

From Horses for Courses...

Roland Taylor looks at the development of the fairways and tees mower from the early days of animal driven maintenance



While cleaning out a drawer recently, I discovered some old leaflets, magazines and newsletters that gave an insight into what greenkeeping, especially the cutting of fairways, was like back in the early part of the 1900's.



Mr Glass, the then Head Greenkeeper of Thorpe Hall GC in Essex, wrote in 1963 that he had been working on golf courses for over 40 years. His first job back in 1923 was mowing fairways with a 24" horse drawn roller mower, this plus a 36" version and a flock of 300 sheep kept the grass short. The work was slow and tedious and he was only able to cut two fairways a day. Later a triple gang horse drawn unit was purchased which did speed up the operation. Animals had been used to keep the fairway grass short as far back as the middle of the 1600's and rabbits were being farmed on courses for their meat. The records show that by the beginning of the 1800's, on one particular course, players were complaining about the amount of damage these four-legged mowers were doing to the fairways, and as a consequence to their game. In this instance, a long, costly legal action, which eventually finished up in the House of Lords, was necessary to rid the course of what had become a nuisance. There are probably still a few golf courses, where local farmers have grazing rights. It is surprising that a flock of sheep was still being used for maintaining grass, 80 years after Budding had invented the cylinder mower.

In his article Mr Glass goes on to say the big day arrived when the club purchased a Fordson tractor plus a five-gang mower. The Horse went into retirement and the sheep went to market, much to the relief of the players and all the fairways were cut in two days.

Further insight into what it was like to work on a golf course in the 1920's is gained from some essays, which were published in 1929 as part of a greenkeepers' competition. Most of the mowing of greens was being done by hand and one entrant wrote that he would not have an engine powered unit on his hallowed turf because they could not be trusted. Reading between the lines he had probably had a nasty experience with a petrol mower. He says that they were apt to leak oil and petrol onto the greens and that his men were inclined to drive them too fast which caused scuffing on the turns.

Advertisements of the time show that there were plenty of courses using motor mowers. Dennis Bros of Guildford were offering 24" (£72), 30" (£85) and 34" (£100) models, plus a trailer seat that would fit any of these at £6.10 shillings (50p). They claimed to have supplied a number of golf clubs with their machines including, Royal St George's, Richmond Park and Woodhall Spa.

Another advertisement illustrated a horse drawn set of Shanks 'Triumph' Triple gang mowers, these were available in 7ft to 16ft widths. They also displayed a 16" Wizard motor mower, complete with grass box for £37.10 shillings.

Over the next four decades tractor towed gang mowers became the normal method of cutting fairways. The ground wheels drove the cylinders and the performance was very much reliant on the operator. The travel speed was critical to the quality of finish, too fast and the result would be very poor. There was tendency for units bouncing at high speeds which results in an uneven cut and turning too sharply could produce scalping and scuffing.

The first innovation to gang mowers, was the introduction of triple units driven off the tractors PTO. This meant the cutting cylinder speed was no longer reliant on the forward motion of the unit, so it was constant, regardless of other outside factors. This introduction heralded the beginning of a more controlled quality of cut.

At about this time hydraulics were also being introduced. These were run off the tractor's system and were for lifting the units in and out of work, which meant the mowing width, could be reduced when working in confined areas or around obstacles.

The next milestone was the hydraulic motor. Now each cutting unit had its own power supply and because of the flexibility of the hoses, used to deliver the oil to each motor, it could be floating to follow the ground contours closely or fixed for level surfaces. Cylinder speed remained constant and its spinning directions could be altered at the flip of a switch. Another major advantage the hydraulic units had over trailed gang mowers was the ability to disconnect the cylinders when travelling between sites and to be able to lift them in and out of work, all from the tractor seat. Trailed gang mowers and hydraulic units are still readily available. But the machinery for maintaining fairways has moved on.

For the last two decades the development of all golf course machinery has mainly been lead from across the pond, in the USA. This saw the introduction of ride-on fairway mowers with a choice of cutting width and cylinder units. The hydraulic systems have been extended to give two and four wheeled drive versions and power steering. The other big change was the advent of small compact diesel engines.





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TEES

The general consensus is that these should be cut with a cylinder mower and the clippings collected. Having said this, it was recently reported that some roller propelled rotary mowers with grass collection were being used in the USA.

No doubt there are some readers who use this type of mower here in the UK. An advantage of using a rotary is that leaves and any other debris will also be collected, whether the finish is acceptable is a point of discussion.

A ride-on triple mower, with a collecting facility, is also an alternative method of mowing tees, especially if they are large enough. Where they have a shallow banking the hover type of mower can be used.

For bank cutting an alternative is the brush cutter. This machine should not be confused with a trimmer, which has a relatively small engine and is mainly designed for domestic grass cutting.

The commercial brush cutter is a far better proposition, they are designed for heavy use and are now available with wide choice of powerful engines. Nylon line trimmer heads are part of the package, so they can cut short grass on banking. The main reason for suggesting this type of machine is its versatility as it can be used for other jobs around the course such as cutting down undergrowth or weeds on ditch sides. Another possibility is the recent introduction of brush cutter type power units which have a range of quick and easy to fit interchangeable attachments including nylon line grass trimmer, hedge cutter and rotary broom.

