



## Greenkeeper Education and Development Fund

Unlock the doors to progress through BIGGA's Education and Development Fund - the key to a great future for greenkeepers, golf clubs and the game of golf.

Golden and Silver Key Membership is available to both companies and individuals.

For details, please contact Ken Richardson on 01347 833800 or via [ken@bigga.co.uk](mailto:ken@bigga.co.uk)

### Golden Key Supporters



### Golden Key Company Members

Company	Tel: Head Office
AGCO (Massey Ferguson)	02476 851286
John Deere Ltd	01949 860491
Kubota (UK) Ltd	01844 214500
PGA European Tour	01344 842881
Rigby Taylor Ltd	01204 677777
Scotts UK Professional	01473 830492
Ransomes Jacobsen Ltd	01473 270000
The Toro Company/Lely UK	01480 226800

### Golden Key Individual Members

J H Fry; J H Greasley; WJ Rogers; David S Robinson; Stuart Townsend; Andy Campbell MG, CGCS; Chris Yeaman; Iain A MacLeod; Bruce Cruickshank; John Crawford; Stuart Cruickshank; Frank Newberry; Terence Welch.

### Silver Key Supporters



### Silver Key Company Members

Company	Tel: Head Office
Bernhard and Company Ltd	01788 811600
Ernest Doe & Sons	01245 380311
Gem Professional	01254 356611
General Legal Protection Ltd	01904 611600
Hayter Ltd	01279 723444
Heath Lambert Group	0113 246 1313
RainBird	01273 891326
Symbio	01372 456101
Syngenta Professional Products	0041 613 233 028
TurfTrax Group Ltd	01722 434000

### Silver Key Individual Members

Clive A Archer; Douglas G Duguid; Robert Malbusch MG; Elliott R Small; Steven Tierney; Richard Lawrence; Clive Osgood; Roger Barker; David Robinson; Richard Stillwell; Stephen Dixon; Ian Semple; Paul Jenkins; Robert Hogarth; R Steele; Lee Relf; Raymond Warrander; Nicholas Gray; Trevor Smith; Iain Barr; Richard McGlynn; Alex McCombie; Paul Murphy; Tom Smith.

# Education Update

Ken Richardson, Education and Training Manager, reviews the Student of the Year Regional Finals.

July has always been an eventful month for the Education and Training Department of BIGGA. July 2005 was memorable for all sorts of reasons but the cowardly act of terrorism perpetrated in London is likely to lodge in my memory for many years to come.

## Toro Student of the Year Competition 2005



We seemed to have picked a bad week for the Regional Finals of this year's competition as the first day, July 4, coincided with the planned G8 protest in Edinburgh. Thankfully, things ran smoothly on the day and all five nominees attended their interviews.

A rapid train journey south was followed by interviews at Manchester Airport, where we interviewed a further five candidates. Hemel Hempstead was the next location, where we interviewed nine candidates and managed to fit in the announcement that London had been awarded the 2012 Olympic Games. A leisurely drive west took us to Cheltenham, followed by a more hectic drive to Kettering

while listening to the shocking news about the London bombs, on Radio 4.

Over 1200 miles of travel, five hotels and a full week of interviews, when I was joined by Iain McLeod, Andy Campbell, Jeff Mills and Gavin Robson, from the BIGGA Board of Management, and Trevor Chard and Jeff Anguige, from Toro, saw us select eight candidates for the National Final that takes place at BIGGA House on September 26.

The standard of entrant to this competition improves each year, making the judge's job even harder. All of those reaching the Regional Finals have gone through a selection process when 3000 'students' are whittled down to 25 entries. Unfortunately, we can pick only eight finalists and you can read all about them in the September issue of Greenkeeper International.

## BIGGA Higher Education Scholarships



This is also the time of year when students graduate from colleges of higher education, including greenkeepers completing NVQ Level 4, HNC, Foundation Degree, First

Degree and Masters Degree Courses. Many of these were fortunate enough to receive a BIGGA Higher Education Scholarship, sponsored by Ransomes Jacobsen, to help with their fees.

If you are about to start a course of higher education then you could be eligible for a scholarship. Contact Ken or Sami on 01347 833800 for details.

## Harrogate Week 2006

The programme for Harrogate Week 2006 is almost ready to go to the printers and it will be distributed in late September/early October. Make sure that you read the brochure thoroughly as many changes have been included for 2006, including a massive increase in the amount of education opportunities available.

Last month's education article contained information on some of the Workshops that would be running during Harrogate Week. The Programme included a Resource Management Workshop presented by Frank Newberry. This should have read Project Management presented by Frank Newberry.

## Regional Training

There is still time for you to decide on subjects and locations for this autumn's education courses. Contact your Section Secretary, Regional Administrator or Ken/Sami at BIGGA HQ for further details.

The Midland Section, of the Midland Region, are well ahead with their planning and wish to offer a range of training courses this Autumn. Paul Woodham has asked that I publicise the following.

The Midland Section is actively promoting skills training this autumn/winter. Gay Hill Golf Club have kindly offered their facilities for training purposes and we hope that a selection of courses will be held depending on demand. Suggested courses are:

- Manual Handling
- Compact Tractor Operation
- Chainsaw Use
- ATV Driving Skills
- A1 Assessor
- L12 Trainer

The courses can be run only on demand and it is in our member's interest to take the opportunity to further their career development and strengthen the health and safety aspects of greenkeeping.

If there are other courses that you wish to attend in the Midlands or you require further information, you can contact Paul on 07880 734197 or email [paul@ghgc.org.uk](mailto:paul@ghgc.org.uk).

