

# The Power Stroke

by Eric Nyre



There are a couple of different paddling strokes that are important in kayaking. Turning strokes, which keep our boat going in the direction that we want it to go. Bracing strokes, which keep us from flipping. And Power strokes, which are used to propel the kayak.

The power stroke can be something that is a little tricky. There is a little technique, and some finesse involved with properly executing this stroke. Why is this important? The people who know how to do this do not get as tired after a long paddle. The purpose of this article is to explain the little tricks, which make a day of paddling an enjoyable experience, instead of an arm-torturing chore.

The muscles that we are going to use are our shoulders, back, legs, and lastly our arms. The forward stroke uses a combination of these muscles, with most of the effort put into the stronger muscles of our shoulders, back, and legs. To see how this works, sit in a stiff chair, a kitchen chair works great, and twist your torso from left to right. This torso rotation is the beginning of our paddle stroke. Notice we are not using our arms.

Keeping your arms locked (and not bending them) rotate your shoulders as you rotate your torso. This will move your arms into something similar to a paddle stroke. As your body turns to the right, drop your arm to the right. When you reach the stopping point, lift your arms, and as you rotate to the left, begin dropping your arms to the left. This is the basic paddle stroke.

To see how your legs work, stand up. Rotate your body and shoulders to the right, and bend your left leg. Move your body to the left, straighten your left leg, and bend your right. Notice that your leg rotates your waist? When we are in our kayaks, with our feet in the footbraces, this leg bending rotates our waist and torso, adding more power.

So what about the arms? The arms lift the paddle and plant the paddle into the water, but they do not pull the paddle. When doing a stroke on my right side, my right arm is stiff. As I plant the paddle, my left arm is bent, and begins a forward push on the paddle. At my torso's maximum rotation, I bend my right arm only to pull the paddle out of the water.

My left arm is extended, and I begin the same stroke on the left side. Only when the stroke is finished, do I bend my left arm, and begin the process over again.

One indication you are doing this right is your lower arm will be stiff through

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the stroke. Another indication is your hands will both move past the center-point of your kayak with each stroke. If your hands do not move past the mid-point (both my hands totally cross over, so that they are both over the water with each stroke, both on the right when doing a right stroke, both on the left when doing a left stroke), then you are not rotating your torso.

Many people say that this feels funny when they first begin. That is because this does not allow slouching back into the backrest. It also moves the boat in a livelier manner, with the boat rocking from side to side with each stroke. But for its apparent awkwardness, those who learned to paddle this way are much happier and less sore at the end of the day.

A kayak is like a car, in that there are gears. A kayak has high gear, mid-gear and low gear. These gears are determined by how you hold the paddle. If you hold the paddle, with your elbows pointed at a 90 degrees, you are in low gear. This is the power gear that whitewater paddlers use. High gear is found when you hold the paddle, with your arms a shoulder's width apart. Mid gear, is in-between. As we paddle, it is good to switch gears to change the stress on our muscles. Moving the grip just a little can feel like a great relief. Changing grip on the paddle can also make steering corrections. If we shift the paddle to the left, our boats will turn to the right. If we shift the paddle to the right, our boats will turn to the left. The reason for this is that we are putting one side of the boat in a higher gear, while dropping the other side into a lower gear. The boat will turn into the slower side, and hence the course corrections. This trick is also good for people who are stronger on one side of their body. Many are right handed, and the right side of our body more powerful. If we hold the paddle perfectly centered, this strength on the right side will push harder and turn our boat to the left. By slightly shifting our grip, we avoid paddling in circles.

When you are paddling, if your hands go higher than your eyes, your paddle is too long. If your hands scrape the boat with each stroke, then your paddle is too short. It is amazing the difference 5-cm in length can make in how your boat feels. If in doubt, opt for the shorter paddle.