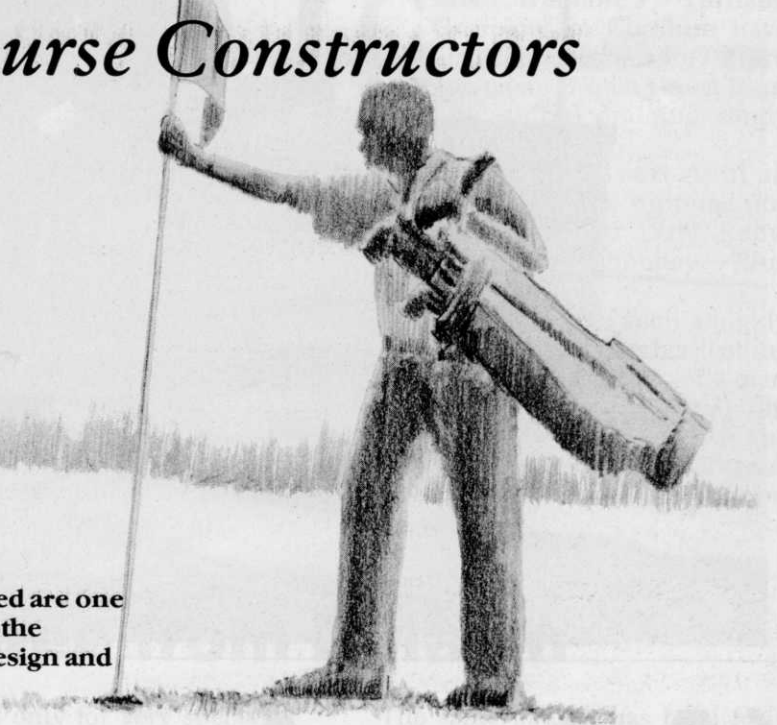




CHAPEL WORKS  
WALDRINGFIELD  
WOODBRIDGE  
SUFFOLK IP12 4PT  
TEL 0473 36 791  
FAX 0473 36 370

## **CDC GOLF & LEISURE DEVELOPMENTS Ltd.** *The Golf Course Constructors*



CDC Golf and Leisure Developments Limited are one of the few Companies in the Country to offer the complete service in the field of golf course design and construction using skilled personnel to full completion.

- Detailed greens complex and contours
- Drainage calculations and layout
- Initial land survey, planning application submission
- Specification and Bill of quantities
- Budget costings and construction programme
- Turf establishment and management. Advice after completion

**WE ARE ABLE TO  
UNDERTAKE ANY DEVELOPMENT  
THROUGHOUT THE WORLD**

## **CDC HORTICULTURAL EQUIPMENT Ltd.**



CDC Horticultural Equipment has a comprehensive fleet of maintenance equipment for hire and can supply machines until clients know precisely the equipment that they need to purchase.

The Company specialise in the acquiring and refurbishing of good quality turf maintenance equipment for resale.

Satisfied clients include Golf courses throughout the United Kingdom and Europe.

*For The Complete Service*  
**Telephone Waldringfield 0473 36 791**



# 'Advantage' over its rivals

*A guaranteed annual meadow grass free turf named Advantage was launched in January at Harrogate by the York turf growers, Rolawn.*

**R**esulting from a long term research programme funded by British Seed House Ltd, Queens University Belfast, have bred two varieties of bent and fescue grasses which after chemical treatment will produce fine turf, free of poa annua and weed.

Under an exclusive contract, BSH Ltd have agreed that only Rolawn will be supplied with the treated seed, Countess Chewings Fescue and Duchess Agrostis Tenuis, but the deal has raised quite a storm of protest among some other turf growers.

A claim that turf can be guaranteed to have no annual meadow grass is like finding gold at the bottom of Finnean's Rainbow, opening Pandora's box or capturing the Abominable Snowman. All knew it was possible but highly improbable.

In the circumstances the name Rolawn have given it - Advantage - could not have been more apt.

