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Wrekin Golf Club

# Wrekin the rewards

**Improving standards whilst reducing budgets is a conundrum that many UK golf clubs face in the current economic climate and the culture of pay and play golfers. So, when Wrekin Golf Club in Shropshire decided to address the situation, they called on the services of Chris Roberts Agronomy. Chris Roberts explains all**

**G**olf clubs have, for some time, found themselves under increasing financial pressure. One of the major contributors to this is the fall in membership numbers. In 2012, an English Golf Union survey indicated 52% of golf courses had seen a reduction in membership, with 94% of clubs having membership vacancies. Ultimately, this reduction in income will lead to smaller consumable and capital expenditure budgets.

However, there is little point in reducing budget on any golf course if the results are to be a deterioration in playing standard which, in turn, will have a negative impact on membership and visitor income.

Coping with these reductions, whilst

keeping or even raising the standards of the golf course is a tall order, however this article will discuss how this was achieved at Wrekin Golf Club in Shropshire.

## Identifying a Strategy

We started working with Wrekin Golf Club in May 2011. At this point, the club were finding themselves under increasing financial pressure and investigating how they could reduce spend on the golf course whilst, at the same time, improving playing conditions.

The first objective at Wrekin was to devise a strategy to allow the golf course to run as efficiently as possible, whilst dealing with any playability issues. The strategy devised was a holistic approach focusing on the course itself, but also areas such as staff efficiency.



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### Strategy on the Greens

The club has poa dominant greens which are clay based in design and had a significant thatch layer. This thatch layer was having a considerable impact on playing conditions and meant that the surfaces, at best, were only fit for purpose for approximately five months a year. These thatch rich greens were especially prone to fusarium patch disease.

In 2011, the greens had been sprayed with a fungicide eight times. At a cost of £6,400 plus VAT, this was something we were eager to reduce. Whenever possible, the temptation was resisted to spray fungicide when growth was sufficient and, instead, allow the disease to grow out. Although this

did sometimes take away from the aesthetic value of the greens for short periods, it was never a bone of contention with the membership.

The amount of spraying on the greens has been reduced since 2012 to, on average, four times per year. This has primarily been achieved by resisting the temptation to spray in periods of strong growth, along with increasing aeration and topdressing and reducing fertiliser inputs. This, in turn, has created a drier, more disease resistant sward without incurring the cost of expensive overseeding.

Fertiliser inputs were reduced drastically from approximately 150kg of nitrogen being applied prior to 2011 to less than 60kg in 2014. The main reason this was possible was

down to the more intensive aeration and topdressing programme that subsequently has released nitrogen to the grass plant. However, small inputs of nitrogen were still required and we found that the most cost effective way of doing this was by 'spoon feeding' treated soluble urea. This was applied to the soil at 800 litres per hectare and is an extremely cost effective way of feeding the greens, with each application costing less than £20 for all the greens.

With money now being saved on fungicide and fertiliser, it allowed the club to make a commitment to a more intensive topdressing programme to combat the thatch accumulations that were present. A move away from a traditional mixed topdressing to straight sand was made. The main reason for

**A move away from a traditional mixed topdressing to straight sand was made as it is far cheaper than kiln dried sand**



Topdressing the greens with straight sand



The 1st tee after increased nutrient inputs and overseeding

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this was budgetary, with straight sand being far cheaper than the kiln dried dressing used previously.

**Improving all year round playability**

It was our intention, from the start, to use the main greens on the course as much as possible. It was felt that this would help the club retain their membership, whilst making the course more attractive to visitors. For this reason, the club changing their policy on using temporary greens in frosty conditions, and now allowed play on the main greens. This was as long as the surfaces were firm and did not have thawing permafrost. This change of policy has now been in place for three years and, as yet, there has been no major detrimental impact to the greens.

The tees at Wrekin are generally small in size and measure approximately 4,000 square metres. Because of their size, and many being in shaded areas, the club previously used artificial mats from November through to March. Again, it was our intention to stay on the main tees for as long as possible. Unlike the greens, this change to use the grass tees more would obviously have an impact on their condition. However, a strategy was implemented to limit this impact.

