



**Your One-Stop Conservation Shop for the Missouri
National Recreational River (MNRR)!!!**

Spring/Summer 2008

1st Annual Missouri River Landowner Workshop by Theresa Smydra MRF

The first Annual Missouri River Landowners Workshop was held at the 4-H building in Yankton, SD, Thursday, March 13, 2008.

This open house was a great venue for all of those involved with Missouri River issues. Landowners and agencies personnel were able to share information on the Missouri National Recreational River (MNRR) between Ft. Randall Dam and Ponca State Park .

Represented were 19 various federal, state, local, and private organizations from Nebraska and South Dakota. Collectively this group's main focus is to provide landowners with numerous conservation options aimed at protecting their unique river frontage as well as information on current and future Missouri River projects.

Attending were approximately 40 landowners who were able to convey their concerns, interact with agency personnel that work in this area, and learn about research and activities along the river bordering their land. They were also able to get more details about conservation programs of interest.

The most popular event was landowners accounts of their experiences and interests along the



MNRR. Many thanks to the three landowners that presented at the meeting. Other attractions included a demonstration by the SD Natural Resources Conservation Service (NRCS) which provided a visual on how soil erosion is directly connected to residue cover, and also of the 12'x30' fish sampling boat used by South Dakota Game, Fish & Parks. One look at the collection of motor propellers will tell you how rough the Missouri River can truly be. Lewis & Clark NRD showcased an educational tool exhibiting water

movement above and below the ground surface. Northern Prairies Land Trust provided an introduction to conservation easements and land trusts showcasing recent projects.

Thanks to the Yankton Area Ice Association for providing coffee and a noon lunch.

Many thanks to everyone attending. Please share with me any ideas to make this a bigger and better event in 2009!

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Special points of interest:

- May 31, Clean Boat Campaign, Yankton, SD
- June 7, Missouri River Clean-up, Sioux City, IA
- Sept. 4-7 Missouri River History Conference, Ponca State Park, NE
- Sept. 20-21, Missouri River Outdoor Expo, Ponca State Park, NE
- New 2008 Farm Bill Summary on MRF website!

Providing Habitat for Threatened & Endangered Birds by Kelly Crane USACE



Threatened Piping Plover



Endangered Interior Least Tern

Least terns and piping plovers, both listed under the Endangered Species Act as endangered and threatened respectively, like to nest on barren, sparsely vegetated sandbars. The Missouri River is one of several locations these birds use for breeding.

Construction of the dams and the annual operations of the Missouri River Mainstem, have slowed the natural sandbar creation process. It is the U. S. Army Corps of Engineers' responsibility under the Endangered Species Act to mechanically create habitat that is not being formed by flows. The Corps is required to create habitat below Garrison Dam, below Fort Randall Dam, below Gavin's Point Dam and in Lewis & Clark Lake.

In the fall of 2007 and the spring of 2008, four sandbars complexes are being built below Gavin's Point Dam creating a total of 207 acres of Emergent Sandbar Habitat (ESH). Two of the four sandbars are complete: one at river mile 791 (Wynot area) and the other at river mile 777.7 (west of Vermillion bridge). The sandbar complexes at river miles 774 and 775 (east of Vermillion bridge) will be complete later this summer.

The sandbars are created on top of existing shallowly submerged areas of sand. The shallowly submerged sand is redistributed and piled up so it is exposed for the birds to use. A portion of the material used to create the sandbar complex at river mile 777.7 was obtained

by creating a 15 acre backwater adjacent to the sandbar on the South Dakota side of the river at the State of South Dakota's Frost Wildlife Management Area.

A sandbar creation project at river mile 795 is planned for late summer and fall of 08. One sandbar will be constructed this fall below Fort Randall Dam at river mile 863. Both sandbars will be 50 acres in size.