In simple terms the seed mixture has been bred to be immune to the affects of amino triazole an agricultural chemical which is used as a complete wipe-out for all weeds and grasses.

It is not available to those maintaining amenity turf, but Rolawn have obtained special authority to treat the grass growing in their nurseries.

According to Robert Laycock, Rolawn's Technical Director, the turf is grown from an 80% fescue 20% bent mix and will be available in the spring at around £2.25 per square yard. When delivered there will be no poa or weeds in the grass.

He agreed that it was possible for incursion to take place from surrounding areas, but said that if the greenkeeper kept a close eye on the

sward, repaired bare patches and immediately removed offending species, then the turf would remain poa free.

**W**hat is unlikely under the tightening pesticide regulations is the freedom to use amino triazole when the turf is in situ on the course. To do so illegally could put staff and golfers at risk and is likely to bring prosecution and heavy fines.

Dr. Peter Hayes, Director of the Sports Turf Research Institute at Bingley says there is no reason why the turf should not remain Poa Annua free if maintained correctly.

He also said amino triazole is a chemical used extensively in horticulture.

Duchess Browntop Bent is a cultivar with a high rating in the recommended list published in the STRI 1988 edition of turfgrass seed, though at the time it was said to be still under review.

Countess was not mentioned, but is expected to be included in the 1989 edition.

**I**nturf Ltd along with other turf growers have also been working on producing poa annua free turf. Inturf in fact do not actually claim to have poa annua free turf but offer a turf treated against annual meadow grass. Inturf at present has 1600 acres under cultivation at four farms around the country. About 85 per cent is selected for use on golf courses and sports grounds.

**T**urf grower Tim Fell from H.R. Fell & Sons, who sell turf from the South Humberside nurseries under the name of Lindum Seeded Turf is sceptical not so much about the final results, but of the mystic that has been built up in its production.

He said the mixture used to produce the turf free of annual meadow grass has been achieved because of its inherent tolerance to amino triazole, through breeding, rather than prior treatment. Turf treated with the chemical has an initial scorched look but these particular bents and fescues recover fairly quickly.

Lindum Seeded Turf also produce their own poa free, fescue/bent turf, launched at Windsor last year, but Tim Fell was reluctant at present to give details of how this was achieved.

Current stocks have sold out, but he hopes ample supplies will be available from April.

**C**hris Watmore's Turfland Company in Cheshire have also claimed a poa free sward under the name Crown Green Plus, grown on a free draining sandy loam.

He says that from next April all their varieties will be supplied poa free as well as the Lady Ruby, Sportsman and Bonney Blue varieties.

It is certain that in such a highly competitive industry, other leading suppliers will be fighting for a market share and if producing turf without the dreaded weed grass is the way forward then we can all look forward to better greens and fewer putts in 1989.

## A realistic guarantee from Rolawn

The following questions were put to Robert Laycock, technical director of Rolawn on behalf of greenkeepers.

**Q.** Is the soil type on which turf for greens is grown very important?

**A.** Yes, particularly for golf greens turf, but all Rolawn turf is grown on soils, which can be classed as sandy loams or loamy sands. They are among the most free-draining natural soils in the country. Only pure sand drains faster and no large scale producer in the UK grows turf on sand. It would be impractical to produce large areas of turf on pure sand for an economic price.

**Q.** In 1988 you introduced the idea of 'washed Rolawn' for use on all-sand constructions. Is this still available?

**A.** Yes, any of our grades of turf can be supplied washed, which enables a playing surface to be created in the shortest possible time using soil-free mature turf.

But it is only for very specialist use.

**Q.** Your new greens turf, Rolawn Advantage, is claimed to be free of annual meadow grass. How does this improve on your past greens turf?

