

UK ENGINE ROLE

Kawasaki has appointed EP Barrus as principal engine distributor to serve the UK market.

In what is regarded as a significant development by the Japanese manufacturer to step up its stationary engine business across the grounds care, turf care, utility and industrial sectors, Oxfordshire-based Barrus will take on responsibility for sales and aftersales throughout the UK from the beginning of April.

The appointment will build on the previous engine business established and managed across these sectors by Kawasaki Motors UK since 1987. The operation will be co-ordinated by the recently created Kawasaki Motors Europe Engines & Power Products Division offering an extended range of the manufacturers' highly regarded two-stroke and four-stroke engine technology.

Barrus will be working closely with Kawasaki over the coming months to ensure the business transition is smooth. With access to an extended engine product range, the Bicester company will be taking the opportunity to extend the sales and service offering to OEMs and dealers. Among other areas to be addressed will be dealer training programmes and the possibility of extending the existing UK dealer network even further.

GOLF CAR FLEET FOR EUROPE

Golfsocieteit De Lage Vuursche near Den Holder in the Netherlands is the first golf club in Europe to take delivery of the new E-Z-GO RXV golf car, launched in January.

A fleet of 10 electric-powered vehicles has been delivered to the club by Duchell b.v. the long established E-Z-GO distributor for the Netherlands.

Not content with the contract at the Netherlands' flagship course, Duchell has also supplied fleets of 10 RXVs to Golfclub Edda Huzid in Voorthuizen and Golfclub De Haenen in Tilburg.



ECOSOLVE EXPANDS IN EUROPE

Drill n Fill aerator's reputation as a problem solver in turf care is spreading across Europe. Koln Golf und Landclub (Cologne) recently took delivery of their own Drill n Fill from Ecosolve Ltd, sales company for Europe.

The recent sale broadens Ecosolve's growing development in Europe in response to the growing popularity of the aerators. All over the Continent, golf clubs are using the equipment to tackle previously insurmountable aeration issues. The machine's unique ability to create 12 inch deep hollow tine-like ducts AND backfill them simultaneously, has enabled remedial treatment to be used to cure major problems of poor drainage rather than to rebuild. In addition to the machine's dramatic effects, the treated turf can be further enhanced by using other aeration equipment to build upon the "foundation" work of the Drill n Fill.

Koln is delighted with its purchase, having seen good results at Gut Kaden Golf Club in Hamburg, Munchen Eichenreid Nord in Munich and various courses in Holland. "This club aspires to present a course in prime condition," says Rolf Henrich, chairman of greens at Koln. "We appreciate that investment must be made to achieve that, but if we can avoid greens reconstruction, there are major benefits to finances, membership, playability and smooth running of the club."

WARNING OF POTENTIAL KNOTWEED EPIDEMIC THIS SUMMER

The scourge of Japanese knotweed infestation could reach unprecedented UK levels this summer and the problem is being exacerbated by many of the companies brought in to treat it. That's the warning from industry specialist, Richard Podmore, who believes that untrained and under qualified treatment 'experts' are potentially making a serious problem worse.

Speaking on the eve of the new growing season, typically the start of May, which could see the problem escalate to more than one serious Japanese knotweed infestation for every 10km in England and Wales, Podmore, joint managing director of Cheshire-based Japanese Knotweed Control, is concerned that the lack of regulation means many of the new entrants into the market are just not up to the job.

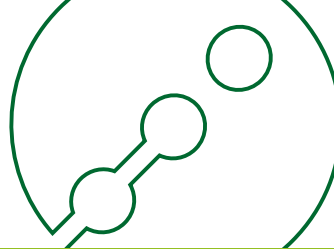
"Japanese knotweed contamination is now much more widely recognised as a major problem, not least by developers, local authorities and highway agencies, but as a result everyone is suddenly an expert on how it should best be treated.

