

The UMRCC Newsletter



Winter 2014

This Newsletter is a publication of the Upper Mississippi River Conservation Committee but does not necessarily represent the official views of the UMRCC. Suggestions or comments regarding its content should be directed to the Chairperson, 555 Lester Avenue, Onalaska, Wisconsin 54650. Phone: (608) 783-8432. E-mail Coordinator at umrcc@mississippi-river.com. Visit our website at <http://www.mississippi-river.com/umrcc>.

Chair's Letter

Hi all, perhaps you are reading this from the warmth of home, or you brought the dog sled to work? None-the-less what a winter this has been! The river rat part of me is wondering what the spring freshet will be like, record flood or slow rise and fall? One thing I do know is that we should bring some good stories to the **70th Annual UMRCC meeting in La Crosse Wisconsin March 18-20**. Please take a moment and register, as with most meetings lately, the planners would appreciate having an accurate count to make the most of our valuable resources.

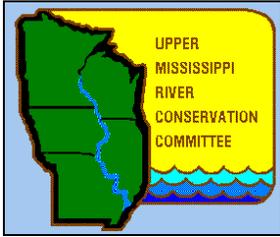
Increasingly, in my role as Aquatic Nuisance Species Program Manager in Illinois, I am asked to find or assist partnerships across multiple agencies to accomplish common goals. If you are not familiar with the history of UMRCC, you should take a moment and read the history page on the website. UMRCC has been working in collaborative ways since 1943 on river issues, with over 200 professionals belonging to this group. What a great heritage! We all should be proud, and not forget to brag a bit and use our strength of partnership in many of the issues discussed at our upcoming annual meeting. We are better because of our friendships on the river! Rats unite!

A final note from my desk would be incomplete if I didn't thank Scott Yess for his constant and expert care he gives our Committee. Scott works hard and is passionate about our river resources and continues to assist members from Executive committee to field crews. Thank-you Scott from myself and for the UMRCC that you serve!

See you on the river in La Crosse!

Kevin Irons

River Resource News



UMRCC 70th ANNUAL MEETING

March 18, 19 and 20, 2014

Radisson Hotel

La Crosse, Wisconsin

The UMRCC 70th Annual Meeting will be hosted by the Wisconsin Department of Natural Resources at the Radisson Hotel, 200 Harborview Plaza, La Crosse, WI.

Return the attached registration form by March 1th in order to receive a reduced registration fee. Please direct questions to Ron Benjamin (e-mail Ron.Benjamin@Wisconsin.gov, telephone 608/785-9012), or Jeff Janvrin (email Jeff.Janvrin@Wisconsin.gov, telephone 608/785-9005).

Poster Session - A poster session will be held Tuesday afternoon, March 18, from 5:30-6:30 pm, with room for 18 presenters. Anyone wishing to present a poster should contact Jennie Sauer (email jsauer@usgs.gov, telephone 608/781-6376).

UMESC Data Analysis/Visualization Tool Workshop – Ben Schlifer from UMESC is willing to offer a demonstration and overview of how river managers can make use of LTRMP data serving tools on Tuesday morning, March 18, from 9:30-11:30. Please check the box on the registration form if you are interested in attending this session. (We are looking for a minimum of 10 individuals)

Tuesday, March 18, 2014

9:00 – 4:30	Registration
9:00 – 11:30	Mussel Technical Section Meeting
9:30 – 11:30	OREIT Technical Section Meeting
9:30 – 11:30	Data vis. workshop
1:00 – 5:00	Technical Section Meetings
5:30 – 6:30	Poster Session
6:00 – 10:00	Social Gathering

Wednesday, March 19, 2014

8:00 – 4:00	Registration
7:00 – 9:00	Executive Board Meeting
9:00 – 11:30	Sessions
11:30 – 12:30	Lunch
12:30 – 5:00	Sessions
6:00 – 10:00	Banquet

Thursday, March 20, 2014

8:00 – 11:00	Sessions
11:00 – 12:00	UMRCC Business Meeting

You will need to make your own hotel reservations (telephone: 608-784-6680). Government rates are available for agency employees. The rate for all others is \$70 for a single and \$100 for a double by asking for rooms set aside for the Upper Mississippi River Conservation Committee. To receive these rates, you must make reservations prior to February 18th.

