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Gordon Childs talks about his methods at Churston Golf Club.

Management

Some answers to the problem of getting grass to grow on small tees.

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Golf Course

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Advertising Production

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The Golf Course, incorporating Golf Greenkeeping is published monthly by Park View Publications Ltd. It is the official magazine of the International Greenkeepers Association.

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Managing Director Stanley Ellison

Editorial, executive and advertising offices: 201–205 Kingston Road, Leatherhead, Surrey KT22 7PB. Tel: 0372 370177. Fax: 0372 362091.

Circulation, subscription and advertising production offices: 29 High Street, Dovercourt, Harwich, Essex Tel: 0255 507527 Fax: 0255 508483.

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Typesetting and artwork by Computerised Typesetting Services Ltd, Redhill, Surrey. Printed by J. B. Offset Marks Tey, Colchester, Essex

Golf Course



Queens course Gleneagles at evening time with Watermation irrigation system coming on.

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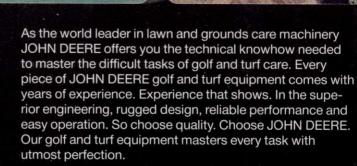
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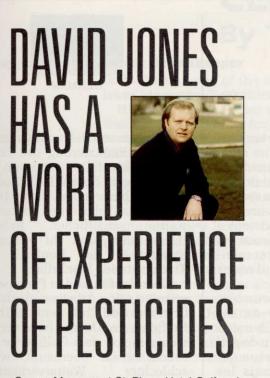




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RÉSUMÉ



Neil Baldwin del Sports Turf Research Institute presenta una revisión de cómo el empleo de los agentes humectantes puede ayudar a reducir los efectos de áreas secas, página 14. En este artículo se describen los agentes humectantes que se encuentran a la disposición en la actualidad y cómo se deben aplicar para controlar efectivamente las áreas secas.

Uno de los principales encargados del green habla acerca de sus métodos de gestión en el Club de Golf Churston, página 16. El campo de golf es uno de los pocos en Devon que en muy contadas ocasiones, si es que lo ha hecho alguna vez, ha impedido a los golfistas jugar debido al clima.

Tudor Park, un nuevo complejo en Gran Bretaña, está empleando una mezcla de hierro y arena para controlar el hongo Fusarium, página 22. Derek Keen, el gerente del campo de golf, explica sus métodos de gestión y el equipo que utiliza.

James Snow, de la USGA Green Section, responde a las preguntas acerca del uso de pasto Gotting en pequeños tees, página 26. Los tees problemáticos sufren generalmente de uno o varios males. Estos males se identifican en el artículo conjuntamente con posibles remedios.

John Campbell, un asesor importante sobre campos de golf, le aconseja en el empleo de banderas y mástiles, página 34. Con muchos años de experiencia como el supervisor del campo de golf en San Andrews, el autor expresa su opinión acerca de lo qué debe buscar cuando compre copas para el agujero o mástiles.

Cómo están empleando los superintendentes norteamericanos la radio FM para mantenerse en contacto con su personal, página 37. En este artículo se analiza el tipo de equipo existente y el costo de montar un sistema que emplee la technología más moderna para las comunicaciones. FRENCH



Neil Baldwin du 'Sports Turf Research Institute' examine comment l'utilisation de produits humidifiants permet de réduire les effets causés par les plaques sèches, page 14. Cet article décrit les produits humidifiants qui existent à présent sur le marché et comment les utiliser efficacement pour minimiser la présence de plaques sèches.

Un des principaux responsables de terrain de golf parle de ses méthodes de gestion au Churston Golf club, page 16. Ce terrain de golf est un des rares dans le Devon qui renvoie rarement ou jamais les joueurs pour cause de mauvais temps.

Tudor Park, nouveau comlexe en Grande Bretagne, qui utilise un mélange de fer et de sable pour contrôler le fusarium, page 22. Derek Keen, le responsable du terrain parle de ses méthodes de gestion et de l'équipement qu'il utilise.

James Snow de la Section USGA Green répond à la question suivante, à savoir comment faire pousser l'herbe sur les petits tees, page 26. Les tees à problèmes souffrent généralement d'une ou de plusieurs maladies. Celles-ci sont identifiées dans l'article et les remèdes possibles sont également mentionnés.

John Campbell, expert-conseil en matière de terrains de golf, donne quelques conseils sur le choix de fanions et de porte-fanions, page 34. Ayant de nombreuses années d'expérience en tant que responsable de terrain de golf, l'auteur donne son avis sur ce qu'il faut rechercher lorsqu'on achète les porte-fanions et les intérieurs de trous.

Comment les commissaires américains utilisent les radios FM pour se tenir en laison avec leurs équipes, page 37. Cet article examine les types d'équipements existants et les coûts de mise en place d'un système qui utilise les dernières technologies de communication. Der Einsatz von Befeuchtigungsmitteln zur Reduzierung des Effekts von Trockenstellen wird von Neil Baldwin vom Sports Turf Research Institute besprochen, Seite 16. In diesem Artikel werden die gegenwärtig erhältlichen Befeuchtigungsmittel und ihr wirksamer Einsatz in der Kontrolle von Trockenstellen beschriben.

Einer der führenden Platzmeister erläutert seine Arbeitsmethoden im Churston Golf Club, Seite 16. Dieser Golfplatz in Devon ist einer der wenigen, von dem Golfspieler sehr selten, wenn überhaupt, wegen schlechter Wetterverhältnisse abgewiesen werden.

Tudor Park, ein neuer Komplex in Großbritannien setzt zur Kontrolle des Fusarium-Schimmels eine Mischung von Eisen und Sand ein, Seite 22. Der Verwalter des Platzes, Derek Keen, spricht über seine Arbeitsmethoden und die Gräte, die er benutzt.

Fragen über Graswuchs auf kleinen Abschlagplätzen werden von James Snow von der USGA Green Section beantwortet, Seite 26. Problematische Abschlagplätze sind oft von mehreren Problemen befallen. Dieso, sowie deren Abhilfen werden in diesem Artikel erörtort.

John Campbell, ein führender Golfplatzberater gibt Ratschläge bezüglich von Flaggen und Flaggenstangen, Seite 34. Mit seiner mehrjährigen Erfahrung als Aufseher in St. Andrews erläutert der Autor seine Ansichten darüber, was beim Kauf von Locheinsätzen und Flaggen beachtet werden sollte.

Der Einsatz von UKW-Radios durch die amerikanische Aufseher mit ihren Mannschaften in Kontakt bleiben, Seite 37. Dieser Artikel gibt einen Einblick in die erhältlichen Geräte und die Kosten, die zur Einrichtung eines Systems, das sich die neueste Kommunikartionstechnologie zu Nutze macht, erforderlich sind.

CLIPPINGS By The Mower

Top job for Yorkshire Greenkeeper

Colin Geddes, one of the country's most respected greenkeepers has been persuaded to leave his native Yorkshire to take on a prestige job in Hertfordshire.

He followed his father as head greenkeeper at Moor Allerton, when the club sold off their original 18 holes for housing and moved the course to nearby Wike. It was here that he became the next door neighbour to Peter Alliss and the beginnings of a continuing family friendship.

Initially he was the liaison consultant between the club and the contractors when the Robert Trent-Jones course, with its sand based greens, was laid out in the late 1960's, taking over as head greenkeeper in 1970.

Colin moves into his new challenge on 12th June, again in a liaising role between the owners of a new luxury hotel complex, incorporating an 18 hole golf course built in the grounds of Hanbury Manor just outside Ware.

He tells me, the course designed by Jackie Nicklaus, the "Golden Bear's" eldest son is being built by Southern Golf to a high standard and his job over the next three years will be to set up the course and train a crew.

The Geddes family have been connected with golf ever since Colin's father became involved with Dr Alister Mackenzie in the mid 1920's as a golf course construction foreman. Two brothers are greenkeepers another became a professional golfer.

And keeping another unique happening in the family, both Colin and his father served as National Chairmen of the BGGA.

SISIS return to Cavendish Club

SISIS Equipment of Macclesfield will again be returning to the heart of the Peak District for their invitation golf day on Tuesday 20th June.

This popular event sponsored by the Cheshire based machinery manufacturers will be an 18 hole stableford competition played at the Cavendish Club at Buxton.

Cavendish is one of the few English courses where they cater for two sports - golf in the summer and a ski run in the winter.

British Students to take part in American Seminar

Jacobsen, based in Racine, Wisconsin have invited two turf management students from Britain to take part in their College Student Seminar at the company's headquarters at the end of May.

This is the first time in the 21 years the programme has been run that it has taken on an international flavour.

Those making the trip are Chris Harvey from the Lancashire College of Agriculture and David Williams from Norwood Hall.

Later in the year Jacobsen's will sponsor a four day College Student Seminar in England when leading golf course and ground care managers will present papers and chair discussion groups.

Course managers of Europe getting together

A move has just been announced by a number of managers working at top European golf courses to form a new organisation. It is understood that membership will be restricted to managers and head greenkeepers. Further information on the new organisations and application forms for membership are expected to be released shortly.