"A prolific grower, Japanese knotweed has the ability to reproduce itself frequently and quickly. Within weeks of the growing season starting it can become dense clumps of weeds up to three metres in height, and while it does die back each year it never becomes dormant and its ability to reproduce itself is the reason the weed is so invasive. Climactic conditions over the past few months have also paved the way for potentially prolific growth this summer."



Koln Machine. Caption: (L to R) Dirk Thelens - Course Manager, Rolf Henrich - Chairman of Greens & Andreas Doring - Club Manager, taking receipt of the Drill and Fill

Membership



JUSTINE DE TAURE, MEMBERSHIP SERVICES OFFICER, UPDATES US ON MEMBERSHIP MATTERS

Well at last the big move is completed and all is starting to get back to normal! Please accept our apologies for any delays this has caused with new members applications and processing renewals within the membership department.

REASONS TO BE A MEMBER OF BIGGA

After updating you on Personal Accident and the Legal Helpline in April and May's Greenkeeper International, we thought it would be a good time to remind members of all the benefits of being a BIGGA Member. In the months to come we will give more details on each individual benefit.

Educational Opportunities

BIGGA offers a variety of ways to improve your education throughout the year, including "Continue to Learn" at Harrogate Week. Many Learning and Development Services are supported by companies and individuals committed to the continuing professional development of greenkeepers. Please contact Sami or Rachael in the Learning and Development Department for more information.

Free Legal Helpline - Tel: 0800 177 7891

Access 24 hours a day, 365 days a year for you and your family (living at the same address). Advice on employment matters, health and safety issues, consumer rights and any other legal matter. Medical costs and expenses: should personal injury be sustained in an accident: and legal expenses up to £50,000 per annum.

Personal Accident Insurance - Tel: 020 7560 3013

Cover for time off work due to an accident at home, work or even on holiday as well as one off payments, dependent on the type of injury.

BIGGA Website - www.bigga.org.uk

On the BIGGA website you will find a host of information. The events section will keep you up to date with what is happening and coming up in your Section.

As a member you will be able to network with others in the profession by exchanging ideas, opinions and giving advice on the Greenkeepers bulletin board. Access is limited to BIGGA bulletin board is reserved for BIGGA Members only.

There is also an up to date list of Greenkeepers jobs if you are looking for a new position.

Networking Opportunities

Members can choose to be assigned to a Section of their choice. As an active member you can attend golf days and other social events on a regular basis, enabling you to network among others in the industry.

If you wish to change Section and affiliate yourself with another, please call membership and we will change your details.

Car Leasing - Tel: 0870 191 6950

Driving a brand new car couldn't be easier. BIGGA has teamed up with Lex FreeChoice Leasing to offer an exclusive scheme that allows you and your family members to drive the car you always wanted at an affordable price.

Car Rental - Tel: 0870 191 6950

BIGGA has enrolled in the National Affinity Leisure Programme, which offers members exclusive rates both on car and van hire in the UK and in 80 countries abroad.

Insurance Quote Service - Tel: 01924 207000

A quotation service is available to members on a wide range of insurance products.

BIGGA Delegation

For the last five years, 10 greenkeepers have been sponsored by Bernard & Company to take part in the BIGGA Delegation to the GCSAA Golf Industry Conference and Show. This also gives an opportunity to visit golf courses around the host city. All BIGGA members can apply to be part of the delegation.

Open Championship Support Team

An opportunity to be part of the Support Team that assist at the Open Championship each year, supporting the home greenkeepers through a BIGGA member accompanying each match to rake bunkers before and after each day's play. This also includes other Championships held throughout the year.

This year's team has already been chosen but should you wish to apply for next year, applications will be available in December and January's issues of Greenkeeper International. Alternatively please contact Scott MacCallum at BIGGA at the beginning of 2009.

Membership Handbook

A free annual copy of this indispensable tool, enabling you to track down professional help and keep in touch with industry colleagues. Please contact either Justine or Brad on 01347 833800 option 1 for any further membership details.