**A.** Rolawn have always pioneered new techniques. In the early 1980s we grew turf on sterilised soil to produce turf virtually free of annual meadow grass. However, this was a costly, difficult and time consuming exercise and as time went on and the quality of our conventional turf improved, we took the decision to stop sterilising the soil. Rolawn's greens turf has been virtually free of annual meadow grass for some time. In fact, out of the acres of greens turf supplied in 1987 we had only two complaints of excessive annual meadow grass, and two to date in 1988. This compares with our records for 1985 which showed thirteen complaints of annual meadow grass in our greens turf.

The same pattern has been followed with all our turf grades.

Unlike some other growers, Rolawn never make claims that are unrealistic, yet we are prepared to guarantee that Rolawn Advantage will be sold free of annual meadow grass.

**Q.** How do you eliminate annual meadow grass?

**A.** The Advantage turf is grown from a mixture of Chewings fescue and Browntop Bent which have been specially bred at Queens University Belfast in a research programme sponsored by British Seed Houses to be herbicide tolerant. This means that we can spray the turf fields during the production cycle to eliminate weed grasses. The seed mixture is exclusive to Rolawn so no other grower can use it for some years to come. In the unlikely event of a weed grass being found in our turf we will happily replace the affected roll at our expense.

**Q.** Can the greenkeeper continue to

## Headquarters move from Bingley to Aldwark

**T**he BIGGA are to move their headquarters from the Sports Turf Research Institute at Bingley to Aldwark Manor, a golf and country club hotel on the outskirts of York.

The impending move was announced during the ETM Exhibition at Harrogate, subject to successful negotiations with the owners, but since then Aldwark Manor and the nine hole golf course has been sold to a York based property company Chessingham Estates, though this is unlikely to have any affect on the move planned for the first week in May.

Aldwark Manor on the banks of the River Ure was built in 1865 as a wedding present for the daughter of Lord Walsingham. It has changed hands several times since and during the war years became the headquarters of the Canadian Airforce who flew from the nearby airfield at Linton on Ouse. Later a special school was opened under the control of the County Council.

The nine hole golf course was laid out in 37 acres of the tree lined grounds of the estate some ten years ago and the club currently has a membership of around 200. Guests staying at the 20 bedroomed hotel can also use the course.

In the short term the BIGGA Executive Director, Neil Thomas and his staff will use an adjacent building as the Association's headquarters offices. Later there are plans for a purpose built building nearer a new clubhouse for golf club members.

Mr Jeremy Benson, General Manager at the Aldwark Manor Hotel said the new owners are fully supporting the move by the Association to Aldwark in May, though they were not able to make an official announcement until the purchase contracts are signed at the end of February.

The golf course managed by Head Greenkeeper, Richard Gamble is also in line for redevelopment. Negotiations were already taking

place for the acquisition of additional land to extend the course to 18 holes and it is understood they will continue under the new ownership.

**I**f the company are able to extend the golf course to 18 holes it will offer an excellent opportunity to use the construction period as a training operation for other greenkeeper members. Accommodation can be provided in the hotel, at a discounted rate, there are Seminar Rooms for lectures and opportunities for practical exercises out on the course.

It is anticipated the golf course will be extensively used by equipment manufacturers for 'Open Days' and demonstrations. The hotel complex is ideal for distributors conferences.

From the A1, Aldwark Manor is approached over a narrow toll bridge, one of the few left in the country, but at 8p a car this is far cheaper than a detour through York.

spray the turf once established to keep out Poa Annuua?

**A.** Unfortunately it is not legally permissible for them to use the chemical but Advantage will give the best possible start to any green.

**Q.** Will the Advantage turf be mown at the same cutting height as the rest of your turf, which takes a greenkeeper quite a while to bring into play?

**A.** For some time we have felt that our greens turf could be enabled to be brought into play earlier if it were mown shorter than our normal 3/4in to 1in cutting height. Accordingly we have purchased a range of equipment more likely to be found on a golf course than on a turf farm. A member of Rolawn staff is now permanently assigned to caring for and maintaining the Advantage turf. In this way our product will be much closer to what the greenkeeper actually wants and will speed up the creation of a putting surface considerably.

