

Paddling Basics

American Canoe Association (www.acanet.org)

The joys and benefits of paddling a canoe, kayak or raft are many, and the reasons people are drawn to paddling are equally varied. Some want to escape the noise and stress of everyday life by exploring the rivers or lakes near their home; others seek a means to venture into the wilderness; exercise is an objective for many paddlers, as is observing wildlife, playing in whitewater, plunging over waterfalls, and navigating the open ocean. There are also those who utilize these paddle craft in activities such as photography, fishing, or social outings.

Paddling a canoe, kayak or raft will take you places you cannot reach by any other means, not just the physical places that are found on a map, but the internal places of the mind and spirit. No other form of boating provides a more intimate experience with the water and its surrounding environment than does canoeing and kayaking. Whether you experience the joy of paddling a canoe across a wilderness lake - miles from the nearest person, splashing a kayak into the froth of a whitewater stream, or exploring a placid cove less than a mile from home, your life will be forever enriched by the experience.

"Be Prepared," as the scout motto advises, is sound advice and the key to a safe and enjoyable canoeing or kayaking outing. You want to be prepared with basic safety and skill knowledge, proper clothing and equipment, and the right mental attitude. Sound judgment is a critical component of any outdoor pursuit. While you can learn to canoe or kayak without taking formal instruction, the value of such instruction cannot be over emphasized. There is nothing like hands-on instruction to make you safe and effective on the water.

Here's a simple head-to-toe guide for the fully outfitted paddler. As an outdoors enthusiast, you may already own many of these items, so don't be scared off by the huge laundry list. You'll be able to add pieces of gear over months or years as you develop your skill and scope as a paddler.

Canoe, Kayak or Raft:

Which type of boat you use will depend largely on your paddling objectives. Objectives such as, the type of waterway you want to explore, the number of people you want in the same boat, and the length of your trip all factor into the choice of vessel. For more information on buying a canoe or kayak visit the following pages: [Kayak Buying Tips](#), [Canoe Buying Tips](#), [ACA Beginners Guide](#) (PDF), and [Paddler Magazine](#) (view the most recent Buyers Guide issue).

Paddle:

A good paddle can make a huge difference in your efficiency on the water. Paddles come in single blade (canoe) versions and double blade (kayak) versions. Beyond that, paddles come in a variety of lengths, materials, blade angles, and blade shapes.

Personal Flotation Device (PFD) A.K.A. "Life Jacket":

While US Coast Guard regulations only require that each boater have a wearable PFD (Class III or V in flotation rating) on board, the American Canoe Association (ACA) strongly advises that anyone in a canoe or kayak wear a PFD at all times. In fact, ACA requires that PFDs be worn during all ACA instruction courses or sanctioned paddling events. PFDs are available in many styles. Most experienced paddlers prefer to wear a Type III PFD that has enough adjustments to ensure a snug fit. A PFD that is too loose will not keep your head above water.

Note: 83% of all canoeing fatalities were not wearing a PFD at the time of the accident.

Synthetic Tee Shirt and Shorts:

Even on a relatively warm day it is important to wear clothes that dry quickly. This prevents both chilling and chafing. Bathing suits will also serve this purpose.

Proper Footwear:

Nearly 90% of all paddling injuries occur from walking around with bare feet. Protect your toes with strong river sandals, old sneakers or neoprene booties. Some folks also wear fleece or wool socks for extra warmth. Flip-flops are a bad idea.

Sunscreen:

Being on the water often means 100% sun exposure. Using a waterproof sunscreen with a high SPF is essential.

Water Bottle with Water:

A hydrated paddler is a happy paddler. Bring some snacks too, such as trail mix, candy bars, fruit and energy bars.

Brimmed Hat or Visor:

Although rain is a paddler's friend (since rain fills our lakes and rivers), you will probably most enjoy venturing out on a clear, sunny day. Therefore you'll want to protect your head and face from the sun's harmful rays. And don't forget the Sunscreen. UV rays are just as severe reflecting up from the water.

Sunglasses:

Keep these handy for the same reason as your sun visor. They can also score big points in the coolness category. Don't forget the retainer strap.

Whistle:

Or other audible signaling device, often attached to your PFD for easy access. A whistle is very useful for getting attention during an emergency and warning other watercraft of your presence. Also required by the Coast Guard on large bodies of water and navigation channels.

Dry Bags:

If you were just wondering what they are, these rubberized gear bags have sealed openings for keeping your stuff inside and water outside. Use a dry bag for storing extra clothes, snacks, or camping equipment inside your boat. They come in a variety of sizes. It is good practice to secure them to the boat so they stay in the boat in the event of a capsize. The combinations of which items you choose to take on your paddling trips will vary greatly. For each excursion you'll need to take into consideration a multitude of factors: air temperature, water temperature, cloud cover, precipitation, destination remoteness, etc. One rule to follow: always expect to get wet and dress and pack accordingly.

