

Welcome to your river!

Welcome to the Missouri National Recreational River, one of 391 units of your National Park System. More than two-thirds of the entire length of the Missouri River has been altered or “re-engineered” by the actions of humans. The two remaining untamed stretches that make up the Missouri National Recreational River are, therefore, very important in preserving chapters of America’s natural and cultural heritage of “Big Muddy”.

This unique unit of the National Park Service offers natural beauty and an exciting history for your enjoyment and enrichment. You will experience the river's ever-changing nature, the animals and plants that find a home in its realm, and the stories of people and events that have shaped its past. As a recreational river, it is also your river to enjoy in a safe and considerate manner. When the United States Congress designated Missouri National Recreational River as a part of America’s Wild and Scenic River System, the National Park Service was charged with the task of maintaining the natural state of the river and keeping it accessible for the enjoyment and enlightenment of present and future generations. I hope that you will join the staff of Missouri National Recreational River in caring for and protecting this remarkable national treasure.

R. Michael Madell
Superintendent

Deal of a lifetime!

Have you reached the noble vintage of 62 years? If so, then you qualify for America’s best outdoor recreation bargain! The federal recreation Senior Pass covers your admission to national park fee areas, and nearly all other federal recreation areas, including U.S. Forest Service, Bureau of Reclamation, Bureau of Land Management, and U.S. Fish and Wildlife Service areas. The pass also entitles you to reduced camping fees at most federal recreation areas and special services (tours, programs, etc.) at some areas. The best news is that this pass is only \$10 and it’s good for the rest of your life!



For those lacking the years to qualify for the Senior Pass, the \$80 Annual Pass is still a bargain, covering entry to all recreation areas operated by the above agencies. Both passes are good for the holder and three additional adults and are available at the Lewis & Clark Visitor Center.

Contacting Your National Park

Missouri National Recreational River
PO Box 666
Yankton South Dakota, 57078
402-667-2550
www.nps.gov/mnrr

Lewis & Clark Visitor Center
Nebraska Hwy 121, overlooking
Gavins Point Dam
402-667-2546



Undercurrents

Your free guide to Missouri National Recreational River

www.nps.gov/mnrr

30th Anniversary Edition – 2008



Superintendent takes the Helm on the Big Muddy

On July 20, Michael Madell officially entered on duty as superintendent of Missouri National Recreational River. Mike began his ranger career in the late 1970s with Michigan State Parks. After earning his Masters in Parks and Recreation at the University of Minnesota, he began his National Park Service career at the Denver Service Center. From 1990 to 1997, he was Chief of Planning and Resources Management at Mississippi National River and Recreation Area, then served as Environmental Coordinator and Chief of Planning in the National Park Service’s Omaha regional office. Following a short stint with the U.S. Forest Service in Kentucky, Mike returned to the NPS as superintendent of Central High School National Historic Site in Little Rock, Arkansas. Mike is now glad to get back to the “North Country” and is looking forward to shoveling snow this winter. The staff of Missouri National Recreational River welcome Mike to Yankton!



Double Anniversary

2008 is a double anniversary year: The 30th anniversary of Missouri National Recreational River and the 40th of the National Wild and Scenic Rivers Act.

Why Wild and Scenic?

As a unit of the National Park System, Missouri National Recreational River has been designated by Congress as one of America’s special places. The park is also part of the National Wild and Scenic River System, stretches of free-flowing rivers that are protected for their outstandingly remarkable geologic, fish and wildlife, scenic, recreational and/or historic values.



Verdigre Creek

NPS photo by Linda Gordon Rokosz

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Why the Missouri?

One third of the Missouri has been channeled – deepened and straightened for barge traffic. Another third of the former “Big Muddy” has been backed up as reservoirs behind the six major dams built by the U.S. Army Corps of Engineers. The two stretches of the Missouri that make up MNRR are the last free-flowing portions of the lower Mis-

(continued on pg. 2)

souri, remnants that have not been extensively re-designed by humans. They are protected not just for their scenic value, but for their unique wildlife habitat; several threatened or endangered species inhabit these portions of the river. The park also protects the recreational value of the river for boating, canoeing and kayaking, and fishing. And history? The “rec river” is near or includes many historic sites visited by American Indians, fur traders, Lewis & Clark, steamboat captains, homesteaders, and so many cultural groups that lived near the Missouri.