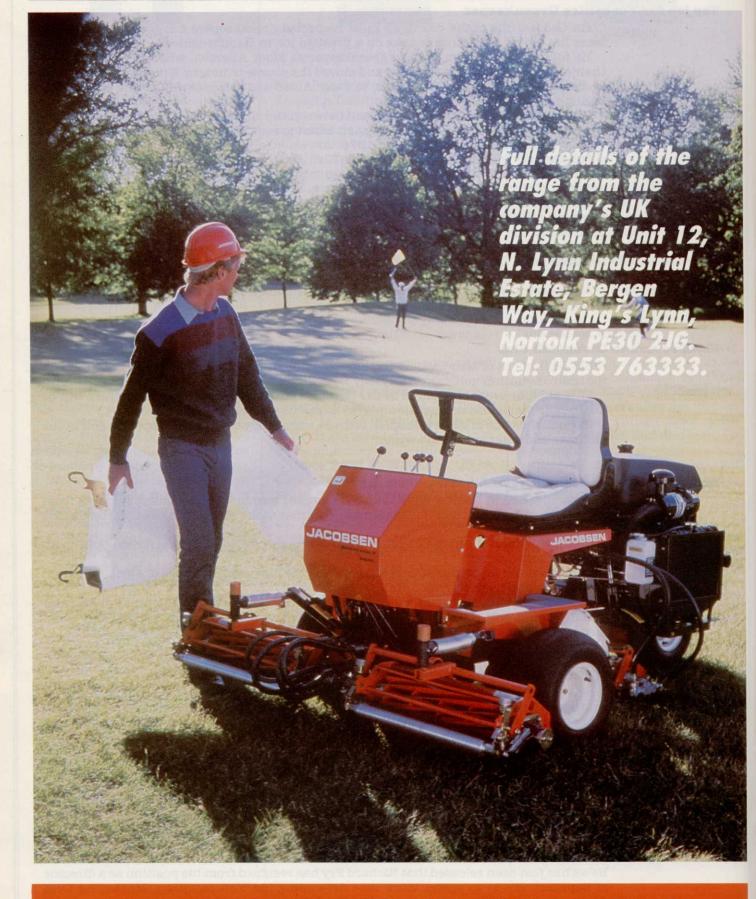
William Lawson choose top steward

The 1989 Golf Club Steward of the Year Award sponsored by William Lawson's Scotch Whisky has been won by David Forshow of Lymm Golf Club.

Fry leaves Supaturf

News has just been released that Richard Fry has resigned from his position as a director of Supaturf. His is to spend more time developing his own company, Marketing Link Associates and Farmura, a company in which he is a share holder.

JACOBSEN.



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OUT AND ABOUT

Welcome news from Rhône-Poulenc

Rhône-Poulenc Environmental Products has re-introduced the popular fungicide Quintozene and announced big price reductions on Spasor - their glyphosate based total herbicide.

Quintozene, a contact fungicide previously marketed under the Bras-Sicol, was originally withdrawn due to problems of supply of the active ingredient. Happily, due to the demand for an alternative fungicide from greenkeepers throughout the UK, Rhône-Poulenc is now able to announce it's re-introduction.

Sold in new 5kg plastic packs, Quintozene wettable powder will give reliable control of Fusarium Patch, Red Thread and Dollar Spot and provides a further valuable product for use in the fight against turf disease.

Spasor - Rhône-Poulenc's specialist non-residual herbicide has it's price reduced. Containing 36 per cent Glyphosate, Spasor is a foliar-applied translocated herbicide for the total control of annual and perennial weeds, both broadleaved and grass.

Packed in 1 litre easy measure and 5 litre Tip 'n Pour containers, Spasor now offers an even more economical way to effectively control a wide variety of weeds including aquatic species.

From seed to harvest in 18 weeks

One can hardly accuse David Davies of West Midland Turf of allowing the grass to grow beneath his feet! This is partly because he incorporates a synthetic netting into his newly established seedlings to improve the handling qualities of the young turf.

This new A22 mixture comprises the shortest growing Perennial Ryegrass and Slender Creeping Red Fescue available



A22 turf seeds from BSH gives a strong root system.

on the UK seed market. Lorina Perennial Ryegrass and Logro Slender Creeping Red Fescue, mixed 60% and 35% respectively, plus 5% Highland Browntop Bent, from BSH Ltd.

"The main priorities are quick establishment, a good fibrous root system and a presentable, even textured turf with dark green colour.

The turf must be capable of withstanding the every day use received in public amenity areas and domestic lawns" said Mr Davies.

"We have found that turf grown from the A22 Low Maintenance seeds mixture requires approximately one-third *less* mowing throughout the growing season in comparison with other dwarf Ryegrass crops. This saves considerable time and money for our company".

"The advantages of the mixture, sown in late June 88, are strong visual colour, a compact, fine-leaved appearance and underneath, an excellent root system. In fact, such is the attractive appearance of the A22 sward, it resembles a fine fescue mixture. Despite the fine leaf, it seems to offer good wear tolerance, having the distinct genetic ability to produce adequate, but very compact leaf growth".

Mulch to insure against drought

After the warmest winter for more than 100 years a dry summer could spell disaster for newly planted shrubs and trees.

One of the more economical options among the many that industry suppliers



will be eager to promote is an early surface mulch to increase and retain moisture content, stabilize ground temperatures, and lengthen the growing season.

"If we get a dry summer, then a surface mulch could turn out to be the cheapest insurance landscapers have ever had", commented Melcourt Industries MD, John Latter, whose company recently launched Forest Biomulch, a dendromulch now being actively promoted for this purpose for large scale plantings.

"Many of our customers are planning ahead and laying mulches on both new and established sites in an effort to minimize the danger of drought stress and subsequent plant losses", continued Mr Latter, "with the added bonus that with this insurance, one year's premiuim provides several years of protection".

A wholly organic mix of pine chips, chipped branches, bark, needles, leaves and twigs (see picture), Forest Biomulch is first processed through a mulcher and then matured to eliminate pathogens and toxins. The product's particle sizes range from 1 to 45 m in length, allowing rain water to drain freely yet limiting evaporation because of the protective layer which is formed between the soil and the atmosphere.

With time, the high percentage of organic debris will breakdown into the soil, creating ideal conditions for earthworm activity - and thus improving root aeration and drainage still further.

Since the winter has proved even drier than that of 1975/6, a hot summer really would present serious problems for the professional landscaper. To date, the South of England has been hardest hit, where rainfall levels in counties like Kent and Hampshire were running at less than half the normal rate for the season.

Wetting agent for turf

A major break-through in turf wetting is claimed by the manufacturers of a new product to be launched next month for fine turf management.

Known as Turfex, the new product was tested independently by the Sports Turf Research Institute during 1988 for the alleviation of dry patch. In laboratory tests it increased the rate of infiltration into dry patch affected turf by up to five times that of other wetting agents.

Excellent results were also shown in a field trial at a golf course in the north of England with a severe dry patch problem. The rate of water uptake was almost doubled following repeated applications of Turfex. In the same trial, results with Turfex were way ahead of those with other wetting agents.

Turfex is expected to be particularly effective in fine turf management on golf courses, bowling greens etc. since it provides a cost-effective solution to the problem of dry patch, by enabling water to

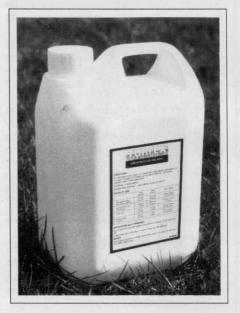
O U T A N D A B O U T

get to the roots of the turf and thus restoring healthy growth.

It can also be used for compacted or puddled ground, or for sloping areas where water would otherwise run off. General application enables greater all round benefits to be obtained from much improved penetration of rain or irrigation water. A further benefit is that it provides an effective and long-lasting alternative to switching for dew removal.

Turfex is readily adsorbed onto soil particles and in this way provides a lasting action and a build-up of effectiveness. (The company recommends two applications seven days apart at the start of the growing season followed by monthly applications thereafter until the problem is alleviated.)

The product is mixed in cold water at the rate of $\frac{1}{2}$ litre in 100 litres of water - an



amount sufficient for 500 square metres of turf (an average golf green size) - and dissolves easily with minimal foaming which quickly disappears.

Turfex is said to have no adverse effects on turf. Even at double strength no phytotoxicity problems have been reported and it can be applied by any conventional sprayer.

Despite its greatly enhanced wetting properties Turfex is to be sold at a cost of only £1.25 for a quantity sufficient to treat 100 square metres, making it an extremely cost-effective wetting agent. It is supplied in a concentrated form in 2.5 litre packs.

Turfex is manufactured by the Horticultural Division of Service Chemicals Limited of 17, Lanchester Way, Royal Oak Industrial Estate, Daventry, Northamptonshire NN11 5PH. Telephone (0327) 704444. It is available from specialist turfcare wholesale distributors and the company's selling agent is John McLauchlan Horticulture of 2a Finkle Street, Thirsk, North Yorkshire YO7 1DA. Telephone (0845) 25585.

South East regional manager for SISIS

SISIS have appointed David Luxford as Regional Manager South East.

Previously David was Sales Manager for Paice & Son for many years. He is a keen cricketer and is married with one son.

He will be responsible for administering all SISIS Sales and Service in the South East of England, liaising with SISIS Distributors T. Parker & Sons (Turf Management) Limited in certain areas.

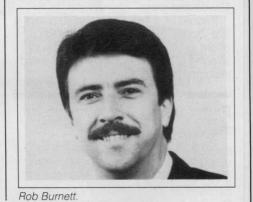


David Luxford.

Addition to Turfland Team

Turfland of Warrington, have recently appointed Rob Burnett to the sales team.

