



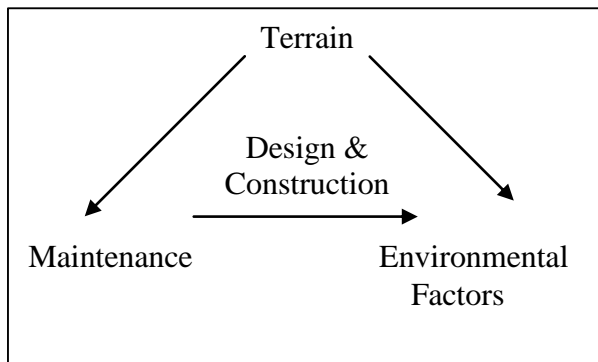
THE LIFE CYCLE OF GOLF COURSE COMPONENTS

Dave Weston reports on Jonathan Tucker's (STRI Golf Course Architect) presentation at the recent Harrogate seminar.

Secretary At Work: February 2008 (*reviewed April 2012*)

Dave Weston reviews the last presentation in the morning of the joint EGU/GCMA Seminar day at Harrogate Week in January 2008.

Jonathan opened his address by stating a few home truths about the golf industry. Each club faced greater competition for members and visitors than ever before. Of those playing golf, a greater proportion than previously are nomadic, and they and club members have a far higher expectation of course condition than ever before. The demographics show an increasing average age for the golf club member (now just under sixty) and an absence of the age range 25 to 45 from club membership. The primary asset of any club is its course. If it has any fundamental flaws, there are no "quick fixes". With the large capital sums involved it is important to have proper long-term planning, rather than a "knee jerk" response to problem solving. If the foundations of good constructions are correct, then a course in good playable condition can follow. All that is required are good materials, a good construction method and good aftercare. These are summarised as the Course Triangle (below). Using photographs to illustrate the various points, he discussed the life expectancy of the various sections of the course.



The first step is an evaluation of where the club currently stands followed by its aspirations, as laid out in the course policy document. It is crucial that these are communicated to the wider membership. With increasing pressure for more winter golf, the number one factor on every course is **drainage**.

For those clubs needing artificial drainage, there are several factors involved, the most important of which is to move the water away from the surface.

Others include the steepness of the localised slopes and the ability of the ground to allow lateral movement of the water. If artificial drainage fails it may be due to silting up, being crushed, ingress by tree roots or by slight ground shift causing joint misalignment. Drains require a minimum slope of 1:200. It helps if there are silt chambers along the run to allow rodding or pressure washing. Over a period of time, the top of the drain may become capped, or in some cases the drains may have been constructed without free draining material over the top and may never have worked properly. They have a lifetime of 25-30 years but with regular maintenance this may be considerably increased. During the 70's and 80's, many clubs invested in **irrigation** systems. The glued PVC pipework joints have now reached the end of their lives as have many other components of those systems. Updating has become a necessity if a reliable system is needed which will guarantee even water coverage of greens. Current polypropylene pipework has an estimated life of 50 years. The solenoid valves, heads and electric cabling should last a minimum of 20 years. With regular maintenance pumps should function for 20 years also, but isolation valves need replacement after 15 years. Depending on the type of construction, holding tanks should be good for between 15 and 40 years. **Bunkers** are the areas on the course requiring the most regular refurbishment. The sand becomes contaminated, it is splashed out onto the banks and drains running from the bunkers become blocked with sand. Checking and refurbishment of each, if necessary, needs to be carried out on a 5 year cycle. On links courses wind blow damages the bunker rivetting and they need regular refacing.

The most important areas on any course are the greens. Should they be reconstructed? Hopefully never. Good greens are designed to fit in with the environment, should be free draining, and have manageable contouring. As green speeds have increased in response to member expectations, severely contoured slopes (>3°) no longer hold the ball. If greens are not performing well, then a complete rebuild may be contemplated. Such re-constructions are expensive, and even if built to USGA or the recent STRI British specifications only perform as designed for 15 years. (Hopefully, results of current research on maintenance practice will extend this period). **Tees**, provided they are large enough, need levelling on a 15 year cycle, or if not, require rebuilding. Increasingly, clubs are investing in **paths** to prevent wear areas and erosion. They may have been constructed of loose chippings, rubberised materials or solids.

Water flow down slopes and spikes (decreasingly with the increased popularity of soft spikes) damage the surfaces. Shale paths usually last a minimum of 5 years, synthetic or asphalt ones 10, and concrete ones upwards of 25 years. His advice on **trees**, "remove them!"

Clubs should not expect the various "parts" of the course to last indefinitely. By looking at when the various features were installed, together with their life expectancy, clubs should be able to avoid any unexpected major costs and plan regular expenditure on the course. Maintenance always prolongs the useful life of any component and a golf course is no different. Above all clubs should ensure that whatever they spend, it is spent wisely.

Dave Weston is the former Secretary of Enmore Park Golf Club.

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