



# SHOW-ME CHAPTER

## PRESIDENT'S CORNER

By Steve Wilson



### Missouri Natural Resources Conference

#### *"Balancing Economics, Conservation and Adaptive Management in a Changing World"*

Register before January 8, 2016, to take advantage of the early bird rate

The Missouri Natural Resources Conference (MNRC) is an annual meeting organized and sponsored by the Missouri Chapter of the American Fisheries Society, The Missouri Chapter of the Society of American Foresters, Missouri Chapter of the Wildlife Society and the Show-Me Chapter of the Soil and Water Conservation Society. This unique blend of disciplines, represented by the four societies, promotes wise use and management of Missouri's natural resources. Each year the conference hosts approximately 1,000 established and aspiring natural resource professionals who meet to exchange information and ideas and encourage continued cooperation among resource professionals, agencies, and other natural resource stakeholders. Cooperating agencies are the Missouri Department of Conservation; University of Missouri, School of Natural Resources; Missouri Cooperative Fish and Wildlife Research Unit; U.S. Forest Service and Natural Resources Conservation Service.



Show Me SWCS meeting is Thursday February 4th, 2016 from 4-5:30 PM (see plenary for room)

#### In this issue:

Awards and Presidents Corner Continued	<b>2</b>
Scholarship Winner	<b>3</b>
Scholarship Winner	<b>4</b>
Silent Auction Prep	<b>6</b>

#### JANUARY 2016

To contribute articles to the Show-Me chapter newsletter, please contact Sarah Szachnieski at [seszachnieski@gmail.com](mailto:seszachnieski@gmail.com)

## **DON'T BE SCARED! By National Awards by Kim Worth, Past President**

While we ALL know someone in the chapter who is doing good conservation work, the process of nominating them for a (*insert scary music here*) national award seems like an ominous undertaking. Below are a few awards for individuals that require minimal amounts of deep thought and flowery writing skills, are given pretty generously, and are a really great way to recognize those hard-working individuals. If you know someone making a difference in conservation, contact Kim Worth ([worths@centurytel.net](mailto:worths@centurytel.net)) or Ross Braun ([rbbraun48@yahoo.com](mailto:rbbraun48@yahoo.com)) to find out how to submit them for a Society-wide award.

**Commendation** — Recognizes members for service to their chapters (members having received other society awards are also eligible) *Number awarded:* Each chapter, council of chapters, society board member, or society officer may nominate no more than one member annually

**Honor** — Recognizes people for outstanding accomplishments compatible with society objectives *Number awarded:* Up to 10 each year

**Merit**—Recognizes noteworthy conservation activity or products of organizations, agencies, or firms. *Number awarded:* As many as meet the criteria.

Other awards available include: Fellow, Outstanding Service, Conservation Research, Hugh Hammond Bennett, and Harold-Kay Scholl Excellence in Conservation.

Deadline for submission is February 29th. Information and award applications are available online at [http://www.swcs.org/en/members\\_only/awards\\_for\\_individuals/](http://www.swcs.org/en/members_only/awards_for_individuals/).

Presidents Corner Continued—

Let me start by saying thank you to all members that have given time to the Council and support the MNRC over recently and in the past.

Please consider two opportunities to participate with the Society in the coming year.

\*Run for Council Person in your geographical area or consider serving in an At-Large capacity.

\*Work with the preparations of the 2017 Mo Natural Resources Conference. At this time we are short an AV Chair and a Web Coordinator.

If anyone is interested in any of these positions, please contact myself or Mike Morris for more information. Thanks you and Happy New Year.

Sincerely, *Steve Wilson*

**2015 Show-Me Chapter Scholarship Winner**—Clayton Robinson from Mark Twain HS in Ralls County

*“Balancing Economics, Conservation and Adaptive Management in a Changing World”*

CONSERVATION IN A CHANGING WORLD: THE MISSISSIPPI RIVER BOTTOM HEALTHY WATERSHEDS INITIATIVE

The Mighty Mississippi wasn't always so mighty. Tens of thousands of years ago, the “Mighty” river was covered by tons of ice: Glaciers. Glaciers were covering much of the length of the Upper Mississippi River Bottoms. Approximately ten thousand years ago, the Mississippi River started its march to might. As the Ice Age came to an end, and the glaciers began to melt. The melting water, as water always does, followed the path of least resistance, cutting through layers of glacial till and deposited sediment. This action created the Mississippi River and its network of tributaries (4 Rivers Realty).

Today, The Mississippi River is crucial to the United States and the world. According to the Natural Resources Conservation Service (NRCS) and National Park Service, the Mississippi River Basin is the second largest in the world, and produces 92% of the United States’ agricultural exports. 60% of American grain is shipped through the Mississippi River. The Mississippi river is home to a quarter of all fish species in North America, as well as 125 species of amphibians. It’s safe to say the Mississippi River has a very impressive resume.

A river with such ecological and economical value must be protected. In order to protect this crucial American waterway, the NRCS has developed an action plan. This plan is called The Mississippi River Basin Healthy Watershed Initiative (MRBI). The MRBI balances economics and conservation, and adaptive management to protect the Mississippi River Basin for a changing world. According to the NRCS, the purpose of the MRBI is to reduce sediments, fertilizer, and chemical residue in the Mississippi River. The MRBI has simple means to achieve its ends. To protect the basin, MRBI works to “Implement conservation systems that improve water quality while maintaining or increasing agricultural productivity (2014 MRBI Progress Report).” The MRBI goes further by identifying specific “focus areas” that are considered priorities to the health of the Mississippi, i.e. those that contribute the most sediment to the Mississippi.

