

COVID-19 Related Response



Activity of the Week : Week 2 My Favorite Fish Project for Open Water

Fishing in North Dakota is probably the most available outdoor sport adventure available to North Dakota residents. Fishing lends itself to great participation by being free to access in most situations and the season is open all year. Tackle can be as simple and inexpensive as a hook and weight on 30 feet of line tied to a pop can. Fishing doesn't take great athletic skill and ages young and old find it easy wet a line in open water or through winter ice.

There is a variety of fish species living on North Dakota. Many species have a dedicated group of anglers that pursue them but probably the most popular is walleye and yellow perch. Valued for their great taste, they are present in most bodies of water in the state.

In this project, there are many activities that one can find to learn more about fish and fishing no matter your age. The activity requires you to research the favorite fish species, the lake, the location, and strategy to catch the fish. Also, there are a couple projects that can be completed to increase enjoyment in the hobby.

Begin the Research

What fish is the favorite? Do you have a nearby lake that has fish you like to catch? Is it the fish in the lake where you have a cabin? Many people like to catch whatever fish is biting, is challenging to find or a species that fights hard. The most common fish we catch for eating are catfish, walleye, yellow perch and crappies. Fish considered to fight well are musky, northern pike, large and smallmouth bass, and carp. The "Fish Detective" sheet will help you learn about your favorite fish.

1. Fish Behavior

- a. Spring time major fish event is spawning. Each spring fish begin moving to positions in the body of water related to spawning. Most fish species spawn at specific water temperature and will be in a location that promotes survival of their eggs when the water reaches that temperature. Some fish such as bluegills and largemouth bass build nests and protect them. Others spawn on shallow vegetation or gravel areas and return to main lake afterwards.
- b. With ice break up, fish move shallow and to running water. The shallow water warms more quickly and is oxygenated making it a better environment than the deep cold water of the main lake. If the favorite fish is in a pond, they will be found in shallows close to shore in the warmest area of the pond. This may be the north shoreline in early spring
- c. Fish will feed aggressively before and after spawning. It should be part of your plan to learn your favorite fish behavior to take advantage of these times. The chart indicates the range of temperature that common fish in North Dakota spawn.
- d. What do fish do after spawning? Fish use the shallows of the lake as long as water temperature and oxygen levels remain comfortable for them. They feed on minnows, insects, and crustaceans. Fishing piers, bridges, river dams and shorelines at this time of year can be very good fishing. As the water warms, fish metabolism increases and they must feed more frequently. Fish also seek different areas of comfort. Bass remain in shallow warm water throughout much of summer while other fish such as northern pike prefer cooler depths of the main lake. Generally, shore fishing is done when there are too many weeds to fish the area.
- e. In midsummer, many fish like walleye and crappie are located in or near the deepest water in the lake. This will mean fishing from a boat. Good locations are humps with weeds or rocks, weed edges, flooded trees, or rockpiles in the main basin. Points that extend into the main basin can also have fish. Fish will be wherever they can find food and comfort.
- f. Some panfish and bass will remain shallow if the lake has shoreline cover that offers shade. Some great success on bass and sunfish can be had by fishing underneath trees that overhang the shoreline. Lilly pads or clumps of cabbage weed are good hiding places. In North Dakota, milfoil weed edges exist in many lakes. Of course, the water needs to be deep enough to fish and fish the shady side of the weed line.

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Species	Temp (F)
Bass, Largemouth	68-72
Bass, Smallmouth	59-60
Bass, White	45-48
Bluegill	70-75
Catfish, Blue	70-75
Catfish, Channel	70-75
Crappie, Black	75-80
Crappie, White	62-68
Musky	60-65
Paddlefish	49-59
Sauger	50-55
Sunfish, Green	40-45
Sunfish, Redear	75-86
Trout, Brown	68-75
Trout, Rainbow	47-52
Walleye	50-55
Carp	75-80
Bullhead	70-75
Northern Pike	39-45

2. Be a Weather Watcher

- a. Weather plays a role in the activity of fish. Generally, bright cool sunny cloudless days after a rain or snow system may produce very poor fishing success. Cloudy or windy days before a rain system can produce fish activity. Anglers can seldom choose their weather for fishing, so a good time to go is anytime. A rising or falling barometric pressure can produce good fishing results.