BIGGA Sub Committees

Sub committee meetings for the Learning & Development and Communications departments will be held at 8.30am on Monday, June 30 at BIGGA HOUSE.



If you have any matters you would like raised at these meetings, please contact a member of the board or BIGGA staff.

The new members list can now be found in the members section at www.bigga.org.uk

Learning & Development

Key Sponsorship:

UNLOCK THE POTENTIAL OF GREENKEEPERS

The funding provided by Gold and Silver Key Sponsors is used to produce training and career aids, DVDs, CD Roms, field guides and provide refunds for training fees and subsidised learning and development courses. The funding also helps support seminars, workshops, courses, the lending library, careers advice, posters and manuals.

Many young greenkeepers owe their career progression to the assistance they've had from the Learning and Development Fund. An equal number of established greenkeepers have also been able to access the fund to continue their professional development thanks to the donations of the Gold and Silver Key Sponsors.

THANK YOU TO THE FOLLOWING KEY SPONSORS



GOLDEN KEY



Golden Key Individual Members

JH Greasley; WJ Rogers; Andy Campbell MG, CGCS;
Iain A Macleod; Tom Smith; Frank Newberry;
Christopher Lomas MG, Lee Strutt MG.



SILVER KEY



Silver Key Individual Members

Ade Archer; Steven Tierney; Paul Jenkins; Iain Barr; Richard McGlynn; Steve Dixon; Sam Langrick.

SAMI COLLINS, HEAD OF LEARNING AND DEVELOPMENT, UPDATES US ON EDUCATION MATTERS

It's that time of year when everything starts to happen at once – deadlines for competitions, the end of the CPD year and preparations for Harrogate Week 2009 move into high gear. No time for the Learning & Development Department to sit back relax and enjoy the sunshine!

Continuing Professional Development (CPD)

The 2007/2008 CPD year ends on 30 June 2008. To ensure that you achieve your certificate of Continuing Professional Development you must gain 10 CPD credits through your attendance at Section, Region and National education events. Those of you achieving 10 CPD credits will be sent your CPD certificate in mid July. Those of you who have achieved five consecutive certificates will receive your Diploma of Continuing Professional Development which will be awarded to you during the Opening Session at Harrogate Week 2009.



BIGGA Golf Environment Competition 2008



Would your Golf Club like to win a prize of either £500 or £2000 for boasting about its environmental initiatives? The BIGGA Golf Environment Competition, supported by Ransomes Jacobsen, Golf Monthly, Scotts Professional Products and Syngenta Professional Products, has been run by BIGGA since 1997 and has seen such worthy winners as:

- 2007 - Notts (Hollinwell) Golf Club
- 2006 - Brighthouse Bay Golf Club
- 2005 - Thorpeness Golf Club
- 2004 - Minchinhampton Golf Club
- 2003 - Kenwick Park Golf Club
- 2002 - Ipswich Golf Club
- 2001 - Broadstone Golf Club
- 2000 - The Dyke Golf Club
- 1999 - Temple Golf Club
- 1998 - Lindrick Golf Club
- 1997 - Hankley Common Golf Club

The competition is open to all golf clubs in England, Scotland and Wales and offers prizes for several different categories including National Winner, Regional Winner, Best Newcomer and Special Initiative. The Competition is in place to acknowledge the positive work being carried out at golf clubs and to highlight to other clubs the ways in which they may become more sustainable.

The closing date for the competition is Friday, 20 June 2008. Application forms are available from the Learning and Development Department or from www.bigga.org.uk/education/downloads and select BIGGA Golf Environment Competition 2008.

The BIGGA Training & Development Manual Supported by John Deere



Are you aware of what the BIGGA Training and Development Manual can offer you?

As a member of BIGGA you can access this valuable membership benefit through the Members area of the BIGGA website. It offers guidance on all aspects of training and development for those just starting and for those already working in the industry. For full details of the documents and links available through the online Manual go to www.bigga.org.uk/education/downloads and select Training and Development Manual Quick Guide.