Rob has gained considerable experience in the lawn-care industry in the USA, where he was employed for a number of years by a company involved in the treatment of lawns against disease (specifi-



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OUT AND ABOUT

cally against bugs and other pests), and in fertilisation techniques. On return to the UK he worked for a while in the landscape industry in East Anglia.

After a period of familiarisation with Brouwer machines and Turfland techniques, Rob will principally cover some of the North West area.

Mechanised core collection from Cushman

Greenkeepers can now collect their hollow tine aeration cores mechanically the new Core Harvester attachment for Cushman Turf Truckster vehicles.

Developed by Cushman and distributed in the UK by Huxleys Grass Machinery, the Core Harvester is suitable for mounting to both 3- and 4-wheel Cushman Turf Trucksters from serial number 8720 onwards, fitted with a short dumpbox or longbox with sides and tailgate.

Attached to the nearside of the Cushman Turf Truckster vehicle, the new Core Harvester comprises three principal sections. At the front, a pair of spring-balanced gathering blades, set at a 60 degree angle, glide across the turf channelling the cores into the mouth of a chain and flight elevator.

This lifts the cores from the ground, depositing them onto a rubber-belted cross conveyor which carries the "harvested" cores sideways to the Turf Truckster's dump box.

When the box is full, the operator shuts off drive to the Core Harvester's elevator and conveyor, raises the machine from the ground and drives to the dump site, where the cores are quickly off-loaded



The new Cushman Core Harvester.

from the Truckster's tipping box.

In tests conducted by its manufacturer, the attachment enabled one man to clear aeration cores from a 70000 sq ft (650 sq m) golf green in just 15 minutes, providing substantial savings in both time and effort over manual gathering and collection.

Drive to the Core Harvester's elevator and cross-conveyor is by individual hydraulic motors supplied by the Turf Truckster's internal hydraulic system. The elevator uses a low speed, high torque motor, while the conveyor has a variable speed motor, allowing the operator to increase or reduce its rate of movement to suit operating conditions and the volume of cores being collected.

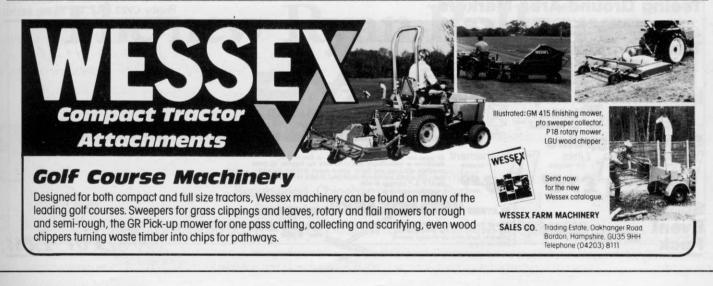
In addition to the spring-balanced flota-

tion system on the core-gathering blades, the complete attachment is supported in work and maintained parallel to the turf by an adjustable shock absorber and pneumatic tyre positioned beneath the elevator.

The core-gathering blades can be offset to either the left or right of centre to facilitate a circular driving pattern.

Attached by just six bolts, and the connection of two hydraulic hoses, the new Cushman Core Harvester is priced at £1,850, plus fitting and VAT.

It is available now for demonstration through Huxleys Grass Machinery, The Dean, New Alresford, Hampshire SO24 9BL; Tel: 0962 733222, or by contacting the company's nationwide network of appointed specialist dealers.



The Mole truth

Frank Taylor is a man with a 'hush hush' mission. The task is enormous - but the day of the mole is over. Their cover has been blown and the trap is set. No - this isn't a tale about espionage, but about those furry little 'critters' who can turn a snooker table lawn into a battle field overnight.

For sixty-year old Frank Taylor, of Pattingham, Wolverhampton, is a professional mole-catcher. Made redundant in 1986, Frank set himself up as a mole



catcher with the help of the government's Enterprise Scheme.

Frank's new found, and one could say down to earth career, has rescued a dying country art and his services are much in demand. On one 'under cover' job at Willey Park, near Broseley, Shropshire, he caught 561 moles in two months. Lord Forester had 150 acres of solid mole hills before Frank began, but armed with knee pad, trap and a skill that can catch a mole in $2\frac{1}{2}$ minutes, the numbers soon dwindled.

"I have trapped moles since I was a boy, usually for my family and friends in the countryside. The use of poisons for controlling moles has always repelled me", said Frank. "I think I have proved that trapping is the only effective method of mole control", he added.

Colorcoat tees off for golf market

Golf course accessories including fairway signs and tee markers are now being fabricated by BEV Golf Equipment Ltd from Colorcoat HP200 supplied by Color Steels Ltd - major stockists and processors of pre-painted steel.

John Hall, managing director of Color Steels, says that such golf course accessories have traditionally been manufactured from formica or post-painted steel.

"However, it has been found that Colorcoat HP200 has several advantages over these materials. It is very cost competitive, offers exceptionally long life and durability (especially against weather corrosion) and is aesthetically pleasing.

Golf courses depend a great deal on easily recognisable, 'colour coded' signs and markers; Colorcoat HP200 offers total consistency in colour quality and high resistance to fading and weathering".

The new Colorcoat HP200 signs and markers are being offered by BEV Golf Equipment Ltd as complete advertising



OUT AND ABOU

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packages. Advertisers can place their promotional messages on signs and markers, so effectively targetting golf players, while giving clubs and courses the opportunity to upgrade their marking facilities free of charge.



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Using wetting agents for dry patch control

A review on the use of wetting agents by Neil A. Baldwin, plant pathologist, at the Sports Turf Research Institute in Bingley

Any greenkeepers are familiar with dry patch, a water-repellent condition of fine turf prevalent especially on links courses, however, this condition is also found on heathland and parkland courses. The symptoms of dry patch may be alleviated to a certain extent by applying wetting agents regularly through the growing season to aid penetration of water into affected turf. This article describes the wetting agents currently available and how to apply them effectively for dry patch control.

Wetting agents are essentially mild detergents which are designed to increase the infiltration rate of water into hydrophobic (water repellent) turf. Basically, they achieve this in two ways. Firstly, when water droplets come into contact with a hydrophobic turf surface they 'ball' up to form a large contact angle (Figure 1). If a wetting agent is added to the irrigation water then surface tension is reduced, a smaller contact angle is formed and consequently the water spreads over a greater surface area, thereby wetting more of the turf (Figure 2).

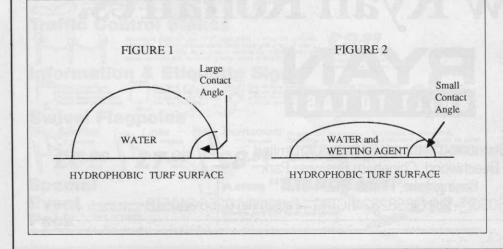
Secondly, the wetting agent, once it has entered the turf profile, can then bind to the organic materials shown to be responsible for creating the hydrophobic nature of dry patch areas. During subsequent irrigation and rainfall, wetting agents in the turf will re-dissolve to produce essentially the water-attractive turf surface originally created. Thus,



Irregular ring of dry patch affected turf (brown area) surrounding healthy turf (central green area).



Irrigation applied 3 hours before photograph was taken. Note water repellency of dry patch affected turf.



regular applications of wetting agents (as recommended by the manufacturers) will lead to an accumulation of chemical thus enabling water to penetrate more freely.

In the 1950's a mild detergent namely Teepol was commonly used on turf to aid water infiltration. Teepol is an **anionic** chemical which means that it has a strong negative electrical charge. Problems occur when anionic materials are applied to turf as they can, with frequent application, have an adverse effect on soil structure especially on soils with high clay contents. **Non ionic**

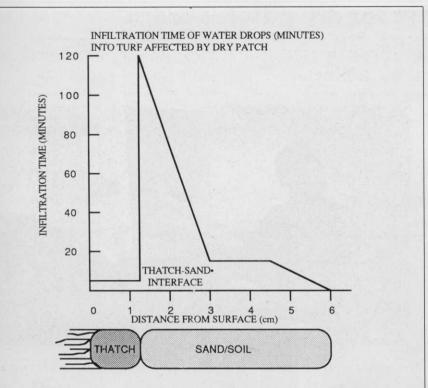


Figure 3. Just below the thatch layer is where the turf is most hydrophobic. Spreadable wetting agent formulations can be placed in this zone after hollow tining or Verti-Draining.

chemicals (which have a very small electrical charge only) do not affect soil structure and consequently may be used safely. For this reason most commercially available wetting agents are non-ionic forms.

F ield trials at STRI and feedback from golf greenkeepers has enabled recommendations to be made on the timing of wetting agent applications for the alleviation of dry patch.

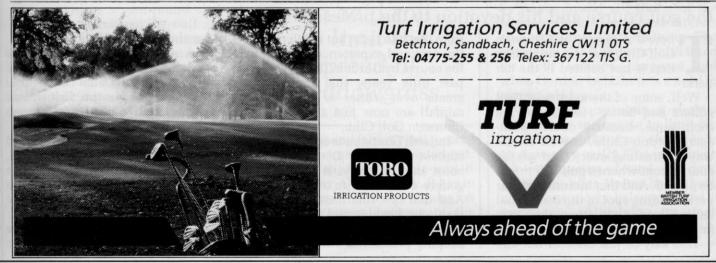
Generally, wetting agent applications should begin at the start of the growing season, before dry patch is observed. If dry patch is a problem, then much can be gained the routine applications from through the April to October period, spraving the chemical at four to six week intervals. This should be combined with aeration using slit or chisel tines to aid turf penetration. In situations where dry patch is a major problem or where preventative applications have not been made, then treatment has to be more intense, and wetting agent applied every two to four weeks and forced into the turf by hand watering. However, it is extremely difficult to obtain satisfactory results by making curative applications, emphasising the importance of a strategy based on prevention rather than cure.