## Policy Continuity and the Importance of Staff Involvement

Many golf clubs have Health & Safety policies in place but unfortunately they vary widely and therefore their usefulness to the management and staff is limited.

The most common situation we find is that the policy was drawn up some time ago, usually with professional help, and left on the shelf. The document is therefore not being consulted and reviewed on a regular basis, as it must be to ensure a safe working environment, as well as, more importantly, not being compliant with current legislation.

### OTHER INSTANCES OFTEN FOUND ARE ALSO WORTH MENTIONING.

- The policy is not site specific to your golf club. i.e. it is a copy of another golf club document with the name changed, or a company has produced a generic document to sell with little or no work carried out in terms of matching the document to the golf club which it covers.
- The staff are not sufficiently involved and consulted at all levels and therefore view Health & Safety, at best, as being a necessary evil instead of something which protects them in the work place.

### SO LETS LOOK AT EACH POINT IN TURN.

1. If your policy is not current, active and reviewed annually as a minimum, make provision for this to happen.

2. Ensure your policy relates exactly to your golf club - in areas of risk assessment, whether in the clubhouse or on the golf course for instance, this is absolutely vital.
3. The staff must be involved - department heads in the first instance, but all staff must have some input - this makes the manager's job easier in the long term.

With the staff involved Health & Safety becomes part of the daily routine and ultimately inherent in the culture of the club - when this happens it is no longer viewed as a necessary evil but something to be welcomed.

By bringing your policy up to date and involving the staff in all the necessary work involved everyone's working life becomes much more manageable and therefore easier - and of course safer.

*Duncan McGilvray is Sales and New Business Manager at Haztek and to find out more visit [www.safegolfplan.com](http://www.safegolfplan.com) or call 0208 905 7552: email: [info@haztekinternational.com](mailto:info@haztekinternational.com).*

# Quick Guide To Sick Pay

It is a misconception that employers have to pay employees full salary sick pay. The only sick pay an employer has to pay is statutory sick pay. Any payments over and above this are at the discretion of the employer and will be detailed in your contract of employment.

### HOW DO I QUALIFY FOR STATUTORY SICK PAY (SSP)?

To qualify for SSP you must be

- Aged 16 or over and under 65.
- Sick for at least four or more days in a row (including weekends and Bank Holidays). This is known as the period of incapacity for work.
- Earn, before Tax and NI, an average of not less than £79 a week (earnings are averaged over an eight week period before sickness began).
- Must notify employer of absence.

### HOW MUCH WILL I GET?

The standard rate of SSP is £68.20 a week for a maximum of 28 weeks. SSP is a daily payment and will be paid for the days that you normally work (qualifying days). It is not paid for the first three qualifying days of sickness (certain exceptions apply) - it is the fourth day of sickness that triggers the SSP entitlement.

### HOW TO TELL YOUR EMPLOYER YOU ARE SICK?

You should tell your employer you're sick as soon as possible (More than seven days and you may forfeit your right to SSP). Check your employee handbook for your employer's requirements. An employer can insist you if you tell them:

- In person
- By a set time
- On a special form
- On a medical certificate
- More than once a week during your sickness

After seven days of sickness you will be asked to provide evidence of sickness, which is usually a doctor's note.

### WHAT IF I DO NOT QUALIFY OR SSP ENDS

You should ask your employer for form SSP1, which they should fill in and give to you. You then need to send this to your social security office to claim incapacity benefit.

For more detailed information go to the department of work and pensions website of [www.dwp.gov.uk](http://www.dwp.gov.uk) or ring the legal helpline on 0800 068 1893.

Rachael and Gemma from the Membership Department would like to welcome 74 new members to the Association and talk about the direct debit scheme.

# Membership Update

## Improved Direct Debit Scheme

After reviewing the way subscriptions are paid to make it easier for you, the member, we are adding a new option to the direct debit scheme. Currently payments can be made over five or 10 instalments. We have now introduced the option to pay in one single instalment.

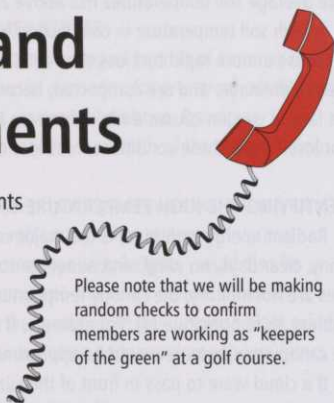
If you are registered for direct debit we will also stop sending out a yearly renewal form for you to complete. In future we will write to you a month before your membership is due to expire

informing you of the new payment amount and asking if you have any change of details. If you have no changes then you do not have to do anything further, your membership will be renewed automatically, which is another job off the list.

If you would like to sign up to direct debit then please call the Membership Department for a form on 01347 833800.

## Telephone and email payments

We are now able to take payments for your membership over the telephone and via email. If you would like to pay by this method then please call the membership department on 01347 833800.



Please note that we will be making random checks to confirm members are working as "keepers of the green" at a golf course.

# WIN A WEEKEND SURVIVAL COURSE FOR TWO

Spend a weekend existing on what nature has provided. Build your own shelter and spend the night under it, learn about edible plants, survival medicine, fire lighting and navigation. The course runs from Friday through to Sunday, are you man enough to last the weekend?



To enter the prize draw all you have to do is introduce one or more new greenkeeping members to BIGGA. Make sure your name goes on their application form as the person who referred them

and we will enter your name into the draw. Remember the more new members you refer the more chances you have to win! The draw will take place on October 1 and the winner will be announced in the November magazine.

Call either Rachael and Gemma today for a new member application form or fill out the slip on the outer cover of this magazine.

