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Layout and Design: Victor Young

A special thank you to the following for providing us with some content and many images for this publication:

Larry Pape, Going Fishing, Nebraska Game and Parks, Aquatic Education Program
Daniel Griffith, Fishing in the Schools Manual, Oklahoma Department of Wildlife Conservation
Mike Beauchene, Let’s Go Fishing!, Connecticut Aquatic Resources Education

Additional images provided by Dreamstime.com and iStock.com

Special Thank you!

To all of the volunteers who make this program possible.
Fishing is one of the oldest and most popular outdoor activities. Each year, over 30 million Americans go fishing, and New Hampshire anglers are part of this ever-increasing trend. A basic knowledge of the sport and resource will prove valuable to one’s success and to the sustainability of fish populations. The Let’s Go Fishing Program is designed to provide new anglers with an understanding of how, when, and where to fish.

Part of the New Hampshire Fish and Game Department’s Aquatic Resource Education Program, courses include information specific to basic freshwater fishing, ice fishing, and fly fishing. Beginner, intermediate and advanced courses are available. All classes provide the information, instruction, and equipment necessary for participants to enjoy fishing opportunities in New Hampshire.

Most courses explain tackle and equipment, aquatic ecology, knot tying, casting, fish identification, ethics and sportsmanship, outdoor safety, and fisheries management. The courses are orchestrated by the New Hampshire Fish and Game Department but taught by a team of trained volunteers. Offered year-round, courses range from a few hours to three days. There is typically a classroom session followed by a field trip to a local waterbody. All classes are free.

This program is funded by license sales revenue and federal aid through the Sportfish Restoration Fund. A user-pay, user-benefit system, anglers pay an excise tax which is used to promote and protect angling opportunities in New Hampshire.

Let’s Go Fishing volunteers are skilled in basic fishing techniques and passionate about sharing this knowledge with those interested in fishing. If you would like to become an instructor, you must submit an application and complete a training course. All information including a sign-up form can be found by visiting the New Hampshire Fish and Game website at www.FishNH.com.

Much of the work of the Department is supported by the Federal Aid in Wildlife and Sport Fish Restoration Programs, which are exclusively funded by your purchase of fishing tackle, firearms, ammunition, archery equipment, and motorboat fuels.
Fishing is fun and can be a reprieve from many of life’s stresses. Catching a fish is not always as important as the experience of recreating and relaxing on the water. While there are not many ways to guarantee a successful catch, there are several ways to ensure a safe and fun outdoor adventure.

The first rule of safety when undertaking an outdoor activity is to be sure someone else knows where you are going. Discuss your plans with a friend or family member. Better yet, invite them to join you. It’s always nice to have someone with you in case trouble arises. There could be severe weather conditions, a medical emergency, or equipment failure that is better solved with another person.

Always be prepared with the essentials. One of the most important items to bring is water. In an emergency, tough decisions might have to be made and a dehydrated individual might struggle to make them. Whether it is hot, cold, sunny, or rainy, water is a must. Sunscreen and bug spray may not seem like life-saving essentials, but having them along may increase your enjoyment. A pair of sunglasses can keep away harmful rays and protect your eyes from flying hooks or lures. A standard first aid kit can prevent a minor injury from becoming a major one. Today’s kits are more compact and more inclusive.

Always bring a map or a GPS unit that you know how to use. These items will help prevent you from getting lost and may help to identify the boundaries of specific waterbodies.

Some other safety items to always bring include a personal floatation device (lifejacket), a flashlight, a raincoat, and extra clothing specific to the anticipated conditions. Knowing the forecasted weather has obvious safety advantages. There are many weather conditions in New Hampshire that can become dangerous. Wind and cold temperatures can develop rapidly, and proper preparation can help keep you safe. Layer your clothing starting with thin layers first, adding an insulating layer, and finishing with a water and windproof outer shell.

Some equipment essential to fishing, such as sharp hooks and knives, pose a risk of injury. The best way to avoid accidents is to handle sharp objects slowly and carefully. Make sure that all hazardous items are stored properly before, during, and after a fishing trip.
Equipment and Tackle

REELS

All fishing reels consist of a spool that holds the line, with a handle to reel it in. There are different types of reels that vary in form and function and have varying degrees of difficulty associated with their use.

SPINCASTING REELS: Spincast or closed-face reels are a great choice for novice anglers and for children. This style of reel is simple and easy to use. It can be utilized in a variety of ways and is mounted on top of the fishing rod.

SPINNING REELS: These are one of the most commonly used reels by anglers. They feature a bail that must be opened or “flipped” prior to casting, along with an exposed spool. Novice users and kids can easily get the line tangled when reeling it in. Spinning reels can take practice to learn how to use correctly; however, they are extremely popular and can be used for fresh and saltwater fishing. This reel style is mounted under the rod and will be below the rod when casting and fishing.

BAITCAST REELS: Baitcasting reels are a popular choice for experienced anglers and are not recommended for beginners. This is another form of reel that is mounted on “top” of the rod, along with an exposed spool. The reel user must use their thumb when casting to control the speed of the line coming off the spool in order to prevent tangles, commonly known as “backlash.”

