How to Be Safe on the Water

Canoeing is fun, but it can be risky! Let's imagine some conditions paddlers might encounter. Read the following description and then list the risks these paddlers are taking.

Early in March, Cliff arrives at Susie's house in northern Ohio with a new canoe. Susie is excited. She's never been in a canoe, and asks to go paddling that afternoon. The sun is shining with a forecast in the mid-sixties, so, dressed in cotton T-shirts and jeans, they drive to the river. The water looks high and is moving fast. It takes a long time to untie the canoe from the car, but they eventually throw paddles, life jackets and a six pack of beer into the canoe and push off. Water splashes into their canoe as they head downstream.

The description above was compiled from actual accident reports.

List the risk factors Cliff and Susie are taking. There are at least 10. (Ch your answers on page 8.)

1.

2.

3.

4.

5.

6.

Now list ways to minimize these risks.

1.

2.

3.

4.

5.

6.

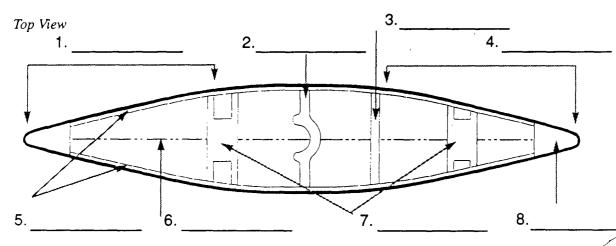
Become a safe paddler by reducing potential risk. Weather, water conditions, wind, temperature, equipment; prior planning, group composition, and experience all play a part in the safe boating formula. Understanding the following key points will reduce your chances of a mishap and increase your enjoyment.

- 1. What is a good rule of thumb for determining when a wet/dry suit is needed?
- 2. Describe criteria for dressing for a canoe trip.
- 3. List items appropriate to take on a canoe trip.
- 4. What is hypothermia? What are its early symptoms?
- 5. What is the leading factor in canoe drownings?
- 6. What are the most common canoe injuries?

Equipment and Nomenclature

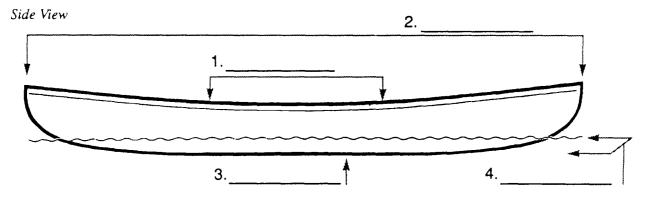
CANOE PARTS AND TERMINOLOGY

Label each part of the canoe with the appropriate term (answers on page 12).



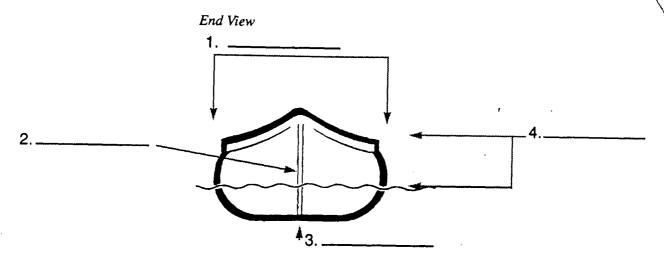
- A. KEEL LINE. A real or imaginary line from end to end down the center of the canoe.
- B. GUNWALES (PRONOUNCED GUNNEL)/RAILS. Reinforcing material along top edges of the sides of the boat.
- C. SEATS. Used for kneeling support or seating and located at bow and stern for tandem paddlers, center for solo paddlers.
- D. THWARTS. Gunwale to gunwale (rail to rail) cross braces.
- E. PORTAGE YOKE. A shoulder rest to aid in canoe portaging.
- F. END DECK. Triangular reinforcement at the bow and stern.
- G. Bow. The front or forward part of the boat.
- H. STERN. The back portion of the boat.

Quick, which direction do paddlers face when paddling the boat above? Hint: Think about where your feet go if you decide to sit instead of kneel. With this hint in mind, you'll always be able to decide which end is the bow and which end is the stern.



- A. LENGTH. Longitudinal measurement from end to end.
- B. DRAFT. The vertical distance from the bottom of the boat to the waterline.
- C. KEEL LINE. The longitudinal centerline of the canoe.
- D. AMIDSHIPS. Midsection of the boat, between the bow and stern.

