

## Analyzing the Forward Stroke

by Brian Blankinship

Every kayaker can make their trip easier by having a more efficient forward stroke. After all, about 90% of the time, we are paddling forward (well, most of us). Yet few really pay attention to the proper form and technique to get the most from our effort. In writing this article, I researched several different viewpoints and sources, but I will lean heavily on my two paddling heroes. Greg Barton, who holds two Olympic Gold medal in Canoe/Kayak, and Oscar Chalupsky, the undisputed king of open water with 12 World Championships.

Okay, so those guys are fast, but what if you are not concerned about speed? Speed comes from efficiency. Sure you can gut-out a 500 meter sprint, but when you are paddling 30 miles across the Pacific Ocean you better have more than just raw speed if you want to win. For the sake of this article, I will assume you are paddling with a Euro paddle, not a Wing or a Greenland paddle.

Let's start with how to hold the paddle. I see a lot of paddlers with their hands on a Euro like it is a Greenland, at about shoulder width. This is too narrow for a Euro. Instead position your hands like you are saying "touchdown" at 90 degrees of elbow bend, then cheat a little bit. I put a wrap of electrical tape just inside my thumb at that point so I can quickly find the proper grip if my hands start to wander. Your control hand's knuckles should be in line with the top of the blade.

Now have a seat in the kayak, but sit up straight. Leaning back will inhibit rotation while leaning slightly forward will open up your rotation as it will free you from the back band. Your legs should be comfortable, but able to press against the foot pegs to drive the boat forward. Your legs, back, shoulders, and torso muscles dwarf your biceps, and they are the ones you should be engaging to paddle. Sit on the ground with your paddle behind your neck and hands draped over the paddle near the blades. Rotate each way. See how your knees naturally come up? In a kayak you should be driving the boat forward with those powerful legs. Notice in this position you are not using your elbows to move the paddle? That is how your stroke should be as well.

The forward stroke has four parts: catch, power, exit and recover.

**CATCH** The goal of the catch is to engage the water as close to the bow of your boat as possible. Rotate your body so that your hand is at the edge of your deck and slightly "spear" the blade forward to put it into the water. Your on-side arm (the one engaging the water) should be straight, but not locked. If you plant the paddle off to the side, you tend to pull the boat in that direction. It is okay for the paddle to travel away from the boat during the power phase, but it needs to start right against the hull. It is also important to not start un-rotating until after you have "caught" the water. Otherwise you waste rotation in the air.

**POWER** After you "grab" the water in the catch phase it is time to start unwinding your torso. Leave your on-side arm straight and un-rotate your body allowing the paddle to slide out to the side along the path of the boat's wake. At the same time press forward with your on-side foot to push the hull forward under you. Think about transferring the power from your blade to your foot. Done correctly, your elbow will barely change angle and your torso and legs will propel you. As you rotate, your blade will arch away from the boat. If you are pulling your paddle back along the side of the kayak, you are using your shoulder/arms, not your torso/legs. One trick I use is to have my off-side hand (the one not engaging the water) trace the horizon as I am doing the stroke.

**EXIT** Once your on-side hand gets to your hip, continue rotating as you pull the paddle out of the water. That eliminates any braking action.

**RECOVER** At this point your entire body should be rotated toward the side on which you just took a stroke so that your previously off-side shoulder is pointing towards the next catch. Bring the paddle up to horizontal. In a long distance run, you might pause slightly to rest here as your kayak coasts forward. You are now in a position to spear forward with your new on-side hand, keeping your new off-side hand at eye level, ready to trace the horizon on the next stroke.

While this highly efficient stroke takes some getting used to, I believe you will find it more efficient in the end. Just like starting any new exercise, your muscles have to work into it before it is comfortable.

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Brian Blankinship demonstrating the "Catch"



Becca Svec demonstrating the "Recover" photograph by Brian Blankinship