FLY REELS: Fly reels are mainly used for holding fly line and backing. In fly casting, the weight of the line is used for casting. Fly reels are narrow and are positioned “under the rod” when in use. They are designed to be used only with fly rods.
RODS

A fishing rod is a tool that is used as an extension of your arm. It helps with casting your bait or lure out to a greater distance. It also flexes and protects your line from breaking. Rods are each designed to hold specific reels and accommodate many different applications.

The most commonly offered rods today are made of graphite, and some are also crafted from fiberglass. These materials are used because they are durable and offer the flex and feel that helps to keep anglers connected.

ROD ACTION: The “action” of a rod describes how much play or bend is in a fishing rod. Actions are classified as: heavy, medium, and light. A heavy-action rod will only bend near the tip of the rod, and light-action rods will bend throughout the entire length of the rod. Medium-action rods are a good choice for beginners. Many rod manufacturers list this information on the rods. It’s located just above the handle along with the recommended line to pair with the rod set up. Many manufacturers offer great options where a reel and rod are sold as a pre-matched combination. They are another great way for beginners to get started fishing, with a rod and reel that is matched correctly and often already rigged with line as well.
LINE

Fishing line is made in a variety of materials and strengths. Line is always merchandised with the pound strength listed on the outside of the package. Fishing line that’s labeled as "10-lb test" has been tested and proven not to break until at least 10 pounds of pressure is put on the line. The type and amount of line that is put on the reel is based on the type of fishing that you will be doing and also the capacity of the reel that you will be using. Manufacturers stamp this information on the reel, and this gives you a good idea of how much line you can put on it.

MONOFILAMENT: A great choice for beginners, monofilament line that is 6- to 8-lb test is a good starting point because it works for almost every freshwater opportunity in New Hampshire. It is also relatively inexpensive and easy to load onto a reel at home or out on the water. The diameter of the monofilament will affect the amount of line that you can load on a reel. In general the heavier pound test a line is the thicker its diameter.

BRAIDED: Braided line is made from woven fiber and synthetic materials such as Kevlar® or Dacron®. These modern materials are woven together to create a fine-diameter line that is extremely strong for its thickness compared with monofilament. This form of line is popular with anglers who are fishing in salt water, bass fishing (with bait casting set ups), and also on tip ups for ice fishing.

When using monofilament line, moisten the knot with saliva before tightening. This helps prevent friction that can weaken the line.
HOOKS

The most important part of your tackle is often the most overlooked item in your tackle box. The hook is what directly connects you to your bait and your potential catch at the end of your line. Hooks are designed for a variety of applications and they are sized for each job.

WORM HOOK: Worm hooks are used to fish with soft plastic baits. The design and shape of this hook allows the angler to rig and fish the plastic bait as a weedless set up (will not snag on the aquatic vegetation or other obstructions), with the hook hidden inside the plastic bait. These are popular for anglers who are fishing for largemouth and smallmouth bass.

BAITHOLDER HOOK: One of the most popular styles of hook to use, baitholder hooks are designed for fishing with dead or live bait. This style of hook features barbs on the shank of the hooks to help secure the bait.

TREBLE HOOK: Treble hooks have a single eye and three hooks fused together with three hook points. These are primarily used as part of an artificial lure.

ABERDEEN HOOK: Made with a longer shank and a lighter wire, Aberdeen hooks are a good choice for panfish. The longer shank on the hook allows you to remove hooks that lodge deep in the fish. These hooks are ideal for beginners and children.

When fishing in New Hampshire, hooks in sizes 6–10 are suitable for most situations when fishing with live bait such as worms, crawlers, or shiners. Many hook makers offer selections to meet the needs of a variety of fishing conditions to help get you started.

CIRCLE HOOK: Circle hooks have a hook point that has a deep bend towards the hook shank and a wide open gap in the design. These hooks are popular with anglers in both fresh and saltwater. They are designed to hook fish on the corner of the mouth and to significantly reduce the amount of deeply embedded hooks in the fish. They are different than traditional hooks, since the angler does not yank to set the hook. A slow pulling motion is all that is required. This style of hook works in all applications and it also benefits fish survival and conservation. This is the style of hook that we use in all of our fishing programs. They are also a great choice for ice fishing.

Hook size is defined using numbers (1...2...3...) and aughts (1/0...2/0...3/0...). With hooks sized by number, larger numbers indicate smaller hooks. With hooks sized by aught, larger numbers indicate larger hooks. The 1/0 is the middle of the hook scale.
WEIGHTS

An important part of the bait fishing set up is your weight, also known as the sinker. These weights, which are added to the line, serve two different purposes. The weight of the hook and the bait alone is often not enough to cast out to a proper distance. The weight will increase the distance that you are able to cast out your offering and will also bring your bait down to the desired depth in the water column.

SPLIT SHOT: A spilt shot sinker is a small round sinker that is clipped onto the fishing line with a pair of pliers by pinching the pair of small tabs on the weight. It can also be removed in the same way when not needed and be reused. These are the most popular style of sinker and the ones that we use in the program. In New Hampshire, all weights and sinkers one ounce or less are required by law to be lead free.

