

# Safety Guidelines for Paddling In the Waters of Florida

"Accident descriptions suggest that a large portion of canoeing and kayaking fatalities involve people who have little or no experience with canoes or kayaks, who lack fundamental paddling skills, and who have not been effectively reached with safety messages."

--American Canoe Association, *Critical Judgment II: Understanding and Preventing Canoe and Kayak Fatalities, 1996-2002*

The following guidelines and recommendations are mainly for the occasional canoeist or kayaker who has not developed the high-level skills, knowledge, and experience of the dedicated paddler. Their purpose is to improve the chances of a safe and comfortable short paddling trip in a traditional canoe or kayak on relatively safe waters. Obviously, guidelines cannot guarantee anyone's safety, and space limitations prevent us from mentioning every hazard.

Although written for Florida paddlers, most of the guidelines apply anywhere.

## 1. Know Fatal Combinations

These factors do not cover all the circumstances in which accidents and fatalities occur, but they present a starting point for being cautious:

**GENERAL: Male paddlers + not wearing a life vest + lack of knowledge and skills.** Although about half the paddlers in the U.S. are women, 90 percent of fatalities are men. Absence of a life vest plays a role in 75 percent of drownings. A majority of victims are unaware of dangers and don't have the skills to get out of trouble.

**CANOES: Calm water + not wearing a life vest + alcohol or fishing.** Canoes are inherently unstable. The mechanics of fishing involve weight shifts (esp. leaning over the gunnels), and that leads to capsizing. So does horseplay. Calm water lulls people into carelessness and creates a setting for drinking.

**KAYAKS: Paddling in open water far from shore + cool to cold water temperatures + bad weather.** Typically, unexpected winds cause repeated tip overs. Water draws heat from the body 25 times faster than air, and the cause of death is often hypothermia (cooling of the body), not drowning. The paddler's hands get too cold to grip the boat, judgment is impaired, and unconsciousness follows.

## 2. Take Responsibility for Your Own Safety

--In the last two fatal paddling incidents in Florida, the novice victims were all wearing life vests and were accompanied by experienced guides. Don't depend on a floatation device or a guide.

--Take responsibility for your own safety by avoiding trips that require more skill and experience than you have. For example, don't go on a trip over open water unless you know how to handle rough water and know how to get back into your boat after a tip over. Popular trips are often rated on the Web: beginner, intermediate, advanced. Don't paddle beyond your level.

## 3. Play It Safe on Large Bodies of Water

--Only trained and practiced paddlers are prepared for the hazards of off-shore or open water. If you do not have that background, don't go there, even if there are professional guides present.

--We recommend that you not try to paddle in the Atlantic in a canoe or sit-inside kayak. On wide rivers, large or isolated lakes, and the Gulf of Mexico, stick to shallow shore lines. Some shores on the Gulf are shallow, calm, and fairly safe, but others are deep with strong tidal currents. Stay away from the latter.

-- Even when paddling close to shore, beware of strong off-shore winds that can push you out into deep water and then tip you over. This may have been what happened to two youths in a recent fatal paddling incident in Florida. Understand that while an offshore wind may feel gentle when you are close to land, it becomes a stronger force as you move away from the wind-blocking effects of land. Winds from any direction may push you into rocks, another paddler, or a pier.

--Some tidal bays are so shallow at low tide that you are fairly safe even hundreds of yards from shore, but be watchful of the in-coming tide so that you won't have to traverse large areas of deep water, far from shore, on the return trip. On the other hand, if the bay is too shallow at low tide, you may be trapped hundreds of yards from shore in watery mud that is too shallow to paddle through and too deep to walk in. Check the tides while planning your trip.

#### **4. Research Your Trip**

--Get as much information as you can about any unfamiliar trip. Consult the Web, the local paddler's club (they will have a Web site), the canoe/kayak rental places, and friends. How long will the trip take and what are the dangers?

--If possible, find out the water level. On a creek, high water means smooth paddling with fewer shoals (small rapids) and fewer sunken logs to get hung up on, but it also means faster current, and beginners will need to approach sharp turns cautiously to avoid losing control. On such turns, overhanging tree branches can overturn your boat. Flooded rivers flowing swiftly through the surrounding brush and trees can create "strainers," which can tip you over or entrap you. On the other hand, shallow water levels create shoals, which may require lots of slow portaging (carrying or dragging your boat over land). Low water may result in your being continually hung up on submerged logs and rocks. In very low water conditions, a trip may take hours longer than usual.

