On the Course

How the American designed Collingtree Park is progressing

Management

Jim Arthur looks at the proper use of the Verti-drain

Review

A look back at Royal Troon, on and off the course

Topical Tip

Patrick M. O'Brien of the USGA Green Section gives advice on how to put shape into fairways
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The spectacular 18th green at Collingtree Park

AUGUST 1989

16
The Dutch invention that has taken over from the fork
Jim Arthur puts the case for Verti-draining and warns of some of the hazards

19
Royal Troon
A round-up of events

22
Collingtree Park, the executive course that brings a new dimension to golf in Britain
John Lelean visits Course Manager Peter Jones at the new complex

28
Contour mowing
how to put life into the look of fairways

Departments

8
Clippings by the Mower

10
Out and About
A round-up of news and new products

31
Appointments
SISIS now offer a range of p.t.o. driven implements for use with suitable compact tractors. The range includes top-dressers, Rotorake, sweeper, aerator, sprayer and spreader. Full details from your SISIS Area Representative or by contacting us at the addresses below.

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- Mc Connal 6" outfield slitter trailed ex demo
- Mountfield Triple mower ex demo
- Wessex GR pick up mower
- Woods Rotary cutters
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- Ransome 20" Auto certes
- Ransome Mastiff
- Cushman Truckster
- Cushman Turf Scarifier
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L'organisation du Championnat international en juillet sur le terrain écossais de Royal Troon reste le principal événement en matière de golf au Royaume-Uni comme ailleurs. A Collingtree Park, près de Northampton, à une heure de route de Londres, a ouvert ses portes en avril prochain.

Le golf a semé du Pencross, cette graine de gazon frie qui a été largement utilisée depuis, révolution des parcours a fait que l'on accorde beaucoup plus d'attention aux contornos. Jim Arthur, rédacteur en chef de Golf Course, explique que bien que cet engin ne soit pas pénalisé à l'excès pour une balle perdue, il peut être un outil précieux s'il est utilisé à la bonne époque de l'année.

Patrick M. O'Brien analyse que ces parcours devraient être conçus afin de pourvoir à tous les niveaux d'expertise des golfeurs.

Un collaborateur régulier de notre magazine, John Lelean, le rédacteur en chef de Golf Course, présente un reportage sur l'avancement des travaux de ce complexe unique, où un terrain plat agricole a été habilement paysagé par des bulldozers pour reproduire les dénivellations naturelles que l'on pouvait trouver sur les premiers terrains de golf des bords de mer et des landes. Les huits lacs qui y ont été creusés ont fourni la terre pour modeler les tertres et les parcours.

On a semé du Pencross, cette graine de gazon dont il est fait usage considérable aux États-Unis, sur une couche de sable fin de quelque 30 cm de profondeur. Le terrain de golf ouvrira ses portes en avril prochain.

Le "Vertidrain" est le nouvel équipement qui a le plus révolutionné l'entretien des terrains de golf de luxe. Il estime que les parcours sont améliorés par une tonte fréquente, notamment par l'utilisation de tondeuses extra-légères aux abords des "greens". Il devrait également exister une zone de semi-long entre les bordures du parcours et le fairway. Patrick M. O'Brien explique qu'il serait souhaitable d'avoir des terrains d'entraînement qui permettent de rendre les coups plus longs.

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CLIPPINGS
By The Mower

New turf on collection
ROLAWN’S turf depots are proving a great success with landscapers and turf-users up and down the country. There are now 19 selling outlets where freshly-harvested turf can be collected or deliveries arranged. Staffed and run entirely by Rolawn, they are situated on prime sites in or near major cities with easy access to main roads and motorways.

"With more Rolawn depots opening all the time, we intend to cover the country within the next two years," says Operations Director Guy Longbottom, who opened the first depot as a trial run in Glasgow three years ago.

"Air-shot" of the Month
THE final round of the Open Championship produced the most compelling TV viewing this year and all credit to the BBC who kept the action alive to a world-wide audience throughout the day. But what prompted the controller to cut off the programme at the moment Mark Calcavecchia received the Claret Jug and held it aloft?
At least we did see amateur Russell Claydon receive his Gold Medal and hear the tribute to Norman Ferguson, but when everyone wanted to join Calcavecchia in his moment of glory, someone decided we had to view a repeat programme of bikini clad Brazilians on the beach of Copacabana!

Johnny Walker backs golf "down under"
RYDER Cup Sponsor, Johnny Walker, the world’s number one Scotch Whisky distiller is to sponsor the Australian Golf Classic with a $1m prize fund, making it the biggest deal in Australian Golf. Played at Royal Melbourne in November it is likely to be screened for British T.V. viewers.

Monro takeover
DAUNTON Hunt Ltd, acquired by George Palmer of Peterborough last year, have been taken over by Monro Horticulture, who have acquired the lease on The Heathfield premises Don and Elizabeth Hunt are joining the new company.

