

Safe Boating Hints for Paddle Craft

Canoes, kayaks, and small inflatable rafts are popular means of recreation for thousands of Californians. Paddle craft are usually lighter and more open than larger vessels, and therefore easier to capsize in rough waters. Paddlers should realize the vulnerability of their craft, assess their own boating experience, and determine the level of difficulty the waterway presents. Effective trip planning and paddling skills as described in this pamphlet will help promote safe and enjoyable recreation.

Your craft does not need to be registered unless it is motorized. (You can register your craft at any branch of the Department of Motor Vehicles. On motorized inflatable vessels or on vessels so configured that the registration number on the hull or superstructure would not be clearly visible or adhere, the number must be painted on or attached to backing plates.)

Required and Recommended Safety Devices

All canoes and kayaks as well as inflatable rafts must carry a U.S. Coast Guard-approved personal flotation device (life jacket) for each person aboard. Common sense demands that everyone wear a life jacket whenever afloat.

New or unfamiliar equipment should first be tested in calm water. The craft should be controlled by strong and adequate-size paddles or oars, and spares should be readily available in case one is lost or broken. Additional recommended equipment includes protective foot gear, such as tennis shoes, bailing device, river maps, flashlight, compass, first-aid kit, boat-repair materials, knife, and a 50- to 100-foot throw rope. A helmet should be worn in swift rapids.

Getting Under Way

Canoes, kayaks, and inflatable rafts have very different handling characteristics. However, all these craft have one thing in common: they easily capsize if they are overloaded or improperly loaded. All weight should be stowed as low in the center of the boat as possible. If you change position in the boat, stay low and center your weight. Always make sure your craft is balanced, secure and in good repair. Inflatable craft having a single air chamber are generally not recommended on white water.

Emergency Procedures

If your boat capsizes, stay on the UPSTREAM end of the craft. This allows better visibility to enable you to swim your boat to shore. More important, it prevents the possibility of being

pinned against obstacles. Hold on to your boat unless you can increase your safety by abandonment. If rescue is not imminent and the water is cold, or perilous rapids are near, float downstream feet-first to the nearest landing. This will enable you to fend off obstacles and prevent your feet from being wedged between rocks, which can trap you underneath the water. Never attempt to stand up in rapidly moving water unless it is too shallow for swimming.

Whitewater Class System

The following classification is based on a guide for rivers established by the American Whitewater Affiliation. The river should be considered one class more difficult than normal if the water temperature is below "50 degrees" Fahrenheit, or the trip is in a wilderness.

CLASS I: Easy

Fast-moving water with riffles and small waves. Few obstructions, all obvious and easily avoided by paddlers with little training. Risk to swimmers is slight; self-rescue is easy.

CLASS II: Novice

Straightforward rapids with wide, clear channels, which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-size waves are avoided easily by trained paddlers. Swimmers are seldom injured, and group assistance, while helpful, is seldom needed.

CLASS III: Intermediate

Rapids with moderate, irregular waves, which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or "strainers" such as fallen trees, bridge pilings and undercut rocks may be present but are easily avoided. Strong eddies and powerful currents can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid a long swim.

CLASS IV: Advanced

Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting is necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for

rescue is often essential but requires practiced skills. A strong Eskimo roll is highly recommended.

CLASS V: Expert

Extremely long, obstructed, or very violent rapids, which expose a paddler to above-average danger. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex, demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the rating scale, several of these factors may be combined. Scouting is mandatory but often difficult. Swims are dangerous, and rescue is difficult even for experts. A very reliable Eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential for survival.

CLASS VI: Extreme

These runs often exemplify extremes of difficulty, unpredictability and danger. The consequences of errors are very severe and rescue may be impossible. For teams of experts only, at favorable water levels, after close inspection and taking of all precautions. This class does not represent drops thought to be unrunnable, but may include rapids that are only occasionally run.

Generally, Class I and II rivers can be run in open canoes. Some higher-class rivers are suitable in open canoes if boaters are highly skilled, if time is allowed for emptying water from the boat, and if extra flotation is firmly installed in the boat. **A CLASS OF RIVER MAY CHANGE ACCORDING TO THE AMOUNT OF RIVER RUNOFF AND THE DEPTH OF WATER AT A GIVEN POINT.**

Know The Flow

The river flow can change quickly, often changing the difficulty of the run. River flows can have a tremendous effect on current velocities and the size and difficulty of the rapids. You should obtain river flow information and determine how the flow will affect the difficulty of the run by calling the river managers. Avoid running the river when the flows are too difficult for your skill level. Stay off rivers at flood level.

Cold Water Dangers

Capsizing or falling overboard into cold water can cause immediate health problems, ranging from disorientation and hyperventilation, to heart attack. A fall into cold water can trigger the "gasp reflex," in which the shock of cold water on your face causes you to take an involuntary breath. If your head is submerged, water is inhaled. Cold water also quickly numbs hands and feet and saps overall strength. Self-rescue becomes difficult very rapidly.

If you cannot get out of the river and your wet clothes within a few minutes, then you may also begin to feel the effects of hypothermia. Hypothermia is a life-threatening condition that occurs when the temperature of a person's heart and brain drop below normal. Unconsciousness can

occur when the body's core temperature drops below approximately 90 degrees F, and heart failure usually occurs below 80 degrees F.

There are several ways in which to increase your chance of survival in cold water: (1) Always wear a personal flotation device (life jacket), (2) Get out of the water as fast as you can since you get colder faster in water than in air, (3) Dress properly. Wear polypropylene or wool, and layer clothing under a windproof outer garment. Avoid cotton garments. When in doubt, substitute a wetsuit under the outer garment.

In Case Of Accident

Should an accident occur while you are on the river, seek assistance from passing boaters. Most commercial rafts have a guide who is experienced in handling river emergencies. On remote sections of a river, stay on the river bank. It is more likely that help will come to you faster than you can find it.

If you must leave the accident site to seek assistance, follow the river back upstream. Do not try to go overland unless you are familiar with the area.

Safety Hints

- Learn how to swim, how to apply first aid and CPR.
- River travel should be a group effort involving at least three boats traveling as a team. NEVER boat alone.
- Leave word with a responsible person concerning your destination and when you will return.
- An unknown rapid should never be run without first scouting it thoroughly from shore. If in doubt, portage around the hazard. Before starting a journey, boaters should become knowledgeable about local conditions such as currents, rapids, flow levels, weather, and hazards.
- Watch for and avoid hazards such as fallen trees, brush, fences, bridge abutments, or old pilings.
- The current may pin the boater or boat against these obstacles.
- At difficult rapids, station rescuers downstream with boats and throw lines.
- Stay clear of reversals behind boulders, weirs or snags. Boaters and their craft can become trapped in this reverse flow of water. If you get caught, work yourself over to the side.
- Have all gear either securely fastened within the craft or in waterproof containers that will float high and be easily retrievable. Never tie yourself or other passengers into the craft.
- Always travel with an experienced trip leader who is thoroughly familiar with the river.
- Do not boat while under the influence of alcohol or drugs.