**Q.** The early maintenance of the newly turfed green is crucial to getting a good result. What do you advise?

**A.** We can supply a first class turf only to see it ruined by poor

management within a matter of months. This may allow the ingress of annual meadow grass or delay the start of play. We give advice in the early management of the turf, but in the long run the standard of the end results are up to the greenkeeping staff. Much of good greenkeeping is attention to detail - removing a weed by hand when you see it for the first time rather than leaving it to produce seed, for example.

**Q.** Once the turf is laid, how long will it be before it is ready for play?

**A.** That depends on when the turf is laid. If it is laid in the Spring, it should, with proper care, be ready for play in three to four months, if laid in the autumn it will be ready by the following Spring. The Sports Turf Research Institute say that turf needs fifteen growing weeks before it's ready for play, so if it is a mild winter, it will be ready even earlier. This is something we will be taking a keen interest in and will give a prize to the greenkeeper who gets his Advantage turf into play in the shortest time.

**Q.** How much of this new turf is available.

**A.** This is a key question particularly as we are all used to turf growers making claims for new kinds of turf which are only available in limited amounts or are still at the planning stages and there's never enough for a golf club needing turf for 18 new greens for example. We should have sufficient to meet the demand this year, a demand we expect to be heavy as we intend promoting Rolawn Advantage extensively.

**Q.** Where can Advantage be seen? Has it been used and tested by greenkeepers?

**A.** Any greenkeeper is welcome to visit out Turf Production Nurseries in Yorkshire and Bedfordshire to see the growing turf. In addition a number of leading golf courses have taken the advance sowings, including St Pierre Golf Course, Chepstow, Fulford Golf Course, York and the Gleneagles Hotel Golf Courses for the Championship King's Course. The greenkeepers have expressed a willingness to vouch for their satisfaction of Advantage - whatever we might say about the turf, it's their opinion that matters in the long run!



GOLF COURSE EQUIPMENT AT ITS VERY BEST

EVERYTHING YOU NEED - NORMALLY FROM STOCK

GOLFBALLS	PUTTERS AND IRONS	CLUBHOUSE FLAGS AND FLAG POLES	DRAIN RODS AND GULLEY SCOOPS	DRIVING RANGE, BALL DISPENSER AND BASKETS	TEE MATS DRIVING RANGE MATS PRACTICE NETS	NOTICE PLATES ANY SIZE AND COLOUR	BOOT AND SHOE MUD BRUSHES HAND AND ELECTRIC	TEE MARKERS AND LITTER BINS	TO NAME JUST A FEW
-----------	-------------------	--------------------------------	------------------------------	---	---	-----------------------------------	---	-----------------------------	--------------------



From us direct - or from our salesman or our dealers - phone 0582 597262

342 Selbourne Road, Luton, Beds. LU4 8NU

RELIEVE COMPACTED AREAS - IMPROVE DRAINAGE  
GREATER ROOT DEPTH

BOOK NOW

FOR SPRING



GREENS, TEES AND APPROACHES

NOTHING GOES DEEPER

*Brian D. Pierson*  
(Contractors) Limited

Homestead Farm, Ringwood Road, Three Legged Cross, Wimbourne, Dorset. BH21 6QY

Telephone: Verwood 822372 & 824906 (STD 0202)

# EDUCATION

## BIGGA/SUPATURF 1989 EDUCATIONAL CONFERENCE QUEENS' COLLEGE CAMBRIDGE, 4th-6th APRIL 1989

BIGGA considers it particularly appropriate that the first National Educational Conference of the new Association is being held at Cambridge - a centre of learning and academic excellence.

The Association considers the education and training of greenkeepers to be of paramount importance and it is to be hoped that the Conference and its setting will prove the inspiration for many delegates to pursue higher standards of education and learning in the future.