Learning & Development Updates and Reminders

BIGGA Library

Several new books have been added to the BIGGA library since last month:

Landscape Graphics – Grant W. Reid

Golf Architecture – A Worldwide Perspective – Paul Daley

Routing the Golf Course – Forrest L. Richardson

To borrow any of the books from the BIGGA library contact Rachael Duffy, Learning & Development Administrator on 01347 833800 option 3. Two books can be borrowed for up to six weeks. The only cost to you is the return postage. Many of the books available can be found via the members area of the BIGGA website.

Higher Education Scholarships Supported by Ransomes Jacobsen



The most recent scholarships have been awarded to:
Gary Baxter – Foundation Degree Sports Turf
Kerry Jones – NVQ Level 4 Management

Useful Website

As an employer you are responsible for making sure that your staff are looked after in accordance with the law. A government website has been set up to answer your questions about employing people. For further information go to www.businesslink.gov.uk/employingpeople

MANAGEMENT OF GOLF COURSE BUNKERS

By Stewart Brown

There is probably no other hazard that causes as much comment or interest than the sand bunker. When bunkers originally evolved on the Scottish links land, they were nothing more than irregularly-shaped sandy pits. The development of the game on differing types of terrain enabled golf course architects to design different types of bunker. Today a bunker can constitute many differing forms, from a little-changed traditional 'links pit' to vast expanses of sandy scrub that sometimes occupy an area the length of a hole.

The maintenance techniques used to keep the hazards on a particular course visibly appealing will, therefore, differ – so will the equipment and the amount of labour necessary.



A poorly maintained and constructed bunker. The golfers nightmare!

DESIGN AND FUNCTION

The earliest designs of bunkers were fashioned by early designers on links courses from irregular shaped naturally-occurring depressions that have been fashioned by the shifting winds over the area, traffic and animal scrapes.

As golf became more popular and interest spread inland to the heath lands and parklands, the earliest golf course architects tried to copy the naturally-occurring shapes of bunkers. The form and shape were quite often nothing like the natural hazards and were often representations

of the designer's interpretation. Earth-moving and shaping equipment was poor and primitive and resulted in a poorly shaped oval sand pit that shared no resemblance to the original concept. As time went on the design, shape and size of the original animal-scraps hazard evolved into what it is today.

Materials and equipment used for bunker construction developed and we now have highly individualised concepts and constructions for bunkers. The interest shown by golfers, designers and golf clubs has changed over the years with bunkers falling in and out of fashion on a regular basis; with courses adding, changing, styling and removing bunkers to individual holes to add interest, design and appeal. Not only will the style of golf course influence the shape and size of a bunker, but also the placement of a bunker on the course will influence the way it is played and viewed.

The three main placements for a bunker on a golf course are:

The Fairway

- Often quite large in size with a shallow base
- Common shapes include rectangle, yawning, freeform and jigsaw
- Easy to play out of with a longer club
- Visible from the tee
- Penalty value is low
- Maintenance value medium

The Approach

- Smaller than the fairway bunker
- Common shapes include yawning, oval and jigsaw
- Usually deeper than fairway with a definite step down into the sand
- Play is restricted to medium to short irons
- Requires more skill on behalf of the player
- Penalty value medium
- Maintenance value medium

Greenside

- Usually smallest of the types available
- Moderately deep, if not the sand, the sides
- Common shapes include pot, oval and jigsaw
- Often arranged in numbers of two - four around

- the green edge guarding the surface
- It is often the number of bunkers as opposed to the size that causes the player to fault
- Extremely visible
- Penalty value high
- Maintenance value high



Large freeform fairway bunker.

The use of a particular style of bunker will also be determined by the use the bunker is being put to.

