Fishing and Boating on the Mississippi River

Wisconsin, A Great State To Fish!

TUCK IT IN YOUR TACKLE BOX
FUN TO READ

Tuck it in your tackle box!
Bring it on your boat!

Help Stop the Spread of Aquatic Invasive Species

LADD JOHNSON, NOAA/GREAT LAKES ENVIRONMENTAL RESEARCH LABORATORY

Clean Boats…Clean Waters

***I*nspect** and **remove** aquatic plants, animals, and mud from your boat, trailer, and equipment before leaving the boat landing.

Drain water from your boat, motor, livewells, baitwells, bilge, and equipment before leaving the boat landing.

Dispose of unwanted live bait in the trash or share it with a fellow angler. Do not transfer bait or water from one body of water to another.

Rinse your boat and equipment with high pressure or hot water, especially if moored for more than a day ***or,***

Dry your boat and equipment thoroughly for at least 5 days.

Learn what aquatic invasive species look like. If you think you have found a new infestation of an invasive plant or animal, report it to the DNR (see inside back cover for contact information).

Wisconsin law prohibits launching a boat or placing a trailer or boating equipment in navigable waters if it has aquatic plants or zebra mussels attached.

STOP AQUATIC HITCHHIKERS!™

Prevent the transport of nuisance species.
Clean all recreational equipment.
www.ProtectYourWaters.net

Fishing and Boating on the Mississippi River

"If you haven't fished Ol' Man Mississip, forget about any preconceived notions you may have as far as rivers are concerned. Because Ol' Man River isn't really a river at all. In fact, he's a hundred rivers and a thousand lakes and more sloughs than you could explore in a lifetime. He is creeks, bayous, ditches, puddles, and thousands and thousands of impenetrable lotus beds that break big yellow flowers out above green pads."

Mel Ellis, Summer 1949, Milwaukee Journal

HEIDI LANGREHR

Acknowledgments

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Catch and Release

Many anglers practice catch-and-release fishing. It is most often done during the spawning season to benefit fish populations by allowing fish a chance to reproduce. To increase the chances of survival for released fish, follow these suggestions:

1. Use barbless hooks. Flatten or file barbs down.

2. Set the hook quickly so the fish doesn't have a chance to swallow it.

3. Don't exhaust the fish by playing it on the line too long. A fish becomes weaker and more susceptible to disease the longer it is played.

4. Fish bruise when dropped so handle them carefully. Wet your hands before touching fish to minimize removal of the slime that helps protect them from disease.

5. Hold the fish firmly, but gently, at the back of the head, just behind the gill covers—not by the eyes!

6. Use a needlenose pliers to remove hooks.

7. Cut the line if the fish is deeply hooked.

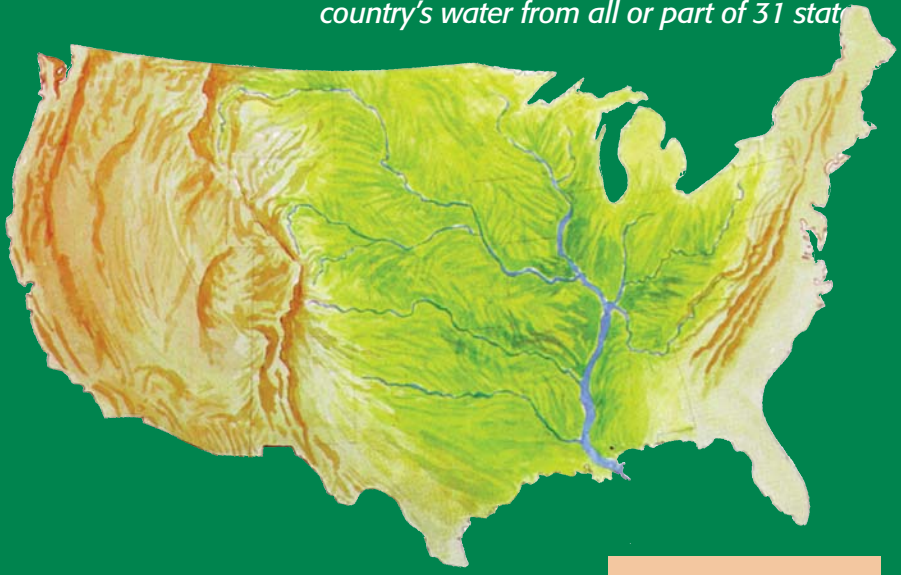
8. Gently ease—don't throw—the fish back into calm water. A fish can die from injuries caused by being thrown or by tumbling downstream into rocks in strong currents.

9. Revive a tired fish by slowly moving it back and forth in the water allowing water to move through its gills. When the fish is strong enough, it will swim out of your hands.

Anglers may release "rough" fish they do not wish to keep, but it is illegal to throw them on the bank or kill them and throw them back in the water.

The Mississippi River

The Mississippi is the world's third largest drainage basin. With 250 tributaries and branches, the river drains 41 percent of the country's water from all or part of 31 stat



The Upper Mississippi is designated as the portion of the river between mile 0.0 at the mouth of the Ohio River in Cairo, Illinois, and mile 839.0 in St. Paul, Minnesota. The Wisconsin border is marked at approximately mile 580.6.

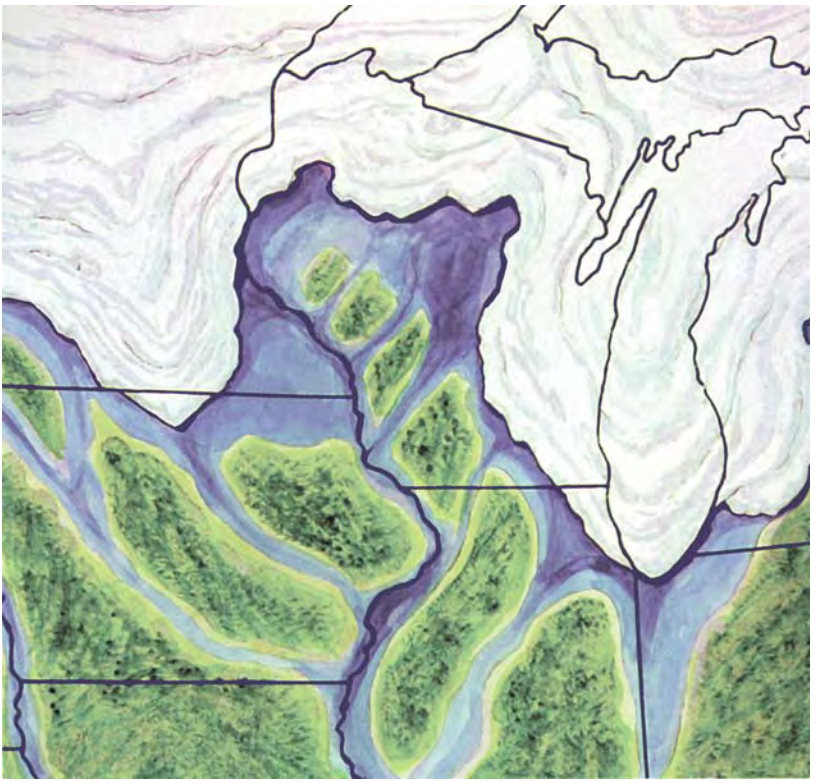
Dear Visitor,

Welcome to the river of legends. Legends of unusual people and unusual fish. The Mississippi River's rich natural and cultural history lends itself to storytelling. It is a dynamic river that plays host to more different species of fish than any of Wisconsin's inland lakes. And it's a busy river with almost every kind of watercraft imaginable traveling its length. There are many ways to find adventure on the river. Rent a houseboat for the weekend, paddle a canoe through the tangle of sloughs, or simply fish from the bank.

This guide to the Mississippi River offers information to help you travel the river safely, explore its backwaters, and enjoy the fishing in those mysterious waters along Wisconsin's western border. We hope your experiences will give rise to wonderful memories and fantastic stories of fishing and boating on "Ol Mississip."

River Formation

The Mississippi River, with its majestic bluffs and peaceful backwaters, has an ancient geologic history. Sandstone and limestone were deposited in shallow



seas that covered the southern half of Wisconsin millions of years ago. As the seas retreated, streams that would become today's Mississippi and its tributaries began cutting down through the layers of sandstone and limestone forming V-shaped valleys. Later, glacial streams laden with sediments filled those valleys with sand and gravel creating broad, flat floodplains.

The river's tendency to wander met with little resistance as it cut meandering paths through the sand and gravel plain. During floods, coarse sediments were dropped at the bottom of the channel while finer sediments were carried up over the banks and deposited on the floodplain, making up the rich lowland soils. The landscape of the Mississippi River is always in flux as islands appear and disappear with passing floodwaters.

The only thing that's constant on the river is change.

Early Navigation

As a resource, the Mississippi was vital to Native Americans who lived in the area long before European settlement. The river received substantial use as a trade route by local and visiting tribes. Birch-bark canoes and log dugouts called pirogues (pronounced pea-rouges), transported crafts and trade goods from village to village throughout the labyrinth of backwater sloughs, creeks and streams.

The styles of canoes used by Native Americans were adopted by early white explorers and fur traders. These agile vessels could carry up to 2,000 pounds of cargo and were perfectly suited to negotiating not only the big waters of Lake Superior, but also the tangled backwaters of the Mississippi. Dangerous stretches were avoided by portaging canoes and cargo around rapids and waterfalls along the way to trading posts.

White settlement brought new modes of transportation to the river. Flatboats and keelboats were used to send goods downriver. Most flatboats were sold for lumber when they reached their destination because navigating them upriver was an exhausting task. Some keelboats were driven back upstream by a method of poling. This involved 10 to 20 men, each with a 20-foot pole, who thrust the pole into the river bottom and walked the length of the deck to move the boat forward.

FRANCES ANNE HOPKINS, CIRCA 1869. GLENBOW MUSEUM, CALGARY, ALBERTA

MURPHY LIBRARY, UNIVERSITY OF WISCONSIN-LA CROSSE

Effigy Mounds

Ceremonial or effigy mounds, built in the shapes of fish, birds or animals, reflected the importance of river resources in the lives of Native Americans. Several effigy mounds may be seen at many of our state parks and at Effigy Mounds National Monument near Marquette, Iowa, just across the river from Prairie du Chien, Wisconsin.

Low water, snags, sandbars and floods limited the introduction of the steamboat on the Upper Mississippi until river communities expanded in the 1840s. By then, lead mining, lumbering and grain distribution increased demand for control of the river and safe, reliable navigation.

Before river modifications began, the Upper Mississippi River was a mosaic of braided channels with rapids and shallow areas, making navigation in larger boats difficult. Water levels also were unpredictable and the river was as vulnerable to drought as it was to floods. Sometimes it was possible to wade or drive wagons across the river during very low water.

NATIONAL PARK SERVICE

Locks and Dams

Dam Construction

Between 1930 and 1938 the U.S. Army Corps of Engineers constructed a series of locks and dams for navigation on the Upper Mississippi River in Wisconsin.

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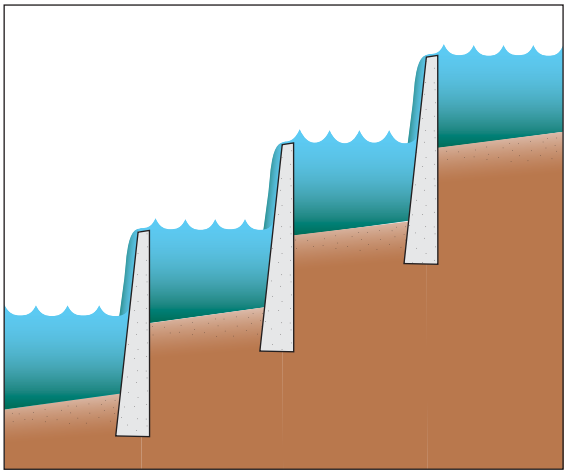
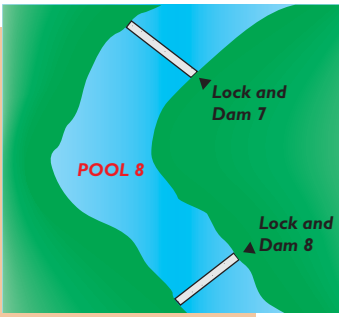
Today, the locks and dams regulate water levels so that a 9-foot deep channel is maintained for the many barges and other watercraft that travel the river each year. Ten locks and dams are along the western boundary of Wisconsin between Prescott, Wisconsin and Dubuque, Iowa.

How the Dams Work

Boaters most likely will encounter a lock and dam, and it is important to know how to safely navigate through it. The dams on the Mississippi River create a series of navigational pools. Each dam is a "step" in the river as it descends to the Gulf of Mexico.





What is a Pool?

A pool is the stretch of river between two navigation dams. Each pool is numbered in reference to the dam at its downstream end. Example: Lock and Dam 8 creates Pool 8 above it.

How to Pass Through Locks

A lock is used to raise and lower boats to the next pool. The lock is a chamber that can be opened on either end to allow boats to enter or leave. Once a boat is in the lock, water may be added to the chamber to raise a boat to the upstream pool, or drawn out of the chamber to lower a boat to the downstream pool. Lifts at the locks range from 5.5 feet to 38.2 feet.

When traveling long distances on the Upper Mississippi, allow time for "locking through" the many locks and dams. Recreational craft and towboats are locked through on a first-come, first-served basis. This process can be done in as little as 20 to 30 minutes, but it frequently can take hours if you have to wait for a barge to pass through a lock. Lock and dam personnel can be contacted on VHF Marine Radio Channel 14 about waiting periods.

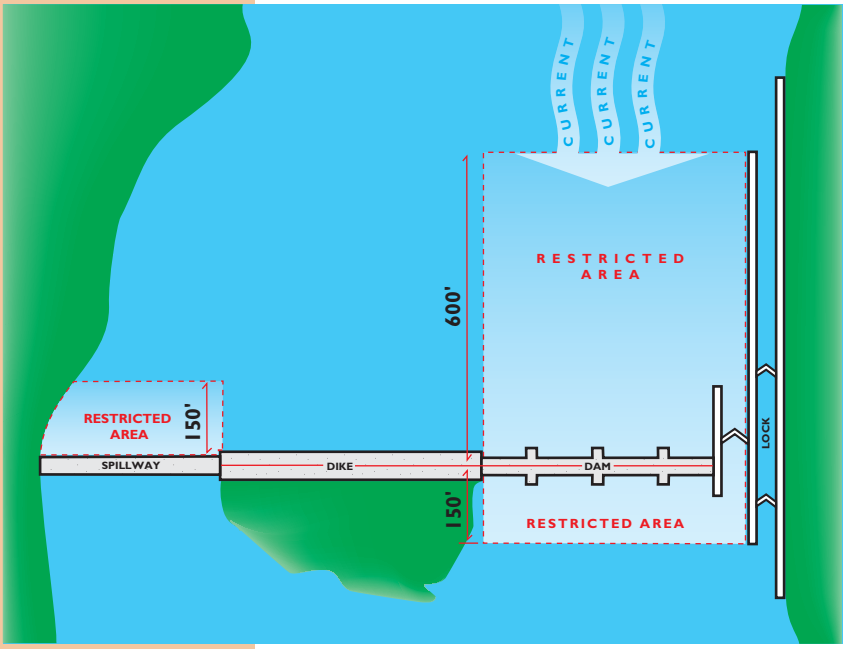
The arrival point at the lock is not the guide wall, but a designated point well above or below the lock structure. The lock master has authority to direct sequencing of watercraft, and will always attempt to send private craft through between consecutive commercial barges. There is no charge for locking through, and you may come and go as you please. The locks are in service 24 hours a day throughout the open water season.

Dam Safety

All boaters should stay clear of dams. The water near each lock and dam is turbulent and has dangerous currents. Boats may not enter the following restricted areas:

- The area 600 feet upstream and 150 feet downstream from the dam (this includes auxiliary locks not in service).
- The area 150 feet upstream from the spillway.

These restrictions are enforced for your protection.



Locking Through

The Corps of Engineers lists the following procedures for using navigational locks:

1. Upon approach to the lock, a vertical bank of traffic signal lights informs boaters of the status of the lock. Signal the lockmaster by radio on channel 14 or by pulling the rope at the end of the lock wall in the ladder way.

THERESA STABO

NO light—lock not in use; approach guide wall and signal for entry.

RED light—stand clear; do not approach.

AMBER light—approach lock slowly under full control.

GREEN light—enter lock.

2. Upon receiving the green light, slowly proceed into the lock. Approaches to the locks are no-wake areas. Entering the lock too quickly can cause dangerous waves and your boat may be damaged as it bounces against the lock walls.

ROBERT QUEEN

3. Once inside the lock, **hand hold** the mooring lines spaced along the lock wall. Do not tie them to your boat. **Do not tie your own lines to any recessed ladders and do not climb the ladders.** Have passengers remain seated and keep hands inside the boat to avoid crushed fingers. Wear a life jacket if construction of craft requires handling lines on deck. Turn off your engine or motor during lockage.

4. When the lock filling or emptying operation is complete and the gates are fully opened, the lock master gives a hand signal or one short toot of the signal horn to indicate that it is safe to depart the lock.

ROBERT QUEEN

5. Leave the lock at a slow speed (no wake), assuring that you are well clear of the lock structure before gaining speed.

Navigational Aids

The U. S. Coast Guard and local units of government place different types of buoys, daymarks and flags along the river to aid navigation.

All official waterway aids are designed to assist boaters by directing traffic through proper channels, warning of danger areas, and preventing accidents with other watercraft. Boaters, however, must keep a wary eye and should not rely solely on buoys for navigation. Although the buoys are tended, it is possible for a channel or obstruction to have shifted, the water depth to have changed, or a buoy to have moved, sunk, or gone adrift between maintenance visits.

Buoys

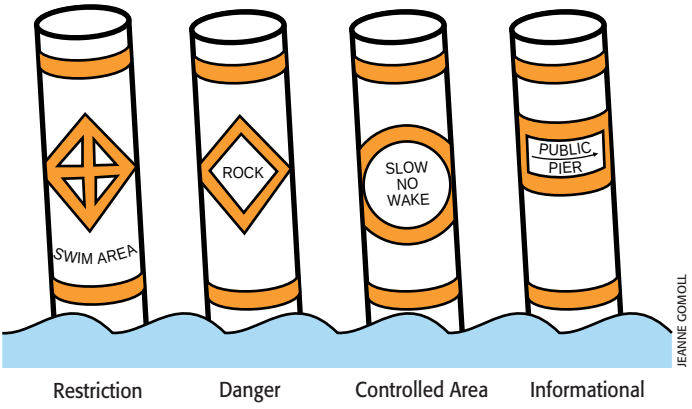
Companion Buoys

Two of the most common buoys seen on the river are the green and red companion buoys, which are used to indicate the 9-foot deep main channel.

The green buoy is on the port (left) side of the channel when you are traveling upstream.

ROBERT QUEEN

The red is on the starboard (right) side when traveling upstream.



JEANNE GOMOLL

Regulatory Buoys

Regulatory buoys and signs provide information or indicate restricted, dangerous or controlled areas.

Restriction: A white buoy or sign with an orange diamond and cross means that boats must keep out of the area.

Danger: A white buoy or sign with an orange diamond warns boaters of danger.

Controlled Area: A white buoy or sign with an orange circle indicates controlled or restricted areas.

Informational: A white buoy or sign with an orange rectangle provides the boater with information or directions.

Daymarks

Daymarks are square, triangular, or diamond-shaped boards (green, red or orange) that are used to mark channels on large river systems. As with buoys, the green is on the port or left side, while the red or orange is on the starboard or right side when traveling upstream.

On the Mississippi upstream from Cairo, Illinois, daymarks also show the river mileage system. The river mile will be on a white board above or below the daymark. Some daymarks may be lighted.

BILL ENGFER

A diver's flag should be visible from 100 yards.

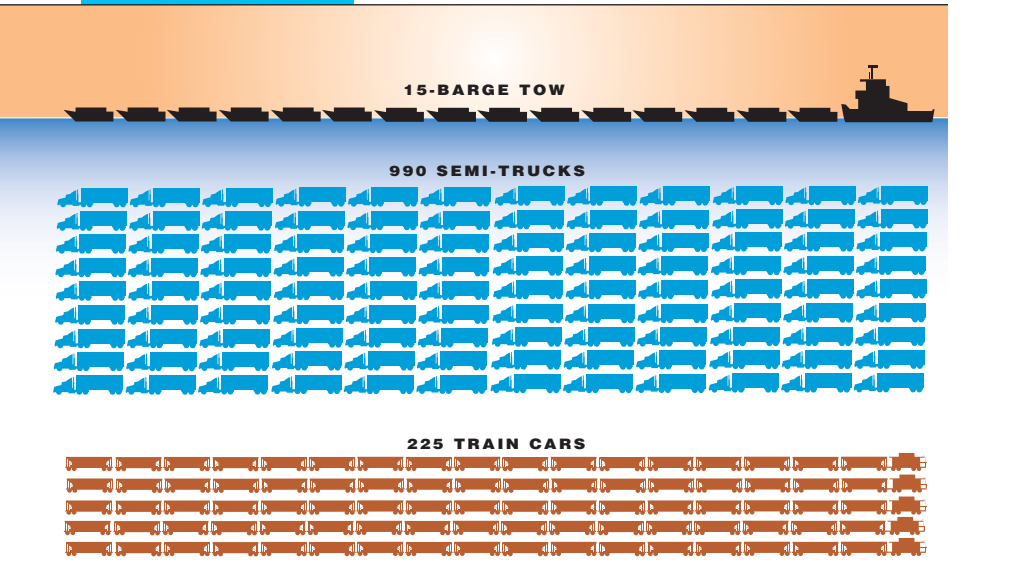
Beware of Diver's Flags

A diver's flag also is something boaters should recognize. This red and white flag means that a "diver is down." It is illegal for any boat or water-skier to approach closer than 100 feet to any diver's flag or any swimmer, unless the boat is part of the diving operation or is accompanying the swimmer.

Navigational Hazards

A complete 15-barge towboat is a quarter-mile in length and can move 22,500 tons—the equivalent of 990 semi-trucks or 225 train cars.

Potential hazards encountered while navigating the Upper Mississippi River include barges, wing dams, closing dams, stump fields, changing water levels, the weather, locks and dams, and other boating traffic.



Typical stopping distance for a loaded tow is a mile or more.

Commercial Barges

Each year, several hundred barges ply the waters of the Mississippi from New Orleans to the Twin Cities. Towboats run from March to December, or whenever the river is not frozen, transporting grain, coal, oil, chemicals, salt, and cement. When fully fitted, barges on the Upper Mississippi consist of a large towboat (which actually pushes rather than tows) and 15 barges. When fully loaded, barges require water depths up to nine feet. Large tows require significant distances for stopping and maneuvering. Use caution when operating around towboats. At night the lights of a tow will appear far apart compared with the lights of small boats.

Safety Tips for Boating Near Barges

- When overtaking a tow, stay to one side and out of the turbulent wake.
- After passing the tow, do not pull in front of the leading barges unless it is necessary. If you should lose power, the pilot may not be able to avoid hitting you.
- Turn your bow into the wake of barges (and boats).
- Stay clear of the stern (rear) of towboats. They may suddenly turn on a burst of power that could overturn a small boat.

Boating Regulations Near Commercial Barges

Always keep the pilot in sight. If you can see the pilot of the towboat, he or she can see you and you will avoid the danger area and blind zone in front of the leading barges. Boating in these blind areas is considered reckless operation of your boat and subject to penalties.

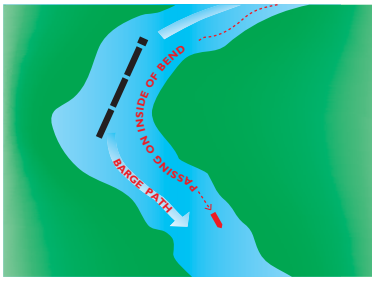
DNR LAW ENFORCEMENT

Generally, when meeting a barge at a bend in the river, the law requires boaters to move to the right of the barge. Many times this is not possible due to the size of the barges so it is advisable to move to the inside of the bend to avoid a collision.

Commercial traffic has the right-of-way.

Never anchor in the navigation channel.

These regulations are enforced for your safety.



Stump fields

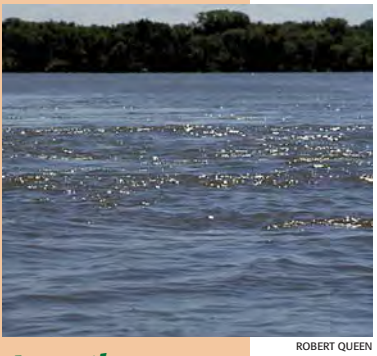
Submerged stump fields are a potential hazard for boaters. Many low-lying forested areas were logged when the dam system on the Mississippi River was built. Many submerged tree stumps remain in the backwater areas and riverine lakes so boaters should use extra caution in these areas.