Battle at the Belfry
BEFORE a ball has been struck of the tee, the PGA and ticket agency Keith Prowse have been involved a legal battle with Company Director Marcus Evans and his two companies, over falsely representing themselves as authorised and entitled to sell hospitality and tickets for the 1989 Ryder Cup.
The High Court have ordered Mr. Evans not to use the name Ryder Cup in any of his ventures or to offer tickets and hospitality facilities at the Belfry.
Executive Director, John Lindsay at the PGA said those companies who had already booked through Evans will be helped if at all possible.

SISIS invitation golf tournament
FOR many years SISIS EQUIPMENT (Macckisfield) LIMITED have sponsored an annual Golf Tournament for greenkeepers in the North West but have now decided to hold the tournament as an Invitation Tournament to include their customers in all sportgrass maintenance.
The first Invitation Golf Tournament was played at The Cavendish Golf Club near Buxton on 20th June and competitors came from as far afield as Prestatyn, Birmingham and Leyland. The weather was glorious and a good time was had by all. The eventual winner was Terry Adamson of Wrexham Golf Club and he also received a set of cut crystal glasses and a replica of the trophy.

Practice for perfection
FOR those that revel in statistics a visit to the practice ground at Troon produced some sets of figures which were quite astounding.
The complete facility, provided by Golf Equip (GB) Ltd of Littlehampton, is responsible for setting up practice bays for all the Open Championship competitors, who are hitting balls from dawn to dusk in an effort to keep the groove in their swing.
Two Honda, four wheel bikes drive up and down the practice area all day pulling an automatic golf ball collector, covering an astonishing 600 miles, over the week of the championship.
The R & A provide 6,000 golf balls to be hit at a rate of 30,000 a day though the number falls towards the end of the week when the cut eliminates those who miss out on the final two days.
The balls are later donated to the Golf Foundation for the benefit of Junior Golf.

Royal Troon
THIS year's Open Championship not only provided one of the most exciting climaxes ever in the three way play off between Mark Calcavecchia, Wayne Grady and Greg Norman, but was a masterpiece of organisation.
The weather helped of course, though the staff in the Exhibition Tent sweltered in temperatures of over 100 degrees. Out on the links the unseen work took place when play finished and before dawn when Norman Ferguson’s crew groomed tees and greens to produce the perfect surface, despite emerging dry patch, a course condition that most golf courses has suffered.
Talking to Sheffield professional Peter Cowan on the 18th after he had missed the cut, his first words were - "There is not a bad hole on the course - I just played badly". For someone that must have been choked with disappointment it was a generous tribute.
Over the past 23 years the Wessex Peat Company have built up an enviable reputation for the manufacture and distribution of quality products throughout the United Kingdom and Europe.

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THE GOLF COURSE AUGUST 1989
TWO NEW RYAN ROLLERS FROM VICTA

Victa (UK) Ltd distributors for the Ryan range of turf care equipment, are to market two new rollers.

Over 20 years of experience has gone into the design and development of the Ryan Rollaire and the Riding Rollaire. Fine turf protection and elimination of ridges have been the main concept behind the round-edged design of the new waterfilled drums. Power is provided by a 5hp Honda engine coupled to hydrostatic drive system. The unique steering system and clutch-less transmission of the 24" Riding Rollaire make the machine extremely manoeuvrable with the minimum amount of operator fatigue. Roller weight is 495 lbs (224 kg) empty, and 1,107 lbs (502 kg) loaded.

The 30" pedestrian operated machine priced at £2,700 plus VAT. Empty roller weight is 425 lbs (193 kg), and 840 lbs (381 kgs) loaded.

Both machines are ideal for freshly seeded areas and newly laid turf.

MODUS 'T' - EXPAND PRODUCT RANGE

In the past three years Modus 'T' have introduced no less that 18 different products. These include the 'attachments' such as Spikers, Scarifiers, Skip Buckets, Corers, Brushes, Rollers, Combi-Tools, all of which fit in the 'one mainframe assembly'.

With the additional ability to apply an infinitely controlled hydraulic pressure, this system offers the ultimate in cost saving, and versatility.

Sweepers, Top Dressers, Level Conditioners, Mole Ploughs, Shredders, Corers: all are available as individual mounted units and plans are now well advanced for a move to NEW premises.

Another, all British designed product is planned to come onto the market this year, a MAJOR new addition to a very extensive range.

TURFOIL DRIFTPROOF SPRAY APPLICATORS

A Canadian company have developed a drift proof spray applicator which makes chemical application safer and more manageable.

The TURFOIL, which is based on the patented WINDFOIL technology, gives three main advantages.

Firstly, wind and drift are no longer a problem - this allows you to apply chemical when you plan to and when it is most effective.

