



MinnAqua Moments with Fishing: Get in the Habitat!

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Minnesota DNR
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Taking Steps to Answer Your Needs

By Jenifer Matthees

In January, MinnAqua completed an evaluation looking at our current distribution methods of the *Fishing: Get in the Habitat!* Leaders Guide and whether you were using and seeing positive outcomes with your students. MinnAqua asked and you responded! We had a 30% response rate from our random sample of those who have received our guide.

We heard from you that equipment was a barrier. So we ran the Pay it Forward fishing package gift away. MinnAqua received 46 applications. We're also looking into other ways to assist you with equipment needs and will keep you posted on those efforts if/when they become available. If you are in the metro area you can check out loaner pole locations listed at <http://www.mndnr.gov/fishing/fn/activities.html> or fishing trunks, EnviroScope watershed models, aquatic exotic trunks and many other kits and resources by searching under browse resources at <http://www.seek.state.mn.us>

You also indicated in your response to the evaluation that you are using *Fishing: Get in the Habitat!* to supplement, enrich, or support what you are already teaching and that the topics motivate your students. Fantastic! MinnAqua would like to receive examples and testimonies of what you are doing by emailing Jenifer.Matthees@dnr.state.mn.us or your Specialists. Other educators have requested examples of how you are using the lessons and how you support and enrich your teaching by using the guide. Let us know and MinnAqua may highlight your examples and stories in our next issue.

MinnAqua also listened to educators when we designed the guide and created an in-depth appendix to the Guide including planning aids. Don't forget to look at your CD under Appendix for: 4-H project areas, Cub and Girl Scout badges, Academic Subjects and Skills Matrixes, Unit and Topic and Seasons Matrixes, Materials Master and Craft and Fishing Equipment Matrixes. MinnAqua wants to help empower you and create stewards of Minnesota's resources so we tried to make planning and implementing as easy as possible and you're letting us know it works.

Thanks for all you do!

Remember Us?

MinnAqua is sending you this newsletter because you have received the new leader's guide, *Fishing: Get in the Habitat!* either through a training workshop or you have requested information about the leaders guide. If you would like to be removed from our mailing list please let Jenifer Matthees know by contacting her at 651-259-5217 or jenifer.matthees@dnr.state.mn.us.





MinnAqua Training Workshops by Roland Sigurdson

The road to finding your Inner Fish!

You've got the CD! You've attended a *Fishing: Get in the Habitat!* workshop. You're feeling great about introducing your students to fishing this spring and summer.

And then it happens! The dreaded "What ifs" begin to enter your mind. What if they

ask me questions that I can't answer? What if these kids fish more than I do; what can I possibly teach them? You're not alone. Every educator has these feelings on occasion.

So how do you continue to provide that Ooo.....Ah.....Oh experience? How do you stay relevant? How do you continue to be excited about providing an aquatic education and fishing experience for the youth you serve? What feeds you?

How about attending an advanced MinnAqua workshop? Didn't know that we provided them? Well, we sure have the ability to do so, but we need your input to meet your needs.

What topics would you really like to know more about? What topics are your students incredibly interested in that you need more background before tackling the subject matter? What topics of interest can you add to this list?

- ✎ More angling skills
- ✎ Macroinvertebrate 101
- ✎ Advanced fish identification
- ✎ Using the Leader's Guide to teach fly fishing and fly tying, and ice fishing focused units.
- ✎ Using the lessons in the Leader's Guide to lead to Service-learning.
- ✎ Invasive aquatic fish and other invasive aquatic species

The MinnAqua staff is looking for your input on how we can best assist you in reaching your goals to become more effective at delivering aquatic and fishing education lessons.

If you have suggestions, please call or email Roland Sigurdson at 612-625-1291 or roland.sigurdson@dnr.state.mn.us



Check our website periodically for updates on the Leader's Guide and other MinnAqua activities.
www.mndnr.gov/minnaqua

Share your success for a chance to get \$700 in fishing equipment!

Thank you to educators across the State that are introducing students to the thrill of recreational angling. Many of you are also guiding your students in gaining valuable information on how we interact with our natural world and what responsibilities we have to conserve and sustain our natural resources.

Have you shared your success with others? Perhaps you've told co-workers about that kid in your scout troop or classroom that just wasn't engaged in learning until fishing became the topic of choice? Have you suggested to others that they would benefit from using the *Fishing: Get in the Habitat!* lesson plans? Maybe encouraged them to attend one of the workshops hosted by a MinnAqua Education Specialist?