Accommodation will be provided in Queens' College which incorporates the old with the new and was founded in 1446. Delegates will be housed in the student accommodation and the Conference Banquet will be held in The New Hall which was opened in 1979. The Old Hall, built in 1449, with an interior richly decorated in the eighteenth and nineteenth century, will be used for a reception by SUPATURF, the Conference's sponsors, whose support and co-operation has been much appreciated by the Association.

The Conference will be held in The Peterhouse Theatre adjacent to Queens' College, a modern purpose-built facility providing all necessary services and a high degree of comfort for delegates. For two of the buffet lunches, we will be using The Garden House Hotel in an attractive setting overlooking the river.

Cambridge itself will appeal to delegates with its unique atmosphere; its narrow, bicycle-filled streets; the variety of languages to be heard; shops displaying British craftsmanship at its best, and always a sense of history and tradition.

BIGGA welcomes you to Cambridge and to a Conference which we feel sure will prove instructive and rewarding.

### CONFERENCE PROGRAMME

#### Tuesday, 4th April

9.30 am onwards Registration - Queens' College  
11.45 am Buffet Lunch in The Garden House Hotel  
1.20 pm until 5.50 pm Conference - First Session  
7.00 pm - 7.30 pm Dinner in Queens' College

#### Wednesday, 5th April

7.45 am until 9.00 am Breakfast  
9.00 am until 12.30 pm Conference - Second Session  
12.30 pm Buffet Lunch in Queens' College  
1.50 pm until 5.50 pm Conference - Second Session continued  
7.00 pm Reception in The Old Hall, Queens' College given by **Supaturf Products Limited**  
8.00 pm Conference Banquet in The New Hall, Queens' College  
Speaker:  
David Purdie, Medical School, Leeds University

#### Thursday, 6th April

7.45 am until 9.00 am Breakfast  
9.00 am until 1.30 pm Conference - Third Session  
1.30 pm Buffet Lunch in The Garden House Hotel

### CONFERENCE DAILY PROGRAMME

#### Tuesday, 4th April

9.30 am Registration in Queens' College  
11.45 am Buffer Lunch - The River Suite, The Garden House Hotel

#### Conference Commences

Session Chairman, Ivor Scoones, Vice-Chairman, BIGGA Educational Sub-Committee

1.20 pm	Introduction	Jack McMillan, Chairman, BIGGA
1.30 pm	'Converting from Poa Annua to Agrostis at Bayview'	James Wyllie, President James A. Wyllie & Associates Limited, Canada
2.10 pm	'Golf Course Management in the Cotswolds'	Lawrence Pitthie, Course Manager Minchinhampton Golf Club
3.30 pm	Coffee	
4.00 pm	'Current Trends in the Maintenance and Science of Golf Course Turfs in the United States'	J.B. Beard, Professor of Turfgrass Physiology and Ecology, Dept. of Soil and Crop Sciences, Texas A & M University
4.40 pm	'Research and the R & A'	Michael Canaway, Assistant Director (Research), The Sports Turf Research Institute, Bingley
5.20 am	Panel Questions	
5.50 pm	Close	

### CONFERENCE DAILY PROGRAMME

#### Wednesday, 5th April

Session Chairman, Paddy McCarron, Chairman, BIGGA Education Sub-Committee

9.00 am	'Similarities and Differences in Golf Course Maintenance Between Great Britain and the United States'	Dr. William Dest, Associate Extension Professor, Department of Plant Science, University of Connecticut
9.40 am	'Constructing a Golf Course on Sussex Flint'	Raymond Hunt, Course Manager, Goodwood Park Hotel Golf Course
10.20 am	Coffee	
10.40 am	'Greenkeeper or Superintendent?'	Dennis Mortram, Reaseheath College, Cheshire
11.20 am	'Golf Development and Course Management in Sweden'	Rolf Lowgren, Chief Consultant, Swedish Golf Federation
12.00 pm	Panel Questions	
12.30 pm	Buffet Lunch - Queens' College	
1.50 pm	'Education and Training for Professional Bodies involved in Golf'	Malcolm Hulley, Association Secretary, The Professional Golfers Association
2.30 pm	Tournament Preparation	Kevin Munt, Course Manager, West Germany
3.10 pm	'Raising Distributor Standards Through Education'	Richard Fry, Director, Supaturf Products Limited
3.40 pm	Coffee	
4.00 pm	'Fertiliser Use, Theory and Practice'	Dr. William Adams, University College of Wales, Aberystwyth
4.40 pm	'The Biggest Problem of Golf Course Turf in the USA'	Jim Snow, Director, North Eastern Region, Green Section, United States Golf Association
5.20 pm	Panel Questions	
5.50 pm	Close	