Secondly, because drift is controlled, spray application is safer - chemical goes and stays where you want it and does not get on the operator or adjacent areas.

ULTRA SAFE CHEMICAL LOCK-UPS

With the 1986 Control of Pesticides Regulations now being enforced by the Health & Safety Executive, Ultra Fabrications Limited, of Huddersfield, have introduced UltraSafe, a range of chemical stores based on their already successful steel security units.

Ultra offer a wide choice of sizes within three main design types, Chem-Vault, Chem-Chest and the Mini Chem-Chest. All are made of 2.5mm fully welded steel plate finished in a synthetic enamel in any B.S. colour. Security is inherent in their pedigree but additional features have been added to each model to ensure maximum safety and compliance with the regulations.

The walk-in Chem-Vault has 10" sills at the base of the doorway to form a tank capable of containing even a major spillage. Two rows of lipped heavy duty steel shelves are fitted to the walls and supported also at the front. Electric lights and a thermostatically controlled heater are protected by PVC conduits and an E.L.C.B. Internal ventilation is provided by high and low level, vermin and weather proof vents. The heavy, Chubb-locked doors can be opened a full 270 degrees and held open by chains. Chem-Vaults are 6' wide by 7' high with four standard lengths from 8 to 16' but larger 8' wide units are available up to 24' long. Even the smallest has a tank capacity of 250 gallons.

More suitable for the groundsman with less storage need, the Chem-Chests are 4' high, 2' deep and 3, 4 or 5' wide. The padlocked lid lifts on gas struts revealing two shelves and ample space in the base which is seam welded to form a containment tank. High level vents ensure good air circulation. The Mini Chem-Chest has the same base dimensions but is only 2' high and opens like a chest freezer. Both are raised on skids to facilitate access for a fork lift truck.

All Ultra products are available through a network of agents in the UK including Northern Ireland. For further information on products and agents contact.

Brian Wallis, Managing Director, Ultra Fabrication Ltd., Utley House Prospect Street, HUDDERSFIELD, HD1 2NU Telephone (0484) 540236

Innovative Equipment Inc., 240 - 103rd Street, Saskatoon, Saskatchewan, Canada S7N 1X7, Telephone (306) 477-2000 Fax (306) 477-1913.
MASSIVE NEW INVESTMENT IN GRASS SEED CLEANING AT JOHNSONS

A massive new grass seed cleaning plant, the only one of its type in the country, has been installed by Johnsons Seeds at their Boston headquarters. Costing over £150,000, the new plant was designed, supplied and installed by a Danish manufacturer primarily for cleaning fescue seed but is equally capable of handling any other variety of grass seed.

Uncleaned seed is taken straight from bulk bins or sacks by a belt feed intake on the ground floor and conveyed to the top floor into a bulk holding bin. From there it passes into the pre-cleaner and on into a large screen cleaner and indented cylinders, with a special brushing machine incorporated in the flow line. The seed then passes into the ‘cleaned seed’ hopper where it undergoes automatic sampling. Finally the seed moves into the ‘weighing off machine and is bagged, labelled and stitched as it passes along the slatted conveyor to be palletised.

Michael Goodliffe, Johnsons production director, said “The new plant is several times more efficient than previous equipment and has a greater capacity. This one will break down the ‘doubles’ and re-clean the ‘overs.”

NEW NATIONAL 84" PTO GANG MOWER FROM ALLEN

Built for users of compact tractors is the new National PTO driven triple mower: by Allen Power Equipment.

All that is needed is a minimum 15 PTO hp tractor unit hooked up to this high performance cutter and you are ready to mow an 84" swath at a rate of up to 3 acres per hour.

Equipped with a high efficiency drive system, heavy-duty right angle gear boxes and final belt drive engage/disengage the mowers via the PTO clutch.

Because the cylinders are belt driven there are no wheels to lock and scuff the turf, if a foreign object becomes jammed in the reel. With no outrigger wheels, cutting units reach out over kerbs and sand traps to minimise additional trimming.

This new addition to the Allen range has hydraulic raising and lowering of cylinders, six bladed 8" diameter cylinders running on adjustable Timken bearings and joins the highly successful National 68" and 84" triple mowers already established in the U.K. market place.

The price of the Allen National PTO Gang Mower is £3995.00 + VAT.

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THE GOLF COURSE AUGUST 1989
**ROYAL DUTIES FOR A HUXLEY THREESOME**

The Royal Parks Division of the Department of the Environment has bought three items of professional turf equipment from Huxleys Grass Machinery to help look after formal grass areas within the Royal Parks and gardens.

The Huxley 358 Greensmower, has been supplied to maintain Royal Lawns together with a three wheel Cushman Turf Trucker vehicle fitted with a tipping Long Box with detachable sides and tailgate.

Supplied and equipped with a rear-mounted Huxley H44 Fine Turf Scarifier, the combination is used for regular aeration of Lawns, removing thatch and other material to encourage healthy grass growth.