We have a challenge for those of you that are at this juncture. MinnAqua is offering to provide you with a fishing package (worth over \$700 retail value) if you can bring together 10 – 30 educators to attend a MinnAqua workshop.

This package includes:

- ✎ 24 Rod/Reel combos
- ✎ 3 Rod Bags (holds 8 rods each)
- ✎ Tackle box (hooks, sinkers, bobbers, casting plugs)
- ✎ Safety Bag (first aid kit, throwable floating cushion, Life jacket)
- ✎ Fishing vest (Nail clipper, retractable lanyard, forceps, small tackle box, whistle)

These fishing packages are being offered to the first 8 educators who successfully host a MinnAqua workshop. We will teach it. You find the location and recruit 10 -30 people to be part of the workshop (4 in the metro, 2 in Northern MN, 2 in Southern MN).

If you are interested in sharing your success with other enthusiastic educators, contact the MinnAqua Education Specialist in your area to let them know that you are working toward organizing a workshop and get the date on their calendar.

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Species Profile** - Close-up on the Northern Pike

By Michelle Kelly

Northern pike: *Esox lucius*

Esox = pike (Latin); *lucius* = Latin name for this species that may refer to "wolf"

The northern pike is large, easy to catch, and good to eat. The fishing season for northern pike coincides with the season for walleye and sauger and started this year on May 9th and runs through February 28, 2010.

This widely distributed fish is found throughout Minnesota in lakes, ponds and rivers, most often around aquatic vegetation in quiet slow-moving water. It prefers 60-65 degree F water, ranges widely throughout its habitat. They tolerate a range of temperatures and prefer clearer water but can tolerate some turbidity. Other common names are pike, northern, jack, snake pickerel, and hammer handle.

Identification

The northern pike is stream-lined - long, slender but muscular, and torpedo-shaped with greenish body coloration on the top and sides, and very light or white coloration on the underside. It has a characteristic duck-billed shaped snout with a large mouth and tongue and palate lined with hundreds of backward-slanting teeth to grip, while long teeth in the lower jaw pierce. The northern pike's one-part dorsal fin has no sharp spines and is located along the top of the fish close to the tail. Young northern pikes have light bars on their darker greenish colored bodies. On the adults, these light colored bars break in to irregular spots. Northern pike have an especially slimy body, which reduces friction as this predator accelerates through the water.

Muskellunge, a larger relative, can be difficult to distinguish from northern pike. However, the muskie has darker markings on a lighter colored body. The V-shaped tail of the northern is less deeply pronounced than that of the muskie. The underside of the jaw of the northern has five or fewer openings or pores on each side, whereas the underside of the muskie's jaw has a total of 11 to 18 pores.

In Minnesota, northern pikes ranging from 2lbs-15lbs are fairly common, and can grow to over four feet in length. The average size is about 2 to 5 pounds. The MN state record for a northern pike caught on a hook and line is 45 pounds, 12 ounces, length n/a, from Basswood Lake (Lake County), 05/16/1929.



Handling

Take special care in handling any fish you intend to release. In deep water, if possible, bring the fish up slowly to prevent stress from changes in water temperature and pressure.

Keep the fish in the water as much as possible. Don't let it flop around, even a little water under a thrashing fish protects it. More times than not, the hook can be removed while leaving the fish



in the water. If necessary, use a net to lift larger, heavier fish out of the water. Nets, if used, should be made of soft nylon or cotton. Attempt to remove the hook while leaving the net and fish in the water. Because of the rows of sharp teeth, take special care when handling a northern pike, keeping fingers well away from the fish's mouth. Remove hooks quickly with long-nosed pliers, not your fingers. If a hook is deeply set, cut the line and leave the hook in place.

You may want to take a photo of your catch. Remember to handle the fish gently - keep your hands wet to protect the slime covering. Never put your fingers in the gills or eyes to lift or hold the fish. This is an older method that assuredly will cause damage and in most cases will kill the fish. Always hold a fish horizontally. Holding vertically places stress on the vertebrae. After your photo, release the fish gently back into the water. Never release a fish that has been held on a stringer, once on the stringer, it is part of your possession limit. Culling fish and live well sorting is illegal.