### BIGGA welcomes...

#### SCOTTISH REGION

Ross Duncan, North  
Neil Farmer, Central  
Sean Fotheringham, Central  
William McBride, Ayrshire  
Stuart McCormick, Ayrshire  
Bobby McDougall, West  
Scott McLeod, North  
Ross Mitchelson, East  
Sandy Nisbet, West  
Gregor Norrie, North  
George Pendrich, Central  
Kerr Rowan, Ayrshire  
John Wilson, Ayrshire  
David Wilson, Ayrshire

#### NORTHERN REGION

Brian Barber, Northern  
Nicholas Cape, Northern  
Stuart Corry, Northern  
Craig Finnegan, Northern  
Chris Gibson, North West  
Mathew Gill, North West  
Scott Greenough, Northern  
Robert Morgan, Cleveland  
Darren Rimmer, North West  
Robert Upton, Northern  
Robert Wallace, Northern  
Michael Willoughby, Northern

#### MIDLAND REGION

Clive Barnes, BB&O  
Gary Cooper, Midland  
Walter Frankham, BB&O  
David Hartley, Midland  
Phil Mansbridge, East Midland  
Nicholas Miller, East Midland  
Paul Smith, Midland

#### SOUTH EAST REGION

Kyle Adams, London  
Denis Church, Kent  
Daniel Cox, East Anglia  
Simon Cross, Sussex  
Tim Drewster, Surrey

Phil Hoare, Kent  
Graham Hurren, East Anglia  
Craig Jennings, Surrey  
Graham Lamb, Kent  
Adam Marrable, Kent  
Alex McDermott, Kent  
Lee Mullanny, Sussex  
Neville, Rowlandson East Anglia  
Terence Russell, Kent  
Russell Sharpe, Sussex  
Nicholas Smith, Surrey  
Clifford Smith, Surrey  
Tom Spurgeon, Surrey  
Mark Thompson, Surrey  
Robert Wallis, Surrey  
Paul Walters, Kent

Timothy Watts, East Anglia  
Adam White, Surrey  
Robert Dyer, Sussex

#### SOUTH WEST/WALES REGION

Andrew Jones, South Wales  
Edmund Stahl, South Coast

#### OVERSEAS

Hans Inguorsen, Denmark  
Brett Perlini, USA  
Stuart Cooper, Hong Kong

#### STUDENT MEMBER

David Lafferty, Central Scotland

#### CORPORATE MEMBERS

Paul Bannister, Kent  
Mike Dodd, Kent  
Richard Fortmuller, BB&O  
Sally Flannagan, Kent  
Stephen Harmer, Kent  
Carl Horrax, North West  
Mark Keysell, East Anglia  
Richard Lawrence, North West

#### ASSOCIATE MEMBERS

James Moore, BB&O  
Golden Key Member  
Colin Gregory, East Anglia

## AUGUST'S MEMBERSHIP DRAW WINNER

Just introduce one or more new greenkeeping members to BIGGA and your name will be placed into a draw to win a DIGITAL FM SCAN RADIO/ALARM, with a detachable speaker and headphones. Our congratulations go to Andrew Flemmings at Filey Golf Club.



# Summer Stress and Pre-Stress Conditioning

The essence of turfgrass management is to provide a quality golf course surface throughout the playing or growing season. In most instances a specific period or time exists where management of a golf course green or fairway is difficult. This period often revolves around an environmental stress period defined primarily by temperature but often in conjunction with a moisture stress.



The combination of high soil temperature and saturated soil conditions resulted in a rapid loss of turf.

Identifying the stress period is the centrepiece for developing a pre-stress conditioning management programme. The 'beginning of the season' should be thought of as occurring after the stress period, and the 'end of the season' is when the turf is under stress. Management practices need to be considered in the context of how they might influence, positively or negatively, turf growth during the stress period. In other words, what are the practices that we will implement prior to the stress period that will enhance survival once the stress period arrives?

By definition, stress subjects the turfgrass plant to a hardship. Each stress induces a strain or injury, which results from direct or indirect physical or metabolic alterations. A temperature stress occurs when plants are exposed to temperatures above or below their optimum range.

## TEMPERATURE STRESS

The optimum range for cool season turfgrass shoot growth is 15-24°C and 10-18°C for root growth. In contrast, the optimum temperature for warm season turfgrass shoot growth is 27-35°C and 24-29°C for root growth. Outside these ranges the turfgrass is under some degree of strain or injury.

The three major temperature stresses are freeze stress, which occurs at temperatures at or below 0°C; chilling stress, which occurs at temperatures below 12°C but above freezing; and heat stress, which occurs above the optimum for growth, and is typically lethal above 45°C. Freeze and chilling stress are primarily concerns on warm season turfgrasses. Freeze stress however can occur to annual meadowgrass (*Poa annua*) and to a lesser extent perennial ryegrass (*Lolium perenne* L.). Heat stress most commonly is a concern on cool season grasses and is greatly affected by the temperature and the duration of the stress.

## HIGH TEMPERATURE STRESS

Elevated temperatures have a physiological and morphological impact on cool season turfgrasses. Creeping bentgrass studies have found that increasing temperatures above the optimum reduced net photosynthetic rates, decreased leaf chlorophyll content, increased respiration, and reduced carbohydrate content



turfgrass growth (Ref 8). The visual impact to the turf quality caused by these changes is a reduction in growth, and a decline in turf density. In addition, under high temperatures, traffic or wear stress is more evident due to the fact the turf cannot recover quickly.