Sandbar construction in Lewis and Clark Lake will continue in the late summer when the birds leave the area. Construction of two sandbar complexes in Lewis & Clark Lake began in the fall of 06. When complete, the complexes will provide over 200 acres of habitat for the birds.

NASQAN Site to Continue Operation by Darin Larson & Kathy Neitzert USGS



The instrument towed is a SonTek Acoustic Doppler Profiler with Trimble Geologic Positioning System on an Ocean Science Riverboat floating equipment platform at the Yankton NASQAN site.

A national network called the National Stream Quality Accounting Network (NASQAN) was established in 1974. This was a program to develop a baseline water chemistry data set that was long-term and systematically collected throughout the nation. Starting with 500 stations recording monthly; by 1994, only 275 remained recording quarterly due to program cuts. In 1995, NASQAN was redesigned to focus on the water quality of the nation's largest rivers (including the Missouri) operating 41 stations but recording more chemical parameters.

The USGS-South Dakota Water Science Center has operated a water quality monitoring station on the Missouri River at Yankton, South Dakota (06467500) since 2000. The Yankton station is immediately below the largest volume of impounded water in the U.S. and is influenced by releases from Lewis and Clark Lake.

This site is ideally located to give baseline water quality information, representing where the Missouri River makes a major change in character from lacustrine (lakes) to riverine (rivers) and a major breakpoint or

boundary condition on the water quality gradient on the Missouri River. The chemical constituents measured include carbon, suspended sediment, nutrients, major ions, suspended and dissolved trace elements, and water-soluble pesticides. The data is available online at <http://waterdata.usgs.gov/sd/nwis/qw>.

The site was previously paid for by the USGS NASQAN program. However, this funding year this site is paid for by both the USGS NASQAN program and the US Army Corps of Engineers.

Hope for the Pallid with Successful 2008 Season! by Sam Stukel SDGF&P

Spring is spawning time for the pallid sturgeon. This endangered Missouri River fish goes on the move looking for mates as the water warms and rises. This year, teams of biologists were looking to intercept these amorous fish and provide a helping hand with their reproductive process. An effort to capture spawn-ready adults was undertaken on the Missouri from St. Louis to Montana.

The SD Game, Fish, and Parks Sturgeon Crew set worm-baited trot lines and large-mesh gill nets in the 59-mile Recreational River reach in hopes of encountering one these rare fish. Mature females were especially sought out. It is hard enough to catch any pallid sturgeon, but catching one that is an egg-filled female is much more diffi-

cult. Females of this species do not spawn until they are 12+ years old, and then they only spawn every few years. Finding one that is ready to go is a needle in a haystack proposition.

Fortunately a little luck shined down on a cold March morning when a 3 foot long female was boated right in front of Riverside Park in Yankton. The fish was delivered to Gavin's Point National Fish Hatchery and was later determined to be an egg-laden female that will be spawned in June. It's eggs will be mixed with milt (sperm) from multiple males that were captured from the middle Missouri and hopefully several thousand of this fish's offspring will be produced and stocked in 2009.

Several other gravid (spawn ready) females and many males were captured by downstream crews from the states of Nebraska and Missouri, making the 2008 spawning season a great success.

Pallid sturgeon have historically been one of the most resilient species on earth. This species evolved over 70 million years, originally swimming during the time of the dinosaurs in the cretaceous age. The pallid sturgeon was able to survive the ice ages, volcanoes, asteroids, the rise of mountain ranges, earthquakes, floods, droughts, but we humans have managed to bring them to the brink of extinction with 60 years of river manipulation.



SD GF&P sturgeon crew members with a mature native female pallid sturgeon captured in March 2008.

CRP SAFE by Sarah Reece & Steve Grube NRCS

Many landowners have small fields and odd areas that are becoming difficult to farm. The Conservation Reserve Program (CRP) is one option that can help the producer's bottom line while improving wildlife habitat.

