Conditioning for Fly Casting - The activities – ©April 30, 2012 by Dr. Gary Eaton, MCI

Starting off, this is neither intended as an exercise prescription nor medical advice, in any manner. Professionally speaking, as both a Master Certified Instructor of Fly Casting and as a physician, only professional physical and occupational therapists and *qualified* musculo-skeletal **specialist** physicians should prescribe exercise regimens based upon sound medical history and physical exam. Others who recommend therapeutic activity (intended to correct a problem) – ***do so assuming all liability risk***!

The individual describing these exercises is in his sixth decade of life with known Carpal Tunnel Syndrome, previous shoulder fracture on the casting arm side, multiple shoulder (acromio-clavicular joint) separations of the casting arm side and fewer such shoulder separations of the acromio-clavicular joint on the line-hand side. He also suffered fractures of some fingers and other hand bones three decades in the past. He has established osteoarthritis of spine, hips, knees, shoulders, elbows and hands. Though once a collegiate athlete and - for most of a decade, a professional firefighter and carpenter- he has worked in less physically demanding endeavors for over 25-years.

Most people 18 to 35-years of age, without previous significant injuries or surgeries, can undertake sensible conditioning under the guidance of an athletic trainer, therapist or civilian coach with little inherent risk of severe injury. Currently, there is NOTHING IN THE FFF CERTIFICATION PROCESS THAT EVALUATES COMPETENCY TO RECOMMEND THERAPEUTIC, CORRECTIVE, OR CONDITIONING EXERCISE TO FLY CASTING STUDENTS OR CLIENTS!

Conditioning involves developing tolerance for more frequent constant use or shorter interval between applications of high force or sustained moderate force. Both of these issues relate to fatigue resistance and rapid recovery. All factors revolve around cardio-respiratory fitness. If one impairs delivery of oxygenated blood or removal of metabolic waste, all recovery and exercise tolerance becomes compromised. Continue at high exertion levels with either of these restrictions, and muscle die-off, including heart ischemia or heart attack, become risks. Generally, larger muscle groups benefit from — and tolerate — more repetitions.

HANDS – Reducing demand involves adequate grip diameter and effective transfer of energy to the rod. Too soft a surface and lots of sensitivity and energy input becomes lost. Serious bicyclists have high density soles and toe-locks to improve efficiency of energy transfer from the legs, through the shoe, to the pedals. Amateurs wear soft soled tennis shoes and limit their potential for very high performance.

Cork has been used on rods because it maintains a dry feel and its high durometer rating prevents excessive force dissipation in getting the rod to move. Wooden handles have been used, but are unforgiving and wear on the hand contact. Plastics, rubberized synthetics, and closed cell foam can be made serviceable, too. When I recommend cushioning a handle, I concomitantly suggest over wrap with Tourna Grip to preserve the dry feel.

The process of practicing casting provides as much conditioning of hands and wrists as any non-training activity. Similar benefits may be obtained in operating hand tools (screwdrivers, hammers, planes, chisels, welders, pliers, etc.) Grip strengthening devices previously described may contribute, if lower resistance is selected and high count repetitions are used. Progress is made when the activity continues beyond exhaustion. Adequate rest must allow for complete recovery between sessions.

WRIST ENDURANCE – Simple devices previously described, when used with resistance under 3-pounds and elevated so that the entire five feet of rope is wound up and down rapidly, work to improve fatigue and promote recovery in an unimpaired upper extremity. Complete recovery between sets avoids injury.

ELBOW ENDURANCE – Activities like jumping rope, paddle ball, and tennis can contribute to endurance of elbow activators. The same resistance training with lighter weight and performed at a quicker pace works, too. Swimming, especially using hand paddles to increase resistance provides good exercise distal to the shoulder and also a serious cardio-respiratory conditioning drill. Regular intervals help prevent plateaus and back-sliding in the fitness regimen.

SHOULDER ENDURANCE – This is the case where a weight bench or resistance bands may provide more benefit in the "pushing" direction. Lighter resistance with a higher number of repetitions (dozens) can improve exercise tolerance for casting. Similarly, lying prone and "pulling" against resistance in a *rowing* motion builds endurance in the muscles on the back of the shoulder when enough repetitions are done in a single set.

NOTE: having had to row watercraft and pole flats boats, I expect that doing so in a rapid stroke interval provides fine endurance exercise.

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