UMRCC 70th Annual Meeting – March 18 – 20, 2014

Radisson Hotel, La Crosse, Wisconsin

200 Harborview Plaza, La Crosse, WI 54601

First Name: Last Name:

Title/Position:

Affiliation:

Address:

City: State: Zip:

Phone:

E-Mail:

Registration Fees*:	Non-Student	Student	<i>Student fee does not include banquet</i>
Before March 1, 2014:	\$140	\$75	
After March 1, 2014:	\$150	\$85	
Total Enclosed:		\$	

Please check this box if you plan to attend the Data Analysis Workshop on Tuesday morning:

Make checks payable to “UMRCC” and send registration to:

Ron Benjamin, UMRCC
 Wisconsin Department of Natural Resources
 3550 Mormon Coulee Road
 La Crosse, WI 54601



Room Reservations: A block of rooms has been set aside at the Radisson Hotel La Crosse, 608-784-6680. Room rates are \$70 for single, \$100 for double. To receive these rates, reserve by **February 18** and tell them you are making reservations for the “Upper Mississippi River Conservation Committee Annual Meeting.”

**Please contact Ron Benjamin (Ron.Benjamin@Wisconsin.gov) or Jeff Janvrin (Jeff.Janvrin@Wisconsin.gov) if you have questions regarding registration fees.*

How Much Green is Good?

Sent in by Shawn Giblin - USGS

The Upper Mississippi River (UMR) has experienced a large increase in free-floating plants (FFP) comprised of duckweeds and filamentous algae in recent years. These FFP can form dense mats which have been shown to create low oxygen conditions and reduce fish and invertebrate biomass. During many years, a large proportion of backwater habitat is covered by these mats resulting in poor fish and wildlife habitat and reduced recreational opportunities. While much of the emphasis regarding excessive phosphorus and nitrogen loading to the UMR has focused on “The Dead Zone” in the Gulf of Mexico, it is becoming increasingly evident that high nutrient concentrations can have effects on the local ecosystem as well. The objective of this study was to better understand the factors that are associated with the formation of dense surface mats of FFP. This study addressed the questions discussed below.

1. Do changes in nutrient (nitrogen and phosphorus) concentrations across gradients of hydraulic connectivity and season result in temporal and spatial patterns in FFP tissue nutrient content and nutrient limitation of FFP?

Background: Free-floating plants obtain the nutrients required for growth from the water column. Thus, adequate water column nutrient concentrations are required to support dense surface mats. The ultimate source of nitrogen and phosphorus are point and nonpoint inputs from the watershed. Once nitrogen and phosphorus are in the river,



there are two primary sources of nutrient input to backwater lakes during the growing season: Hydraulic transport from the main channel and nutrient release from the sediment. In the UMR, other studies have shown that total N and P concentration tend to decline and increase through the growing season, respectively. During the growing season, N concentration tends to be highest in the main channel and, among backwaters, N concentration tends to be higher in backwaters which are more connected to the main channel. Because the UMR exhibits extensive variation in nutrient availability it is an ideal system to examine FFP nutrient content and limitation patterns.

Results and implications: FFP tissue nutrient concentrations suggested P limitation was more likely in high connectivity backwaters during spring, N limitation was more likely in late summer, and N limitation was most likely in backwaters with minimal hydraulic connection to the main channel. These results indicate that the limiting variable for FFP production

appears to vary spatially and temporally, and such variability is likely associated with connectivity. Any restoration or management project that alters connectivity should consider the possible effects on nutrient concentrations and FFP abundance that may result.

2. What thresholds can be detected in the relations between FFP biomass, water velocity, water column N and P concentrations, and aquatic macrophyte cover?

