

# To Rebuild or not Rebuild

Robert Laycock looks at the options facing you when a green is failing to perform.

The other day I was thinking just how many old golf courses I knew where the worst green on the course was a reconstructed one. In fact, when clients from a potential new golf course first approach me as an agronomist and tell me about a problem green, I would put money on it being the new "USGA" green they were persuaded to build a few years ago which, after a good start, has gradually gone downhill!

In these circumstances of course I do not know how bad its predecessor was. However, I am sure from those instances where I have been brought in before old greens were dug up that, very often, more could be done to preserve them and improve their condition before considering rebuilding.

A golf club should think very carefully before re-building just one or two greens on the course and should seriously consider other options.

## BEFORE MAKING THE FINAL DECISION

Some agronomists have too close an association with particular golf course architects. Such people can be almost as dangerous as those too closely associated with a fertiliser company. Independence in agronomy is vital.

If a club feels it is being unnecessarily persuaded (or pressured) by its agronomist to re-build one or two greens, there is nothing to stop it from getting a second opinion or changing agronomist altogether. The recently launched Register of Independent Professional Turfgrass Agronomists (RIPTA) gives a list of qualified agronomists from which to choose.

## WHY REBUILD?

Sometimes there are legitimate and unavoidable reasons for rebuilding greens. Examples would be the proposed re-routing of a road through the course, major drainage problems necessitating reconstruction of all greens and major issues such as length of hole and safety issues related to the game of golf.

However, if these are not the case, all other alternatives should be seriously attempted before rebuilding is carried out, as the new greens and old are usually like chalk and cheese, both in terms of their putting quality and in their management.

If some greens are not performing well and have not improved or have been getting worse over a period of time, there are things to try before rebuilding.

1. If greens are genuinely getting worse in spite of the club paying for agronomic advice and following it, the club should change its agronomist to see if there is an alternative way forward – no reputable agronomist wants his or her name to be associated with a course which is gradually performing less well.
2. Correct shady conditions or locally poor drainage, as these will contribute to poor performance. If the course is based on a naturally free-draining soil, rebuilding is less likely to be necessary.
3. Improve the management regimes of poor greens for routine tasks such as aeration, scarification and nutrition.

If none of these do the trick after a year or so of trying, then rebuilding may be inevitable.

The next choice is that of construction technique. Most choose USGA greens.



Excellent rooting on washed turf laid 30 months previously

## WHAT IS A USGA GREEN?

The term "USGA green" covers a multitude of sins in practice, but all should, when first built, fulfil the criteria laid down by the USGA. The USGA Recommendations specify the characteristics, mainly physical, of a golf green construction. All USGA greens, at the time they are constructed, are designed within defined limits to drain well in wet conditions yet hold water in dry conditions.

All USGA greens must fulfil these criteria, but every USGA construction is different in some way – for example, I have come across golf courses supposedly running USGA greens where the rootzone pH values were less than 4 and others where they were up to 8. Clearly such greens would need different management. New greens are built using different sands, different sources of organic matter, and so on. The chances of any green of this type having similar requirements to those of an old green are pretty remote.

USGA greens can never easily be brought into the routine management of an old course. Their characteristics of drainage and nutrient requirements are

so different from old golf greens that they need a completely different management – something that the typically stretched course management team find very difficult to cope with. The different irrigation programmes, top dressing applications and fertiliser applications that are necessary to keep both old and new greens in good condition put a great strain on the green staff.

The option chosen by some, i.e trying to maintain the new greens in the same way as the old ones - trying to bring their management into line with the others by, say, using the same top dressing on the new greens as was used on the old ones - is a recipe for disaster. Spending a lot of money on a USGA green and then capping it off with a fine textured top dressing so that water is held near the surface is just a waste of money.

For a USGA green to work it has to be maintained like a USGA green. If it isn't, it will deteriorate over quite a small number of years until it is as much a problem as its predecessor.

#### EXAMPLES OF WHAT CAN GO WRONG WITH A NEW GREEN

Even if built and maintained correctly, a new green can still fail to thrive. The most common reasons are:

**LOCATION** – if the existing green is failing because dense trees surround it, the new green will fail for the same reason.