Least Tern chicks

USACE photo

MNRR is unique among national parks in that it has very little land area — it’s primarily a water park. Its natural and cultural resources are managed in cooperation with numerous other agencies, including the Corps of Engineers, U S Fish and Wildlife Service, Nebraska Game & Parks Commission, South Dakota Department of Game, Fish, and Parks, Yankton Sioux Tribe, Ponca Tribe of Nebraska, and city and county governments. These



NPS photo by Linda Gordon Rokosz

and other agencies work with the National Park Service to keep these special portions of the Missouri available for you and your family to enjoy now and in the future.

Junior Rangers



Earn your badge!

Pick up a Junior Ranger activity brochure or activity book at the Lewis & Clark Visitor Center and spend an hour or a weekend discovering the fascinating historic and natural world of your Wild & Scenic River. Find out what rangers do and what Junior Rangers can do to protect their national parks.

It’s free and it’s fun!

For online Junior Ranger adventures, visit www.nps.gov/webangers

Did you know?

Yankton’s first non-Indian resident was Pierre Dorion, a French trapper and trader who married into the Yankton Tribe around 1785. He joined the Lewis & Clark Corps of Discovery enroute and left the expedition at Calumet Bluff after serving as liaison and translator between the explorers and the tribe.

and may be required at some other sites. Other launch sites may be indicated on maps, but are not recommended for trailered craft.

Overnight floats

Most of the land along the park is privately owned and there are few public camping possibilities. Primitive camping is normally allowed on islands and sandbars. Please adhere to the "pack-it-in, pack-it-out" (Leave No Trace) ethic. The river bank on both sides of the river, sandbars and islands on the Nebraska side, and deeded islands on the South Dakota side of the river are private property. Only the water belongs to the public. In areas other than designated campsites, permission is required to walk, picnic or camp on private property. Sandbars on the South Dakota side of the river are public property. In several locations along the "rec river," the state border is still undetermined.



Another Wild & Scenic River

Not far away is another surprising unit of the Wild and Scenic River System. Niobrara National Scenic River, near Valentine, Nebraska offers river experiences from mild to wild, spectacular waterfalls, classic iron bridges, and fascinating local history. For more information, visit www.nps.gov/niob.



Take it to the Lake!



In accordance with National Park Service policy, personal watercraft (Jet Ski®, WaveRunner®, etc.) are not permitted on the portions of the Missouri designated as Wild & Scenic. This includes the 59-mile reach from Gavins Point Dam to Ponca State Park, the 39-mile reach from Running Water, SD to Ft. Randall Dam, the lower 20 miles of the Niobrara River and the lower 8 miles of Verdigre Creek. Personal Watercraft are welcomed on all Corps of Engineers lakes on the Missouri and on the Missouri River downstream of Ponca State Park. Ride safely and wear your life vest!

More National Parks

Many more of America’s special places are within a day’s drive of MNRR. Here are just a few:



Pipestone National Monument, Pipestone, Minnesota. www.nps.gov/pipe

Minuteman Missile National Historic Site, Phillip, South Dakota. www.nps.gov/mimi

Homestead National Monument of America, Beatrice, Nebraska. www.nps.gov/home

Badlands National Park, Interior, South Dakota. www.nps.gov/badl

Discover your America

Canoeing & Kayaking

Floating the Missouri can be an adventure, different from whitewater trips, but challenging and exciting in its own way. Before you consider a float trip on “Mighty Mo”, you should be an experienced river canoeist or kayaker. The Lakota name for the river is *MniSoshe Wakpa*, turbulent-underneath river. The Missouri is known for its varied currents that sometimes give little or no surface clues to their presence. Wind can also be a problem at times, impeding your progress or creating dangerous waves.



Launch and take-out sites are indicated on the official MNRR map and brochure, and detailed directions can be found at www.nps.gov/mnrr/guides.htm

Restrooms are available at the state parks and at most launch sites. If nature calls when you are not near one of these areas, please use the **Leave No Trace** practices detailed elsewhere in this booklet.