Changeable Water Levels

Water levels change frequently on the river. High water can produce unpredictable currents strong enough to move debris such as whole trees, logs, and docks. Low water can reduce clearance between your boat and hazards below the water's surface, such as stump fields and wing dams.

Weather

Weather also may affect boating safety. Generally speaking, the river is smooth, calm and safe. A brisk south wind, however, can create large "white cap" waves and give you a rough ride. The river is no place to be during a severe storm. Sharp winds can capsize a boat, particularly if it is overloaded. Get off the water immediately should a thunder or electrical storm come up. The experienced river boater never loses respect for the river and its weather.



ROBERT QUEEN

Locating Wing Dams

Telltale signs like a turbulence line in the water may reveal the location of a wing dam. The top of the wing dam is indicated by slack water just upstream from the turbulence line. The deepest water is found in the scour hole directly downstream from the wing dam.

Wing Dams

Beginning in the late 1800s, the Corps constructed wing dams and closing dams on the Mississippi River to help maintain a channel for commercial navigation. The function of wing dams and closing dams is to divert flow back into the main channel. This increases current speed, which scours the river bottom deepening the main channel.

Wing dams generally are perpendicular to or across the current from the shoreline out toward the main channel. They vary from 20 feet to more than 100 yards long and have top widths ranging from 6 to 20 feet. Most are straight in shape, but some can be found in "L" or "T" shapes. The basic material for construction is rock.

A closing dam is a wing dam constructed across all or most of a side channel or slough. Because water levels of the river change considerably, wing and closing dams do not always lie at a constant depth below the water surface. During summer and fall, when the water level is lower, wing and closing dams can be dangerously close to the surface. A shallow summer wing dam has four feet or less of clearance. Hitting one could easily damage your boat.

Avoiding Wing Dams

You can avoid wing dams by following these boating practices:

1. Stay within the main channel, as indicated by buoys and markers.
2. When approaching shore, proceed slowly from a perpendicular angle.
3. Stay clear of turbulence lines or ripples in the water. These may indicate a wing dam.

Maps of the Mississippi

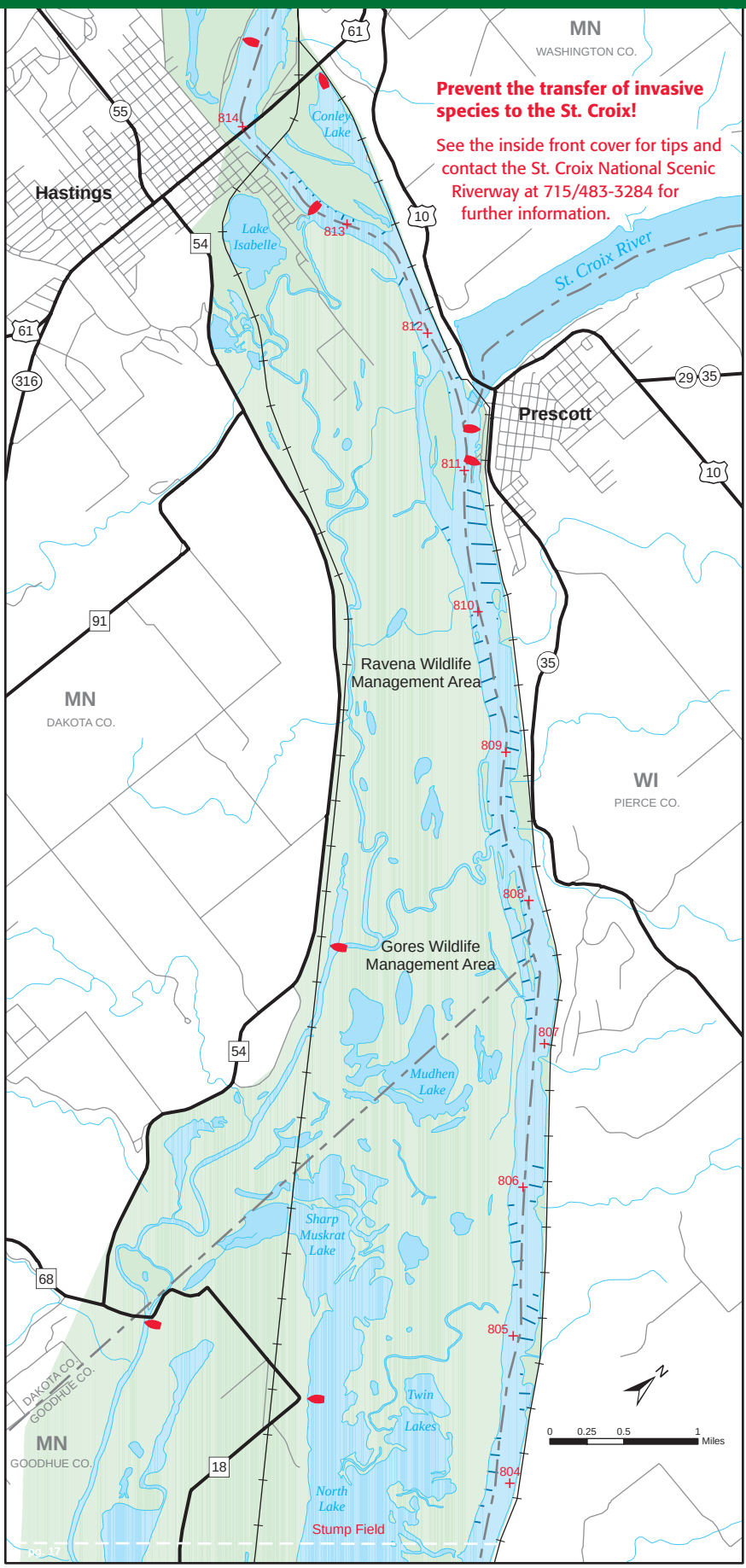
The ***"Big Dipper"*** is a boat serving as a National Park Service contact station on the St. Croix National Scenic Riverway. Upstream travel is restricted on the St. Croix River past this point to prevent the spread of zebra mussels.

For information on boating regulations on the St. Croix River, visit **www.nps.gov/sacn/activities/boating.html** or call 715/483-3284.

Legend

- Major Roads
- Other Roads
- Railroad
- State / County Boundary
- Boat Access Point
- Canoe Route
  (Maps of canoe routes available by contacting the WI DNR or U.S. Fish and Wildlife Service offices listed on pg. 69)
- 807 — Mileage Above Ohio River
- Lock & Dam
- Spillway
- Wing Dam / Closing Dam
- Submerged Rip Rap
- Stump Field — Stump Field
- Closed Area
  (Areas are closed to all hunting and trapping during duck hunting season. Areas are open to fishing.)
- Match Line

The following maps are intended to be used as a general guide to the Mississippi River. Maps showing additional information, including navigation aides, may be purchased from the Corps of Engineers (see contact information on page 69).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Prevent the transfer of invasive species to the St. Croix!
See the inside front cover for tips and contact the St. Croix National Scenic Riverway at 715/483-3284 for further information.
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Conley Lake
Lake Isabelle
St. Croix River
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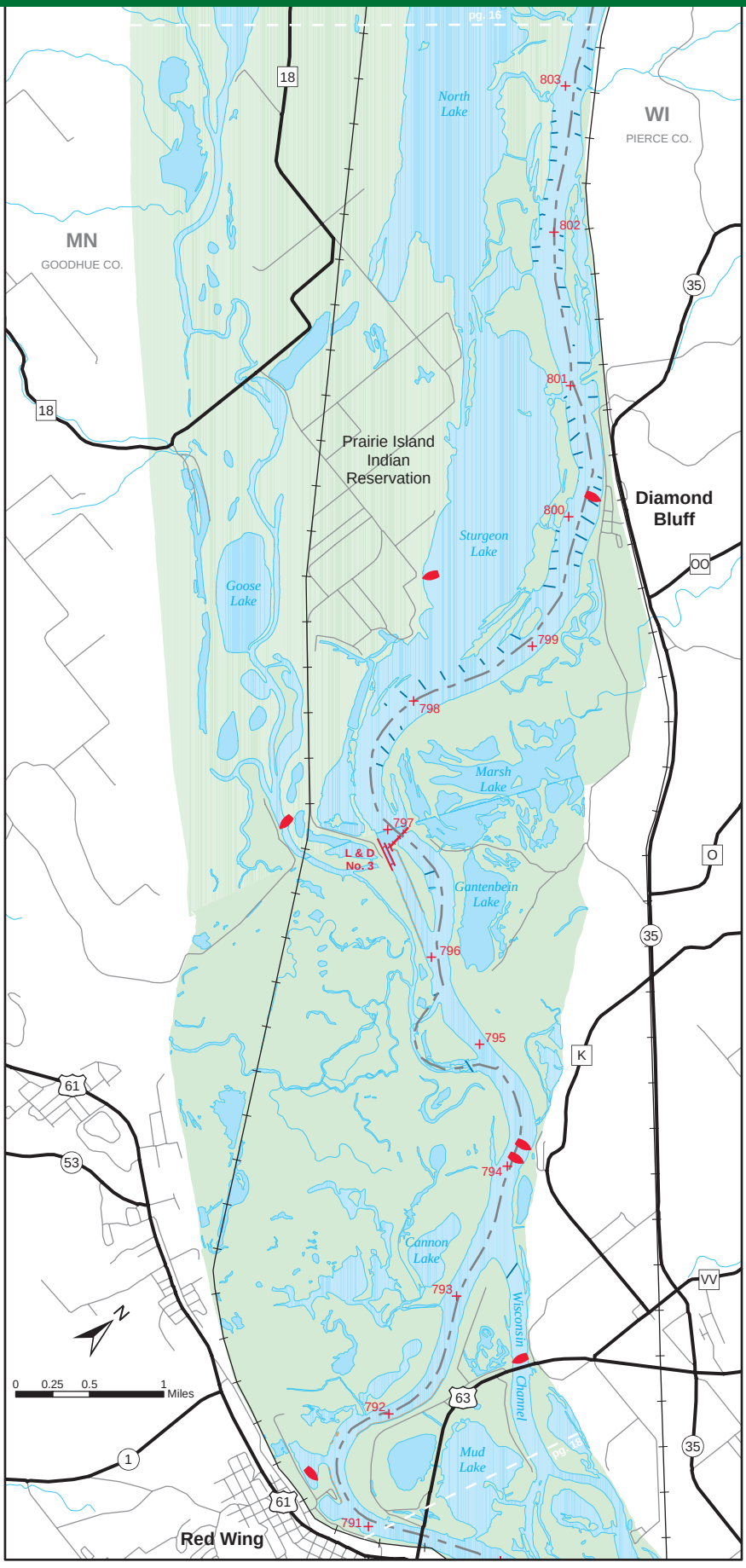
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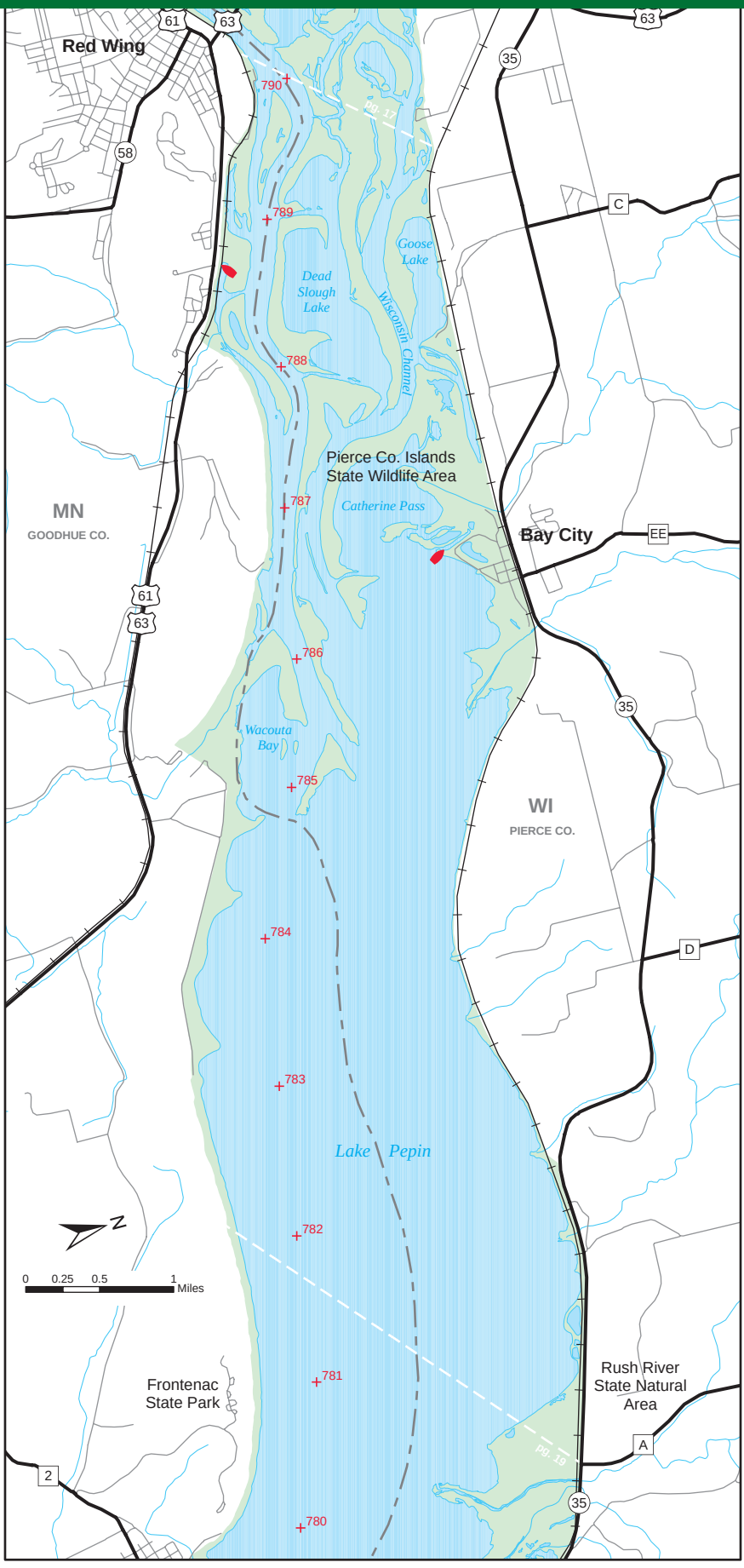
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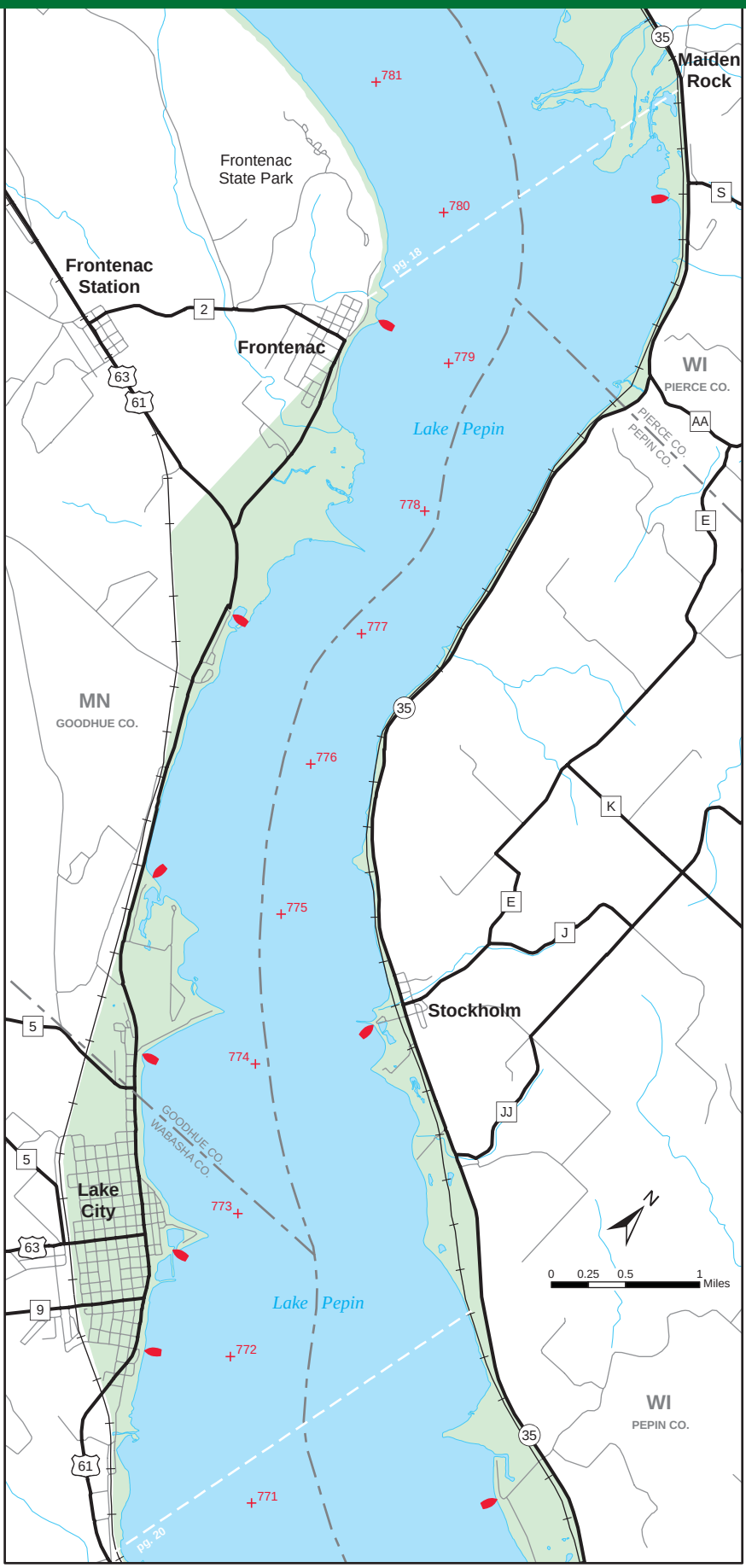
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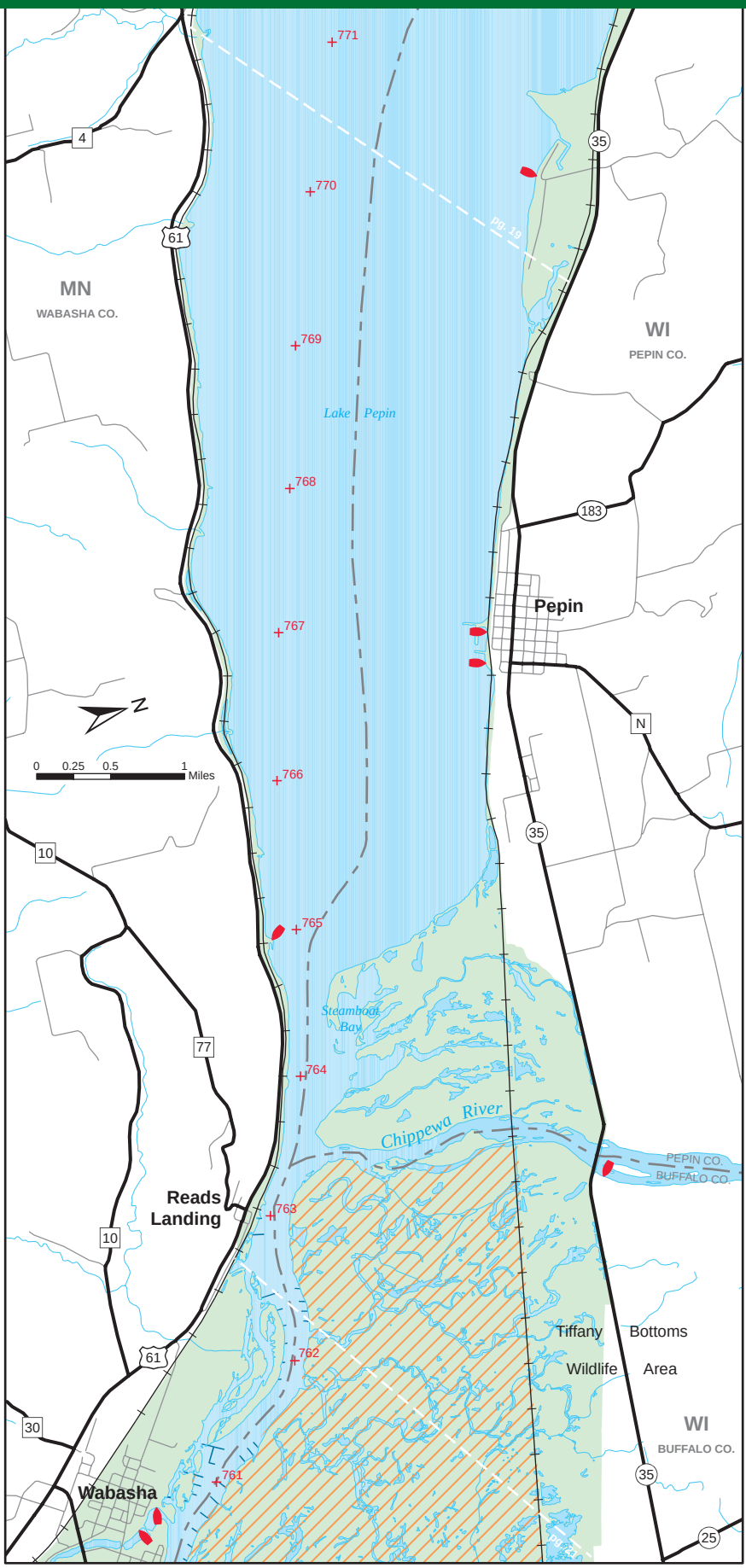
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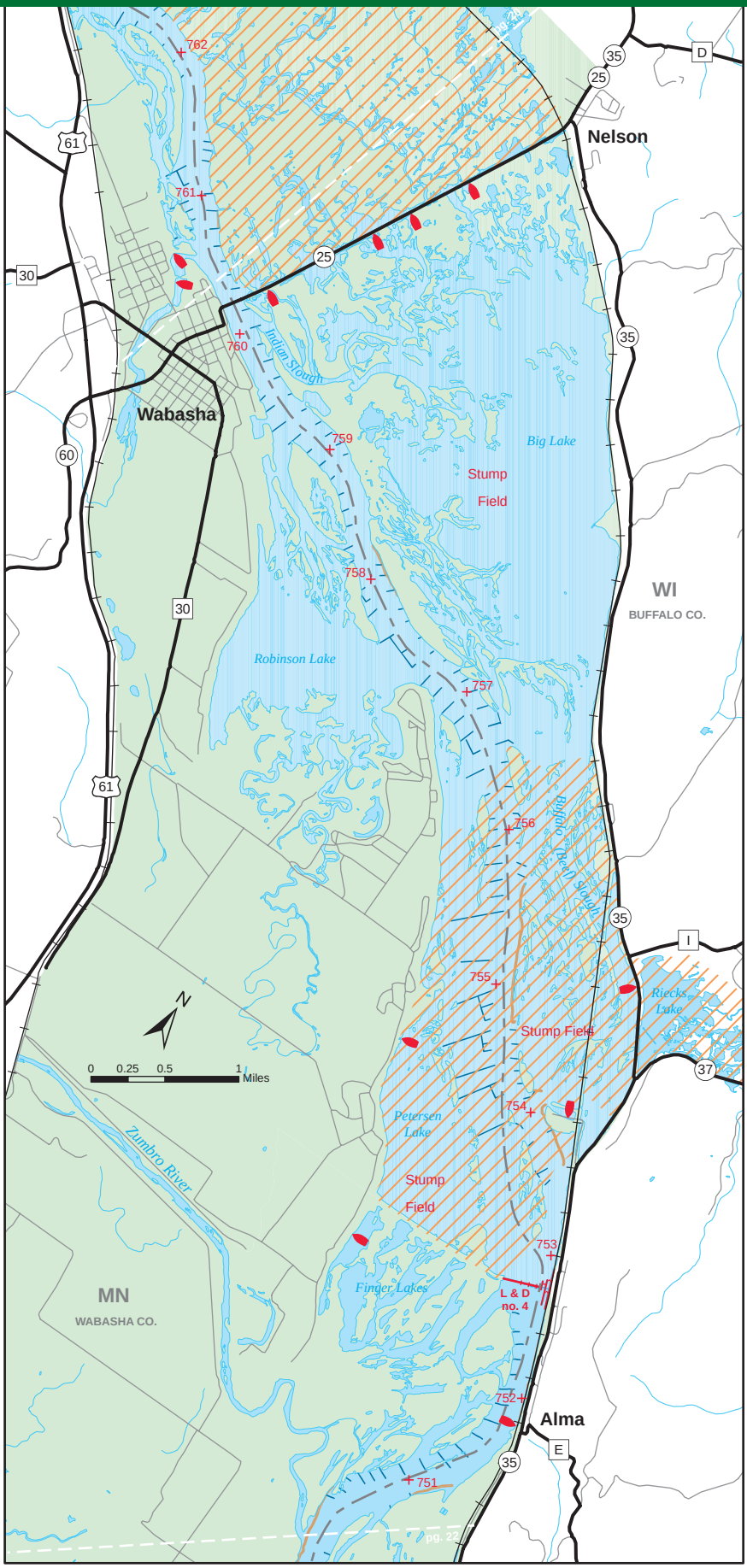
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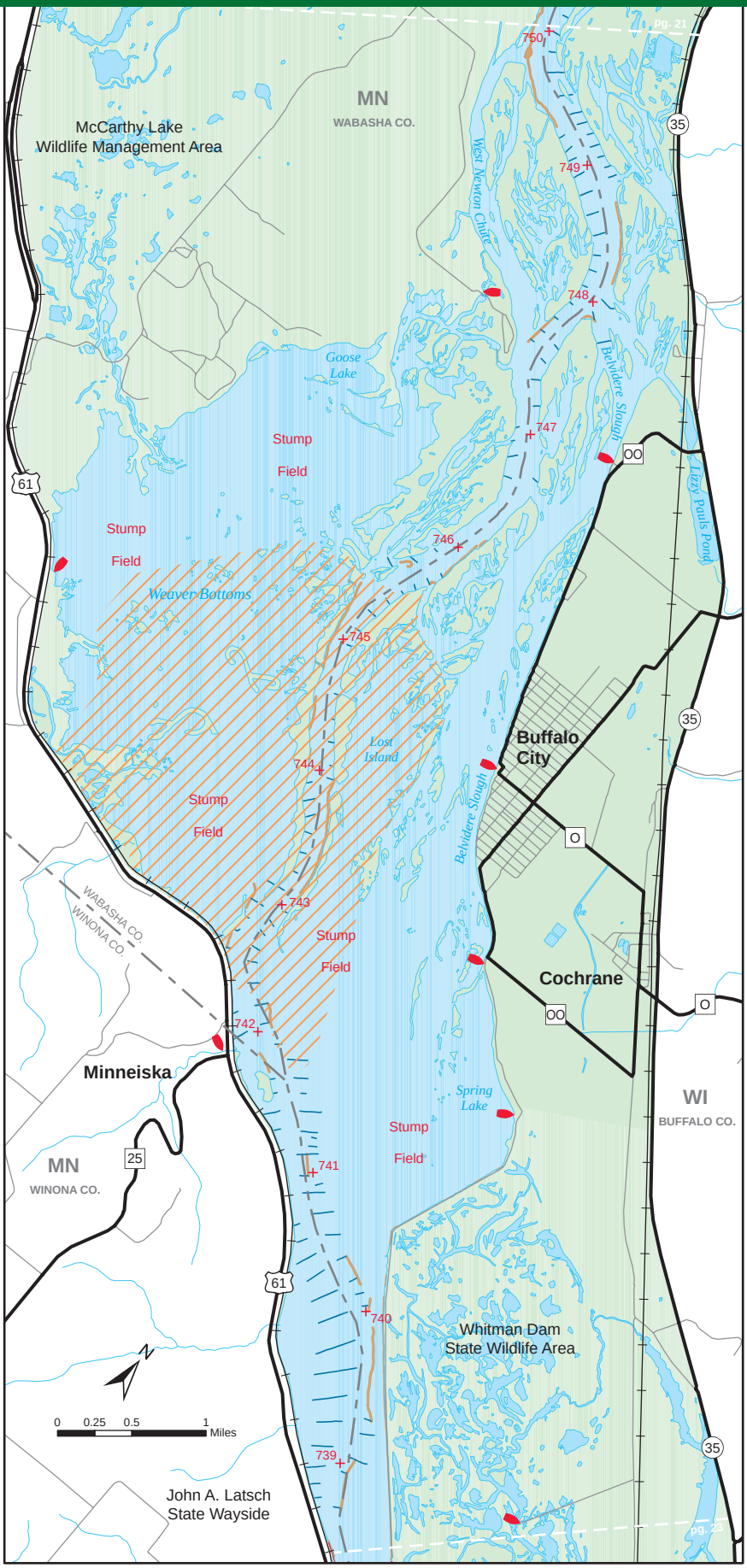
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MN
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West Newton Chute
Belvidere Slough
Goose
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Stump
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Stump
Field
Weaver Bottoms
Lizzy Pauls Pond
Lost
Island
Stump
Field
Buffalo
City
Belvidere Slough
WABASHA CO.
WINONA CO.
Stump
Field
Cochrane
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Field
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WINONA CO.
Whitman Dam
State Wildlife Area
John A. Latsch
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pg. 21
pg. 23
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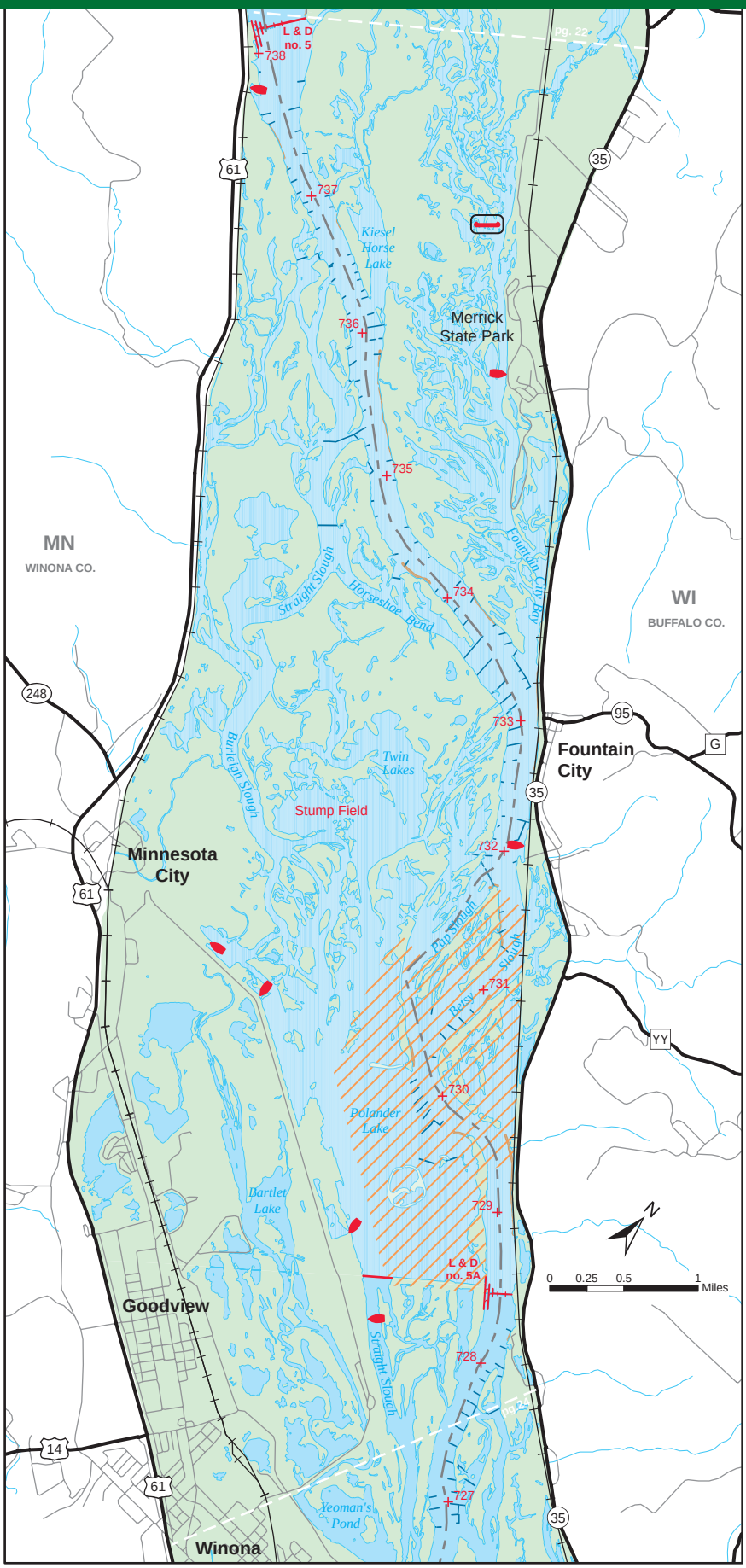
L & D no. 5
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Kiesel Horse Lake
Merrick State Park
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WINONA CO.
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Straight Slough
Horseshoe Bend
Fountain City Bay
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Fountain City
Burleigh Slough
Twin Lakes
Stump Field
Minnesota City
Flap Slough
Slough
Betsy
YY
Polander Lake
Bartlet Lake
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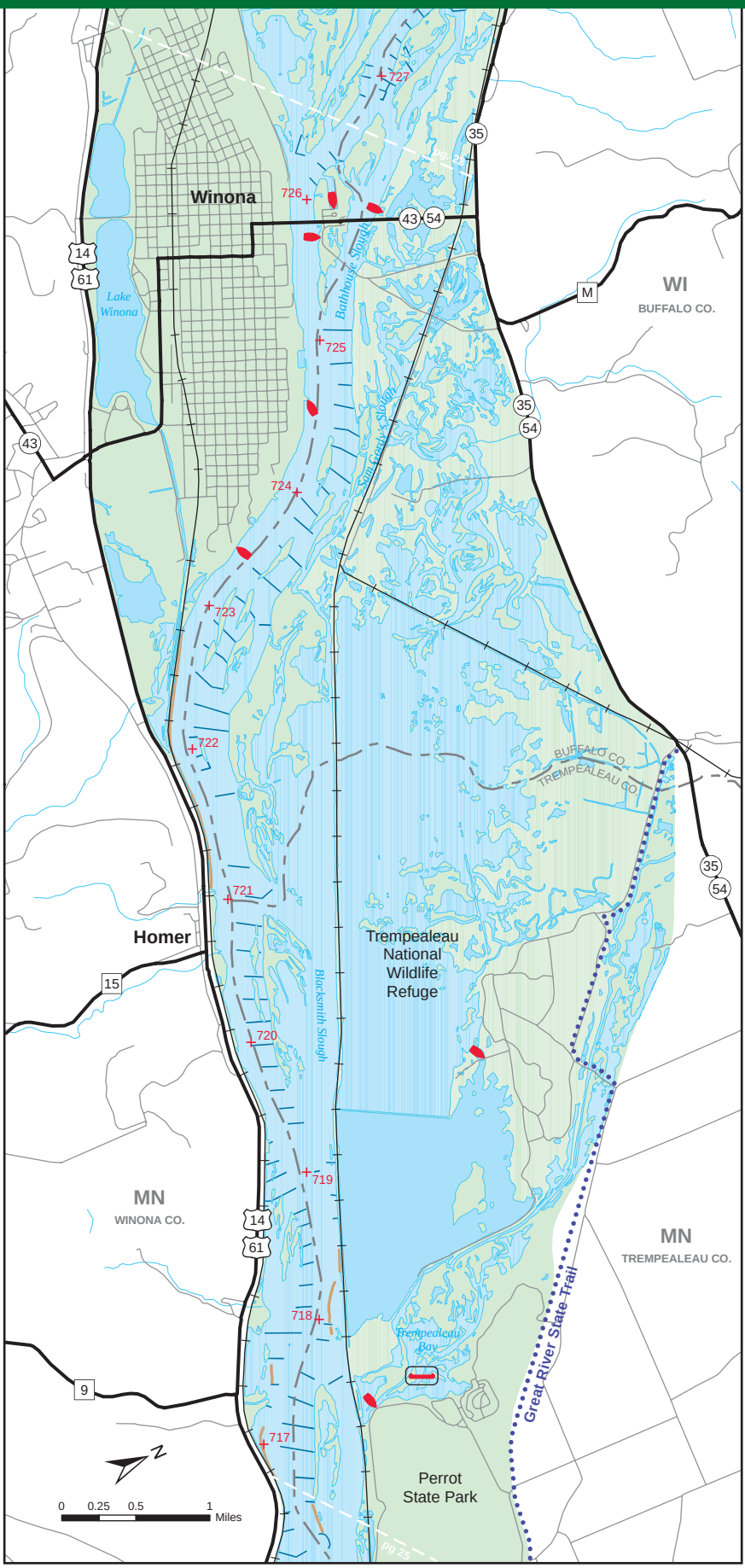
Yeoman's Pond
Winona