**ROUGH CUT ROTARY SAVES STRIMMING TIME**

Trees, trees hundreds of trees! Just the thing to enhance a Golf Course. Many golfers would argue there is no finer sight than a tree lined fairway, all very well for the player but what about the greenkeeping staff. There is no doubt that trees do present problems for greens staff as well as the occasional wayward drive. Not any more though, the new HMR from TORO has the ability to leave uncut circles as small as 8" diameter.

Don Major, Head Greenkeeper of Bletchworth Park Private Golf Club has purchased an HMR 1600 with 52" cutting width, in his opinion "Its time saving abilities are immense, the HMR will save hours usually spent operating strimmers. We can use the machine around 200 or so trees on our course and on numerous pathways." The HMR has two cutting widths; 112cm (44") and 132cm (52"). Separate gearboxes drive the rear wheels independently so that drive can be cut off from the inside rear wheel when turning sharply. This prevents scuffing or marking the turf and because speed is automatically reduced on sharp corners the operator can cut to edges more easily.

The HMR 1600 is highly versatile with excellent stability on hills. Cutting heights are adjustable from 37.5 to 112.5mm. Picture above shows Don Major (left) Head Greenkeeper of Bletchworth Golf Club is shown the tight cutting circle of his new Toro HMR 1600.

Edward Huxley (left) with area sales manager, Ron Rose, checking the new machines prior to delivery to London's Royal Parks.

---

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WEATHER MATIC LAUNCH NEW WATER CONTROL SYSTEM

Weather-matic has introduced an affordable and versatile irrigation water management system designed specifically for golf courses.

The new Command Satellite system features MK12C Command units and MK12S Satellite units. The communications link requires only 24 V.A.C. with 2 wires common from each Command to all associated Satellites.

The Symflex System also features a pump interrupter circuit which provides remote sensing of mainline pressure and flow to assist in pump protection; a system shutdown alert circuit to prevent pressure surge damage caused by rapid valve closure; and a remote sensor circuit to monitor special water management conditions such as wind, rain, soil moisture and temperature.

KUBOTA ENGINE FOR MALLARD TRUCK

A new Kubota air-cooled diesel engine has been chosen to power a new British built all-terrain light truck. The engine has a remarkably low fuel consumption, using some 40 per cent less per hour than an air-cooled petrol engine of the same power, and is much quieter.

Until now all Mallard designs have had front-mounted engines located between the seats for the driver and his mate, but truck designer David Brown was searching for an engine which would be compact enough to fit under the load body of his new Mallard Mark V so as to give less noise for crew and bystanders alike. David Brown said, "Our Mallard Trucks are produced as true multi-purpose vehicles and can have 3 point hydraulic linkages fitted at front and rear to carry a wide range of equipment - so the engine has to be able to drive an hydraulic services pump as well as deliver sufficient power to the rear wheels. The OC 60 does this comfortably, it just 'sets its teeth' into the load and keeps going'.
OUT AND ABOUT

FIRST GOLF COURSE FOR POLAND
(A Golf Course - Exclusive)

An 18 hole golf course with a driving range is to be built in the grounds of a luxury hotel, converted from an Old Bishop’s Castle at Pultusk, a medieval town some 60km north east of Warsaw.

The project has reached the design stage to plans drawn up by the Swedish architect, Jan Sederholm who has been responsible for a number of golf courses in Scandinavia.

The hotel with a recreational complex opened last month, the course will follow, constructed by a local civil engineering firm under the management of Richard Gacke, a Pole who has worked in Nigeria for 15 years, where he acquired his golfing interest as a member of the Ikoyi Club in Lagos.

Richard confesses to be a “lousy” golfer, but says that he is keen and does at least know something about the game!

Once the course is finished, there is an option to build a further 9 holes.

It seems there is an immediate demand for at least 20 golf courses in Poland just to cater for the tourists who take their clubs to West Berlin and Vienna and then move on into Poland to continue their holiday. That takes no account of the local population, who are at present unable to take up the game.

Estimates point to over 40,000 people waiting to join a club in Stockholm, many quite prepared to join the new club at Pultusk and fly in to stay at the hotel.

In fact the Swedish partner has already reserved a number of membership cards and when ready, the course will also be available to hotel guests.

Once constructed, Richard Gacke will take over as Course Manager and will then be faced with the task of training a greenkeeping crew. Purchasing the right equipment for course maintenance is likely to be a major problem as there is nothing of suitable manufacture in Poland.

However as one of the current subscribers to ‘the Golf Course’, he is sure to pick up a great deal of the information he requires.

4 WHEEL DRIVE FOR JACOBSEN FAIRWAY MOWER

The Jacobsen LF-100 5 gang fairway mower is now available with four wheel drive. This option allows the LF-100 to climb hills without damage to the turf caused by wheel spin and slippage.

