A comprehensive level survey has been undertaken to determine the feasibility of draining these areas as at first sight it would appear that the 13th fairway is totally land locked by very large sand dunes. However, after studying the levels, it emerges that if a three metre wide swathe is cut through approximately 50 metres of dunes to a depth of the patch of silt and the area around an overflowing pond can be drained very easily, with the swathe through the dunes being reinstated afterwards.

These areas have been causing problems for some time now and I am sure Head Greenkeeper John Muir will be relieved the problems can be solved.

Recently I was involved with a feasibility study on some very flat land adjacent to the Somerset levels. Once again a comprehensive level survey was undertaken, but this time the outfall was into a tidal river, which as you can imagine poses problems over and above the norm.

I now propose to try and help greenkeepers on inland courses identify probable causes of drainage problems on their own courses.

If your course has a heavy clay sub-soil don’t despair, because this is the easiest type of land to drain, much easier than sand and clay mixed, as the Woodhall Spa experience is proving. Stand back and study your own golf course. There may be parts of one or two fairways that are very wet during the winter and other parts of the same fairways that are perfectly dry.

Picture in your own mind, could the fairways in question have been two different fields at some time in the distant past?

Is there a tell-tale line of mature trees across the course that could have originally been in...
a hedgerow? If there was a hedgerow there, it is almost certain that at some time there would have been a drainage ditch there as well.

Was the ditch piped properly or was the golf course constructed during a dry time when the ditch was assumed to be dry? A very dangerous assumption as I am sure many Head Greenkeepers are finding out after these last two winters.

All fields, even in the same area have not all been drained at the same time, and the scheme that drained the field which contained the wet parts of the fairways has ceased to function, while the scheme that drained the field containing the dry part is still working. I mention this because it may help you to make logical assessments regarding drainage on your own course and also impress your Green's Chairman.

If you are fortunate enough to be employed as Head Greenkeeper on a new course being constructed keep your eyes open to prevent the two main mistakes being made during construction which are as follows:

When a green is constructed the base of it sometimes comes from an area all around where it is sited. The top soil is stripped and then sufficient sub-soil is "borrowed" to build the base. As we all know the surrounds and approaches are a vitally important part of the golf course and sometimes the natural drainage of them is destroyed at the outset. It is much better to import all the green base materials from a "borrow pit" not in an area of general play.

The second major sin is to ignore existing drains during construction work. Broken drains cause absolute chaos during the winter months.

To all greenkeepers undertaking "in house" drainage work this winter, I wish you all the best, and should you need any advice I am only a phone call away.

Barry Cooper is a golf course drainage consultant based in Market Harborough, Leicestershire. Tel: 01858 46684.
BIGGA - IT'S ABOUT YOU...
If you're thinking about joining BIGGA for the first time or are wondering whether to rejoin in 1996, here are just a few of the benefits BIGGA membership offers you:

**EDUCATION**

We aim to keep you up to date of developments in a fast moving world by means of seminars, training courses, management courses, workshops, publications, videos etc. These are aimed at helping you carry out your job more effectively and develop your career. They are available to you as a member at reduced rates.

Supervisory and Management Courses aimed at generally improving your skills whilst providing the underpinning knowledge for NVQ Levels 3 and 4 are held annually at BIGGA HQ. With five modules to choose from you can apply to those courses most suited to your needs. Similar two day courses are held in each of BIGGA's regions. Attendance at these courses can gain you credits towards the Master Greenkeeper Certificate.

BIGGA Sections also organise their own seminars and training programmes for members during the Autumn and Winter.

We also have a library of books and videos for loan to members - the only cost is postage back to BIGGA (unless of course you wish to purchase!).

**MASTER GREENKEEPER CERTIFICATE**

We want to help you reach the highest standards of excellence: those who gain all 300 credits required to receive this prestigious award prove not only that they are highly qualified and experienced greenkeepers but have reached the very pinnacle of their profession.

The scheme is designed to recognise through a combination of training, experience and by a formal examination those who are Masters of their profession. Credits are gradually built up through the three stages until you achieve the maximum 300.

**LEGAL HELP LINE**

The Help Line is there to provide you and your family with legal advice and assistance on any matter 24 hours a day, 365 days a year. Last year alone the Help Line received nearly 600 calls from members regarding not only employment, but also matrimonial problems, disputes with neighbours etc, etc. BIGGA's insurers also paid out £88,000 in legal costs in the course of helping members pursue claims through the courts, claims they may not otherwise have been in a position to pursue.