Winona
Lake Winona
Bathhouse Slough
Sam Fenn's Slough
Blacksmith Slough
Homer
Trempealeau National Wildlife Refuge
Trempealeau Bay
Great River State Trail
Perrot State Park
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BUFFALO CO.
MN
WINONA CO.
MN
TREMPEALEAU CO.
BUFFALO CO.
TREMPEALEAU CO.
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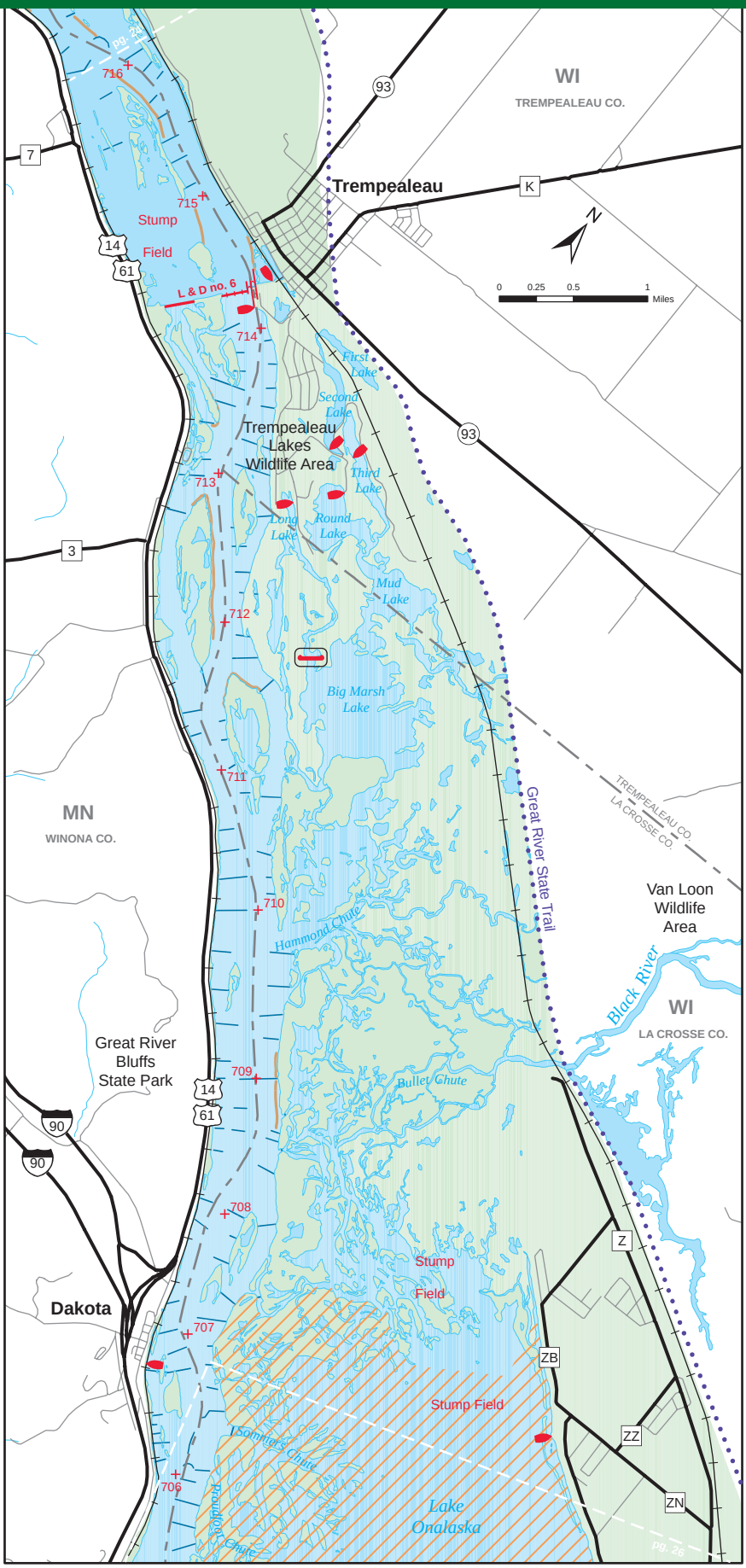
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WI
TREMPEALEAU CO.
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Trempealeau
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Stump
Field
14
61
L & D no. 6
First Lake
Second Lake
Trempealeau Lakes Wildlife Area
Third Lake
Long Lake
Round Lake
3
Mud Lake
Big Marsh Lake
MN
WINONA CO.
Great River State Trail
TREMPEALEAU CO.
LA CROSSE CO.
Van Loon Wildlife Area
Hammond Chute
Black River
WI
LA CROSSE CO.
Great River Bluffs State Park
Bullet Chute
90
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Field
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ZB
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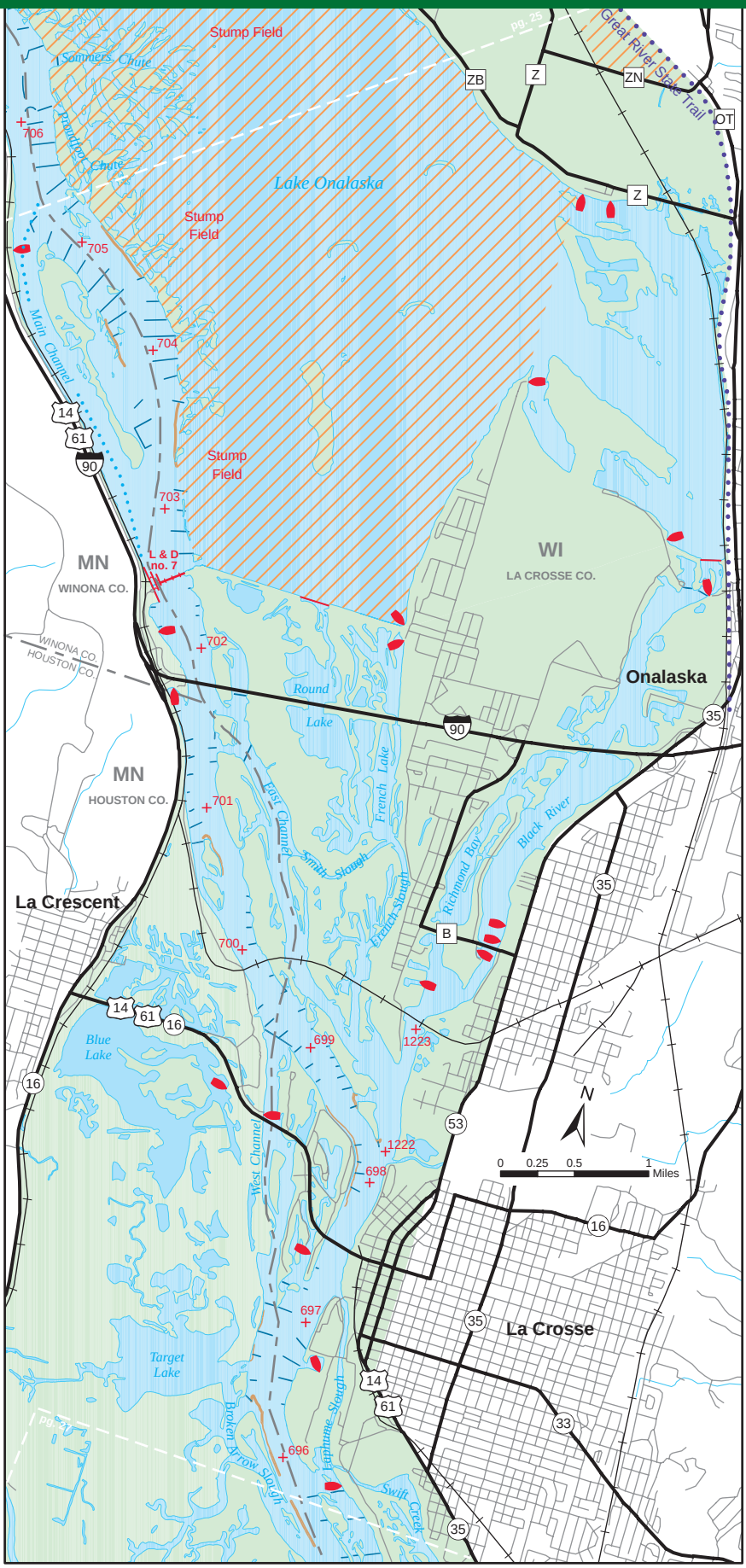
Pouliot Chute
Lake Onalaska
ZN
pg. 26