To date, there has been little research comparing the relative effectiveness of the various wetting agents currently available. Research in the USA has identified Aqua-gro as being readily absorbed on to hydrophobic materials in turf which may produce lasting effects against dry patch. It is probable that Hydro-wet has similar properties. Also, Synperonic has for many vears been recommended as a costeffective wetting agent treatment. Recent research at STRI has developed, in collaboration with industry, a new wetting agent, namely Turfex, which has excellent penetrative properties into water repellent turf.

Spreadable formulations of Aquagro and Hydro-wet are also available. Spreadable wetting agents consist of the chemical together with a dry carrier, such as ground corn cobs, which can be easily spread on to large turf areas. These spreadable formulations can also be worked down hollow tine or Verti-Drain holes, placing the wetting agent where the turf is most hydrophobic often just beneath the thatch layer (Figure 3). Even with extensive watering, this is often extremely difficult to achieve with liquid formulations.

Further information on dry patch and the use of wetting agents may be found in the following publications: Anon (1987) Dry Patch. Sport Turf Bulletin **159**, 11–12.

Baldwin, N.A. (1987) Turfgrass Diseases. Sports Turf Research Institute, 40pp, price £2.50.



THE GOLF COURSE MAY 1989



Aeration is the secret at Churston

Forty years a greenkeeper, Gordon Child talks to Michael Bird about his work on the golf course and his devotion to the profession.

There's a saying at Churston Golf Club that the only place that is not aerated is the car park.

Well, some of the more wayward golfers had better start improving their game, because course Manager, Gordon Child, is well on his way to treating every part of the course from where a golf ball might be played. And that includes the car park, landing spot of the occasional badly-sliced shot from the 18th fairway.

This may be just another tall-tale

from the 19th hole, but it's thanks to the care and experience brought to the course by Gordon Child over the past nine years, that unplayable greens over winter or after heavy rainfall are now just a memory at Churston Golf Club.

Indeed, Churston is one of the few courses in South Devon able to boast that it rarely, if ever, turns golfers away due to the weather. And that is a fine testimonial to a man who has devoted a lifetime to improving the standing of the greenkeeping profession and the education and training of its members.

For apart from his daily course maintenance and management duties, Gordon is also the regional administrator for the British and International Golf Greenkeepers Association.

Gordon Child was appointed course manager at the 6,201 yard, par 70. Churston Golf Club in December 1980, following seven years at Moor Park, and before that at St Georges Hill, Weybridge.

The course now in his charge commands a superb position on the



Setting the programme on the Watermation irrigation system.

southern shores of Torbay and, apart from the first and 18th holes, clings tightly to the coastline with the back nine played virtually straight into the prevailing southwesterly winds.

Six of the holes around the turn from the sixth to the 11th - offer totally different characteristics to the remaining 12 on the course, being located on a thin, shaley subsoil with very little cover before solid rock is encountered.

The other holes lie on deep, heavy clay, providing a year-round challenge to the greenkeeping staff.

"The terrain at Churston imparts the characteristics of both a heathland and a parkland course," explained Mr Child. "When one half of the course is wet, the other is much drier. And when the heavy soil dries out, the six holes on the shallow land are facing drought."

F ortunately, the experience and knowledge gained by Gordon over 40 years as a greenkeeper supplied a ready answer: "There is absolutely no substitute for mechanical work on a golf course," he said. "When I arrived, there were parts of the course which had never been touched or where very little aeration was carried out. Now, there is virtually nowhere that we don't spike or slit to help keep the ground open."

Regular aeration is an absolute must to Gordon Child. "Greens, sur-

An acid soil to limit the spread of meadowgrass

rounds, tees and fairways all receive routine treatment," he pointed out. "The operation saves time and it saves money. Quite simply, it has to be looked upon now as a regular job on most courses because of the amount of golf played and the compaction that results. "If golfers want to play all year round, we have to aerate all year round."

Irrespective of the hole, aeration of Churston's 18 greens is carried out every week, weather permitting, with one of the club's two Cushmans equipped with a variabledepth aerator fitted with 'V'-shaped tines.

Operating depth is set to 3in during the summer and 5in over winter.

Year-round aeration of the greens and their surrounds is accompanied by tractor-towed slit tining of the fairways during the winter months and occasional Verti-draining. The greens are also hollow or solid tined for both aeration purposes and when Gordon feels there is a need to correct pH levels.

"We try to maintain a slightly acid soil on the course to limit the spread of meadowgrass which tends to grow very easily," he explained. "A top dressing of sand and peat, plus iron, after tining helps keep conditions nicely balanced. And it assists in maintaining an open surface.

"Verticutting also helps and in

summer we regularly slit and then verticut before mowing the greens."

The Child philosophy on top dressing is "little and often". Other than when correcting pH levels, Gordon Child also applies dressings to maintain speed on the greens, always matting in the mix, the majority of which is produced on the course to his own formula. Fendress makes up the balance.

Automatic watering of the greens is under the control of a Watermation system, updated in 1987 with the replacement of all components apart from the mains and storage tank. The system is said to work extremely well, especially on the greens with little sub-soil which could otherwise quickly show signs of stress in dry weather.

Weeds are not a major problem at Churston, with treatment against daisies on the fairways being the only regular reason for a sprayer being attached to either the Cushman or one of the club's two tractors.

This is carried out twice a year, with spot treatments as and when necessary. The greens are weeded by hand.

Despite the apparent low use of pesticides on the course, Gordon Child said that an immediate priority was the construction of a separate lockable chemical store, with shower. "I believe that this is absolutely crucial and would urge all greenkeepers to place it at the top of their equipment priorities list." he stressed.

Apart from daily greens mowing during the summer, the fairways are cut twice a week using a grounddriven trailed set of five gangs.

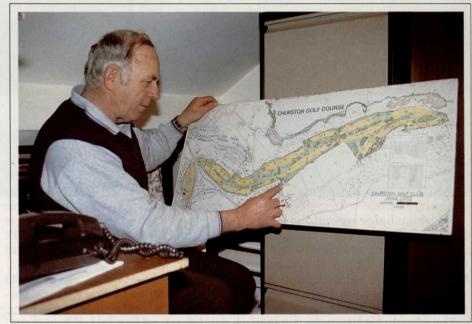
"We're a bit out of date there," commented Mr Child, "and I shall be looking to replace them with modern equipment soon. There are definite advantages to collecting grass cut on the fairways, and that is the direction in which I am looking."

No reseeding has ever been carried out on the greens at Churston as the club does not seem to have a problem with either regrowth or re-establishment after winter or dry periods, due to a combination of good drainage and regular watering.

Mr Child admitted that the pre-



Gordon Childs pointing to the 13th green where trees have been removed to improve turf growth and drainage.



Gordon Childs in his office (at home) with a plan of the Churston Golf Course.

dominant meadow grass had been difficult to reduce, but pointed out that he had managed to raise the percentage of bents and fescues through regular aeration, better drainage and a reduction in fertiliser usage which, he said, had been too high in the past: "The course was literally overfed."

Drainage improvement has been one of the major areas of attention on the course since Gordon Child's appointment.

"Even fairly light rainfall caused the bunkers to fill up with water and overflow onto the greens," he explained. "We have drained a number of bunkers and also around the edges of greens to eliminate most of the problem areas."

Gordon Child and his staff of four, headed by assistant, David Prosser, have also been busy on other parts of the course, with at least one important project being completed each year.

Last winter, with advice from golf course architect, Fred Hawtree, the team removed a rock bank adjoining the 8th green, setting in three new bunkers in its place.

Previously, a golf ball just six

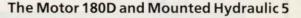
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inches off line could strike the bank and be "kicked off" into undergrowth, never to be found again. Now, it is just another challenging golf shot, with the alteration much appreciated by members.

Projects in other years have involved removing trees that were shading a green, making it unplayable in winter, to let in light and air and improving the green "beyond recognition"; building new tees in positions designed to both enhance and encourage golf shots; and altering the line of a fairway to keep play away from a busy road.

Despite bearing the title course manager, Gordon Child is very much a working greenkeeper. "That is the only way to keep in touch totally with what is going on," he said. "The club management has been tremendous and we have established an excellent relationship. They respect and appreciate what we are doing on the course."

This understanding has been

New tees designed to encourage golf shots

most important to Gordon for his work with BIGGA.

Although he says that he has found it easier to relax at the end of the day since he arrived at Churston, Gordon Child's work does not finish when he locks up the sheds at night.

As administrator for the South West and South Wales region of BIGGA since its inception, he is totally absorbed in the education, training and welfare of greenkeepers within their chosen profession.

"The formation of the Association is the best thing that has happened in our industry for many years," he said. "Although funded by headquarters at the start, the regions are now looking to stand on their own feet. For that reason, we are hoping that our first Turf Care Trade Exhibition to be held at Long Ashton Golf Club on 24th May will be a success for the region and become an annual event."

Ever generous in his praise, Gordon Child admits that he could not have coped with the ever-growing paperwork and responsibilities of his full and part-time jobs without the invaluable help and support of his wife, Marion.

And yet, with all his interests, Gordon Child still finds time to relax. An ability which he believes is essential to all involved with a job where pressure and pride go hand in hand.