Background: Favorable environmental conditions for FFP include abundant nitrogen and phosphorus, warm water temperature, shallow water depth, and low water velocity. Additionally, the presence of rooted aquatic macrophytes (submersed, rooted floating-leaved, and emergent), which act as a substrate to hold FFP in place, has been associated with high FFP biomass.

Results and implications: We detected thresholds indicating that relatively small changes in drivers such as water velocity, aquatic macrophyte cover, water depth, and nutrient concentrations can produce relatively large changes in FFP biomass. Specifically, local regression analysis was used to estimate thresholds in the relations between FFP abundance and phosphorus (P) concentration (0.167 mg l^{-1}), nitrogen (N) concentration (0.808 mg l^{-1}), water velocity (0.095 m s^{-1}), and aquatic macrophyte abundance (65 % cover; See Fig. 8 in our manuscript). These thresholds comprised a tiered response whereby physical thresholds such as

water velocity, and rooted macrophyte cover and water depth appeared to be a primary determinant of the presence or absence of FFP. When these thresholds were met, nitrogen and phosphorus concentration then became important factors.

General conclusions

Duckweed and other free-floating plants (FFP) can form dense surface mats that affect ecosystem condition and processes, and can impair public use of aquatic resources. Management actions on the Upper Mississippi River are often designed to manipulate water velocity and hydraulic connection between channel and off-channel areas. (e.g., constructing islands to reduce wind fetch and create shallow, sheltered areas). The results of this study significantly expand those of the previous study (Houser et al. 2013) by providing initial estimates of thresholds in the relationship between FFP and selected physical and chemical characteristics, and a more detailed assessment of the effects of connectivity on nutrient concentration and FFP abundance. These threshold estimates, along with observed patterns in nutrient limitation, will help managers and project planners understand likely effects of project design on FFP abundance. Furthermore, the estimated TP threshold is consistent with the numeric P criterion of $< 0.1 \text{ mg l}^{-1}$ TP for Wisconsin non-wadeable rivers (Wisconsin Administrative Code NR 102.06(3)); achieving this value may reduce the frequency of occurrence of large FFP mats in the UMR.

Bill Would Require Separation of Lake Michigan and Mississippi River

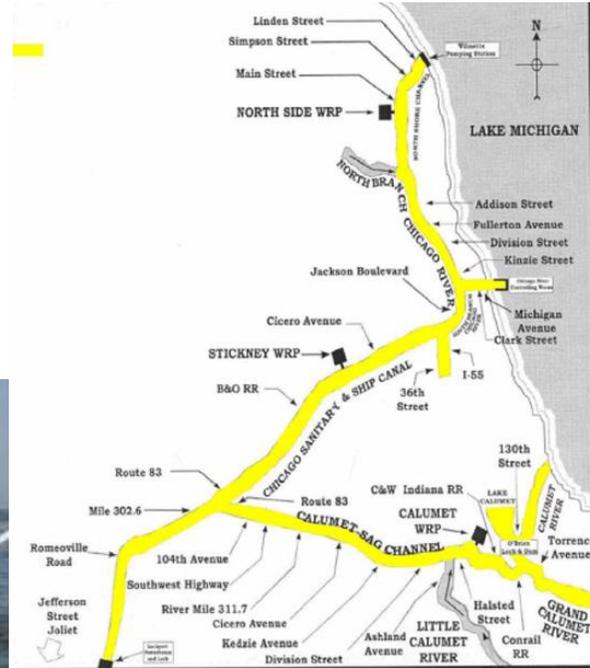
From the Daily Journal

TRAVERSE CITY, Mich. — A member of Congress from Michigan has introduced a bill that would require separating Lake Michigan from the Mississippi River watershed in the Chicago area to block the path of Asian carp and other invasive species.



Republican U.S. Rep. Candice Miller said Wednesday that the measure would authorize the U.S. Army Corps of Engineers to construct barriers severing the connection between the two aquatic systems.

The Corps offered two options to accomplish that goal in a report last month.



Business groups in Illinois and Indiana say separation would damage the economy and cause flooding. Miller and other supporters say it's the only sure way to protect the Great Lakes from Asian carp.