Stump Field
Sommers Chute
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Lake Onalaska
Stump Field
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Main Channel
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14
61
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Stump Field
703
L & D no. 7
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WINONA CO.
WINONA CO.
HOUSTON CO.
MN
HOUSTON CO.
WI
LA CROSSE CO.
702
Round Lake
Onalaska
90
35
French Slough
French Lake
Black River
Richmond Bay
701
Smith Slough
La Crescent
700
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61
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Blue Lake
699
1223
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1222
698
West Channel
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16
697
35
La Crosse
Target Lake
14
61
33
Broken Arrow Slough
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Lighthouse Slough
Swift Creek
35
pg. 25
pg. 27
Great River State Trail
ZB
Z
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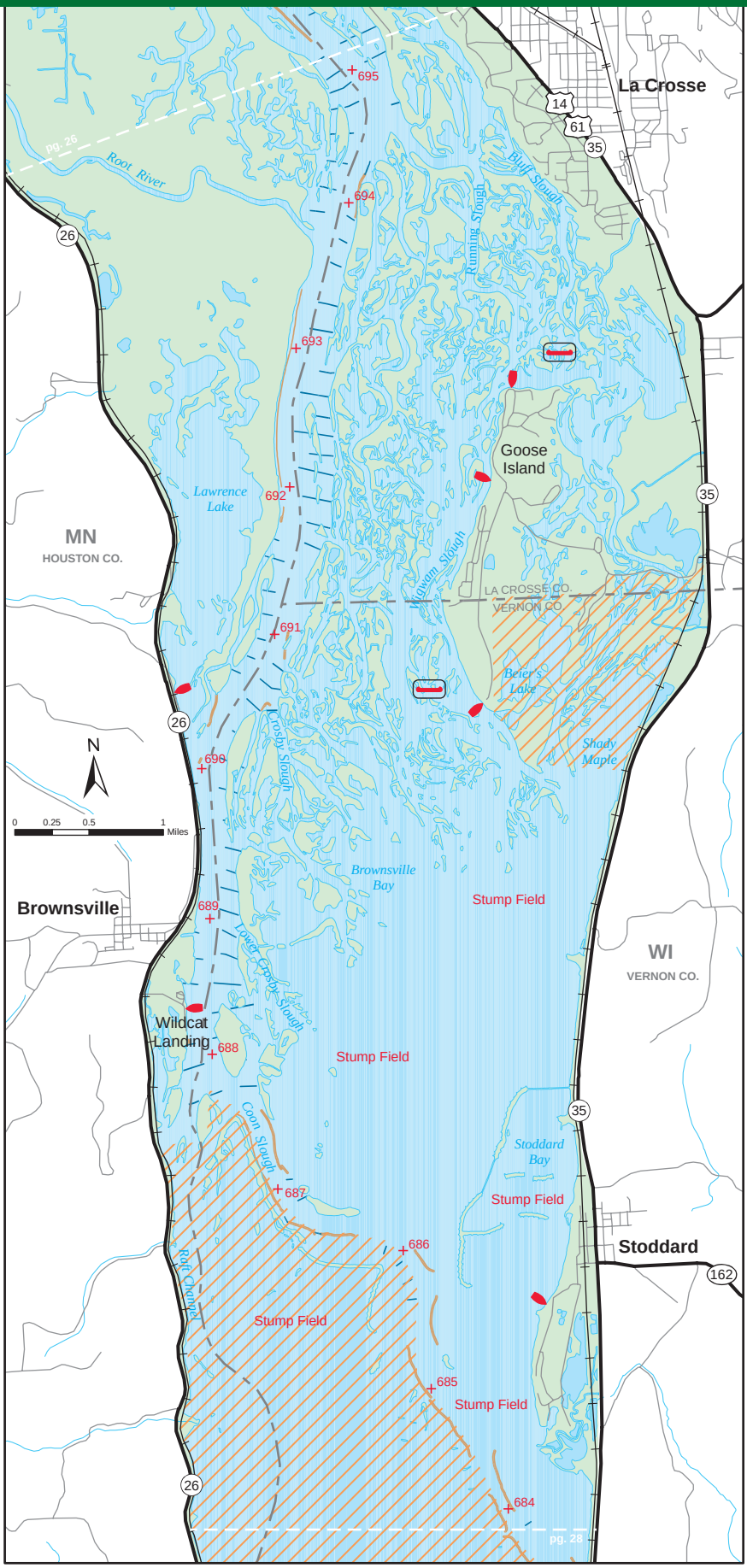
La Crosse
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pg. 26
Root River
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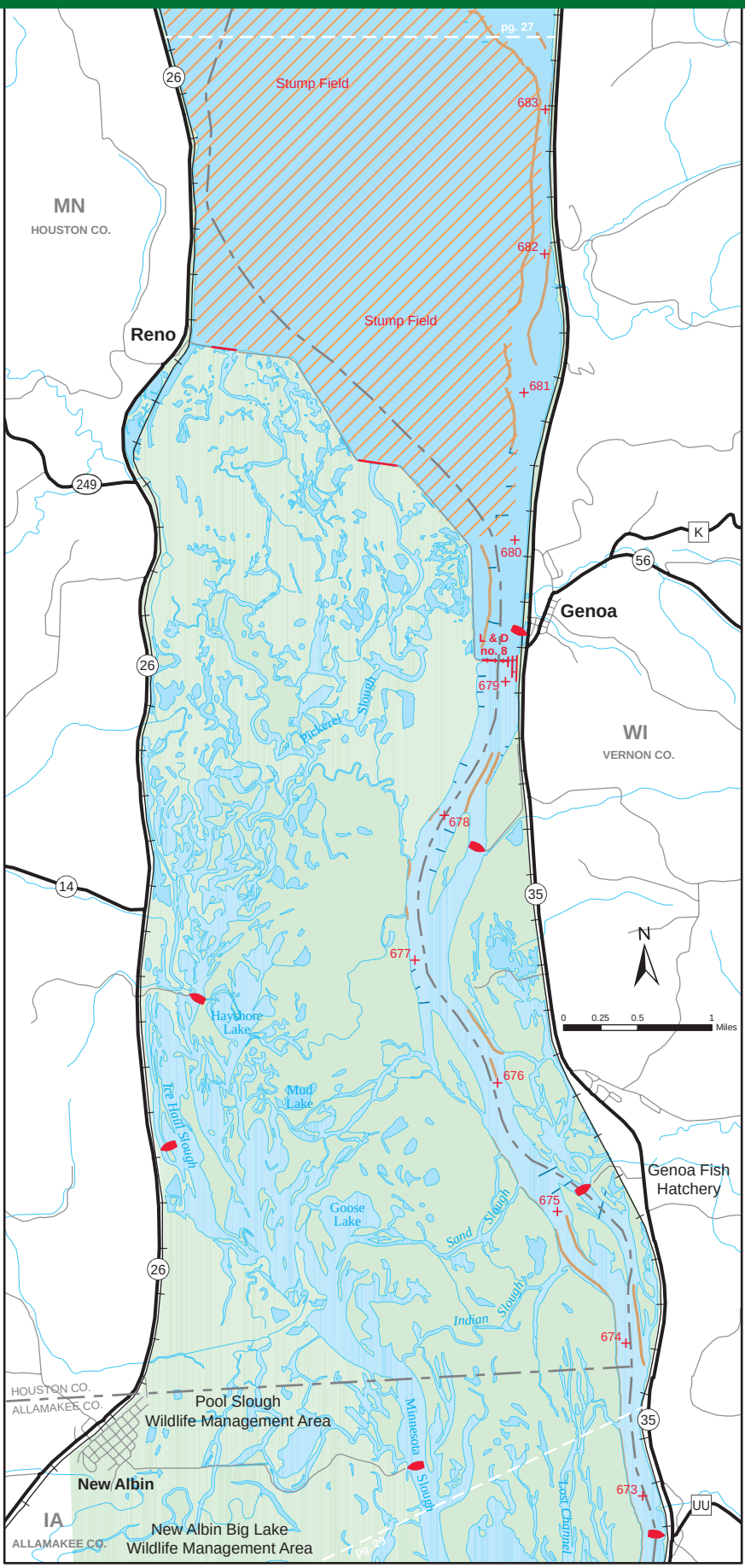
684
Bluff Slough
Running Slough
Goose Island
Lawrence Lake
MN
HOUSTON CO.
Kinyon Slough
LA CROSSE CO.
VERNON CO.
Beier's Lake
Shady Maple
26
N
0 0.25 0.5 1 Miles
Crosby Slough
Brownsville Bay
Stump Field
Brownsville
Lower Crosby Slough
WI
VERNON CO.
Wildcat Landing
Coon Slough
Stoddard Bay
Stump Field
Stoddard
162
Rod Channel
Stump Field
Stump Field
pg. 28


pg. 27
Stump Field
683
682
Stump Field
681
MN
HOUSTON CO.
Reno
26
249
680
K
56
Genoa
L & D no. 8
679
Pickerel Slough
WI
VERNON CO.
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14
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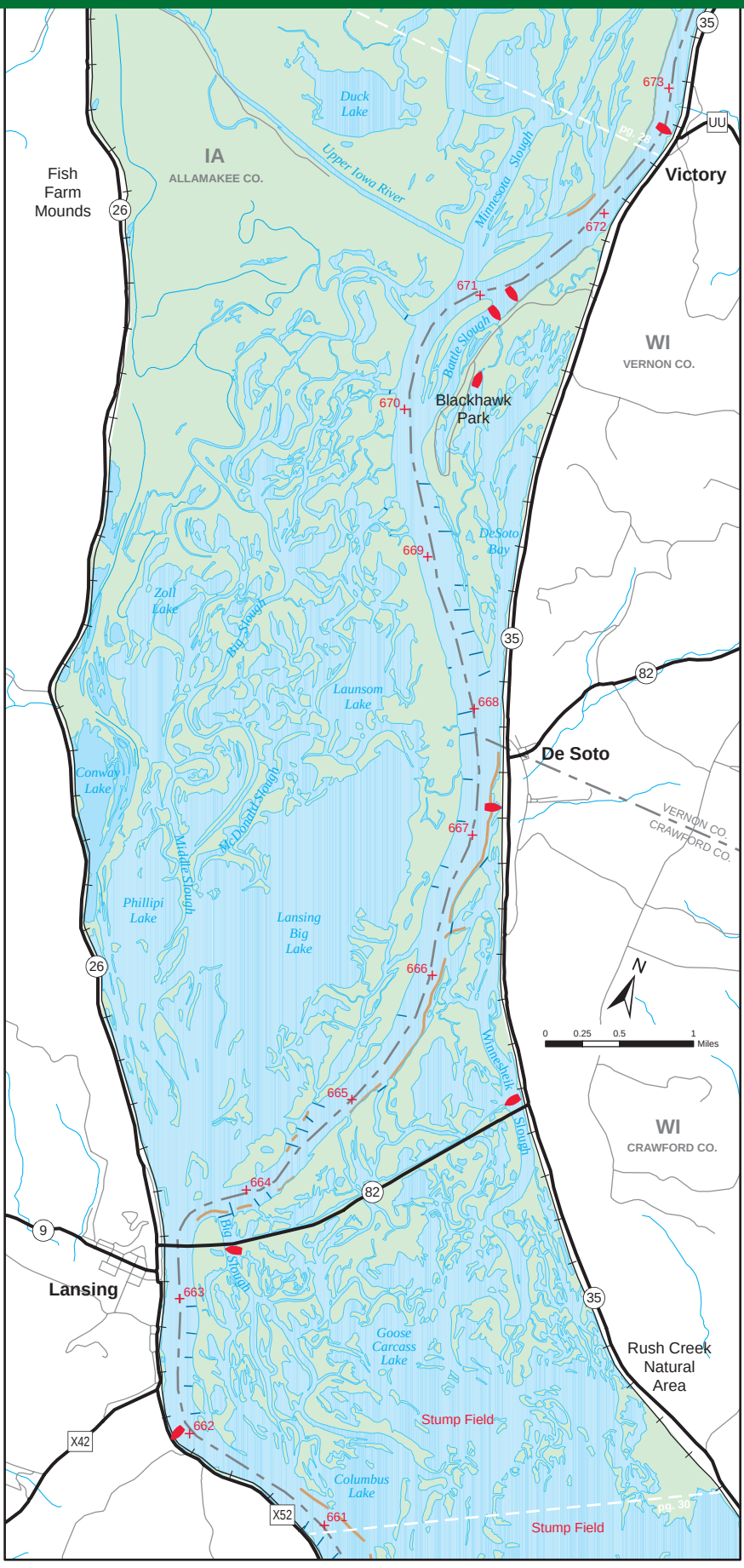
0 0.25 0.5 1 Miles
Hayshore Lake
Mud Lake
Ice Hunt Slough
676
Genoa Fish Hatchery
Goose Lake
Sand Slough
675
Indian Slough
674
HOUSTON CO.
ALLAMAKEE CO.
Pool Slough Wildlife Management Area
Minnesota Slough
New Albin
673
East Channel
UU
IA
ALLAMAKEE CO.
New Albin Big Lake Wildlife Management Area
pg. 29


Duck Lake
IA
ALLAMAKEE CO.
Upper Iowa River
Minnesota Slough
Fish Farm Mounds
26
35
UU
678
Victory
pg. 28
672
671
Battle Slough
WI
VERNON CO.
Blackhawk Park
670
669
DeSoto Bay
Zoll Lake
Big Slough
35
82
Launsom Lake
668
De Soto
Conway Lake
McDonald Slough
667
VERNON CO.
CRAWFORD CO.
Middle Slough
Phillipi Lake
Lansing Big Lake
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Winneshiek Slough
665
WI
CRAWFORD CO.
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9
Big Slough
Lansing
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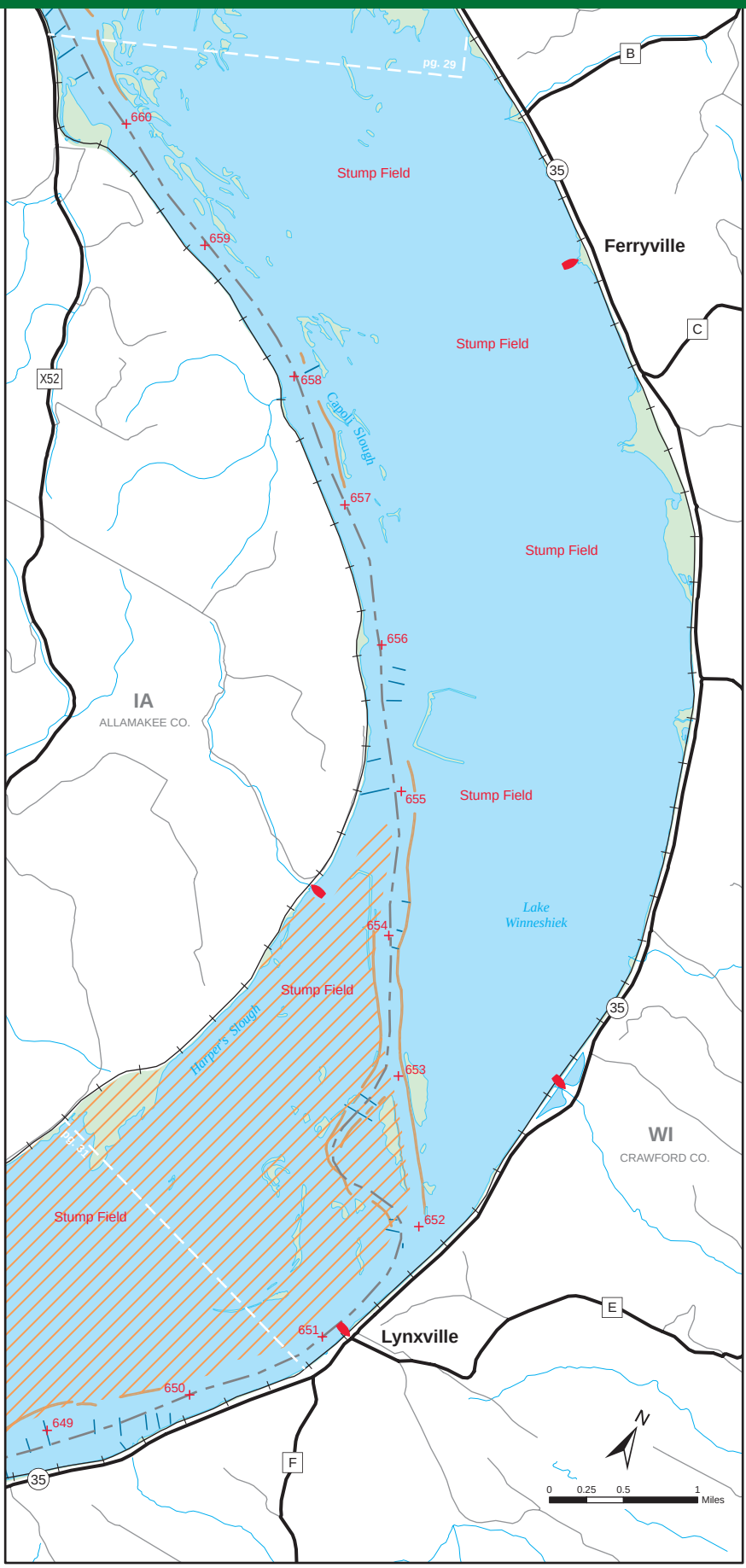
Goose Carcass Lake
Rush Creek Natural Area
Stump Field
662
X42
Columbus Lake
X52
661
pg. 30
Stump Field


pg. 29
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Stump Field
Stump Field
Stump Field
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Stump Field
Stump Field
Ferryville
Lynxville
Canoli Slough
Harper's Slough
Lake Winneshiek
IA
ALLAMAKEE CO.
WI
CRAWFORD CO.
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C
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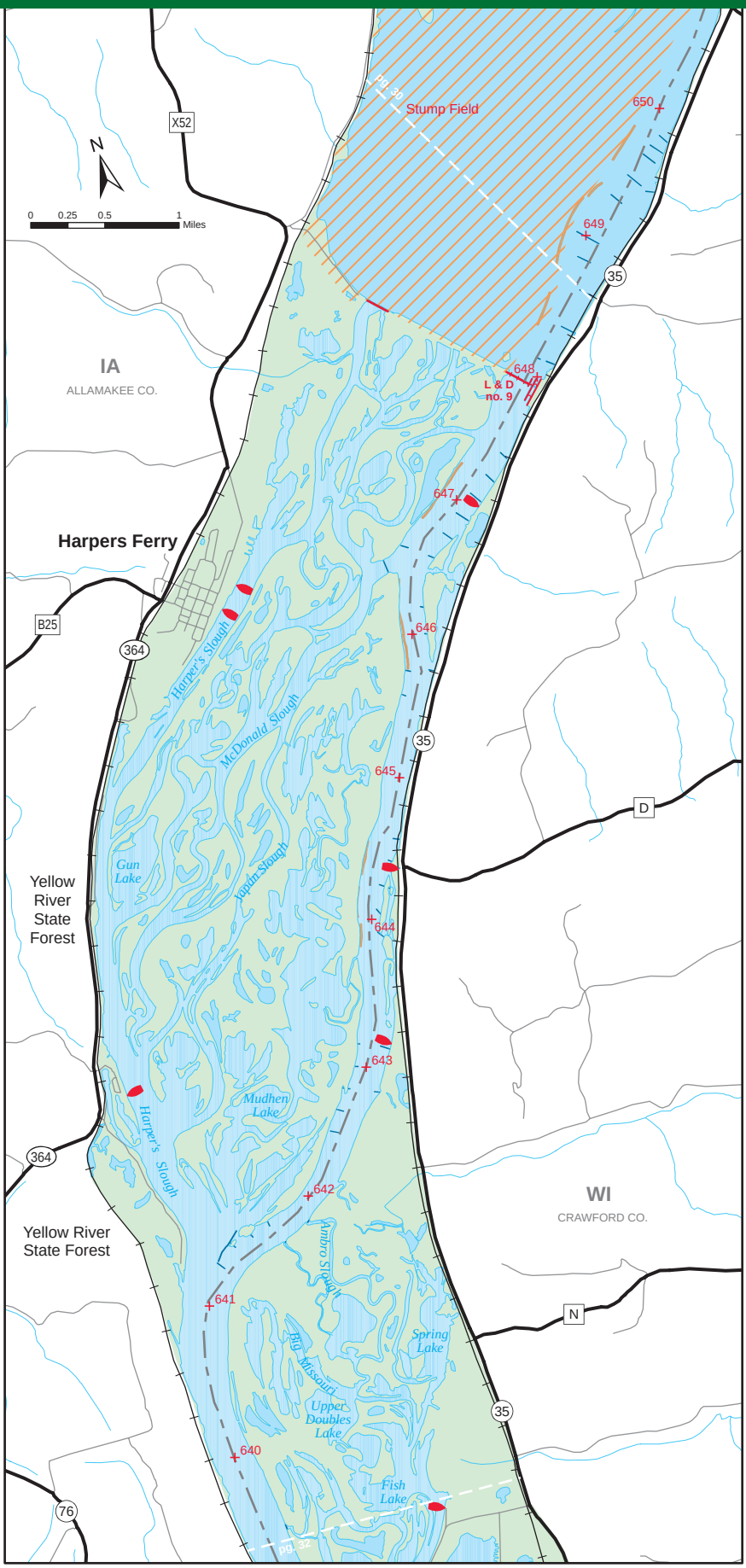
N
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X52
Stump Field
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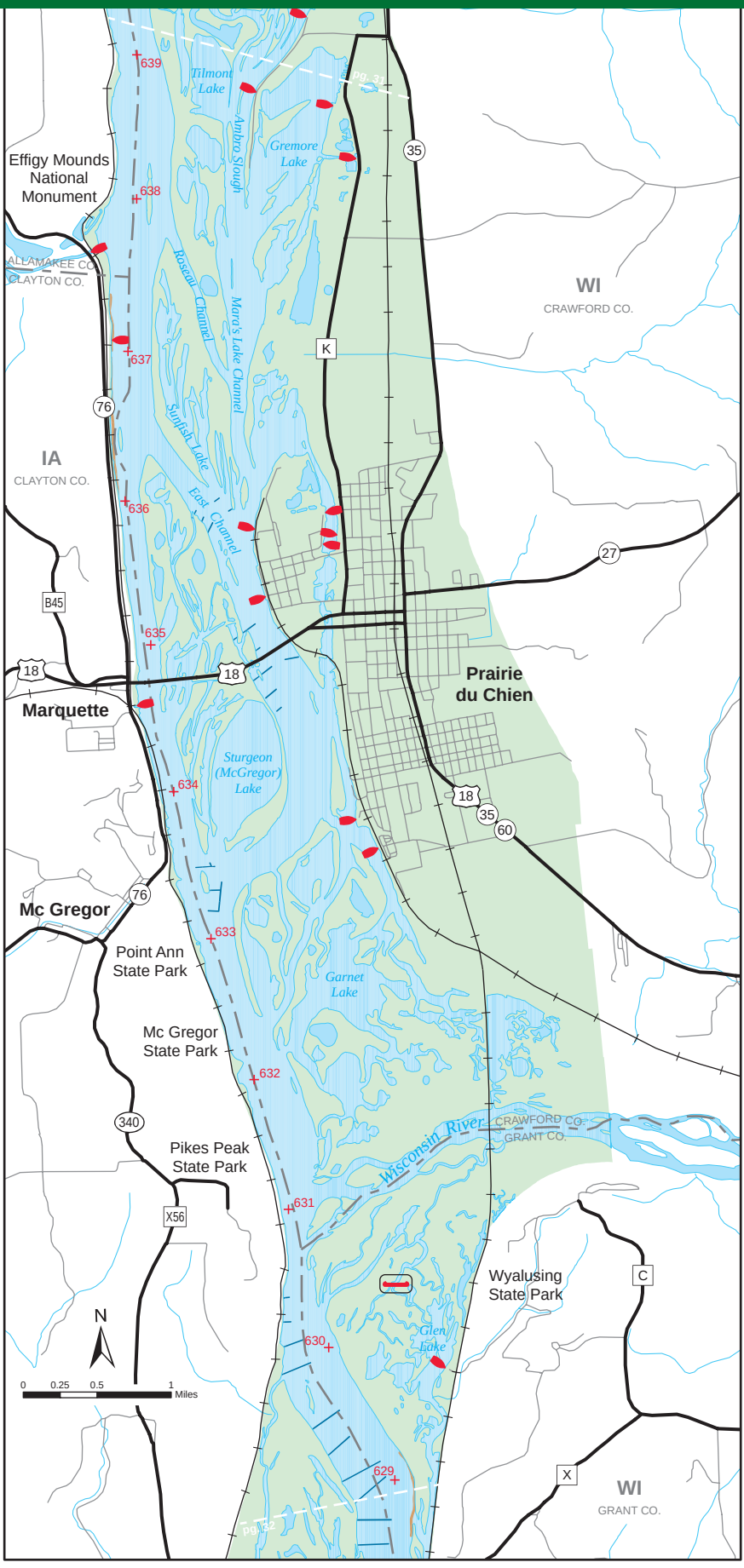
649
35
IA
ALLAMAKEE CO.
648
L & D no. 9
647
Harpers Ferry
B25
364
646
Harper's Slough
McDonald Slough
645
35
D
Gun Lake
Lopdn Slough
Yellow River State Forest
644
643
Mudhen Lake
Harper's Slough
364
642
WI
CRAWFORD CO.
Yellow River State Forest
Ambro Slough
641
N
Spring Lake
Big Missouri
Upper Doubles Lake
35
640
Fish Lake
76
pg. 32


639
Tilmont Lake
pg. 31
Ambro Slough
Gremore Lake
35
Effigy Mounds National Monument
638
ALLAMAKEE CO.
CLAYTON CO.
Rosenil Channel
Moro's Lake Channel
WI
CRAWFORD CO.
K
637
76
Sunfish Lake
East Channel
IA
CLAYTON CO.
636
27
B45
635
18
18
Marquette
Prairie du Chien
Sturgeon (McGregor) Lake
634
18
35
60
76
Mc Gregor
633
Point Ann State Park
Garnet Lake
Mc Gregor State Park
632
340
Pikes Peak State Park
Wisconsin River
CRAWFORD CO.
GRANT CO.
631
X56
Wyalusing State Park
C
N
Glen Lake
630
0 0.25 0.5 1 Miles
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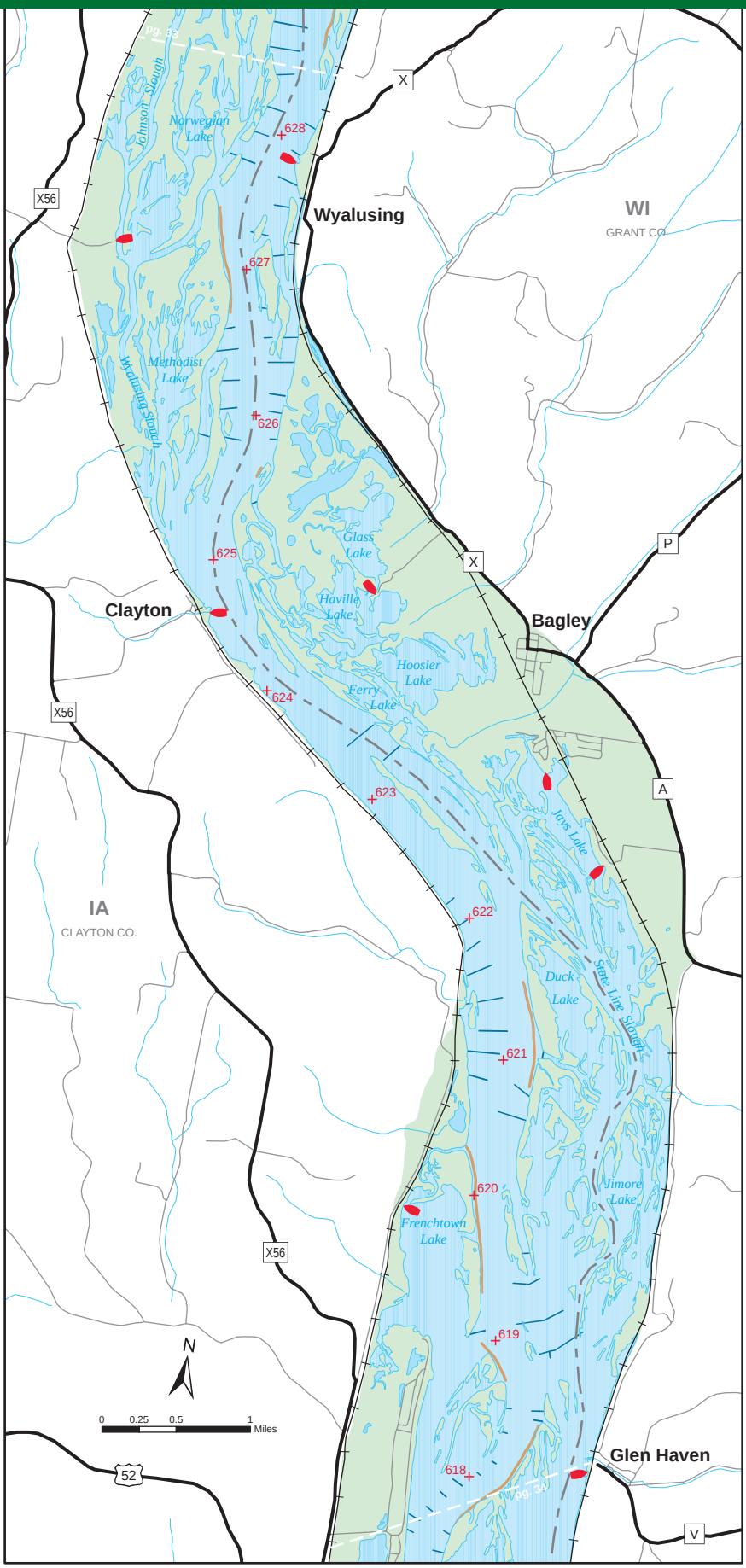
X
WI
GRANT CO.
pg. 32