EGG SINKER: Egg sinkers, also known as slip sinkers, are a popular style to use when bottom fishing. This type of weight is shaped like an egg and has a hole into which the angler’s line can easily be threaded. An egg sinker is usually used along with a barrel swivel to prevent the weight from making contact with the hook and the bait. This also allows the fish to take the bait without feeling the added weight on the line. This is a great set up for bottom fishing for both trout and catfish.

LOONS AND LEAD

Did you know that lead is poisonous to loons, mergansers, and other wildlife and is bad for the environment?

State Law prohibits the sale and freshwater use of sinkers and lead jigs weighing one ounce or less in New Hampshire. A “lead jig” means a lead-weighted hook that is one ounce or less and is prohibited regardless of whether it is painted, coated, covered by some other substance or by attached skirts. Protect our lakes and wildlife and use lead-free tackle today!

fishleadfree.org

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ANGLER’S TIP

The advantage of split shot over other types of weights is the ease of adjusting how much weight you need without having to tie and untie your line.
BOBBERS

A bobber is simply an air-filled plastic ball with clips that allow you to attach it to your fishing line at the desired spot. The bobber floats your baited hook at the set depth. You can then leave your bait floating while you watch the bobber for movement, which indicates that a fish is taking your bait. Bobbers come in a variety of styles and sizes. Bobbers that range in size from a quarter to a golf ball are suitable for freshwater fishing in New Hampshire. This style of fishing, along with worms as bait, is a fantastic way to introduce children to fishing and the outdoors.

BASIC CLIP-ON BOBBER RIG

- USING THE CLIPS AT THE TOP AND BOTTOM, SNAP A BOBBER ONTO YOUR LINE AT A HEIGHT MATCHING THE DEPTH OF THE WATER.
- PINCH A SPLIT SHOT Sinker 10-16 inches above the hook.
- BAIT THE HOOK - Earthworms are an excellent choice for new anglers and will attract a wide variety of fish.

ANGLER’S TIP

When picking the size of your round bobber, be sure to use small ones for ultralight fishing and larger ones for heavier fish.
BAITS

The purpose of the bait is to attract the fish to your hook using movement, vibration, color, or scent. Bait can be either natural or artificial and comes in many forms.

NATURAL BAIT: Natural bait can be live, such as worms, minnows, crayfish, grasshoppers, or dead, such as cut fish. It can also include nontraditional items like corn or dough balls.

Earthworms are the best choice for beginning anglers. They attract almost any fish including panfish, bass, catfish, and trout. Worms can be purchased at bait shops, sporting goods retailers, and gas stations. You can also go to your compost pile and dig up your own!

ARTIFICIAL BAIT (LURES): Lures are designed to imitate the look and movement of a fish’s natural prey. Many lures don’t look like live creatures but they exhibit movements, reflective qualities, and color patterns of the real thing.

Spoons are extremely popular and can be fished in a variety of different ways. The most popular is casting and actively retrieving, which gives the lure a wobbling and fluttering motion. They are usually metal and feature a spoon-like shape or basin.

Jigs are typically a single hooked offering that is designed to be fished deep with the hook point riding upwards. They feature a weighted head and are made with both natural (bucktail, feathers) and artificial (soft plastic baits and rubber) materials.

Learning how to retrieve lures in a way that attracts fish takes practice but keeps the angler in suspense, waiting for the fish to bite. The benefit of lures is that they are typically reusable, and some lures can be used for years.
Soft plastic baits offer anglers endless types of imitations in both style and color for virtually every species that swims. They are artificial and often feature realistic shapes of natural prey along with scents and attractive colors. Hooks are purchased separately, and baits are then rigged to the angler’s preference.

Spinners are another style of lure that features a small metal blade that repeatedly spins around while the lure is being retrieved at a steady pace. This creates flash and vibration that entice fish to bite.

Plugs or stick baits are made to imitate small baitfish that are consumed by larger predatory fish. These lures often feature baitfish-like shapes along with eyes. They typically have multiple treble hooks and are fished with various retrieves and motions to imitate struggling baitfish.

Top water lures are another style of plug bait and are designed to be fished on the surface of the water. They have a cupped face or blades that disturb the water when retrieved, which attracts predatory fish. They mimic a frog or injured baitfish and often entice the fish to make an explosive strike on the lure.

FISHING WITH SOFT PLASTICS

While soft plastics are a popular and effective bait for catching fish, proper disposal of a worn soft plastic bait is important. Overused baits can tear away from your hook and end up on the bottom of a lake or pond or in the belly of a fish. These lost baits are often ingested by fish and may negatively affect their health.

You can extend the usefulness of your plastic baits by fitting a small o-ring or zip-tie in the middle of the bait. Insert your hook right under the o-ring or zip-tie. This will secure your bait if your hook pulls through.

Inspect and replace any worn baits while fishing and recycle or dispose of them responsibly.
This is the most commonly used fishing knot and has become known as The Fisherman’s Knot. It can be used in a variety of different fishing applications and is very easy to learn. This knot is known for its supreme strength, and it works great for bait fishing, ice fishing, fly fishing, and much more.