### CONFERENCE DAILY PROGRAMME

#### Thursday, 6th April

Session Chairman, Bill Lawson, Vice-Chairman, BIGGA

9.00 am	'The Role of the Golf Unions in the 90's'	Keith Wright, Secretary, English Golf Union
9.40 am	'The Role of Phosphorus and Potassium in Maintaining Bentgrass Putting Greens'	Dr. William Dest, Associate Extension Professor, Department of Plant Science, University of Connecticut
10.20 am	Coffee	
10.50 am	'The Educational Minefield'	Tony Gentil, Reaseheath College, Cheshire
11.30 am	'My Experience of Green-keeping in Portugal'	Peter Wisbey, Course Manager, Sas Lourence/Penina, Portugal
12.10 pm	'Modern Nutritional Strategies for Golf Course Turfs'	J.B. Beard, Professor of Turfgrass Physiology and Ecology, Dept. of Soil and Crop Sciences, Texas A & M University
12.50 pm	Panel Questions	
1.20 pm	Summing up	Jack McMillan, Chairman, BIGGA
1.30 pm	Buffet Lunch - The River Suite, The Garden House Hotel	

# APPLICATION FORM

**PRIORITY BOOKINGS**

Due to the limitation on the number of places available, preference to applicants will be given as follows:

- |    |                                 |                 |
|----|---------------------------------|-----------------|
| 1. | Greenkeeper Members and Spouses | Residential     |
| 2. | Greenkeeper Members             | Non-Residential |
| 3. | Associate/Trade Members         |                 |
| 4. | Non-Members                     |                 |

**CHARGES (inclusive of VAT)**

<b>A</b>	<b>RESIDENTIAL</b>	
(i)	Greenkeeper Members and Spouses attending the Conference	£139
(ii)	Spouses not attending the Conference	£119
(iii)	Associate/Trade Members	£171
(iv)	Non-Members	£185
<b>B</b>	<b>NON-RESIDENTIAL</b>	
	Including buffet lunch for the three days	£83
<b>C</b>	<b>EXTRA NIGHT</b>	
	Bed/Breakfast	£23
	Bed/Breakfast/Evening Meal	£36

NAME ..... POSITION .....

ADDRESS ..... GOLF CLUB .....

..... COMPANY .....

..... TEL. NO .....

POSTCODE .....

I AM/AM NOT\* A MEMBER OF BIGGA\*                      MEMBERSHIP NUMBER .....

CATEGORY OF MEMBERSHIP — GREENKEEPER/TRADE/ASSOCIATE\*

\*DELETE AS APPROPRIATE

If you wish to apply for a spouse place, please give

NAME .....

Will spouse be attending the Conference?                      YES/NO\*

If you require a NON-RESIDENTIAL place — please tick box

If you require an EXTRA NIGHT(S) please indicate requirement with dates

.....