Pg. 32
Johnson Slough
Norwegian Lake
628
X
X56
Wyalusing
WI
GRANT CO.
627
Methodist Lake
Wyalusing Slough
626
Glass Lake
625
X
P
Clayton
Haville Lake
Bagley
Hoosier Lake
Ferry Lake
624
X56
623
A
Jays Lake
IA
CLAYTON CO.
622
Duck Lake
State Line Slough
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Yimore Lake
Frenchtown Lake
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N
0 0.25 0.5 1 Miles
619
Glen Haven
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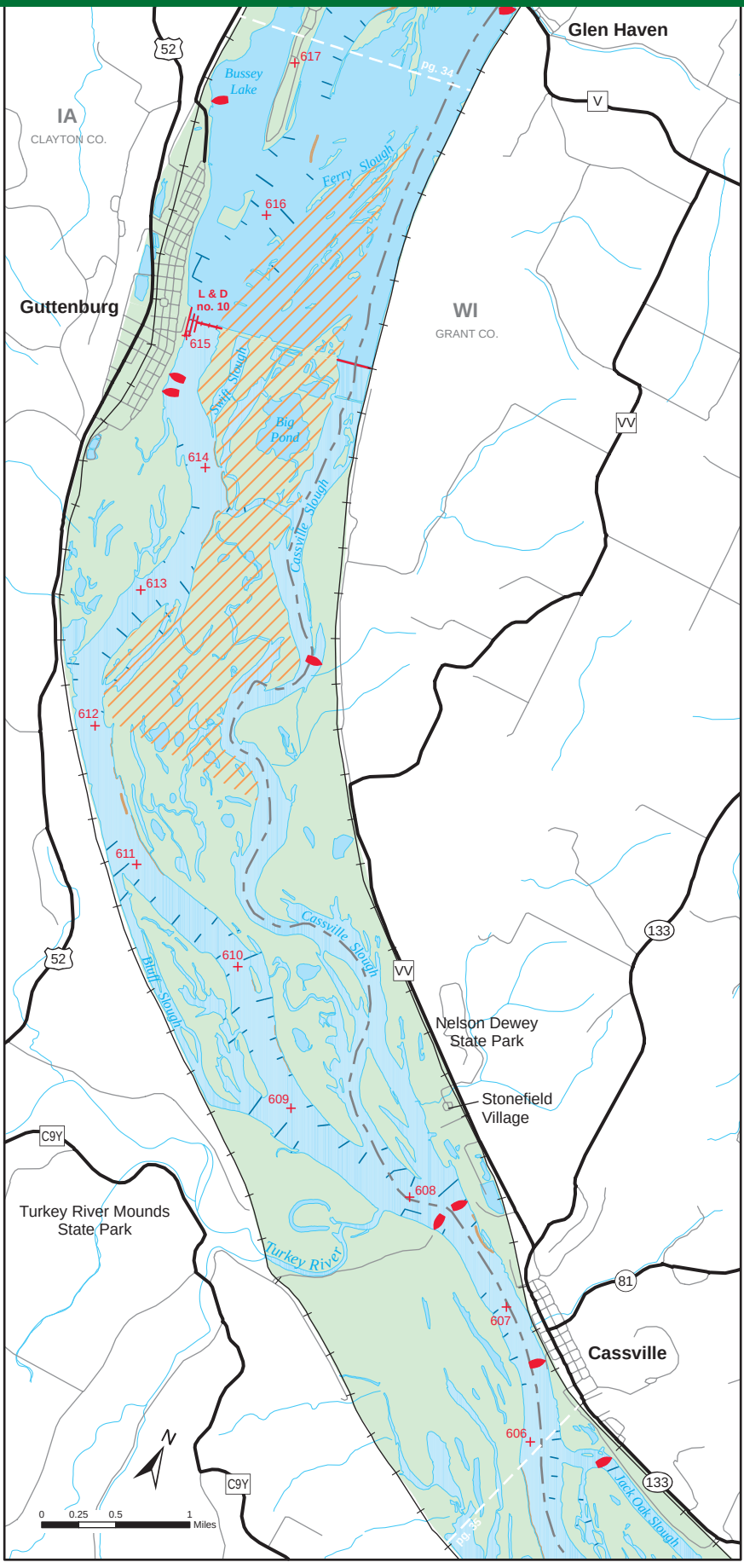
618
Pg. 34
V


Glen Haven
52
617
Bussey Lake
pg. 34
V
IA
CLAYTON CO.
Ferry Slough
616
Guttenburg
L & D no. 10
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WI
GRANT CO.
Swift Slough
Big Pond
VV
614
Cassville Slough
613
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611
133
52
Cassville Slough
Bluff Slough
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VV
Nelson Dewey State Park
Stonefield Village
609
C9Y
608
Turkey River Mounds State Park
Turkey River
81
607
Cassville
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C9Y
Tack Oak Slough
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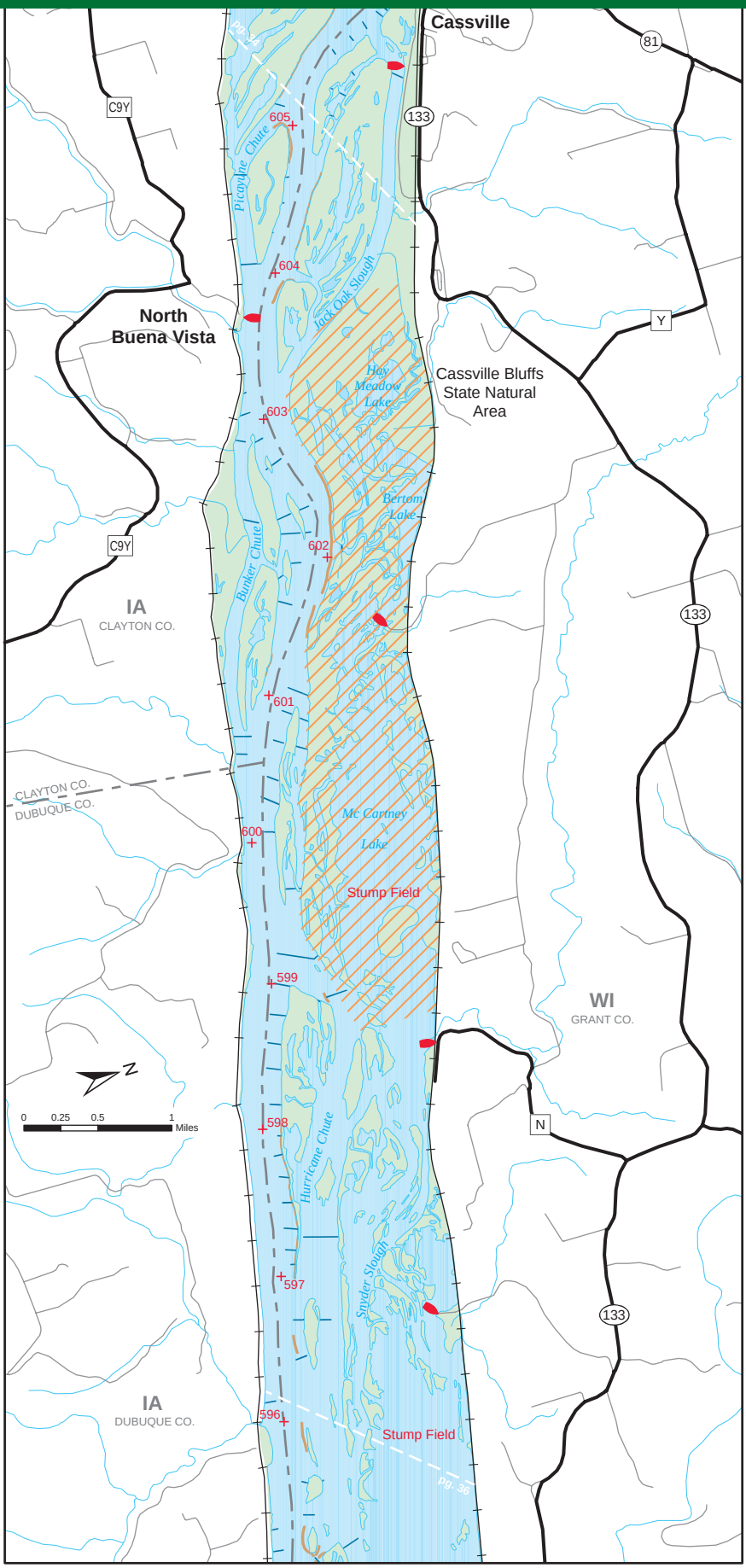
pg. 35
0 0.25 0.5 1 Miles


Cassville
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133
C9Y
605
Picayune Chute
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Jack Oak Slough
North
Buena Vista
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Hay
Meadow
Lake
Cassville Bluffs
State Natural
Area
603
Bertom
Lake
C9Y
602
Bunker Chutel
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CLAYTON CO.
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601
CLAYTON CO.
DUBUQUE CO.
Mc Cartney
Lake
600
Stump Field
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WI
GRANT CO.
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Hurricane Chute
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Snyder Slough
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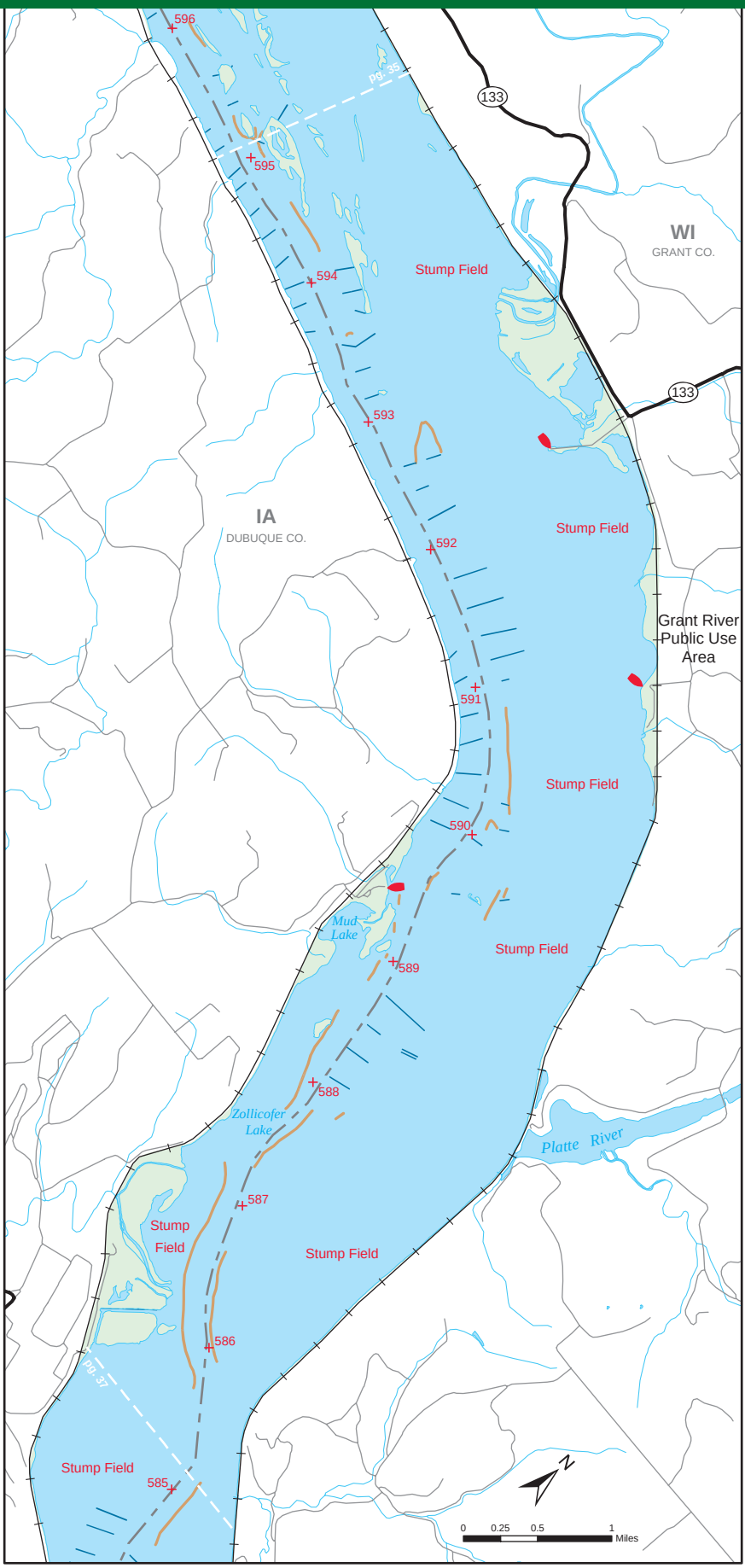
IA
DUBUQUE CO.
596
Stump Field
pg. 36
0 0.25 0.5 1 Miles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GRANT CO.
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Stump Field
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Grant River Public Use Area
Mud Lake
Zollicofer Lake
Platte River
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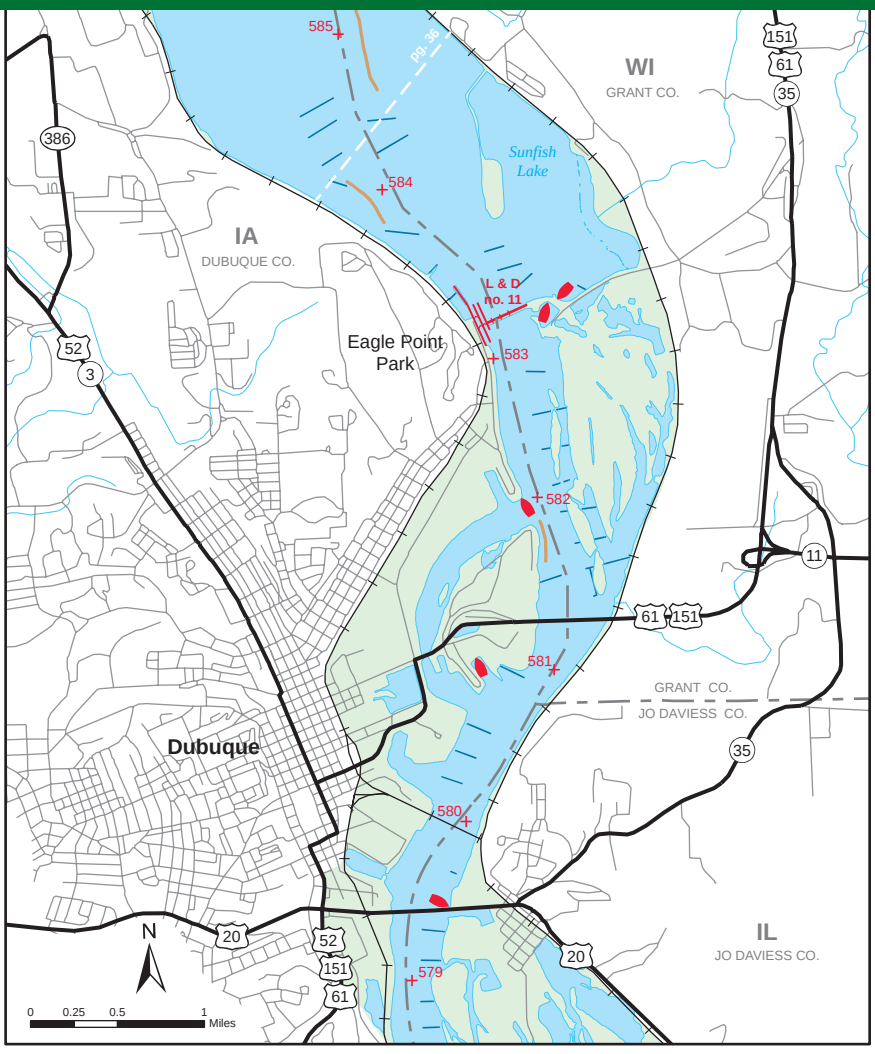


These maps are intended for informational purposes only, not for navigational use. The accuracy of these maps cannot be guaranteed as the features of the river are constantly changing.

Data for these maps were interpreted from aerial photographs taken in 1989.

Warden Authority: Conservation wardens from adjoining states may enforce laws from bank to bank on all boundary waters. Under a law enforcement agreement signed in 2000 between Wisconsin and Minnesota, wardens may carry out law enforcement responsibilities in Wisconsin and Minnesota counties bordering the Mississippi River. In other words, Wisconsin and Minnesota wardens are considered to be certified law enforcement officers in adjoining states and may check hunters and anglers at boat landings in either state.

Public Lands: Protected Habitats Along the Mississippi River

State Natural Areas

Several areas along the river are designated as State Natural Areas. These areas have been set aside to protect critical habitat of endangered or threatened species and to preserve significant examples of various plant and animal communities. One natural area, Whitman Bottoms Floodplain Forest near Merrick State Park, has a canoe landing.

WYALUSING STATE PARK

State Parks

Four Wisconsin state parks, Merrick, Perrot, Nelson Dewey, and Wyalusing are located along the banks of the Mississippi River and offer a variety of facilities and interpretive exhibits.

National Wildlife and Fish Refuge

Many of the Mississippi River bottomlands lie within the boundaries of the Upper Mississippi River National Wildlife and Fish Refuge. The refuge, which encompasses 200,000 acres of wooded islands and backwaters, begins at the mouth of the Chippewa River (river mile 763.4) and extends 261 miles downriver.

The refuge is administered by the U. S. Fish and Wildlife Service to protect and preserve habitat needed by migratory birds, fish and other wildlife. Millions of migratory birds including ducks, geese and swans rest and feed on the refuge during spring and fall migrations, and hundreds of American bald eagles winter along the river. The popularity of a variety of recreational activities has made this a heavily used refuge.

Voluntary closed areas are established in some portions of the refuge to protect nesting and migratory wildlife.

Information, maps and regulations governing public use are available from the U. S. Fish and Wildlife Service. The phone number and address are listed on the inside back cover.

Sportfishing on the Mississippi

The Upper Mississippi River boasts a considerable sport fishery. More than 100 varieties of warm-water fish are found in

ROBERT QUEEN

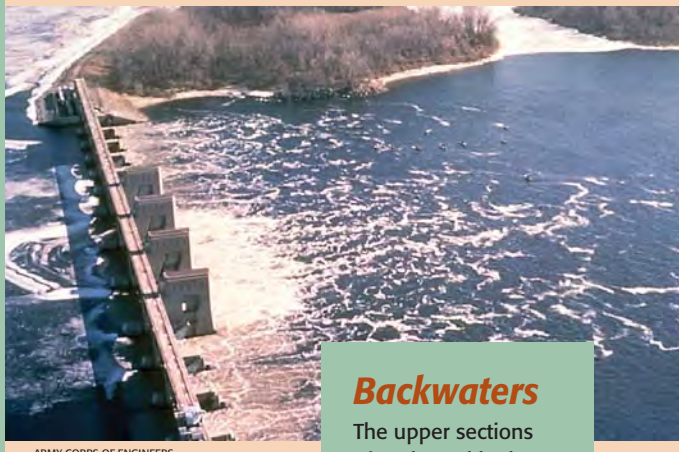
the Mississippi—and you don't necessarily need a boat to catch them. Many of the fish inhabiting the Mississippi can be caught from shore. On any given day of the year, someone will be out there rising to the challenge of fishing the Mississippi, and hoping a fish will rise to the bait.

River Habitats

Locks and dams changed the "wildness" of the river and greatly modified fish habitats. These changes have favored some species like white bass and freshwater drum, while others like the skip jack herring, paddlefish, bullheads and sturgeon have severely declined. Navigation pools created by locks and dams range in size from less than half a mile to nearly 50 miles long.

Tailwaters

Turbulent tailwaters extend for about half a mile below the dam. This roiling water provides rich habitat for walleye, sauger, white bass, freshwater drum and catfish. When fishing, please be mindful of the danger zone and leave the most turbulent water to the fish. Powerful currents can easily pull a boat under.



ARMY CORPS OF ENGINEERS

Backwaters

The upper sections of each pool look much the same today as they did before the locks and dams were constructed. A trip through this area will reveal a maze of backwater sloughs and side channels that wind through bottomland forests, small backwater lakes and wetlands. Side channels that run through these areas typically have flowing water at normal river stages. Still water channels or sloughs may be former side channels cut off from the main channel. Sloughs usually have mucky bottoms and are thick with aquatic plants like lotus, coontail and wild celery.

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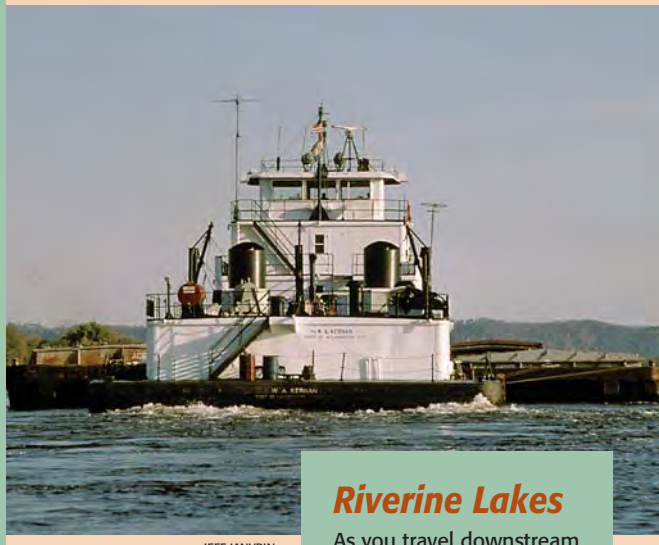
Within each of these pools are large open lakes, sloughs, and braided backwaters surrounded by trees and marshes.

Natural events also can change river habitats. Floods can deposit silt in spawning habitats while droughts can dry them up. The diversity of habitats is what makes fishing on the Mississippi River a unique adventure.

Main Channel

Barge and boat traffic present certain challenges to sportfishing. Main channel borders are buffer zones between heavy traffic in the main channel and habitats close to land. Wing dams, closing dams and riprap influence currents in this transition area enough to either scour out and deepen the river bottom, or deposit sand that decreases water depth. Some of the banks are riprapped, providing fair to good fish habitat. Wing dams located on the outside bend of the river channel tend to be the most productive for fishing.



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Riverine Lakes

As you travel downstream in a pool, the river changes from a maze of side channels and sloughs to large bodies of open water called riverine lakes. Most riverine lakes were formed when the locks and dams were constructed and rising water levels covered much of the river valley. Shortly after the dams were constructed, many of these areas were dotted with islands. Today, river currents, ice, waves, and wind have eroded these islands away in the lower sections of the pools.