1. Pass the end of the line through the eye of the hook.

2. Wrap the line around the standing end about five complete turns.

3. Pass the end back through the loop beside the eye.

4. Then pass the end under the final turn.

5. Tighten the knot and trim the end.

To watch a step-by-step demonstration of tying an improved clinch knot, visit animatedknots.com/improved-clinch-knot

IMAGES COURTESY OF ANIMATEDKNOTS.COM

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OVERHAND CASTING

Learning how to properly and safely cast is essential to enjoying the sport of fishing. The easiest cast to learn is the overhand technique using a spincast reel. The key to improving your casting technique is practice, practice, practice, but the most important thing to remember when casting is safety!

SAFETY: Before casting, always check your surroundings. To avoid hooking someone and potentially causing serious injury, look behind you, to your sides, and above you. Make sure no one is on the water in the vicinity of your target before you make each cast. Also, be aware of objects such as trees, branches, or shrubs that could be hooked and cause you to lose your gear.

CASTING: 1) While holding the button, slowly bring the rod back over your shoulder. Be sure your toes are pointing in the direction you want to cast. 2) While bringing the rod forward, keep your elbow down and release the button just beyond the point where the rod is pointing directly up. 3) Once the cast is complete, turn the reel handle once in the direction of the rod tip to engage the line so it won’t continue to unwind from the spool. You should hear a click as the pin pops back into place.
KNOW YOUR FISH

New Hampshire offers more than 20 species of freshwater gamefish, and properly identifying them is an important part of fishing. Being a responsible angler means knowing the fishing regulations including the minimum size and how many of each fish you can catch and keep. Knowing how to identify fish will help you understand what rules or regulations apply to that species.

This section covers a variety of species that are commonly caught when fishing from shore and that are good targets for new anglers. For more information on fish identification, along with state rules and regulations, pick up copies of the New Hampshire Freshwater Fishing Digest and the Angler’s Guide to Freshwater Fishing in New Hampshire at a New Hampshire Fish and Game Department office or local license agent, or download them at FishNH.com.

For a complete list of New Hampshire’s freshwater fish species, visit fishnh.com/fishing/species.html
CHAPTER 4

LETS GO FISHING PROGRAM MANUAL • 15

ROCK BASS

BLACK CRAPPIE

YELLOW PERCH

CHAIN PICKEREL

BROWN BULLHEAD (HORNED POUT)

BROOK TROUT

RAINBOW TROUT

BROWN TROUT

LEADING EDGE OF LOWER FINS IS WHITE

UPPER JAW EXTENDS TO MIDDLE OR REAR EDGE OF THE EYE

ADIPOSE FIN TINGED WITH ORANGE

BODY AND FINS HEAVILY SPOTTED

WORM-LIKE PATTERNS ON THE BACK

RED SPOTS WITH BLUE HALOS
ANGLER RESPONSIBILITY

Anglers have a responsibility to participate in the sport ethically. Stress on a fish or its habitat may seem inevitable when hooking, landing, handling, and finally releasing one. There are obvious effects on the resource and minimizing them is easy when a few simple practices are followed. If fishing experiences are to be preserved and enjoyed by everyone, it is critical that this mindset is present during every outdoor adventure.

FISH HANDLING: Handling and releasing fish should be done as quickly as possible. Depriving fish of oxygen and exposing them to warm temperatures are serious risks to their overall survival. This is important to consider when taking pictures, which should also be done as quickly as possible. During handling, be very careful not to touch the fish’s gills. Extended contact with a fish may remove the coat of slime which serves as a protective layer. It is preferable to release a fish without ever taking it out of the water. A good net facilitates this practice.

If a fish is hooked deeply or in a difficult spot, it is best to cut the line and release it with the hook still in place. This will minimize damage and prevent further injury. Removing a hook from a fish’s throat or stomach will almost always result in mortality. If you don’t plan to keep a fish, it is best to use barbless hooks. This will increase the survival rates and test your skills as a fisherman. If you decide to keep your catch, take only what you need.

Catch and Release

• **Time is of the essence.** Play and release the fish as quickly and carefully as possible.

• **When landing a fish,** use a net made of fine mesh or rubber to avoid injury. A net is not always necessary for small fish. Keep the fish in the water as much as possible; a fish out of water is suffocating and could be injured.

• **When releasing a fish,** handle it as little as possible when removing the hook and don’t squeeze it or let it flop around. Gently hold the fish around the middle and upside down while removing the hook. This position calms the fish and deters it from moving around.

• **Remove the hook** with small pliers or use your thumb and forefinger to loosen and back out the hook. If a hook cannot be easily removed, cut the leader as close as possible to the hook. The hook will rust or fall out over time.

**ANGLER’S TIP**

*Rubber bag nets are great for protecting the outer slime coating on a fish’s skin and make it easier to remove hooks and tangled line.*
ANGLER ETHICS: Being a courteous angler is up to all of us. Never leave trash or tackle behind, and always pick up disposed line, bait, or other unneeded items. Most fishing locations are on private property and respecting the owner is the key to continued access. Respecting other anglers is also important, and leaving plenty of room to fish is part of a good angling code. Fishing should never be a selfish sport, and there is almost always enough space for everyone who wants to try.

Respecting the outdoors and all parts of nature will keep your experience pleasant for you and other anglers. Observing nature without disturbing it is important. When this practice is followed, every new adventure will be as rewarding as the last.