Food

The northern pike is a carnivorous lie-in-wait predator and a daytime feeder. Its diet consists mostly of other fishes but a northern will pursue any living thing up to a third its body length that will go down its throat: ducks, mice, rats, frogs, snakes, crayfish, and nearly all fishes, including other pikes. Adult northern pikes do have a special fondness for 4" - 15" suckers and yellow perch. Northern pikes will often stalk their prey from below before gulping it down, much like an alligator.



Reproduction

In late winter or early spring, adult pike migrate into shallower tributary streams, flooded grassy lowlands, or shallows of lakes to spawn in April and May when water temperatures are around 40-50 degrees. No nest is constructed. The females look for vegetation and randomly release or spread between 15,000 and 75,000 eggs which are fertilized by 1-5 males. Once the sticky eggs are released and fertilized by the males they adhere to the vegetation. After spawning the adults return to deeper water.

The eggs hatch after about ten days to two weeks. Once the fry (newborns) have used up their egg sac they begin to feed on phytoplankton and aquatic insects and soon will switch to other small fishes. The fry stay in their spawning areas until they're about two to three inches long. Then they move to deeper water.

Lesson 1:3 - Run For Your Life Cycle allows students to role-play being a northern pike starting as an egg and trying to survive to spawn as an adult.

Continued on Page 4

Featured Lesson - Lesson 5:5 - Flashy Fish Catchers

by Scott Moeller

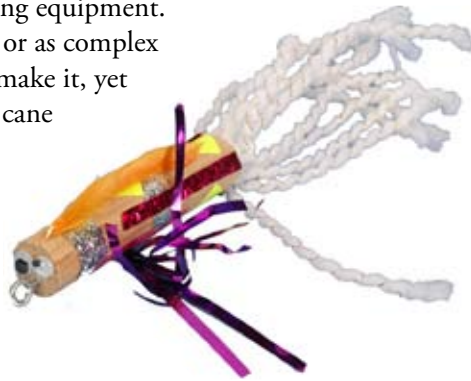
Chapter 5 of the *Fishing: Get in the Habitat!* Leader's Guide contains seven of the 39 lessons, all of which pertain to the proper use of fishing equipment.

Fishing can be as simple or as complex as the angler chooses to make it, yet even the angler with the cane pole, hook and bobber must have some basic understanding of how fish perceive their environment and what attracts them.

This chapter focuses

on how fish are attracted to color, movement and vibration, and gives

students an opportunity to design their own unique fishing lure based on this knowledge. **Lesson 5:5 – Flashy Fish Catchers** is a great lesson that cuts across subjects like biology, physics and art, and lets students express their creativity with a fun, hands-on project that can be displayed or taken home.



Lesson Summary – *Using their knowledge of fish senses, students design their own fishing lures for a selected target fish species and the water conditions that allow lures to work most effectively.*

Tips & Tricks

- ✎ This lesson has many small craft materials associated with it. Keeping materials in small plastic reusable plastic containers with snap-on lids helps keep materials organized and when doing this outdoors, the containers help prevent materials from blowing away on windy days.
- ✎ Having each participant use a paper plate to work on also helps keep materials organized. Participants can go to where the materials are kept and place what they need on their plate and return to their work area to assemble their flashy fish catchers.
- ✎ Pipe cleaners are excellent for holding down materials such as feathers, felt, and fabric once they are glued onto the wooden dowel. The pipe-cleaners can remain on the dowel once the glue dries or be removed (most participants want to keep the pipe cleaners on as part of their creation).
- ✎ Some stores, such as Ax Man in the twin cities sells bulk paper with a sticky backing in metallic colors. This paper is excellent for this project. The paper is easily cut into smaller pieces by the participants and can be used to hold down items like feathers, felt, and fabric. Contact paper can also be useful for holding down materials while the glue dries.
- ✎ Keep a garbage bag handy near the area where the participants are working. If you are working outside, be sure to have the students demonstrate their stewardship skills by picking up any materials that may have fallen on the ground or blown off the tables during their assembly time.

Diving Deeper

There are many ways to extend this lesson that the students may want to try. Fill up a pool and let students observe how their lures move through the water (if you have used waterproof glue), ask how lures could be modified to obtain certain movements, try pre-made lures to watch how they move, etc. Students may even show interest in actually fishing with their lures. To create additional art and language arts components, ask students to design an ad campaign to market their lure to anglers, focusing on the features of the lure that attract fish.