Firstly, the seed used on the tees was changed from a fescue bent mixture to a more wear tolerant rye grass. Although fescue and bent grass is indigenous to Wrekin, it was felt that these grasses had little chance of survival in this high wear environment. The downside to using rye grass was that it required higher nutrient inputs. However, to achieve a better quality teeing surface that could endure heavy play throughout the year, it was felt that extra fertiliser was vital to the scheme's success.

To further aid the tees, a tree removal programme was initiated around the most shaded ones. This had a dramatic effect on improving grass cover in these areas. Whilst the tree removal programme around the tees continued, any badly shaded areas around

the tees were seeded with a more shade tolerant mixture containing fescue and tufted hairgrass.

**Working hours**

In 2011, the greenkeeping team was made up of three full time greenkeepers with one seasonal worker for the summer months. This was a reduction from the four full time and one seasonal greenkeeper that prepared the course in previous years.

To cope with these cuts, there was a switch in working hours from the original eight hour day that was worked throughout the year, to working nine hours from May to August, eight hours in March, April, September and October and seven hours in the winter months. This gave the smaller greenkeeping team more time on the course when grass growth was at its peak, whilst working less in winter when there was less daylight and ground conditions were likely to be less conducive to efficient work. The only disadvantage to this was there was going to be less time for any winter projects.

However, as one of our main objectives was to reduce spend, winter projects were going to be limited, or so we thought!

It was noted that a lot of time on the course was being spent strimming. As well as being time consuming, the amount of strimming also had health and safety implications in relation to white finger, a condition brought on by the over use of hand tools for extended periods. So, therefore, it was decided to spread the strimming duties between all of the staff, thereby limiting their exposure to the vibration from the tools.

To also cut down on the amount of strimming, Primo Maxx growth regulator was sprayed on all steep banks. This was initially applied at 2 litres per hectare; however, the application rate was, in the end, increased to the full 3.2 litres per hectare. The Primo was mixed with a small amounts of nitrogen to aid its intake into the plant.

To reduce the amount of strimming further, glyphosate was sprayed around the



The 5th fairway

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By spraying Primo Maxx on the banks and glyphosate around the trees, large amounts of time have been freed up to allow the greens staff to concentrate on the main playing surfaces

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bases of the trees on the course. These areas were being trimmed around five times a year. Not only was this time consuming, but the trees were being damaged by the trimming and their development hampered. By spraying Primo Maxx on the banks and glyphosate around the trees, large amounts of time have been freed up to allow the greens staff to concentrate on the main playing surfaces.

#### More compact machinery fleet

The machinery fleet at Wrekin was certainly fit for purpose, with all the specialised mowing and maintenance equipment one would require to maintain an 18 hole golf course. However, the fleet was ageing and the club were in no position to invest significantly in replacements. There were, however, some duplicate pieces of machinery, with three utility vehicles being

used for spraying and topdressing and one as a run around. The club also owned pieces of equipment that were no longer being used.

It was decided to trade these in, along with two of the utility vehicles and a topdresser. In its place, a towed twin spin topdresser was purchased to fit on to the back of the club's tractor. The purchase of the dresser would mean less disruption to play as light applications of sand could now



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The 4th green twelve weeks after re-contouring

be made more accurately than before.

This more compact machinery fleet saw increased storage space in the sheds and a reduction in servicing costs.

**Irrigation Spend**

The irrigation system on any golf course is a fundamental part in maintaining quality playing surfaces, especially tees and greens. So, although money may be tight, it is not practical to neglect any irrigation system. Therefore, even with a challenging budget, it was decided that money had to be invested into maintaining and improving the irrigation system.

The irrigation system did, however, appear to be unbalanced in the respect that it had a state of the art irrigation controller, whilst the rest of the system was far from modern. The piping around the course was uPVC plastic and was often prone to leaks, especially on any glued joints. This was something, however, that we were just going to have to grin and bear as there was no realistic chance of this being replaced in the near future.