Fishing rules and regulations are designed to preserve and protect the entire resource. If the sport is to be maintained at its highest potential, everyone must abide by these rules. Buy a license and get a current rulebook before each new season. Laws are updated every year and it is important to understand and obey them if we are going to maintain a healthy fishery.

Never Relocate Live Fish

Release of fish in waters other than where they are caught is prohibited. Fish must be returned to the water where taken. Never release plants, fish, or animals into a body of water. *It’s the law!*

Culling of a fish (the act of exchanging a fish for one of the same species already in possession), except during some permitted bass tournaments, is prohibited.

I always practice safe fishing. I am careful when casting. I handle all fish hooks carefully. I wear a life jacket when I am in a boat or when I am near deep or running water.

I am a courteous Fisherman. I don’t litter. I pick up extra line, left-over bait, candy wrappers and other trash. I don’t get too close to someone else who is fishing.

I obey fishing laws. I have a fishing license when required. I know the size, kind and number of fish I’m allowed to keep.

I respect the outdoors. I observe, but do not disturb other wildlife that live around the water. I release fish right away if I don’t plan to eat them.

Honor the Angler’s Code! Always clean up after yourself and leave the place where you fished better than when you arrived.
SAFETY: It is important to practice safe fishing as there are inherent risks involved at all times. Be careful when casting and handling the many sharp objects required by the sport. Always be aware of those around you and take your time.

It is an absolute certainty that fishing will bring you in contact with the water. Rivers and streams, and lakes and ponds, all present dangers if a fisherman is not thoughtful and prepared. Wearing a life jacket is the most important safety step to take before being on the water.

STOP AQUATIC HITCHHIKERS!™
StopAquaticHitchhikers.org

Clean...Drain...Dry
To help prevent the transport of aquatic nuisance species, clean all recreational equipment whenever you leave a body of water:

• **Remove** any visible mud, plants, fish or animals.
• **Drain water from equipment** (engine water intake systems, bilge, live wells, bait buckets).
• **Clean and dry** anything that comes into contact with water (boats, paddles, trailers, waders, etc.).

Before leaving and before launching...
**inspect everything!**

BECOME A LET’S GO FISHING VOLUNTEER INSTRUCTOR

Visit [FishNH.com/fishing/lgf-volunteers.html](http://FishNH.com/fishing/lgf-volunteers.html)
NEVER WASTE YOUR CATCH

If you’re going to bring your prized catch home for a meal, the process and tools should be prepared well ahead of time. The ultimate sin for an angler is to waste their catch due to being unprepared. An angler should be responsible and ready to handle and properly clean and consume the catch. Anglers may have the best of intentions to keep and eat a fish that they caught out on the water, only to arrive home to put it in the freezer and then months later throw it away. You should always remember that these fish are a natural resource and should always be treated properly and handled with great care, and never wasted.

BASIC COOLER: If you have decided to bring a mess of yellow perch or black crappies home for a family fish fry, the process starts well before you are out on the water. Leaving fish out in warm temperatures will cause your catch to spoil quickly; be prepared by taking a basic cooler and ice along with you.

FILET KNIFE: The most important tool that you need is a proper knife for cleaning fish. There is simply no substitution for a sharp fillet knife. If you don't have one, it is an investment that is worth making. Most tackle shops and sporting goods stores sell them, and for under twenty dollars you can pick up a nice knife that will serve you well for years. Trying to use a different type of knife (or a dull knife) can make the fish cleaning process extremely frustrating and difficult, which in turn can result in wasted fish and a bad experience for the participant. Fishing is fun and enjoyable, and with a bit of planning it can also provide you with a rewarding meal.
CLEANING AND FILLETING

While people enjoy fishing for sport, many others catch fish to use as food. Being able to clean and cook a fish that you caught is also rewarding. A filleted fish has its skin and all of its bones removed before cooking. Bass, bluegill (and other sunfish), yellow perch, white perch, and bullhead make good fillets.

CLEANING YOUR CATCH: To clean your fish, insert your fillet knife tip into the fish’s belly near the anal opening and move the blade up along the belly, cutting to the head. Keep the knife blade shallow so you don’t puncture the intestines. Spread the body open and remove all of the entrails. Locate the fish’s anus and cut this out in a “V” or notch shape. Some fish have a kidney by the backbone. Remove it by scraping it out with a spoon or your thumbnail. Rinse the cavity out with a good stream of water and wash the skin. Some fish have dark tissue lining the abdominal cavity that can be scraped off to prevent a strong, oily flavor.

FILLETING: Before filleting, make sure the knife blade is sharp. A dull blade will tear the meat and pull out bones. If you have any slime on your hands or the fillet knife handle, wash it off to prevent slipping.

An 8-inch panfish (the size of the bluegill above) or larger, will yield an acceptable sized fillet.
1. To start a fillet, cut diagonally from the top of the back to the belly, behind the pectoral and pelvic fins; do not cut the backbone.

2. Next, cut along the backbone on one side of the dorsal fin. Slice at an angle without cutting the rib cage to a point just behind the anal opening.

3. Then slice along the edge of the anal fin with the blade flat against the backbone. Continue to slice to the tail.

4. Now lay the free meat back carefully and cut it away from the rib cage. Cut through the skin to free the fillet. Turn the fish over and repeat.

