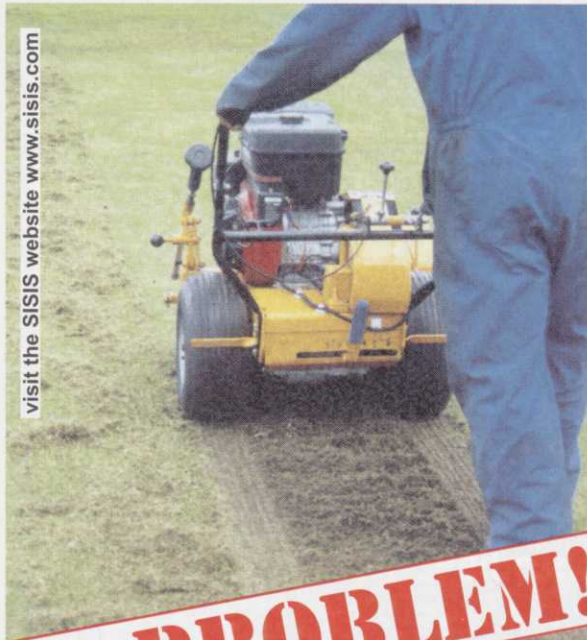


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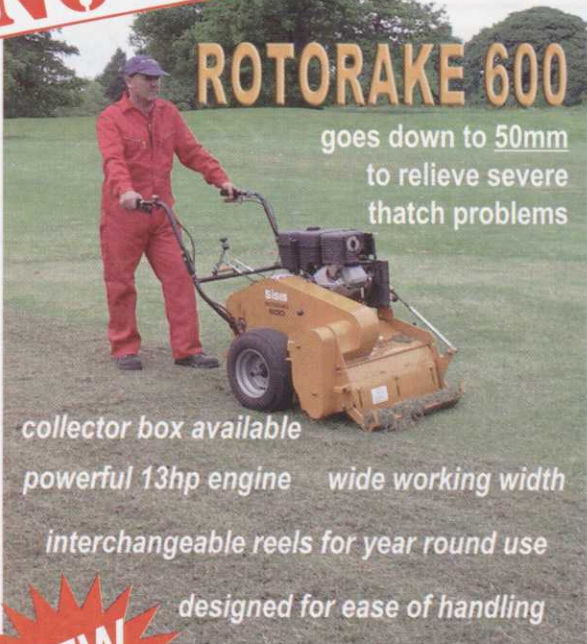


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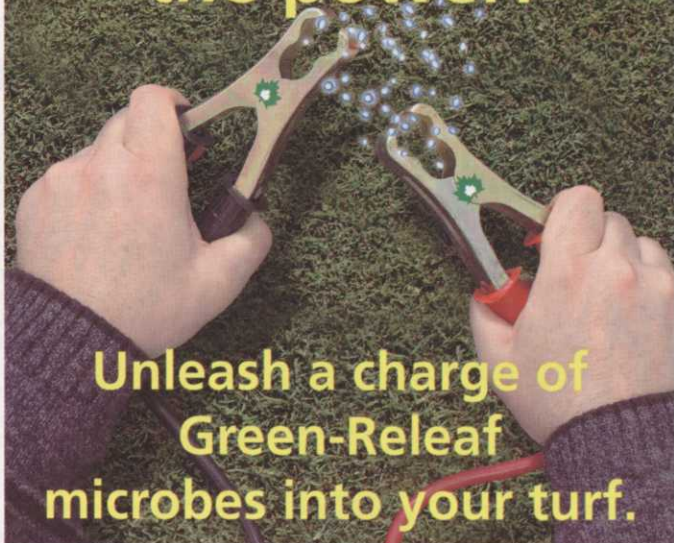
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Tracey and Susannah from BIGGA's Membership Services Department, would like to welcome almost 70 new members to the Association and update you on the new Membership Photocard

Membership Photocard update

A big thank you to all of you who have been quick off the mark and have already sent us your photograph. Although you won't be receiving your new card until next year, this has given us the opportunity to scan your photograph and file it in your record ready for reproducing onto your new card when you renew.