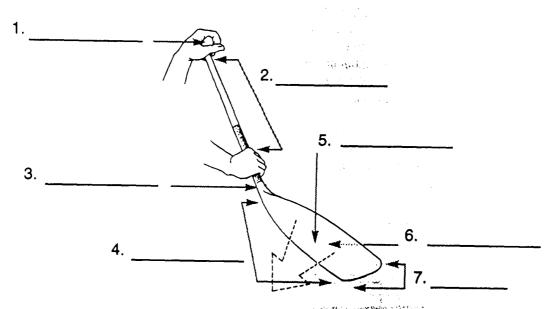




- A. STEM. Bow or stern vertical edge of the canoe.
- B. BEAM. Width of the canoe at amidships.
- C. FREEBOARD. The vertical distance from water to the lowest point along the gunwale.
- D. KEEL LINE. The longitudinal center line of the canoe.

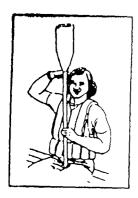
PADDLE PARTS _

Label each part of this bent paddle.



- A. BLADE. The flat section of the paddle which moves through the water.
- B TIP. The blade's bottom edge
- C. GRIP. The control handle shaped to fit the paddler's top hand.
- D. SHAFT. The section of paddle between the blade and grip.
- E. THROAT. The junction between blade and shaft.
- F. POWERFACE. The side of the blade catching the water during a forward stroke.
- G. BACKFACE. The other side of the blade.





To select the correct length of a canoe paddle, sit upright on a flat surface. Place the paddle grip between your legs and extend the blade upward. The throat of a straight paddle should reach the top of your head. The bent paddle's throat should reach the bridge of your nose. Seating options, canoe type, and load may reduce or increase this optimal length by an inch or two. Once in the canoe, your control (top) hand should be approximately at eyelevel with the blade immersed and the paddle vertical.

| REVIEW: PADDLES AND CANOES | |
|----------------------------|---|
| 1. | How do you measure for proper paddle length? |
| 2. | How do you choose between straight and bent-shaft paddles? |
| 3. | Longer canoes have the potential for greaterthan shorter ones. |
| 4. | Describe how a lake canoe should be shaped. |
| 5. | Describe how a river canoe should be shaped. |
| 6. | Describe the performance differences between canoes with round versus flat bottoms. |
| 7. | Describe the performance and paddling differences between canoes with flare versus tumblehome shapes. |

Abeams move the canoe sideways without turning it. Abeams are useful for leaving and approaching shore and avoiding obstacles in moving water. Draws, pushaways, prys, and cross draws move the solo canoe abeam. Tandem paddlers may use a variety of combinations including:

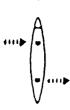
- A bow draw with a stern pry or pushaway to move the canoe to the onside.
- A bow pushaway or cross draw with a stern draw for an offside move.

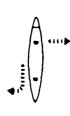
DIFFERENT STROKES FOR TANDEM FOLKS .

Name the stroke. Also note the direction the canoe will travel. The arrows represent the directions of the paddles.













A. Bow

Stern

Direction

B. Bow

Stern

Direction

C. Bow

Stern

Direction

D. Bow

Stern

Direction

E. Bow

Stern

Direction

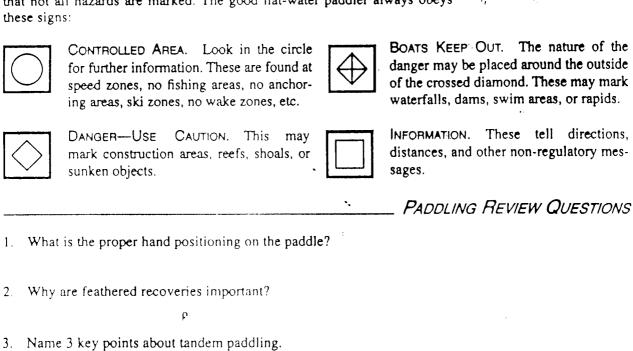
F. Bow

Stern

Direction

Canoeing on Lakes and State Waterways

Many lakes and rivers are marked with information and regulatory signs and buoys indicating restricted or hazardous areas. It's important to keep in mind that not all hazards are marked. The good flat-water paddler always obeys these signs:



- .
- 4. With the bow paddling on right, the stern on left, list combinations turning the canoe offside (counterclockwise).
- 5. As above, list onside (clockwise) combinations.
- 6. What is the purpose of the "J" stroke?
- 7. Why do we try to keep the paddle shaft vertical on draws, pushaways, forward, and back strokes?
- 8. Why do we hold the shaft nearly horizontal for sweeps and reverse sweeps?
- 9. What phase of the paddle stroke transfers the most force to the water?
- 10. What are three common factors in eddy turns and peelouts?
- 11. What force aids in ferrying a boat?