First Aid Kit and Duct Tape:

Take along a well-stocked repair kit for your body and boat whenever exploring the nation's waterways. There are several varieties of ready-equipped first aid kits for various degrees of need (from a placid day-trip, to whitewater or extended wilderness trips), some of which come with their own dry bags.

Towel:

Since you will usually get wet, having a dry towel available at the end of the trip can increase your comfort and protect your car seats from wet rear ends.

Synthetic Fleece Sweater and/or Long Underwear:

Popular for their wicking qualities (drawing water away from your skin) synthetic fibers dry quickly and help keep your body warm in when it's cold out. Cotton is generally frowned upon because it has the opposite effect of conducting body heat when it gets wet. Even in the summer, cold water, wind and wet cotton can be a deadly combination. Use Synthetic Pants or Lycra Tights for your lower half too.

Paddling Jacket:

Water and wind repellant, these jackets are made of a coated nylon and/or Gortex and typically have neoprene cuffs and collars. A paddling jacket will prevent splashing water and wind from chilling your skin. They can also keep you semi-dry should you do an Eskimo roll. Those designed for canoe or kayak touring usually have hoods, while those designed for whitewater do not. Paddling Pants are also available.

Wet Suit:

Worn right next to your skin, wet suits can be a life saver when a person is exposed to cold water. The neoprene material holds in a thin layer of water as a thermal barrier against the outside cold water. Highly recommended for winter or early spring paddles.

Gloves or Pogies:

Helpful for keeping your hands warm and nimble on cool or windy days. Pogies are large mitten that attach around the shaft/handle of your paddle. Some folks also like to wear lightweight gloves even when it is warm to improve their grip and to prevent blisters.

Spray Skirt:

Worn around the waist of kayakers (touring and whitewater), this device attaches around the cockpit of the kayak to keep the water from filling the boat. The skirt has a quick release strap that allows the boater to exit kayak quickly and easily.

Helmet:

A solid paddling helmet is essential for whitewater paddling or surf kayaking. Can you picture a public service announcement about, "This is your brain on the rocks?"

Nose Plugs or Clips:

Designed specially for paddlers who plan to roll upside-down frequently, but can't seem to stop themselves from inhaling.

Throw Bag:

This is a specially designed rescue bag attached to and full of rope. For those trained to use it, it is an effective tool for rescuing a person swimming in rough water.

Dry Suit:

Although relatively expensive, the dry suit is the ultimate piece of clothing for winter paddling. It is similar to the paddling jacket, except the cuffs and collar are sealed with flexible rubber gaskets. The gaskets form a snug seal around the neck, wrists, and ankles to keep you completely dry (even when submerged). Made as a single piece suit or as separate tops and pants.

Trip Preparation Goes Beyond Equipment and Clothing

Once you are properly geared, being prepared goes beyond equipment and clothing. Virtually any paddling trip should be regarded as a serious (and fun) outdoor pursuit. The paddler must be adequately prepared for the type of paddling trip he or she is taking. Knowledge of the waterway, length of the trip, weather, water conditions, and a realistic assessment of the skill level of everyone on the trip are key to a safe and enjoyable outing. Whitewater, wilderness waterways, open ocean, and cold weather paddling all require special preparation and skills. Also, keep in mind that a day or afternoon of paddling can demand strenuous physical exertion. Start with shorter (time and distance) outings to build up your strength and stamina. As you refine your paddling skills you will also gain greater stroke efficiency.

It's a good idea to consult with outdoor guidebooks or other experienced paddlers to research your destinations ahead of time. You'll want to know what hazards to expect and which emergency facilities are close by. Remember that guidebooks cannot replace the need for good judgment, skills, and safety precautions.

If you need to transport your boat and gear to the start of your paddling trip, be sure to get appropriate roof-top racks and instructions for loading boats on your vehicle. If you need help with effective tie-down knots, the ACA has a handy guide entitled, "Knots for Paddlers"(\$4.95; call 703-451-0141).

Keep in mind that exploring rivers with significant current will require you to place a car at the take-out (final destination) before driving to the put-in (starting point). Always take care to protect the car keys. Many paddlers have made mistakes such as leaving the keys for the car positioned at the take-out in the car at the put-in, or even worse, losing car key while on the water.

Once you arrive at the put-in, take care while unloading. Remember to lift with your legs so as not to strain your back. Since you should always paddle with a buddy, you can help each other with unloading and carrying.

While you're at the put-in, remember to also show respect for others around you. Other sportsmen and neighboring property owners are likely seeking the solitude and purity of undisturbed nature. Don't hinder their experience by littering, playing loud music, changing clothes in public, or other potentially offensive actions. Plus always get permission in advance if you want to cross private property in order to access a particular waterway.