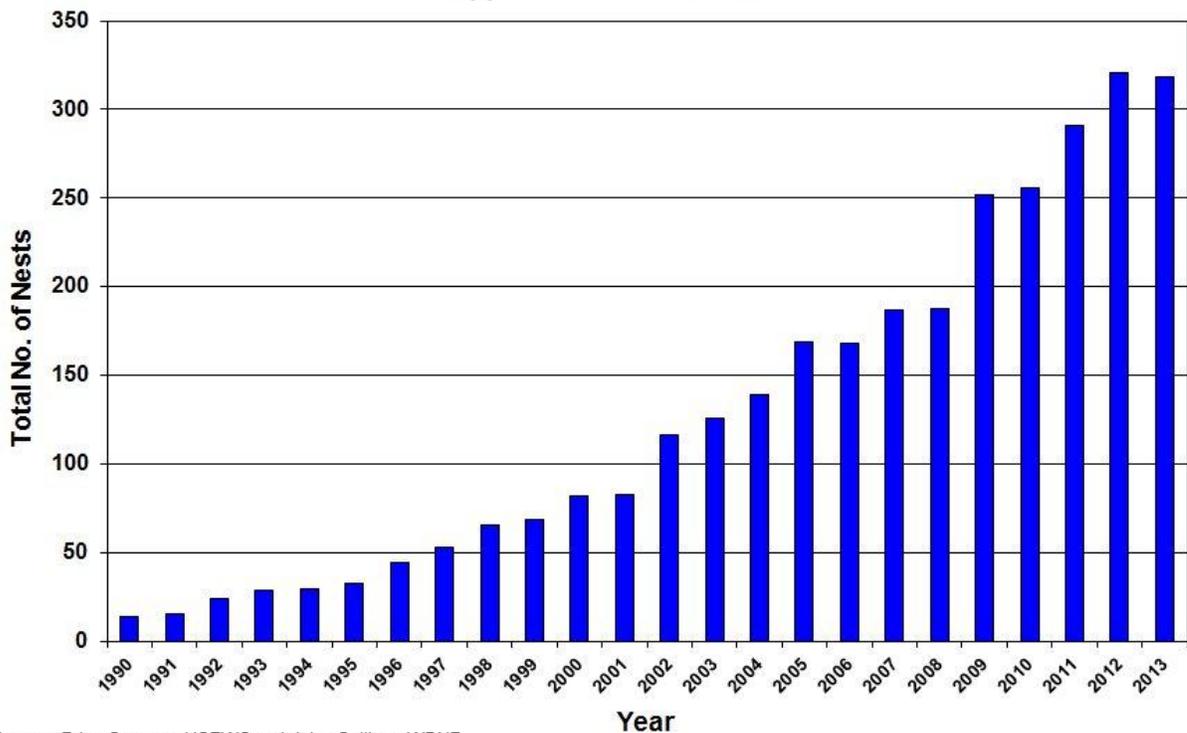
If enacted, the bill would set a timetable for designing a separation project and beginning construction.

