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CANOEING



CANOEING SECTION CONTENTS

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PADDLING POINTERS – FOR BOTH FLAT-WATER AND SWIFT-WATER CANOEING

Which paddle should you use? Experienced canoeists say to use whatever paddle length feels most comfortable. For beginning canoeists, a paddle of the proper size should reach from shoe level to about four inches below your shoulders. But, remember, it's the feel of the paddle that's most important. Since you may be paddling all day, use the one that feels most natural in your hands. Always carry an extra paddle, and do not use a paddle to pole the canoe over rocks or shallows. A cracked paddle may break when you need it most. Be sure the spare is placed so that it may be quickly reached if needed.

In all strokes, the paddle should be held with the palm of the upper hand *over* the top of the grip. The lower hand should be held far enough down on the shaft to assure a powerful stroke. The blade angle and direction of the stroke are very important in proper execution of each paddle stroke. Keep the paddle close to the side of the canoe.

Easy, energy conserving paddling is a matter of balance and coordination and position in the canoe. Nearly all this comes with practice, but bad habits can develop and tire you easily. Learning the basic strokes is not difficult, but only through practice can you become a skillful canoeist, able to handle difficult situations with confidence.

When you watch experienced paddlers maneuver a canoe up to a dock or down challenging rapids, you will notice they often combine power and turning strokes into one smooth motion. Practice the strokes in their pure forms first. After you get a feel for the canoe and the paddle, you will find yourself automatically combining strokes.

Paddles

There is a wide variety of paddle designs, construction materials and prices. A strong, well-balanced, light paddle will be expensive but will be a dependable partner for many years. Length, blade width, and grip shape depend on the type of canoeing you plan to do, your size, your strength, and your personal preference. Before you buy your own paddle, try as many different types as possible.

There are some *general* guidelines to consider when purchasing a paddle:

- Standard length is up to the chin; however, you may want it shorter or longer. Try different lengths.
- The blade width generally varies from six to eight inches. Wider blades are used in whitewater, longer, narrower blades for lake travel.
- Pear-shaped grips on lake paddles fit comfortably in the palm of your hand while T-grips offer more blade control in whitewater.

Parts of the Stroke

- The *plant* is the starting point of a stroke.
- The *power* or propulsion phase is the application of force, through the paddle, against the water. This results in movement of the canoe.
- The *recovery* phase involves the return of the paddle blade to a plant position. Recoveries involve feathering the blade above the water or slicing the blade through the water.
- The *powerface* is the side of the paddle blade which pushes against the water during the forward stroke.
- The *backface* is the opposite side or back of the blade. During the backstroke, the backface is pushing the water.

Now that you are familiar with paddling terminology, we will introduce you to the strokes used in canoeing today. If you are learning strokes for the first time, read through the entire description of the stroke. Then grab your paddle and practice the stroke. Take your time and concentrate on technique, not on speed. Practicing in a canoe is best, but kneeling on the side of a swimming pool or a dock will also work. If you have a video camera, have someone film you. Then, with book in hand, watch your video in slow motion and critique your paddling strokes.

STROKES

The Forward Stroke: Within the last decade, the forward stroke has taken on a new look. There has been a shift from “arm” paddling which utilizes smaller, weaker muscles, to “torso” paddling. The torso style of paddling encourages you to use the stronger and larger muscles of your back, abdomen, and upper body. Even though this technique may seem awkward at first, it will save you from sore arm muscles on those long paddling days.

Start on your ride side. Slightly rotate your upper body by moving your right shoulder forward. Keeping both arms nearly straight and plant your paddle in the water well ahead of your knees. With your paddle shaft nearly vertical, uncoil your upper body by driving your left shoulder forward. Keep your arms straight and make your shoulders and stomach muscles do the work. As soon as the paddle reaches your hips, the recovery phase begins. Slice your blade out of the water and feather it a few inches above the surface of the water back to the plant position.

The Back Stroke: The back stroke is used to propel your canoe backward or to decrease forward speed when approaching obstacles such as rocks, moose, or shore.