At supraoptimal temperatures beyond what we would consider chronic (37 to 40°C) protein denaturation or unfolding can occur causing death or severe injury to the plant (5). In this case a special group of proteins, called heat shock proteins, play a role as 'chaperones' that help prevent the unfolding of proteins once they are exposed to high temperatures (5). These proteins may also help explain genetic differences in heat tolerance among cultivars of creeping bentgrass (12).

Soil temperature is considered more detrimental to turfgrass growth than air temperatures (15). As described previously the optimum soil temperature range for cool season turfgrass growth is narrow, 10-18°C. However root growth can occur below the optimum until soil temperatures reach freezing (0°C). Conversely, increasing soil temperatures above the optimum can cause root growth to decline and death to occur (9). A temperature threshold for root decline and death occurs once average soil temperatures rise above 21°C. The total root loss can exceed 50%.

A high soil temperature in conjunction with a high soil moisture content level can cause a more rapid turf loss than soil temperature alone. Soils that have poor internal drainage, and are compacted, become oxygen deficient upon saturation. The lack of oxygen causes a rapid decrease in root respiration, contributing to rapid root loss. Under these conditions, root loss can occur in a matter of hours.

## IDENTIFYING THE HIGH TEMPERATURE STRESS PERIOD

Radiant energy (sunshine) is the major contributor to leaf temperature. Under sunny, clear days, no wind, and adequate soil moisture levels where transpiration rates are not limiting, the canopy temperature is often 7 to 10°C warmer than the ambient air temperature (4). For example, if the ambient air temperature were 32°C the canopy temperature would be approximately 41°C.

If a cloud were to pass in front of the sun the canopy temperature would drop 5 to 8°C. Thus, on cloudy days under the same conditions of no wind, and adequate soil moisture, the canopy temperature would be similar to the ambient air temperature.

A slight breeze (~8kph) across the turf canopy can reduce the temperature 4 to 7°C under sunny clear conditions. In shaded or restricted areas, where little air movement occurs, promoting air movement through cutting or trimming trees or installing fans can help reduce the canopy temperatures and thus reduce the potential for canopy temperature build-up.

In the above situations, moisture levels were not limiting. However, if the turfgrass plants cannot meet the transpirational needs, leaf temperatures can raise 11°C or higher beyond the ambient air temperature. Localised dry spots often have canopy temperatures of 49°C due to the lack of moisture present to the turfgrass plants (3).

As previously mentioned, average daily soil temperatures above 21°C can result in significant root loss. For onsite measuring of soil temperatures, many of the new irrigation systems come with weather stations that have the capability for measuring and recording soil temperatures. Soil temperatures can also be measured with a relatively inexpensive soil temperature probe placed on a nursery or practice green to a 5cm depth. Reading the soil temperature between 11 and 12 noon will provide a rough measure for the average daily soil temperature.

By Karl Danneberger and David Gardner, Professors of Turfgrass Science, Department of Horticulture and Crop Science, The Ohio State University, Columbus, USA

TORO

Count on it.



Heat stress normally manifests itself in association with under stresses like increased susceptibility to moisture stress, and increased susceptibility to pests.

Once average daily soil temperatures remain above 21°C that creeping bentgrass and/or *Poa annua* green or turf is under temperature stress. In a recent study, the combination of syringing and fans not only reduced canopy temperatures, as mentioned above, but also reduced soil temperatures (2,7). Although, decreasing soil temperatures from supraoptimal conditions by a few degrees may enhance shoot/root ratios (16), root growth does not increase until soil temperatures are optimum for root growth.

#### PRE-STRESS CONDITIONING FOR SUMMER STRESS

Developing a hardy plant that can sustain prolonged periods of summer stress is the goal of pre-stress conditioning. Obviously, a criterion for pre-stress conditioning is knowing when the stress period occurs, as described above. Pre-stress conditioning practices should focus on enhancing the health of the turf including improving its growing environment (1).

Pre-stress conditioning practices include providing adequate soil aeration and surface organic matter management through coring, topdressing and vertical mowing. Correct fertilisation programmes and mowing heights would also be practiced to enhance turfgrass growth going into the stress period. However, a couple of specific practices that enhance the condition of the turfgrass plant prior to stress are irrigation and the use of exogenous plant hormones/growth regulators.

#### MOISTURE STRESS AS A PRE-STRESS CONDITIONER

Prior to summer high temperature stress, plants undergoing moisture stress like annual bluegrass, perennial bluegrass, and Kentucky bluegrass are more heat tolerant than those not exposed to moisture stress (14). Drought pre-conditioned plants tend to accumulate ion solutes, specifically potassium, at higher levels during periods of high temperature stress compared to non-drought stress plants (10).

The higher ion concentration allows for a relative higher osmotic adjustment potential during summer stress. In addition, a deeper more extensive root system develops prior to the period of high temperature stress (10). When irrigation is needed, deep infrequent irrigation is the most desirable for hardening turfgrass plants off for the summer.

#### PLANT REGULATORS AND HORMONES PRE-STRESS CONDITIONERS

Plant regulators are a small group of hormones that in small amounts can affect membrane functions, enzyme activity, and gene expression in plants. Cytokinin is one of the plant hormones that plays an important role and it can promote axillary bud growth by overriding auxin effects.

Thus, this interaction with auxin is a means of balancing shoot/root ratios. Cytokinin is also important in retarding leaf senescence or yellowing during periods of high temperatures. It probably plays a roll through stimulating RNA and protein

synthesis and delaying degradation of chlorophyll.

Research has found that applications of cytokinin to the root system (cytokinins are synthesized in the root tips and transported via xylem) alleviated leaf senescence and improved turf quality (13). Further research has found that cytokinin containing seaweed and humic acid extracts increased plant cytokinin levels possibly leading to improved drought tolerance (17).