Eagle Nests Indicate Environmental Health

Sent in by John Sullivan – Wisconsin DNR

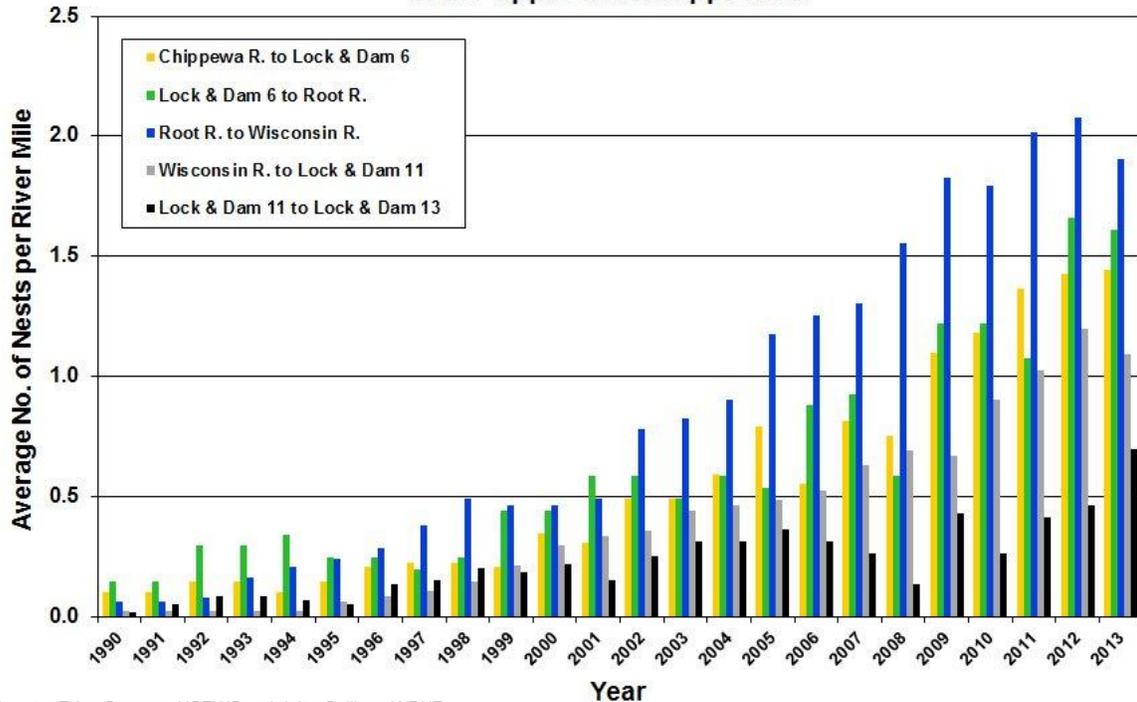
Here is an update on the eagle nest data collected in the UMR National Wildlife & Fish Refuge. The data was compiled by Brian Stemper, USFWS – Winona. I then extracted this information and plotted the values by our Clean Water Act assessment reaches for the UMR. Brian noted that there were many nesting territories that were not checked in 2013 due to staff workloads, so the results for this year likely reflect an underestimation of active nests in the refuge.

**Active Eagle Nests in the Upper Mississippi River
Reach: Chippewa River to Lock and Dam 13**



Source: Brian Stemper USFWS and John Sullivan WDNR

Active Eagle Nests by Year and by UMRBA Assessment Reaches in the Upper Mississippi River



Source: Brian Stemper USFWS and John Sullivan WDNR

Most of you know I will be retiring in early April and wanted to pass along these additional comments. I would strongly encourage this monitoring activity and summary preparation continue into the future. I believe this is one of the best environmental health stories we have for the UMR. I have suggested previously this type of summary should be expanded river-wide and into our major tributaries in the UMR basin.

I know Wisconsin has been monitoring eagle nests since the early 1970s, but the information has not been evaluated by major riverine corridors, to my knowledge. These eagles are certainly telling us something about the quality of our waters and the adjacent riparian habitats. We need to continue to document these trends as part of our routine environmental monitoring programs and relate these results to other indicators of anthropogenic stress and ecosystem health along our major waterways.

Coordinator Comments



**Hope to see you at the
70th Annual UMRCC
Meeting in La Crosse, WI.
March 18-20, 2014**

**Remember No Registration Fee for
River Rat Retirees, but please fill out
the registration form.**

Photo Request for Annual Meeting!
Please remember to send photos for a
slide show during the social Tuesday
night. We are looking for pictures of
members at work, wildlife, scenery, and
landmarks along the river. We would
like to identify who or what is in the
picture and where it was taken. If folks
want to submit a humorous quote or
description of what somebody might
have been thinking when the photo was
snapped, that would be good, too.

Photos can be emailed
to umrcc.photos@gmail.com

\$\$\$\$\$\$\$\$\$\$\$\$ Grants \$\$\$\$\$\$\$\$\$\$\$\$\$
Please let your area schools and kids
groups know about the grants available

to get kids out to the Mississippi River
or other river resources. The UMRCC
has nine \$250 dollar grants still
available. See the UMRCC webpage
and go to the OREIT Tech Section for
the application.

