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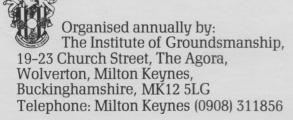
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Golf's modern dilemma

ON a recent visit to Scotland, I had what I suspect must be the classic illustration of 'black and white' golf clubs. On consecutive days in August, a doctor friend and I, both adequate golfers and he a respectable past captain. decided to play Gleneagles and Blairgowrie – the King's and Rosemount courses.

Gleneagles was exceptionally well-presented for the visiting golfer, from locker-room to putting green. The course itself was a joy and, to my delight, the greens were sufficiently fast to induce my opponent to four-putt the first! All the staff we encountered, from starter to steward, greenstaff to waitress, were helpful and polite, non more so than the ranger who appeared astride a Honda threewheeler on the sixth fairway to encourage a husband and wife from Tokyo to step aside in the cause of speeding up play. It was money well spent.

Rosemount, by contrast, was a great disappointment. I had last played there some 25 years ago and remembered it as 'The Sunningdale of Scotland,' which it isn't now. The course, changed by the addition of a couple of the dullest holes built anywhere, had greens that were slow and bright green. They were so spongy, even in August, that any shot left a pitch mark, a great number of which remained unrepaired. The greens were not good in August, so you wonder what they are like in a wet February.

Our enjoyment was further spoilt by a member in charge of a fourball who, despite two *requests* from the doctor, steadfastly refused to let our twoball through from the fourteenth green to the home hole. Whatever it costs, Blairgowrie overcharges.

I believe that these two incidents are really what golf is all about today and by 'golf' I mean course maintenance and presentation – if it's no fun to play, it's no fun to pay. Those who can pay, will buy the best and those who can't, will be left with the soggy bogs.

Scotland is also in the news on another more important front. SIGGA is the first of the three greenkeeping associations to commit itself to the proposed British and International Golf Greenkeepers' Association (see page 13). Well done, gentlemen! EIGGA is in the process of a postal ballot, the result of which will be announced at a series of branch EGMs on October 1. The BGGA is rumoured to have said yes but, apparently, the association is waiting till after the declaration of the EIGGA result to announce its position.

A previous headline in *Greenkeeper* may have been misleading or misunderstood. 'BIGGA may not necessarily be better' (page 3, July issue) was a statement made to encourage rank and file members of all the associations to ask those charged with the responsibility of discussion and negotiation searching questions regarding BIGGA in order that as many of the wrinkles be ironed out at the start so members cannot say afterwards "I didn't know."

A united greenkeeping fraternity must make sense and, no doubt, BIGGA will be the start, with no loss of the ideals and progress that have characterised SIGGA and EIGGA since their respective splits from the BGGA. **MICHAEL COFFEY**



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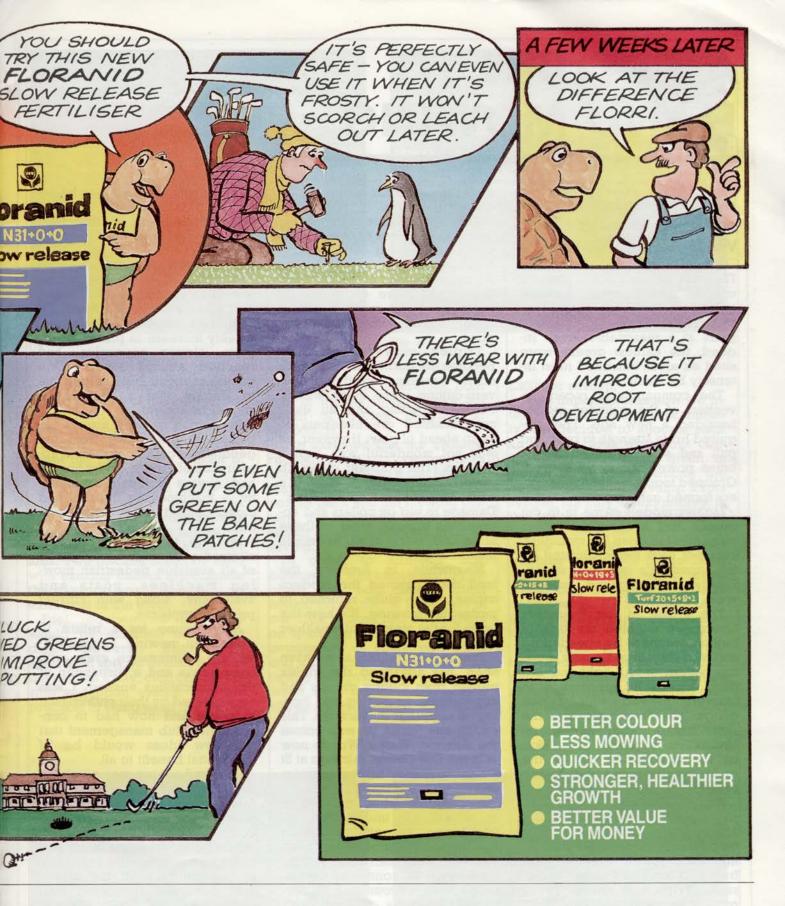
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A RETURN TO HAND MOWING