His great passion is for horse riding, so if you can't find Gordon Child on the golf course or in his office, look out for a windswept figure galloping along the cliff top. But there again, he could just be in the car park at Churston Golf Club checking for compaction.

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Iron and sand keeps fusarium under control at Tudor Park

John Lelean meets the helmsman, on course for a successful season.

O n the outskirts of Maidstone near the village of Bearsted, the new Tudor Park Hotel Golf and Country Club fits majestically into the rural Kentish countryside.

Built on the site of the Tudor House Restaurant, gutted by fire some years ago, together with the adjacent former deer park of Milgate Estate, Country Club Hotels, a division of the Whitbread Group, have created the first of a new generation of hotel golf and country clubs, which they justly regard as the flagship of the present ten similar hotels and golf courses operated by the company.

But more about the superb hotel and leisure facilities later. The objective of my visit was to meet the man responsible for the upkeep of the eighteen hole Tudor Park Golf Course, course manager Derek Keen.

Derek is well known to many greenkeepers in the Midlands, having moved to Tudor Park from Telford Golf and Country Club to take charge at the construction stage in 1985.

Prior to his appointment at Telford in 1974 he had a four year stint as head greenkeeper at Shrewsbury where a new course was built to replace the original 1891 design.

He has always taken an active part in the affairs of the Greenkeepers Association and was one time secretary of the Midlands Section, always to be relied on to produce newsworthy items for publication.

His interest in the advancement of greenkeepers is still strong, though Derek now confesses to taking a less demanding role in the organisation, understably because of the responsibilities he has undertaken with his new course, though he has accepted a committee position for the Kent Section.

he parkland course, designed by Donald Steel was never intended to be a championship course. Acreage restrictions demanded the 6,041 yards from the back tees had to be set into the land available, but nevertheless Steel achieved his objective to produce a pleasant hotel club course which gives every golfer, regardless of handicap a more than fair chance to beat the standard scratch.

The course winding round the rear of the hotel has two par fives, 12 par fours and four par threes. Two ponds at the fourth and tenth add a feature to the course, but unless one over clubs at the 177 yard tenth, they do not come into play.

There are only 26 bunkers on the course, one way to cut back on maintenance costs, but these are made up by an increasing use of moundings and grass hollows, formed in such a way they can be cut mechanically. The greens in January were in superb condition. Firm with a good grass covering, well drained and hardly a suspicion of poa.

Derek said they were constructed with a herringbone drainage system overlaid with a blinding layer of pea gravel on a gravel carpet. The growing medium is a 70:30 mix of Leighton Buzzard Sand and Fen Soil.

All the greens were seeded rather than turfed with a mixture of Chewings Fescue and Browntop Bent and since the course was opened for play in May last year he estimates there has been less than 2 per cent incursion from other species.

This has been achieved by a programme of intensive cultivation, slitting every two weeks (though this was not too noticeable on the putting surface) and hand cutting with Ransomes Auto Certes. He is cutting every two weeks throughout the winter.

Over the last few months careful use of iron and sand as a greens top dressing has kept the dreaded fusarium at bay and he has had no need to apply any fungicides. Earlier he fertilised with small quantities Farmura and Seamac but now only applies a dilute solution on weak areas of the fairways.

The fairways, like most courses constructed on open parkland are inclined to be sparse in the initial stages. Derek is attempting to overcome the problem by regular slitting and keeping traffic away from areas with a tendency to wear thin or become muddy, though drainage is not a serious difficulty as the underlying layer is Kentish ragstone a material which has fissures and cracks allowing water to run through.

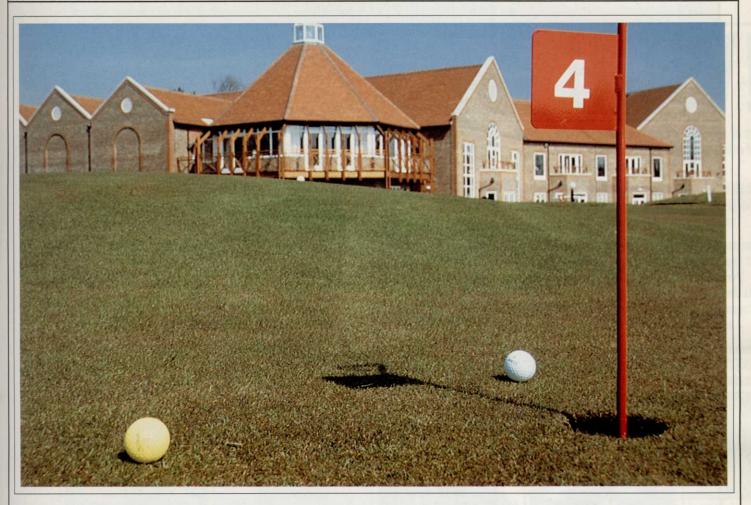
With hindsight, the tees could have been built larger and some may have to be extended to give greenstaff the opportunity to effect repairs if the number of rounds of golf increase. Winter golf is played off mats and Derek invested around £1,600 to put an artificial surface on every tee, but even these have not saved the immediate surrounds from intensive wear.

The opening of the course at Tudor Park created an interesting situation, which new golf course owners might consider. Although guests at the hotel may use the course as part of the daily tariff, a club was formed to include membership of both the golf course and the leisure facilities, including the indoor swimming pool.

B ecause it was a new course, the majority of applications came from nearby residents, who previously had not been able to obtain membership of a golf club with the result that quite a number were beginners at the game.

The thought of three hundred 'hackers' let loose on a new course is enough to turn a greenkeeper's legs to jelly, but this was overcome by insisting that golfers had to reach a required standard before they were allowed out on the fairways.

Although this was an added bonus for club professional Marc Boggia, Derek Keen has said the policy has worked well and not only are the new members reasonably



competent, despite high handicaps, but they have been taught the etiquette of the game. Divots are replaced, pitchmarks repaired, there are less hold-ups and cards are marked correctly.

When the course was planned, trees played a major part in the layout, that was until the hurricane of 1987 struck the South of England. Between 50 and 60 were lost, including ten mature specimens intended to be a feature in the playing of a hole. However these were cleared and in time others will take their place.

Even now visitors to Kent and Surrey are shocked at the total devastation of woodland in the countryside, which will take years to cut and clear, let alone replant.

Derek's pride and joy at Tudor Park is his greenkeeping 'shed'. Shed is hardly the word to describe the magnificent long low L shaped equipment area, hard surfaced in front of the high security up and over doors, with a roofed open area to the left of the building where he is able to store sand and compost and do his own mixing. The maintenance building includes Derek's office, which also houses the computerized control centre for the Watermation irrigation system and a rest area for the seven greenkeeping staff.

Most of the equipment is Ransomes. In addition to the five Auto Certes for the greens, there are three hand operated Marquis for tees and approaches, three Ransomes 180s, one five blade and two seven blade.

For the fairways he has a Hydraulic 5, with a five gang Magna and a three gang Magna for rough cutting. Power is provided with a 45hp Kubota, a Massey Fergusson 135 and a Ford Tractor with a loader.

For fairway slitting he uses a SISIS TDF 32 and for greens maintenance a Cushman system. Extra equipment includes a screen and shredder and a couple of 36" Bobcats for awkward rough areas.

But to return to the hotel and leisure complex. Derek Keen met me in the poolside grill and bar alongside one of the best private heated indoor swimming pools in the country. The pity was we did not have the time to enjoy it!

Nor the saunas, jacuzzi, squash courts and snooker tables, though I can sing the praises of the hotel's Garden Restaurant where the food was of excellent quality, beautifully presented by the staff, who perfectly blended the balance between professionalism and friendliness.

As for breakfast . . . that was a treat that had most of the guests gasping for breath as they were confronted with the vast range of tempting dishes from oriental fruits, several types of fish to good old English bacon and eggs accompanied by as many of the extras one could put on the plate.

All the bedrooms have their own bathrooms, most look out over the golf course.

In time the views will be even better as Derek Keen's responsibility includes the hotel gardens. He said the company policy is to create colour and interest throughout the year by planting banks of flowering shrubs.

In his words it is "to create a visual experience", a task I know he will enjoy.

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excellent quality turf - this plus an automatic watering system such as the Toro 650 design really puts the groundsman in control...* David Bryant - World Singles Champion

David Bryant - World Singles Champion Willie Wood - World Singles Finalist

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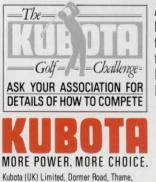
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Grass growth on small tees

The Setting: The small but scenic 16th tee at Secluded Woods Golf Club. Dappled light flickers on the teeing ground through the tall oaks. After several practice swings and a few divots, the golfers prepare to play. The Comment: "Why can't we grow grass on this tee!" James Snow gives some answers.

nly a lucky few golf course managers have never had to answer this question. Most speak of their problem tees with a hint of frustration and forced resignation, feeling that the ultimate solution to improving them would not be acceptable to the golfers. While this may be true in certain instances, it is often possible to make adjustments to the tee itself or to the surrounding environment so that acceptable turf can be maintained.

Problem tees usually suffer from one or more of the following maladies:

- small size
- tree effects
- poor construction
- insufficient maintenance and management

Most often a combination and interaction of three or four of these factors leads to turf failure, but it is probably safe to say most problem tees have one thing in common: they are simply too small to accommodate the play they must take. To a certain point, adequate tee size can compensate for almost any other weakness. The ability to distribute wear over a large enough area is the key.