This can be:

- Strategic – Defining shot values
- Retaining – Keeping balls from worse fates
- Safety – Stopping errant shots and protecting tees, golfers, buildings
- Directional – Helping to define play direction
- Aesthetic – Adding harmony, style and cosmetic value

Bunkers certainly add to the aesthetics of a golf course and appropriate maintenance is an important part of the brief for every course manager and greenkeeper. It is also important that all hazards on the course are fair, ie:

- Bunker faces are complete and free from overhangs
- Bunker bases are shaped to avoid downhill lies
- Rear lips are graded to prevent unplayable lies
- There is a uniform depth of sand in all hazards
- The sand and its playing characteristics are the same right the course

Poor bunkers are often characterised by exhibiting the following features:

- Excessive depth of excavation (inland) – impervious clay or stony subsoil exposed
- Inadequate depth of excavation (links) – sand susceptible to wind-blow
- Bunker too narrow – limits backswing and follow-through
- Formation of excessively steep bunker faces – problems of sand retention and undercutting of front lip of bunker
- Abrupt step between fairway and sand at the entrance
- Inadequate drainage – clay subsoil
- Selection of wrong sand type
- Omission of geotextile membrane on stony sites

CONSTRUCTION OF BUNKERS

There are a number of important factors to be considered when bunkers are being constructed. The location is usually dictated by an architect in order to provide strategy and playability, and to add visual impact to a hole. However, other factors such as soil type, degree of exposure to the elements and natural land contours must be considered if the hazard is to fulfil its envisaged function. Bunkers should be well constructed and designed so that they drain freely, are (preferably) visible and influence play 'positively'. On links land, the need for protection from wind erosion will keep sand areas low.

On links courses where the inherent conditions are free-draining, there is no need to install additional drainage in the base of the bunker, although it is advisable to check the natural winter water table, and to keep above this if possible. It is usually sufficient to excavate the area to the desired shape, remembering that depth is important on exposed sites in order to prevent wind blowing sand from the bunker.

On inland sites where free-draining soils are the exception rather than the rule, problems with drainage can develop if the construction is inadequate. Because of the impermeable clay sub-soil that often exists on parkland sites, inland bunkers must be built up rather than excavated as they are on links land.

In addition, it is usually necessary to install drainage in the base of the bunker to prevent ponding during wetter periods of weather, and to ensure that external ground contours shed rather than gather water.

BUNKER SAND

Playing quality is frequently the most subjective evaluation criterion of bunker sands. Players vary widely in their assessment of what constitutes good playing quality. One of the few agreed opinions seems to be a desire for all bunkers on the course to play in a consistent manner. For this reason, when adding sand to existing bunkers, it is good practice to perform the work on all bunkers on the course. Sands often change significantly in their playing quality over the first few months as they become compacted and contaminated with soil and organic debris.

Newly-installed sand may seem soft at first, but soon will become more firm. The speed at which this firming occurs depends on the angularity and particle sizing of the sand, as well as raking practices. There must be sufficient depth (100mm/4 inches) of 'clean' sand (lime-free on inland sites) within the bunker and the surface layers should be maintained in a loose condition over a firmer base. Ideally, the majority of particles should be within the range 0.125 to 0.5mm (seaside) or 0.25 to 1.0mm (inland) and angular in shape.

Light or tan coloured sands are preferred for definition and contrast. The sand should form a central depression which will gather the badly-placed shot, yet will still allow sufficient room for backswing and a full follow-through to effect a satisfactory recovery shot. There must be a smooth transition in contouring between the surrounding turf areas and surface of the sand, with sharp definition. The sand should be kept free from weed growth or stone.

From a testing standpoint, particle size, particle shape, crusting potential, and infiltration rate all provide insight as to how the sand will play. However, other factors that have nothing to do with the makeup of the sand have equal if not greater impact on playing quality.

