

Monthly Manager Moments – Article #7

Sidestroke

The sidestroke is the 3rd in our series of resting strokes – those that incorporate a glide. Sidestroke is especially appealing to swimmers because it's one of the easiest strokes to learn. It uses a relatively simple kick – the scissors kick; and has a straight-forward timing sequence. Plus, sidestroke does not require learning a breathing pattern. Let's break it down.

Body position – Sidestroke is performed on either side, as the name implies. Most people have a natural favorite side, which feels more comfortable than the other. To keep your body in a side-lying position, point your top shoulder straight up, and put your bottom ear in the water, looking directly to the side. If you find that you keep rolling onto your stomach anyway, then turn your head and look up, so the back of your head is in the water. The key is to keep your shoulder straight up. Body position on the sidestroke is at a slight diagonal, since all of the stroking motions are submerged. Minimize the diagonal as much as possible to avoid frontal resistance (drag). Keep your back straight and body streamlined during the glide.

Kick – As I just mentioned, the scissors kick is used for sidestroke. There are two versions of this kick: top leg forward, or regular scissors kick; and top leg backward or inverted scissors kick. The inverted kick is used primarily for lifeguards who are towing a victim in a side-lying position. The inverted kick is less likely to strike the victim than the regular kick, thus it is preferred for rescues where a scissors kick is employed. The regular kick is performed as follows: start with both legs straight and together in the glide position, toes pointed, body directly onto one side. I'll describe the right side for sake of clarity. With your right hip pointed downward and your legs straight & together, draw your legs up slowly to maximum flexion, keeping them as much in line with your torso as possible. Do the "splits" with your legs by extending your top (left) leg straight out in front of you and your bottom (right) leg back behind you as far as your range of motion will allow. This position creates a LOT of drag, so do this as a continuous motion into the kick backward to bring your legs back together again. If it creates so much drag, why do this at all? Because the splits position will push water directly backward, whereas a more streamlined and diagonal leg separation will push water mostly to the side, creating less forward motion. The key is to minimize the duration of the drag force, by making the motion into the splits continuous with the straightening or kicking of the legs back into the glide position. In this kick, the toes are pointed throughout, because the sides of your feet are not involved, only the top and bottom. The top leg actually kicks with the bottom of the foot and vice-versa. One tip for scissors kick: the top leg goes forward on sidestroke, but if your top leg naturally goes backward instead, just flip over and do the stroke on the other side. It will still feel natural and your top leg will now go forward.

Arm motion – On the right side (as above) the arm pattern goes like this: begin with the top (left) arm at your side, laying it extended on your top leg; bottom (right) arm is extended straight over your head, with your head laying on this arm. Fingers should be straight and hands in a streamlined position to minimize drag during the glide. Your head and back should be aligned too, for the same reason. To perform the power phase of the arm pattern, recover your arms/hands opposite of one another. This is

kind of weird because your bottom (right) arm is actually doing its power phase during the recovery of the top (left) and both legs. In spite of this opposition, this phase is still considered the recovery of the stroke. I guess it's a case of majority rules – since 3 of the 4 appendages are recovering. Let's cover each arm in detail. The right/bottom arm begins its power phase by flexion of the wrist and bending of the elbow to pull the water straight back. Your palm should be pressing flat against the water, with a minimum of sideways slipping. Of course some natural sculling action will occur, but this motion is quite small, similar to the arm stroke pattern in the breaststroke. It's called a "shallow arm pull." Pull only to the level of your chest, and circle your hand back around to recover it back to its extended position. This recovery will be timed to coincide with the scissors kick of the legs and the power stroke of the left/top arm. Be especially careful to pull, not slip, during the power phase; and to slice, not push during the recovery. Both are very common mistakes. Remember this motion is opposite the recovery of the other three limbs. The top arm (left in this example) recovers with the legs by sliding up your side, again to the level of the chest. Keep your hand close to your body to reduce drag. Both hands should reach the chest at once. The circling motion of your bottom/right hand should create a plus (+) with your top hand when they meet in front of your chest. When the plus is formed, the bottom/right hand should be closest to your body, and the top/left hand should be outside of the right hand. This will prevent them from tangling when they are extended again into the glide position. The plus position is created when your bottom/right hand is in the slice position for recovery and the top/left hand is horizontal for its power phase. The top/left arm should be pitched flat for the press back into the glide position. Don't put your hand sideways and allow it to slip. Pitch your hand so the palm is pressing against the water effectively and adding to the kick's propulsion.

Breathing and timing – The timing pattern is simple: recover, kick, glide. I'd suggest using a modified phrase to accentuate the glide, as we did in elementary backstroke: recover, kick, glide-2-3. Remember that this stroke's recovery is a backward motion with both legs and the top arm, so do it slowly. The shallow arm pull of the bottom arm is in opposition to the recovery, so the backward motion is somewhat neutralized by the shallow arm pull. However, the shallow arm pull is very small and is opposing three other limbs with a much longer recovery. It will also help to keep the recovery tight and in line with your body as much as you can. The more streamlined it is, the less negative impact it will have. Breathing for the sidestroke is pretty much automatic: breathe in as your legs recover, and exhale as you kick.

Variations – Sidestroke has two other variations that you may see: over-arm sidestroke and underwater sidestroke (for underwater swimming). The over-arm sidestroke is very much the same as the regular sidestroke, with the exception of the top arm recovery out over the water, and the catch position of the top arm at approximately the top of the head. The over water recovery is much faster than the slow draw up your side underwater, thus the timing needs to be adjusted accordingly. The top arm must be drawn slowly over the water, which feels weird at first. Think of that over-arm motion as being done in slow-motion. Because of the higher entry and catch position, there is really no plus formed at the chest with the arms, as in the regular sidestroke; except in a quick passing of the hands as they extend back to the glide position.

The underwater variation is different in that the bottom arm no longer works in opposition, but recovers in time with the top arm, and the top arm reaches above your head like the bottom arm. Both arms pull down to full extension and finish alongside your body. Kick and body position are the same, but the head is looking more forward, or at least frequently looking forward to avoid obstacles.

Lastly, you may see hybrids of crawlstroke and sidestroke called trudgen or trudgen crawl. These two strokes are really more crawlstroke than sidestroke, and use the same arm motions and side breathing technique as the crawlstroke. They both employ a small scissors kick in place of (or in addition to) the flutter kick, which is performed while the swimmer is taking a breath to the side. A full splits-sized scissor kick doesn't work for these strokes, because it throws off the timing. The trudgen is usually done with unilateral breathing on the swimmer's favorite side, breathing every four arm strokes. No flutter kick is used, just the smaller scissors while taking a breath. The trudgen crawl is usually done with bilateral breathing every third arm stroke. Flutter kick is used between the breaths, and a small scissors kick is used while taking a breath. Some swimmers do these strokes on "accident" because they have not mastered the subtleties of the crawlstroke. I recall one surprisingly fast swimmer who was self-taught and did a modified trudgen stroke for miles a day. He did not learn how to side breathe, so he turned his head from side to side and constantly switched sides on his scissor kick as he swam. Although his mouth was never submerged, because his head position was low and his ears were laid down nicely, his body position remained horizontal. His variation of trudgen was unique, but effective.

Sidestroke is relatively easy, and very relaxing. Muscular, low body fat swimmers must remember to keep your ear in the water and float your head to avoid sinking your legs. If you lift your head, the easy and relaxing part will disappear! Have fun with sidestroke!

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Face up head position



Face to side head position