A good rule suggests that there should be at least 100 square feet of usable teeing area for every 1,000 rounds of golf played annually, with 200 square feet available for every 1,000 rounds played from tees where irons are used. If this was the situation at most golf courses, there would most certainly be fewer problem tees.

Many tees were not small to begin with, but rather, they evolved over

Old tees can't handle the same traffic as modern tees

the years. Consider the great architects of the 1920s building golf courses to accommodate perhaps 5,000 to 10,000 rounds. Had they only known that today their courses are being stampeded by up to 40,000 to 50,000 golfers each year. Construction specifications, too, were not what they are today. Old tees built of native soils can't handle the same amount of traffic as a tee constructed to modern specifications.

Finally, the growing environment around many tees has changed over



A small tee before and after trees were removed.

the years. The negative effects of maturing trees and the demands for more closely cut turf have pushed tees beyond their limits without intensifying maintenance practices. When this occurs, most golf clubs would be best advised to rebuild or enlarge their tees to better accommodate the traffic they receive.

A major complicating factor contributing to problem tees is the effect of nearby trees. While most golfers consider the shade and aesthetic beauty of these trees, from a turf standpoint they are a nuisance. Shaded turf is inevitably weaker, less vigorous, more prone to traffic injury, and less able to recover quickly from damage. Too many trees block air circulation, leading to problems with heat and disease.

Wherever possible, nearby trees should be selectively culled, and branches on remaining trees should be pruned and thinned to increase sunlight and increase air circulation. If it is done carefully, the turf can be significantly improved without harming the aesthetic appeal of the area.

While it is easy enough to see how shade affects turf, tree roots are the hidden menace. Contrary to popular opinion, tree roots can extend well beyond the dripline in their search for moisture and nutrients. robbing the turf of essential elements. In most instances, root pruning around the outside of the tee can make a dramatic difference in the condition of the turf on the tee. Tree root pruning is easily done by slicing or digging a two- to three-inchdeep trench between the tee and trees. If a trench is used, place tar paper or sheets of heavy plastic along the wall of the trench and backfill. Root pruning may have to be repeated every three to five years, depending on the species and their proximity to the tee.

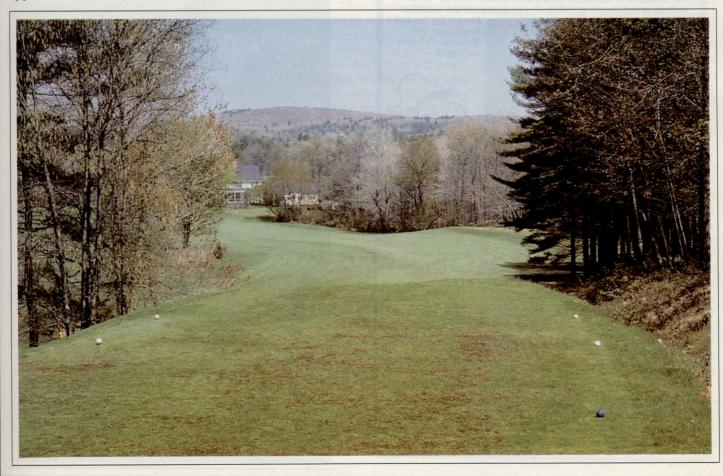
Trees also affect tees by effectively making them smaller. As trees planted off the front and sides of tees become larger, they block part of the tee. As a result, the actual usable teeing area is reduced, and the remaining surface is subjected to greater and greater play. Where this has occurred, trees should be removed or brances should be pruned back to help reclaim the entire surface. A any problem tees were unknowingly built to selfdestruct. While it is common for new greens to be built to the latest improved specifications, such is not the case with many new tees. The use of pond dredgings or on-site topsoil, the lack of adequate drainage, and poor grading are among the common mistakes.

Where substantial quantities of fill are used, the material is not always compacted or allowed to settle adequately before the topmix is added and the finishing work is done. As a result, settling occurs later and the tee becomes uneven. When this happens, the usable area on the tee is reduced, and the remaining level areas are subjected to heavier play than anticipated.

New tee construction should receive the same kind of consideration as if it were for a green, especially where heavy play is anticipated.

Where time and resources are available, intensifying maintenance practices can partially overcome the effects of small size, poor construction, and tree competition on problem tees.

Any practice that improves the



health and vigor of the turf is certainly helpful on problem tees. One of the easiest and yet most overlooked programmes is turf fertilisation. Tees frequently require twice as much nitrogen fertiliser as greens, yet they often receive less than greens. Because of heavy wear and their need to recover quickly from damage, use of 3/4 to one pound of nitrogen per 1,000 square feet per growing month is common.

To help overcome the effects of heavy traffic and soil compaction, aerify (core cultivate) problem tees as often as possible. If the soil is poor, remove the cores and incorporate good quality topdressing into the holes, then overseed the tee with the appropriate type of grass, which in the case of problem tees is often perennial ryegrass. Ryegrass germinates and develops quickly, is wear tolerant, and it survives on shaded, compacted tees better than bentgrass.

One of the best techniques for encouraging quick recovery of damaged areas is to fill divot scars daily, weekly, or as often as possible with a mixture of top-dressing and seed. This helps to keep the tee surface smoothed and helps minimise the establishment of certain weeds.

Because mowing problem tees with triplex mowers can contribute to soil compaction and turfgrass wear problems, try to use walkbehind units. If this can't be done, then request that the triplex mower make its turns off the teeing surface itself.

In the realm of tee management, many things can be done to maximise usable teeing area and to take advantage of every available square foot of space. Depressions should be selectively topdressed on a regular basis until they conform with adjacent turf. Severe undulations or setling over irrigation lines may require that the sod be lifted, the subsurface levelled and the sod replaced.

Trees which interfere with play or block the use of part of a tee should be removed or pruned back so that golfers can legitimately use the entire surface.

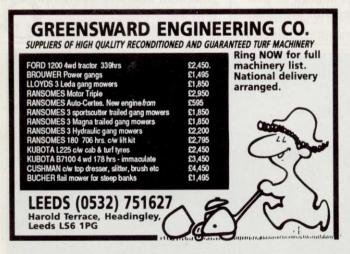
Where the situation presents

itself, build ladies tees (or forward tees) to take a certain amount of traffic off the regular tee and to open up a new area for the regular markers where the forward markers had previously been placed. The construction of alternate tees at a different distance or angle would serve a similar purpose.

Careful movement of tee markers from day to day can also be very helpful in distributing traffic over the entire usable area. Using just 1/3 or 1/2 the width of the tee when possible, move the markers in a set rotation so the golfers are forced to use the entire tee over a period.

Dealing successfully with problem tees involves intensifying maintenance and management practices and minimising the effects of nearby trees. When this does not resolve the problem satisfactorily, enlarging or rebuilding the tee to good specifications is the only alternative.

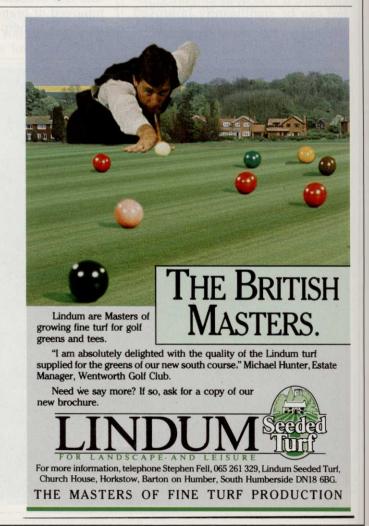
James T. Snow is Director of the North Eastern Region of the USGA Green Section.



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OPINION

Exercises in golf course architecture

Fred Hawtree has praise for home grown talent



Liphook Golf Course designed by Horace Hutchinson.

L ast month, I threatened to clobber you with a key to the style of golf course architects to help you establish responsibilities for your own course if the early Minutes are obscure. Even if they are absent, as is more common, there may still be one of those slim booklets which publicity firms produced gratis for nearly all golf clubs on the revenue from butcher, baker and other suppliers who felt it prudent to keep their names in favour with the secretary.

Given the connections, it is probably no accident that the Irish are equally addicted to discovering the identity and activities of their courses' designers. Reading a recent press cutting about a west coast, links, I was fascinated by a description of the architect's aims, style and mannerisms which could only arise from wide experience and reflection on the results. The account of these characteristics became still more riveting when it mentioned that they were mine.

These publications from firms like Temple Publicity Services, and The Golf Clubs Association (G.W. May Ltd.) generally started with a potted history and sometimes the name of the designer got in by mistake. The latter firm, particularly, used highly respected writers and these were more likely to look for the architect first. But apart from a few cognoscenti, British golfers have never been particularly interested in the man who designed their course. Even today he will only be

identified if his name is Nicklaus. Ballesteros or Langer. You don't believe it? Last week one of those travel writers who spend happy lives perambulating Europe send-ing home occasional dispatches on hotels where they lingered and fourcourse meals which, after a loving description, they generally sum up with a casual cost-guide like 'only £80 a head.' This man had been down the Costa Brava to Pals where he found the 'renowned' golf course which was host to the Spanish Open in 1973 (British designed, not mentioned). Farther south, he visited another golf course 'designed by Olazabal.' I guess that this would be Mr O's first and, since his father was a golf greenkeeper, it is likely to be very creditable. I also guess that he get a mention because the player is known. In this country, if the golfing press ever mention a British designer's name, they always feel obliged to tack on to it 'the wellcourse known golf architect' because their readers will not know who on earth they are talking about.