The style of cutting has also undergone a metamorphosis and to some extent this has been influenced by television coverage, which is now big business. How the course appears on the small screen has become an important factor. Long sweeping fairways that look immaculate are the norm. This has, to some extent, influenced players in this country, who also expect their course to look similar.

A majority of courses now use ride-on machines for mowing the fairways and there are plenty to choose from, often with similar specifications, that cater for the need.



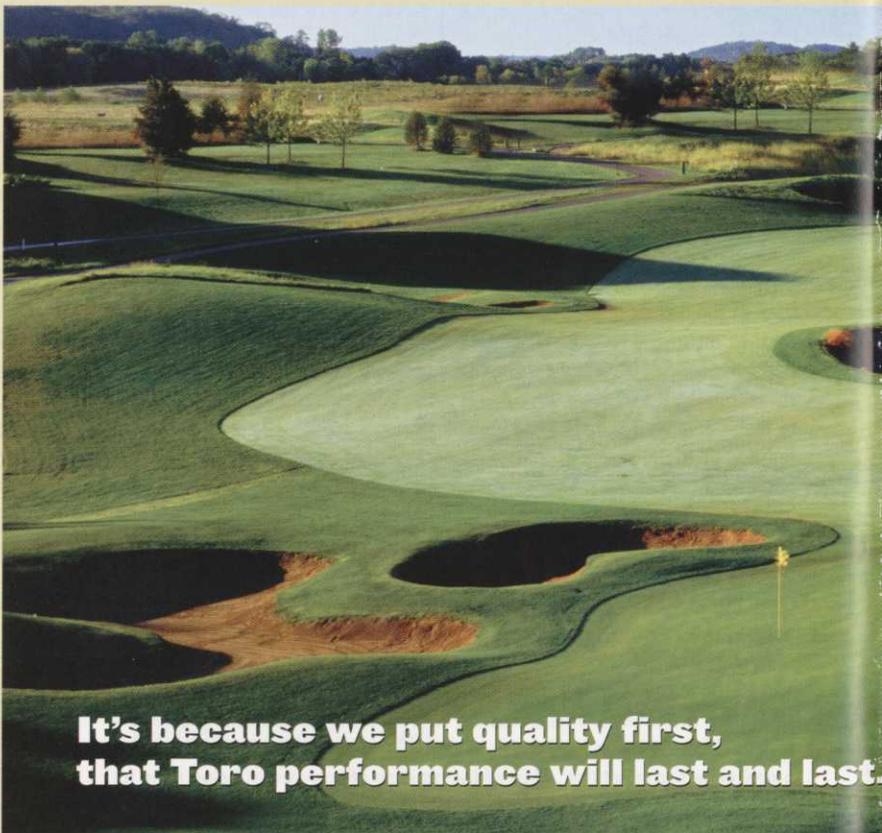
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AROUND BUNKERS

These sometimes have banking and it is not always possible to cut this with a fairway mower. Again the hover or brush cutter machines are ideal for these areas. The edge around the bunker can be cut using edging shears, but a faster way of carrying out this operation is with a mechanised unit built especially for the job. The machine consists of a vertical blade which has a guide that runs along the bunker edge, while the blade trims the feather of grass. On some machines the cutting head can be rotated and used for trimming up against walls or posts and along the edge of tarmac or concrete paths.

KEEN BLADES

With all the modern equipment now available it is easy to forget some of the fundamental factors that result in the course looking good. The blades on a cylinder mower like a rotary must be kept sharp. They also require setting at the correct distance from the bed knife. Too hard and they will act like a brake and place considerable strain on the machine's other components, especially the engine, which will use more fuel oil and increase the amount of pollutants discharged into the atmosphere. Likewise if the cutters are not adjusted close enough, the grass is torn rather than cut, this distresses the turf and causes a similar loading, as mentioned before, on the machine.

Hydraulic drives have made backlapping easy, but it should be realised that this is only a stop gap measure and the cylinder and bed knife need grinding as soon as possible.

Cruising round the course in an ergonomically designed seat and often with a cab, an operator can easily forget what is happening underneath the machine. The good greenkeeper is one with keen eye, sharp ear and good sense of smell.



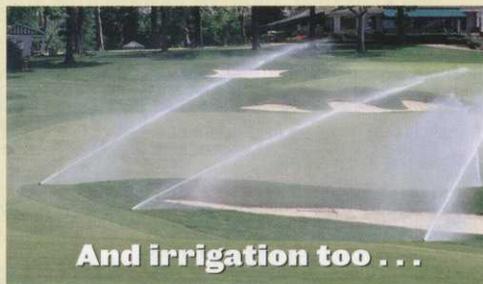
Maintaining fairway, tees and bunkers have come a long way since the beginning of the last century. There are probably no readers who have a flock of 300 sheep or several hundred rabbits to contend with but because the boundaries are continually being pushed back more complexities occur to contend with.

Greenkeeping has become more demanding and sophisticated and Mr Glass would be hard pushed to keep up with today's technocrats. On the bright side, at least today, it doesn't take nine days to cut each of the fairways once, on an 18-hole course and spend all that time looking at the rear end of a horse.



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