By Chris Mardon, course manager at West Malling GC, Kent

IT IS well known that the first golf courses relied upon 'nature's greenkeepers,' such as rabbits, sheep and cattle, to maintain grass at a reasonable level. Indeed, the earliest greens were sited on areas inhabited most intensely by animals.

The comparatively recent invention of the cylinder mower heralded a new age. They required brute strength to push and pull and some were so heavy, horse power had to be utilised. Grouped together, cylinder mowers formed gang mowers.

Lighter models came in to cut greens and eventually engines were fitted to drive the cylinders, cuts per yard being dictated by the operator's walking speed. Finally, self-propelled mowers were developed.

The arrival of the Ransomes Overgreen enabled the task of cutting greens to be speeded up and also developed a new mowing pattern of half light and half dark, similar in appearance to fairways mowed with trained gangs. The Overgreen was the first 'triplex' and, having no hydraulics, required great skill by the operator to turn at the ends, which produced a unique mowing pattern.

Many golf clubs stuck to pedestrian mowers until the early 1970s when the first modern triplexes arrived from the USA. At this time, Britain was suffering from inflation and a wages explosion. Triplex mowers could replace men and save time. Well, that was the theory!

The popularity of triplexes grew along with the increase in the popularity of golf which, with the increase in the number of players, put pressure on pedestrian mowers. Inflation's spiral continued and more clubs bought triplexes. There were more golfers, more competitions, more pressure for greens to be cut at weekends.

The now discredited greenkeeping practices of these times, over-watering and overfertilisation, increased the need for more frequent cutting of 'lush' greens, so more clubs bought triplexes. Hand mowers almost disappeared, some clubs had none.

Triplex mowers had now become the norm and there were some benefits. Scarifying and verti-cutting were much easier. Frequent cutting and an early start enabled greenkeepers to keep ahead of play. However, all was not wonderful with triplex mowers. The constant clean up pattern around greens caused a new bogey – "Triplex Ring'. Damage to turf on collars and approaches brought wear to these areas and, worst of all, hydraulic leak damage.

Meanwhile, in America, the land that spawned the modern triplex, many clubs returned to pedestrian mowing. It's now the norm for the majority of wealthier clubs.

Progress in the USA, as we have seen, has advanced the triplex mower from cutting greens and approaches, to cutting and boxing off clippings on fairways. This policy has found its way across the Atlantic. Walter Woods now cuts the Old Course fairways at St Andrews using triplex mowers and with encouraging results.

In the UK, while the triplex revolution was under way, the pedestrian mower maintained one bastion, the professional tour. The PGA European Tour, paying lip service to consistent course preparation, encouraged all tournament venues to cut with pedestrian mowers, as did the R & A for Open Championships, although Royal Lytham in 1979 and Royal St George's in 1981 were exceptions.

West Malling Golf Club was built as recently as 1974 and really knew no other mowing practice than the triplex. While preparing last year's budget, I estimated that the two triplexes owned by the club would need replacement. They were both ageing and, during 1984, had proved unreliable.

