

The Paddling Stroke

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Paddling technique is not so much a matter of definitives but rather a series of theories and opinions. However over recent years where paddle-sports have taken on a higher professional profile so too has there been a deeper study into the mechanics of efficient paddling techniques related to any given paddle craft. Jason Somerville-Kimlin of Mooloolaba Outrigger Canoe Club, formerly of Outrigger Australia and one of Australia's most respected and experienced outrigger paddlers, outlines what is currently being promoted as the most efficient use of both body and blade.

AN EFFICIENT TECHNIQUE IS THE KEY TO ENJOYABLE AND FAST OUTRIGGER CANOEING. MARATHON AND OUTRIGGER RACERS WHO HAVE NOT ONLY TO SURVIVE MULTIPLE-HOUR RACES BUT TO FINISH STRONGLY, HAVE LEARNED A LOT ABOUT TAKING EFFICIENT STROKES.

In any endurance sport efficiency is the key to getting the best results with the least amount of effort and of all canoeing, outrigger and marathon racing puts the highest premium on efficiency. Observing a canoe race, you'll notice the leaders go by looking relaxed and going fast. Sometimes they don't appear to be working very hard. Then the rest of the teams follow, each one going slower but appearing to be working much harder than the leaders. What's going on here? Do the leaders have a much faster canoe? The fact is, they are simply much more efficient in their technique than the teams which they are beating.

Outrigger canoe racing is an endurance sport. The leaders of a cross-country ski race or a runner in a marathon or triathlon appear to be gliding along with minimal effort. Their motions are just enough to get the job done without wasting precious energy. Hence the rule in endurance sports: **WORKING HARD DOES NOT ENSURE THAT YOU ARE GOING TO GO FAST!**

You can take your paddle and attack the water with it, straining every muscle in your body, throwing up big rooster-tails behind you, or you can slice your blade into the water, anchoring it solidly and using your entire torso, pulling it smoothly and evenly with much better results.

Not only is good technique energy-saving and fast, it is easy to learn because it is so simple. Part of the learning process requires that you have a clear picture in your mind of how a paddler moves the canoe through the water.

THE CANOE IS BEING PULLED FORWARD THROUGH THE WATER UP TO THE PADDLE, WHICH ACTS AS AN ANCHOR IN-THE WATER (AKIN TO A MOUNTAINEER CLIMBING UPWARD WITH THEIR ICE AXE). THE CANOE IS BEING PULLED FORWARD NOT PUSHED.



Reach forward as far as you can without bending or hinging at the waist, at the beginning of the stroke.

Remember this principle and you overcome one of the major technical problems most canoeists have, that is, trying to move the canoe forward by pushing through entering the paddle too far back and continuing the stroke too far behind.

TO PULL RATHER THAN PUSH THE CANOE THROUGH THE WATER, REACH FORWARD AS FAR AS YOU CAN (WITHOUT BENDING OR HINGING AT THE WAIST) AT THE BEGINNING OF THE STROKE AND END THE STROKE JUST BEFORE YOUR LOWER HAND REACHES YOUR HIP.

Use your body in the stroke. Most paddlers are all arms, attempting to generate all the power with the relatively small bicep and tricep muscles of the arms rather than using, in combination, the muscles of the torso which are far larger and more capable.

By keeping the stroke in front of you, you will be leaning slightly forward and you using the stomach and back muscles by rotating on (around) your spine. Dropping your lower shoulder and rotating, you will be able to extend and pull on that arm using the latissimus dorsi muscle of your back. Using the larger, stronger muscles of the torso is one of the secrets behind the leaders looking less wiped out at the finish line than the stragglers.