If you missed last month's Membership Update, as from 1st

January 2002, BIGGA's Membership Department will be issuing plastic credit card size Membership Photocards (at no extra cost to the member). This will not only provide you with an extra form of ID but it will continue to promote the professional image that the Association has achieved. To start preparing for the launch of the new card, BIGGA need a photograph of each of you! If you have a passport size photograph please send it to Tracey or Susannah, Membership Services Department, BIGGA, BIGGA HOUSE, Aldwark, Ane, York YO61 1UE.

Don't forget to write your full name, date of birth and membership number on the back. Alternatively, if you have mastered the art of digital cameras why not send us a photo by email to tracey@bigga.co.uk or susannah@bigga.co.uk

2002 Membership Renewal form with a difference...

Because of the new Membership Photocard, next year your renewal form will be different. For convenience your renewal form will continue to have your personal and Golf Club details already printed, however, you will need to check that these are correct. To help us ascertain education and training needs, we have asked you to complete a section on education and training and for convenience this will be a tick box section. Most importantly, to process your membership you will need to return your form with a passport size photograph of yourself, with your name, date of birth and membership number written on the back. This can be the photograph on your current membership card, or send us the whole card. Finally it is important that you sign the form in the space provided.

The form has been designed for easy completion and should only take a few minutes to check and complete.

CLIVE OSGOOD
Course Manager
Walton Heath Golf Club
Membership number: 00001
Expiry date: Dec01




You may have heard their names mentioned in conversation, or even seen them in print, but have you ever wondered who the individuals are who help BIGGA to run so smoothly as the leading Association in the fine turf industry? Read on...



Richard Barker

Vice Chairman

Name: Richard Barker

Association Position:
Vice Chairman

How long have you been a member of BIGGA?
Since the beginning in 1987

Where do you hope the Association will be in 10 years time?

With an improved profile and greater recognition among other golfing bodies

For what would you most like to be remembered?

For leading a 36 hole scratch tournament in the morning after a round of 71, for which I won a prize

For what would you least like to be remembered?

For adding an 86 in the afternoon, for the worst score of the day

Why did you take on a more involved role in the running of the Association?

I wanted to put a little something back into an Association which had provided me with a lot of help and education over the years

Name one thing which would improve the Association?

More active support from members at grass roots level and continued expansion into Europe

What is your claim to fame (None, not acceptable)?

Playing eight rounds and six holes - 150 holes in total - in one day and raising over £1,000 for a local charity

Describe BIGGA in 15 words

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 3. V-neck no sleeves, available in navy only, sizes from 40" to 46", larger sizes available on request. £29.95 inc. VAT, p+p

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BIGGA Members Lapel Badge

BIGGA have introduced a new "Members" enamel lapel badge. Available to all members at the special rate of £2.50 inc. VAT, p+p

The new BIGGA logo merchandise can be seen at the BIGGA stand at the Saltex Show on 4/5/6th September. For further information contact Tracey or Susannah in Membership Services.

August's Monthly 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 fantastic BIGGA sportswatch. Our congratulations go to August's winner, Alastair Logan of Galgorm Castle Golf Club.



BIGGA welcomes ...

Scottish Region

Graeme Ferguson, East
Scott L Horal, East
James C MacIntosh, East
Lee Maxwell, East
Andrew McCleary, East
Steven Peppers, East
Christopher Noble, Central
Peter M Paton, Ayrshire
Steven Peppers, East
Scott I Poole, East
Christopher Smith, North
Bruce Summerton, Central

Edwards Coulthard, Cleveland
Christopher Courtman, Northern
Michael R Dealtry, Northern
Paul A Gledhill, Northern
Robert A Herro, Northern
Thomas Ibison, N West
Colin Jessop, Sheffield
Gwilym H Jones, N Wales
James Kershaw, Northern
Joanne Kershaw, Northern
Paul Nelson, Sheffield
Simon Sayner, Sheffield
Steven Walker, N West
Timothy Ward, Northern