In recent times, the almightly dollar had outshone the pound and this dramatically altered the cost of new American triplexes. Enquiries showed an almost weekly increase in prices. Spare parts, always expensive, had reached absurd levels. One glance at repair bills helped me to decide that an alternative should be sought.

Pedestrian mowing always appealed to me. Apart from the generally accepted improved appearance of greens cut by hand, I had always enjoyed operating these machines for the feel and closer contact you achieved with turf.

My trip to Windsor in 1984 allowed a thorough investigation of all available pedestrian mowing machines, costs and availability, along with current prices of triplexes.

After opting for a return to pedestrian mowing, I approached my maintenance crew with some ideas and a discussion of the practicalities ensued. I was very pleased by their enthusiastic response and now had to convince the club management that our new ideas would be of substantial benefit to all.

I worked out my case carefully. With five staff, we would need five mowers. I prepared a chart showing comparative purchase costs (fig 1). Annual service costs would be an important factor and so was the average life expectancy. As can be seen, the capital cost per year, the initial cost divided by the likely lifetime, showed a considerable saving for five pedestrian mowers against one triplex.

The next thing to consider was labour costs (fig 2). At West Malling, we have 20 greens – 18 on the golf course, a putting green and a practice chipping green. Triplexes seemed to have good labour cost advantages, but if

COMPARATI	/E PUR	CHASE	COSTS

	TRIPLEX	WALKING
NEW MACHINE (APPROX)	£10,400	£1010 x 5 = £5,050
ANNUAL SERVICE COSTS	£800.00	$\pounds 160 \times 5 = \pounds 800.00$
AVERAGE LIFE EXPECTANCY	5-7 YEARS	8-10 YEARS
CAPITAL COST PER YEAR	£1500-£2080 PER YEAR	£101-£126 PER YEAR x 5 = £505-£630 PER YEAR

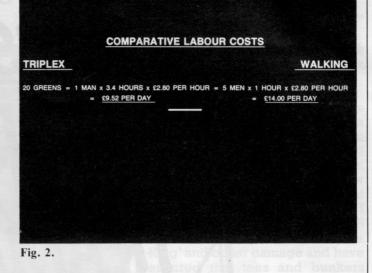


Fig. 1.

men and mowers were being sent to all parts of the course, we performed numerous other essential tasks (fig 3). In order to transport men and equipment about the course, we looked at what we had available.

As one area could easily be covered by walking, we needed four vehicles. The Cushman was an obvious choice. We had an old van that could cope with another area. Two tractors could be used with existing trailers to complete the transport arrangements at no extra cost to the club.

Fuel requirements for these would be minimal, two being diesel powered. Regrettably, apart from special events, such as the captain's day, club championship and open events, it is impractical to bring in all the staff to cut at weekends. Therefore, both sets of figures in fig 3 take account of triplex mowing at weekends.

It is assumed that the average regular mowing season lasts about 32 weeks, so it can be seen that, by incorporating other golf course tasks into the mowing pattern, the increased efficiency of labour usage produced another saving.

In order to achieve this, however, it was necessary to purchase extra hole cutters, lifting hooks, rakes, etc. A large part of our 1984 budget had been spent on spare parts and fig 4 shows a comparison of spare part costs and a fuel cost comparison. This saving multiplied by five days per week over the 32-week season shows a fuel saving cost of some £300 per season.

Most important was how we intended to divide the work. Initially, we decided to allocate each an area to look after, but consideration had to be given to variations in ability among the crew. If we could develop a rota system, not only would interest in the entire course be maintained by all the crew, but a poor performance or less well-adjusted machine would not be confined to one area and each green would only be treated this way once a week. (In fact, there is little evidence of performance variation.)