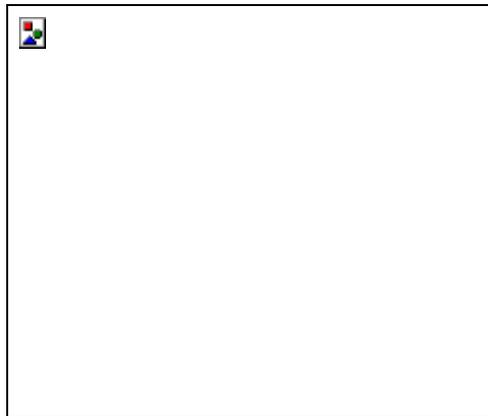
HAVING UNDERSTOOD THIS TECHNIQUE OF HOW TO APPLY YOUR MUSCLE GROUPS TO ENSURE PROLONGED AND POWERFUL PADDLING, YOU ALSO NEED TO LEARN THE TECHNIQUES OF ENTERING AND EXITING YOUR

PADDLE BLADE INTO THE WATER: ENTERING THE BLADE CLEANLY, EXITING CLEANLY AND RECOVERING SMOOTHLY.

Entering the Blade

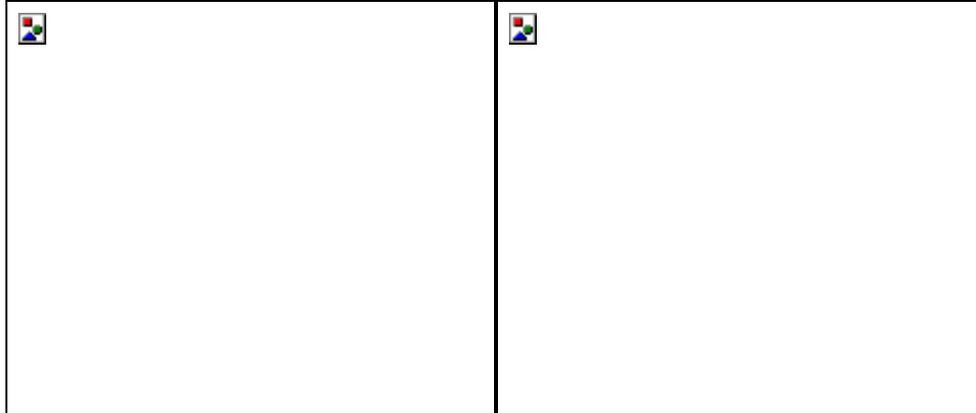
Rather than attacking, or stabbing at the water place the blade cleanly in the water. Do not start the stroke until the blade is in the water (this will cause cavitation and you will not get full power from your stroke). A clean, silent entry is the beginning of a good stroke. Note too, that your lower arm should be fully extended and straight.

Pulling the Canoe up to the Blade



Firmly anchor the blade in deeply before making the pull; pull down and across with your top hand and down and back with your lower hand, keeping your elbows locked.

If you have sliced the blade in cleanly and buried the whole blade in the water you will have a solid ANCHOR from which you can pull the canoe. You have now come to the main part of the stroke where your objective is to lever yourself and the canoe forward to the anchor point of the paddle. Your lower body should be firmly positioned in the canoe to fully transfer energy from the paddle to the canoe. Likewise, you do not want any extra movement in your arms that would absorb or deflect energy from moving the canoe forward. This involves keeping your arms in the entry position, swinging down and through from your shoulders. Try to push down and across with your top hand and pull down and back on your lower hand, smoothly and equally. Watch your hands and make sure that they move through the stroke at the same rate, neither faster than the other.



End the stroke just before your lower hand reaches your hip.

Helpful Hints

- Try the techniques shown with locked elbows, this will force you to sit up and rotate.
- Add the minimum bend necessary to your arms for comfort later when you have mastered this.
- Try to keep a flat back and keep your chin up, this will afford the maximum oxygen and will help keep your shoulder and neck muscles relaxed.
- Don't forget to get drive from your leading leg.
- Keep your face muscles relaxed and remember to breath!
- Keep your concentration in the canoe and remember that is it the thoughtful application of power that makes each and every stroke count.

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