Paul J Crouch, Mid Anglia
Stephen J Donoghue, E Midland
Mark R Faulkner, BB&O
Luke Foskett, Midland
Derek Ganning, Midland
Paul Harden, BB&O
Gregory J Lansbury, Mid Anglia
Alistair Main, BB&O
Philip C Newman, Mid Anglia
Paul A Stiff, BB&O

South East Region

Nicholas Barton, Essex
Rodney D Beautyman, Essex
Phillip R Garrod, London
Stephen W Goode, London
Daniel P Hughes, Surrey
Phillip G T Hunter, Surrey

Sun Kim, Surrey
Chris M Little, Essex
Brendan Morgan, London
Jay Motta, Kent
Douglas J Tate, Surrey
Colin R Wait, Kent
Barry Williams, Surrey

S West & S Wales

Jamie Bowler, S West
Paul Sargeant, S Wales
Robert M Shaw, S Wales

Northern Ireland

Harry Creighton
James H E Eager
Rodney McKay

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Lars M Westlund, Norway
Ulf Orjoh Utterstrom, Sweden
Randal Gai, USA

Associate Members

Blair S Cornthwaite, Far East

Student Members

Andrew Fraser, East
Greg Sutherland, Ayrshire

Northern Region

Paul G Bradshaw, N West
Paul Brown, Northern
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Midland Region

Justin Adams, BB&O
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Next month ...
August's latest members



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- Totrax Ltd
- Garden Innovation Products
- Kubota (UK) Ltd
- STRI
- Farmura Ltd
- Johnsons Grass & Wildflower
- EvenProducts Ltd
- Eagle Promotions Ltd
- Barenbrug UK Ltd
- Simon Tullett Machinery Co Ltd
- Allen Power Equipment Ltd
- Textron Golf Turf & Specialty
- Rolawn (Turf Growers) Ltd
- Gem Professional
- Wiedenman (UK) Ltd
- Supaturf Products Ltd
- Risboro Turf
- Trelleborg Wheel Systems
- Aitkens Sportsturf Ltd
- Inturf
- Vitax Ltd
- Lewis Equipment Ltd
- Boyd Golf Course Accessories
- Kubota (UK) Ltd
- Ocmis Irrigation Ltd
- Allett Mowers
- Amenity Land Services
- PSD Agronomy Ltd
- TACIT
- Turf Seed UK Ltd
- Lincmaster Thief Stoppers
- Rufford Soil Technology
- Club Car - Ingersoll-Rand
- LS Systems Ltd
- North Staffs Irrigation Ltd
- Logic Irrigation
- Irrigation Control Ltd
- The Golf Sign Company
- Lloyds & Co Letchworth Ltd
- FMW
- Bernhard & Co Ltd
- Port Agric Ltd
- Charterhouse Turf Machinery
- Scotts UK Professional
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- Long Equipment Ltd
- Turfmech Machinery Ltd
- Cleveland Sitesafe Ltd
- Symbio
- Lindum Seeded Turf Ltd
- Avoncrop Amenity Products Ltd
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- Scotts UK Professional
- Rousseau Equipment Ltd
- Hunter Grinders Ltd
- Arden Lea Irrigation Ltd
- Links Leisure Ltd
- Maxxis International UK
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- Sportsworld Amenity
- Fern House Marketing Ltd
- Golf Car UK Ltd
- Advanta Seeds UK Ltd
- GPS Services Ltd
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- Water Proofing Services
- Aventis Environmental Science
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- D W Tomlin
- Boughton Loam Ltd
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- Spaldings UK Ltd
- Caprari Pumps (UK) Ltd
- M J Abbott Ltd
- Cebeco Oliver Seeds Ltd
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- Toro Commercial Products
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- European Turf Technology Ltd
- True Surface Rollers
- The Hydroscape Group Ltd
- Saxon Industries
- AGCO Ltd
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- Swan Plant Services Ltd
- Kawasaki Motors (UK) Ltd
- Garfits International Ltd
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- Major Equipment Ltd
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- Trimax Mowing Systems
- Talbot Farm Landscapes Ltd
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- John Deere Ltd
- AGCO Ltd
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- Kestrel Golf Ltd
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- European Institute of Golf Course Architects
- European Turfgrass Laboratories
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- Greenlink International Ltd
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- Seoul Nassau UK Ltd
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- Green Pride Ltd
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- Headland Amenity
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- Tower Sport (Europe) Ltd
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BTME 2002 sees a superb innovation designed to make attending the Show as an exhibitor or a visitor far easier than ever before ...