At the touch of a knob, the operator can go from two wheel drive to four wheel drive and back, without stopping.

The 100-inch cut and mowing speeds of more than five mph mean high productivity. The up-front placement of the outside reels allows the operator to see the trimming edge without looking behind, for a cleaner mowing line.

The LF-100’s five 22-inch reels deliver a tournament-quality cut. Pedal-operated real lift helps the operator cross-cut fairways effectively. A tight turning radius and power steering provide extra manoeuvrability and comfort.

ICI DONATION TO AQUATIC WEEDS RESEARCH UNIT

HRH The Duke of Gloucester has received a cheque on behalf of the Aquatic Weeds Research Unit for (3138) from ICI Professional Products.

The cheque, presented by Patrick Goldsworthy was a donation based on the sales of the ICI publication ‘Aquatic Plants - A Guide to Recognition’ by David Spencer-Jones and Max Wade.

The book is still available at a cost of £7.50 inc &p from Borrcombe Printers Ltd., Publications Department, Unit 6, Buds Lane, Romsey, Hampshire, SO51 OHA.
The Verti-Drain, invented by the de Ridders in the Netherlands specifically to emulate the old raise forking technique - insert and prise back, which was used on golf greens at my instigation on Dutch courses, proved very difficult to introduce into Britain but thanks to the efforts of a few enthusiastic contractors in the early eighties - and it really is a contractors' weapon unless more than 18 holes are involved, it has been regarded as the answer to all compaction problems.

Of course, it is not! Only where there is a permeable situation, within the reach of the tines will it improve drainage and persistent use on wet sticky clays aggravates problems, as has been discovered on some poorly drained football pitches.

Timing is also vital if disturbance is not to be intolerable. This naturally does not just mean avoiding Vertidraining a few days before Captain's day, but primarily choosing a time when surfaces are firm enough to avoid wheel marking and subsurfaces dry enough to be friable and so break up on lifting.

The use of flotation tyres initially eliminates wheel tracking even (or especially) with the larger models. Depth is as vital as lifting. There is no point in Vertidraining 6" deep with no lift we have cheaper machines with less potential for disturbance. It is vital to go down to the drier less compacted areas and to penetrate any pan formation.

Closer spacing avoids the rippled effect and this means slower operating speeds. Since the whole green (or tee) is lifted, hopefully uniformly, some settlement is inevitable.

Many greenkeepers have found it saves many grumbles to run a hand machine over the greens immediately afterwards, with the reel set up and...
the box weighted with sand bags. It is definitely a very bad idea to sand greens after Vertidraining. If it is desired to keep the holes open to provide a pattern of vertical drains, then use clean uniform 4mm screened 'gravel' screenings from sand quarries. It is available! This either goes down the holes or is swept off. The sand layers, even under dry conditions and we do not want to resurrect the heresy of shallow tining and massive sand dressings, causing severe root breaks and layering and reduced drought resistance and in consequence gross over watering.

Above all, if in doubt leave the holes open. Only if the weather is suitable and there is still growth to absorb it use the normal (mid seasonal) top dressing. Many a greenkeeper has suffered from listening to members moans and going out on a wet winter's day with a Cushman fully laden with sand, putting almost ineradicable deep tracks across all the greens as well as smearing greens. Timing is therefore vital and in consequence early booking with Contractors, who naturally want to spread their contract season. I would rather see greens Vertidrained in July and August than in November, but the weather is the final arbiter.

Vertidrain only where there is a drained or potentially drainable layer below, though this can include uncompacted dry friable clay! Vertidrain only under suitable 'soil' conditions, which includes weather! Vertidraining must be backed up by regular aeration, deeper in winter but frequent in the growing season (to encourage penetration of rain and irrigation). Do not fall into the trap of thinking that this is the solution to all problems it isn’t, but it is a very valuable weapon and greenkeeping owes the de Ridders a vast debt of gratitude.
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A lonely figure walking up the par five 16th carrying a single wood was recognised immediately as Arnold Palmer on his way to find a wayward shot.

As he passed a middle aged lady leaning against the fence, Arnold smiled, raised his hand to his forehead and said "Good Afternoon".

She looked in stunned silence for a second or two, then rushed across to her husband and said "He spoke to me - he actually spoke to me - Arnold Palmer said good afternoon!"

Arnold has made a great many people happy over four decades of competition. He has just added another fan for life.

**Smoothing the sand in the dunes**

Greenkeepers from all parts of the country came to Royal Troon to assist with bunker raking. This year, on the drought stricken Ayrshire course their duties were totally confined to smoothing the sand, unlike last year at Royal Lytham when it was all hands to the pump to make the course playable, following hours of torrential rain.

It was so dry, at Troon the wispy rough was like a tinder box and it was inevitable someone would drop a lit cigarette into the dead grass and start a fire.