Along these lines certain classes of fungicides exhibit cytokinin-like properties in preventing leaf senescence (11). In the late 1970's and 1980's it was postulated that one of the reasons *Poa annua* fairways survived summer stress was that fungicides used to control anthracnose also acted as a leaf anti-senescence agent by inducing cytokinin-like effects. In this case, fungicide applications were applied preventatively prior to the summer stress period.

Trinexapac-ethyl (Primo), a plant growth regulator, increases levels of zeatin riboside, one of the more prevalent and bioactive cytokinins (6). The increased plant levels potentially could increase the heat and drought tolerance of the turf. To get the desired effect multiple applications need to be initiated prior to the stress period.

#### CONCLUSION

As the intensity of turfgrass management increases, the susceptibility of the turf to environmental stresses increases. Managing turf successfully during stress periods depends increasingly on the condition of the plant going into the stress. Our understanding of how and why pre-stress conditioning factors may help is still in the early stages. However, it is clear that under intensive management, these factors will play a greater role.

#### Reference:

1. Carrow, R.N. (Jan/Feb 2004.). Surface organic matter in bentgrass greens. USGA Green Section Record. Retrieved April 14, 2005 from [www.usga.org/turf/green\\_section\\_record/2004/jan\\_feb/surface.html](http://www.usga.org/turf/green_section_record/2004/jan_feb/surface.html)
2. Danneberger, T.K. & Gardner, D. (2004, June). Syringing can dramatically affect canopy temperatures. *Turfgrass Trends*. Retrieved April 29, 2005 from [www.turfgrasstrends.com/turfgrasstrends/article/articleDetail.jsp?id=99488&pageID=2](http://www.turfgrasstrends.com/turfgrasstrends/article/articleDetail.jsp?id=99488&pageID=2)
3. Danneberger, T.K. & White, S. (1988, Feb). Treating localized dry spots. *Golf Course Management* 56, 6-10.
4. Danneberger, T.K. & Yan, J. (Aug 27, 2003). Does the water temperature affect syringing? Superintendents Korner TurfNotes. Retrieved April 7, 2004, from <http://hcs.osu.edu/sk>
5. DiMascio, J.A., Sweeney, P.M., Danneberger, T.K., & Kamalay, J.C. (1994). Analysis of heat shock response in perennial ryegrass using maize heat shock protein clones. *Crop Science* 34, 798-804.
6. Ervin, E.H. & Zhang, X. (May 2004). Primo changes plant hormone levels that prompt beneficial side effects for healthy turf. *TurfgrassTrends*. Retrieved April 15, 2005 from [www.turfgrasstrends.com/turfgrasstrends/content/printContentPopUp.jsp?id=92965](http://www.turfgrasstrends.com/turfgrasstrends/content/printContentPopUp.jsp?id=92965)
7. Guertal, E.A., van Santen, E., & Han, D.Y. (2005). Fan and syringe application for cooling bentgrass greens. *Crop Science* 45, 245-250. Retrieved April 14, 2005 from [www.hcs.crop.scijournal.org/cgi/content/full/45/1/245](http://www.hcs.crop.scijournal.org/cgi/content/full/45/1/245)
8. Huang, B. & Gao, H. (2000). Growth and carbohydrate metabolism of creeping bentgrass cultivars in response to increasing temperatures. *Crop Science* 40, 1115-1120. Retrieved April 7, 2005 from <http://crop.scijournal.org/cgi/content/full/40/4/1115>
9. Ervin, E.H. & Liu, X. (2003). Summer root decline: Production and mortality for four cultivars of creeping bentgrass. *Crop Science* 4, 258-265. Retrieved April 14, 2005 from <http://crop.scijournal.org/cgi/content/full/43/1/258>
10. Jiang, Y. & Huang, B. (2001). Osmotic adjustments and root growth associated with drought preconditioning-enhanced heat tolerance in Kentucky bluegrass. *Crop Science* 41, 1168-1173. Retrieved April 15, 2005 from <http://crop.scijournal.org/cgi/content/full/41/4/1168>
11. Skene, K.G.M. (1972). Cytokinin-like properties of the systemic fungicide benomyl. *Journal Horticulture Science* 47, 179-182.
12. Wang, D. & Luthe, D.S. (September 2003). Heat Sensitivity in a Bentgrass Variant. Failure to Accumulate a Chloroplast Heat Shock Protein Isoform Implicated in Heat Tolerance. *Plant Physiology* 133, 319-327. Retrieved April 15, 2005 from [www.plantphysiol.org/cgi/content/abstract/133/1/319](http://www.plantphysiol.org/cgi/content/abstract/133/1/319)
13. Wang, Z., Xu, Q., & Huang, B. (2004). Endogenous cytokinin levels and growth responses to extended photoperiods for creeping bentgrass under heat stress. *Crop Science* 44, 209-213. Retrieved April 15, 2005 from <http://crop.scijournal.org/cgi/content/full/44/1/209>
14. Wehner, D.J. & Watschke, T.L. (1981). Heat tolerance of Kentucky bluegrass, perennial ryegrass, and annual bluegrass. *Agronomy Journal* 73, 79-84.
15. Xu, Q. & Huang, B. (2000). Growth and physiological responses of creeping bentgrass to changes in air and soil temperatures. *Crop Science*, 40, 1363-1368. Retrieved April 7, 2005 from <http://crop.scijournal.org/cgi/content/full/40/5/1363>
16. Xu, Q. & Huang, B. (2001). Lowering soil temperatures improves creeping bentgrass growth under heat stress. *Crop Science* 41, 1878-1883. Retrieved April 15, 2005 from <http://crop.scijournal.org/cgi/content/full/41/6/1878>
17. Zhang, X. & Ervin, E.H. (2004). Cytokinin-containing seaweed and humic acid extracts associated with creeping bentgrass leaf cytokinins and drought resistance. *Crop Science* 44, 1507-1510 Retrieved April 15, 2005 from <http://crop.scijournal.org/cgi/content/full/44/5/1507>