The next step is actually getting in the boat and beginning your journey. When launching from a steep bank or dock, place your boat in the water along side and parallel to the shoreline, and hold on to it. Squat down next to your boat and carefully shift your weight over the centerline while holding the top sides of your boat. For kayaks, it's best to sit on the stern deck and then slide into the cockpit with legs straight.

For canoes, you want to step on the centerline and quickly kneel down. Canoeists and kayakers alike can add stability by holding their paddle perpendicular across the top of the boat and leaning on the blade resting on the shore or dock. Tandem paddlers should board one at a time and stabilize the boat for each other. When launching on the shore or shallow shoreline, you can wade into ankle deep water and continue the process as above.

On the Water

Once you are on the water, it is time to control this beast of a boat that seems to have a mind of its own. In theory, paddling is really rather simple. There are only three types of strokes: propelling, turning and bracing. But these three stroke types can seem somewhat daunting when one considers the multitude of variations and stroke combinations. With the proper level of skill, just a simple flex of the wrist can alter the direction of travel and the angle of the boat.

Check first to make sure you're holding your paddle correctly. For canoeists: Choose the side of the canoe on which you want to paddle. This side becomes your on-side. Your hand on this side is the shaft hand (i.e., the hand that holds the shaft of the paddle). Your other hand is the grip hand, which rests on top of the paddle's grip and controls the angle of the blade. Your hands should be spaced comfortably about shoulder width apart, and your arms should remain mostly straight. If you plan to tandem paddle with one partner often, remember that you need have opposite on-sides.

For kayakers: Hold the paddle horizontal above and resting on your head. Slide your hands apart such that your elbows are bent at right angles. Lower the paddle in front of you and make sure that your hands are an equal distance from each blade.

There are a few basic principles for achieving maximum efficiency from a paddle stroke. First for maximum power transfer, angle the blade perpendicular to the force of resistance. In other words, when you want to move the canoe or kayak forward, hold the paddle vertically such that the face of the blade points flat towards the rear. Also, as you apply power through the stroke, ensure that the blade remains vertical to the water's surface. Any alterations to the lateral and vertical angles of the blade will either affect a turning motion or create lift of the water (wasted energy if you're just trying to go straight).

When you execute a paddling stroke be sure to not be a "lily-dipper." In other words, make sure that the blade of the paddle is fully submerged in the water at the mid-point of your stroke.

You should power the stroke from your major muscle groups. You'll find that you have much more strength and endurance in your back and shoulders than in just your arms. Therefore, by rotating your torso and unwinding through the stroke, you'll go further than from just pulling on the paddle with your arms. Also by rotating your torso such that your chest always faces your paddles, you'll protect yourself from possible shoulder injuries. When you first start out, this principle is easily applied by watching the blade throughout each stroke. As you gain experience, you'll be able to rotate your body effectively while looking in any direction; usually the direction you want to go.

The basic strokes are really pretty simple. If you want to turn to the left, take a wide-reaching sweep stroke on the right. If you want to use a forward stroke keep your paddle close-in and parallel to the centerline. If you want to move sideways, place the paddle out to the side and draw yourself to it. Try each of these strokes on both sides and in reverse too.

Yet one more thing to keep in mind as you experiment and practice, is that eventually you may capsize ("swim", "flip"). If you're in a canoe, no problem, just fall out. Since you will be wearing your PFD (lifejacket), you should have no problem staying afloat. Do your best to hold on to your boat and paddle. If you're on moving water (a flowing river), float on your back with your feet on the surface of the water. Even in shallow water, with a current, a river can be a death trap if your feet become entrapped under a rock. While holding your boat and paddle in one hand, you can use the other hand to do a side stroke towards the nearest shore or eddy. Fight that instinct to stand up and wait to do so only when you are out of the current.

If you are in a kayak and you capsize, you need a little more patience. Unless you already know how to execute an Eskimo roll, you will also need to exit your boat. Gravity will still do the work to get you out, but you need to relax and keep your legs straight. As soon as you flip over tuck forward and pull on the spray deck grab loop (which should be right in front of you). Slide your hands on the deck behind you and carefully push out while doing an upside-down somersault. Wait until your feet are completely out of the kayak before you come to the surface. The whole process only takes a few seconds, but it's worth practicing a couple of times to reduce any anxiety about being upside-down under water. Again, try to grab your boat and paddle before they float away. If you're on calm, flat water, your partner may be able to help you drain and re-enter your boat without swimming to shore.

As with most things, you'll get out of it what you put into it. A few simple lessons from a qualified instructor will speed up your learning process dramatically and help you explore new paddling adventures.

Finally, if you'd like to read more about paddling techniques, contact the **American Canoe Association at (703) 451-0141**. We offer a wide selection of instruction manuals and videos on canoeing, river/whitewater kayaking, coastal/sea kayaking and river rescue, to help you fully understand the fascinating world of paddling.

Happy Paddling!