Plant your paddle in the water next to your hips. With both hands out over the gunwale, use the backface to push water towards the front of the canoe. Throughout the power phase of the stroke, keep your paddle parallel to the keel line of the canoe. Once the paddle reaches your knees, slice the blade out of the water at a ninety-degree angle to the keel. Rotate the thumb of your top hand forward and feather the blade back to the plant position.

Key Points:

- Keep your paddle vertical and not diagonal across your chest during the power phase. Your paddle must travel on a line parallel to the center line of your canoe.
- Keep your torso straight, except for a slight forward lean at the start of the stroke. Excessive forward movement of the upper body will cause the canoe to bob up and down, decreasing your forward momentum.
- Feather your blade on the recovery phase to reduce wind resistance. There is no need to raise the paddle high above the surface of the water. Relax through the recovery phase.
- Seventy-five percent of the power in the forward stroke occurs within the first seven inches following the plant. Once the paddle passes your hips there is little forward force applied.

The J-Stroke: Staying on Course

The stern person’s stroke causes the canoe to veer off course because he or she sits further from the middle of the canoe. A stern position paddling on the right will cause the canoe to veer left and vice versa. The most elementary stroke used to compensate for this flight deviation is a stern rudder. But as simple as it is, the rudder creates excessive drag and makes paddling in unison difficult. Using a J-stroke will keep the canoe tracking straight without affecting forward speed.

The J-stroke is a forward stroke with a turning stroke added at the end. At the end of each forward stroke, turn the thumb of the top hand down towards the water to turn your blade perpendicular to the water. Give a quick outward hook to provide the corrective push-away force.

Key Points:

- When you start the J-stroke, make sure both your hands are over the gunwale. If the paddle is slightly across your chest your corrective stroke will be ineffective.
- If your blade is lifting water instead of pushing water, cock the thumb of your top hand further. Your thumb must point to the water to ensure your paddle blade is perpendicular to the surface of the water.

The J-stroke, one of the most versatile strokes for controlling direction, is primarily used to push the canoe straight ahead when two people are aboard. If alone in the canoe, the J-stroke will push the canoe forward in a straight line without shifting your paddle from side to side. Most experienced canoeists find, however, that the J-stroke requires a lot of energy, and is quite tiring if one has to paddle a long time. Therefore, most canoeists use a variation of the J-stroke called the Pitch stroke.

The Pitch stroke is really a shortened J-stroke, one that uses less flair at the tail end. The difference is that the J-stroke causes the canoe to slightly zig-zag along its forward course, whereas the Pitch stroke follows a straighter course that requires less effort. The secret of the Pitch stroke lies in wrist action. As the paddle is drawn to the rear, the wrist rolls gradually forcing the water outward, away from the stern. If still more turn is needed, simply continue to twist the blade out farther. This now becomes a J-stroke.

The Backwater stroke is used to reverse direction, to stop the canoe, and/or to hold it in a stationary position. This stroke is useful at landings, in backing out of tight places, and in checking speed in rough water.

The Draw stroke is used for steering the canoe. This stroke pulls the canoe sideways by forcing water under the keel. Often this stroke pulls the canoe sideways by forcing water under the keel. Often this stroke is used when the canoe is not moving forward as in moving closer to a dock, but it may also serve as the opposite of the J-stroke: that is, the J-stroke pushes the stern away from the paddle; the Draw stroke pulls it toward the paddle.

The Skulling Draw serves as a guiding stroke to steady a canoe in rapid water or high waves. It's simply a squared off figure-eight. Capable of holding the canoe in tight control, this stroke can ease you through very rough water. The novice should practice this particular stroke in quiet water, however, before attempting to use it in wild rapids and spillways.

Turning Strokes: Draw, Pry and Sweep Strokes

The Draw: The Draw stroke pulls the canoe towards your paddle. When bow and stern paddlers draw simultaneously (on opposite sides) the canoe spins in a circle.