**A new fungicide  
has landed**

**lunar**

**New chemistry for the control and  
prevention of Fusarium Patch**

*Sherriff Amenity*

The Pines, Fordham Road, Newmarket, Suffolk, CB8 7LG  
Tel. 01638 721888 Fax. 01638 721815

Always read the label.  
Use pesticides safely.  
Dispose of chemicals safely.

[www.sherriff-amenity.com](http://www.sherriff-amenity.com)

MAPP 12366

Lunar contains emulsifiable concentrate formulation containing 267.1g/l (25.2%) Prochloraz and 132.5g/l (12.5%) Tebuconazole. Lunar is a registered trademark of Bayer Environmental Science.

Amenity Grass Seed

For those that **know!** <sup>use</sup>

**Advanta**

**GREENS MM 9**

- Pure Bent mix for seeding and overseeding greens
- Top rated cultivars
- Range of cultivars for all year round performance
- Very tolerant to close mowing

100% Browntop Bent

**GREENS MM 11**

- Traditional 80:20 greens mixture
- Tolerant of close mowing
- High shoot density
- Good playing quality

80% Chewings 20% Browntop Bent

**GREENS & TEES MM 10**

- Variation of the traditional 80:20 mixture
- Tolerant to close mowing
- Dense close knit turf
- Top rated cultivars
- Good wear characteristics
- Good disease resistance

30% Chewings 50% Slender Creeping Red Fescue 20% Browntop Bent

**11**



Tel: 01529 304511 Fax: 01529 413179  
email: [amenity@advantaseeds.co.uk](mailto:amenity@advantaseeds.co.uk) web: [www.advantaseeds.co.uk](http://www.advantaseeds.co.uk)



# Course Feature



Niall McKibbon

## Racing Ahead

Scott MacCallum may have arrived at Ramsey on the Isle of Man on four wheels rather than two but he found the golf course just as interesting as the TT course.

Hear the name "Ramsay" and what do you think of? Is it the guy who managed England to the Jules Remes Trophy in the dim and distant past? Perhaps it's that famous street in Australia with all those neighbours? It could also be the bloke who invented the ladder or the chef with the colourful language.

See it written down as "Ramsey", though, and unless you are acquainted with the names Ducati, Kawasaki, Yamaha, Suzuki and Honda, it may not mean much to you. Ramsey is the town on the north of the Isle of Man where the famous TT course passes through but it is also home to a very fine golf course which, although it may never usurp motor bike racing as Ramsey's claim to fame, is a good reason to pack your golf clubs as well as your leathers if you're ever in the area.

"They average 200 miles an hour for the 39 mile course," revealed Course Manager, Niall McKibbon, who has a library of gory tales of what has happened to some of the racers when things go just slightly wrong. Indeed just a couple of weeks after my visit a sidecar passenger died in Ramsey itself during one of the races.

"They close the road for practice in the morning and then again for racing in the late afternoon and the noise can be deafening when they pass just beside the golf course, having started at ten second intervals," said the young Ulsterman, who has been Course Manager since May '99.

In that time he has done much to polish what is undoubtedly a fine James Braid layout through the introduction of new working practices, new course presentation and a bunker reconstruction programme which has moulded the greenkeeping team together and provided the course with a set of bunkers even Gary Player would enjoy pitching his skills against.

The project which really relaunched the club came in 1999 when architect, Steve Marnoch, and construction company, Delta 2000, were appointed to look at the first six holes and last two of the course. Four and a half miles of drainage pipe was installed, new ditches were built, tees were reconstructed and all the bunkers in that phase, the clubhouse side of a course which is split by a road, were rebuilt.



The success of that project gave the club a taste of what the course could be like and Niall was asked to redo the remaining bunkers.

"We started the bunker programme in October 2002 when we did 15 bunkers on holes 7 to 11 and the response from the members to those was good. They were astonished by the visual enhancement of the holes and the change from having a bunker which went up to their knee caps to having to be on their tip toes to see out."



Niall and his staff

Over the following two years, having got the bit between their teeth the team did a further 23 bunkers and 10 holes and the entire project was completed last winter.

"It was a buzz. The boys were coming in when the weather was terrible keen to get stuck in and they were often turfing bunkers in the pouring rain."