Power Boating

Whether you are fishing or just cruising, boating the Missouri can be different from what you may have experienced on other rivers. The natural portions of the Missouri still exhibit shifting sandbars, tree stumps (snags), and other hazards. Local river rats' boats are easy to spot by their shiny propellers; if you boat the wild Missouri, you *will*

Float trip guides and outfitters



This list is provided for your convenience and may not be complete. No endorsement by the National Park Service or Missouri National Recreational River is implied.

Missouri River Expeditions, P.O. Box 536, Vermillion, SD 57069. Telephone: 605/360-2646
E-mail: ccmrepaddler@yahoo.com
Internet: www.missriverexp.com

Missouri River Rafting, P.O. Box 133, Irene, SD 57037. Telephone: 605/267-3075

Missouri River Tours, P.O. Box 17A, Wynot, NE 68792. Telephone: 402/985-2216

DJ's Sports Rentals: 31110 Walleys Dr., Yankton, SD 57078. Telephone: 605/665-3206
E-mail: rentals@djssportsrentals.com
Internet: www.DJsSportsRentals.com

hit sand! Constant attention to the water ahead of you is necessary to maintain a safe course. Watch your speed and be on the lookout for submerged obstacles.

Launch ramps are provided by the Corps of Engineers on both sides of the river below Gavins Point Dam, by the City of Yankton at Riverside Park, and by the state of South Dakota at Randall Creek, Running Water, and Clay County Park. Nebraska Game and Parks provides launch ramps at Verdel, Niobrara State Park, St. Helena, Brooky Bottom, Mulberry Bend, and Ponca State Park. State park fees apply at state parks

Camping

The National Park Service does not operate campgrounds in or near Missouri National Recreational River. Camping is available through our partner agencies as follows:



US Army Corps of Engineers operates the Cottonwood campground on Lake Yankton and Tailwaters campground on the Missouri River. Both campgrounds are in Nebraska and reservations may be made through the national reservation service at 877-444-6777 or www.recreation.gov.

South Dakota State Parks (www.sdgfp.info) operates several campgrounds near MNRR, including Lewis & Clark on Lewis & Clark Lake, Pierson Ranch below Gavins Point Dam, and Chief White Crane on Lake Yankton (605-668-2985). The state also operates the Randall Creek campground on the Missouri below Fort Randall Dam and North Point on Lake Francis Case. (605- 487-7046) South Dakota State Parks reservations 800-710-CAMP. Clay County State Recreation Area is located west of Vermillion with first-come-first-serve campsites within a half mile of the river.

Nebraska State Parks (www.ngpc.state.ne.us) provides campgrounds at Ponca State Park (402-755-2284), the downstream boundary of MNRR, at Niobrara State Park (402-857-3373), and at Weigand/Burbach unit of Lewis & Clark Recreation Area on Lewis & Clark Lake (402-388-4169). Nebraska State Parks reservations 402- 471-1414.

Most campgrounds are full on summer weekends, so make your reservations early. All offer both electric and tent sites except Clay County Recreation Area. Some state park facilities also have camping cabins and housekeeping cabins available. Call the parks or visit their websites for more information.

Who's more likely to drown?

Adults or kids?

According to one of our partners, the U.S. Army Corps of Engineers, adults are far more likely to drown in a swimming or boating accident than children. Why? Adults will insist that the kids wear life jackets, but will neglect to wear one themselves.

But I can swim!

Many drowning victims were good swimmers. Injuries in a boating accident, strong currents, or distance may make swimming impossible.

Be safe!

State and federal regulations require children under 13 to wear life jackets while in a boat and we recommend that all boaters wear them at all times.



Don't sit on it, wear it!

Alien Invasion Alert!

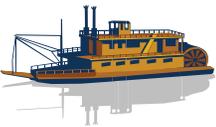
Keep your National Park free of this invasive species! Zebra Mussels, accidentally imported from Europe, have spread from the Great Lakes and Mississippi River to other waterways. They clog water intakes, damage boats and motors, and crowd out native species. They reproduce rapidly and have few natural predators. Zebra mussels can only travel upstream as hitchhikers, they or their larvae attached to boats, motors, or trailers, or in livewells or bilges.