When it happened at the Prestwick end of the course, spectators were quickly evacuated and the fire brigade were on the scene within minutes to bring the blaze under control.

**Cheers!**

Events such as the Open Championship always produce a captive gathering of people with money in their pockets. Hand in hand there are those with the sole objective of getting it out. Although one can understand the necessity of covering the cost of the stand rents charged by the R & A, the prices demanded by some of the food and drink suppliers were quite obscene.

No names, but the two organisations to whom we will raise our glasses in a grateful toast are the Golf Club Stewards Association for their friendly welcome and bar prices equal to those charged in most clubs.

Coupled with those thanks is one to the members and committee of Royal Troon who also dispensed hospitality, without inflation, in the club bar.

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Collingtree Park, the executive course that brings a new dimension to golf in Britain

John Lelean has a priviledge pre-view of sculptured fairways in a lakeside setting

Just two years ago, work commenced on the outskirts of Northampton to develop one of the most exciting new golf course projects anywhere in Europe. Now, spot on schedule, the first stage, the 18 hole golf course is nearing completion to a standard that even a hard bitten golf writer who has attended many a press conference announcing a new venture, must confess has more than lived up to the smoked salmon, white wine publicity launch.

To sum up this latest addition to a golf starved country - its a Cracker!

Much has been written by the purists that the "American Concept" of man made courses based on the original Scottish links or the later sandy heathlands in the Surrey stockbroker belt is pure here-say. But golf has become a truly international game and in the same way that golf courses developed in parkland when the linksland was exhausted, so other tracts have needed to be developed to satisfy an ever increasing demand for somewhere to play.

What has been done at Collingtree Park is the forerunner of the fourth stage in golf course development in the British Isles. If the land is unsuitable, then move it about until it is. Mechanisation has provided the opportunity to build today the equivalent of the Hanging Gardens of Babylon, the Pyramids of Egypt or the Great Wall of China. The architects in ancient times had at their disposal an army of dispensable labour, modern designers use one man at the controls of an earth moving machine.

Management trainers advance the theory that problems do not exist. Every problem they say, presents an opportunity. Certainly there were plenty of opportunities at Collingtree Park.

Local residents expressed the view that part of the site was quite unsuitable for a golf course because low lying wetlands frequently flooded and a slow flowing stream, burst its banks at the mere hint of a storm.

In conjunction with the local water authority this "opportunity" was examined with the result that eight man made lakes, were incorporated into the course design, inter linked and controlled by stone weirs. They not only come into play on eleven of the holes, but it has solved a potential flooding problem for the surrounding area.

Mature trees within the old parkland have been cleverly incorporating in the sweep of the fairways, the flat, partly boggy meadows, completely reshaped to provide not only a fine test of golf, but a vista which is unrecognisable to previous owners of the land. It is a golf course, designed with imagination and sculptured by bull-dozers.

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The sluggish stream has been opened up, silt traps constructed, the banks landscaped, picturesque waterfalls add aeration, encouraging a thriving fish population. Black and white wagtails skip across the stones, herons patrol the banks and both flora and fauna, are flourishing. The contractors, Southern Golf have now left the site, leaving only the arborists to plant new trees and shape those around the fringes of the fairways. In the words of Course Manager Peter Jones, “We are now growing the course in”.

Peter joined Collingtree Park just over two years ago and has seen it take shape as the months progressed. Originally involved in golf course construction at Woburn with the development of the Dukes Course, he gained further experience in the building of nine holes at Harrow School and the Abbey Hill course at Milton Keynes. Later he joined the greenstaff at Woburn and was involved in the re-construction of ten holes and the “in-house” laying out of the subsequent Duchess course. At Collingtree Park his brief was to prepare a total maintenance budget, negotiate the purchase of machinery, recruit and train a greenkeeping crew and have the course ready for play by the Autumn. All this he has achieved. His greens are Pencross, sown between July and September last year on 12” of pure sand and all are in magnificent condition. It is possible to find a stalk of poa annua, but it is almost like searching for the four leafed clover. Admittedly the only puts currently struck over the surface are those played by the greenkeeping staff, but as the opening of the course has been put back until Spring next year, to coincide with the opening of the first tee complex, there is still another nine months of grooming and maturing to come.

The original plan was for 185 luxury houses on 60 acres skirting the fairways and this development is now underway as is a block of sheltered housing and nursing home. The construction of a hotel overlooking a lake and the island 18th green, will start shortly but is not expected to be ready for occupation until 1992. However, in time for the April opening of the golf course, the Golf Academy building will be completed, to dual as the temporary golf house in addition to its main role as an indoor teaching school.

Three outdoor specialist “Academy” holes, now maturing, will complete the training complex, backed by a grass two tier driving range, and sheltered cubicles on astro turf, illuminated by floodlighting. The greenstaff, headed by Robert Gilbert, previously at Billingham Golf Club in Cleveland are with one exception not far out of their teens, but all show a keenness and enthusiasm that Peter has little difficulty encouraging.

