Monthly Manager Moments Article #11

Treading Water

Treading water is truly one of the most critical of swimming skills. Without this skill, it is pretty hard to consider yourself a "swimmer." For very buoyant people, treading water is exceptionally easy – they can sometimes just remain motionless in a vertical position, and remain at the surface. Some can even keep their heads out without moving. Most of us however, must exert some effort to accomplish this. Even for swimmers with exceptionally high specific gravity (very muscular people), treading water doesn't have to be a struggle. With the proper technique, it can be quite easy to keep your head above water. Here's how:

First, learn the two magic words of treading water: **BIG and S-L-O-W**. If you are able to make your arm and leg motions very BIG and very slow, treading water is not hard at all. Short, rapid movements of the appendages will result in poor efficiency, rapid tiring, and maybe even eventual panic if not modified or discontinued. Why am I saying this big and slow thing? Because treading water is only holding position, drag is really not a significant consideration. Thus, slow, large movements can be made to provide constant downward pressure against the water; effectively supporting the swimmer. Let's look at the components –

Body position – The correct body position for treading water may best be described as riding a bicycle or sitting on the edge of a chair and leaning forward as if talking to someone intently. Your back should be sloped forward, and your waist bent slightly to keep your legs directly under your torso. Your head should be facing directly forward, with the water-line just below your chin.

Arm motion – There is a universal arm motion that should be used for all treading water. This motion starts with your arms out to your sides (like airplane wings) and your palms pitched downward and slightly toward the front. Remember that all of your arm motion should be directed downward as much as possible, to provide upward force and keep you up. Slowly bring both arms forward in front of you, feeling the pressure against the palms of your hands directed downward. In a large sweeping movement, keep moving your arms until they cross over one another in front of your chest. Resist the temptation to stop the sweeping action too soon. Keep it SLOW! Once you've reached the end of your range of motion, flip your hands over, to pitch them downward but now back out. Do NOT *recover* your arms back to the "airplane" position! Instead, push slowly down and back out until they've returned to the airplane position. Treading water has no recovery; only a quick flip of the palms to change direction of the force. Your cadence should be something like: "sweep in, and sweep out." Once you've returned to the original airplane position, turn your hands again to start over with the sweep forward.

Kick – There are a number of kicks that swimmers use for treading water. My two favorites are modified flutter and rotary (also called egg-beater). Let me cover these two first, then we'll look at other kicks used in swimming that make sense for treading water.

- *Modified flutter kick* – This kick is really a combination of scissors kick and flutter kick, because of the combination of continuous kicking like flutter and the forward/back splits used for scissors kick. To perform the modified flutter, apply the BIG and slow principles learned before. With your legs split apart as wide as they'll go forward and back, kick straight down to the glide position in scissors kick – but instead of gliding, kick straight through to the splits position in the

reverse direction and kick down again. Keep repeating this kick, and keep it slow. Try to maintain constant downward pressure. The more constant the pressure, the slower you can do this. When tempted to go faster, go bigger instead. Nearly all increase in speed can be averted by going bigger.

- *Rotary kick* – Quite possibly the best kick for treading water. Use a wide rotary kick to maintain steady downward pressure. This kick is more difficult than modified flutter, but is an outstanding kick for support and versatility. Lifeguards use this kick more than any other. So do polo players and synchronized swimmers. To perform rotary kick, first learn the whip kick with simultaneous leg action. After you've mastered the whip kick, alternate your legs left and right, while moving them at the same time. There is no glide in the rotary kick. It's constant pressure. With practice, your rotary kick will become very smooth and provide steady support without being jerky. Rotary kick is inherently faster than modified flutter, so it can be more tiring. It's not recommended for long periods of treading, unless you use it to change muscle groups and switch back and forth between modified flutter and rotary. However, for short durations, or for maximum support, it's the kick of choice.

- *Flutter kick* – Because it's the most familiar, it's often the most used. It's also very inefficient and tiring. Remember our discussion about crawlstroke? Flutter kick provides only about 10% of the propulsion, because it's so inefficient. Water is pushed mostly to the side, and not in the opposite direction of motion as you want. I do not recommend using this kick for treading. It's neither big nor slow when performed its usual way.

- *Scissors kick* – Works well with treading water, because it can be both big and slow. It's also somewhat jerky if not modified for treading water; so I prefer using the modified flutter over scissors. Scissors kick has a definite recovery and power phase which causes the jerky up and down motion.

- *Dolphin kick* – The worst choice for treading water. Coaches use this as a conditioning drill, but it makes no sense to use dolphin kick for routine water treading. It's simply much too tiring and inefficient when done vertically. Undulating in a vertical position can be done of course, but it is much harder, due to the effect of gravity acting all in one small line, and the inability to "plane" as you do when in a dynamic horizontal motion.

Summary – Treading water has something in common with pretty much everything we've discussed so far: the key to success is relaxing, and learning to enjoy the water instead of "fighting" it. If you're tense when treading water, try turning parallel to the pool wall, and holding the side of the pool with one hand. Perform the arm motion with your other (free) hand, and the modified flutter described above. When you've got the motions down, let go and try to support yourself without holding onto the wall. The magic words are big and slow. Use them, and you'll be able to relax more. The more you relax, the easier it will be to go big and slow. Keep increasing the time you tread water, and have fun!