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3. Fishing Strategy

Lures and bait for fish depend on the species. All fish will prefer certain prey available in their lake or river. What lure or bait does your favorite fish prefer? What colors of the lure are recommended?

- a. The simple hook, line and sinker has caught many fish throughout history. Most any fish will take bait off the bottom of the lake in the spring of the year. While it is a simple form of fishing, it can catch nearly any fish that swims. Northern Pike will eat big minnow baits like smelt. Walleye and catfish prefer minnows, crawlers, or leeches.

Another effective live bait strategy is bobber fishing. A bare hook with a ¼ ounce split shot weight about one foot above the hook, with a small bobber is the standard rig. Bait it with a minnow in winter or early spring, a leech or crawler in summer will prove to catch fish. The bobber should be big enough to hold the bait off the bottom but not so large that the fish has a difficult time pulling it under. Split shot weights added as necessary to balance the bobber.

- b. A jig casted is also an effective presentation from shore or a boat. The smallest jig that can be casted should be used so that the fish can inhale the bait more easily. A 1/16 ounce jig works well for casting for smaller fish and ¼ ounce for large fish. Color choice is often considered for different species. Colors of white, chartreuse, orange, and pink are good universal colors to start with.
- c. Match the hatch is often said about choosing fishing lures and catching strategy. As an example, walleyes and northern pike are common predator fish in most lakes. If the lake has minnows, perch, bullheads, or carp, any of these young fish can be food for them. A plug (crankbait) that matches the profile and approximate color of the prey species that may be in the lake are good starting points. Plugs can be casted or trolled begin a boat.

4. What fish See

Visibility in the water is also a factor in catching fish. Fish can locate prey by sensing movement with their lateral line or visually. In clear water, fish can see movement from a distance and can be attracted more easily. They might prefer more natural colored plugs in this situation. In stained water, bright colors on the plug and one that has rattles will help fish locate the plug. The color strategy also works for bass baits and walleye spinners.

5. Let' Fish!

Its mid-June sunny and 75 degrees with a 10 mile per hour wind blowing. North Dakota has had a warm rainy spring in some areas and has been warm and dry in others. According to the North Dakota Game and Fish website, your favorite lake has your favorite fish, the sunfish. The lake is shallow without a deep basin. When you test it, the water temperature of 77 degrees means they are likely done spawning. They should be eager biters. The water is clear and has some weed growth around the edges in eight feet of water. Where do you start to fish?

Your favorite fish should be schooled along the edge of the weedline in a point or pocket of weeds in about 4 to 8 feet of water. A good cast from shore, fishing pier or fishing from a boat will work well. Sunfish like leeches, worms, waxworms, and even some artificial baits work. A small bobber, ¼ ounce weight and a plain #8 long shank hook will work well.

6. Fall Run

Once fall temperatures start to cool and the coming of winter is eminent, fish and bait fish return to shallow water and current areas. When water temperatures go below 50 degrees, it is considered the fall run and will mean fish are again shallow. In North Dakota, the fall run happens in mid to late October.

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Fishing Rod Rack Project

This project build will feature a rod rack to hold up to four or six rods and reels. It can be designed with two mounting options. It is expected that adult supervision is provided to run any power equipment and safety glasses are worn.

Materials Needed:

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| 2- 1 inch by 4 inches board 8 feet long. | Pencil |
| 1½ inch hole saw (preferred) or spade bit | 8 screws 1 ½ inches long |
| 1 drill press and 3/8 inch cordless driver | Tape measure or ruler |
| Small can of wood stain or paint for rod rack | Safety glasses |
| Saw to cut board in half and jigsaw for rod slots | Sand paper for sanding holes and rough edges |
| Wood etching tool to add designs or detail (optional) | Small foam brush or towel to complete staining |