MinnAqua Lesson Connections

This lesson can be used as a supplement to, or extension of, **Lesson 2:1 – Fish Sense**. In Lesson 2:1, students learn about the various sensory adaptations that help fish detect such environmental cues as vibration, color and movement. In addition, many of the materials used in this lesson can also be used in **Lesson 1:1 – Design a Habitat**

Species Profile Continued from Page 3

Predators

Of course, young pike start out quite small and are eaten by pretty much everything that eats fish, including bigger fish, snakes, otters, a wide variety of birds (e.g., herons, mergansers, loons, ospreys, kingfishers), turtles, dragonfly nymphs, etc. As they grow (if they survive, that is), their predator pool shrinks accordingly. Large pike sometimes eat smaller pike. Adult pike, which reach over four feet in length and are accomplished predators themselves, have no significant predators other than humans.

Tackle

Since it is such a voracious feeder, the northern pike is exciting to catch and will readily attack all manner of lures, especially larger plugs and spoons. It will take minnows fished on bobbers and under the ice. Don't forget a steel leader for larger pikes or you will likely lose your lure as those sharp teeth will easily cut through your mono-filament line. The best fishing technique for pikes is casting or trolling around beds of aquatic vegetation and stumps in shallow water, where they stalk their prey.

Preparation for Cooking

You need a good, sharp fillet knife to get the fish ready for the frying pan. Removing pike bones is not a fine art and the prep is not much different from filleting any other fish. You will need an extra step or two to remove the Y bones. You can find many resources including step-by-step videos on-line for cleaning, filleting and deboning pike.

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Book Reviews* - Fishing Equipment & Skills

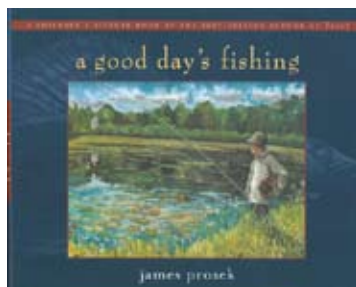
by Nadine Meyer

a good day's fishing, 2004

by James Prosek

Grades: PreK-3 ISBN: 0689853270

A beautifully and accurately illustrated book with simple text that describes different fishing lures and what types of fish a young boy caught with each lure. The story also goes into other types of tackle that may be used for fishing and ends with a simple safety message.



Available in hardcover.

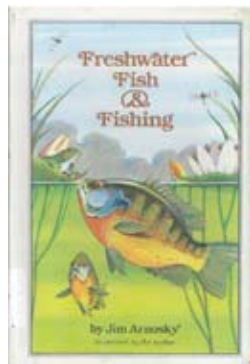
Freshwater Fish & Fishing, 1982

By Jim Arnosky

Grades: 3-6 ISBN: 0027058506

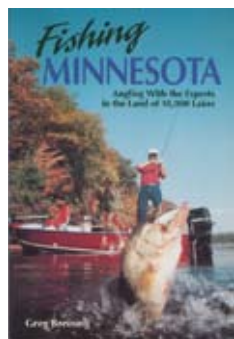
This accurately illustrated book about freshwater fish and fishing skills provides hands on activities and excellent information on where to find fish.

Not in print, can be purchased used, as hardcover or paperback.



Fishing Minnesota, Angling with the Experts in the Land of 10,000 Lakes, 1993, 2003 by Greg Breining

Grades: 6-12 ISBN: 1559711507



Using real-life narratives, this book engages novice and experienced anglers in the joy of fishing throughout the variety of lakes and rivers found in Minnesota. The author artfully describes the how-to without making this a how-to manual, transporting the reader onto the actual body of water and seeing the thought process of picking the right location and fishing equipment to catch the fish you desire. This book

also brings in the history of fishing and describes how fishing techniques evolved over time.

2003 edition available in paperback, 1993 edition available used.

**Book reviews are provided as an educational service and are not an endorsement by the MN Department of Natural Resources.*

Fishing Equipment & Tips

Lured In

by Scott Moeller

Sometimes there are just too many choices in life, and nowhere is this truer than the fishing lure aisle at the sporting goods store. The dizzying array of rainbow-hued “spinners,” “poppers,” “chuggers” and “buzzers” can easily leave you confused and frustrated.