5. Lay the fillet skinside down on a flat surface. Hold the tail and cut through the meat down to, but not through, the skin. Rotate the knife blade so it is at an angle away from the tail. Pull on the skin and use the knife in a cutting motion. Don’t try to slice the meat off, rather scrape it off with the blade and the pulling motion.
COOKING YOUR CATCH

Cooking your catch is what caps off a successful fishing trip. Whether you spent hours stealthily casting and retrieving or pulled in your limit in a 45-minute bonanza, learning to prepare and cook your catch is a tasty reward for the patience and skill it takes to reel in a fish. Here is a basic recipe for cooking your fish fillet.

PAN FRYING FISH: Pan frying is a popular, simple way to cook a variety of fish. It’s a quick and easy way to cook your catch at a campsite, a picnic area, or on the shoreline.

1: Coat the fish fillet with all-purpose flour. Feel free to add your favorite spices to the flour before coating.

2: Dredge the flour-covered fillet in a beaten egg.

3: Coat the fillet with bread crumbs.

4: Heat some cooking oil in a skillet. Test heat by dropping a small piece of fish into the skillet. If it sizzles, the oil is hot enough to cook the fish.

5: Add your fish to the skillet, cooking on each side for 3 to 4 minutes or until the coating is brown.

The fish is done when the fillets turn from translucent to opaque or white and feel firm but still moist. The fillets should be just ready to flake.

Enjoy your fish with fellow anglers, family, and friends!

ANGLER’S TIP

The fish is done when the fillets turn from translucent to opaque or white and feel firm but still moist. The fillets should be just ready to flake.

For additional fish cleaning and cooking tips, go online to TakeMeFishing.org.
Preparation Is the Key to Having Fun

For many anglers in New Hampshire, fishing is an activity that is enjoyed all year. Just because lakes and ponds become covered with ice for several months doesn't mean you can't head outside to go fishing. In fact, some of the best fishing opportunities of the year happen during the winter months. Ice fishing is a time-honored Granite State tradition that brings lots of individuals and families out on the ice each winter. This type of fishing is a fantastic way to get beginners and children outside during the winter months. Modern technologies have created warm and waterproof boots along with multiple forms of fleece and other synthetic materials that allow for outdoor participants to stay warmer for longer than ever before. When anglers are asked if they have ever been ice fishing before, some reply “it was freezing cold.” It is important to properly plan and prepare before heading out onto the ice for the day. Always bring more layers than you need. It’s easy to remove an extra layer or two while out on the ice but you can’t add a layer if you left it at home.

Safety Gear: It is good practice to carry safety gear while ice fishing so that you can either help yourself or another angler should the need arise. Basic safety gear includes: hand spikes, a whistle, rope, and ice cleats.

Though all ice is potentially dangerous, the U.S. Army Cold Regions Research & Engineering Laboratory in Hanover, NH, offers a “rule of thumb” on ice thickness: There should be a minimum of 6 inches of hard ice before individual foot travel, and 8 to 10 inches of hard ice for snow machine or all-terrain vehicle travel.
**TIP UPS:** Tip ups, or “traps” as they are more commonly called, are a simple approach to ice fishing. These are stand-alone devices that are made with a basic line spool connected to a self-tripping flag that is set off when a fish takes your bait, indicating that a fish is on the line. Tip ups come in a variety of shapes, styles, and designs. Fishing with tip ups can be a lot of fun with kids, especially when the flags start flying. Live minnows are the most common bait used when fishing with tip ups.

**SOUNDER:** The sounder is a key tool in using a tip up. It is used as a depth finder to locate the bottom of the lake or pond that one would be fishing. It allows the angler to set a baited offering to the desired depth. The most popular set up is 18 inches to 3 feet off the bottom. Always use the sounder in conjunction with a line marker. A button is a simple and easy solution.
SKIMMER: The skimmer, or ice scoop, is used for removing and clearing ice chips and shavings from the ice fishing hole once a cut is made through the ice.

AUGER: Ice augers come in two different styles—manual (hand crank) and power (gas, propane, electric). A hand auger with sharp blades can make fast work out of a few inches of early-season ice. Remember that the blades on augers are extremely sharp, and always use caution when using them around children.

CHISEL: The chisel or ice spud is used for cutting or chopping a hole in the ice. A well sharpened chisel works great during early ice and can make quick work of 4–6 inches of thickness. It becomes harder to use when ice depths increase. They are also handy for ice safety to check the ice depth and ice structure and can be used to “check as you go” It is always recommended to bring one along with you when out on the ice.