The MRBI strives to be as economically friendly as possible by protection of resources, as well as by sustaining agricultural production. Firstly, the MRBI balances economics by taking action to support the economy of the future. Agricultural production is dependent upon soil. Therefore, having quality soil is crucial to the agricultural industry of the future. The MRBI helps to prevent erosion and conserve water for future generations through cost share and technical assistance. Specifically, MRBI helps farmers construct waterways and terraces, as well as manage organic matter through cover crops and no-till. These practices help to ensure that the soil will be there for future generations. The preservation of this land also benefits agricultural consumers: anyone who eats. By preserving agriculture, everyday Americans can continue to go about their daily lives without worrying about their food security (2014 MRBI Progress Report).

Additionally, the MRBI preserves more than just the agricultural economy. By protection the Mississippi, the MRBI is protecting one of the nation's biggest thoroughfares and water supplies. With a non-functional Mississippi-an waterway, agricultural trade would come to a halt, while millions of Americans would have to find a new source of drinking water.

The MRBI also helps to enhance agricultural production in a short term manner as well as in the long term. In a matter of a few years, practices like terraces, cover crops and no-till could benefit producers, Build up of organic matter and enhanced soil health can dramatically improve soil productivity. In addition, enhanced water drainage systems (tile terraces, waterways, etc.) help field to drain more evenly, enhancing yield.

In addition to economic impact, the MRBI focuses on conservation of soil, and wildlife. It is crucial to keep soil in the field for its importance to the economy, but when soil is lost it impacts the downstream economy and taxonomy. Sediment runoff makes water harder to purify into drinking water. It also causes problems for wildlife. Sediment runoff prevents fish and aquatic animals from properly breathing and eating (Environmental Protection Agency). Sediment isn't the only pollutant that can cause problems for the Mississippi. Sediment often carries fertilizers and chemicals with it. These chemicals can cause a plethora of wildlife health issues, resulting in injury death or reproductive issues. The fertilizer causes zones of hypoxia resulting in massive deaths of fish from lack of oxygen. If the amount of fertilizer entering the water supply can be reduced, massive oxygen consuming algal blooms can be prevented, preventing hypoxia. MRBI works to conserve wildlife by stopping the flow of sediment, chemicals, and fertilizer, all the while preventing soil erosion.

The MRBI also uses adaptive management to increase its effectiveness. MRBI uses field side monitoring to determine the effectiveness of its action. MRBI uses monitors to measure water quality so that NRCS and its partners can constantly adapt their practices to ensure the most effective plan is followed. MRBI uses this data to determine one of its key features: hydrological focus units. MRBI prioritizes specific hydrological areas to ensure the most good is done. New areas are added each year based partially on the information collected in the edge of field monitoring program ("*Mississippi River Basin Healthy Watershed Initiative*"). The research gained through MRBI will prove valuable in deciphering complex water quality issues in the future as well, creating a lasting legacy of adaptive management.

MRBI has affected my local community in a large way. In fact, I reside in one of the priority watershed areas. Many farmers have taken advantage of the cost share construction programs, as well as the learning and technical assistance programs made possible by MRBI. My community will be positively affected in years to come due to MRBI. I have a personal connection to the MRBI, which is why I chose to make it the topic of my essay.

MRBI does an excellent job of balancing economics, conservation, and adaptive management through research and constant improvement. MRBI is a success, with 5500 contracts and one million acres due to its economic friendliness. A notable example of the MRBI's success is with the St. Francis River, which was taken off of the impaired waterways list because of MRBI ("*2014 MRBI Progress Report*"). MRBI has had proven success. However, the real, lasting success of the Mississippi River Bottom Healthy Watersheds Initiative will be in its constant adaptation; "To improve is to change; to be perfect is to change often." - *Winston Churchill*

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*Fostering the science and art of soil, water and related natural resource management to achieve sustainability.*



**Its not to late to donate to the Silent Auction for the MNRC Conference!  
Contact Mike Morris at [Michael.Morris@mo.usda.gov](mailto:Michael.Morris@mo.usda.gov) about donating items to benefit the Scholarship program.**

#### Tips for Silent Auction Donations

Homemade items go well including garden products and any type of nick-naks. Instead of saving items for a garage sale consider bringing NICE stuff to the silent auction.

Request a donation item from retailers you do regular business with. The Show Me Chapter of the Soil and Water Conservation Society is a Not For Profit Organization so donations are Tax Deductible Organization (501 (C) (3), EIN 43-6049740). Explain that all proceeds support a scholarship for a Missouri Student going to a Missouri School studying a Natural Resources related field. Every Bank that I have an account with in California, MO gives me a donation. The local restaurants that I frequent give me some type of donation. Granted these items may only be good for a business in your community but YOU can then purchase them. Is there a manufacturer in your area that might donate some of their product...

Last year I received a cash donation from my Dentist whom I spend a lot of money with.....

## SOIL AND WATER CONSERVATION SOCIETY JANUARY 2016

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