MNRR and the lakes upstream presently appear to be free of these pests. Please prevent their spread by washing your vessel with hot soapy water or allowing at least five days drying time after boating in waters that may be contaminated. Ask a ranger for a brochure to learn what you can do to protect your favorite fishing and boating places.

Did You Know?

The average lifespan of a Missouri River steamboat was 5.7 years.



Twenty percent of these boats sank before their third season. Fire, explosions, and ice jams claimed a few of these ships, but the vast majority were sunk by snags, tree stumps lodged in the river bottom with their jagged ends just above or below the water's surface.

Hit the Trail

The National Park Service's partner agencies offer numerous hiking and bicycling opportunities. South Dakota State Parks have several miles of paved and primitive trails along the north shore of Lewis & Clark Lake. Nebraska State Parks maintains unpaved trails on the south shore of the lake. Appropriate state park admission is required to park at the trailheads.



The city of Yankton has an extensive system of paved trails through the historic city and a connecting trail to the dam area. For more information on these trails, ask a ranger for a "Meridian Trails" brochure. Excellent hiking and/or equestrian trails are also available at Ponca and Niobrara state parks.

Ranger Programs

Just like at other national parks, MNRR rangers present fascinating programs on the natural and cultural history of the park, in this case, the river and its surroundings. Topics include native plants, American Indian history, homesteading, steamboats, and the Lewis & Clark Expedition. For our younger visitors, we offer fishing clinics and craft programs. See a ranger for a complete schedule and program descriptions.

Don't forget to stop at the Lewis & Clark Visitor Center for short programs at 11:00 am every day and special exhibits and craft programs every Saturday and Sunday at 1:00 pm.



Protecting Our Rivers

"It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations..."



Niobrara National Scenic River

2008 is the 40th anniversary of the Wild and Scenic Rivers Act.

After decades of damming, development, and diversion, Americans began to recognize the adverse effects on our rivers. On October 2, 1968, President Lyndon Johnson signed the National Wild and Scenic Rivers Act, establishing a process for building a legacy of protected rivers. From the eight rivers originally included in the act, the

Wild Rivers:

"Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unspoiled."

National Wild and Scenic River System has grown to over 160 rivers in 37 states. Wild & Scenic Rivers are managed by the National Park Service, the Bureau of Land Management, the U.S. Forest Service, U.S.

Fish and Wildlife Service and state agencies. These state and federal agencies work in cooperation with other state and federal, as well as local and tribal entities to balance the demands of use and protection of our natural river resources.

Scenic Rivers:

"Those Rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."

The object of river management is to protect and enhance wild and scenic river values without limiting other uses, unless those uses are incompatible with the purposes of the act. The focus for management is not to prevent development, but to safeguard water quality, free-flowing condition, and natural and cultural values. The Act specifically prohibits federally assisted or sponsored water resources projects that would impede the free flow of a river or adversely affect its outstandingly remarkable values.

Recreational Rivers:

"Those rivers or sections of rivers that are readily accessible by road or rail-road, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past."



Missouri National Recreational River

Doing your part

We all benefit from visiting America's wild places and relaxing with outdoor activities, but heavy use of our favorite recreation areas is having a negative impact and detracting from everyone's outdoor experience.

Missouri National Recreational River is *your* park; your place for outdoor recreation. Boaters, floaters, anglers, and hunters; everyone needs to do their part to minimize their impact on the river environment.



Leave No Trace is an outdoor ethics program developed by a partnership of government agencies and private enterprises. The LNT principles are based on scientific information, common sense and courtesy. Whether you are camping or just out for a day, the following seven principles will help keep your river enjoyable for everyone.

The 7 Principles

Plan ahead and prepare—Be aware of conditions and weather you might encounter and pack accordingly. Repackage food to minimize waste. Schedule your trip for low-use days if possible.

