, R. Burdis, S. Delain, M. Moore, and J. Sauer Temporal trends in water quality and biota in reaches of Pool 4 above and below Lake Pepin: indications of a recent ecological shift. Presentation at UMRR-EMPCC quarterly meeting, Nov. 29, St. Paul.

Walt Popp chaired and Rob Burdis participated in a MNDNR Mississippi River Team meeting on Oct. 16th.

Megan Moore, as chair of the Wildlife Tech Section, participated by phone in a UMRCC Executive Board meeting on Dec. 4th.

John Chick, Ben Lubinski, Lori Gittinger, and Eric Ratcliff participated in a two day training session on the operation of the YSI PISCES (Pontoon for In-situ Characterization of Environmental Systems) water monitoring platform soon to be deployed by the NGRREC field station. The unit is planned to be the first in the proposed GREON (Great Rivers Ecological Observation Network) of real-time, continuous monitors collecting various water quality and phytoplankton data in the Mississippi River and other large rivers. 10/2012.

LTRMP staff attended NE District Fisheries Management quarterly meeting at Mines of Spain State Park – November, 2012.

Fischer gave presentation on Mississippi River resources, issues, programs, and partnerships (including UMRR-EMP HREP and LTRMP) during WDNR new employees training session. Kemp Natural Resources Station, Woodruff, WI October 3

Fischer, participated in monthly WDNR meetings with Water Quality Board and Water Resources Policy & Management Team (statewide), & Western District Management Team, to provide a link for UMRR-EMP science and restoration activities with inland WDNR

Fischer & Baumann participated in UMRBA and EMPCC meetings November 27-29, St. Paul

Fischer co-chaired and participated in St. Paul District River Resources Forum meeting, Dec 4-5, St. Paul

### **Technical activities and assistance:**

Jeff Houser, Shawn Giblin, and Rob Burdis discussed summer chlorophyll a concentrations in the Upper Mississippi River with John Sullivan (WDNR). John was seeing reductions in summer chlorophyll a concentrations in the UMR below Lake Pepin since 2008 and was interested in seeing if a similar pattern was being reported by LTRMP.

Brian Ickes assisted Steve Winter (USFWS) in gathering information from the LTRMP database. The Refuge is compiling a list of Resources of Concern as part of a Habitat Management Planning process.

Brian Ickes assisted Ann Runstrom (USFWS) in gathering information from the LTRMP database. Ann is looking for info to complete a Wildlife Action Plan for the refuge system. She mined the Fish 10-year report for an initial conservation status listing table to update, the LTRMP Fish life history database to help expand her list and then selected a final listing for her particular agency needs, and then supplemented that with empirically-informed write-ups for each species using mostly LTRMP data, but also other sources like UMRCC.

Ben Schlifer assisted Ann Runstrom (USFWS) in gathering fisheries information from the LTRMP database and summarizing it in the specific format that was requested.

The water quality field station staff participated in the USGS National Field Quality Assurance Project. In March 1979, U.S. Geological Survey began the NFQA Project. The project is designed to monitor the proficiency of alkalinity, pH, and specific conductance measurements performed by USGS water-quality analysts. The results were excellent! All field station measurements were "Acceptable".

Brian Ickes assisted Marie Baget, a French journalist, who is working on a documentary about the Mississippi River for the French TV (and maybe an American channel). The documentary is to discover the Mississippi River from it source at Lake Itasca down to New Orleans, in 10 episodes of 43 minutes. Brian provided a description of his position, a description of the River in La Crosse, how is the river at this place, and some relevant topics for the documentary.

Barry Johnson made a presentation describing UMRR-EMP LTRMP and its collaborations to a meeting of managers from the USGS Midwest Region, 7 November 2012, in Mounds View, Minnesota. The meeting was a scoping session for a possible new initiative on large river research within the Midwest Region and USGS.

Barry Johnson participated in a meeting to direct future work leading to an integrated approach to adaptation strategies for climate change effects within Wisconsin and the Upper Midwest, as a member of the Science Council for the Wisconsin Initiative on Climate Change Impacts (WICCI). The meeting was held in Madison, WI, November 5th, 2012.

Jennifer Sauer provided mapping assistance to Marian Havlik of Malacological Consultants. Marian was interested in a map depicting the McGregor area.

Jennifer Sauer and Carol Lowenberg provided Russ Wilson (USFWS) some background information on the faucet snail (*Bithynia tentaculata*). Russ was writing a press release on waterbird die-off occurring in the Upper Mississippi River National Wildlife and Fish Refuge, Savanna District.

Jennifer Sauer provided Eric Smith (Valley City State University, North Dakota) some background information on the faucet snail (*Bithynia tentaculata*). Eric is developing a project looking at waterbird die-off on the UMR. Eric is particularly interested in scaup population dynamics as it relates to the die-off.

Nerissa Michaels- provided UMRR-EMP LTRMP content and pictures for Experience Emiquon brochure. Nov 2012

Nerissa Michaels- participated in Spoon River College 10th Grade Career Day as a member on the Natural Resources panel at SRC, Canton, IL. Nov 2012

Nerissa Michaels- provided IDNR Kevin Irons with LTRMP data. Nov 2012

Nerissa Michaels- Provided John Nuhn, photo director, National Wildlife, National Wildlife Federation, Reston, VA with Asian carp photos for Dec 2012 issue. Nov 2012

Nerissa Michaels- Provided Alison Kirkpatrick, Terrestrial Invasive Species Outreach Liaison, Invading Species Awareness Program, Ontario Federation of Anglers and Hunters, Asian carp photos for their Facebook page. Nov 2012

Nerissa Michaels- Assisted UIS graduate student Nathan Grider with thesis research collecting alligator gar from TNC's Spunky Bottoms for growth and diet analysis. Oct 2012

Nerissa Michaels- Provided Stefan Daume, PhD student, Goettingen University, Stockholm Resilience Center, Asian carp pictures for PhD presentation. Oct 2012

Nerissa Michaels-Phone conference for meeting planning as Secretary on the Executive Board of the Mississippi River Research Consortium. Oct 2012

Levi Solomon completed update of Illinois River Biological Station website including LTRMP component webpages. (<http://www.inhs.illinois.edu/fieldstations/irbs>)

Megan Moore gave a talk on the development and use of a submersed macrophyte IBI for the UMR at a meeting of MN DNR and PCA staff to discuss development of a submersed macrophyte IBI for lakes at Sauk Rapids, MN on Oct. 16th.

