

Padding Signals

Stop. Normally, everyone should signal everyone else in the group. This lets everyone know that everyone knows to stop. Wait for "all clear" signal before proceeding.

Help/Emergency: There is an emergency or problem. Wave the paddle vertically in a circular motion and/or give three long blasts on a whistle.

All Clear: Everything is okay. Hold the paddle vertical and stationary.

Go This Way: Use the paddle to point the direction of travel. (Not Shown)

Are You Okay? Tap the top of your head three times and point to the person whom you are questioning. If they tap their head three times, they are signaling that they are okay. Otherwise, they need assistance.

Typical Paddler and Equipment

Right/Left/Neutral Control: Place the backface of the blade on the ground pointing forward. If the power face of the top blade is pointing to your left, you have a left control paddle. If it points to the right, you have a right control paddle. Note: The power face is the side of the blade in contact with the water on a forward stroke. Increasingly, many paddlers are using neutral or non-leathered paddles.

Nose plugs: The Eskimo roll is just another stroke when playing on the river. Nose plugs help to keep you from getting water up your nose.

Helmet: A helmet provides protection to the head including the temple area. It should provide insulation if there is cold water and should protect the temple area.

Whistle: Good for communications, use a whistle. A "pealers" whistle is best since the ball used to make the sound won't get clogged with water.

Pouch or Day Bag: For storing valuables including car keys for the shuttle car and money for an emergency phone call. It's preferable to carry your valuables in the pouch where they can't accidentally hook you to something.

Lifejacket: The lifejacket should fit snugly, yet allow freedom of movement. A Type III PFD is comfortable to wear, offers protection to the lower back, helps keep the body warmer.

Knife: When there are ropes and rigging, a knife is needed. The knife needs to be accessible, but not a hazard where it can catch on other things.

Dry Top: Made from waterproof material, the short or long sleeve dry top is sealed at the neck, wrists and spray skirt. As long as the spray skirt is intact, the paddler remains dry and warm. Providing additional warmth, normal paddling clothes are layered underneath. Made of neoprene, the vest (not pictured) traps and insulates a thin layer of warm water next to the skin. Both suits should protect the high heat loss areas of the arms, pits, crotch and neck.

Sprayskirt: Usually made from neoprene, the sprayskirt should fit snugly onto the cockpit. Make sure the grab loop on the front is outside of the boat so that you can release yourself from the kayak, if needed.

Goggles/M Gloves Mittens: help protect the hands from the chilling effects of the wind and cold water.

Boots: boots should insulate the feet and ankles from the cold water and they should protect your feet on rough surfaces.

Cold Water

Experts consider water below 70°F as cold. Consider the 120° rule. If the water and air temperature is below 120°F, wear a vest or dry suit. If there is any doubt regarding what to wear, dress for the water temperature. Cold water shock can result from the initial contact with cold water. The initial cold water contact against the chest or neck can result in an involuntary gag reflex that can drown you. Your lifejacket and paddling gear can help reduce the likelihood of cold water shock. Once in the water, hypothermia sets in quickly. It disorients, quickly robbing a person of their strength, and it quickly numbs a person's arms and legs within several minutes. Without rescue and proper first aid and treatment, unconsciousness and death can result.

Dehydration

When the body becomes too hot, it attempts to cool itself by sweating. Wet suits, drysuits and even paddling jackets can create a cycle of excessive dehydration. As the sweat evaporates, it absorbs heat from the body. The body is cooled. Unfortunately, they prevent evaporation. The body doesn't cool. So it sweats more in an attempt to cool itself. The result is that you create a situation that causes further loss of fluids and dehydration. Drink water before you start paddling and drink plenty of water as you paddle. Symptoms include headaches, nausea, and dark acid smelling urine.

River Kayaking

Flow: Mihaly Csikszentmihalyi developed the concept of flow. It is a state of mind that a paddler can reach when the challenges created by the river match the paddler's skills, necessary to meet those challenges. Adrenaline is usually not a necessary ingredient. When a flow state is obtained, paddlers often note some of the following characteristics: there is a merging or oneness between the paddler and what he or she does, time seems to become timeless or irrelevant, there is a focus on the immediacy of the activity itself and not on anything external to the activity. Surfing a wave, performing an eddy turn a good ferry or completing a skillful maneuver can easily lead to a flow experience.