I enclose my cheque, made payable to 'BIGGA' in the sum of £..... incl. VAT  
(where a deposit has been paid, this should be deducted from the total sum due)

Return to:                      **THE EXECUTIVE DIRECTOR, BIGGA,  
THE SPORTS TURF RESEARCH INSTITUTE,  
BINGLEY, WEST YORKSHIRE, BD16 1AU.  
TELEPHONE: 0274 560556**

VAT Registration Number 500 2920 (05)

# BIGGA Official Uniform

Description	Colours available	Price
<b>Lambswool</b> V-neck sweater <i>Sizes:</i> 36"-46" 34" and 48"-54" also available in many of the colours	Navy, Light Blue, Bluebird Blue, Tartan Red, Bordeaux (Burgandy), White, Black, Mid-Grey, Mink Brown, Blond, Dark Green, Sorbet Yellow, Light Pink, Azure Blue, Frost Grey, Pampas Green, Light Peach, Cherry and Catkin (mid-green)	£19.49 48"-54" £2.00 extra
<b>Lambswool</b> Crew-neck sweater <i>Sizes:</i> 36"-46" only	Navy, White, Tartan Red, Sorbet Yellow	£19.49
<b>Lambswool</b> V-neck slipover <i>Sizes:</i> 38"-46" 34"-36" and 48"-54" also available in many of the colours	Navy, Light Blue, Bluebird Blue, Tartan Red, Bordeaux (Burgandy), Black, White, Mid-Grey, Blond, Sorbet Yellow, Light Pink, Frost Grey and Light Peach	£18.75 48"-54" £2.00 extra
<b>Pure new botany wool</b> roll-neck sweater <i>Sizes:</i> small/38"; medium/40"; large/43"; X-large/46" X-small/36"	Navy, Light Blue, Red, Wine, White, black, Grey, Beige, Tartan Green, Loden Green, Yellow  Navy, Light Blue, White only	£19.49
<b>Pure new wool</b> V-neck sweater <i>Sizes:</i> 34"-46" 48" on popular dark colours only	Navy, Light Grey, Burgandy, Bottle Green, Black, Brown, Natural, Red, Pale Blue, Lemon, Royal, White, Pink, Jade, Peach	£16.04
<b>Pure new wool</b> crew-neck sweater <i>Sizes:</i> 34"-46"	Navy only	£16.04
<b>Pure new wool</b> slipover <i>Sizes:</i> 34"-46"	Navy, Light Blue, Red, Black, Light Grey, Burgandy	£14.89
<b>Jersey knit</b> sportshirt (65% polyester/35" modal) with covered collar <i>Sizes:</i> Small, medium, large, X-large	Navy, Light Blue, Royal Blue, White, Red, Black, Wine, Mint Green, Emerald Green, Light Pink, Beige, Mocha Brown, Silver Grey, Lilac and Rose	£12.59
<b>Jersey knit</b> sportshire with ribbed knitted collar of a more casual type shirt <i>Sizes:</i> Small, medium, large, X-large	White, Lemon, Navy, Black, Red, Royal Blue, Grey	£11.50
Official tie	Navy Blue, Grey and Burgandy	£3.75
Official blazer including badge <i>Size:</i> 36"-50" specify short, regular or long	Navy Blue	£69.00 46"-50" £75.00
Official blazer badge		£11.50
Official golfing umbrella		£8.95
BIGGA lightweight jacket <i>Sizes:</i> 38"-48"	Navy/white with official BIGGA lettering	£28.00
BIGGA wetsuit <i>Sizes:</i> X-small; small; medium; large; X-large	Light blue	£28.00

**N.B. all prices are inclusive of VAT**



# Are you over par without us?



Wherever you find successful turf management, and professional greenkeeping you'll also find Rigby Taylor.

Because, from golf courses, tennis courts and bowling greens to parks and sports grounds Rigby

Taylor is committed to providing the right product at the right price within a service framework that's simply unbeatable.

We understand your problems and have the experience to interpret situations quickly with both thoroughness and reliability. For technical advice and ordering your requirements phone free 0800 424 919.

With Rigby Taylor the job's done right. After all, if it wasn't we'd be over par!

# Rigby Taylor



A **GROWING** FORCE IN LEISURE

Fertilizers, Top Dressings and Composts, Pesticides, Grass Seeds, Tools and Golf Course Equipment.

