Hugh Tilley canvasses opinion on a selection of Greens Mowers currently on the market

Greens mowers are always the first machine anyone thinks of when considering golf course machinery. Perhaps they are the glamour machines because they are in such frequent use, or maybe it because they have the most important visual impact on the course.

Most greenkeepers prefer to use pedestrian operated machines, however, many admit that ride-on greens triples offer time and labour savings and have to be used to greater or lesser extend on most courses. Whether there is any significant difference between quality of cut is debatable, perhaps the greatest difference is visual – the width of those highly desirable stripes.

Groomers, conditioners or rakes are available for most if not all greens machines, and most greenkeepers either love or hate them. Most groomers only work in a straight line – which may be a problem for the perimeter cut, few people are prepared to lift them just for one or two circles of the green. Verti-cutter reels are also an option for many machines, however as these require the cutting unit to be changed most greenkeepers prefer to have a dedicated machine for the task although changing reels may be very quick and easy. The Dennis cassette system is the ultimate in quick change, and perhaps this could be adopted on other machines.

Without doubt quality of cut is the number one criteria in selecting machines with cuts per metre (or yard) the salient figure to consider however the greenkeepers spoken to accepted that a machine sold as a “greens mower” would provide acceptable cut quality. After this other considerations have to be price, reliability, service back-up and ease of use, including of adjusting. Again most greenkeepers took it for granted that the main contenders in this field would be easy to use and reliable. Service back-up was more important in this survey than in any of the previous ones, probably because the greens mower is the mainstay of maintenance – and appearance, not to mention green speed.

Greens vary considerably between clubs, and often between different parts on the same course. The size of the greens, their level and the surround have a significant impact on the ease of using a mower on them. Manoeuvrability is more vital on some courses than on others, while some have a greater requirement for machines with better than average stability and surefootedness. Greens triples have no tread or rib on tyres or rollers, and engine braking and/or all wheel drive may be required.

The Hayter Beaver T93 at Peterstone GC, South Wales
A troubled financial history, i.e. lack of money for investment, was the most critical factor in Peterstone’s purchase of the Hayter T93. The five year old 18 hole private course is in receivership, however consultants advised of the necessity of maintaining the course, and thus the need to invest. A number of different machines were demonstrated, however the T93 supplied through local dealer Ted Hopkins (who took the old GT as a trade-in) performed perfectly satisfactorily and was available “at a price we couldn’t refuse,” said Philip Bowes, joint Head Greenkeeper.

Now three years old with 663
hours on the clock, Philip commented that it has proved itself to be an extremely reliable and efficient machine which had never let them down. Pedestrian machines are only used in special circumstances, such as for matches.

The grooming reels were supplied with the machine and Philip commented that he would not have bought without them. In his opinion the machine gave "an excellent quality of cut especially when considered against its cost". Standard bottom blades are used with life and cost both acceptable. The reels are normally sharpened just once during the winter and then back-lapped "as and when necessary" during the cutting season. Philip was very pleased with the way the reels kept their cut and adjustment.

Ease of use, operating and maneuvering, was considered to be equal to any other greens triple, four of the five greenkeepers use the machine regularly and all like it.

A couple of reel bearings have had to be replaced, using original parts from Hayter as these are "not over priced".

Philip's brother, and joint Head Greenkeeper, Greg said that Hayter had been extremely supportive and re-welded without quibble one minor crack in the frame. The machine still has all its original hydraulic pipework which has never leaked, although one internal seal in the transmission had to be replaced.

"No" said both Bowes brothers, "we can't fault the Hayter T93 and we'd certainly consider another".

Graham Wissett and the Ransomes E-Plex

"It'll be interesting to compare costs after a year's use," said Graham Wissett, Head Greenkeeper at Lydney in Gloucestershire. "It's not a machine which will suit everyone," he suggested, "however it has proved to be ideal for our needs. You soon forget how it is powered." The E-Plex has now proved that it will cut 29 greens between charges and still have enough power to get back to its battery charger.

While knowing that it was an untried machine and principle, Graham was confident in the support he would receive from Ransomes and Birds, and added inducement was given by the fact that Birds gave a three years (free) service contract with it. The most obvious advantages of the machine apart from its economy of operation are its quietness. With a housing estate alongside the course the advantage when going out to cut greens at 5.30am is obvious. Other significant advantages are the lack of oils to spill and the minimal maintenance requirement. Graham said it was nice not to have to check oils and water or for worn pipes nor to have to wear ear defenders.