**NEW FOR 1996 – STRESS LINE**

Stress is something that affects all of us at some time, not just at work but also in our everyday lives. That's why this year we've introduced a Stress Help Line. Staffed by trained counsellors, like the Legal Help Line it's there 24 hours a day, 365 days a year to help you cope with any matter that could potentially be or is actually a cause of stress.

**INSURANCE COVER**

It's a fact of life that accidents do happen. Our personal accident insurance policy offers peace of mind for you and your dependents.

Cover includes £5,000 for accidental death, loss of sight in one or both eyes or permanent loss of one or more limbs, £1,000 for permanent loss of one thumb, plus £35.00 per week (up to a maximum of 104 weeks) should you become temporarily or totally disabled as a result of an accident.

Since 1988 BIGGA's insurers have dealt with 158 claims on behalf of members including payment of £3,495 to a member involved in a road traffic accident and £2,688 to a member who suffered a back injury.

**BIGGA TURF MANAGEMENT EXHIBITION**

The BIGGA Turf Management Exhibition held annually in Harrogate is the premier exhibition for the fine turf industry in Europe and as a member you are eligible to discounted rates at the extensive educational events linked to the exhibition.

Where else will you find comprehensive educational seminars, the major manufacturers, producers and distributors for the greenkeeping profession all under one roof? The BTME provides you with the ideal opportunity to discuss new developments, view the latest equipment and machinery and get expert advice as well as exchanging ideas and experiences, meeting old friends and, of course, making new ones.
**NATIONAL EDUCATION CONFERENCE**

Linked to the BTME, BIGGA's annual two day educational event is the largest, most varied education and training programme in Europe.

Make sure you are aware of the latest developments, new technology and advances in greenkeeping by attending. As a member you are entitled to a discounted rate. Attendance at this event and the BTME seminars or workshops can gain you credits towards the Master Greenkeeper Certificate.

**GOLDEN OPPORTUNITIES**

Younger members can enter the Toro/PGA European Tour Student Greenkeeper of the Year competition for which the winner wins a 10 week expenses paid trip to the United States including an 8 week residential turf management study course at the University of Massachusetts. Why not join the BIGGA greenkeepers at the Open Championship. Demonstrate that your skills lie not just in keeping the fairway but in playing the fairway by taking part in the Hayter Challenge Golf Tournament or the BIGGA National Tournament. There are a whole host of other opportunities as well – but only if you’re a member.

**REPRESENTATION**

As the leading representative body in the greenkeeping profession, BIGGA has been instrumental in earning greenkeeping the recognition it deserves as a highly skilled and technical job. More and more clubs are adopting BIGGA’s recommended salary scale.

**RETIREMENT**

Retirement does not mean severing all connections with the greenkeeping profession. Upon retirement you can apply to become a retired member and keep in touch by receiving your monthly copy of BIGGA’s magazine, “Greenkeeper International”, and joining in all section events.

**INTERNATIONAL**

If you’re a greenkeeper employed overseas, you can continue to receive all the benefits of BIGGA membership by applying as an international member (the Legal Help Line applies to UK Law only).

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**BIGGA RECOMMENDED MINIMUM SALARY SCALE, 1996**

The Association has updated its recommended minimum salary scale in line with the latest Retail Prices Index Figure available which is 3.5% for 1996. The quoted rates apply from 1 January 1996 but any variance from the above RPI figure at the time of implementation should be taken into account. The figures in brackets are 1996 rates.