Rigby Taylor has a wide range of specialist products for golf courses from the well known Mascot fertilizers and pesticides to grass seed mixtures, top dressings and wetting agents.



Rigby Taylor Limited

 **FREE 0800 424 919**

## Course construction in Australia

*Chris Nicholson is an Ex-Head Greenkeeper at Mid-Herts Golf Club and reports on the project he is involved with in Western Australia*



I am at present here in Perth, Western Australia engaged in the construction of a 27-hole championship golf course, 40 kilometres north of Perth at Ellenbrook, in the wine-growing district of Western Australia. This is the largest golf course under construction in Australia at the moment. The company I am employed by is Sanwa Vines, a Japanese consortium and the course is the brainchild and designed by Graham Marsh.

There are 27 normal greens, plus 3 gambling holes, 4 practice greens and 4 championship tennis courts, 2 bowling greens and an archery range. A huge Clubhouse and hotel complex are also under construction on site. The fairways are skirted by 400, one acre blocks where luxury houses will be sited. A vineyard is being planted to supply the club with its own wine brand.

The huge machinery shed has just been completed to house the vast amount of new machines that are arriving almost daily. The local Toro dealer must have thought it was Christmas when we ordered four GM3's, four bunker rakes and four 420d's to name but a few. The

sheds cover the area of a soccer pitch with machine workshop, with full-time mechanic, fertiliser and chemical stores, with wash-down areas, suction fans, staff rest-rooms, showers, lockers. Every modern convenience has been supplied for the 22 staff we have at the moment, a world apart from what most Clubs expect their greens staff to contend with.

The greens are built to USPGA Standards, sand on a blanket of 18in aggregate or 'Blue Metal' as the locals refer to it. Some greens have agraflex drains beneath but we have found not all need it. The greens are then fed after final shaping with a pre-plant nutrient, consisting of chicken pellets and a cocktail of muriate of potash, nitrogen (Agran) super copper, zinc and Epsom salts. This is then raked into the surface and the green is then sprayed with Pencross Bent in an emulsion, to help the seed hold on the surface. The results we have had so far are good and a nice even cover has been achieved. This grass grows well over here, although I am not so sure how it would go in the UK climate.

The tees are, after final shaping, laser-levelled with a special machine I have never seen in the

UK. It comprises of a small tractor with a laser controlled scraper-come-hopper at the rear. A laser on the hopper works in conjunction with a laser to the rear of the tee to give a perfectly level tee. A drop of 2 per cent from front to rear of the tee is allowed for run-off. The tees are then stolonised with Greenless Park grass, disked into the surface and rolled. Most holes have at least five tees and each are stepped out in front of the other and most have buggy paths alongside.

The fairways meander through virgin bush, every care has been taken to maintain the natural habitat of the many kangaroos and other wild animals and plants that live around the course. The fairways have been panned with clay to prevent leaching of chemicals into the nearby Ellen brook. This clay, a few inches under a British fairway, would be deemed as a disaster. But when you consider the evaporation which takes place on an Australian fairway, you can see that no problems occur.

A great deal of revegetation has been done on each side of every fairway to tighten them up as it were. We have purchased a tree spade at the cost of A\$70,000 to transplant larger trees and palms. This has proved most successful and in time the natural bush will skirt each fairway, thus making a stray shot almost unplayable. As with the tees, the fairways are stolonised after pre-plant nutrients are added, this is done in the larger areas with a muck spreader, then they are disced in and repeatedly rolled.

The watering system or reticulation as is the word here, is complicated to say the least and is vast. The bore holes have been sunk to feed water to the lakes which, in turn, are pumped into the pump house area which is situated under ground. Massive pumps then push the water to each part of the course controlled by a main computer in our shed. Each fairway has its own satellite computer which can be operated manually if needed. We are using Toro 620 heads, 2,500 of them in all, working on 80/90psi.

We have at the moment three full-time staff learning the programmes and trouble-shooting the whole system in conjunction with the installers, Challenge Irrigation Ltd. I won't say there haven't been prob-