MAINTENANCE TASKS

Bunkers require high levels of maintenance to keep them in top condition. To this effect bunkers can become the most labour intensive area on the golf course, requiring far more day-to-day maintenance and management than the greens and tees combined. A commitment to a high level of bunkers on any

course should not be a decision taken lightly. On most established golf courses in the United Kingdom bunker maintenance should be relatively straightforward. Increasingly, however, modern design techniques involve the creation of bunkers that are far more time-consuming to maintain. Nevertheless, basic bunker maintenance involves the following main tasks: Raking, Sand replacement, Mowing and strimming, Weed control, Bunker repair/renovation and Sand replenishment.



Some bunkers need a lot of raking!

CONCLUSION

The amount of time spent on bunker maintenance will depend upon the number of bunkers on the course and the shape and contouring around them. Most existing bunkers on long established courses are of regular shape, with subtle, yet manageable, contours around them. Some labour intensive work is inevitably required but in most cases this is not excessive. In contrast, however, some newer developments have gone for the more 'grandiose' style bunker, visibly formidable for the golfer but even more formidable for the staff that have to maintain them! Fingers of sand and extensive steep slopes can make the maintenance of these hazards a far more time consuming task.

Bunker management is reasonably straightforward provided that maintenance is not neglected over a long period. There are, however, more and more courses where bunker maintenance is very time consuming – this must be recognised and time allocated to it if problems are to be avoided in the future.

Stewart Brown is Team Leader – Sportsturf and Mechanisation, Myerscough College, Bilberron, Preston PR3 0RY
Tel: 01995 642305
 Email: sbrown@myerscough.ac.uk

TORO

Count on it.



PROTECTED SPECIES SURVEYS – KNOWING WHAT YOU’VE GOT

By Kelly Harmar

Golf courses are an incredibly valuable ecological resource which often provide homes for our most threatened species. Management of such rich wildlife habitat brings responsibility and though good environmental stewardship is often second nature to many greenkeepers, some environmental protection is actively enforced.

The UK has a suite of laws designed to protect our most rare and endangered species. Some of these species are well known, such as great crested newt and natterjack toads, but others have received less attention. Did you know for example that all wild birds are protected by law and that to disturb badgers on your course requires a licence from Defra? And its not just animals that are protected. It is illegal to pick or uproot protected plants such as lizard orchids, fen orchids, early gentian or Deptford pink and many rare fungi and lichens are also protected.

Protected species legislation became much stronger in 2007, following important amendments to the Habitats Regulations. The Habitats Regulations came into force in 1994 and are the UK’s interpretation of the European Habitats Directive.

However, the UK version was deemed too lenient by the European Commission who asked for changes to be made. The amendments have increased fines to £5,000 per offence (so that’s £5,000 per bat or newt or £5,000 per dormouse harmed or killed or each fen orchid destroyed!) and serious offences

can result in up to six months in prison. The amendments also remove the ‘incidental result’ defence, i.e. that offences committed unknowingly, and as and incidental result of a lawful management activity, were excused.

Put simply, ignorance is no longer an excuse.

In addition, from April 6 this year, under the Wildlife and Countryside Act, it is now illegal to kill or injure water voles in England. Previously only the water vole’s habitat had been protected. Similar protection is expected in the rest of the UK soon. UK water vole populations have declined by 90% since 1990 and this legislation is long overdue.

One of the main ways of staying above the law is to know what you have on your golf course. If you know you have protected species then you can take steps to avoid disturbing or harming them.

Surveys of protected species should be carried out by approved surveyors who are licensed, by the statutory conservation body relevant to your country, to survey and handle protected species and can recognise signs of their presence: e.g. the folded leaves created by great crested newts to protect their eggs or the feeding platforms constructed by water voles.

Site surveys will map the location of protected species and their favoured habitat and will help plan future management, directing damaging activity away from sensitive areas. Equally, for specific operations, a survey can



Kelly Harmar

FEATURE



also prove that protected species are not present in the location you are interested in and this will allow you to proceed with management without restriction.

However, if you have protected species on your site then that need not mean that the work can't go ahead, it will just need to be thought through more carefully and appropriate measures put into place.