After an irrigation audit, it was noted that the sprinkler heads were another cause for concern, which were impact in design and had been present for some considerable time. Some of these had already been

changed to a more modern geared design that were more reliable and gave better water distribution. Therefore, it was agreed that the replacement programme of the sprinkler heads be continued, even with the associated costs.

The irrigation audit also indicated that a small number of greens and tees were not working automatically. This was addressed as a matter of urgency as we could not be spending man hours watering areas that could be done automatically. Luckily, the faults on the automatic irrigation system were all associated with faulty decoders and were relatively cheap and easy to fix.

**Drainage**

Similar to the irrigation, drainage is something that cannot be forgotten about on a golf course, even under the tightest financial pressure. This is especially so in respect of the greens, where members and visitors alike want to play as much as possible on main greens.

For this reason, in the autumn of 2013, it was decided to drain two of the greens - the 9th and 10th. These had been historically wet and, even with the intensive aeration and topdressing programme, were getting wetter.

Therefore, primary piped drainage was

installed in both greens. The trenches would be cut using ALS (a local contractor), whilst the rest of the work would be done in-house.

The improvement in the greens drainage was instant and, in less than eight weeks after commencing the work, the 10th green was being played on. This was quickly followed by the 9th. The cost of this work, including the contractors fees, was just £4,000 to do both greens.

**Reconstruction of two greens**

With one of our main objectives being to reduce costs, one of the last things we thought we would be doing was rebuilding a green! The greens at Wrekin are undulating, especially so the 4th and the 17th. Both greens were historically problematic with limited pin positions and stories of balls nearly reaching the hole to only end up back by the players feet.

Whilst some members accepted their design, it was a source of criticism from visitors. Ultimately, this was something that could have had a detrimental effect on visitor income and something that had to be addressed. We wanted visitors and members alike to be talking about the improving condition of the course, not how unfair these two greens were.

**Drainage is something that cannot be forgotten about on a golf course, even under the tightest financial pressure**



Hollow tining



The 18th green



Superb views of the surrounding Shropshire countryside await golfers

In October 2011, the 4th green was re-contoured and a primary drainage system was installed. Although the shaping and drainage channels were done by a local contractor, all other work, such as lifting the turf, installing the drainage and reinstatement was carried out in-house. This was going to be extremely testing with only three members of staff to help virtually rebuild a green, whilst still carrying out core duties such as mowing, changing holes etc.

By April 2012, the green was ready for play and, although it was designed to be in keeping with the other greens on the course, its drainage system and reduced thatch meant it quickly started to perform better than the other greens on the course.

The cost of this new green was a miserly £4,500, a far cry from the £30,000 that a USGA construction green would have cost, and is far more in keeping with the other greens.

The success of the 4th green meant that, in October 2012, work commenced on the 17th. This work was completed at a similar cost and, once more, has been a great success.

### Summing Up

When we started working at Wrekin Golf Club, the objective was to scrutinise all systems of work that were then in place and advise the club on how these could be improved. Some of these improvements would result in cost savings, while others would result in the long term improvement of playing standards.

It is true that cost could have been kept even lower, as we rebuilt two greens and installed a full primary drainage system on two more. Yet, this work was required and has only further improved the playability of the course.

The total annual spend at Wrekin on the golf course is currently 14% lower than it was in 2010. This percentage does not take into consideration inflation over the last four years so, in real terms, the reduction in budget is closer to 22%.

To make this type of saving, whilst dealing with ageing machinery and an outdated irrigation system, as well as improve the standard of the course, is quite something.

Therefore, it is a huge credit to Head Greenkeeper Harry Jones and his staff that, even with these reduction in budget, they have produced a course that the members are proud of, and that draws accolades from most who visit it.

Chris Roberts [cragronomy.co.uk](http://cragronomy.co.uk)



Chris Roberts