Power is provided by a bank of eight 6 volt batteries. Battery life is still an unknown quantity, Ransomes recommend replacing batteries in rotation, however Graham intends to wait until they go down and then to replace them all, using a local battery supplier at a cost estimated at £500. Following recommendations Lydney run the batteries down almost "flat" before recharging, using the machine as a run-around if necessary. Charging takes about seven hour, i.e. overnight and once plugged in is automatic.

The E-Plex has a charge meter on the dash, and Graham said that reel speed, and so quality of cut, remains constant "until the batteries are virtually dead - the reel drives being the priority service." Quality of cut is considered to be at least as good as any other greens mower. Furthermore the machine has stayed "on cut" exceptionally well without needing any resharpening. The service which does show charge level is reel lift, "you notice this getting sluggish as the charge runs down," Graham said. Slopes do have some effect on the machine, and speed can be reduced by as much as 30% when climbing. There is no engine braking when going downhill but Graham is happy to use the brakes if necessary to check forward speed. He believes that Ransomes have made a modification to this.

The machine has been used without turf groomers for the past season, however these are to be fitted for the next. Lydney checked the ability of the electric lift to cope with the extra weight - by loading 50kgs of sand into the boxes. Verti-cutters are not available. Individual units can be switched off allowing narrower and offset perimeter cuts to be made. Lift height stops are adjustable by screwdriver to ensure that the units come up just sufficiently high enough to clear bumps.

There are some downsides to the machine, one is that there is no power steering, however Graham said this is no real problem, you just develop different techniques, wider sweep turns and a three point turn if necessary, this has eliminated steering (skid) marks. Another expressed wish was for a sprung seat.

Overall Graham said, "I think the design is brilliant, exceptionally well thought out with easy service swing out cutting units, only a single spanner for all adjustments. Certainly if it were stolen tomorrow I would buy another and I don't think that I will have a different opinion in a year's time."
The Wimbledon Common Golf Club's team and their Toro 3200-D

The Wimbledon Common Golf Club's team and their Toro 3200-D. A lot of money was spent on it a season or two ago, it was considered worth retaining. No pedestrian mowing is undertaken and greens are cut daily.

The groomers were removed from the GM3 and 3000 as they were found to “ripple” the perimeter cut, and Ron will not have them on the new machine. The club has verticutters for the GM3. The change to diesel power was an important factor in upgrading—a petrol engine 3200 is available, however transporting and storing petrol is proving to be an ever increasing difficulty, whereas there is already a diesel tank in the yard.

The club, through David Shore, the Course Liaison Manager, are endeavouring to change into a rolling replacement programme.

Lloyd Paladin 21s at Dyrham Park Country Club, Barnet

Don Wilson, Course Manager, declares himself to be a dedicated pedestrian man, giving in part the justification that the course is built on heavy London clay—with some variety in the greens which he mows each year. His other reasoning was that pedestrian mowing gave a better and faster green and a more attractive finish with no edge marking and this was something the members required.

The club selected Paladins for several reasons not least of which was the fact that Lloyds at Letchworth were very close to hand for parts and service. However the principle reason was that Don considers that the mower produces a better finish than the other machines which he has tried. The build quality and engineering also received praise.

The club has three of the machines, all of the same age, which are individually numbered. It also has two Jacobsen triples which lack of time and money dictate be used at weekends during peak season. One of the Greenskings is used for verti-cutting. Don does not believe in groomers—or rakes.

There have been no problems with the machines, service is simple and grease points are excellent and readily accessible, nor does the machine shed its grease on the greens. All three machines go back to Lloyds for a winter overhaul and sharpen, with back-lapping being undertaken at Dyrham as necessary, normally two or three times a season. Don said the machines stay on cut well, and seldom need adjusting although this is checked each time they go out. Adjusting the cut is simple, but it does need a box spanner—“this need for a spanner”, Don said, “ensures that adjustment is not undertaken by the operator without due consideration.” Cutting even in the wet is not a problem.

The club has eight greenkeepers when at full strength, machines are not specific to any greenkeepers and all handles are set at the same height. Transport wheels are not used as normally each greenkeeper has a Cushman which he uses to move himself and the mower from green to green. Don said that he particularly liked the Honda engine, advantages he cited were its reliability, quietness and economy, and on top of this was the eco-friendly use of unleaded fuel. It has an oil alert switch which ensures that it cannot be run without oil.

Replacement is scheduled for after the machines have done four seasons of work, but prior to that Don is also hoping to buy two more similar machines for his tees.

Huxley 358 Greensmowers at Barton-on-Sea Golf Club, Hampshire

Barton on Sea is a private 27 hole links type course which while long established has recently had to move further away from the sea. Greens are built to full USGA specification. The club bought the second production machine from Huxleys in 1988 and this is still with them, but now down graded to a tees machine. Since then they have bought a further two machines, respectively for the ’91 and ’93 seasons and it now anticipates replacing the oldest machine next year as part of a five year replacement plan.