<table>
<thead>
<tr>
<th>Position</th>
<th>18 Holes</th>
<th>27 Holes</th>
<th>36 Holes</th>
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<tbody>
<tr>
<td>Course Manager/Head Greenkeeper</td>
<td>£19,650</td>
<td>£21,600</td>
<td>£24,200</td>
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<td>(£19,144)</td>
<td>(£20,867)</td>
<td>(£23,354)</td>
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<tr>
<td>Deputy Course Manager/Deputy Head Greenkeeper</td>
<td>£14,300</td>
<td>£15,600</td>
<td>£17,450</td>
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<tr>
<td>(£13,818)</td>
<td>(£15,057)</td>
<td>(£16,842)</td>
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<tr>
<td>First Assistant</td>
<td>£12,376</td>
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<td>(£12,376)</td>
<td>(£12,376)</td>
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<tr>
<td>Assistant Greenkeeper: aged 21 and over</td>
<td>£11,648</td>
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<tr>
<td>(£216.30pw)</td>
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<td>Assistant Greenkeeper: aged 20</td>
<td>£9,880</td>
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<td>(£189.27pw)</td>
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<tr>
<td>Assistant Greenkeeper: aged 19</td>
<td>£8,736</td>
<td>£8,736</td>
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<tr>
<td>(£162.23pw)</td>
<td>(£162.23pw)</td>
<td>(£162.23pw)</td>
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</tr>
<tr>
<td>Assistant Greenkeeper: aged 18</td>
<td>£7,280</td>
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<tr>
<td>(£135.20pw)</td>
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<tr>
<td>Assistant Greenkeeper: aged 16/17</td>
<td>£5,824</td>
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<tr>
<td>(£108.15pw)</td>
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</tbody>
</table>

**MAGAZINE**

Greenkeeper International is the award-winning professional journal for greenkeepers providing news, education updates, technical and scientific articles and regular what's on information in addition to informative editorial features, an excellent recruitment section, lively competitions and an exciting format guaranteed to maintain your interest throughout the year.

---

**SOCIAL ACTIVITIES**

As a member you can participate in your local section events such as golf days, visits, educational lectures etc and also have the opportunity to meet with other greenkeepers. Independent research has shown that this social networking plays an important role in the exchange of ideas, views and tips.

**EVEN BETTER VALUE FOR MONEY**

If you pay your own membership subscription, you can claim tax relief on the amount, saving 25% for a standard rate tax payer; making membership even more beneficial. Clubs can normally also claim tax relief on the amount.

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**SUBSCRIPTION RATES from 1 January 1996**

<table>
<thead>
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<th>Category</th>
<th>Rate</th>
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<tr>
<td>Course Manager/Head Greenkeeper</td>
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<tr>
<td>Deputy Course Manager/Deputy Head Greenkeeper</td>
<td>£54</td>
</tr>
<tr>
<td>All other greens staff and students aged 21 years and over</td>
<td>£47</td>
</tr>
<tr>
<td>Greens staff and students aged 20 years and under</td>
<td>£30</td>
</tr>
<tr>
<td>International</td>
<td>£54</td>
</tr>
<tr>
<td>Associate/Company with magazine</td>
<td>£54</td>
</tr>
<tr>
<td>Associate/Company without magazine</td>
<td>£28</td>
</tr>
</tbody>
</table>

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**Can you really afford not to be a member?**
Company/Associate Member

If you're not employed as a greenkeeper in Fine Turf, why not become an Associate or Company member?

- **Associate** membership is for those people involved in the golf industry but not employed as greenkeepers eg Golf Club Secretaries, Members of Greens Committees etc.
- **Company** membership is available to those persons employed by a business connected with greenkeeping or fine turf management.

So what are the benefits? As well as receiving a monthly copy of "Greenkeeper International", Company and Associate members also have the opportunity to take part in BIGGA events at national, region and section levels. This provides Company members with a regular opportunity to get to know the people they provide with a service in an informal surrounding and enables Associate members to mix with their peers. All members will benefit from the educational aspects section events provide.

Company and Associate members also benefit from reduced delegate fees at BTME, the National Education Conference and all BIGGA educational seminars and courses.

**EDUCATION AND DEVELOPMENT FUND**

BIGGA membership can be linked to the Education and Development Fund. The fund was established to further advance the status of the greenkeeping profession and standards of golf course management by providing specialist training videos, publishing books on greenkeeping, running educational seminars and management courses.

By becoming a golden or silver key circle member, you can help secure the very future of greenkeeper, golf club and game.