--On wilderness river/creek trips, find out if there are any "low-head" dams. These drops of a few feet can be hard to see coming and their hydraulics are dangerous in fast-water conditions, sucking you back toward the dam and then under water.

--On an ocean or gulf, tides can create strong and dangerous currents, even close to shore. Enquire about such dangers where you intend to paddle.

#### **5. Check the Weather**

--Bad weather can be deadly on an ocean, gulf, lake, or river, and rain can make any trip miserable. Winds over 5 mph can be dangerous. Lightening can strike your boat on the water. Wait for a sunny, calm day ([www.nws.noaa.gov](http://www.nws.noaa.gov)). If you are caught unawares by a lightening storm or strong winds, put into shore immediately. If there is lightening about, don't stand under a high tree.

#### **6. Don't Paddle Alone**

--There is safety in numbers, and the more paddlers the better. On wilderness trips, where you are far from the nearest hospital, travel in groups of four or more. It may take three people to rapidly carry or shuttle an injured person.

#### **7. Tell Someone Where You Are Going and When You Will Be Back**

--Write down the name of the water and the route and the time of your return, give that to someone on shore, and arrange to contact that person when you return. Don't expect that person to remember this information; write it down.

## **8. Start Early**

--Once you know how long the trip will take, start early enough that you can expect to be off the water at least three hours before sunset, in case you are slowed by unexpected trouble. Narrow rivers and creeks, with submerged rocks and logs, can be unnavigable in darkness, and it's no fun sitting in the woods waiting for dawn while your loved ones back home worry. On large bodies of water, rescue is obviously more difficult in the dark, and night coldness can contribute to hypothermia.

## **9. Dress Appropriately**

--Wear a life jacket at all times. Instead of relying on jackets handed out by rental places, you might consider buying one that fits you well and is comfortable.

--Be especially careful of the sun in unshaded water; it reflects up off the water into your face. Wear a hat, dark glasses, lip balm, sun-protection lotion, and, in warm months, insect repellent.

--Expect to tip over and get soaked. Have a complete set of dry clothes in your car, and on a long trip carry a set in your boat in a dry bag or a plastic garbage bag.

--Wear synthetics, not cotton. Cotton retains dampness and cold. In cool weather, dress in layers of capilene or other quick-drying synthetics. Inexperienced, unskilled paddlers probably shouldn't go out in cold winter weather; no one should do so without an appropriate wet-suit or dry-suit designed for such conditions.

--In the boat, always wear some kind of toe-covering footwear, such as water shoes or tennis shoes. Don't go barefoot. Don't wear open sandals or flip-flops.

## **10. Bring Plenty of Water and Food**

--Bring at least one gallon of water for a day trip. Sip regularly, even if you are not thirsty, to avoid dehydration through the exertion of paddling and exposure to the sun.

--Besides your lunch, consider taking snack bars in case your trip takes longer than you think.

## **11. Bring Basic Safety Equipment**

-- A check list: A life vest (worn at all times), a water pump (absolute necessity; they are cheap, so buy one; or ask the rental place to lend you one), a First Aid kit (especially on wilderness trips), 30 feet of rope for mooring, a quick release harness for towing (safer than using a simple rope), a knife, a whistle to signal location and request rescue (attach these last two to your life jacket), a compass or GPS, and a map of the area. If you own a VHF radio, bring it along on any trip in isolated waters. Cell phones are not dependable in wilderness areas.

## **12. Bring an Extra Paddle**

--If you tip over in fast moving water, try to hang on to your paddle. Once it gets loose, it moves downstream faster than you or your boat and can easily get lost. You should have a back-up paddle in case you lose your main paddle. One half of a screw-together kayak paddle will be enough to get you home. Secure that back-up paddle firmly to the top of your boat; don't leave it loose inside.

### **13. Tie Down (Almost) Everything**

--You should make two assumptions: (1) you are going to tip over, and (2) when you do, you are going to lose everything that is not tied down. Tie a string around your water bottles with one end attached to your boat. Tie on your glasses with a strap behind your head. Tie your hat to your shirt collar with a cord with clamps on each end. And so forth. Don't keep anything loose in an unbuttoned shirt pocket or inside the open seat compartment of your boat.