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What Fish Eat

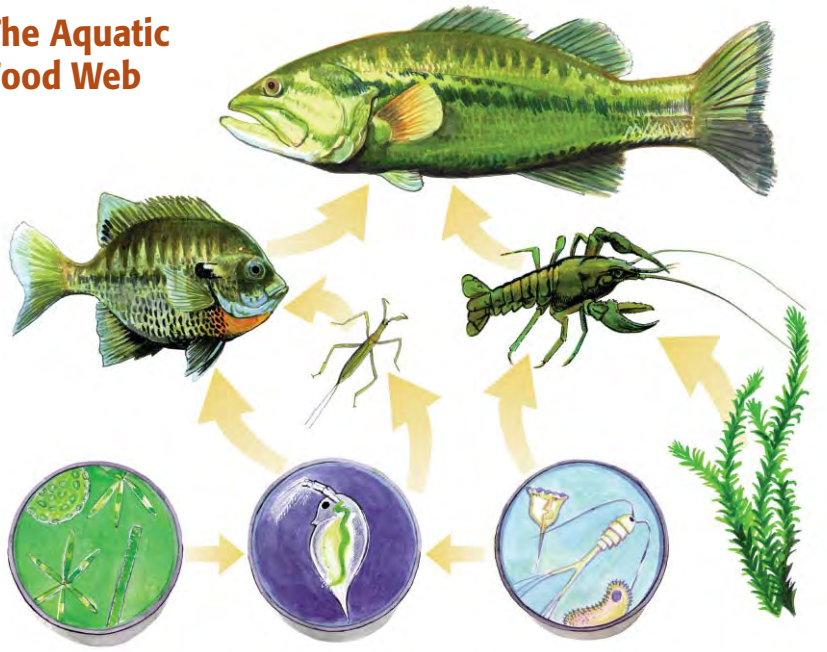
Unsavory Leftovers

It is illegal to dump bait into the water; you might be introducing an exotic. Share leftover bait with another angler or take it home and dispose of it.

Natural Foods

Knowing something about the food preferences of fish can help you be a more successful angler. The river provides fish with a rich and varied diet. Zooplankton (microscopic animals) are the mainstay of newly hatched fish while insects make up the bulk of their diet as they grow. Larger fish depend on a larger variety of aquatic organisms. Many species of small forage fish and immature game fish round out the aquatic food web.

The Aquatic Food Web



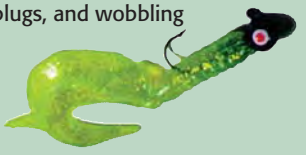
The Bait Debate

Whether choosing live bait or artificial lures, anglers have plenty of options.

A sampling of the live bait and artificial lures mentioned on the fish species pages that follow is listed below. For more information on selecting bait and lures, visit a local bait and tackle shop. The sales staff often are knowledgeable about local fishing and may offer valuable tackle and fishing tips.

Live Baits: *Spikes or grubs, minnows, worms, nightcrawlers, wax worms.

Artificial Lures: Plastic worms, jigs, spinnerbaits, flies, bucktail streamers, spinners, plugs, and wobbling spoons.



* Spikes, grubs, waxworms and mousies are all different kinds of maggots.

Popular Fish of the Mississippi

The following section highlights popular fish species among anglers fishing the Mississippi River. While many of these fish species are also found in Wisconsin lakes, the habits and habitat of river fish may differ from their lake-dwelling kin. Information about their unique adaptations to the river environment, along with fish identification pictures, diet, angling and bait tips is included.

The Seasonal Location of Fish

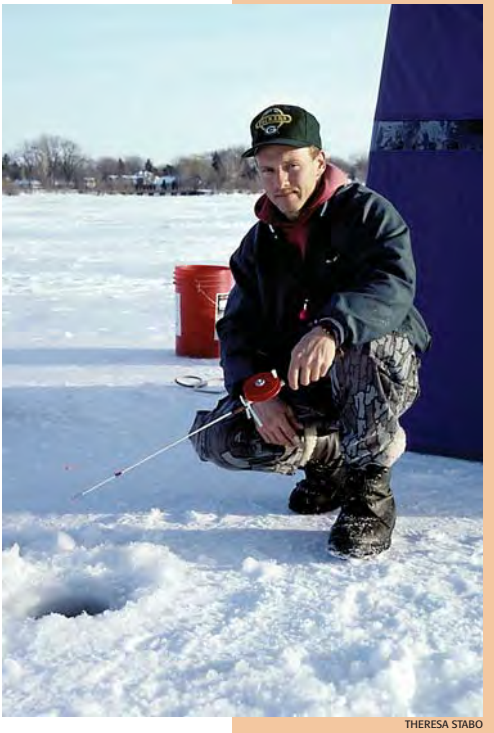
As seasons change so do fish habits and habitats. In springtime, many fish move to flooded backwater areas to spawn. Here perch, northern pike and carp deposit their eggs on aquatic plants, rocks or other underwater objects. Other fish, such as walleye and sauger, may concentrate below the tailwaters of the navigation dams and spillways and spawn along riprap areas or in the flooded backwaters.

As water temperatures increase during the summer, catfish, walleye, sauger and yellow perch move to deeper water along the main channel border and below wing dams. Bass, sunfish, crappie and northerns hang out along and in the weedy areas of backwaters, side channels, sloughs and main channel borders.

In the fall, many fish migrate to overwintering areas. Sunfish, bass, northern pike and crappie overwinter in deeper backwater lakes and other areas with little or no current. Catfish can be found in deep sections of the main channel and side channels that have some structure on the bottom to protect them from the current. Walleye and sauger migrate to deeper areas in the river such as tailwaters of the dams and some river lakes.

Ice Fishing

Ice fishing on the Mississippi River is as popular as it is on other water bodies in Wisconsin. Backwater lakes and sloughs are the most productive areas for sunfish, crappie, northern pike and an occasional bass. They also are the only safe places to ice fish on the river. Ice on the main channel, main channel border, some of the side channels, and in the tailwaters is very unreliable and dangerous.



THERESA STABO

Largemouth Bass (Micropterus salmoides)

Spawning Notes

The male builds and defends its nest in backwaters on sand or gravel bottoms. Spawning occurs in late April to early June in water 63 degrees F.

Habits & Habitat

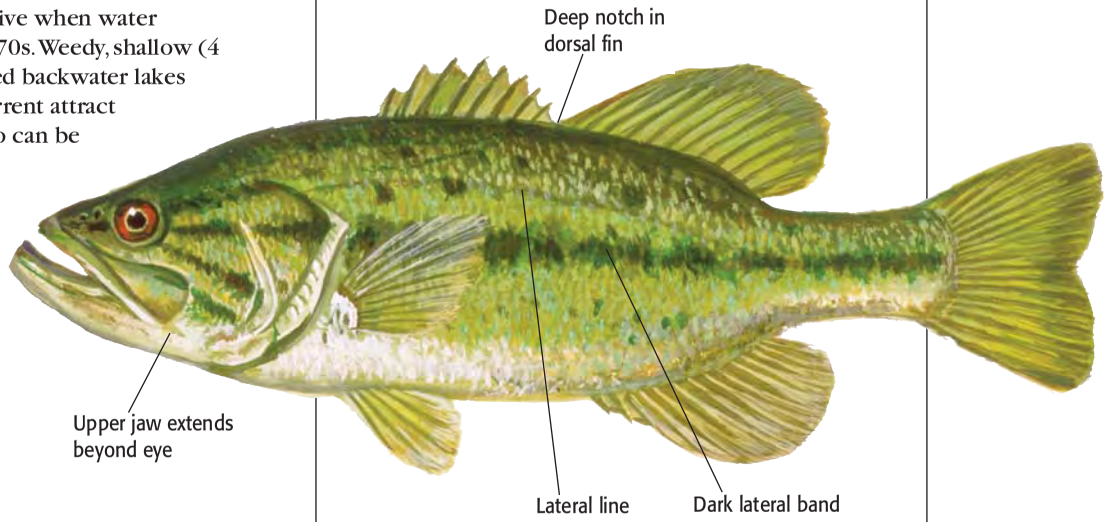
Largemouths are most active when water temperatures hit the low 70s. Weedy, shallow (4 to 6 feet deep), stump-filled backwater lakes and sloughs with little current attract largemouth bass. They also can be found along deeper water edges and in deep holes scoured out by the current.

Diet

Crayfish, frogs, small fish and, insects.

Fishing Tips

Largemouth bass are primarily sight feeders and hide along the edges of weed beds waiting to ambush their prey. Work weedless lures along the edges and pockets of weed beds. Best fishing times are early morning and evening during the warm summer months.



Good Bait

Minnows, worms, crayfish, frogs, spinnerbaits, plastic worms and jig and pig combos, (pork rinds hooked on a jig).

Smallmouth Bass (Micropterus dolomieui)

Spawning Notes

Some smallmouth migrate up into tributaries to spawn. The male sweeps out its nest over gravel near structure. Spawning occurs between mid-May and mid-June in water 63 degrees F.

Habits & Habitats

Smallmouths prefer moderately swift-flowing water, and rocky bottoms near wing dams and riprap areas. They usually avoid weedy areas and rest behind large boulders, rock ledges, and stumps. Smallmouths shun bright light and are most active at dawn and dusk.

Diet

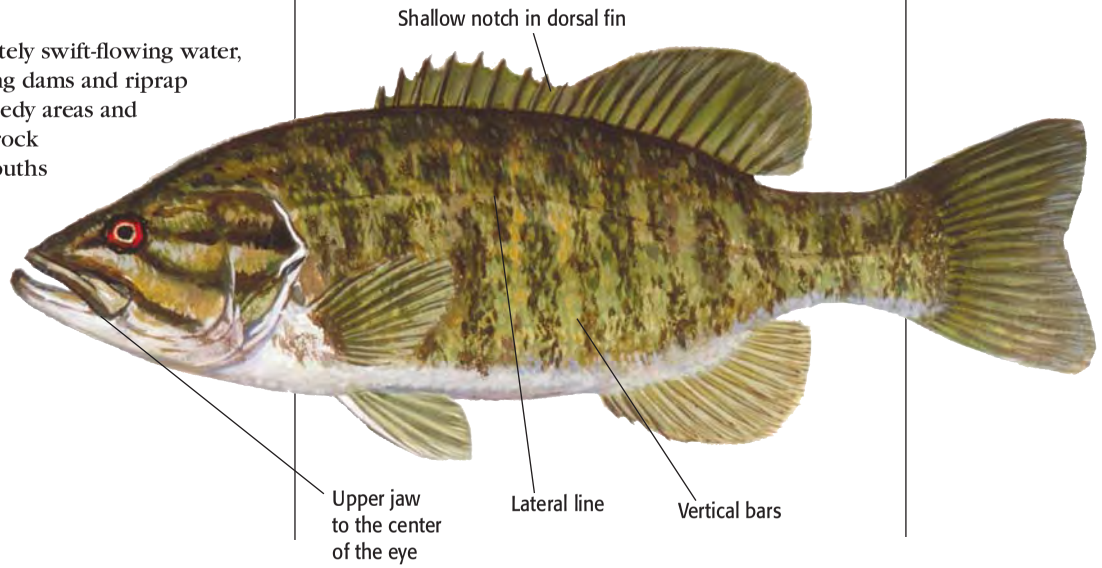
Crayfish, small fish and aquatic insects.

Fishing Tips

Fish at daybreak or twilight. Equal success can be had on a cane pole, spinning rod or fly rod as long as you keep the tip up and the line taut. Cast for them near individual rocks or pilings that break the current.

Good Bait

Minnows, crayfish, hellgrammites, worms, spinnerbaits, plastic worms, and jig and pig combos.



White Bass (Morone chrysops)

Spawning Notes

White bass scatter eggs in the backwaters or tributary streams over submerged plants, logs and rubble. Spawning occurs from late April to June when water temperatures hit 68 degrees F.

Habits & Habitats

White bass prefer the main channel and the sandy shallows of riverine lakes, as well as areas below wing dams and navigation dam spillways. Most white bass avoid thick beds of aquatic vegetation.

Diet

Zooplankton, aquatic insects, and small fish, including drum, sauger and gizzard shad.

Fishing Tips

White bass school in early morning and evening, betraying their location with telltale surface activity when they are feeding. Here, a downsized lure will be hit by frenzied white bass. Fishing peaks in late April or early May.

Good Bait

Minnows, worms, grubs, artificial flies, bucktail streamers, and spinner.

Bluegill (Lepomis macrochirus)

Spawning Notes

The male sweeps out a nest in shallow areas over sand or gravel bars, usually as part of a colony of other nests. Spawning occurs from late May to early August when water temperatures reach 67 to 80 degrees F.

Habits & Habitats

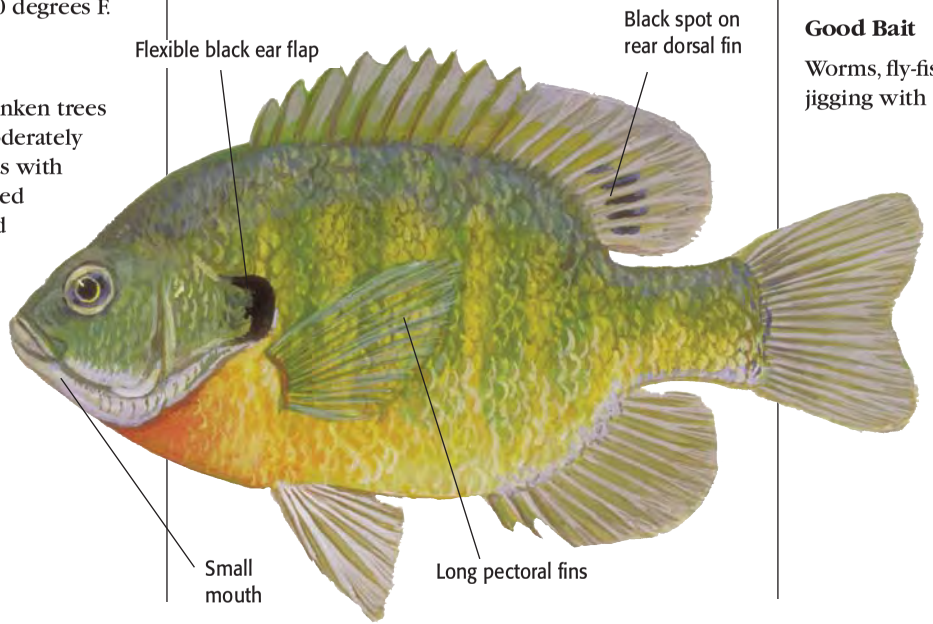
Bluegills congregate in the plants and sunken trees of shallow backwater bays, lakes and moderately running sloughs. They tend to avoid areas with swift currents. Undercut banks, submerged timber, stumps, and pockets within weed beds often produce larger fish. By midsummer larger bluegills often move to deeper water.

Diet

Aquatic insects, especially mayfly larvae, caddisfly larvae, and dragonfly nymphs; small crayfish and small fish.

Fishing Tips

Fish a foot or two off the bottom with light tackle and a small hook (#6 or smaller) tied directly onto 4- to 6-pound line. Put a couple of sinkers just above the hook to balance the bobber. For more excitement try a fly rod or ultralight tackle with 1/8-ounce jigs. The best places to ice fish for bluegills are weedy backwater bays, lakes, and sloughs.



Good Bait

Worms, fly-fishing with poppers, and wintertime jigging with grubs or mousies.

Yellow Perch (Perca flavescens)

Spawning Notes

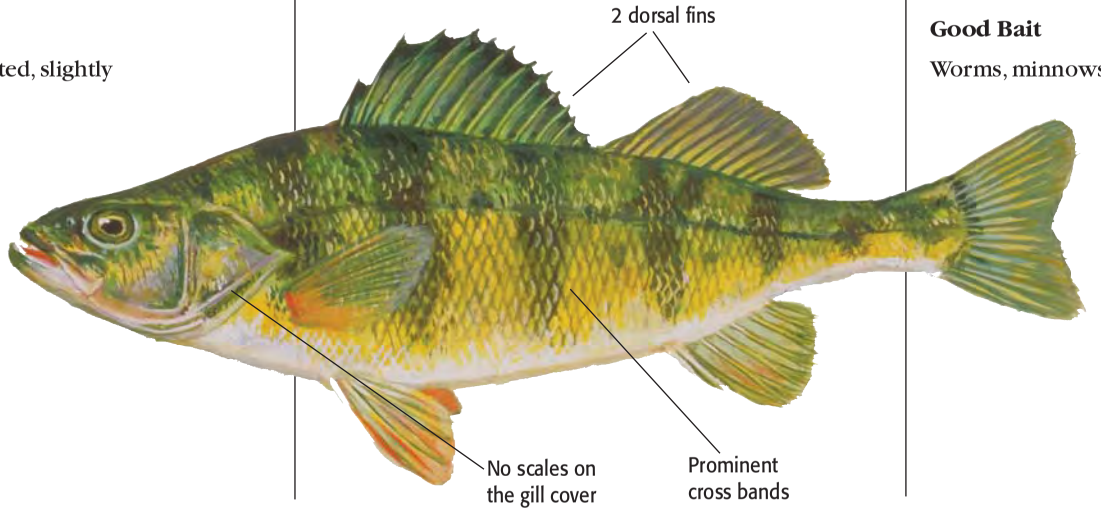
Perch spawn in the backwaters near vegetation soon after ice-out from April to early May in water temperatures of 45 to 52 degrees F. Random spawners, their long, gelatinous strands of eggs float freely until sinking to the bottom or becoming entangled in weeds and fallen branches.

Habits & Habitats

Perch prefer shallow, vegetated, slightly turbid waters. They tend to avoid the main channel, staying mainly in the backwaters and side channels that have a current. Perch tend to move in schools, by size, with the larger fish schooling near the bottom.

Diet

Insect larvae, crayfish, worms, mollusks, and small fish.



Fishing Tips

Yellow perch have a light bite so use light tackle and set the hook quickly at the first nibble. Perch feed in the early morning and late afternoon primarily near the bottom. If one spot is unproductive after a few casts, try different depths before hoisting your anchor.

Good Bait

Worms, minnows, small jigs, and grubs.

Northern Pike (Esox lucius)

Spawning Notes

Spawning occurs when ice breaks up between late March and early April and the water temperature reaches 37 degrees F. Northern pike gather in very shallow, flooded marshy areas a few days before spawning actually begins, then deposit their eggs on grassy vegetation. Some of these sites are posted "No Fishing" during the spawning season to protect fish that congregate to spawn.

Habits & Habitats

Northern pike generally prefer shallow, weedy areas with plenty of cover. These areas are most common in the backwaters and sloughs below navigation dams. They feed during the daylight hours and are most active in cool weather. Solitary fish lurk in the weeds waiting to ambush their prey. When the weather is hot and food is plentiful northerns tend to linger in deeper, cooler waters.

Diet

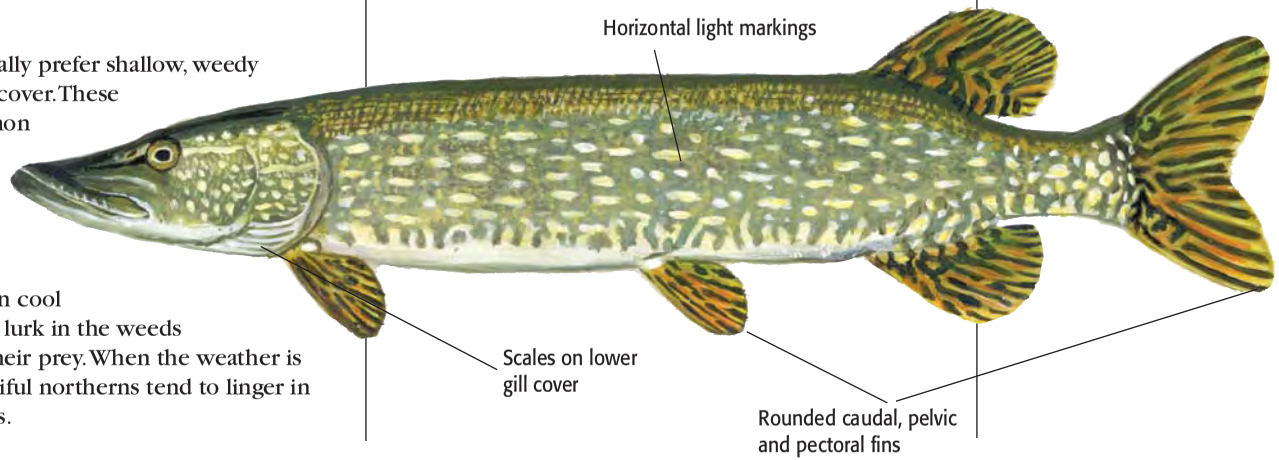
Fish, waterfowl, frogs, crayfish, and small mammals.

Fishing Tips

Use medium-weight tackle. During warm weather concentrate fishing efforts along the fringes of weed beds or in stumpy shallow sloughs and lakes. May, June, September and October are the best open-water months for catching northerns. In winter use tip-ups and fish close to the bottom with minnows.

Good Bait

Sucker minnows, plugs and, wobbling spoons.



Walleye (Sttizostedion vitreum)

Spawning Notes

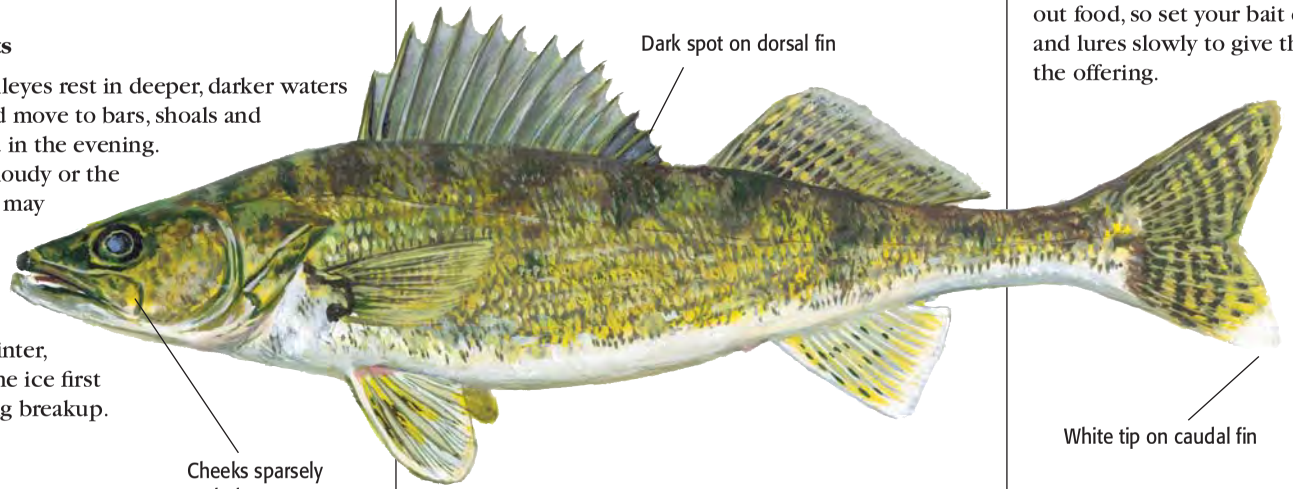
Spawning occurs between mid-April and early May in water 38 to 44 degrees F. Eggs are scattered over gravel bottoms and riprapped dikes or on flooded wetland vegetation. Low to moderate floods seem to improve spawning sites and success.

Habits & Habitats

Light-sensitive walleyes rest in deeper, darker waters during the day and move to bars, shoals and weed beds to feed in the evening. When the sky is cloudy or the water turbid, they may be more active during the day. Walleye also feed actively throughout the winter, especially when the ice first forms and at spring breakup.

Diet

Aquatic insect larvae, crayfish, and fish including darters, minnows, and bullheads.



Fishing Tips

May, June, October and November are the best months for open-water fishing, particularly in the tailwaters of the dams and when trolling the downstream side of wing dams. Like the sauger, walleye move slowly along the bottom seeking out food, so set your bait deep and retrieve jigs and lures slowly to give the fish time to look over the offering.

Good Bait

Minnows, leeches, small bullheads, nightcrawlers, plugs and spinner combos.

Sauger (Sttizostedion canadense)

Spawning Notes

Spawning occurs over rocky areas and in the tailwaters from late April to early May when water temperatures reach 46 degrees F.

Habits & Habitats

Sauger is more common in the Mississippi River than its cousin the walleye. Saugers prefer the tailwaters and flowing water in the main channel and side channels.