The Paddling Experience

River paddling provides different benefits or experiences to the paddler. Often emphasized in the media, some people seek the thrill of an adrenaline rush. Others, seek an aesthetic experience much more akin to ballet, gymnastics, or dance where the boat is an extension of their body. Piroettes, doughnuts, surfing a wave, or precisely made eddy turn or peel out offers the paddler the grace, precision and mastery of the perfect maneuver. These paddlers seek harmony and equilibrium. Other kayakers seek out the beauty of nature offered on their local waterway. Yet, another group of kayakers seek none of these experiences because they use their kayak as their vehicle to do an activity like camping or fishing. Know that river kayaking can provide you with more than one type of experience.



This paddler is shown prepared for a moderately cool day. She can increase or decrease the layers of her clothes to suit the temperature and difficulty of the run (i.e., will she swim). To increase her warmth she will add layers of warm clothes. Her vapor barrier pants. If it is cold and if there is a chance of coming out of her boat, she will wear a full dry suit. In contrast, on a warmer day, she will remove layers.

Throw Bags

The throw bag is a rescue device that can be thrown quickly to a swimmer or used to snip a boat. The bag makes it easy to store in the boat and helps prevent becoming entangled in the rope. Normally, it will have between 50 and 70 feet of soft braided polypropylene or spectra rope as it is used. It is stored systematically into the bag. When throwing the bag, first loosen the drawing. Hold the top end of one hand (do not put your hand through the loop), and throw the bag at or slightly behind the victim in the rapids. A second bag works the rope. "belly" yourself (sit down, brace yourself) and run the rope behind your hip and put in the bow of your back) and let the victim swing to shore.



Eddy Turn

She focuses on speed, angle, stroke and lean. She knows that with the shorter boats, her turn into the eddy will be quick and easy. She takes a quick and powerful forward stroke to propel her across the eddy line. She leans the kayak into the turn. Once in the eddy, she uses a stern draw to stop her spin.



Ferrying

The kayaker slips out of the eddy with her bow pointing upstream. She lifts the upstream side of the kayak ever so slightly out of the water. The kayak is at an angle to the current. She can feel the force of the water against the hull. Some of the current forces the kayak downstream and some of the current forces it laterally or sideways across the river. She takes a forward stroke to counteract the force of the downstream current and stern draws rudder to maintain her proper angle. The kayak continues to move sideways across the river. The river begins to push her back downstream. Again, she takes another forward stroke and stern draw. She catches a small standing wave that helps her maintain her upstream momentum. She experiences a balance or equilibrium between the downstream force of the current against the hull of her boat and the opposing force of her forward strokes. Soon the slips effortlessly into the eddy on the other side of the stream.



Boat Diversity

River kayaks have evolved from longer racing boats designed to meet the International Canoe Federation requirements to shorter boats that are used for recreational and rodeo paddling. Shorter and lighter boats result in boats that turn, surf waves, and are more maneuverable than their predecessors. They require less energy to maneuver. Kayak designs may vary radically with each design serving a very different and specific purpose.

Guidelines In Planning a Boat Trip

Specific planning must take place by paddlers preparing for a float trip. The following guidelines should give paddlers insight and guidelines regarding what they should consider before attempting to paddle a river.

Pre Trip Planning

- 1) Know the river or stream to be paddled. River guide booklets and topography maps are valuable references in trip planning. Have a knowledge of the difficult parts of the trip and the location of any low head dams. Be aware of possible changes in the river's level. One may want to plan alternatives in case the stream is too high or too low.
- 2) Set-up locations for put-ins and take-outs along with possible lunch break stops. Consider time and distance. Arrange for the shuttle.
- 3) Equipment - What you take with you on a trip is all that you have to survive and rescue yourself. This includes water, food, navigation aids, safety, rescue equipment and extra clothes. If you don't bring it, you won't have it if and when you need it.
- 4) Float Plan - If the trip is into a wilderness area, or for an extended period of time, plans should be filed with appropriate authorities or left with someone who will contact them after a certain period of time. The establishment of a late return phone number can save time and worry for everyone involved.
- 5) Participant Responsibilities - Unless the trip is an instructional or a commercially guided trip, most trips are of a common adventure trip format where each participant takes responsibility for participation on the trip, the selection of appropriate equipment, and the decision to run or scout rapids. More experienced paddlers should assist those with less experience in making proper decisions on the trip.
- 6) Gradually work yourself into the activity. Pick a setting that matches your ability, skills and general conditioning. When they improve, choose more difficult settings or longer more remote trips.