So, for those indecisive-types who have ever been overwhelmed by the diversity of lures and reduced to gentle sobbing in a fetal position behind the bargain bin, here are some tips for keeping it simple in the lure aisle.

When it comes to deciding on the right lure, there are really only a handful of basic lure types:

- ✎ **Jigs** – Sometimes called a “jighead,” a jig is simply a weight with a hook molded into it. The round weight usually has eyespots, and a tail of feathers, plastic or hair to make the jig resemble an insect or small fish.
- ✎ **Plastic worms** – A plastic or rubber version of the real thing, often infused with a chemical that gives the lure an attractive smell or taste (to the fish). Slide it onto a hook or jig, and you’re ready to go.
- ✎ **Spinners** – Standard spinners, weight-forward spinners and spinnerbaits are all different versions of a similar idea. All spinners consist of one or two shiny metal blades that spin around a shaft as the lure is pulled through the water. The spinning blades produce flashes and vibrations that the fish can see, feel and hear.
- ✎ **Spoons** – A spoon is a single, curved metal blade that wobbles as it is pulled through the water. Usually shiny on one side and colorful on the other, a spoon imitates the shape, movement and colorful flashing of a small fish.
- ✎ **Plugs** – “Plug” is a very generic term for any lure that looks like a small baitfish with hooks attached. There are many different kinds. Diving plugs (called “crankbaits”) usually have a plastic lip that causes them to dive and wiggle as they are pulled along beneath the water. Surface plugs float on the water’s surface. “Poppers” and “chuggers” are surface plugs with a concave front that makes a sound and splash when the lure is twitched across the water.

Plastic worms, jigs, spinners and surface plugs are all good for a variety of species, provided you get an appropriate size. Spoons and diving plugs are good for catching larger predatory fish like northern pike, muskie, walleye and bass.

As you make your selection(s), remember to keep it simple. Instead of getting ***lured in*** and buying an arm load of lures and filling your tackle box, consider the fish you’ll be going after and get only the lures that are appropriate. **Lesson 5:4 - Tackling Your Tackle Box** provides an engaging hands-on activity to help you learn about appropriate tackle for different species of fish.

Remember that Henry David Thoreau said: *“Simplify, simplify, simplify.”* (Although it seems like it would have been simpler to have just said it once.) Happy fishing!

Community Connections - Crow River Trail Guards Fall Fishing Day

by Michelle Kelly

Crow River Trail Guards, Inc. is a self-funded private youth organization started in 1992 by Paynesville, MN resident Tom Koshiol. The original intention of building a local trail system to promote environmental awareness through positive outdoor exposure evolved into a program that now serves an average of 50 youths each season, and also provides a wholesome service to the community.

Since 1992, the Crow River Trail Guards has been building and maintaining a park along the North Fork of the Crow River on 12 acres of city-owned land within the city limits of Paynesville. Long neglected and misused, the site is being restored as the Crow River Nature Park. Trail Guard members, ages 8 to 19, work at the park every Saturday morning, April through October, ending each work session with a group noon lunch. Work points are earned to be redeemed on "Outdoor Adventure Rewards", a series of exciting outdoor activities designed for personal growth in a nature setting. These trips are provided at no cost to the participating youths, making them available to virtually any kid willing to earn his or her points at the park.

The "Outdoor Adventure Rewards" points can be redeemed towards a 5-day summer BWCA Wilderness trip that impacts kids in life-changing ways. Or, points can be redeemed for the annual whitewater rafting trip near Carlton, MN, which is always an exciting and challenging adventure that opens a door to another unforgettable outdoor experience for many young Trail Guards. Or, they can attend the annual canoe and kayak Picnic Cruise.



Michelle Kelly, MinnAqua Specialist, preparing the Crow Wing Crossing Guards for fishing

the MinnAqua **Fishing: Get in the Habitat!** Leaders Guide and catch and release fishing by Trail Guards of all ages is followed by the traditional group meal back at the Nature Park. Trail Guards like to eat! In addition to the food, nourishing bonding time is provided as the group comes together after working and/or playing together.

"This past Saturday morning (Sept. 20, 2008) was another one of those at Nature Park that just didn't have to end", reported Tom Koshiol, founder of the Crow River Trail Guards. "The weather was perfect, we had a great program for some great kids, and the fish were biting."