For example, this year's Open is to be held at Royal Birkdale, one of the most ecologically sensitive golf courses in the UK. Royal Birkdale is a Special Area of Conservation (SAC), the highest level of environmental protection within the European Union, that has both natterjack toads and sand lizards. Both are rare and protected in the UK and both are vulnerable to the thousands of trampling feet that track across the dunes during the Championship. However, surveys of the course have identified the main sensitive areas and have allowed spectator routes and infrastructure to be placed well away from these vulnerable areas and a plan is in place to protect any inquisitive lizards or toads spotted during The Open. The right information provided to the statutory bodies helped obtain a licence to host The Open.

Much more routine operations can also be planned to provide minimum disturbance. Measures as simple as choosing the correct time of year can ensure that protected species are not disturbed and that greenkeepers stay within the law. For example vegetation clearance in ponds that have great crested newts can be undertaken in the late autumn when newts leave their

breeding pools to hibernate on land and tree felling should be undertaken before the end of March before breeding birds have set up home or bats have left their hibernation chambers and begun to roost. In other circumstances the removal of mature trees on the golf course can be compensated for by providing bird and bat boxes or raised walkways can be installed across important botanical areas.

Ignorance is no longer an excuse while the right knowledge and expertise can help bring about structured and sensitive management and protect our vulnerable species.

Kelly Harmar is from the Ecology and Environment Unit at STRI.

For further information on protected species legislation and protected species surveys contact:

tel: 01274 518903

or email: ecology@stri.co.uk

STRI

Kubota



B30 Series

The next generation of Compact Tractors



The B30 Series premium Compact Tractors combine high power output, proficiency and many comfort features so even the toughest jobs are tackled effortlessly. The B30 Series feature Kubota's Shuttle Shift transmission and hydraulic bi-speed turn for exceptional productivity, reduced turf damage and effortless operation, and with a choice of four there's a model to perfectly suit your needs.

Visit your local dealership to arrange a test drive.

www.kubota.co.uk



Tel: 0800 023 1111

ROI Tel: 1 800 848 000

Email: sales@kubota.co.uk

Kubota (U.K.) Limited, Dormer Road, Thame, Oxfordshire. OX9 3UN



TRACTORS THROUGH THE YEARS

By James de Havilland

Back in 1947, Brockhouse Engineering introduced its BMB President tractor. Powered by a 29hp Morris 8 petrol engine, a new one would have set you back £239 in basic form, a rear linkage and PTO coming as an option. Considered light and powerful for its day, the President tractor was a popular 'groundsmans' tractor, with many remaining in use into the 1980s. For some, however, its main claim to fame was that it was a tractor that replaced the golf course horse.

Each generation of greenkeeper tends to see a pretty major development within their working lives. One that has been largely forgotten is the dramatic change brought by moving from horse drawn equipment to tractor power. It is all too easy to overlook this massive change, many people not realising that it was not until after the end of WW2 that the horse started to be displaced not just on farms but in other sectors too. Milk floats through to short haul carriers relied on horse power into the 1960s in many parts of the UK. As

for mowing, older courses may well find the fairways were horse and gang mown far more recently than many would think.

Although the President tractor mentioned initially is one that many may well remember as a typical gang mower tractor, there were others that were pressed into this role, typically drawn from the entry level range offered by the main agricultural tractor makers. As farm tractors got bigger, the small tractor class was expanded by the introduction of Japanese made compacts.

With so many courses now using dedicated ride-on mowers for all mowing duties, it is easy to forget how grass cutting has evolved. But for those who enjoy a look back, the following pictures may be of interest.

With thanks to Ransomes Jacobsen, Kubota UK, Lloyds and Co Letchworth, Massey Ferguson, John Deere and Michael Bird.

