

AQUATIC EXERCISE

PART ONE
IN A SERIES

INNOVATIVE IDEAS FOR CONDITIONING FOOTBALL PLAYERS AND ALL ATHLETES

By Mark McKown C.S.C.S.

Strength Coach / Asst. Basketball Coach
Jacksonville University

and

Mike Barrett

Strength Coach / Defensive Coordinator
The Bolles School

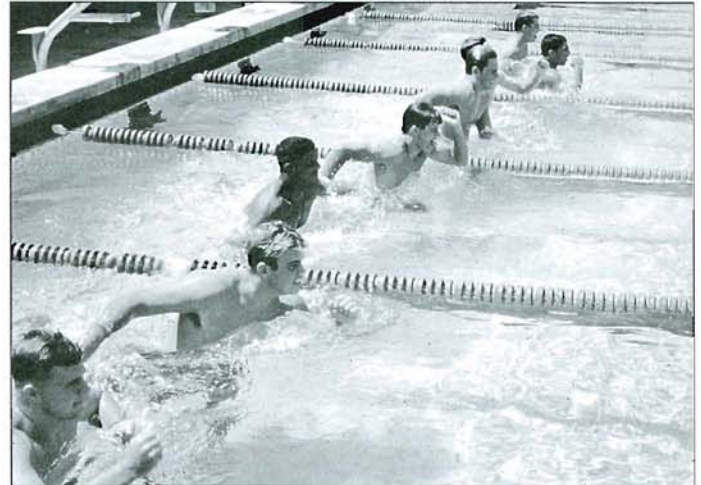
The Physical demands placed on today's athletes are tremendous. Year-round strength training and conditioning programs are necessary and essential parts of the athlete's preparation for competition. This preparation routinely involves drills and exercises that place the muscles, joints, and connective tissues in extremely stressful situations. As the body adapts to these outside stresses, it becomes a more efficient machine. Too much outside stress, however, will cause the body to break down. This breakdown may appear in the form of tendonitis, stress fractures, or some other overuse injury. Thus, the coach is often faced with the decline of training his athletes for optimal performance and conditioning or limiting the athlete's workouts in order to save his body for the rigors of the season ahead. Coaches can avoid this dilemma. Aquatic exercise is the simple solution to this problem.

There are two broad categories of aquatic exercise, "without apparatus" and "with Apparatus". "Without apparatus" exercises are those that involve no special equipment. These exercises are performed in shallow water. "With apparatus" aquatic exercises involve the use of special equipment by the athlete. The focus of this article will be on only one type of apparatus. In this case, the apparatus is the wet vest (R), a floatation device for deep water sprinting. Although both forms of aquatic exercise have certain drawbacks, the advantages of each are numerous. The advantages include:

1. Relative low cost - ("without apparatus" exercises). All you need is the local pool and a bathing suit.
2. Easy to teach drills - drills are fairly simple to teach.
3. Non-Traumatizing - With aquatic exercises, gravity is not a major factor and there is a natural cushioning effect of water. Therefore, the jolting of land exercises does not occur.
4. Strength endurance gains - The water provides a constant uniform resistance. There is an equal force applied to the muscles throughout the full range of motion. The faster the athlete moves his extremities, the more resistance he receives from the water.

Continued on next page

Aquatic exercise is not a substitute for strength training in the weight room, dry land speed and conditioning work. It is, however, an excellent supplement to an existing conditioning program. Aquatic exercise is definitely a conditioning asset today and the exercise wave of the future.



Bolles Football Players Aquatic Sprinting



J.U. Volleyball Players Karen Kelly and Ruth Terry Demonstrate Stationary Jumps Drill.



Bolles Football Players Do Stationary Butt Kicks.

AQUATIC EXERCISE

Continued From Previous Page

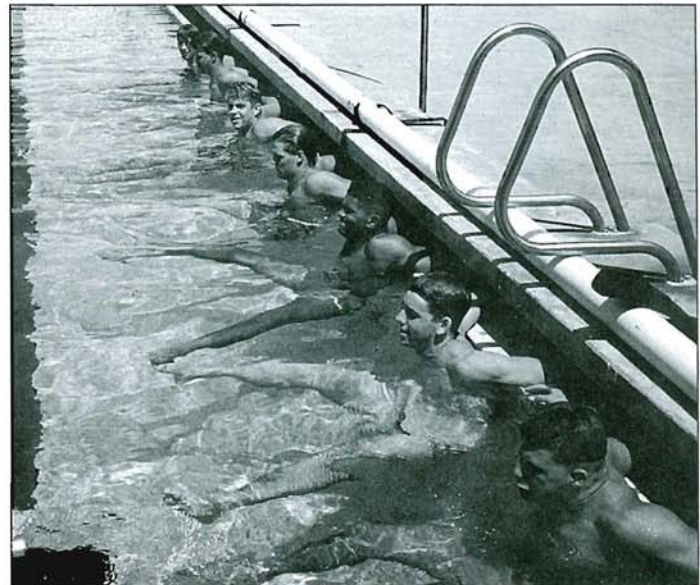
5. Aerobic Conditioning - The water provides an ideal environment for sustained exercise - through in water jogging.
6. Anaerobic Conditioning - Ideal environment for high intensity short duration exercises - through in water sprints and drills.
7. Rehabilitation of athletic injuries - Cases have shown that not only have athletes recovered faster from injuries with aquatic rehab (as opposed to traditional rehab methods), but that they often return to competition in better condition than before they were injured.
8. Heat is not an exercise deterrent - Since the pool water temp is usually quite a bit cooler than the outdoor air temperature, exercise produced heat ailments are not a problem.
9. Excellent environment for teaching sprinting technique - Especially deep water work utilizing the wet vest. (R)
10. Ideal environment for certain sport specific movements - It is possible to work on movements similar to those utilized in different sports (i.e., tennis forehand).
11. Increased flexibility - Due to the buoyancy factor of the water, aquatic exercises can be performed with less pain and the joints can be taken through the complete range of motion.

The possible disadvantages of aquatic exercises are low, but they do exist. They include:

1. Must have access to a pool or large body of water in order to conduct program.
2. Some athletes may have a fear of water - they may be non-swimmers or poor swimmers.
3. The "with apparatus" exercises can be expensive. For example, the wet vest retails for \$125.00.
4. It can be difficult to measure an athlete's effort during aquatic exercise. This is a problem because the distance the athlete travels in the water during a drill does not necessarily reflect how hard the athlete is working. It is also possible for the athlete to "cheat" with his hands and arms on certain drills. The coach is somewhat dependent on the athlete's desire to work hard.



J.U. Volleyball Team Doing Power Skips Across the pool.



Bolles Football Team Doing Abduction - Adduction



J. U. Volleyball Team Power Skips