TUE 22 JAN02

WED 23 JAN02

THU 24 JAN02

Micro site Maxi info

Major new developments to the BTME microsite

As part of BIGGA's existing website - bigga.org.uk - a BTME Microsite has been added to make pre-registering for the Show, booking accommodation, and reserving stand space, just a few clicks away. It also means that exhibitors can have their stand and company information available to everyone much earlier than in the past, while visitors can familiarise themselves with the show layout months before they arrive in Harrogate.

In a new departure for 2002 and in response to the queues, which were a direct result of the record numbers who visited Harrogate last January, everyone who attended BTME2001 will automatically be pre-registered for BTME2002.

If you didn't attend January's show, however, or your personal circumstances have changed - new job or residential address for example - you can pre-register using the Microsite.

Pre-registration

Simply click on the Pre-registration option in the navigation bar at the left hand side of the page. You'll then go to the pre-registration page where you will find a number of ways in which you can sign up for your free ticket. By clicking on the email link, you will open up a separate page containing an easy-to-use form. Fill this in, click the submit button, and there you are. You will receive confirmation that your form has arrived and that your registration will be processed.

Please note that all badges will be mailed in early January 2002

Alternative means of registering are the telephone option Tel: 01423 856062 Fax: 01423 528686 or the mail option by calling BIGGA HOUSE Tel: 01347 833800 and asking for a pre-registration card.

Exhibitor information

The new BTME Microsite gives so many added benefits for exhibitors.

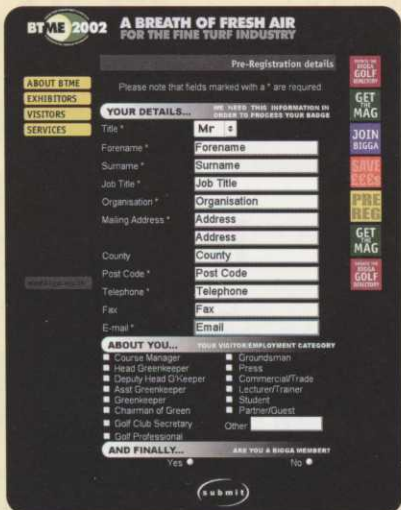
Existing exhibitors can list important contact information for themselves, plus 100 words on their new launches or general company details. These are then activated by microsite visitors when they click on the relevant stand within the on-site Show map.

Visitors to the site can then access individual company websites using this advanced function.

Potential exhibitors can identify an available stand and click on it to learn the size and cost - as space



Above: Finding stand information
Right: Booking a stand online
Below: The online pre-registration form



only or with shell scheme. If they wish to proceed, they can then fill in an online form and reserve that stand for themselves. Easy!

The site also includes an online accommodation booking service, up to the minute information on the Education Programme and important information about the social side of the week.



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Dr. Ruth Mann explains how the problem with Chafer Grubs could soon be a thing of the past ...

Chafers:

Have they met their match?

In 1983, an article appeared in the Sports Turf Bulletin concerning pests in turf. Chafer grubs (also called white grubs) were included only as a minor pest in the British Isles, although, at this time, they were causing major damage on continental golf courses. Since this article, chafer grubs seem to have been appearing with more regularity, sometimes being an incidental pest and sometimes causing severe damage. This year, perhaps due to a rather mild winter, chafer grubs have become a major pest on some golf courses.

Chafer grubs can be identified by their creamy white bodies with a swollen tail end that is usually darker due to the intestinal contents and lie in a characteristic comma shape (Fig 1). They have three pairs of brown legs and a distinctive shiny brown head with large chewing jaws. They lie just

below the turf surface and feed on the roots. As the roots are severed the turf becomes prone to drought in dry weather. They like to live in sandy soils and thatchy areas with adequate moisture as they can easily move up and down the soil profile. They are most commonly found in roughs, semi-roughs and fairways. They also favour less disturbed areas, such as the sides of bunkers or infrequently used championship tees. Adult females do not tend to move over vast areas. This can lead to the same areas being infested year after year. So far, they have been found from Guernsey, Cornwall and Devon up through East Anglia across to the West coast of Wales and as far North as Cumbria. At this point I have no reports of chafers in Scotland, although I suspect it is just a matter of time before they begin to appear.