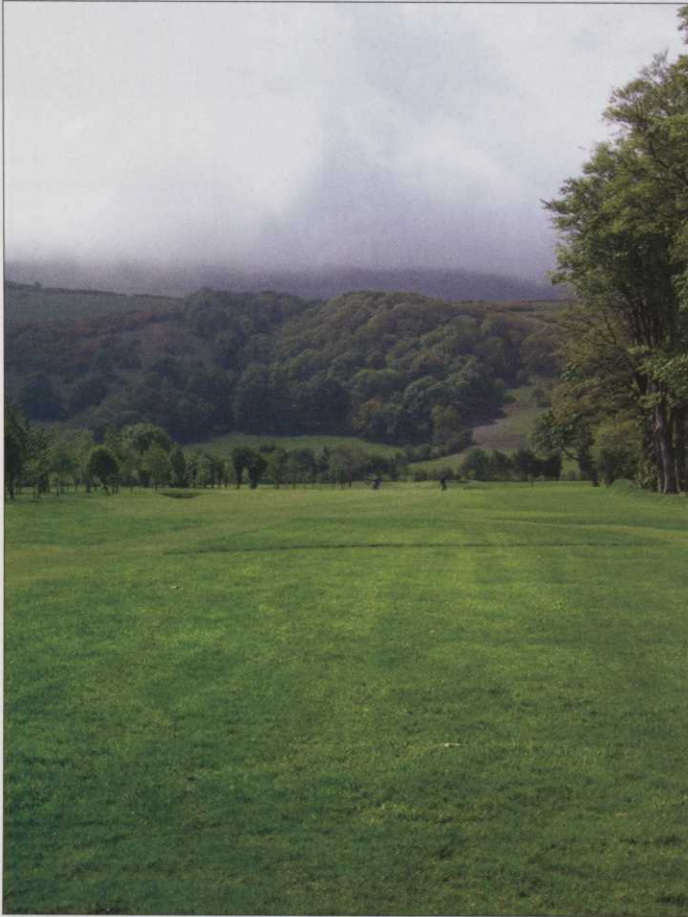
Niall took the lead on that first phase using the experienced he'd picked up through working on golf course constructions in South Carolina and Virginia as a young greenkeeper in the mid 90s.

"The club asked me to take on the construction - basically to design and build the bunkers from scratch - and one thing I would say is that you won't know how good you are until you are put in a situation where you have to think about the knowledge and skills you have picked up and then put them to good use. Being naïve and 23 in the States I thought everything was going in one ear and out the other but eight years later I found myself putting into practice what I'd picked up.

"I found the best way was to return the old bunker to flat ground and then assessing the situation, imagining the bunker before I put anything into the ground. When I got the shape I'd visualise the shot and take some more out if I thought it was too shallow," explained Niall.

All the staff were involved throughout the process, preparing the ground and removing the turf, putting in the membrane, adding the sand and returfing.

"The following year I taught two of the guys how to do it because I could have been off sick and they might have needed to step in and they picked up the skills."



One of them did get a little carried away though on a bunker on the 13th fairway.

"I was driving back across the course and I couldn't see the digger. I got a little closer and I could just see the bucket coming up. He'd gone so deep the digger was below the level of the surface. We pulled it back to about six feet deep although he had been about 10."

Despite the severity of the new Ramsey bunkers the course record has gone four times in recent years and Niall is still smarting that his own record 64 was beaten last season by a 63.

When he took over as Course Manager he started to bring in presentation styles more sympathetic to a Braid designed course.

"I introduced the shaping of fairways and started to off set the tees which was a feature of Braid courses. I'd also noticed that every green was cut differently so I now get the guy cutting the greens to put a stroke on the calendar in the Mess room so that the guy who is cutting next knows which way to make the cut," said Niall, as he pointed out the calendar covered in a series of pen marks.

"We change that every day through the season so I can see how many times we've cut them and which direction they've been cut in. It's second nature to the guys now," he explained, adding that he now also had policies in place for the cutting of fairways.

He has also left more areas uncut, which is more environmentally friendly and cuts down on the workload for the team.

His communications skills verbally and in written form are well honed and he also has knack of finding a way to get a job done.

When the ladies were concerned about rough being left in front of one of their tees and their ability to make the carry he gave them all survey flags to take out with them on a competition to indicate where their drives had finished so he could amend his strategy appropriately.

The other significant change he introduced involved the working hours of the team and he did so initially on a trial basis after having floated the idea past them first.

"They used to work 8am-5pm and take three breaks a day. I felt you'd only

got started on something when it was time for another break so I proposed 6am - 2.30pm which we operated for four and a half years. We changed it last year in response to the lady members, who felt that the machines were too noisy on Ladies' Day, so now we work 6am - 3.30pm four days a week and 6am - 10am on Tuesdays. The boys now enjoy those hours."

He has recently introduced a three flag system so the colour of the flag signifies if the pin is front, middle or back.

"It is helpful to the members but also means that the guys cutting the holes have to make sure they think more about what they are doing and have six front, six middle and six back. Prior to that the holes were sometimes moved without too much thought to pin position."

Niall started his career at his home club of Royal County Down where he worked under Walter Beattie. Whenever he's home he visits Alan Strachan, a man for whom he has the utmost respect, but while his upbringing was on a links, he has no desire to return to that style of course.

"I've gone away from links and been on inland golf for sometime so I think I'd find myself getting confused if I returned to links. The only way forward for me is to stay with the type of golf course I know best and that's parkland," explained Niall, who has now settled down well into island life and married a local girl.

Island life does have its complications however and compromises have to be made.

"I went to four different quarries on the island to ask for a sample of bunker sand as bringing it in from the mainland is just too prohibitive - it would work out at nearly £8,000 for 100 tones and I spent £3,000 on 210 tonnes. I eventually stumbled across what I thought was an excellent sand and sent it to my agronomist, Dave Bates, and he was blown away by it. Unfortunately the quarry has since moved and I'm back to square one but it is something we have to deal with."

Another problem is coping with the pace of life on the island, remarkable for somewhere where the record for getting around 39 miles of it is under 20 minutes.

"I recently ordered some speed rollers from Greentech and they were delivered to the island but then didn't arrive. I finally got the name of the company who had them and was told that they'd get them up to me in two



The team have been busy with a bunker reconstruction programme





The course boasts some superb views

days as it wasn't a big enough order to do it straight away. I ended up driving the 16 miles from Ramsey to Douglas and picking them up myself.

