

## **ARCHERY IS NOT DIFFICULT**

Why do archers struggle with the concept that archery is a difficult sport to master? Stripped to its basics archery is a very simple sport in as much as all that is required is to build a firm launching pad from which to launch a missile (the arrow), point the missile at the centre of the target and release the missile without disturbing the launching pad.

If the archer accepts this concept a program can be planned to ensure that a consistent approach is achieved each and every time the missile is to be launched. Most archers shoot arrows without too much thought being given to the process of how this is achieved in exactly the same manner for every arrow.

Building a firm base is the foundation for all other aspects of the archer's form. Emphasis should be placed on a firm upright posture that will support the stability of the bow until the arrow has disengaged from the string and passed the bow. Core stability is the essential physical attribute that is required for good posture. The correct posture will not be achieved unless the archer is physically fit enough to control the stresses placed upon it by the action of drawing the bow.

A training program, concentrating on the muscles that are needed to stabilize the archer's posture, needs to be established. This program is quite distinct from that needed to strengthen the muscles used to draw the bow and hold the sights steady on the target. As all archers have different physical attributes it is advisable to seek professional advice on a program that is specific to the individual. General exercises for stability control are readily available but specific exercises for areas of concern, of the individual, may be required.

It is generally accepted that athletes should consult a physiotherapist at least twice a year to ensure their physical attributes are continually under review to encourage peak performance.

Once the core stability of the archer has been established a strength program can be instigated. Strength is required to enable the bow to be controlled during the drawing, holding and sighting segments of the shooting procedure. Without the ability to easily draw and hold the bow steady before releasing the arrow the archer will never obtain optimum scores. The archer needs to be able to control the bow not allow the bow to control them. Archers tend to use a bow with a draw weight that is too heavy for them to control satisfactorily. A heavy bow will not allow the correct style to be established i.e. without good technique the archer will never achieve optimum performance.

SPT (Specific Physical Training) is an exercise, when performed correctly, which will increase the shooting strength, conditioning and endurance of the archer. An archer can perform weight training but this is more for injury prevention and also so the archer does not become "lopsided" in muscle development because, by its nature, archery will develop one side of the upper body more so than the other.

To perform SPT, the archer must use the correct technique to draw and hold the bow at full draw. Once at full draw, the archer must hold the bow using correct technique and the correct muscles for as long as possible. If the archer's technique deteriorates, the archer must let down. It is imperative for the exercise to be beneficial that correct technique be maintained, better to let down, take a short rest and recommence than to hold for the full period with poor structure for half of it.

The general principle of SPT revolves around traditional interval training where the athlete works for a period and then rests for a period before restarting the exercise. In archery resting for double the holding period is considered the norm. If for example, the archer holds the bow at full draw for 20 seconds, the rest period is double this figure i.e. 40 seconds. On completion of the rest period, the archer must draw the bow again, concentrating on maintaining the correct technique.

SPT should be practiced for an hour daily to gain maximum benefit. Naturally over the hour, the maximum hold time that the archer is able to maintain will decrease. This is normal but will improve over time and with commitment to training. It would not be advisable to introduce an SPT program to junior archers until their physical attributes have stabilised, undue stress placed on young archers could have detrimental long-term effects.

It should be noted that the form and technique for SPT replicates that of shooting. Nothing should be done differently to any aspect of posture, draw, set-up and holding. It would be counter-productive for an archer to exercise at SPT one way and shoot another so concentration must be just as strong during SPT as when shooting.

Stretching exercises should also be built into the archers training program. Tension is an archer's worst enemy and can be associated with muscles that are too tight. Stretching will help to alleviate the problems associated with tight muscles. Stretching exercises are generally done by archers as part of their warm-up prior to training or competition but current thinking is that stretching needs to become part of the archer's normal training regime, not just part of their warm-up procedure.

An aerobic component to training is also essential. Aerobic fitness, i.e. cardio vascular and respiratory fitness, can have a barely noticeable outward effect but has a very significant effect on conditioning and an archer's ability to maintain concentration and structure for prolonged periods. A relatively demanding cardio fitness regime is recommended. Cardio vascular fitness can be any number of sustained exercise programs e.g. walking, jogging, swimming, bicycle riding or any other exercise that raises the heart rate for extended periods.

Archers spend the majority of their time trying to perfect their technique with little thought given to the physical attributes that are required to set up and maintain a

solid foundation on which their technique can be established. A commitment to a program that will enhance the archer's physical attributes will lead to vast improvement in their ability to control their bow, which will automatically lead to a better basic technique with higher scores being recorded. An archer will never reach their full potential by only shooting arrows; a training program that will enhance their physical attributes is an absolute necessity.