

U.S. PGA TOUR® Professional – What does it take?

Written by Steve Adams, February 2011

What does it take to become a U.S. PGA TOUR® Pro? If a list of essential criteria were made, the necessary components to compete on the world's premier golf tour would be very similar to many professional sports played around the globe. The public perception of golf has changed considerably over the past 10 years. The success of players like Adam Scott, Nick Watney and Geoff Ogilvy has given golf a more 'athletic' face. Organisations such as the Titleist Performance Institute have emerged on the golf landscape, gathering some of the world's leading experts in athlete physical preparation so that thousands of golfers are given access to quality information and best practices. In many ways, Golf has become the benchmark in athletic development for other sports to follow.

A useful way to determine just how far golf has come would be to compare a US PGA Tour Professional with a world-class athlete from a different sport - to put performance, physical preparation and recovery techniques under the microscope. Two dominant male athletes who are currently at the top of their sports are Adam Scott and 100-metre sprinter Usain Bolt. Obviously, while a direct contest between the two athletes is of no use in assessing the success of their respective training programs, the differences between the Scott and Bolt are less than what you may think.

The Golf swing and 100-metre sprint are broken down into phases that both Scott and Bolt will aim to perfect throughout their careers. For them, the phases are the focal point with which all training programs are designed around. In the Golf swing the terminology most commonly used to describe the phases are:

- Address or set-up.
- Backswing.
- Transition.
- Downswing.
- Follow through.

Rather than isolate a single stride in sprinting, as golf coaches do with the golf swing, a track coach will analyse distinct phases that occur over the 100-metre distance:

- Start – Reaction time & block clearance.
- Drive or acceleration phase (0-30m).
- Stride phase & maximum speed (30-60m).
- Lift phase or maintenance (60-90m).
- Deceleration (90-100m).

Scott will often be quoted regarding his quest for the unblemished round of golf. Never will every shot be hit with exact precision, even during those record-breaking rounds or many Tour victories. Bolt will also be preoccupied with every part of his performance: the start of the race, the finish, and every step taken in between. To safeguard against the loss of any valuable data that may assist future execution, both men display a remarkable ability to recall a single stroke or stride with complete clarity. However, further insurance is provided in the way of regular sessions devoted to detailed Biomechanical analysis of the golf swing and sprinting action. Motion is captured on video camera and then transferred to a digital format for computer analysis. Each movement is effectively placed 'under the microscope' to determine the essential elements of performance and provide a platform for positive change to occur. In Scott's case, for the ball to go further he must swing the club at a certain speed and launch the ball at a specified

angle. So the Biomechanist will work backwards to ensure that the maximum is achieved, e.g. for the club head to have the necessary speed then the hand must have that speed, for the hand to have the necessary speed then the forearm must have that speed, etc. This form of analysis illustrates objectively how power may be leaking away or lost completely. Bolt will have his action placed under the same level of scrutiny. His support team will use this type of analysis to ensure that power is efficiently transferred from one body segment to another, and then finally into the track surface in much the same way that Scott will hope to transfer maximum power into the club or golf ball.

Almost anybody will tell you that the person with the lowest score after 72 holes is declared champion, but Scott does it better than most. This is where Scott and Bolt are relatively similar in the advantage they have over their competition. While Scott likes to take fewer strokes than everybody else on the golf course, Bolt also displays an economy in his performance that his opposition cannot match. The top 100-metre sprinters in the world will take roughly 45 steps from starting blocks to finish line. Usain Bolt managed just 41 steps on his way to a world record 9.58 seconds. With fewer strides he is able to hit his maximum speed of 44 kph (27.3 mph) later and hold it for much longer before deceleration takes hold over the remaining metres. This phenomenon explains why Bolt gives the appearance of running away from his competitors over the final 30-metres, much like Scott has done to his opponents on the final day of a golf tournament.