**DRAINAGE** – if the green is located in a bowl at the bottom of a hill, a new green taking its place will also be difficult to drain and, will probably develop anaerobic black layer which is probably why its predecessor went.

**TURF** – for speed you may decide to use turf rather than seed. Conventionally grown turf will import a layer of the soil the turf was grown on, which will interfere with the movement of water from the surface. To avoid this, use washed turf or turf grown on a rootzone compatible with that you are going to use. If you want to know the botanical composition of the turf you are buying, most members of the Turfgrass Growers Association are able to supply a certificate at point of harvest listing the grasses and their percentages in the turf – note, not the percentage in the seed mixture, the percentage ground cover in the actual turf.

#### CHOOSE THE RIGHT GRASS SPECIES FOR THE NEW PUTTING SURFACE

Using turf from the original green (if the new green is no bigger than the old one) is often the best option. The turf will match the original greens, thereby overcoming the objection to the new green that it has a different putting surface. If recently used top dressings are compatible with the rootzone chosen for the new green, the possibility of problems with water percolation can be minimised.

If there is not sufficient old turf to be found on the green, turf or seed of traditional greens grasses will have to be used. Attempting to produce a putting surface reasonably similar to existing greens effectively eliminates the use of seed mixtures or turf with a high fescue content. Many old greens are replaced because they are too wet and thus tend to have a high annual meadow grass content – this is completely different from fine-leaved fescues in its management requirements and thus fescue



Laying turf grown on fine-textured soil on a USGA rootzone always leads to disappointment



Accumulation of incompatible top dressings on turf laid 5 years ago, leading to thatch build up and shallow rooting

should normally be avoided for this purpose. (I hasten to add that I believe that red fescue has a place as a greens grass, but this is unlikely to be the case when an old green has to be replaced by another of similar playing quality and management requirements.)

This leaves the bent grasses, which have a leaf blade more similar to that of annual meadow grass. It can also be managed in a similar way, maximising the chances of success with the new green and, as annual meadow grass invades, it is less obvious in a bent grass green. Browntop bent is traditionally used and is probably the best bet. In fact, if the rest of the greens are a mixture of annual meadow grass and bent, they may gradually come to have similar proportions of these grasses.

#### GET THE MANAGEMENT RIGHT

There is plenty of advice around on USGA green maintenance. In fact where a whole course has been constructed in the same way, whether a brand new course or a set of re-built greens, management is not a problem. It is the mixture of new and old that seems to cause the difficulties.

#### SO, WHAT CAN A CLUB DO WHEN REBUILDING IS ON THE CARDS?

First, do not expect the rebuilding to solve all the course's problems at a stroke. Different, unforeseen, problems may be created.

Second, if you decide to rebuild, use a USGA construction unless you have a proven alternative technique on the course, as on seaside links, where USGA greens should not be necessary (though I know some where, sadly, it has been done). However, the new greens must be managed in the most appropriate way.

Third, if possible for consistency and for the long term good, aim to rebuild all the greens rather than just a few, whether all at once or a few a year, though this can be the most problematic approach in the period while there are still different greens to be cared for. Also ensure that if the rebuilding is going to take several years that the source of rootzone is safe – avoid changing supplier half way through the job.

If circumstances allow for keeping an original green as a temporary or alternative green, this can take some of the pressure off the new green as it matures.

You could spend thousands of pounds on building a new green to replace the worst green on the course and find that it is still the worst green on the course! Think twice before rebuilding and do not allow the club to be rushed. Make sure you have tried all the alternatives to re-building, because once done, you cannot turn back the clock.

#### WEB SITES:

Robert Laycock: [www.robertlaycock.co.uk](http://www.robertlaycock.co.uk)

Turfgrass Growers Association: [www.turfgrass.co.uk](http://www.turfgrass.co.uk)

Register of Independent Professional Turfgrass Agronomists: [www.ripta.co.uk](http://www.ripta.co.uk)