"It is a lot slower and you have to be patient. The Manx have a saying, 'Tres De Loure' which roughly translated is, 'What can't be done today can be done tomorrow'. It just means you have to plan ahead. If you want something in June order it in March."

It is also important to have a good mechanic to keep the machines operational and Niall appointed just such a character in 2003 and Dave Birchenough has since proved his worth.

#### RAMSEY GOLF CLUB INVENTORY

Toro 3250 Greens Mower  
 Toro 3000 Tee Mower  
 Toro 216 Green Bankings  
 Toro 3300 Utility Vehicle  
 Toro 4500 Rough Mower  
 Jacobson Lf3810 Fairway Mower  
 Renault Pales 210 Tractor  
 Ford 1920 Tractor  
 Bobcat 328 Mini Digger  
 Toro 1800lt Topdresser  
 Charterhouse Slitter Attachment  
 3 x Kawasaki Strimmers  
 M1tsubisha Strimmer  
 2 x Suzuki Flymos M12ox Gt500  
 Charterhouse 105 145 Verti Drain  
 Graden Greens Scarifer and Slitter  
 Mountfield Xte50 Hand Mower  
 Canon C8 Rotavator  
 Ryan Sod Cutter  
 Paladin Hand Mower  
 Gambettibarre 450 Sprayer Attachment  
 Toro Green Aerator Not Working For Last 3 Years  
 Clarke Mig Welder 220te Turbo  
 Karcher Hd 525s Pressure Washer  
 Oleo Mae Bv 162 Blower  
 Oleo Mae 951 Chainsaw  
 Oleo Mae 962 Chainsaw  
 Bernhard + Co Rota Minor Relief Grinder  
 Bernhard + Co Rapid Relief 1000 Bed Knife Sharpener  
 Toro Blow Vac

"He'd been in the automotive industry for 36 years and decided on a career change and there isn't a machine he doesn't know inside out. He can tell if there's a problem just from the sound a machine might make," said Niall, who has since promoted him to become his Deputy.

He is very keen that his team are properly trained and he encouraged Paul McGreal, of Myerscough College, to visit once a month to work with his team.



"Initially he just came here but now Paul visits virtually every club on the island. In fact when our guys all became qualified we had our picture on the front page of the island newspaper," said Niall, who is also D32 and D33 qualified and proud of his tough assessments.

"I was assessing one of the guys on irrigation and was going to fail him but Paul told me that it was the toughest assessment he'd ever seen, and advised me to pass him."

The work is paying off however and one of his team has recently left to take up a position at a golf club in Austria, proof if it were needed that if you work at it greenkeeping can be a passport to seeing the world.

Ramsey may be synonymous to bikers but thanks to the work of Niall and his team it is now on the golfing map as well.

# Tight at the Top



Rigby Taylor 1 battled though to claim a narrow victory in the second Neil Thomas Memorial Golf Day.

30 teams, 120 players and a scorching hot day meant only one thing - the Neil Thomas Memorial Golf Day. Hosted, as always, at Aldwark Manor Hotel, the base of BIGGA HOUSE, this was the second such event since the passing of the Association's Executive Director, Neil Thomas, in 2004.

Running since 1997 in various guises, the competition's 2005 format was changed from previous years to a four ball best two to count on each hole, best three to count on par 3 holes. All eyes were on the defending champions, the Surrey Section, but it was the Rigby Taylor 1 team who adapted to the new format the quickest as they fought though to claim a narrow victory.

How narrow? Very narrow indeed. Rigby Taylor 1 finished their 18 hole round on 100pts, edging out Lincsgreen 1 by a solitary point with the Chief Executive's side forced into the bronze medal position with 97pts.

But the amenity supplier team were not the only winners of the day. Nearest the Pin, sponsored by Scotts, was won by Kevin Kinzer, of Alpha Amenity, with Antony Freeman making sure the Surrey Section kept their name on the winners' parchment, as he claimed the Longest Drive, sponsored by Hayter. This was the second year in succession that the Roehampton Course Manager has won the prize.

The Putting Competition was another dramatically close affair. Former BIGGA Chairman, Richard Barker, and Andrew Corns, Acorn Golf, needed to endure a sudden death playoff to determine the winner. Eventually it was Richard who held his nerve to come out on top and lift the prize.

The evening witnessed sun kissed golfers enjoying a delicious BBQ and the presentation of prizes. Neil's widow, Elaine, was again in attendance with two of their four children Adam and Natalie, and she awarded the prizes to the jubilant winners.

In another change to the BIGGA competition, the 18 holes were individually sponsored and the Association gratefully thanks all who supported the Golf Day and Aldwark Manor for hosting the event. The money raised from the event was donated to Macmillan Cancer Relief.

## RESULTS

1. Rigby Taylor 1. Mike Brear, Ian Whitehead, Paul Dockerty & Kim Kirkham, 100pts.
2. Lincsgreen 1. Graeme MacDonald, Rob Welford, Les Howkins & Phil Wilkinson, 99pts.
3. Chief Executive Team. John Pemberton, Gerrit van Nieuwnhuize, Alan Russell & Mark Dobell, 97pts.

**Longest Drive**, sponsored by Hayter. Andy Freeman, Surrey Section.  
**Nearest the Pin**, sponsored by Scotts. Kevin Kinzer, Alpha Amenity.  
**Putting Competition**: Richard Barker.



Players putt on the 14th, besides the River Ouse, on a scorching day at Aldwark Manor



The Greenkeeper International team, led by the Editor, didn't have the best of days



The Putting Competition was a real test of golfers' nerves