Rod Rack Construction

1. One of the 1 inch by 4 inches boards is cut with a saw in half to be the rod holder.
2. Once the board is cut in half, a tape measure is used to measure down from the top of the board 5 inches and marked. At the five inch mark, another mark is measured at the half mark of the width of the board (1.75 inches). This should be a mark (x) which can be used as the center point to drill the first hole for the rod holder.
3. The next rod hole is marked 7 inches down from the center mark of the first hole. Another center mark will be made across the first mark to form an x. From that point, each hole is marked 7 inches below the center point of the last mark until there is 4 or 6 holes as one plans. If a smaller rack is desired, the holes can be marked 4 inches apart for baitcasting reels.
4. A drill press or 3/8 inch cordless driver is used to cut the holes with a 1 ½ inch hole saw. It may work the best for clean holes to cut each hole partially from each side of the board. The holes and any rough edges are sanded or a wood rasp used when completed. (A youth might need help starting the holes with a 3/8 inch driver, the saw grabs the wood when it first starts.)
5. Next, the second rod holder board is completed. One can complete the center point marking of the second board in same way as the first. Another option is to lay the completed board over the other and mark the center point of all the holes using the first as a template.
6. The slots to place the rod in the rod rack are cut in one side of the rod rack so they will be on top of the hole for the rod to be slid in and down. The other side of the rod holder is for placing the butt of the rod and needs no further attention. On the side of the rod holder that will be mounted away from the wall, the first slot is cut in the first hole by measuring down along the edge of the board 4 inches from the top and marking it. Next measure another ½ inch and mark that location. Next, measure down 11 inches and mark that location. Then, another ½ inch and mark that one. Continue down until all the slots are marked for the holes. The top marks of the slots should be 7 inches apart. After marking, draw a line from the top mark to a point on the cut circle 1 ½ inches away. Next, draw a parallel line from the second mark to the edge of the cut circle. You can do this by making a template from paper ½ inch thick cut to the right length. Do this for each hole. A jigsaw or other saw can be used to cut the slots.



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- Next, the holes are sanded to make them smooth so they don't scratch the rods and rod butts. The ends of the rack are sanded too. The staining and any design cuts to the rack brace, wood etching, or transfers is best completed before the rack is put together.
- Finally, the rack is screwed together according to the chosen mounting option. The mounting board for the horizontal mount can be any length that fits your rods and reels as long as it can be fastened securely to the wall, preferably fastened into a wall stud. A rod rack built too narrow will not support the ends of the rods and they may tangle. The second 1 inch by 4 inch long board is cut into two 36 inch pieces (recommended) for the 4 and 6 rod rack horizontal mount. For the vertical option, two 45 inch long boards are cut for the 6 rod rack vertical mount and 31 inches for the 4 rod vertical mount.

Four 1 ½ inch long screws are used to secure each rack to the mounting boards. The screws on the vertical mount are spaced evenly down the mounting board into the rack and countersunk on the mounting plate so they will not scratch the wall. Wood glue can be used with the screws if no painting or staining has been completed.
- Next, mark the number of holes you will use to secure the rod rack to the wall on your mounting plate. Countersink these and fill with wood putty. Touch up staining is completed when the putty is dry and sanded. The screw holes are not filled with putty if it may be removed at some time.



Vertical Mounting Option



Horizontal Mounting Option

Wood Etching with light stain



Pipe insulation or other material can be glued in the rod holder to prevent scratching



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Resources

While a person might not have a favorite fish, the species that is fished for most often may be more easily caught if one studies their habits and tests baits and lures to see what can be learned from the results. In this activity, youth will choose a fish to study. Of course, there are many ways to study fish and how to catch them. One general fishing resource is a website: takemefishing.org for those new to fishing. For information specifically about the fish in North Dakota, the North Dakota Game and Fish Department website gf.nd.gov has all the necessary information on licensing, fish identification, a lake listing by county, what species are in those lakes, the whopper club, and first fish certificates. For fun fishing facts and activities, the **4-H Sport Fishing curriculum**, Take the Bait (grades 3-5), Reel in the Fun (grades 6-8), and Cast into the Future (grades 9-12) are can be ordered through your local extension office. Cost of each manual is \$8.



jannsnecraft.com is a good catalog company with lurecrafting supplies. Scheels also has some supplies.

[Infisherman.com](http://infisherman.com) is a great source of information for multispecies. They have books and DVDs available. <https://www.in-fisherman.com/>

Angling Edge TV hosted by the Lindner family has a great video library. <https://fishhead.tv/>

References

Binkelman, William; Malz, Carl; Pazik, George; Petros, Spence: Lunkers Love Nightcrawlers, 2000

<http://www.southeasternoutdoors.com/wildlife/fish/fresh-water-fish-spawning-temperatures.html>:2020

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