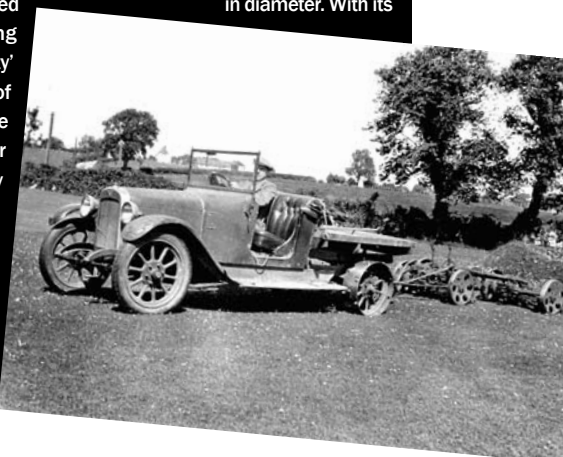
Horse Power.

It is all too easy to forget that we relied on horse power to mow turf, with this form of power still prevailing into the 1950s or possibly even later in some areas. The animal pictured is not wearing turf overshoes, the latter being commonly fitted to help avoid damage to the ground. In the background, it is evident that working in a straight line was as much a priority then as it is today. Also look at the Lloyds gang mower, and note how the leading gang set have dual rims on the outer wheel sets. This was to help boost traction to the unit in a turn, the mower operator needing a great deal of skill when working in tight spaces and in less than ideal conditions.



Austin Car and Gang Mower.

Believed to be based around an Austin 20 Tourer of around 1924, this circa 1931 picture clearly demonstrates the desire to be less reliant on true horsepower. The rear of the car has been completely re-worked to provide a load platform for greenkeeping requisites and tools, the lugged steel wheels on the back axle appearing to have been built using the original wheels and spokes. To achieve a lower forward speed, the rear wheels are also reduced screen and comfy looking seats, this course-built 'utility' must have been the envy of all who saw it in action. Note the size of the gang mower drive wheels. Probably geared for a horse's pace, they would probably have spun the cylinders at quite a lick when the 'car' was run up to speed!





Ferguson FE35 Municipal.

An interesting picture of a 'prototype' Ferguson FE35 'industrial' tractor. Taken at the Banner Lane, Coventry, factory, the 34hp FE35 was only produced between 1956 and part way through 1957, its distinctive bronze and grey finish making it something of a collector's item today. A more sober red and grey paint scheme was adopted when the tractor 'brand' was changed to Massey Ferguson in 1957. The tractors were re-badged as the MF35. Developed from the 'grey Fergie' TE series, the FE35 featured a live PTO, a great advance as it separated the PTO from the tractors forward speed. Note the rear tyres, this pattern doubling up for both industrial and turf use. When used on golf courses, tractors like this were often fitted with worn or road front tread tyres. The prominent ribs of a new agricultural tyre would damage the turf, particularly in a tight turn.

57 Mark 1.

Manufactured by Ford at its Basildon tractor plant (still in business building current New Holland tractors) between 1965 and 1975, the three-cylinder 47hp Ford 3000 had 8 forward and 2 reverse speeds. Taken in possibly 1969, the pictured unit is seen powering a Ransomes 57 Mk 1 hydraulic gang mower. In its day the Ford 3000, which replaced the Fordson Super Dexta, was considered light and powerful for its size, with a good number being sold to golf clubs. Fit decent flotation tyres and forty years on it would not look out of place on a golf course today. The mower is also interesting, hydraulic gang sets enabling Ransomes to meet the demand for a wide-area cylinder mower that could tackle longer grass, deliver high levels of productivity and still leave a decent finish.



Kubota B7100.

Kubota entered the UK market in the early 1970s, its light and genuinely compact tractors proving a hit with greenkeepers. There were reasons other than size that made these models appeal; for starters they offered a wide choice of gear speeds and they also tended to be pretty oil tight. The tractor shown is a 16hp B7100 with knife tine aerator working on a fairway. This tractor was produced from the 1970s, its genes still being evident in the company's current 'B' model line-up. Tyres purpose developed for use on fine turf helped allow tractors to be used for a wider range of duties, with ancillary equipment being developed to help exploit what a tractor had to offer.