Usain Bolt's 41 steps over the 100-metre distance are all performed at maximum effort. The sprinting action is of short duration, high speed, high intensity, and one of the most explosive movements in all of sports. These characteristics also provide an accurate description of the golf swing and favour a strong argument for further parallels to be drawn between Scott and Bolt. During an 18-hole round of golf, Scott will hit the ball with near maximal effort between 35-45 times. The exact number of strokes will depend on his success on any given day, the number of times he is required to hit out of rough or putts necessary to complete the round. Therefore, both athletes will be required to produce around 40 explosive movements during competition. It is not surprising then that Scott and Bolt require highly specialised training programs, although, these programs will have many similarities. The key elements that both programs are built around are posture and power production, with an underlying focus on muscle imbalance that may result because of the repetitious nature of their sports, i.e. overuse. The process each athlete will follow is Assessment/Screening, Treatment, Movement/Exercise Prescription and Skill Performance. The ultimate aim is for both athletes to have their skeletal system and joint structures in near perfect alignment so that the larger muscle groups can repeatedly produce the desired movement patterns with the necessary forces applied. Put simply, training programs that promote efficient body function.

During any given year Adam Scott is given four opportunities to claim a Major title. He builds his year around these four dates and limits additional tournament play accordingly. Usain Bolt, on the other hand, will have only one chance for a major title at the London Olympics in 2012. Following these games he must wait another four years to add Olympic medals to his already impressive tally. There will be other competitions of significance in that time, just as there are important championships to win in golf outside of the majors, but none are more coveted than Olympic glory for the track athlete. However, regardless of opportunity, both men will plan ahead using a process known as Periodization in order to make certain that a physical peak is achieved at the time of the event. Periodization involves the progressive cycling of various aspects of a training program to bring about a formulated gain in performance within a specified time frame. It is an exact science that can allow an athlete to be at their physiological best on the day, or days, of their performance following years of planning. In the past, most professional golfers have planned training periods for pre-season, competition season, post-season and off-season only. Although there is now evidence to suggest that many professional golfers,

including Scott, are now attempting and succeeding with the more scientific approach of Periodization to physically prepare for golf tournaments. It is the logical 'next step' in the quest for ultimate athletic performance and will continue to evolve within professional golf over the coming years.

For a long time recovery for a professional golfer meant a round of drinks at the 19th hole before leaving the course. Today, Adam Scott has a recovery regime that is every bit as scientific as his swing analysis and physical preparation. Many of Scott's current recovery practices have been taken directly from some of the world's leading Sport Science journals and organisations such as Titleist Performance Institute. This fact illustrates how much Golf has closed the gap to other sports in terms of athletic preparation, and how it has been driven by the new breed of Tour Professional. Scott and Bolt will participate in light exercise immediately following competition either on a soft surface, piece of exercise equipment (e.g. stationary bike) or swimming pool. They will follow the light activity with a period of gentle stretching, then 45-50 minutes of massage to ensure that any feeling of muscle tightness is not allowed to inhibit future movement. Occasionally, contrast baths (hot and cold pools) will be used to alleviate muscle soreness and promote recovery at a faster rate. Nutrition will also play a vital role for both men. Food and fluid intake are closely monitored with diets designed to get the most out of training, to enhance performance, and to promote recovery.

The intervention of science in athletic physical preparation and the drive towards attaining performance perfection is very evident in the next generation of Tour professionals who now walk the fairways of world golf. This group of players have more information about their golf swings than ever before, have equipment that is designed and fitted to meet their specific needs, and are more knowledgeable about their bodies and organised in their approach towards physical preparation. Usain Bolt is also changing the sprinting landscape, with his training methods and race execution becoming the rule rather than the exception. Adam Scott and Usain Bolt - two wonderful athletes, who aside from their participation in different sports, have much in common regarding athletic preparation and performance.

About the Author

Steve Adams has a Masters Degree in Sport Science and has been training professional, elite amateur and recreational golfers for almost fifteen years. He is currently working as the High Performance Coordinator for golf professional Geoff Ogilvy. Steve has also been an accredited specialist coach with the Australian Strength and Conditioning Association (ASCA) since 1999. He has previously worked with national level track and field athletes, multi sports endurance athletes, as well as teams and individuals from Australia's National Rugby League (NRL) competition.