-- Secure rope away from your feet; rope loops can be dangerous if a tip-over occurs. Don't tie down your paddle; you can get tangled up in a tied paddle during a tip-over.

### **14. Don't Allow Stragglers**

--On a trip with many paddlers led by professional or volunteer guides, the formation will be structured so that amateur paddlers are between experienced paddlers; the guides also take up the front and back. The back is as important as the lead. If there is no rear "sweep boat," a weak paddler will soon be out of sight and may eventually get in trouble while the group moves on unaware.

--If you are out paddling with your friends, and one in the group is particularly slow, put that person in the lead if there are no dangers ahead, or put that person second if an experienced paddler is required up front. This will keep everybody at the slower boat's pace. Use your whistles to signal when someone straggles or gets in trouble. Paddlers in a line will naturally separate; at regular intervals, the lead person should wait for everyone to catch up and get back in sight of each other.

### **15. Know the Local Wildlife Dangers**

--In Florida, the biggest danger from wildlife in fresh water comes from the "Cottonmouth" Water Moccasin. This snake is mottled black and brown with a distinguishing milky whiteness under the chin and inside the mouth. It has the triangular head and pointed snout of a viper. It likes to hang out under the high overhanging banks of creeks and in rocky areas where you may be portaging. The Water Moccasin usually doesn't retreat as you approach, and that may be your first hint of its identity. Florida also has coral snakes, copperheads, and rattlers. Florida bears are very shy, but, obviously, don't mess with them.

--Alligators tend to enter the water with a big splash when humans approach, apparently feeling safer there. Gators are not inclined to attack canoes or kayaks, but take care not to tip over when they are around. Like snakes and bears, gators are small-brained animals with big teeth, and you should always treat them as dangerous.

--In the Gulf, sharks come right up to the shoreline.

### **16. Know What to Do If You Tip Over**

--Obviously it is best to not tip over at all. In large bodies of water, turn your boat into waves; don't let them hit you broadside. The same with the wakes from motorboats passing by; point into them, or if they are so big they threaten to swamp the nose of your boat, take them at a 45-degree angle. Stay low and brace yourself until your boat stops rocking.

--On creeks, avoid risky shoals by portaging.

--Canoes are more stable if weight is distributed equally and towards the wide middle. If paddling alone in a canoe, put a weight low in the front center to partially balance your own weight. Flotation devices--foam or air bags--help keep water out of the boat during a capsize and prevent the canoe from sinking.

When you do tip over--

--On creeks and rivers and along shore lines, keep hold of your paddle and your boat, unless doing so endangers you. Swim or walk directly for shore, taking your paddle and boat with you. In a creek, do not stand up in fast moving water at knee level or higher--that can result in "foot entrapment," which can lead to drowning. In such rapids, lie on your back and float out of them feet first, holding onto your paddle but not your boat.

--On a large body of water, you must depend on skills learned before taking the trip. If you haven't become proficient at re-entering your boat in water over your head and stabilizing the boat by emptying it of water, you should not venture far from shore, even in the company of professional guides.

## **17. Save Intoxicants/Stimulants for After the Trip**

-- Nicotine speeds up frost bite. Caffeine and alcohol dehydrate your body. Alcohol exacerbates hypothermia and encourages recklessness. Marijuana has a lulling effect, not ideal in an emergency.

## **18. Learn Basic Paddling Skills**

--Paddling is popular partly because it's generally safe, despite the dangers discussed in this document. It is also popular because it requires almost no skill to move a canoe or kayak through the water. However, it does require skill to handle a boat well, especially in choppy or fast moving water. And everyone who wants to paddle in deep water (e.g. crossing a lake) should know how to get back into the boat after a tip-over. You can learn such techniques from books and videos, but you should do a tip-over drill in safe water to find out how well those techniques work for you. Tip-over drills are a great activity for the beach or your favorite swimming hole or your home swimming pool on a hot day. You may also want to try it on a cold day to find out how well you can manage the shock of cold water. Make sure your children know what it is like to tip a boat over and recover it so that they won't panic when it happens for real. Train them to hang on to their paddle and their boat.

--If you plan to paddle regularly, it's a smart idea to take a course taught by professionals. Many canoe/kayak rental places offer such courses.