Ice Safety Tips

In winter, before you venture out onto any frozen pond or lake to ice fish, snowmobile, ski, or snowshoe, play it safe by following these important guidelines for ice safety:

- Always fish with a buddy
- Test the ice—never assume the ice is safe!
- New ice is usually stronger than old ice
- Avoid the shoreline if it is cracked or squishy
- Wind and currents can make ice unsafe
- Don’t gather in large groups
- Don’t drive vehicles onto the ice
- Don’t build a fire on the ice
- Bring blankets and a first-aid kit

Watch the video on ice safety at FishNH.com/fishing/ice-fishing.html

Before you venture out on a frozen pond or lake, learn more about ice safety at FishNH.com/outdoor-recreation/ice-safety.html
Fisheries Management

RESEARCH, PROTECT, AND PROMOTE

It takes a lot to keep our fisheries healthy, and cooperation between anglers and biologists is an important part of the success. The New Hampshire Fish and Game Department employs biologists throughout the state whose job it is to research, protect, and promote our aquatic resources. The health of our fisheries is always being inventoried and evaluated with the hope of providing the best opportunity for anglers.

MANAGING THE RESOURCE: While everyone must take responsibility for the successful management of our fish, biologists and managers take an active role in conserving this valuable resource. Understanding fish and their habitat is crucial to effective management, and scientific research is constantly being conducted and translated into policy. Once management strategies are in place, they must be evaluated. Over time and with changing climate conditions, this type of evaluation is crucial to the success of fisheries in our state.

Managing our fisheries often means sampling fish, which is accomplished in many ways. Utilizing traps, nets, and even electricity, biologists investigate fish very closely by handling live samples and releasing them unharmed. Taking biological measurements concerning survival and growth help to determine how well fisheries are performing and how they will translate into fishing opportunities.

Recently, advances in technology have allowed researchers to closely monitor fish movement. By implanting a radio tag in an individual fish, biologists can determine home range, spawning locations, and seasonal habitat preference with a precision not available in the past.

There are many ways that fish biology and management play a role in successful angling. Utilizing sound science and staying up-to-date with management practices allows New Hampshire Fish and Game to provide the best sportfishing opportunities possible to residents and visitors.
CYCLE OF SUCCESS FOR WILDLIFE AND SPORT FISH RESTORATION PROGRAMS

Anglers, hunters, and boaters purchase fishing and hunting equipment and motor boat fuels

Manufacturers pay an excise tax on that equipment

U.S. Fish & Wildlife Service allocates funds to state fish and wildlife agencies

State fish and wildlife agencies implement programs and projects

Grants to states

The Result: Better fishing, hunting, boating and wildlife-oriented recreation

THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION

The motivation for the North American Model of Wildlife Conservation had its origins in the 19th century with sportsmen’s concerns over the extinction and near extinction of several species. This model rests on two basic principles: fish and wildlife belong to all U.S. citizens, and fish and wildlife should be managed so their populations are present forever.

Biologists from the New Hampshire Fish and Game Department and other fish and wildlife agencies are working together to protect, restore, and enhance aquatic habitat for brook trout. This scientific effort is called the Eastern Brook Trout Joint Venture.
The 5 Fishing Essentials

ITEMS TO ALWAYS HAVE WITH YOU

Take a walk around any bait and tackle shop, or a large sporting goods store, and you will see hundreds of different items for sale to anglers. Consumer options are endless for different types of fishing line, rubber worms, lures, tackle boxes, etc. Many anglers carry more lures, bait, and gear with them than they will ever use in a lifetime of fishing. However, there are five basic items that you should always have with you when you go fishing. It doesn’t matter if you’re a casual angler or out on the water every day as a fishing guide, these items should always be part of your arsenal.

NEEDLE NOSE PLIERS: It’s no secret that most tackle boxes contain a pair of needle nose pliers. They are indispensable for removing hooks from fish, especially toothy predators like pickerel, northern pike, and bluefish. Many pliers also feature line or wire cutters and can be purchased for under five dollars from a hardware store. Nothing fancy is needed, and it’s always wise to have a pair that can make a permanent home in your tackle box.

HOOK HONE: One of the most overlooked tools by anglers is a small hook hone. This tool is used to sharpen your hooks and can be added to a keychain or a tackle box without taking up much space. You can have all of the best gear in the world, but with a dull hook, you won’t be catching any fish!

SUNSCREEN: A beautiful sunny summer day out on your favorite lake or river is what we think about all winter long. However, the sun can also be harmful. Sunscreen is an essential part of any outdoor activity. Skin cancer is serious, and preventive measures (wearing a hat, other clothing, and sunscreen) should be taken by outdoor enthusiasts, especially people fishing. Taking for granted the sun’s powerful reflection off the water can be a tough lesson to learn.
Polarized Sunglasses: Another item to remember that helps combat the sun’s rays is a pair of polarized sunglasses. They will not only protect your eyes from the glare off the water, but also from hooks and rod tips. Polarized sunglasses let you see into the water by effectively removing the glare from the water’s surface. This is an item that you should always include when preparing for a day of fishing.

Line Cutters: Each year manufacturers push the technology of fishing line to new extremes. Smaller diameters and increased breaking points and durability mean fewer break offs. However, these new monofilaments and braids are also more difficult to cut or trim when changing lures or retying knots. Grandpa’s old method of using his teeth to cut fishing line is a great way to damage them. A pair of line cutters is a valuable tool to have along with you. This is another great item that is affordable and one that you will find yourself using in other ways while fishing. Many anglers prefer to use line cutters that are similar to an inexpensive pair of finger nail clippers, while others prefer to use a small scissor style. Whatever type you select, they will earn a permanent home in your tackle box.

