The 2017 World Dwarf Games (WDG) will mark the second archery competition for these quadrennial games. About 60 archers participated at the 2013 WDG archery competition representing seven different countries. This was a big success for the inaugural offering for archery. The WDG recurve and crossbow events represent the pinnacle for archery competition exclusively for little people as no short stature classification currently exists in Paralympic or World Archery tournaments. Therefore, athlete-archers should look to prepare for the upcoming competition making sure to understand the rules, acceptable equipment and training for success.

Tournament Rules

The 2017 WDG archery event will take place indoors at the Gryphon Fieldhouse on the University of Guelph campus. The competition will follow the rules posted on the 2017 WDG website. http://worlddwarfgames2017.org/sports-rules/

Every archer should familiarize themselves with all the rules prior to the event. Any questions can be directed to the Archery Sport Tech via the World Dwarf Games site.

Safety of all archers and range personnel is paramount. All archers will conduct themselves in a safe manner and will be expected to follow all range rules and commands.

The archery competition will be comprised of two genders amongst three age divisions from 12 years and older (Junior B, Open and Masters). However, archers under the age of 12 wanting to compete will need to register in the Open Division.

Each recurve (9 and 18-meter) and crossbow (18-meter) event will be contested with 30 scored arrows or bolts. Archers will have 2 minutes per end to shoot three arrows or bolts for a possible score of 300. Depending on the number of registered archers there may be multiple shooting lines.

Equipment

A limited supply of recurve bows/arrows and crossbows/bolts will be available at the competition. These will be the same bows utilized for the 2013 WDG which are smaller bows (54") available in 14-20 lbs. It is important to note that acquiring, training and competing with your own personal equipment will be an asset to the archer. In addition, during the competition any recurve, traditional, or long bows will not have aiming devices, stabilizers, or compensators. However, the 18-meter recurve competition will allow the use of a sight or aiming device similar to the 2013 games.

The crossbows available will be the Horton Eagle Youth Crossbow, which are low-poundage (25 pounds, 127 feet/second). Any personal crossbow intended for competition will need to be a similar poundage or speed and pass inspection by the tournament judges.

Arrows available will be a collection of Easton Tribute 1214 arrows. Any archer is welcome to use their own arrows as long as the shaft diameter does not exceed 9.3mm diameter and the tip does not exceed 9.4mm in diameter.

Archers are welcome to use their own armguards, finger tabs, and/or finger slings. A supply of protective equipment will be available at the competition.

Fitness

The sport of archery relies on core strength to consistently repeat a set of motions propelling an arrow to the target. The best preparation for archery is maintaining good physical conditioning with well-balanced workouts which include stretching, cardio and strength training.

Stretching is the number one key component to any workout or shooting session. Performing a pre-exercise warm-up helps increase blood flow supplying oxygen and nutrients, warms the

muscles, and prepares the muscles and mind for the upcoming workload. Working out on cold muscles will invite soreness, or worse, injury. Before any workout begin performing the exercise at a slow pace or low intensity. Try jogging in place, jumping jacks, forward and reverse arm circles and alternating bear hugs each for 30 seconds. This will result in an increased heart rate which in turn warms the muscles and enhances the stretching routine. Static stretches, in which a muscle is gently stretched and held for 10-30 seconds is desirable. Focus on the muscles used during the archery shot sequence including the arms, shoulders, upper back and chest. Additional stretching can be done with a light-weight resistance or therapy band available at an archery store or medical supply. Tie off the band just short of draw length and practice repeating your archery shot in front of a mirror. This will gently stretch and train your muscles while allowing your mind to focus on your technique. A good example of stretch band training can be found <u>here</u>.

Cardio training is fundamental to being a good archer. Having a low heart rate directly correlates to better performance in competition. Thirty minutes of walking, jogging, swimming or aerobics three to four times a week will strengthen your heart and other important abdominal, back and leg muscles. When the competition pressure heats up, the archer with a low heart rate will consistently perform better.

An archer's form can be greatly enhanced by lifting weights meant to strengthen the muscles and movements used during shooting. Lifting weights to focus on your shoulder, neck and back muscles is key. Even without weights, the archer could perform pull-ups, pushups, and planks. Shoulder raises (front and side) with a gallon jug of water is another great exercise. These movements mimic the archery shot sequence and will keep your muscles ready for when you actually draw an arrow.

Furthermore, the archer should develop a strong core. The lower trapezius helps lift your bow and the abdominals and latissimus dorsi provide stability when raising and drawing the bow. Many challenging and fun exercises can be performed with an appropriately sized stability ball directed on core strengthening can be found <u>here</u>.

Training

Up to now, there are no exercises or drills that replicate the pleasure of shooting an arrow into the center of the target. So make the time to get to the range and practice shooting. Start off by shooting two or three dozen arrows at no more than 10 yards. Continue shooting every other day to build strength, stamina and confidence. Consider an initial goal of shooting 30 arrows without missing the target. Over time try to incrementally narrow all your arrows closer and closer to the center and then incrementally increase the target distance. Another goal would be to shoot twice as many arrows as you would shoot in competition. Thus, when the day of competition arrives, you will be more than ready and will likely finish strong.

Keep in mind it is more beneficial to shoot a few dozen arrows with perfect form than to shoot a hundred or more arrows with improper form. Your muscles will begin to memorize the correct movements if you maintain focus on your form. When you develop consistently proper form then you can begin to build strength to shoot more arrows. Have an archery coach watch and critique your shooting form. If you don't have access to a coach, capture your shooting with video and self-analyze your form. Archery is a sport of subtle and precise movements that are repeated time and time again. Remember, we all strive for perfect shooting form but rarely can one be perfect all the time.

Enjoy stretching, exercising and training for your next archery tournament.

Aric Smith

Archery Sport Tech 2017 World Dwarf Games