

Single Blading a Sea Kayak

By Greg Welker

During the last several years a friend has completed two of the Water-tribe challenges, including a Florida circumnavigation. One of the items he used during the last trip was a single blade canoe paddle modified for use with his kayak. The theory is that using a single blade paddle for very long distance days reduces fatigue since you are only lifting half a kayak paddle, and don't have really any windage issues from an upper blade in the air. Intrigued by his comments, and what I had been reading on the long distance paddling networks such as Watertribe, borrowed one of his paddles to use for the summer of 2007. Since then, the single blade bent shaft racing canoe paddle has become my paddle of choice whenever possible.

The paddles I have been using are made by Zaval Racing Equipment (www.ZRE.com). The model is the Power Surge FW-Z Light, though there are other models by ZRE and other manufacturers that would likely work as well. The weight of the paddle is listed as 8.5 ounces for their medium weight paddle. The paddle is short – a 23 inch shaft length - which results in a 44 inch overall length to allow for easier paddling from a kayak's lower seat position. The paddle is a bent shaft at a 12 degree angle and constructed of carbon fiber. The paddle's power face is correctly positioned with the bent blade facing up and away from the paddler, or toward the bow, which gives a clean exit from the water at the end of the stroke.

I have experimented with using the paddle on sea kayaks with skegs, and that is workable but you will end up taking about 6-8 strokes per side before having to switch to the other side to correct the kayak's course. A ruddered kayak works much better. I typically take about 50 strokes per side in my ruddered kayaks, which seems to evenly distribute the effort across the left and right sides of my body. The cadence of strokes is high, as high or higher than with a greenland paddle. The entry point of the paddle stroke begins by rotating and reaching forward, with the body rotating from the hip to shoulder toward the blade. The stroke finishes at the paddler's hip, with no delay in taking the paddle out of the water. The upper hand describes a circle about the size of a dinner plate in front of the paddler for most people.

The "hut" or changeover stroke, begins with a forward stroke that finishes going across the front of the paddler after the blade leaves the water. The top hand releasing as the lower hand slides up to the grip, using the paddles momentum, to the top hand's place and the



End stroke Paddle Recovery

by Jenny Plummer-Welker

free hand taking the lower hand grip, ready to start a forward stroke on the new side of the boat.

The J stroke familiar to most canoeists does not work well with these paddles. The bend in the blade/shaft connection drops your speed quickly when you rudder. Sweep strokes and low braces work well. Side sculling strokes work well. I can roll the kayak easily with the paddle. It is similar to rolling with half of a European style kayak blade. I use an extended arm sweep from a Pawlatta roll. Rolling with the power face down is easier than with the back of the blade.

In terms of speed over a couple of miles I lose about 1/2-1 mph when compared to my normal speed with a greenland paddle. However, as the distances increase that speed differential is offset by the ability to paddle longer distances. For me, a good day with a greenland paddle is 20-30 statute miles. A good day with a single blade is 30-40 miles in my experience.

In cold water paddling the single blade paddle keeps your hands drier and thus warmer.



Boat with Rudder

by Jenny Plummer-Welker

I have found some downsides to the single blade, besides the jokes about "what happened to the rest of your paddle?" In confused water bracing requires some really fast reflexes as you try to get the paddle from one side of the boat to the other. In situations with beam waves over 1-2 feet you end up always paddling on the windward side, which can make a long and uncomfortable day. For this reason, it seems that most people who paddle sea kayaks with single blades use the blades for upwind or flat water paddling, and use a greenland paddle for rough water or downwind when you can surf. Another reason for using a single blade and greenland combination is for self rescues. An outrigger style rescue (with or without paddle float) works much better with a double bladed paddle. The single blade will provide limited outrigger balance, though it can be used for a reentry and roll rescue. On the ego damaging end, getting in and out of a boat at the beach with only a single paddle can be a twitchy experience. The grace of the entry or exit is indirectly proportional to the number of people watching from land. ☹



Forward Stroke

by Jenny Plummer-Welker