The American golfer is different. He wants to know who designed the course before he pays his green fee or very soon afterwards. Some of his interest may spin off the higher publicity profile adopted by resort courses; but some, at least, comes from a genuine interest in all the aspects of the game he enjoys and a desire to compare the designs of one man with those of another. Clues in the form of mannerisms in detail and standard solutions to particular problems often provide the best cards in the golf course Identikit which I shall offer later. Much later, as it happens. You should allow at least 28 days for delivery, like everything else you order by post, because it is now clear that the names will mean nothing to you. Therefore the current exercise will be devoted to cataloguing the principal designers of the early days. After that there will be no excuse for you to say that you never heard of him.

We will return first to the happy days when there were no golf course architects - only golf professionals, though sometimes known as greenkeeper or custodian, until job descriptions became better defined.

Amateur golfers did not get in on the act until the early 20th century though men like Horace G. Hutchinson, Gordon G. Smith, John L. Low and Arthur Croome were already formulating theories of design which they were able to apply when consulted informally, Hutchinson at Royal Eastbourne and Royal West Norfolk, John Low at Woking and Croome later at Liphook. But these were mostly one off men. (there are still a few about). You are unlikely to come across them in this context and I should be hard put to it to define any recognisable features of their work.

ost designers or better, perhaps, 'layers out' of golf courses were professional golfers as late as 1910 and even after the Great War though things were changing. I say 'layers out' because a golf course would often be staked out in the afternoon following a morning inspection (though not on a Sunday in Scotland). Indications of bunkering might be discussed or supplied on a plan later but the detailed landscaping of greens and hazards was often the province of the local greenkeeper, professional or contractor.

This was not true of later disciples like Willie Park Junior to whom we will return to in a moment but probably characterised the more distant operations of the prolific

OPINION

Tom Morris (Snr.) 1821–1908. It is only fair to point out however that alterations of contours on any large scale were either impossible, unnecessary or not wanted at that time. The real art lay precisely in the staking process as in many ways, it does today save when the operation is only an exercise in landscape engineering and the original contours are ignored. Old Tom did marvels within these limits.

His contemporary, Tom Dunn, (1849-1902) was the most prolific of five golfing and designing Dunns. His father had laid out the London Scottish Golf Club's course on Wimbledon Common. Tom cannot be mentioned without crediting him for the golf course architect's favourite and most hackneyed quotation 'God obviously intended this to be a golf course.' He was a great cross-bunkerer and his formal style had an enormous influence on inland design until the knowledgeable young amateurs who followed took it apart and interred it. He did more than 50 courses in Britain and others overseas. His brother, Willie Junior, and nephews Sevmour Dunn and John Duncan Dunn all started designing in Britain and Europe but then moved to North America where they left an impressive list of credits. Willie Park Junior came much closer to today's practising golf course architect although his talents penetrated every department of the game - golf ball-maker, greenkeeper, professional, club-maker, golf architect, contractor, developer, inventor and author. To cap this record, he won the Open Championship in 1887 and 1889 and was runner-up in 1888. He designed over 50 courses in Britain, four in France, two in Belgium and a wide range in the U.S.A. and Canada.

Willie Park and the Dunns take us across the turn of the century to the early 1900's when James Braid started designing. Braid won the first of his five Opens in 1901 and his earlier courses like Machynlleth (1905); Stranraer (1906); Turnhouse, Edinburgh (1909) West Hove (1910) were followed by over 100, the majority constructed by John R. Stutt Ltd. of Paisley who will have done the detailed design on site.

I.H. Taylor, fellow member of the Great Triumvirate, was just ahead with Seaford (1904) before Royal Ascot (1905), Eastbourne Downs (1908), Clevedon (1909) and also seems to have got his nose in front at Salisbury and South Wilts (1894). His score exceeds sixty but after 1920. like Braid, the credits are blurred because he allied himself to a practical designer and constructor, my son's grandfather, who I happen to know did the donkey work until Taylor, also like Braid, put in an appearance at the Opening Exhibition matches. But his reports in the early 1900s, before this connection arose, were 'professional' and

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Vardon (1870–1937), the third side of the triangle though active, did relatively little. His score barely reaches 20 and a few of these are of dubious attribution.

igressing for a moment, when Royal North Devon G.C. opened its museum at Westward Ho!, they played a recording of J.H. Taylor giving the encomium at Harry Varden's funeral. I thought it of marvellous quality and said so to Mr. Peter McEvoy who was next to me. "Met a lot of people!" said P.M. and that was that. But I think there was much more to it. In spite of leaving school at 11, J.H. acquired a style and presence which no further education could have improved. He did not need to imitate people. His eminence and his prose were notable because they were home-grown.

The last professional golfer designer of note in those early days is Tom Williamson. He was greenkeeper and pro. at Notts. Golf Course for more than 50 years from 1896 to 1950 but was consulted for many new layouts. His extra-mural activities was confined almost exclusively to Nottinghamshire and adjoining counties.

His assistant was his brother, Hugh. In all, Tom was responsible for more than 60 new courses and remodellings and could even claim at one time that every course within 50 miles of Nottingham came from the Williamson stable.

If stuck for an answer to the provenance of an East Midlands course, you could therefore do worse than hazard a guess that the author might be Tom Williamson.

These are all the names you need to know for the moment. I will return to the matter next month when we will look at the amateur golfers who took over in the Twenties. By the time we have looked at all of them, I expect we shall again have to put off giving you the Identikit until a later issue. By then you will probably be too busy to read it anyway but it is nice to think that Spring is now with us.



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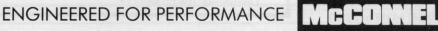
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ACCESSORIES

Flags and Flagpins

Smart and well designed accessories can enhance the aesthetic appeal of any golf course by John Campbell

Any golfers would like to see the flagpins on all courses conforming to certain standard specifications with regard to size, thickness and design, etc, and most manufacturers who are aware of this are now producing a more standardised range of this type of equipment.

However, it is still suprising to find a fair variety of flagpins - long, short, thin and thick on many courses, or even on the same course.

The choice and colour of the flagsticks is often dictated by the type of course, the environment and nature of the terrain and the whims of the club committee.

Quality and type of flags and pins can also be influenced by a limited budget or the fact that the course may be more liable to attention of vandals. So the club may be less inclined to devote priority to the maintenance of course furniture and equipment.

In the early days of the game there were no flags or flagpins to mark the hole and the procedure then was for the first party of players going out on the course to find and mark the position of each hole for those following with a gull or rook feather which happened to be lying around.

If, as sometimes happened, the hole could not be found due to ravages of sheep or other animals churning up the turf, the leading match was expected to select another site, cut a new hole with a knife and set up the feather beside that.

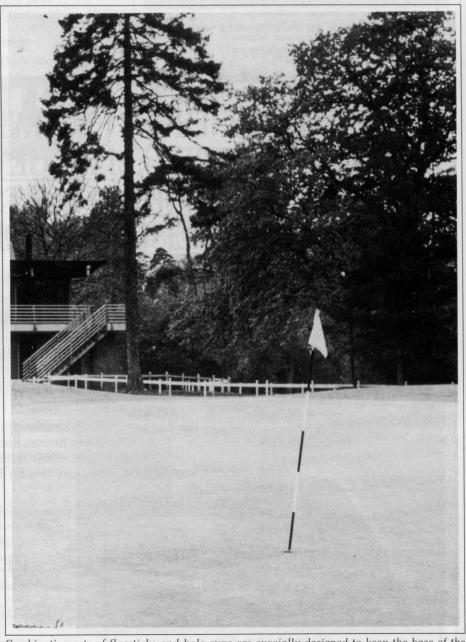
In those days golfers were used to more primitive methods of dealing with the hole, and greens as we know them today never really existed.

A broken branch from any nearby bush or tree with a fragment of cloth attached to the top was generally considered quite suitable. At a later date flags were pieces of material or bunting attached to a length of stick or bamboo.

But these flags soon became dirty and tattered and their main purpose as a marker was ineffective for they were hard to distinguish.

And they were never replaced

unless they were removed by vandals or carried away by the wind. The custom of attaching flags to the end of a stick has not always been entirely universal for at one time some clubs used



Combination sets of flagsticks and hole cups are specially designed to keep the base of the flagstick erect in the cup.

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ACCESSORIES

oval-shaped wicker baskets surmounted on the hole sticks and it is believed that this tradition is still carried on in North America where these unique markers seem to blend in with a background of lakes, weeping willows and other ornamental trees.

If flagsticks are not properly maintained and regularly replaced, their function as hole markers is substantially reduced when they are allowed to assume a grimy appearance with paintwork flaking and chipped.

In this condition they tend to merge with the background in the manners of camouflage and players experience great difficulty spotting them from a distance. For good visibility reasons, there is often quite a variation in the choice of flagstick colours from one course to another.

Some clubs prefer them all white, others like them red, or combination of red/white, or black/white sections. Quite a lot depends on the

*

layout of the course and the background features to the greens and for this reason some colours stand out more clearly than others.

At St Andrews, there used to be a custom (and probably still is) with regard to the colour sequence of flags on the greens which is not always fully understood by visitors.

From the 1st to the 9th going out the flags were all white, then, from the 10th to the 17th they were red, finishing with the traditional white flat on the 18th green.

No historical reasons are advanced for this unusual colour sequence, although one theory is that a white flag was traditional on the 18th green on the Old Course where there is a prominent red brick building in the background.

Course accessories like flags and flagpins play an important part in the game and if regularly maintained these items can enhance the look of any type of course. Golfers today have the advantage of more brightly coloured flags, which in addition to indicating wind direction, they can be easily picked out in the distance against any kind of background.