Use durable surfaces—Travel and camp on rock, gravel, or sand when not on the

river. Use existing campsites and fire scars to minimize impacted area. Camp 200 feet from water, streambeds, and other campers.

Dispose of waste properly—Pack it in, pack it out. Do not attempt to burn waste in your campfire. Solid human waste should be deposited in a “cathole” 200 feet from water or campsites, or use a portable toilet. Toilet paper should not be buried, but bagged and packed out. Dishwater should be strained into a cathole and the solid material bagged and packed out.

Leave what you find—Flowers, trees, artifacts; enjoy looking at them and leave them for others to enjoy. Do not build fire rings or structures, or trench campsites.

Minimize fire impact—Use camp stoves whenever possible. If you must have a campfire, keep it small, use an existing fire site or use a fire pan or mat. Burn all fuel to ash and pack out.

Respect wildlife—Give wildlife their space, do not feed animals or leave food scraps. Even if you are hunting, minimize disturbance of non-game species.

Be considerate of other visitors—This sums up the whole LNT program. Let nature's sounds prevail, allow others their space, and think about what you can do to leave a campsite or recreation spot the way you would like to find it.

Ask a ranger for a LNT brochure or reminder card or visit www.lnt.org.

Did You Know?

Ponca Chief Standing Bear's desire to return to his tribe's ancestral homeland along the lower Niobrara River resulted in a landmark federal court decision affirming that American Indians are persons under the U.S. Constitution.

Master of the Big Muddy

Among the numerous Missouri River steamboat pilots, Grant Prince Marsh (1834-1916) was possibly the greatest ever, possessed of both great skill and incredible luck.



He grew up in the river town of Rochester, Pennsylvania, and began his steamboat career as a cabin boy at the age of 12. By 1858 he was a first mate on the *A. B. Chambers No. 2*, on which he was assisted by a then-unknown second mate, Samuel Clemens. During the Civil War, Marsh worked on boats in the Union Fleet on the lower Mississippi.

After the war Marsh worked as a pilot and captain in the St. Louis-Fort Benton (Montana) trade. He moved to Yankton and became a partner of Sanford Coulson in 1873 and worked with the Coulson Packet Line for several years, establishing a reputation for reliability, both in moving freight and in commanding a crew.

Three years later, his unique experience on the Yellowstone River caused him to be assigned as master of the *Far West* to accompany Gen. Alfred Terry and Custer on their ill-fated campaign against the Sioux and Northern Cheyenne. The *Far West's* 54-hour, 700-mile dash to Bismarck with more than 50 wounded troopers of Major Reno's command was one of the most remarkable exploits in Missouri River steamboating annals.

Marsh then continued his work on the Missouri. With his own packet boat, the *W. J. Behan*, he participated in one more notable event in late April 1883, transporting Sitting Bull and his remaining followers to Fort Randall from Fort Yates where they had been detained after their return from Canada. Then, as river traffic waned on the

Missouri, Marsh moved to Memphis, Tennessee, where there were still opportunities for individuals like him on the Mississippi.

In over a half century of riverboating, Marsh lost only one boat; the towboat *Little Eagle* was capsized by a “cyclone” near St. Louis. The crew jumped to the barges for safety, but Marsh was trapped on the towboat when it was torn away from the barges. He clambered out the pilot house window and crawled to the edge of the hull, walking out onto the bottom of the hull as the boat completed its rollover. According to his biography, published in 1909, this is the only recorded incident of a pilot walking from the pilot-house to the keel without getting wet!

He later returned to Bismarck, North Dakota, operating snag boats, towing coal barges, transporting grain and cement. He stayed active on the river as long as he could. Marsh died in near poverty in Bismarck in January 1916, at the age of 81. He was interred in St. Mary's Cemetery located on a hilltop overlooking the Missouri River valley.

Did You Know?

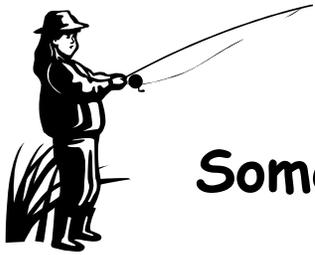
At 2,320.7 miles the Missouri is America's longest river. It is 2.5 miles longer than the Mississippi River. This does not include the 325 miles from Three Forks to Brower's Spring, considered to be the Missouri's source.