Rob Burdis, Steve DeLain, and Megan Moore gave a joint talk at a regional meeting of the MNDNR's Ecological and Water Resources Division on how monitoring of water quality, fish and aquatic vegetation in the UMR contributes toward healthy watersheds on Oct. 25th in St. Paul.

Megan Moore provided 2012 LTRMP vegetation frequency summaries and distribution maps to MN, WI, and IA DNRs, MPCA, USFWS, and UMESC.

Steve DeLain reviewed the MNDNR's Asian carp action plan.

Eric Ratcliff corresponded with Oquawka Boats and Western Illinois University on numerous occasions, supplying specifications and procedures for boat wiring and building booms for LTRMP electrofishing boats. Western Illinois University is having an electrofishing boat built to LTRMP specs to be used at the Kibbe Field Station for sampling the Mississippi River. 11/2012.

Eric Ratcliff provided shock boat building advice, diagrams, and descriptions for Southern Illinois University at Carbondale (SIUC) to build an electrofishing boat to LTRMP specifications. 12/2012.

Kueter, Petersen, and Reed completed monthly WQ fixed site sampling – October-December, 2012.

Bowler, Kueter, Petersen, and Reed conducted normal LTRMP fisheries sampling in Pool 13 – October, 2012.

Bowler compiled and submitted summaries of 4th quarter station activities for FY12 for UMESC and USACE staff – October, 2012.

Bierman, Petersen, and Reed assisted Kueter with field collections of fall WQ SRS – October, 2012.

Bellevue LTRMP staff assisted Fisheries Research staff with fall tailwater sauger and walleye population assessments in Pool 13 – October, 2012.

Bellevue LTRMP staff completed 21 pool-wide random electrofishing sites and completed 30 fyke net samples at six different backwater complexes in conjunction with the Pool 12 overwintering HREP projects – October-November, 2012.

Bellevue LTRMP staff collected 558 bluegill otoliths in Pool 12 to assess age structure in conjunction with overwintering HREP projects – October, 2012.

Bowler completed data entry and QA/QC for Pool 12 overwintering HREP projects – November, 2012.

Petersen assisted multiple DNR staff with the Black Hawk Lake fish renovation project – November, 2012.

Bowler entered data from Pools 9, 10, 17, 19, and Huron Island HREP into the special projects database – November-December, 2012.

Bellevue LTRMP staff removed and catalogued 558 bluegill otoliths from Pool 12 – December, 2012.

Bowler data entry of catalogued bluegill otoliths – December, 2012.

Bowler submitted and completed QA/QC for Pool 13 routine fisheries monitoring from the 2012 season – December, 2012.

Bartels & Hoff processed 18,629 preserved fish specimens in the lab

Bartels, Giblin, Hoff, Langrehr, Finalized a summary report of 2011 field station findings for WDNR

Bartels, Hoff, Fischer, participated in in a WDNR group discussion and response to USFWS draft habitat management plan call for comments.

## **Outreach**

Mike Jawson and Randy Hines met with Congressman Tim Walz's (MN, 1st district) staffers Peder Kjeseth (Minnesota) and Randolph Briley (Washington DC), October 23rd. Kjeseth and Briley visited the UMESC to learn about research and monitoring programs at the Center including the UMRR-EMP.

Larry Robinson and Randy Hines facilitated a tour of UMESC for 100 students from La Crosse's Longfellow Middle School's, "School on the River." The Program's curriculum focuses on the Mississippi River's ecological systems and how these systems lead to students' understanding of how cultural, economic, political and organizational systems work in the real world. Larry gave a presentation on the use of geographic information systems (GIS) to map and monitor floodplain vegetation on the Upper Mississippi River System, including the use of historic aerial photos and state-of-the-art 3D mapping technologies. October 23rd, 2012.

Jack Waide and Randy Hines hosted Congressman Ron Kind (WI) staffers Kevin Warnke (DC) and Karrie Jackelen (La Crosse, WI) on September 25th. A complete facility tour and discussion of the Center science programs was the focus including the UMRR-EMP LTRMP.

Levi Solomon co-hosted University of Illinois-Springfield Biology class field trip, including tour of facilities and demonstration of LTRMP fisheries techniques.

Nerissa Michaels- Conducted an educational presentation for 4-5th graders at Dive IN! Water Education Event at Peace on Earth Environmental Learning Center in Rushville, IL. Oct 2012

Nerissa Michaels & Levi Solomon - Organized a station /LTRMP component for 2012 Conservation Police Officer Recruit Training in Havana, IL. Oct 2012

The LTRMP La Crosse Field Station received recognition from the WDNR Water Division for their contributions to Mississippi River science and management.

John Chick gave a field station tour to Principia College Biology classes in October and December. 2013.

John Chick gave a field station tour to water quality professionals from Illinois American Water Company. 10/2013.