Many courses have now installed combination sets of flagsticks and cups that are specially designed to keep the lower part of the flagstick upright in a socket extending below the base of the cup.

Most golf club officials and greenkeepers would agree that smart, well designed course accessories can enhance the aesthetic appear of a well groomed course and add to the character of the general surroundings.

Such equipment must be attractive, dependable and easy to maintain. Besides being able to withstand the weather, equipment sometimes has to suffer harsh treatment from vandals and it is desirable that it should be durable and capable of standing up to a bit of wear and tear.

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THE GOLF COURSE MAY 1989

LOOKING AHEAD

FM Radios on the Golf Course

Using the latest communication technology gives you the next best thing to being in two places at once. James Moore looks at the advantages and the systems being adopted by American golf course superintendents

W hether you choose to admit it, you live in and are part of a hi-tech society. You can't start your car without activating a series of microcomputers beneath the bonnet.

Well the computers under the bonnet may baffle you, you may not have looked in the back of your TV lately, and your old Timex may still be merrily ticking away, but even if you are shy of technology, as a golf course manager you need to take a hard look at FM two-way radio communication, one of the most useful and sensible hi-tech tools ever introduced to the golf course. Radios are not new to golf course maintenance; they have been around in one form or another for years. In the past, however, they have been inefficient, costly, and bulky. Although they occassionally accomplished their goal of allowing voice communication between two parties, their use was limited to this sole function. If you think this is all radios can do today, you are in for some surprises.

The most obvious application of a radio system on the golf course is helping the course manager better manage his crew. Piercing whistles and bullhorns have obvious limitations, particularly during the member-guest or club championship. Citizen-band radios occasionally meet this need. Unfortunately, CBs are limited in their range, and are not very portable because they need antennae. There is also the very real problem of unexpected visitors to the channel you may be using. A CB blasting out, "How bout ya, Sugar Bear? You got your ears on?" could really prove embarassing on ladies' day.

Fortunately, highly compact and portable FM radios have solved these problems and many others. They have plenty of range for the typical golf course.

If communication is necessary over a larger area, the signal can be strengthened by a repeater extending the range to many miles. A repeater is actually an amplifier that takes your transmitted signal, makes it stronger, and re-transmits it to the various receivers on your frequency.

FM systems allow you to communicate privately with your crew since you are assigned your own frequency. They are small and easily carried, with some units being as little as $6 \times 3 \times 1$ inches. They are quickly rechargeable and extremely reliable. And now the really good news - they are finally affordable!

Two types of FM units should be acquired.

1. Base station. This unit is usually the same or similar to the type of FM two-way radio installed in a vehicle. As a base station it is equipped with a dc power supply, an external antenna, and a desk microphone. The base unit is typically installed in the mechanic's area of the shop or in the course manager's office, if a secretary is employed.

2. Portables. These are the small, hand-held units. A minimum configuration for most courses would provide a unit to the course manager, each assistant course manager, the irrigation technician, and the mechanic.

A touch keypad for making and receiving telephone calls is a valuable and inexpensive option for the course manager's unit. Similar in operation to a mobile or cellular car phone, it helps the superintendent stay in touch regardless of his loca-

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LOOKING AHEAD

tion. This allows him to meet his often conflicting duties of direct supervision of the crew and managerial responsibilities in the office.

The advantages of reliable and immediate communications between the course manager and the crew are too numerous to cover fully. Obvious applications include:

1. Testing, repair, and adjustment of the irrigation system.

2. Avoiding lost man-hours due to equipment breakdown.

3. Constant adjustment of the daily maintenance schedule to make the maximum use of available man-hours.

4. The coordination of activities such as tournaments, chemical applications, and special projects.

5. Since the maintenance workers are almost constantly on the course, they are usually close by when an accident or medical emergency occurs. Once equipped with radios, they can quickly summon help.

The technology is already available to make FM radio systems work for you and

OBITUARY

The death occurred just before Easter of E. W. Park, 62, a member and past Captain of Lindrick Golf Club. He was a regular contributor to this magazine and its predecessor *Greenkeeper*, as well as a personal friend and supporter.

Eddie's first contact with greenkeeping was at St Bees school in Cumbria where, being a keen golfer he looked after the school's nine hole course. The course, situated on a cliff overlooking the Irish sea was blessed with fine turf, as well as a flock of sheep, so maintenance was minimal and traditional. Upon leaving St Bees he qualified in dentistry at Edinburgh University moving to Worksop where he met and married his wife Nan. Eventually he practiced in Sheffield in a 'family' business, with daughter Sarah and Nick joining him in the practise and his devoted wife assisting with the administration. He was a greatly respected member of his profession.

With his son Nick, Eddie became one of the most knowledgeable laymen on greenkeeping matters, which enabled him to collaborate with Nick on a series of articles, published in *Golf Monthly*. The Management of British Golf Courses'. This was subsequently published in booklet form and through the Greenkeeper Training Committee distributed to all golf clubs. your club in other ways as well as talking to the crew.

Many clubs have installed phones on the course in case of medical emergencies and to prevent long delays between nines as players stop for food and drink. Conventional phone lines require costly installation and often ditching across the golf course.

Many industries use FM voice reporter units to monitor and report on the function of specialized equipment. These units are triggered by an event such as low pressure, high temperature, etc., and a call is made to the portable base station or even a pocket pager. A recorded message is then played announcing the event.

There are many uses for such a system on the golf course - particularly regarding the irrigation system. Imagine the savings of water and electriciy (as well as turfgrass) that could be be realized if the monitor detected power lost from the pumping station. The course manager would be notified by the voice reporter unit with a message such as "pump station power off."

However, it was in his capacity of Captain, and Green Chairman of Lindrick Golf Club that Eddie made his mark in the field of golf course maintenance which became his great interest. For a period he acted as course manager before handing over to the current young, skilled Lindrick greenstaff. He studied golf course conditions countrywide and had amassed a considerable collection of slides on course conditions good and bad which he used for his numerous talks to greenkeeping groups. He was a friend and confidant to many greenkeepers and a firm believer that the condition of our courses would not improve until the ordinary golfer was better educated to the methods needed to achieve good playing conditions all the year round.

Another of his interest lay in country houses. He assisted his wife Nan on the research for her book 'Schooldays at Chatsworth', an account of her schools war time evacuation to Chatsworth House, the home of the Duke of Devonshire. Discovering the Duke's connection with local golf clubs, Eddie set about researching the subject of 'country house golf' which was later published under the pseudonym 'Historicus' in Golf Monthly.

He had retired early to pursue his interests, and his untimely death whilst looking at a course in Cheshire has robbed his family and friends of invaluable support. The whole of greenkeeping will be saddened by his passing. I mentioned that two-way FM communication systems are now affordable. Although the prices will vary according to the system you choose and your dealer, listed below are some rough estimates of what you will currently need to spend.

Base station \$1,000-\$1,200 (including antenna and desk

microphone)

Course manager's portable \$600-\$700 (with telephone option)

Crew's portable (each) \$500-\$600 Repeater service \$20-\$25

(if necessary, per unit per month)

At first glance, the cost may seem high even though these numbers are significantly lower than they were one or two years ago. Actually, most courses would recover the cost of the system quickly as man-hours are saved and work is carried out more efficiently.

For most golf courses, the year's capital equipment purchases are just around the corner. Give strong consideration to acquiring a two-way FM radio system. It is a purchase you will find well worth the cost.

OBITUARY

Walter Heeles, Secretary of the British Golf Greenkeepers Association for over 12 years died in Harrogate District Hospital, last month after a short illness.

The high regard of Walter's contribution to golf was reflected in the huge attendance at his funeral, by not only the officials and members of his club but greenkeepers nationwide and representatives from the amenity turf industry.

The service was conducted by the Rev. Richard Kayes, an Oakdale member, Walter's one time playing partner and a family friend.

Mr Heeles, who was 63 had been Oakdale's head greenkeeper for 23 years, accepting the position when his business premises were compulsory purchased in 1963.

A talented natural golfer he joined Knaresborough Golf Club as a young man and in 1962 was elected Captain. He won the President's Cup in 1955, held the amateur course record and later when head greenkeeper at Oakdale won the Harrogate Union Individual Championship.

A leading member of the Yorkshire Branch of BGGA, he became the National Secretary of the Association and ran their affairs with his wife Betty from their home in Knaresborough until the amalgamation with EIGGA and the BGGA in 1987.



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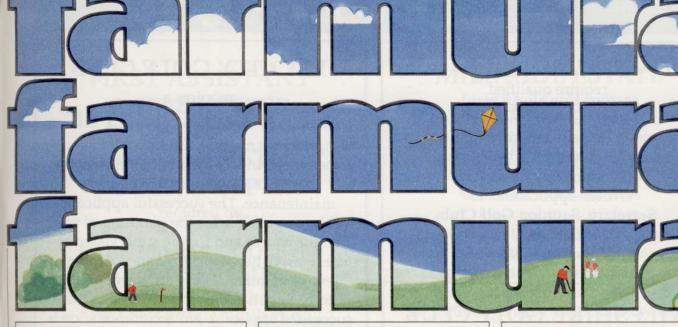
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The Secretary, Ely City Golf Course Ltd., Cambridge Road, Ely, Cambridgeshire. CB7 4HX Tel: Ely (0353) 662751

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require an ambitious and progressive

HEAD GREENKEEPER

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