Diet

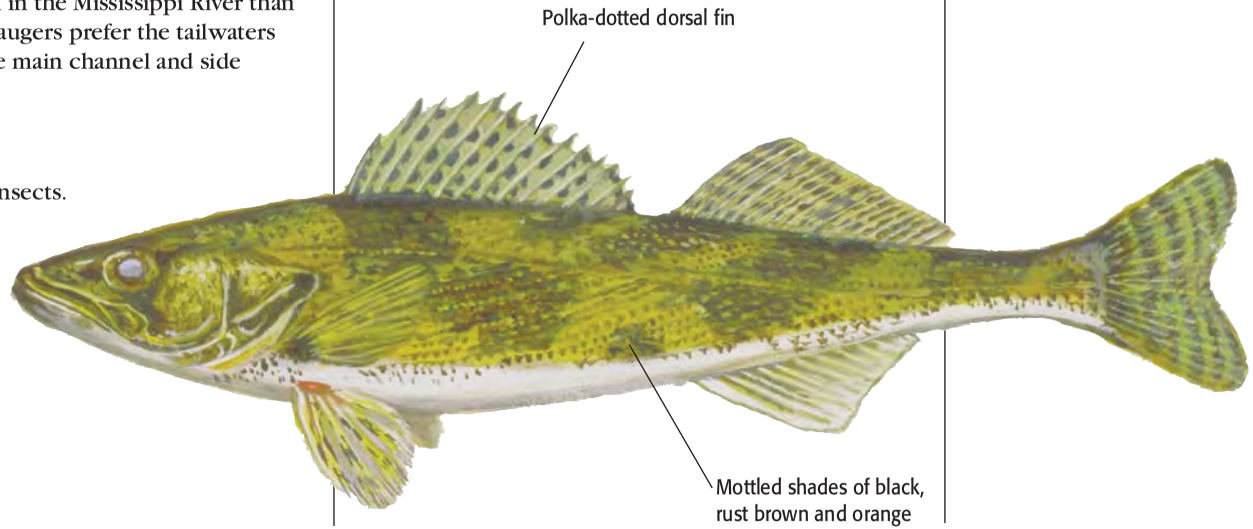
Small fish, leeches, and insects.

Fishing Tips

Sauger are fished the same as walleye with weighted lures and plugs.

Good Bait

Plugs, streamer hair and feather wet flies, spinner minnows and spinner fly combinations, live minnows, and worms.



Black Crappie (Pomoxis nigromachulatus)

Spawning Notes

The male builds and defends its nest in backwaters on a sand or fine gravel bottom. Spawning occurs in May and June in water 64 to 68 degrees F.

Habits & Habitats

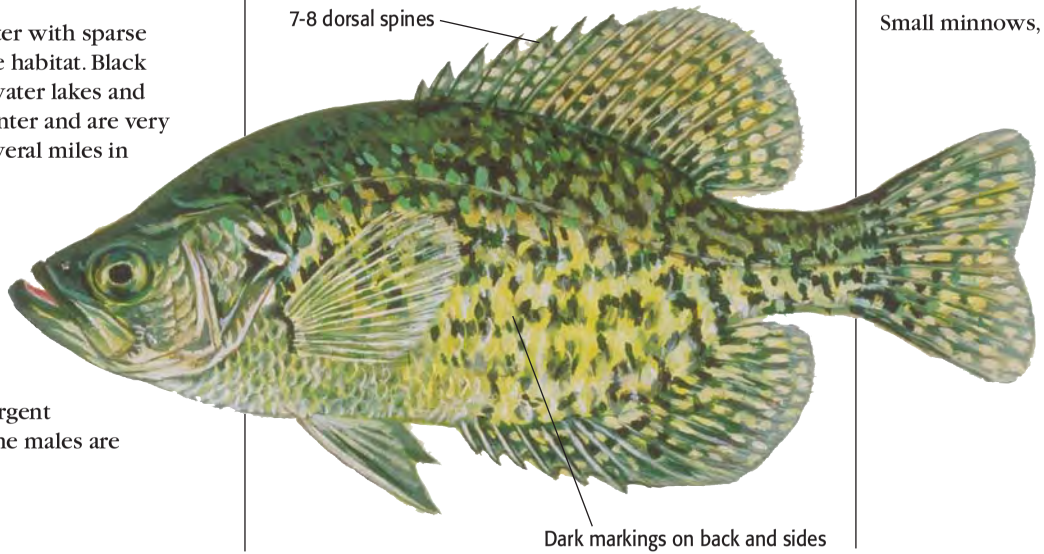
Submerged timber in deeper water with sparse vegetation is prime black crappie habitat. Black crappies often inhabit still backwater lakes and sloughs. They feed during the winter and are very active under the ice, traveling several miles in schools.

Diet

Midges, crustaceans, and small fish-like shiners.

Fishing Tips

During the spring, cast near emergent vegetation close to shore. Here the males are protecting their nests and will strike at almost anything that passes near them. Fishing in deep holes or river channels with structure on the bottom is productive in the summer. Ice-fishing the backwaters where there is little current also brings good results.



Land crappies gently. Their mouths are tender and many anglers have had to tell stories about "the one that got away" when they used too much force trying to land a crappie.

Good Bait

Small minnows, small streamer flies, and worms.

White Crappie (Pomoxis annularis)

Spawning Notes

White crappies nest in colonies. Males sweep away silt to make a shallow nest over gravel and viciously guard the eggs. Spawning occurs in May and June in water 65 degrees F.

Habits & Habitats

White crappies are more tolerant of muddy water than black crappies. They are found in slow-moving side channels, running sloughs, sunken trees and stump fields. White crappies are a schooling fish. Most active in the evening and early morning hours, they remain active throughout the winter when many other sunfishes are dormant.

Diet

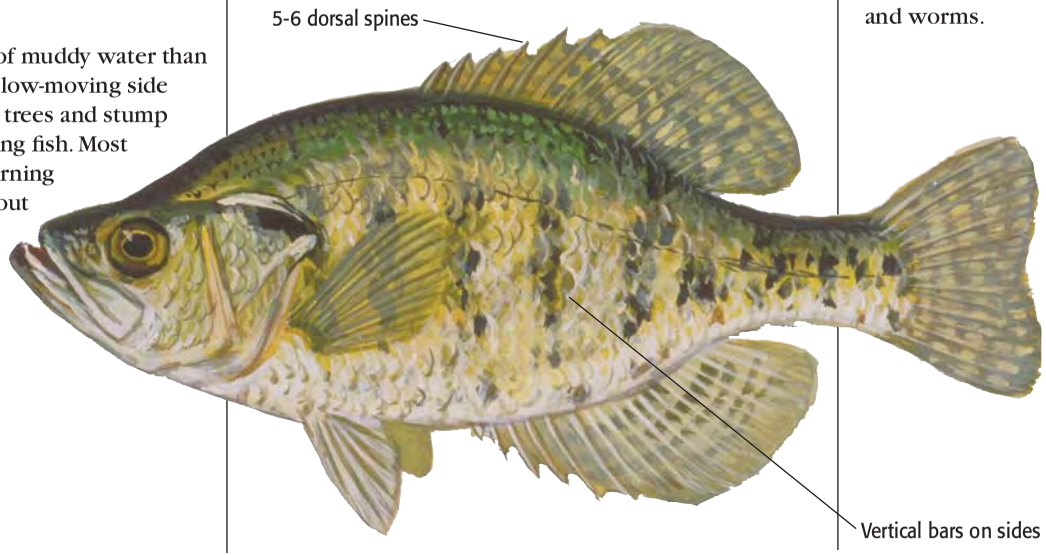
Small fish and aquatic insects.

Fishing Tips

Fish structure, especially brush, logs, and weeds. White crappies are gregarious so where you find one you'll usually find more. Present the bait slowly. Their gentle strike and delicate mouths demand a gentle response so your hook doesn't tear through the thin membranes around their mouths.

Good Bait

Live or artificial minnows, grasshoppers, crickets and worms.



Channel Catfish (Ictalurus punctatus)

Spawning Notes

Spawning occurs from May to July in water 75 degrees F.The male sweeps out a nest in a cranny under a rock ledge or tangle of tree roots. In turbid water, nests may be made directly on the muddy bottom.The male aggressively guards the eggs until they hatch.

Habits & Habitats

While channel catfish tolerate turbidity, they prefer clear, slow-moving water. Channel catfish feed by their senses of smell and touch using their sensitive whiskers (barbels).They scavenge on the bottom from sunset until midnight. They rarely eat during the winter or spawning season, but they're nearly frenzied after a rain when rising water washes food into submerged grasses along the river.

Diet

Aquatic insects, crayfish, frogs, clams, snails, worms, and fish.

Fishing Tips

Fish deep holes and tailwaters of dams at night. Small channel catfish can be taken on lightweight spincasting gear, but many anglers opt for heavier equipment to bring in fish in the 15-pound range.Tie the hook right onto the line when using a heavy bait in slow-moving water. Use a bottom rig—a hook attached to a leader with a sinker tied at the end of the line a few inches below the leader—or fishing with light baits in faster currents.While channel catfish also feed by sight, appeal to their excellent sens of smell when you select a bait.

Good Bait

Meat scraps, coagulated blood, cheese paste, and oatmeal paste on large treble hooks.

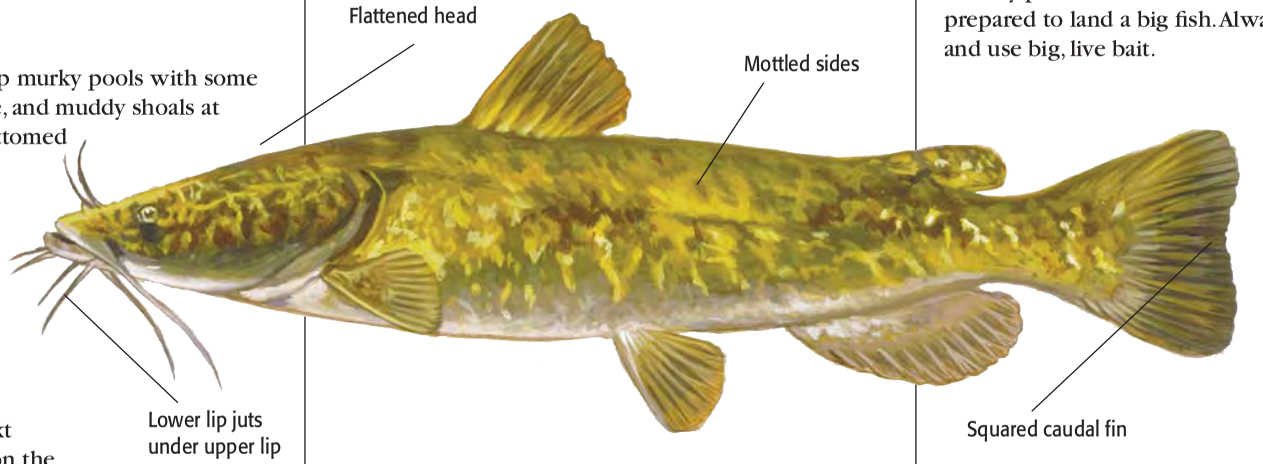
Flathead Catfish (Pylodictis olivaris)

Spawning Notes

Spawning occurs from late June to early July in water 75 degrees F.The male and female build a large nest in dark, sheltered areas. Soon after the female lays her eggs, the male drives her from the nest to prevent her from crushing or eating them.

Habits & Habitats

Flathead catfish live in deep murky pools with some current during the daytime, and muddy shoals at night. Rock- and rubble-bottomed areas with an adjacent hole for resting also are common habitats. Flatheads are most active in warm water temperatures.They feed mostly at night from early June through September, except when spawning. Flatheads lie next to logs or other structure on the bottom of shallow riffles where they wait for passing prey to swim by. In winter, flatheads lie dormant in deep holes behind structure out of the current.



Diet

Aquatic insect larvae, crayfish, suckers, minnows, darters, freshwater drum, sunfish, and other fishes.

Fishing Tips

Twenty-pound flatheads are common so be prepared to land a big fish. Always fish the bottom and use big, live bait.

Good Bait

Minnows, chubs, crayfish, shiners, bluegill, perch or any forage fish.

Freshwater Drum (Aplodinotus grunniens)

Spawning Notes

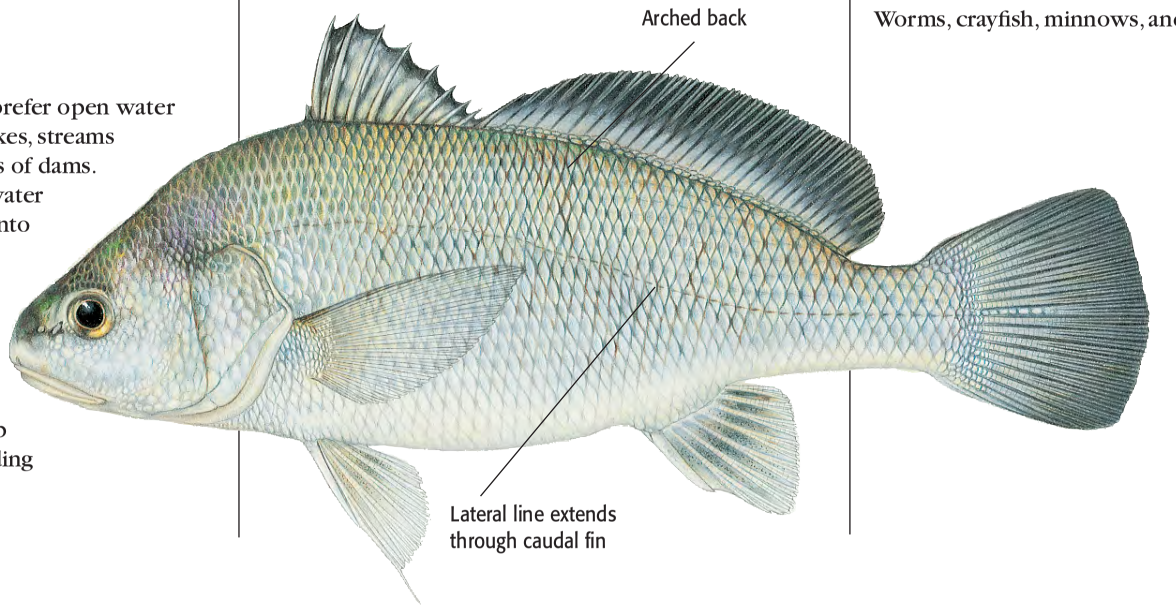
Spawning occurs in the main channel between early May and late June in water 66 to 72 degrees F. The buoyant eggs are released in open water and dispersed by the current. Prior to spawning, males produce a drumming sound during the day, possibly to attract a female.

Habits & Habitats

Schooling fish, freshwater drum prefer open water areas of warm, turbid, sluggish lakes, streams with mud bottoms, and tailwaters of dams. They are seldom found in clear water or over weed beds. Drum move into shallower waters briefly in the spring, and back into the deeper waters of the main channel in the late fall. Drum feed by touch and taste in their murky habitat, moving rocks and stones with their snouts to stir up aquatic organisms. In winter, feeding and activity are greatly reduced.

Diet

Aquatic insects, crayfish, darters, and other fishes.



Fishing Tips

Freshwater drum feed at all hours of the day and night. Spring and summer are ideal seasons to bank fish for drum.

Good Baits

Worms, crayfish, minnows, and cut bait.

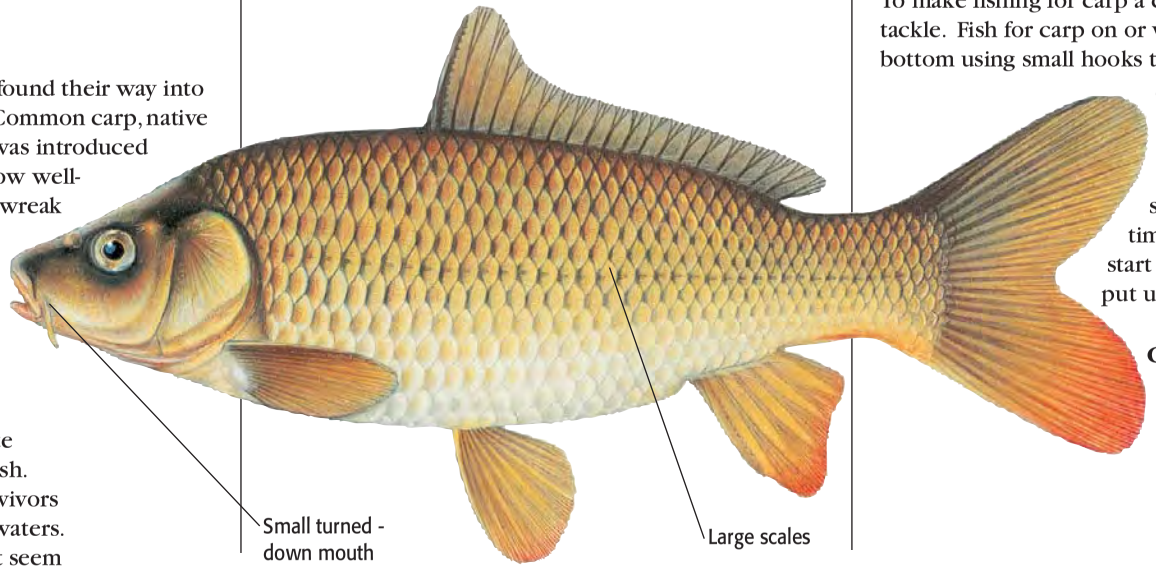
Common Carp (Cyprinus carpio)

Spawning Notes

The carp has a long spawning period that extends from April to August in water 65 to 75 degrees F. Shallow, weedy areas of riverine lakes, streams, marshes, and flooded low areas are prime spawning habitats.

Habits & Habitats

Several exotic carp species have found their way into Wiconsin waters over the years. Common carp, native to Asia and esteemed in Europe, was introduced to Wisconsin in the late 1800s. Now well-established across the state, carp wreak havoc on native fish spawning areas by uprooting vegetation and muddying the waters. Anglers pursuing them find a wary fish that will dash for cover at the first ripple. Carp like shallow, weedy backwater lakes and sloughs, and can tolerate conditions that would kill most fish. Carp often are one of the last survivors in oxygen-depleted and polluted waters. Radical temperature swings don't seem to affect them either. They avoid swift water, except during the spring spawning runs, in favor of quiet waters and dark holes, although larger fish often are seen leaping in the shallows on warm afternoons or evenings.



Diet

Insect larvae, mollusks, crustaceans, snails, worms, fish, and plants.

Fishing Tips

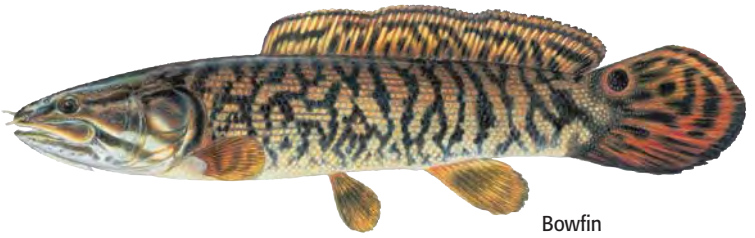
To make fishing for carp a challenge, try light tackle. Fish for carp on or very close to the bottom using small hooks to accommodate their small mouths. Carp sniff and sample a bait before they suck it into their mouths, so give them lots of time. When hooked, carp start out in high gear and put up quite a fight.

Good Bait

Dough balls from dampened old bread on a small to medium-sized treble hook.

Unusual Fish of the Mississippi

The Mississippi River is a diverse fishery. While Wisconsin is famous for its fighting game fish, some of their more interesting kin are often overlooked.



Bowfin

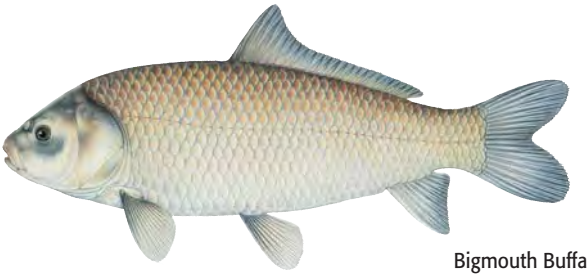
Longnose Gar

Shortnose Gar

Lake Sturgeon

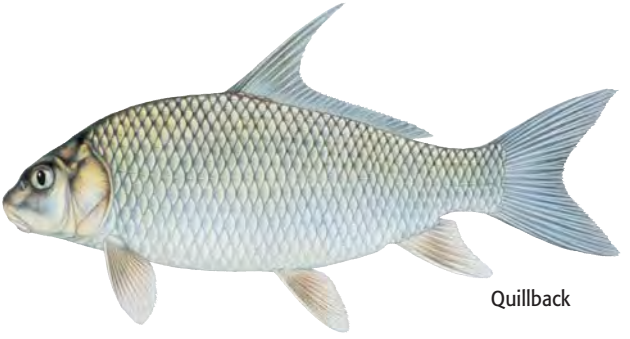
Shovelnose Sturgeon

Paddlefish



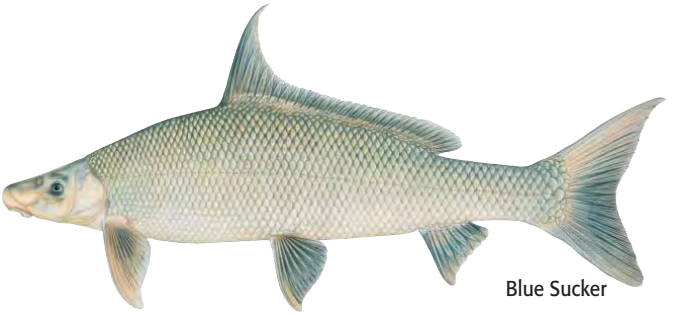
Bigmouth Buffalo

Shorthead Redhorse



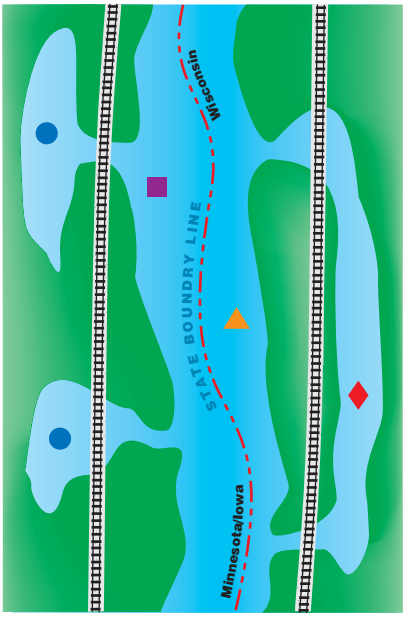
Quillback

Mooneye



Blue Sucker

Fishing Regulations



- Minnesota license valid; Wisconsin rules and regulations apply.
- Wisconsin license required. Inland rules apply.
- Wisconsin license valid; neighboring state(s) rules and regulations apply.
- Neighboring state(s) license required and neighboring state(s) inland rules apply.

Special rules, regulations, and agreements apply when fishing the Upper Mississippi.

Reciprocity agreements between Wisconsin and the states of Iowa and Minnesota allow a person to fish the boundary waters on the Mississippi River, provided they have a valid fishing license from one of the adjacent states. The river basin between Wisconsin, Minnesota and Iowa is divided by the railroad tracks that parallel both sides of the river. Refer to the state lines as shown in this book. However, residents must possess a resident license when fishing in their own state's boundary waters. Regulations between Wisconsin and the other states differ, so anglers must obey the regulations in the state they are fishing.

Anglers who fish the boundary waters must be aware of the locations of the state lines. Refer to the state lines as shown in this book.

Special boundary waters rules apply if you fish the main river between the railroad tracks. If you drift into Minnesota's jurisdiction, you may use a Wisconsin fishing license, but you must follow Minnesota's rules. Likewise, if you are in Iowa's jurisdiction, you may use a Wisconsin license, but you must follow Iowa's rules. If you fish waters on the inland side of the tracks, then each state's inland fishing regulations must be honored and you must have a license for that state. For instance, if you pass under the tracks on the Minnesota side to fish a creek or bay, a Wisconsin license is not valid.

For more information, consult current fishing regulations of the appropriate state(s) for which you are fishing. When in doubt, your best bet is to obey the regulations for the state that is more restrictive. Consult Wisconsin's Trout Fishing Regulations and Guide (Publication FH-302) for special regulations regarding trout.

A License to Fish

Fishing licenses are sold at most Department of Natural Resources offices, most county clerk offices, and at many bait shops, sporting goods stores and marinas. Copies of Wisconsin fishing regulations may be obtained wherever fishing licenses are sold.