The youth learn all about fish characteristics, species, and families, demonstration that

and have a great knot tying is easy to follow and do.

Then they load head to the kids lead pan fishing. by the All fish day.

a bus from the Nature Park and five-mile bridge, where Trail Guards the way into a very successful morning of Sunfish, plenty of crappies and perch are caught youth, with some catching enough to lose count. caught are promptly released to be caught another

Thanks, for this past year's event, goes to MinnAqua and the other adult fishing experts and fish line detanglers, and to a great group of kids who help make this annual fishing day a great success. And thanks to all the Trail Guards for picking up every last scrap of trash and litter under both ends of the bridge before heading back to the park for lunch.

The 11th Crow River Trail Guards Fall Fishing Day was funded by a generous donation from the Minnesota Anglers and Dark House Association.

How did the Trail Guards evolve?

It all grew out of the State of Minnesota "Clean The River" program. The City of Paynesville participated in this program during the late 80's and early 90's, and when Tom Koshiol took over, he proposed to the city to begin a trail system along the North Fork of the Crow River, which runs along the north edge of town. The city owned a 12 acre parcel of that river bottom area, and that was to be the trail head.

In the spring of 1992, volunteers began clearing trails, and a stairway and footbridge were constructed with funds solicited from local service organizations. Kids seemed naturally drawn to the area, and to the ongoing activities, so Tom decided to put them to work. They asked to be trail guides, and guide folks along the new trails. Tom said they really needed 'trail guards' to guard the new trails from vandals and troublemakers.

The Trail Guards was really born then and there. A local business offered to provide T-shirts, and soon a growing number of kids began to meet at the new "nature park" to work under Tom's direction.

Now, after many years, they are a non-profit incorporated private youth group with a proud legacy of hundreds of young participants. About 50 kids are involved annually, 30 or so on a pretty regular basis. Paynesville kids (and now young adults, too) are personally invested in this special place, and Nature Park experiences virtually no vandalism, in sharp contrast to the other parks and playgrounds in the area.

Visit the Crow River Trail Guards website at:
<http://www.trailguards.org/index.html>

Piers & Places - Fishing Minnesota's Rivers

by Roland Sigurdson

Bigfork-Blue Earth-Buffalo-Cannon-Cedar-Chippewa-Clearwater-Cloquet-Cottonwood-Crow-Des Moines-Grand Marais-Kettle-Lac qui Parle-Le Sueur-Littlefork-Long Prairie-Marsh-Minnehaha-Minnesota-Mississippi-Mustinka-Nemadji-Otter Tail-Pine-Pomme de Terre-Rainy-Rapid-Red River of the North-Redeye-Redwood-Rock-Root-Roseau-Rum-Sand Hill-Sauk-Snake-St. Croix-St. Louis-Tamarac-Thief-Two Rivers-Vermilion-Watonwan-Wild Rice-Yellow Medicine-Zumbro

Rivers! Places of amazing power, mystical stories, tranquil beauty, and HUGE fish!

The rivers of Minnesota have always been a mix of fascination, amazement and a healthy bit of trepidation. For years growing up in East Central Minnesota our youth group would make an annual voyage by canoe down the St. Croix River from the Hwy 70 bridge down to Wild River State Park. I have wonderful memories of those trips including a few sore muscles, nearly edible camp food and wrinkly skin from hours playing in the water.

As I got older, I also discovered the amazing diversity of fishes that live in our rivers. They range in size from our smallest fish, the least darter, to the gigantic lake sturgeon. I have spent many wonderful hours along the shores of countless rivers across our state. From pristine, backwoods trout streams along the north shore of Lake Superior to the urbanized, sandy banks of the mighty Mississippi River in the Twin Cities a person can find a new and wonderful ecosystem often ignored by others.

For many Minnesota anglers, rivers are places that you go over on a bridge while driving your car to your favorite fishing hole. That's really too bad since rivers offer some of the best and most exciting fishing in our state. While not all rivers contain the same species of fish, they do have one thing in common; you never know what the next cast will catch. I often tell people that I'm disappointed if I don't catch six different species while fishing the larger rivers. There are so many kinds! Redhorse sucker, lake sturgeon, channel catfish, freshwater drum (aka sheepshead), walleye, sauger, white bass, common carp, shovelnose sturgeon, quillback, northern pike, highfin carpsucker, smallmouth bass, muskellunge, flathead catfish, mooneye, and maybe even an American eel.