During 1995, money from the Education and Development Fund has been used for:
- 12 regional management training courses commencing October 1995
- Practical Ecology Management book
- Course Preparation video
- Green Reconstruction video (completion Winter 1995)

Future projects include:
- Grass Identification booklet
- Videos, books and booklets
- Presentation skills course
- Educational grants

**MEMBERSHIP BENEFITS OF GOLDEN KEY CIRCLE**

**Individuals**
- Special Tie – BIGGA/Golden Key Circle design
- Association Membership – to include monthly copies of "Greenkeeper International" magazine
- 15% discount on all BIGGA Educational Programmes

**Contribution:** Donations of over £150 annually

**MEMBERSHIP BENEFITS OF SILVER KEY CIRCLE**

**Individuals**
- Special Tie – BIGGA/Silver Key Circle design
- Association Membership – to include monthly copies of "Greenkeeper International" magazine
- 7.5% discount on all BIGGA Educational Programmes

**Contribution:** Donations of £100-£150 annually

For more information on BIGGA membership, contact Janet Adamson at the address below

**BIGGA**
Aldwark Manor
Aldwark
Aune
York
YO6 2NF
Tel: 01904 838581

If you are already a member, do nothing for the time being, we will send you advance notification of your renewal.
If you are not currently a member but are now thinking of joining the Association, please complete and return the membership application card in this magazine.

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Fax: 01276 452616

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The 1995 Miracle Professional Greenkeeper of the Year will be drawn from three from each region. A member of Bigga's Board of Management and a Miracle Professional in charge of three golf courses before nominating the finalists for the seventh Greenkeeper of the Year Award.

The winner and the man who will follow in the illustrious footsteps of Laurence Pittie, Anthony Davies, David Whittaker, Ian Harrison, Gordon Irvine and last year's winner David Tiller, will receive an all expenses paid trip to the BTME on formulating a Golf Course Policy document, he is co-author of our Golf Course Policy Document which has been adopted by many clubs throughout the country and he sits on the South Coast section committee and the Education Committee.

He is married to Marion and they have two children Daryl (8) and Nathan (4). Ed is a 6 handicap golfer, a course angler, a fell walker while he also finds time to manage his son's under 9s football team.

Michael Goodhind, Northern Age: 35 Club: Course Manager Tytherington Club

Has over 19 years experience in greenkeeping and was Course Manager at Cavendish GC in Buxton, Derbyshire for nine years before taking up his current position.

The Tytherington Club is the headquarters for the Women Professional Golfers European Tour and in that regard Mike has prepared the course for two Ladies' English Opens, as well as for numerous National Corporate Events.

He has recently qualified as a GTC NVQ assessor. He is married with four children and is a keen all round sportsman interested in most sports but particularly cricket and golf.

The winner of the 1995 Miracle Professional Greenkeeper of the Year will be announced in the January issue of Greenkeeper International.
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New Toro/PGA European Tour Student Greenkeeper of the Year James Braithwaite chats with Scott MacCallum about his hard earned triumph

Three years of effort paid off for James Braithwaite of Hallgarth Golf and Country Club Hotel when he was crowned the seventh Toro/PGA European Tour Student Greenkeeper of the Year at Aldwark Manor last month.

James (29) only began greenkeeping in late '92 when the iron foundry, where he was Casting Department Superintendent, closed down but since then he has been instrumental in building a new course, been promoted to First Assistant, gained his Level 2 qualification at Askham Bryan College in York, increased the size of his family - and held down two other jobs to help make ends meet.

"I work as barman/waiter at a local hotel and as a gardener and it is not unknown for me to start on the golf course at 5.30am, finish at 9am get home at 9.30am, change, start at the hotel at 11am and work through to 1.30am, get home at 2am and back into work at 5.30am the next day. That's the worst scenario," he explains, before casually dropping in that he also cycles the four miles to and from work.

It may have been that work ethic and will to succeed which convinced the judges - Graham Dale, Managing Director of Lely UK Ltd, Mark Gunter of Toro Irrigation, Edward Kitson of the PGA European Tour, Dean Cleaver, Vice Chairman of BIGGA and Chairman of the Education Sub Committee and Nell Thomas, BIGGA Executive Director - that he should take the honours and the winner's place on the eight week Turf Management Study Course at the University of Massachusetts in January/February.

During his trip James will also visit the Toro Company Headquarters in Minneapolis and the Toro Irrigation Division in California and possibly visit the GCSAA Show in Orlando, Florida.

Asked what he hopes to achieve from his trip to the States James responds immediately. "I want education... and a chance to see a different way of life and culture. America is full of different ideas and everything is on a bigger scale. "I'm excited about the prospect and can't really yet believe I'm going," he adds.

James talks of Hallgarth, a nine hole course near Darlington, with