Strength Training for Fly Casting - The elements – ©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***!

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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 strength training 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!

HAND STRENGTH – Grip ball type exercises using therapeutic polymer putty, rubber cylinders, compressible sports balls, or spring tension “wishbones” serve as rational strengtheners for intact hands. I use all of these, inverting the “wishbone” device to focus on the smaller digits as well as gripping putty or rubber tube with only the ring and little finger during compression. Gyroscopic resistance is not inherently a hand strengthener as much as it is a wrist conditioner. I do not use this device due to unpredictable force changes and the repetition training of non-casting sequences.

WRIST STRENGTH – Simple devices serve very well. I drilled a hole in a 1.25-inch diameter *closet rod* section about 15-inches long. I ran a five foot section of ½-inch rope through the hole and through one or two disc weights of 2.5 pounds each. The rope then passed through an identical section of drilled *closet rod*, then both ends were knotted to prevent the rope slipping through. I rest my wrists on a solid surface – knees work fine. I then wind the weight up, then down, at a very, very slow pace. I change from both palms facing up, to one up and one down, to both down. Two to five repetitions with each palm-facing combination prevent wrist weakness in normally innervated muscles. I began with just floor-to-knee height, lower weight resistance and fewer repetitions. Alternating days of this exercise is the maximum that I attempt. I modified the dowel by adding Wilson ™ Cushion Pro to the entire circumference.

ELBOW STRENGTH – Two directions of motion – flexion and extension – dominate elbow function. For elbow flexion strengthening, I use two different dumbbell weights – one is 18-pounds, the other is 35-pounds. I perform what are commonly known as "preacher curls" where the upper arm is stabilized on a flat surface (sometimes inclined away from the body), or seated with a rigid elbows against front of torso position. Keeping an extremely slow motion throughout the arc, I perform this exercise to exhaustion (I can no longer initiate or can no longer control the weight to full completion). Using the lighter weight builds more endurance and tone, while using the heavier resistance facilitates muscle mass/strength. Rehabilitating from a shoulder injury when I started, the weights were 8-pounds and 15-pounds. In overcoming *plateaus* in performance, I resorted to *negative repetitions*, where I would use both hands to fully flex the load then lower the elbow to straight, unassisted.----------For elbow extension strengthening, simple push-ups remain reasonable. Whether performed with bent knees or straight legs, the motion of pressing one's body up from the floor serves nicely. Again, I perform these at a very, very slow pace to maximize body control. Due to torsion limitations from previous injuries, I acquired some push-up *turntables* with elevated grip handles that allow my hands to start-out oriented at a different angle to my body than when I finish. The push-up devices have been further modified with Wilson ™ Cushion Pro to reduce hand discomfort. Two or three times per week is plenty of "to exhaustion" workout for these maneuvers and my body recovery.

SHOULDER STRENGTH – Push-ups also build plenty of shoulder strength. Adding modified bar-dips, using a sturdy chair with raised arm rests works plenty well-enough for all one-handed casting expectations. I was surprised at how demanding this exercise can be when one performs at a very controlled pace, both up, and down. I see no value in having the elbows go higher than the shoulder for this exercise applied to fly casting. If I felt the need to expand my range of motion in this strengthening pursuit, I might consider performing this between two chair backs with my knees bent. Traditional pull-ups and bar-dips from a fully suspended position far exceed the strength requirements of fly casting.

NOTE: having had to row watercraft and pole flats boats, I expect the shoulder, hand and elbow strength thus generated to be very adequate for general fly casting conditioning.

Gary Eaton, MCI