Two of the staff, working on equal terms with the men are Paula and Angela. Both in their 20’s Paula has a background in horticulture and Angela is fast acquiring an intimate knowledge of the complex Waterman irrigation system.

In the sheds another young man, Dominic is the course mechanic, responsible for keeping all the machinery in top class working order. As little as possible goes out for repair and all the grass cutting machinery is sharpened in house on their own grinding equipment.

Last month he recruited four school leavers to the staff. They will they gain maximum benefit from on job training, but will receive a first class greenkeeping education, attending a block release course at a college to be chosen.

Peters Jones said, “We are developing a team each responsible for achieving part of the overall jigsaw. Irrigation and mechanical problems are full time jobs for two of the staff, they in turn are training colleagues responsible for other tasks.” Peter added, “I am pleased with the way the greenstaff communicate with each other and I am sure there are worthwhile career prospects in greenkeeping for those who have shown an enthusiastic approach to the job.”

The policy of International Resort
Holdings is one of growing and developing their own staff to be available for the future expansion of the company's interests. Just prior to the Open Championship at Royal Troon, BBC sports commentator Renton Laidlaw chaired a discussion with Jacklin, Norman, Floyd and Nicklaus, all of whom have moved into course design in varying degrees. The “confession” extracted from Jack Nicklaus is particularly pertinent as he admitted that in his early days of architecture, he laid out a course to suit his own game, not necessarily playable by golfers of indifferent ability.

How many of us can drive 250 yards from the tee with a slight fade? His more recent designs cater for all levels of golf, by a judicious siting of a number of tees for each hole, each one lining up a variety of approach shots to the green.

Collingtree Park is intended to be a golf course catering for the company golf day, society golf or hotel visitors. They require the best facilities that can be provided and if this necessitates the luxury of a golf buggy it should be available.

From a business point of view there is the additional advantage of speeding up play and subsequently increasing the number of rounds per day. A decision is yet to be finalised on the formation of a member's club, but hardly a day passes without a written application or a telephone enquiry from golfers who are prepared to join without asking the price of a membership fee.

Each application is carefully filed on to the computer and if it is eventually decided to form a club, then all the applicants will be informed. But to return to that superb course, mounded, grooved and shaped to sweep away from the tees, to the hole in the putting green.

The engineered drainage system not only gathers underground water, but can cope with a sudden storm when surface water runs off the mounding and channelled to the lowest point in the fairways. Here, storm gratings have been installed in the swales to pick up surplus water to be carried away to the lakes and streams and alleviate any danger of flooding.

The developers have used designers from the USA, because with the experience of similar constructions in Florida, they can accurately calculate the technique of cut and fill to give contractors the exact drawings to fix a contract price. Peter is enthusiastic about the way the golf course construction has progressed with little disturbance from the accompanying building development taking shape around the course. Project management, headed by Richard Skene, has ensured that the necessary roads and services have been installed with the minimum disruption to the delicate task of seeding fairways and growing the grass.

There is little doubt this privileged pre-view of one of the most exciting golf course developments in Britain has more than lived up to expectations. Next Spring when the paying customers arrive, they too will discover a fine course with many challenges. My only advice is to bring a bag full of old balls, as many a card will show a penalty shot for a lost ball in one of the lakes.

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M O S T GOLF COURSES like to offer their golfers an artistic contrast between the fairways and roughs, a feature that enhances the natural beauty of each hole. This is true especially if the fairway perimeters are curbed rather than set in a straight line. This feature is termed contour mowing, and it is usually considered highly desirable by most golfers.

Historically, while the term "fairway" was understood to be the closely mown areas of the course - other than greens - the word did not appear in the Rules. Even today, the Rules of Golf doesn't use the term. Between 1700 and 1850 golfers played principally on links courses adjacent to the coastline. Their fairways consisted of the native grasses, which were bents and fescues, kept short by the first greenkeepers, the grazing sheep, and rabbits. The deep, inescapable rough on either side of these fairways was spotted with heather, a woody groundcover, and gorse, a thorny bush. The main route to the putting green was usually no more than 40 yards wide. With such narrow fairways and difficult rough, slow play, injuries, and lost balls were an integral part of the early game. In the middle-to-late 19th century, as play increased at St. Andrews following the arrival of the gutta-percha ball, the fairways were widened, principally to prevent injuries. The heather was cut away in what was probably the first attempt to specifically shape the route between the teeing ground and putting green. The fairways on British courses eventually became even wider, for two reasons. First, the gutta-percha ball travelled further than the leather-bound feather ball, and therefore required a wider fairway. Second, since the gutta-percha ball would not dent like the feathery ball, the players now had new clubs called irons. Playing with irons killed or injured much of the heather and the fairway grasses spread into more of the links land. With more grasses on the fairways, additional men called greenkeepers were needed to help maintain these large areas between the tees and putting greens. Even in the early days of golf, the primary goal with the tee shot was to aim at, and hit the fairway. Later, more emphasis was placed on hitting a particular side of the fairway. Position became even more important as the fairway was perceived as the defense for the putting green. The reward for a well positioned tee shot was a better angle to the putting green, and a well-designed fairway helped make the game even more interesting. The first greenkeepers didn't have enough equipment or labour for intense maintenance, they believed the fairway grasses should take care of themselves. The low-maintenance approach worked quite well, given the acid, sandy soils and the temperate climate. These conditions caused the fairway grasses to grow very slowly in beautiful patterns.