Angler’s Tip

Being prepared with a well organized, updated tackle box can make the difference between an enjoyable and memorable day of fishing and a fishing trip marked by frustration and lost opportunities.
HELPFUL PROGRAMS AND RESOURCES

The New Hampshire Fish and Game Department’s Conservation Education programs engage with residents and visitors through diverse educational experiences in order to develop individuals who are knowledgeable about fish and wildlife, make decisions that benefit fish and wildlife, and spend time outdoors engaging with fish and wildlife with proper skills, safety, and ethics.

WATERSHED EDUCATION PROGRAM:
[link]

The New Hampshire Fish and Game Department has an exciting and free Watershed Education Program (WEP) that puts students where the action is in their own watershed. Students become citizen scientists, studying and working with local community partners to improve and maintain healthy aquatic ecosystems for fish and wildlife.

WILDLIFE EDUCATION:
[link]

Whether you’re a teacher, an organization, or someone who is interested in wildlife, these pages can provide you with a connection to wildlife education. We provide high-quality professional development for teachers, and our school-based programs align with the Next Generation Science Standards. Our resources are available to organizations and schools interested in learning about or teaching others about wildlife to help sustain healthy wildlife populations in New Hampshire.

OWL BROOK HUNTER EDUCATION CENTER:
[link]

Owl Brook Hunter Education Center is a 240-acre education center located in Holderness, N.H. A variety of hunting and outdoor skills workshops are offered year round including summer youth programs, advanced hunting skills topics, shooting skills, map and compass, and outdoor survival. All workshops are taught using hands-on experiential learning. Owl Brook also has a woodland archery range free for public use.

HUNTER EDUCATION COURSES:
[link]

Hunter Education is a mandatory course for anyone wishing to buy a hunting license in New Hampshire. It is designed to teach hunters proper safety and ethics while hunting. NH Fish and Game posts courses beginning in February that run through October. Online pre-registration is required for many program offerings, including certification courses. Register as soon as possible – courses fill up fast!
BECOMING AN OUTDOORS WOMAN (BOW): nhbow.com

BOW is a workshop focused on the learning of outdoor skills usually associated with hunting and fishing, but useful for many outdoor pursuits. Designed primarily for women, it is an opportunity for anyone 18 years of age or older.

BARRY CONSERVATION CAMP: wildnh.com/barrycamp

Barry Camp is operated by Fish and Game in partnership with 4-H through UNH Cooperative Extension. Programs include education in the shooting sports, hunting, fishing, camping, and other outdoor skills. Barry Conservation Camp is in the White Mountain National Forest on the grounds of the Berlin Fish Hatchery.

NH REGIONAL FISHING GUIDES: Now that you have learned how to freshwater fish in New Hampshire, it’s time to find the ideal location for you to get out and go fishing! Great fishing is just around the corner all around the state. New Hampshire Fish and Game publishes regional fishing guides for every area of the state.

Visit fishnh.com/fishing/publications.html
NEW HAMPSHIRE FISH AND GAME DEPARTMENT EDUCATION CENTERS

Visitors are welcome at the New Hampshire Fish and Game Department’s fish hatcheries and education centers. Group visits require a reservation. [wildnh.com/about/visit.html]

TWIN MOUNTAIN FISH HATCHERY:
Hatchery grounds open 8 a.m.-4 p.m. Call ahead for visitor center availability. (603) 846-5429
Stop by any time to feed the fish! Located at the Twin Mountain Fish Hatchery on Route 3 in the town of Carroll, this facility teaches people about watersheds.

WARREN FISH HATCHERY:
Hatchery grounds open 8 a.m.-4 p.m. Call ahead for visitor center availability. (603) 764-8593
Stop by any time to feed the fish! Located along Route 25 on Fish Hatchery Road in Warren, this educational center looks at wildlife habitat and the life cycle of Atlantic salmon.

MILFORD FISH HATCHERY EDUCATIONAL EXHIBITS:
Open 9 a.m.-4 p.m. year-round. (603) 673-1416
Located on North River Road in Milford, this center explores river habitat and fisheries management.

DISCOVERY ROOM AT FISH AND GAME HEADQUARTERS:
Open 8 a.m.-4 p.m., Monday through Friday year-round. (603) 271-3211
Located at 11 Hazen Drive in Concord, this facility invites you to Discover Wild New Hampshire. Hands-on exhibits explore New Hampshire’s wildlife communities.

GREAT BAY DISCOVERY CENTER:
Grounds open sunrise to sunset year-round
Building open 10 a.m.-4 p.m., Wednesday-Sunday, May-September. Weekends only in October. (603) 778-0015 [greatbay.org]
Located in Greenland/Stratham, off Route 33 at 89 Depot Road, this center provides opportunities to learn about coastal environments and estuarine life. It is part of the Great Bay National Estuarine Research Reserve. 
Accompanying anglers aged 16 and older must possess a valid New Hampshire fishing license.
N.H. Fish and Game Department — Our Mission

As the guardian of the state's fish, wildlife, and marine resources, the New Hampshire Fish and Game Department works in partnership with the public to:

- Conserve, manage, and protect these resources and their habitats;
- Inform and educate the public about these resources; and
- Provide the public with opportunities to use and appreciate these resources.