In order to minimise interference from, or to, golfers, we needed to ensure that we stayed ahead of play. We have two starting points – the 1st and 10th

	OTHER GOLF	COURSE TASKS				
BUNKER RAKING					STS OF COMMON REP	
UNDER TRIPLEX MOWING 2 MEN x 3 HOURS x = £16.80 PER DAY			VALKING MOWER REGIMÉ EN × .33 HOURS × £2.80 = £9.24 PER DAY	COMPARATIVE CO.	TRIPLEX	WALKIN
CHANGING HOLES & TEES (TWICE WEEKLY)			BOTTOM BLADE	£21 x 3 = £63.00	£8 x 5 = £40.00
1 MAN x 2.5 HOURS x = £7.00 2 x PER WEEK = £1			MEN x 3.3 HOURS x £2.80 = £4.62 2 x <u>PER WEEK</u> = <u>£9.24</u>	EXCHANGE ENGINE	<u>£815.00</u> EACH £68.00 EACH	<u>£175.00</u> EACH N/A
WEEKLY MOWING COSTS IN	ICLUDING OVERTIN	IE (x7)		HYDRAYLIC DRIVE MOTORS	£270.00 EACH	N/A
	£77.64	£100.00				
WEEKLY HOLES & TEES	£14.00	£9.24		STARTER MOTOR	£136.00	N/A
BUNKER RAKING x 6	£99.00	£61.20		FRONT ROLLER BEARINGS	£24.00 EACH	£3.80 EACH
OVER ALL COST PER 7 DAYS	£190.64 x 32 WEEKS	£170.44 x 32 WEEKS		FUEL CONSUMPTION PER 18 HOLES	£0.82 GALLONS PER HOUR x 3.4 HOURS =	20.13 GALLONS PER HOUR x 5 x 1HOUR =
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A RETURN TO HAND MOWING - CONTINUED...

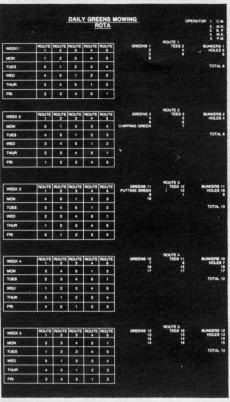
West Malling holes.

A rota scheme that encompassed our important ideal of daily mowing was evolved. Fig 5 shows it with a five-man crew, five-day week and 20 greens. This gives each man four greens per day and easily lends itself to a fiveweek rota. We divided each area into a route and decided that we should all take one of the greens played first. As a starting point, the figures to the right indicate the greens covered by each operator.

Starting at about 7am each morning, holes 1, 2, 10, 11 and 12 are cut first. By 7.30am, holes 3, 4 and 13 are cut well ahead of play. The figures under bunkers are the number on each hole and the total is for the route. Tees are changed as the men pass by on their route.

On day one of week one, operator one works route one. On day two of week one, he works route two and so on. The others move around as indicated. With this information clearly presented, the club management readily agreed to try hand mowing.

The system has worked even better than expected. Starting daily at 7am, we can cut all 20 greens, rake all 53 bunkers and, when necessary, change all holes and tees and be back in the shed before 9am, well in front of any golfers. Should anyone be on





holiday or off sick, we have a fourman rota, which works almost as well. Adopting this system has given our ageing triplex an extended lease of life and taken the pressure off.

One machine is now used exclusively for collars and approaches and these areas have shown a vast improvement. We also use this machine for regular verti-cutting. The other machine's role is to cut greens at weekends and to cover the other triplex should the need arise.

Running costs have improved. Fuel expenditure is well down, as is the purchase of spares. There are undoubted improvements in quality and appearance of greens. Pressure has been taken off the tees mower and I now have no fears of being caught out by mechanical breakdown as I have adequate back up in all areas. I have eliminated 'Triplex Ring' and collar damage and have ensured that tees and bunkers are looked after on a more positive daily basis.

I have instilled a greater sense of pride and achievement in my crew, which now has more time for other maintenance tasks. For West Malling Golf Club, hand mowing works. It will probably work for your club, too. Sizes of greens, access problems, transport, availability of suitable, reliable staff will all need to be considered but, in my opinion, the balance has changed and, even if it costs your club more, the aesthetic and turf benefits make it well worthwhile.

After all, it is accepted that the single most important golf course maintenance operation, cutting the greens, is improved most by the quality of the cutting equipment employed, the skill of the operator and the frequency with which it is used!