Park Offices to Move

The headquarters of MNRR will be moving from O'Neill, Nebraska to downtown Yankton.



According to the plan, the MNRR field office, currently located in the Corps of Engineers Lewis and Clark Visitor Center will also be relocated to the new office space. National Park rangers will continue to help staff the visitor center and present programs there.



Something Fishy!

Missouri National Recreational River includes the two reaches of the Missouri River, 20 miles of the lower Niobrara River, and the lower 8 miles of Verdigre Creek. Catfish, walleye, sauger, paddlefish, and many more game species await your angling skills in these bodies of water.

Licensing: The Missouri River forms a good part of the state boundary between South Dakota and Nebraska. As the river here is considered "border waters," either state license (South Dakota and Nebraska) is acceptable and special seasons and laws apply accordingly. Waters of the Missouri River are defined to include all flowing portions and backwaters, sloughs and chutes that draw water from the Missouri River. Mouths of tributaries may only be fished in the state in which the angler is licensed.

Live bait: Please use caution when using live bait and follow all state regulations. To avoid introducing non-native species, please empty all bait buckets in the water they were filled from or on land.

Threatened and Endangered: The Pallid Sturgeon, a fish native to the Missouri River, is listed on the federal Threatened and Endangered Species List. It is difficult

to differentiate the pallid sturgeon from the more common shovelnose sturgeon and the lake sturgeon, and the season is therefore closed year-round on all sturgeon species.

So, where are they biting?

Bait shops and other anglers are your best sources, but they won't always share the best spots. Here are some helpful hints:

The best time is often in the evening and early morning as this is feeding time for most fish. Bass, and walleye and trout feed all night.

Deep holes are good places and are often located under bridges, below dams, on bends in the river, and downstream of sandbars.

Fish can sense noise vibrations such as hitting the bottom of the boat or loud talking.

For walleye/sauger, the best times are May to June and mid-September through November. Just downstream of the Fort Randall and the Gavins Point dams seems to be popular with anglers for this fish species.

For small and largemouth bass, the best times are May, June, September, and October near Springfield (SD) and Niobrara (NE).

For crappie and northern pike, the best times are early April after ice out and in late summer near Springfield and Niobrara.

For catfish, the best times are late June, July and August near Springfield and Niobrara.

Enjoy yourself! Remember the fishing is always good;

the catching just makes it better.



Weather or not...



The Great Plains can be full of weather surprises, but you can generally expect hot in the summer and cold in the winter. Be prepared for occasional storms with possible tornadoes in the summer and snow with the possibility of ice or blizzard conditions in the winter. You can also expect many seasonably pleasant days at any time of



Month	Avg. High	Avg. Low	Avg Precip.	*Avg. Water Temperature
January	28	8	.43	
February	35	14	.53	
March	46	24	1.77	
April	60	35	2.51	50
May	72	46	3.87	63
June	82	57	3.91	71
July	87	62	3.36	78
August	85	60	2.93	78
September	77	49	2.17	66
October	64	38	1.85	54
November	45	24	1.25	42
December	32	12	.51	

*Missouri River at Yankton. Water temperature recording began in 2006 on a seasonal basis.

Hunting is another popular year-round activity along the "rec river" corridor.



Most hunting is done on private land, requiring permission of the landowner. Both South Dakota and Nebraska state hunting regulations apply. Duck blind permits for the upper end of Lewis and Clark Lake can be obtained from the US Army Corps of Engineers at the Lewis and Clark Visitor Center or online. Applications are taken from August 1 to September 1.

Visitor Centers

The Lewis and Clark Visitor Center overlooking Gavins Point Dam is the only visitor center in the country shared by the Army Corps of Engineers and the National Park Service. Rangers from both agencies staff the center, assist visitors and present interpretive programs.

The state visitor center at Ponca State Park (NE) houses the Missouri River Resource and Education center, which includes a wing of exhibits jointly developed by several agencies and designed and built by the National Park Service.