On River Behavior and Etiquette

- 1) Be a competent swimmer with the ability to handle oneself underwater and in moving water.
- 2) Be certain to have a properly fitting life jacket, and WEAR IT.
- 3) Keep the kayak under control. Control must be good enough at all times to stop or reach shore before reaching any danger. Know your boating ability. Do not enter a rapid unless reasonably sure you can navigate it or swim the entire rapid in event of a capsizing.
- 4) Be sure to keep an appropriate distance between kayaks (the actual distance will vary depending on water conditions, a good general rule is to keep the kayak behind you in view). Normally, stay behind the lead kayak and in front of the sweep boat. Both the lead and sweep kayak should be experienced boaters.
- 5) Keep a lookout for river hazards and avoid them.
- 6) Know your emotional and physical limitations. Group members need to constantly assess the behavior of others in their group. Look for changes in behavior, withdrawal, sluggishness, talking less, or a member not eating enough. These are all symptoms of fatigue and may suggest a problem that the group needs to address.
- 7) Respect the rights of fishermen and land owners when paddling.

International Scale of River Difficulty

Class I: Easy. Moving water with a few riffles and small waves. Few or no obstructions.

Class II: Novice. Straightforward rapids with wide, clear channels that are obvious without scouting. Some maneuvering is required.

Class III: Intermediate. Rapids with high, irregular waves that are difficult to avoid and that are often capable of swamping an open canoe. Eddies and currents are more powerful. Narrower passages may require the ability to maneuver the kayak around ledges and rocks. Scouting is often advisable for inexperienced groups.

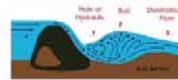
Class IV: Advanced. Long, difficult rapids with constricted passages that often require precise maneuvering in very turbulent waters. Scouting from shore is often necessary, and conditions make rescue difficult. Generally, not possible for open canoes. Kayakers should have the ability to Eskimo roll.

Class V: Expert. Extremely difficult, long very violent rapids with highly congested routes that rarely always must be scouted from shore. Rescue conditions are difficult, and there is significant hazard to life in the event of a mishap. Ability to Eskimo roll is essential for boaters in kayakers.

Class VI: Extreme. Difficulties of Class V carried to the extreme of navigability. Nearly impossible and very dangerous. For teams of experts only, after close study has been made and all precautions have been taken.

Remember: Many rivers refuse to fit neatly into a system. Fluctuating water levels caused by rainfall and upstream releases may change the class. Be aware of these changes and prepare accordingly. One final note that should be addressed, the river classification system is subject to interpretation and it is recommended that you seek several sources before assuming you have the ability to run sections.

Common Hazards



The following are some hazards commonly associated with river kayaking.

Hydraulics, holes, reversals: When water drops over an obstacle, it curls back on itself, forming a strong upstream current that may be capable of holding a swimmer or boat. When viewed from the upstream side, a hydraulic that seems to "smile" directs the force of the current toward and outside of the hole. Often they are a friendly hole to surf. In contrast, a hydraulic that seems to "frown" directs the force of the current toward the middle of the hole. Often, these holes are undesirable to a paddler. When viewed from the upstream, a "straight line" across the river often suggests a ledge or even a low head dam below.

Types of Holes



Low head dams: create a perfectly formed hydraulic extending from one side of the river to the other. The recirculating portion of the hydraulic can hold a person and floating debris until the person drowns. So efficient at killing are low head dams, they are nicknamed the "drowning machine."

Strainers: fallen trees, bridge pilings, undercut rocks or anything else that allows the current to flow through it while holding you is a strainer. Strainers are deadly.

Moderately high water: When spring flows occur in summer, the river has the power to kill people. A one or two foot difference in the water level over summer low flows can often double the velocity of the river. To the untrained eye of someone who visits the river once or perhaps twice a year, the river looks perfectly normal since it is still within its banks. Asked when the river is dangerous, most people identify flood conditions or high water, which of course, are dangerous. This is why the moderate flows are potentially dangerous. The river has the power to become a contributing factor in a fatality, yet people don't perceive the river as dangerous. A gravel bar covered with annual vegetation that is partially underwater is usually a good indicator of moderately high water during the summer.

Safety Education

In an effort to promote a safe and enjoyable boating experience, the ACA offers extensive safety, educational and instructional programs to its members and to the general public. In addition, the ACA is committed to protecting the resource for paddlers and through its programs, it seeks to provide water trails and other scenic places for people to paddle their kayaks and canoes. This watershed is part of the ACA's effort to promote safe boating.

High water: - he river may be getting close to filling its banks or it is flooding over its banks and into the trees. The river looks high. The current is flowing noticeably faster; often the river changes color or is muddy, and often there is debris floating down the river. Most people sense danger when looking at a river at high water.

YOUR BOATING DOLLARS AT WORK