Health Advisory for Eating Fish

For public health protection, the Department of Natural Resources routinely monitors chemicals in fish collected from waters throughout Wisconsin. After consulting the Division of Health, the state issues fish contaminant advisories each year.

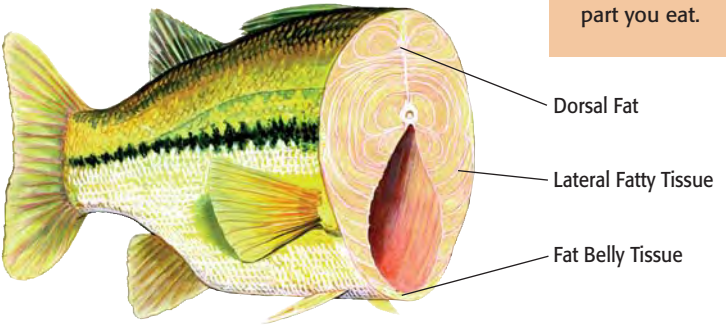
Precautions recommended in the advisories range from advice suggesting that you remove fat and skin before cooking and eating some fish, to a stronger statement advising that you not eat certain fish. Generally, the advice is aimed at protecting children under 15 (especially infants) and women who intend to have children or are nursing babies.

For a free copy of Wisconsin's fish consumption advisory, contact any DNR office or write or call Wisconsin Department of Natural Resources, Bureau of Fisheries Management and Habitat Protection, P.O. Box 7921, Madison, WI 53707-7921, (608) 267-7498. Information is also posted on the web at **dnr.wi.gov/org/water/fhp/fish/advisories/Index.htm.**

Preparing Fatty Fish

Many contaminants, including PCBs and dioxin, concentrate in the fatty tissue of fish. Large, fatty fish, such as carp are more likely to have a higher con-taminant level than small, lean fish, such as perch.

Minimize the amount of fat-soluble contaminants by trimming away the fatty tissue as you clean your fish. Keep in mind that while PCBs accumulate in the fatty tissue of fish, mercury lodges in muscle tissue, the part you eat.



Reduce Fish Contamination

Mercury is released into the air by volcanoes and the decomposition of rocks and soil. Individuals can help reduce mercury that is released by coal-burning power plants by reducing their consumption of electricity. Shut down computers and pull the plug on "quick-start" appliances that continuously draw power, even when not in use. The price of fluorescent light bulbs has come down and the design has improved in recent years making energy conservation and mercury reduction as simple as changing a light bulb.

Mississippi River Mussels

Butterfly

Fat Pocketbook
Extirpated from the Upper Mississippi River

Higgins' eye Pearlymussel
Endangered

Pink Heelsplitter

Pistolgrip

Spectaclecase
Endangered

DEBORAH ROSE, MN-DNR

Threehorn Wartyback

Washboard
Species of Concern

Mussel Care

It's best to leave mussels alone. If you find one that has been disturbed, gently place it in the river bottom. Siphons for breathing are located in the long end near the hinge and should be above the substrate. The foot is in the shorter end opposite the hinge and should be embedded in the substrate a bit. Harvest or disturbance of native mussels on the nearby St. Croix National Scenic Riverway is prohibited.

Overlooked, stepped on and chucked around like rocks, the humble mussel is an unsung hero in river ecology. Dead or alive, mussel beds provide a reef-like habitat for insects, algae and other aquatic life making them a vital link in the food chain and the foundation for many species. While humans don't serve them up, raccoons, otters, muskrats, ducks and fish all dine on freshwater mussels.

Mussels filter and cleanse several gallons of water per day. They remain in one place for a long time collecting suspended particles. Biologists can measure the amount of certain pollutants trapped in mussels to help monitor water quality trends.

A drab appearance belies the opalescent shell lining and colorful, descriptive names ascribed to mussels tell stories of human experiences. The hunt for pearls took on Gold Rush proportions and led to the destruction of millions of mussels in the late 1800's. A second wave of exploitation soon followed with the shell button industry that thrived from 1889 to 1930, wiping out miles of mussel beds. Of the fifty-one known species of mussels existing in and native to Wisconsin, two are federally endangered, eleven are state endangered, seven are state threatened, and eight are special species of concern. Major threats to mussels include encrustation by invasive zebra mussels and habitat degradation due to dams, channelization, sedimentation, dredging, pollution, and loss of host fish species.

Many mussels depend on a specific species of fish to play host to tiny developing mussels, called glochidia (the larval stage). Construction of Lock and Dam 19 at Keokuk, Iowa prevented the skipjack herring from migrating upstream to host the ebony shell and elephant ear mussels. Both mussel populations declined dramatically and are now endangered. To reestablish and stabilize declining populations of the federally endangered Higgins' eye pearlymussel, biologists inoculate host fish with glochidia at hatcheries before stocking fish, cleanse native mussels of zebra mussels, and relocate adult mussels to habitats free of zebra mussels.

Several web sites provide detailed information and photo galleries of freshwater mussels of the Upper Mississippi River system. **www.nps.gov/miss/features/mussels/index.html, midwest.fws.gov/mussel/, and dnr.wi.gov/org/land/er/invertebrates/mussels/.** Consult the Department of Natural Resources for current mussel harvesting rules and regulations, **dnr.wi.gov.**

Aquatic Invasive Species

Several non-native species, like salmon and brown trout, were introduced into Wisconsin waters by resource managers and welcomed by anglers. Others, however, have become pests and are considered invasive. Invasive organisms overwhelm native species and "take over" a body of water or landscape. The lack of natural predators and the inability of native species to hold their ground against invasives allow them to explode in number. Once established, most invaders are difficult if not impossible to eliminate. Aquatic invasive species threaten the diversity and productivity of the Mississippi and St. Croix river systems by competing with native species for food and habitat. Invasive plants may also clog waterways making it difficult to boat or fish in infested areas.

Non-native–Exotic–Alien–Non-indigenous

No matter what you choose to call them, non-native species are plants and animals present in an ecosystem beyond their native range. Those that become "**invasive**" can threaten native species and interfere with commercial, agricultural, or recreational activities.

Understanding Invasives and Preventing their Spread

As the species descriptions on the following pages illustrate, aquatic invasive species have been introduced to Wisconsin in a number of different ways. However, once they are in our waters, everyone who boats or fishes has the potential to move these invaders to a new waterbody. The good news is that there are steps that we can take to help prevent their spread:

- **Inspect** and **remove** aquatic plants and animals from your boat and equipment,
- **Drain** water from your boat and equipment before leaving the boat landing,
- **Dispose** of unwanted live bait in the trash or share it with a fellow angler,
- **Rinse** your boat and equipment with high-pressure or hot water, **OR,**
- **Dry** your boat and equipment thoroughly for at least five days.

CAROLYN SCHOLL

ROBERT QUEEN

In addition to spreading the word about what boaters and anglers can do to prevent the spread of aquatic invasive species, natural resource managers are actively monitoring the Mississippi and St. Croix rivers to better understand where these species are found and what effect they are having. The National Park Service coordinates dives on the St. Croix River three times per year to gain a better understanding of zebra mussel numbers and locations.

Citizens are also encouraged to aid in monitoring efforts. Learn what these invasive species look like. If you think you have discovered a new infestation of an invasive plant or animal, report it to the DNR immediately.

In some cases, management decisions are made to protect native populations. To protect the upper St. Croix River and its native mussels from invasive zebra mussels, all boats heading north on the St. Croix are stopped at a National Park Service Check Station north of Stillwater. With very limited exceptions, boats are not allowed to continue further upstream. For information on this and other boating regulations on the St. Croix, visit **www.nps.gov/sacn/activities/boating.html** or call 715-483-3284.

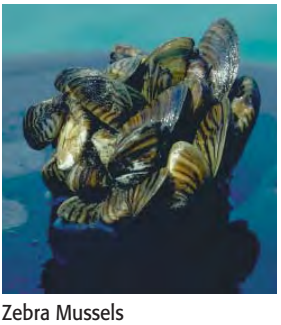
RICHARD HENDERSON

Purple Looseestrife

Lake to River—River to Lake

Historically, the Great Lakes and Mississippi River basins were separated by a continental divide. The Chicago River and nearby Calumet River flowed into Lake Michigan, while neighboring waters on the other side of the divide flowed into the Illinois River. More than a century ago, channels were built to move freight and people between the Illinois River and Lake Michigan, serving as a connection between two of the largest drainage basins in the United States. Ultimately, the direction of the rivers connected to these canals was changed to carry sewage away from the Lake Michigan, Chicago's drinking water source. This connection has allowed invasive species to move between basins. An electric barrier in the Chicago Ship and Sanitary Canal was activated in April 2002 to prevent fish from moving from one basin to the other.

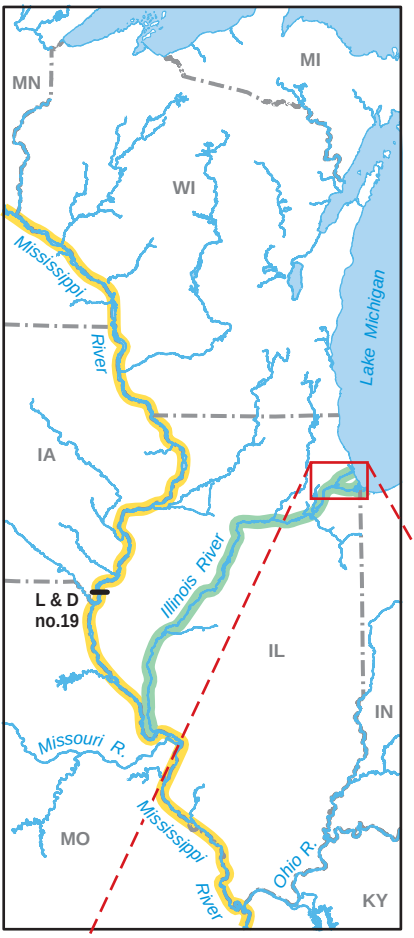
GREAT LAKES SEA GRANT NETWORK



Zebra Mussels

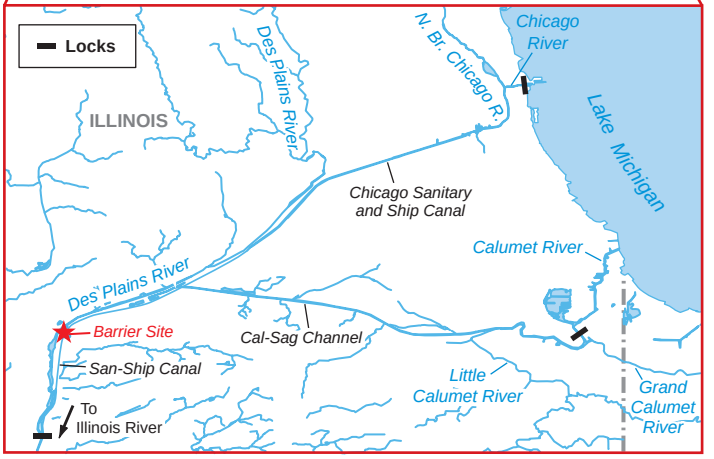
Inter-basin Travelers

Region of Interest



Zebra mussels and round gobies, introduced to the Great Lakes via ballast water, have moved inland. Many now fear that Asian carp species will be able to find their way into the Great Lakes using the Chicago Ship and Sanitary Canal, and threaten the multi-billion dollar fishery that the lakes currently support.

A Closer Look at Chicago Area Waterways



Infamous Aquatic Invasives!

J. ELLEN MARSDEN, ILLINOIS NATURAL HISTORY SURVEY

Zebra Mussels

Zebra mussels are hardy and prolific mollusks that clog water-intakes, encrust piers and docks, cause significant declines in native mussels, and may lead to increased plant growth. Zebra mussels are small filter feeders (adults are 1 to 2 inches in size) that strain the same plankton from the water that young native game fish depend on for food. Native to Eastern Europe and Western Asia, ocean-going vessels brought zebra mussels to Wisconsin by discharging ballast water that contained their larvae into Great Lakes ports. They were found in all of the Great Lakes by 1990 and have spread to more than 40 inland waters in Wisconsin. By 1991, the mussels had made their way into Pool 8 of the Mississippi River, carried by boats traveling inland from the Great Lakes via the Illinois River. As of 2004, their distribution included the entire Wisconsin portion of the Mississippi and extended up to Stillwater in the St Croix River.

DAVID JUDE, CENTER FOR GREAT LAKES AQUATIC SCIENCES (CGLAS)

Round goby

Round gobies are small (usually three to six inches long) fish that are becoming increasingly common along the Lake Michigan and Lake Superior shorelines. Like zebra mussels, they are native to Eastern Europe, and were introduced in ballast water from ships. They compete directly with native fish for food and habitat, in addition to preying upon their eggs and young. They also spawn several times per year and survive in poor water quality, making them tough competition for native fish. By June 2003, round gobies had moved inland and infested at least 50 miles of the Illinois Waterway, heading toward the Mississippi.

JEFF GUNDERSON, UNIVERSITY OF MINNESOTA SEA GRANT PROGRAM

Rusty crayfish

Rusty crayfish eat fish eggs and feed on aquatic vegetation, which deprives native fishes of food and cover. They also displace native crayfish. Rusty crayfish are found in at least 300 inland lakes and rivers in Wisconsin, including the Mississippi and St. Croix Rivers and their tributaries. They are native to the Ohio River drainage and were most likely spread to Wisconsin waters by anglers who dumped their bait buckets.

ROBERT COSGRIFF, ILLINOIS NATURAL HISTORY SURVEY

Black Carp

Black carp were brought into the country both accidentally with grass carp shipments and intentionally to control snails in the 1970's and 1980's. They escaped into the Osage River in Missouri and have not been found elsewhere, save one that was caught in a lake in southern Illinois in the summer of 2003. They eat mollusks and crustaceans, and may pose a risk to native populations of these animals.

Asian Carp species (black, grass, bighead, and silver carp) can reach at least 40 to 50 pounds in the United States!

JOHN LYONS, WISCONSIN DNR

Grass Carp

Grass carp were first introduced into southern states in the 1960's to control aquatic vegetation on fish farms. They spread through accidental and illegal, intentional releases. Grass carp have the potential to seriously disrupt the food web, as they can consume considerable amounts of aquatic vegetation that other organisms rely on for food and cover. As of 2004, there is no evidence of an established population upstream of Lock and Dam 19 on the Mississippi. However, a few strays have been reported as far north as Pool 4.

Did you know that **common carp** are also an invasive fish species? See page 57 for more information.

DAVID REICKS, UIUC/IL-IN SEA GRANT

Bighead Carp

Bighead and **silver carp** were first brought to the United States in the 1970's by Arkansas fish farmers to consume algae and improve water quality in fish production ponds. They escaped from fish farms, and began to appear in the southern Mississippi River in the 1980's. They have been moving north and are now present in large numbers below Lock and Dam 19 in Iowa. A bighead was caught in Pool 4 (Lake Pepin) in the fall of 2003. Both species are present in the Illinois River. As of fall 2003, both species were approximately 50 miles from Lake Michigan. They are large-bodied filter feeders that compete directly with native mussels, young fish, and some adult fish for food. There is great concern about their potential to affect Great Lakes, Mississippi River, and St. Croix River fish communities should they become established in Wisconsin waters. Both fish species are known to "jump" out of the water in response to boat motors!

Bighead and **silver carp** together now represent more than 90% of the fish biomass (fish by weight) in some Missouri rivers.

DAVID REICKS, UIUC/IL-IN SEA GRANT

Silver Carp

TED RITTER

Eurasian water-milfoil

Eurasian water-milfoil is an aquatic plant native to Europe and Asia. Its stem fragments cling to boats, motors and trailers and drift with currents to colonize new areas. These fragments can root and grow into new plants, allowing it to spread over long distances. Eurasian water-milfoil may form dense stands, crowding out native vegetation and creating mats so dense that game fish can't maneuver through them to snap up their prey. Eurasian water-milfoil is found in portions of the Mississippi River, the St. Croix River south of St. Croix Falls, and in more than 380 inland lakes in Wisconsin.

VIC RAMEY, UNIVERSITY OF FLORIDA

Curly-leaf pondweed

Curly-leaf pondweed is another invasive plant that is carried to new waterbodies on boats and trailers. Native to Europe and Asia, it was thought to have been accidentally introduced along with the common carp. This plant, with its characteristic wavy leaves, grows rapidly early in the spring (even under ice), and shades out native plants. Like Eurasian water-milfoil, it can form dense mats that make it tough to boat or swim. When curly-leaf pondweed dies back in mid-summer it releases nutrients, which can lead to algal blooms and other problems. It is found in portions of the Mississippi and upper St. Croix rivers and their tributaries, as well as an unknown number of inland lakes.

VIC RAMEY, UNIVERSITY OF FLORIDA

Purple loosestrife

Purple loosestrife was introduced from Europe as a garden plant, and its seeds were carried in the ballast holds of European ships. Gardeners and beekeepers have helped spread the plant. It invades wetlands, lake and river shorelines, and moist roadsides where it displaces native vegetation and reduces available habitat and food for wildlife. It spreads by seeds and by broken stems that root in moist soil. Purple loosestrife occupies many shorelines and backwaters along the Mississippi, and is still relatively uncommon on the St. Croix, though locally abundant at some lower river sites. It is found in some tributaries of both rivers and in lakes in those systems.

CORNELL UNIVERSITY

Galerucella beetle

Purple Loosestrife Control

Herbicide control works in small areas, but biological control is being used increasingly to combat purple loosestrife throughout Wisconsin. Galerucella beetles (often called by their nickname, Cella, pronounced "chella") selectively eat purple loosestrife. Cella beetles are being raised and released at heavily infested sites by interested citizens. For more information on the bio-control program call 608-221-6349.

River Management Agencies

BILL ENGFER

Management of the Mississippi River's natural resources often is accomplished through inter-agency cooperation. The stretch of the Mississippi River forming Wisconsin's western border is managed by several state and federal agencies with overlapping jurisdiction. The following phone numbers and addresses may be helpful:

Wisconsin Department of Natural Resources
La Crosse Service Center
3550 Mormon Coulee Road
La Crosse, WI 54601
608-785-9000
Web site: **dnr.wi.gov**

Minnesota Department of Natural Resources
Information Center
500 Lafayette Road
St. Paul, MN 55155-4040
1-888-646-6367
Web site: **dnr.state.mn.us**

Iowa Department of Natural Resources
Wallace State Office Building
502 East 9th Street
Des Moines, IA 50319-0034
515-281-5918
Web site: **iowadnr.com**

U.S. Fish and Wildlife Service
Upper Mississippi River National Wildlife and Fish Refuge
51 East 4th St., Room 101
Winona, MN 55987
507-452-4232
Web site: **midwest.fws.gov/uppermississippiriver**

U.S. Army Corps of Engineers, St. Paul District (Pools 3-10)
Public Affairs Office
190 Fifth Street East
St. Paul, MN 55101-1638
651-290-5200
Web site: **mvp.usace.army.mil**
For navigation charts visit the web site or call 651-290-5680

U.S. Army Corps of Engineers, Rock Island District (Pools 11-12)
Mississippi River Project
P.O. Box 534
Pleasant Valley, IA 52767
309-794-4524 or 563-582-0881
Web site: **mvr.usace.army.mil**

U.S. Coast Guard
Boating Safety Hotline
1-800-368-5647

U. S. Geological Survey
Upper Midwest Environmental Sciences Center
2630 Fanta Reed Road
La Crosse, WI 54603
608-783-6451
Web site: **umesc.usgs.gov**

Aquatic Resources Education

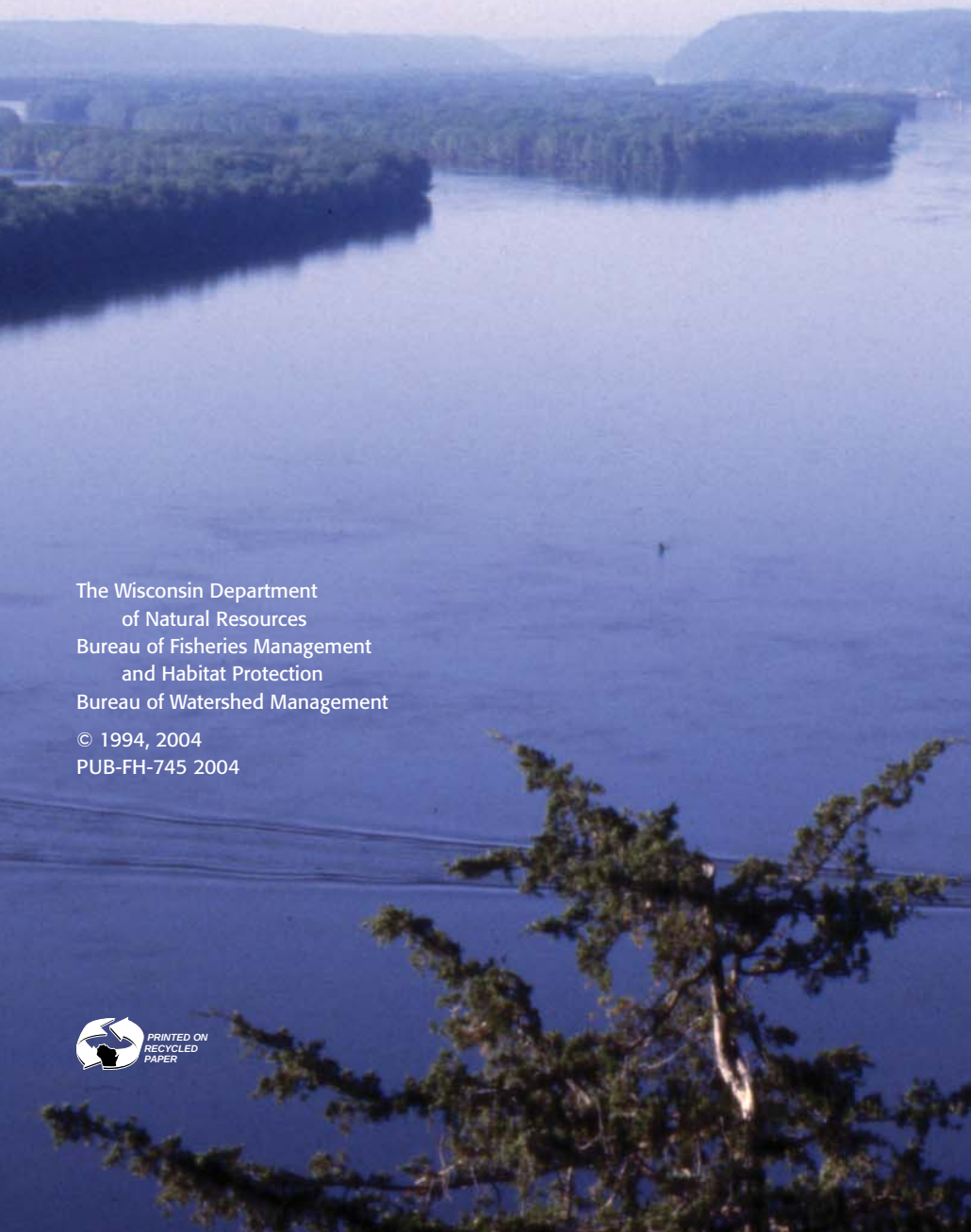
The Department of Natural Resources provides training to teachers, youth leaders and other adults who would like to introduce children to fishing. Materials and access to equipment appropriate for classroom and club use are also provided. Contact the Aquatic Resources Education Program office at 608/266-2272 or check out the website at **dnr.wi.gov/org/water/fhp/fish/pages/anglereducation/index.shtml.** Or just go to **dnr.wi.gov** and click your way to Angler Education.

This publication by the Wisconsin Department of Natural Resources is made possible through the Sport Fish Restoration Fund and the United States Fish and Wildlife Service.

Tips for Safe Boating

Pleasure boating on the Mississippi River is a popular pursuit. Marinas and boat launching areas catering to the pleasure boater line the river. Follow these general tips to keep this growing sport safe:

- Stay sober. It's the law!
- Never overload your boat.
- Stay in the channel between marker buoys.
- Watch out for other boaters.
- Give barges a wide berth, and do not cross in front of one. If your motor fails, a barge cannot stop suddenly to avoid you.
- Be courteous. A powerful wake (waves) from your boat could swamp a small craft. The law requires you to go slow in no-wake areas.
- Consult Wisconsin Boating Regulations (Publication LE-301) available from the Wisconsin Department of Natural Resources for more safety information.



The Wisconsin Department
of Natural Resources
Bureau of Fisheries Management
and Habitat Protection
Bureau of Watershed Management

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