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proved maintenance standards and enhanced fairway design can make a course more pleasing and challenging.

Probably the most dramatically designed fairways in the United States are on bentgrass courses. Many golf courses with bentgrass and Poa annua fairways are maintained with small three-or-five-plex reel mowing units, and in many instances clippings are removed as well. Smaller mowers came into use as a response to the desire of golfers for tighter, drier fairway lines. Because lightweight mowing produces healthier turf as well as better playing conditions, both golfers and superintendents benefit from the programme.

In conjunction with this new mowing programme, fairway acreage has been significantly reduced, in part to lower costs. Though fairways have become narrower, smaller, more maneuverable mowers have led to more interesting mowing lines. Thus, these smaller mowers have dramatically improved bentgrass and Poa annua fairway design and maintenance. With healthier fairway turf, better playing conditions, and improved fairway designs, golfers now prefer less fairway turf and more rough on these bentgrass golf courses.

In contrast, bermudagrass golf courses have long provided the standard for excellence in fairway playing conditions. The bermudagrasses are considered the highest quality fairway turf, particularly the Tifway hybrid. However, bentgrass maintenance and care is radically different from bentgrass and Poa annua. Bermudagrass golf courses will normally maintain more fairway acreage and use bigger and heavier mowing machines. Grass clippings are seldom removed. There are agronomic reasons for these differences in mowing practices and care. During the active growing season, bermudagrasses require more frequent cutting than bentgrasses and Poa annua. Bent/Poa fairways are usually cut two to four times weekly, while bermudagrass fairways are cut four to six times a week. Also, the active growing season is much longer for bermudagrass golf courses. Bermudagrasses are cut nine to 12 months of the year, while the active growing season for most bentgrass and Poa annua golf courses is five to seven months.

Even though all turfgrasses respond positively to lighter mowing equipment lighter mowers are not generally used on bermudagrass fairways because of their faster growth rate and longer growing season. A sharp seven-to-nine-gang reel mower will still produce an excellent fairway surface on bermudagrass. These are the most efficient and economical mowers for open spaces like most fairways. Nevertheless, there are times and situations when smaller three-or-five-plex unit mowers are helpful on bermudagrass fairways. Many golf courses do maintain approaches to putting greens and par-3 holes with the lightweight equipment. These machines are more maneuverable in restricted areas, and they allow the operator the flexibility to change mowing patterns more easily. Also, these lighter machines will cause less damage to wet or poorly drained fairways.

**TOPICAL TIP**

The prevalent philosophy today with any fairway contour mowing pattern on both bentgrass and bermudagrass courses is not to make the game too difficult. The primary goal of any mowing design should be to provide enjoyment for the greatest number of golfers. Fortunately, there are only a few guidelines to follow to start a successful contour mowing program at your club:

1. Make the widest point of the fairway 170 to 210 yards from the middle tee, or wherever the majority of drives land. Fairway widths in these areas could vary from 35 to 60 yards, with the norm being 40 to 50 yards.
2. Narrow the fairway shape in the area from 240 to 290 yards off the tee in the landing areas of the scratch golfer. A 50- to 40-yard width is desirable for these better players.
3. Start the fairway 50 to 75 yards from the regular tee. This gives everyone a chance to play from the fairway. For the golfer to see differences between fairway and rough grasses from the tee, it is important to cut the roughs at least one inch taller than the fairways for bentgrass courses and three quarters of an inch taller for bermudagrass courses. It is important to cut the roughs at least one inch taller than the fairways for bentgrass courses and three quarters of an inch taller for bermudagrass courses. It is also important not to let the rough grow too tall, especially bermudagrass rough, or the penalty for missing the fairway is too great. Many clubs now mow an intermediate or secondary rough adjacent to the fairway perimeter to reduce the penalty for barely missing the fairway. This is seen most often on bentgrass and Poa annua courses that have narrow fairways.

Bobby Jones felt the primary purpose of any golf course was "to give pleasure to the greatest possible number of players, without respect to their capabilities." A sensible fairway contour mowing program is one intelligent way for a golf course superintendent to implement this philosophy.

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