Janet Sternburg sent in information on
the 2015 Annual Meeting – Heads Up!
We are taking advantage of timing, and
on March 22-27, 2015, the UMRCC
annual meeting will be held in St. Louis
with the Freshwater Mollusk
Conservation Society. You older River
Rats may remember the two UMRCC
sponsored symposia that were held in
1992 and 1995 in St. Louis to examine
the status, conservation and management
needs of freshwater mussels. Now, 20
years later, we will join meetings to
recognize conservation success and
future opportunities.

Although registration rates have not
been finalized, and we expect them to be
slightly less, here are the potential rates
for budgeting purposes: UMRCC full
registration - \$200; FMCS full
registration - \$350; combined
registration \$475. The meetings will
overlap one day with a combined
plenary and evening social, and some of
the meals will be included in the
registration fee. Hotel rooms are
expected to be approximately \$118/night
for 1-2 people and \$128/night for 3-4.
We hope you can join us next year for
this unique opportunity to learn how
your UMRCC has influenced
conservation in and beyond the
Mississippi River Basin.

Congressional Action Related to the Upper Mississippi River



Climate Change

Bill # S. 332, [Bernard Sanders](#) (VT)

To address climate disruptions, reduce carbon pollution, enhance the use of clean energy, and promote resilience in the infrastructure of the United States, and for other purposes.

Bill # H.R.765, [Lois Capps](#) (CA)

To authorize the Administrator of the Environmental Protection Agency to establish a program of awarding grants to owners or operators of water systems to increase resiliency or adaptability of the systems to any ongoing or forecasted changes to the hydrologic conditions of a region of the United States.

Conservation

Bill # H.R.875, [James Sensenbrenner](#) (WI)

To provide for a comprehensive assessment of the scientific and technical research on the implications of the use of mid-level ethanol blends, and for other purposes.

Bill # H.R. 916, [Ron Kind](#) (WI)

To improve Federal land management, resource conservation, environmental protection, and use of Federal real property, by requiring the Secretary of the Interior to develop a multipurpose cadastre of Federal real property and identifying inaccurate, duplicate, and out-of-date Federal land inventories, and for other purposes.

Endangered Species

Bill # H.R.576, [Steve Stockman](#) (TX)

Requires the Secretary of the Interior to reissue the final rule published on September 2, 2005, which allows for the taking, export or re-import, delivery, receipt, carrying, and transport, shipment, or sale in interstate or foreign commerce, in the course of a commercial activity, of U.S. captive-bred live scimitar-horned oryx, addax, or dama gazelle, including embryos, gametes, and sport-hunted trophies, as long as certain criteria are met, including that the purpose of such activity is associated with the management or transfer of live wildlife or sport hunting in a manner that contributes to increasing or sustaining captive numbers or to potential reintroduction to range countries.

Bill # H.R.1175, [Dianne Feinstein](#) (CA)

To require the Secretary of the Treasury to establish a program to provide loans and loan guarantees to enable eligible public entities to acquire interests in real property that are in compliance with habitat conservation plans approved by the Secretary of the Interior under the Endangered Species Act of 1973, and for other purposes.

Invasive Species

Bill # H.R.358, [Betty McCollum](#) (MN)

To direct the United States Fish and Wildlife Service, in coordination with the Army Corps of Engineers, the National Park Service, and the United States Geological Survey, to lead a multiagency effort to slow the spread of Asian Carp in the Upper Mississippi and Ohio River basins and tributaries, and for other purposes.

Bill # H.R.709, [Keith Ellison](#) (MN)

To authorize the Secretary of the Army to take actions to manage the threat of Asian carp traveling up the Mississippi River in the State of Minnesota, and for other purposes.

Bill # H.R. 996, [Louise Slaughter](#) (NY)

To establish an improved regulatory process for injurious wildlife to prevent the introduction and establishment in the United States of nonnative wildlife and wild animal pathogens and parasites that are likely to cause harm.