Start the draw by reach out with a vertical paddle and plant the blade with the powerface towards you. Extend your top hand as far out as possible to maintain a vertical paddle. Pull your paddle towards the canoe. Just before your paddle reaches the canoe, turn the thumb of the top hand away from the canoe and slice the paddle blade out of the water. Return to the plant position.

Key Points:

- For a more powerful draw, extend your reach by leaning way out. The draw stroke has a balancing effect on the canoe which allows you to lean out without tipping over. Try it — it works.
- To gain maximum turning efficiency, perform the draw stroke farthest from the canoe's pivot point. The bow person should finish the stroke at the knee while the stern person should finish the stroke just behind himself or herself.

The Cross Draw: The Cross Draw is performed by the bow paddler to pull the canoe to his or her *off* side. Your off side is the opposite side of the canoe to the one you are paddling on. *Without changing the position of your hands on the paddle*, rotate your upper torso and lift the paddle over and across the bow. Plant the paddle at a forty-five-degree angle to the keel line. Your top hand will be shoulder level and your lower arm will be extended. The power in the cross draw comes when you use your entire torso, not your arms, to pull the paddle to the bow. Keep elbows close to body to prevent shoulder dislocation.

The Pry: The Pry pushes the canoe away from your paddle. When done properly, a pry is a quick and powerful stroke.

The Pry involves slicing your paddle under the canoe, doing a quick pry off the side of the canoe, and finishing with an underwater recovery. Start by stretching your top arm out over the water with your thumb pointing towards the stern. Slice the blade under the canoe. Keep your blade deep and your bottom hand just above the gunwale. Pull your top arm towards your nose so the paddle shaft pries off the bilge of the canoe. Stop when your paddle is vertical. Rotate your top hand thumb away from you and slice the blade under the canoe.

Key Points:

- Keep your bottom hand above the gunwale or you may catch your thumb between the paddle and the canoe.
- Keep your top hand well-extended over the water at the start.
- If you are rocking the canoe, you are pulling your top hand too far across your chest. This causes your paddle to lift water, forcing the gunwale down.
- As with the draw, maximum turning efficiency will occur when the stroke is performed farthest from the pivot point.

Sweeps

Sweep strokes are turning strokes in which the paddle “sweeps” the surface of the water in an arch. Sweeps are used in the bow and stern. Although sweeps are not as powerful as the draw and pry, they provide more stability and are useful in shallow water.

The stern forward sweep is used by the stern person to keep the canoe on a straight course. While the J-stroke swings the canoe to your paddling side, the stern forward sweep pushes the canoe away from your paddling side. Begin by extending your paddle out at a forty-five-degree angle and sweep in an arc ending well behind you.

The stern reverse sweep pushes the stern away from your paddling side. Start the stern reverse sweep with your paddle as far back and as close to the stern as possible. Push the water in an arc using the backface of your paddle. Stop the sweep when your paddle is at right angles to the canoe. The most effective part of the stern reverse sweep is the first twelve inches of push-away closest to the stern.

The bow forward sweep will push the bow away from your paddling side. It is good for shallow water and meandering creeks. Plant your paddle as far forward and as close to the bow as possible. Using the powerface of the blade, push the water in an arc. Stop the sweep when the paddle is at right angles to the canoe.

Key Points:

- The most effective part of sweep strokes is the push or pull which occurs in the first twelve inches closest to the canoe.
- Keep your top hand low so your paddle is nearly horizontal.
- Recover by feathering your blade.

Braces

Low and high braces are used to prevent a canoe from tipping over and to stabilize a canoe when turning in whitewater. Determining exactly how far you can lean on a brace is best practiced in warm water, close to shore.

Use the low brace when the canoe suddenly tips towards your paddling side. Reach out over the water, with your knuckles down. Using the backface, apply a hard and quick downward thrust on the surface of the water. The key points in the low brace are: using a flat blade, a quick slap-push off the water, and both hands over the water.

The high brace can be used when the canoe tips *away* from your paddling side. This stroke feels as if you're grabbing the water with your paddle to pull yourself upright. It is basically the same as a stationary draw stroke done quickly. The high brace works because of the same righting effect that applies to the draw stroke.