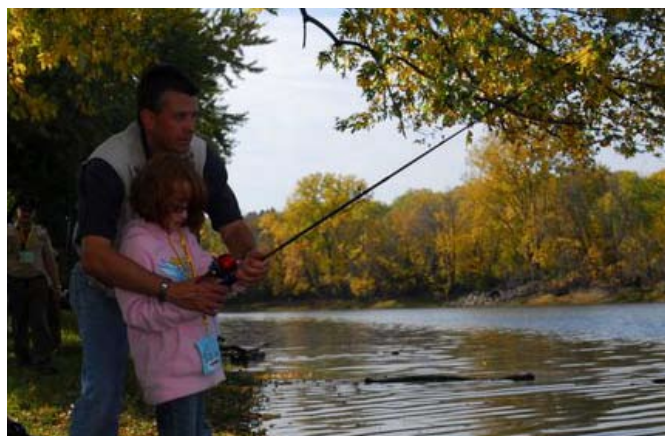
Location

Where can you fish? The Minnesota Dept. of Natural Resources website says we have approximately 69,200 miles of natural rivers & streams (also called creeks), so there is a pretty good chance you

are closer than you think to a new adventure. Parks along rivers and streams are great places to start.

Equipment

The equipment for river fishing is much the same as for the lake. For beginners, I suggest a hook, large sinker and some worms. Fishing on the bottom is the most effective way to get fish in the river since most of them are searching for food floating downstream. You will get caught on rocks, logs, branches and this will require breaking off the line and attaching new terminal tackle. We suggest using lead-free weights to avoid adding toxic lead to the environment. A great resource for beginners is the book *Fishing for Buffalo: A Guide to the Pursuit, Lore and Cuisine of Buffalo, Carp, Mooneye, Gar and Other "Rough Fish"* by Rob Buffler and Tom Dickson often found in your local library. Inviting a local river angler to join your group is great way to get some pointers for you and your group.



Roland Sigurdson, MinnAqua Specialist river fishing with youth.

Safety

After 11 years working with groups that want to introduce kids to fishing, I have learned a bit about why educators are often skeptical taking kids to the river to fish. While one does need to be careful while river fishing, I don't find that the rules of safety are any different than taking kids to a lake.

Here are a few guidelines for river fishing taken from **Lesson 6:1 - Safety and Fishing at the Water's Edge.**

1. A 'no feet in the water' rule is the first thing that helps create a safe situation.
2. Water near dams and reservoir releases can be deep, with strong and unpredictable currents. Avoid choosing these areas as fishing spots.
3. Don't take your students fishing during high water times (spring run-off, after major rain events). Check with your local water safety patrol regarding water levels.
4. If fishing on a river or stream, position an adult downstream from the group to mark a boundary and aid in rescue if someone should fall in upstream. This person should always have a floatable boat cushion or ring attached to a rope with them in the case of an emergency.
5. High, steep banks should be avoided. Fish only on low banks that gently slope to the water access/fishing site.
6. Whenever possible keep clear of muddy or slippery footing.

While we all need to have respect for the power of moving water, we only need to fear it if we leave our safety rules behind. The incredible fishing and other wildlife the live on, in or near our rivers and streams make them excellent places to get kids outside and introduce them to fishing.

School Spotlight - Lakeaires Elementary, White Bear Lake

Collaborating with MinnAqua for the Governor's Fishing Opener

by Jenifer Matthees

Most students look forward to May as the wrap up of their school year, but this year May took on a whole new meaning for Lakeaires Elementary in White Bear Lake. Students from Laura Bege's, Kelly Humphrey's, and Jennifer Kiesling's second grade classes were highlighted at the 61st Annual Governors Fishing Opener, with opening ceremonies on May 8th. The seventy-two students completed 14 MinnAqua *Fishing: Get in the Habitat!* lessons before their field day to Lions Park on White Bear Lake. "The students loved every lesson and I had so much fun teaching them. The kids are so pumped about learning!" expressed Laura Bege, Lakeaires second grade teacher.

The students spent the morning at Lion's Park planting a shore land restoration site, refreshing their fish identification skills at the live aquarium tank, practicing casting, and learning safety at the water's edge. Governor Tim Pawlenty stopped by to spend time with the students and take part in the field activities. They completed their day pier fishing on White Bear Lake where they caught bluegill. The students wrapped up their year with a classroom visit from a pro musky fisherman and completing one more MinnAqua *Fishing: Get in the Habitat!* lesson.