Course Manager is Tony Gadd and he said he and all the greenkeeping staff are extremely happy with the Huxleys. The fact that Huxleys are only an hour away and provide an extremely efficient back-up service adds to the fact that the machines are British and priced “right”. All machines have combs but not roller brushes.

Tony admitted that the oldest machine has had its troubles but that it is coming to the end of its economic life, but one of the advantages of Huxleys being a small British firm was that they took trouble to listen to the greenkeeper (and Barton greenkeepers in particular) and then acted on this. This has meant that many of the early niggles and problems have been corrected in
A feature of the machine is its good clearance, but Tony reckoned that early machines had sacrificed clean collection as in wet conditions the rollers collected and clumped clippings. Having learnt this, Huxleys have made slight design changes to the boxes so that new machines collect 100% of the clippings.

Other features which were noted were the ease of working on the machines and the ease of adjusting the machine. Quality of cut was equal to any in Tony’s assessment. Reliability, overall, has been excellent. The machines have all wheels driven and this is considered an essential requirement, probably because the machine is heavier than some and has more weight over the back wheel. Stability on the current model is good but the earlier machine was prone to tip. The latest model also has strengthened cutting unit lift arms to cure the problem of earlier breakage’s, but Tony said one of the most significant advances is the improved hydraulic pump capacity which gives a much smoother drive.

Several different operators drive the machines but most of the greens mowing is done by the two first assistants, all are pleased with the machines. Tony said all his staff are consulted before the club buys a new machine. He commented that where anyone has preferred another model of greens mower they have accepted that their preference was not sufficiently strong to warrant a change, especially when it meant loss of commonality of parts and a difference in the location of important controls such as lift/lower.

**Dennis FT610 at Fawley Parish Council**

Peter Stevens, Head Groundsman at Fawley Parish Council in Hampshire, admitted to being a “new boy” when it came to greenkeeping as the parish has only recently built its own 9 hole course on reclaimed land. His requirement was for a versatile and inexpensive mower for the greens which are relatively small, and this led to selection to the Dennis for its cassette reel change. Compaction is a major problem on the site as is lack of capital and these criteria exclude the purchase of a ride-on triple unit.

The course is to be opened next spring and one of Peter’s worries is that the maintenance requirement is higher than existing staff and machines will be able to cope with, thus he has retained some reservations.

Nervously the Dennis has been used for the past season without any problems and it has done an exceptionally good job. In addition to the cutting unit the council has a verti-cut cassette, and Peter said he likes the look of the sorrel roller unit.

Prompted for design faults, Peter did say that the box could usefully have a handle at the front, but otherwise he had no criticism of the machine.

Servicing is simple and reliability has been total. The machine negotiates the undulations in several greens without trace of scalping despite the fact that it has a relatively long wheelbase. Supply was by Jenman Engineering of Durley.

**John Deere 2243 at Broadway Golf Club**

When Broadway needed a new greensmower, service and parts back-up were high on the list of priorities. Cedric Gough, course manager, said that he was not prepared to buy an untried machine nor one where the parts back-up was not 100%. Nor did he expect to be charged for overnight delivery for items which should be in stock.

Other reasons for the selection was the fact that the reels are offset and Cedric was impressed with the units, furthermore the machine is not complex or over endowed with electronics. This latter feature was important because the club has its own greenkeeper/mechanic who undertakes most of the clubs work. The new JD 2243 is the recently introduced diesel engined model, and Cedric commented that diesel engines were synonymous with reliability.

Cedric has been to Langar in Nottinghamshire, John Deere’s UK depot, and been particularly impressed with the way they operate, getting parts from wherever in the world they are and getting them in fast. He was impressed by the computer net which located parts, and he praised the way that JD record faults and can provide the mechanic with the number of previous similar faults which have occurred and what the best solution to them is.

**Jacobsen Greensking 5 at Enmore Park GC, Somerset**

Enmore Park’s GK5 has yet to be delivered, the 18 hole private course is committed to Jacobsen for several reasons, firstly they believe in the product and are used to it, having had several previous models, and, secondly and perhaps no less important, they reckon they get superb service from dealer B.S. Mowers of Bristol.

Gary Cook who is head greenkeeper at Enmore Park said that these reasons were important, because “(while) there may be others mowers and dealers, which are as good, there is everything to be said for the devil you know.”

In fact most of Gary’s knowledge of the new machine is hearsay, but he commented that the GK4 has proved itself and the GK5 is basically similar with added improvements. Of course the new machine will be diesel powered.