Even though CRP is being discussed in the new

farm bill there is currently no forecast of the next general signup. There is however a new practice that may be of interest to those wanting to enroll acres into the CRP program. Recently in 2008, the Farm Service Agency began taking signups for the new CRP State Acres for Wildlife Enhancement

(SAFE) practice. Referred to as CP38 this program is an opportunity for landowners to enroll anywhere from 5 to 160 acres. Acres are limited in both Nebraska and South Dakota so landowners are strongly encouraged to stop at their local USDA offices for additional information.



Northern Bobwhite Quail

Ongoing Research on the MNRR by Theresa Smydra MRF

Along with all of the other activities on the MNRR you have seen in this newsletter, there are also several other research projects being conducted but perhaps are a little more off the radar.

Check the Missouri River Institute web site for de-

scription of projects such as the Gunderson backwater monitoring project, cottonwood forest assessment, turtle population study, historic flow pattern changes and others : <http://www.usd.edu/mri/research.cfm>.

The University of South Dakota established the Missouri River Institute to develop and promote research, education, and public awareness related to the natural and cultural resources of the basin.



False Map Turtle

MISSOURI RIVER FUTURES

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Goal of the Missouri River Futures (MRF): To improve communication, understanding, and trust among all stakeholders; leading to effective resources conservation. Providing information on conservation options for landowners/stakeholders along the MNRR from Ft. Randall to Ponca State Park. Please contact MRF for information on the authors of the articles contained in this newsletter, as well as to get on the newsletter contact list or to submit articles.



Is it spring yet?

Call MRF or check out
www.missouririverfutures.com for your copy
of the conservation programs available for
your area, newsletters, and other information!

STOP AQUATIC NUISANCE SPECIES! See <http://www.protectyourwaters.net/> to find out why you should be concerned and simple procedures you can use to halt the spread of these invasive & destructive hitchhikers. They can in the form of plants, animals, or microscopic organisms and easily transported to other waters.

Missouri National Recreational River Water Trail by Tim Cowman MRI

A water trail planning group comprised of several federal, state, local, and non-profit organizations has been formed. This group is working to establish a formal water trail along the Missouri River from Gavin's Point Dam near Yankton, SD, to Sioux City, IA.

This water trail will encompass the entire 59-mile segment of the MNRR, as well as an additional 20 miles from Ponca, NE, to Sioux City, IA. The 39-mile seg-

ment between Ft. Randall Dam and Lewis & Clark Lake will be added to this water trail in the future.

The group's activities include improving public access to the river, compiling float trip information, creating informational brochures and signs, and building an interactive web site that can be used to plan float trips.

Public access sites on the river are sometimes located relatively

long distances apart. Landowners can help with the water trail by offering limited access to and from the river in certain areas. The water trail development group is interested in working with landowners to establish emergency access points on their land to compliment the public access points.

For more information contact Tim Cowman with the Missouri River Institute at 605-677-6151 or at tim.cowman@usd.edu.



MRRP Publications & Info on Web by Paul Boyd & Teresa Armagan USACE

The Missouri River Recovery Program (MRRP, U.S. Army Corps of Engineers) is in the process of sending out a number of recent science publications from the basin. You will find them on our website, <http://www.moriverrecovery.org>, under Recent Articles and Reports on the Key Documents page (under the General Information tab). Look for recent publications on Platte River Pallid

Sturgeon Ecology (to be posted soon); Piping Plover Chick Foraging, Growth and Survival in the Great Plains; and Piping Plovers Nesting among Cottonwoods.

Those looking for information on the Lewis and Clark Lake Sediment Management Study (LCLSMS) can find it on the same website under 'Recovery Activities' tab. On the left side of that page under the 'Science' heading select 'Research'. Un-

der 'Select Project' on the drop down list, select the LCLSMS page. The document is listed at the bottom of the LCLSMS page.

All the information on the Shallow Water Habitat, Emergent Sandbar Habitat, Integrated Science and Research Program, and summaries of all the Missouri River Recovery Program Activities are available at the website.