EWU Aquatic Center
Monthly Manager Moments – by Greg Schmidt, EWU Aquatics Manager

Article #3– "Backstroke Basics"

In my last article, I explained some details about swimming crawlstroke - and how the notion of *swimming = crawlstroke* is wrong-minded. ANY stroke is swimming, including the easiest stroke of all – Winging & Kicking. I encourage everyone to learn this skill because it's so easy to do, and is great when you are injured, disabled, very tired, etc. It's also the lead-up skill to the backstroke, so here it is:

As soon as you're comfortable being on your back in a horizontal position, and you can recover (stand up) from the horizontal position, try winging & kicking. The kick is a steady flutter kick. The arm stroke is just like a bird flapping its wings (thus the name winging). Pull your hands up your sides to about your waist, and flap them back down, keeping your elbows against your sides. Push the water back toward your feet with your hands. Both hands are simultaneous. Keep your head back enough to keep your hips from sinking. Again, if you're buff, you'll need to have your head way back. If your chest sinks, arch your back and take a deep breath to inflate your lungs; also kick at a diagonal to keep your hips up. Even very muscular people can stay up if they modify their body position, and use some additional support from their kick to keep their hips from going under.

Once you've mastered winging & kicking, you're ready for backstroke. Backstroke uses the same kick, but it may need to be slightly deeper (more of an angle) than winging, because now you're lifting your arm out of the water. This takes more support by your kick, especially if your arm is super buff. As we did with crawlstroke, we'll talk about the arm pattern first; which again has catch, mid-pull, finish, and recovery phases.

Catch – Put your hand in the water with your palm turned outward, so your pinky goes in first. Slip your hand in without making any splash. Brush your upper arm against your ear when your hand enters the water. Your elbow joint is completely straight, and so is your wrist joint. Once your pinky enters the water and your hand is just under the surface, start to flex your wrist to pull the water toward your feet, and begin bending your arm at the elbow. Don't hyperextend your wrist – a common mistake. That results in an awkward, incorrect hand position for the catch. Likewise, don't put your middle finger in first, so that your hand is essentially upside down, and palm facing away from your head (see 1st sentence of this paragraph). Don't bend your elbow – yet another common mistake. This also results in incorrect hand position/catch angle, and crossing over.

Mid-pull – Keep bending your arm as you pull the water toward your feet. Maximum arm flexion is about 90˚. This occurs as the hand is even with the shoulder. Now, you will change from pulling to pushing. Do not collapse your arm to a tiny angle, over-bending your arm. This creates slipping, rather than pulling. Again, no more than 90˚ elbow bend. Another common mistake is no arm bend whatsoever. That will prevent you from gaining the acceleration possible with the elbow bend, plus it will push water the wrong direction (usually straight down, rather than back). A straight arm pull may also create unnecessary stress on your shoulder and cause injuries.

Finish – As your arm passes the shoulder, you'll begin to straighten it again, sweeping your hand back and down. Your arm will finish the power stroke fully extended, below your hips. At this point, your thumb will be up, and your palm turned toward your leg. Although this seems somewhat counter-intuitive that the finish would be down below your hips, this is correct.
Recovery – Begin the recovery by rotating your shoulder upward and lifting your arm, thumb first, out of the water, arm still completely straight. As you bring your arm over the water back alongside your head, rotate your hand so your pinky will go in first again. Keep your arm straight.
Timing - Remember that the arms in the crawlstroke are not truly opposite? With backstroke they ARE truly opposite, known logically as opposition rhythm. The key to maintaining opposition rhythm is to remember that you must move both arms at the same time, not one at a time. Start your push off from the wall with both arms overhead in a streamline position. Pull your favorite arm first. Once it gets to the finish, pull the other while the first recovers. Sweeping down on the finish will help to support the opposite arm's weight out of the water – and help keep your head from sinking.
Kick – Use a six beat flutter kick for the backstroke. It is deeper and more diagonal than the flutter kick for the crawlstroke, because of the support needed for the upper body. Very buoyant swimmers can do this stroke nearly horizontal, whereas more muscular swimmers will have to be more diagonal, and have more frontal resistance (drag). As in crawlstroke, the quadriceps do the power stroke, and the hamstrings do the recovery. Here the power stroke is upward, however. The kick does not usually break the surface, but boils the surface. However, some very buoyant swimmers may break the surface with their toes on occasion.
Body position – Slightly diagonal, with legs submerged about 10-12 inches or so – depending again upon body type and resultant buoyancy. The waterline is typically from the middle of the head to the tip of the chin. Roll your body as you lift your recovering arm, while maintaining a steady head position.
Breathing – Inhale on one arm and exhale on the other. Most swimmers do this without coaching.

Remember my #1 tip on crawlstroke? It was RELAX! *This is true for every stroke.* Backstroke is of course, no exception. A smooth, relaxed arm-stroking pattern with no splash on the entry, along with a steady, fluid kick and good body roll will produce a relatively effortless backstroke. The rule is still float-first, and swim-second, as much as your body type will allow.

PS. What about "double arm backstroke?" There really is no such thing as an officially recognized stroke. However, people occasionally do this variation of the backstroke for fun; and coaches sometimes use it as a drill, to force their swimmers to do a more supportive kick.