MinnAqua would like to say thank you to John Hiebert, Heather Baird, Lindy Ekola, Jim Levitt, Sean Sisler, Tim Ohmann, Fishing in the Neighborhood, TJ DeBates, Dirk Peterson, Harland Heimstra, Jerry Johnson, James Stone, Pete Takash and all of the parents and chaperones from Lakeaires Elementary that volunteered their time to this event.



Photos from top right:

Michelle Kelly, MinnAqua Specialist teaching **Lesson 5:2 - Casting a Closed-face Rod & Reel Combo**; Roland Sigurdson, MinnAqua Specialist teaching **Lesson 1:3 - Run for Your Life Cycle**; Youth participants drilling holes in the soil for aquatic plant plugs as part of a shoreline restoration project; Youth participants and adult volunteers fishing at White Bear Lake

Reality Fishing?

Channel surfing for an outdoor fishing show, I ended up watching reality fishing. Or should I say, fairy-land fishing. Pictured were big boats, big motors, expensive gear and big fish. Is this the authentic world of fishing? I think not!

I observed very few boats videoed with less than a 60 horse on the transom. Most had 150 to even 250 horses to match the flashy imposing sized fiberglass fishing machines. All the bell and whistles you can think of were attached in all the right places. Is this the real life of fishing now days?

And yet, while carefully watching many crafts from the past this past summer with 25 horses and 12 foot of beat-up aluminum for a boat, the anglers from these relics were having hey-days. The boat operators knew that positioning and mastering the finer points of boat control on the structure were more important than the style of boat they occupied. Or they flat out didn't care because time spent with family and friends was more important. Reality, I think so!

Those fancy rigs had plenty of fishing gear aboard, too. The cost of rods, reels, tackle, bait, gas and oil are staggering, but doesn't need to be.



Youth from Lakeaires Elementary School, White Bear Lake, MN fishing with a closed-face rod & reel combo.

However, purchasing cheap outdoor gear will not help in keeping that investment in outdoor equipment to a minimum. You'll just end up buying a more durable set-up to replace it, where you could have procured decent gear in the first place and saved yourself a considerable amount of money, time and peace of mind. Your best bet is to get the most reasonably-priced gear you can afford right from the start. Youngsters need quality products

that hold up to punishment, are appropriately sized for their age and the size of the fish being pursued. If my past experiences have taught me anything, you get what you pay for.

That brings me to the topic of big fish. Remember that TV is not reality. Many of fishing shows take days and even weeks to capture all the necessary footage required for 22 minutes outdoor entertainment. Yes, they are experts in angling and yes, they have all the new technological advancements in electronics and yes, they know all the right people to clue them in on the big ones at the right time of year; but the reality is they probably caught a ton of small fish before finding the big ones. To put into perspective, they have days upon weeks to fish, while we have hours to accomplish the same feats.

I am not saying that you should sell all your outdoor gear and roll back the calendar to years gone by. I am recommending you take those leaps of modern technology and products in mini-steps. Hooking youths and adults on a simple approach to fishing and outdoor life style should be your goal before you make the jump to tournament angling and fancy boats. We accomplish our objective by time spent with family and friends while catching some fish and releasing more.

This summer, spend some *real* simple time on the water with friends and family and live the genuine outdoor life!

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There are many tasty recipes for cooking pike. Try cooking outdoors over a fire, in the kitchen in a fry pan - wrap it, stuff it, or roll it in beaten eggs and cracker crumbs. The real secret is to eat smaller pike and cook the fish while it is fresh. The flesh of northern pike can get a slight grainy texture after being frozen. The chunky, flaky white meat of freshly cooked pike is as delectable as that other Minnesota fish, the walleye!

Fun Facts

- ☞ Northern pike are one of the fastest growing freshwater fish. They can live for more than 20 years.
- ☞ Even a blind pike can catch fish, using its lateral-line sense alone to detect swimming vibrations.

***Species highlighted in this section will be aquatic (fish, plants or bugs) or semi-aquatic in the case of shoreline plants. We'll try to rotate through the various fauna and flora of our aquatic ecosystems in order to help you to become familiar with some amazing organisms from our state!!*