Bill # H.R.4001, [Candice Miller](#) (MI)

To authorize the Secretary of the Army to carry out certain activities to prevent the interbasin transfer of aquatic invasive species between the Great Lakes and Mississippi River, and for other purposes.

Water Resources

Bill # S.565, [Richard Durbin](#) (IL)

Directs the Chief of Engineers to carry out a study of the Mississippi River Basin to: (1) improve the coordinated and comprehensive management of water resource projects in the greater Mississippi River Basin relating to extreme weather conditions, and (2) evaluate the feasibility of modifications to those projects and develop new projects to improve the reliability of navigation and more effectively reduce flood risk.

Bill # S.601, [Barbara Boxer](#) (CA)

Bill # H.R 3080, [Bill Shuster](#) (PA)

To provide for improvements to the rivers and harbors of the United States, to provide for the conservation and development of water and related resources, and for other purposes.

CALENDAR

Meetings, Conferences and Events

UMRBA Meeting
February 25 & 26, 2014
Quad Cities

Mussel Coordination Team Meeting
UMESC - March 17, 2014
La Crosse – Wisconsin

UMRCC 70th Annual Meeting March
18-20, 2014
La Crosse – Wisconsin

Mississippi R. Research Consortium
April 23-25, 2014
La Crosse - Wisconsin

UMRBA Meeting
May 12 & 13, 2014
St. Louis, MO

See www.big-river.com/br.calendar.html for additional interesting events on the UMR!

Training/Workshops

Freshwater Mollusk Conservation Society 2014 Workshop
Mussel Studies and Regulatory Process Associated with Dam Removals
April 24 & 25, 2014 in Portland, Maine
<http://molluskconservation.org/Events.html>

Check out the FWS National Training Centers Web Site at training.fws.gov

Coordinators Quiz

The Fall Newsletter quiz question was: **Who was the first person to sign the original Agreement of Organization for the Upper Mississippi River Conservation Survey Committee?** (Currently known as UMRCC)

Answer – Chester S. Wilson sent in by Jenna Merry.

The Quiz Question for the Winter Newsletter is – **What year did the U.S Fish Commission begin fish rescue work?** The first correct answer emailed to Scott_yess@fws.gov will receive a \$10 gift certificate.



UMRCC Chair

Kevin Irons – Illinois Delegate - Illinois DNR - Springfield, IL

Executive Board

- Ron Benjamin – Wisconsin Delegate - Wisconsin DNR - La Crosse, WI
- Martin Konrad – Iowa Delegate - Iowa DNR - Des Moines, IA
- Janet Sternburg – Missouri Delegate - Missouri DOC - Jefferson City, MO
- Brad Parsons – Minnesota Delegate - Minnesota DNR – St. Paul, MN
- Bernie Schonhoff – Secretary/Treasurer - Iowa DNR - Fairport, IA
- Travis Moore – Fish Section Chair - Missouri DOC – Hannibal, MO
- Megan Moore – Wildlife Section Chair - Minnesota DNR – Lake City, MN
- Louise Hotka – Water Quality Section Chair – Minnesota PCA – St. Paul, MN
- Tyler Strelow – Law Enforcement Section Chair - Wisconsin DNR – La Crosse, WI
- Cindy Samples – OREIT (Recreation) Section Chair – FWS - Winona, MN
- Rich Lewis – Mussel Section Chair – Illinois DNR – Springfield, IL
- Tim Yager – Refuge Observer - Fish & Wildlife Service - Winona, MN
- Scott Yess – Coordinator - Fish & Wildlife Service - La Crosse, WI

The Upper Mississippi River Conservation Committee (UMRCC) was established in 1943 with the goal to: “Promote the preservation and wise utilization of the natural and recreational resources of the Upper Mississippi River and to formulate policies, plans and programs for conducting cooperative studies”.

Send comments and items for future editions to:

UMRCC Coordinator - Scott Yess
scott_yess@fws.gov
Phone: 608/783-8432