We have five species of chafers, the cockchafer, garden chafer, summer chafer, brown chafer and Welsh chafer. The two species that seem to be commonly found on golf courses are the cockchafer and garden chafer. The cockchafer is the largest species. Adults have black heads and reddish-brown wing cases. They are nocturnal, emerging in May and June. The female burrows back down into the soil to lay eggs which hatch 5-6 weeks after laying (around July). Cockchafer grubs take three years to mature and can grow up to 48 mm in length. Therefore, any grubs found actively feeding in springtime, will be cockchafers.

Garden chafers are thought to be the most abundant species on golf courses. The adults are smaller with a metallic green head and reddish-brown wing cases. Grubs are also smaller (around 18 mm when fully grown) and only take one year to mature. The

grubs feed from hatching around July until late autumn when falling temperatures cause them to burrow down the soil profile and hibernate. They do not resume feeding in the spring as cockchafers do, but pupate and emerge as adults in May and June.

Small grubs do not really cause much damage to the turf, unless they are in very large numbers. In such cases, they can weaken turf leaving it prone to increased injury from wear and tear and environmental extremes. Also, once they have grown quite large, small numbers of grubs can kill areas of turf which then encourages the influx of weed grasses and broad leaved weeds. On golf courses, feeding grubs do not tend to be the major problem. Birds and small mammals searching for juicy grubs can rip up large areas of turf, leaving unsightly scars. To moles and badgers chafer grubs are a delicacy and so they may be encouraged to take up residence in chafer infested areas, causing more problems.

There are no chemicals approved for the control of chafer grubs at the moment which presents a major problem in itself. It has been proposed that physical control methods could be attempted, such as heavy rolling to squash the grubs when they are actively feeding just below the surface. However, research carried out at the University of Kentucky showed that liming, fertilisation, heavy rolling and aerification had no effect on chafer grub numbers over four years. Aluminium sulphate applied just before adults emerged did reduce grub numbers, perhaps showing that, similar to earthworms, chafer grubs do not like acidic conditions.

One control measure currently available in the British Isles is parasitic

Above right: Chafer grubs

Below and far right:
Damage caused by birds
looking for chafer grubs





nematodes. Nematodes are microscopic round worms. Just like fungi and insects there are 'bad' species that parasitise turf leaving the area weak and prone to drought damage and 'good' species that parasitise other turf pests. *Heterorhabditis megidis* is a good species of nematode as it searches for and kills chafer grubs. This nematode naturally occurs in our soils but the numbers are not large enough for chafer control. It is also specific and so does not affect other beneficial insects or animals and humans. The nematodes search for chafers in the soil and enter them through natural openings such as the mouth and anus. Once inside they release a bacterium that multiplies and kills the chafer in a couple of days. The nematodes then feed on the bacteria and reproduce releasing more nematodes into the soil to begin the search again. However, nematodes do not come without their problems. At initial application the soil temperature must be 12°C or above for activation. The nematodes are destroyed by ultra-violet light and high temperatures and so are best applied in early morning or evening when it is not too hot or sunny. The turf needs to be well irrigated after application to wash the nematodes into the soil and

kept moist, but not flooded, for two weeks as the nematodes need a film of water for movement. The nematodes may be easily washed into the soil on areas with short grass, such as greens and tees. However, on areas with long grass like fairways and roughs there have been problems with getting the nematodes into the soil.

Nematodes are being successfully used in gardens here but as yet we have no information regarding usage on golf courses in the UK. However, in Denmark, nematodes have been successful on greens and tees but not on fairways, possibly due to the nematodes failing to penetrate the long grass and thatch. They are expensive for treating large areas. The aforementioned golf course in Denmark spent £25,000 treating the whole course. However, work carried out by Imperial College, Berkshire on garden chafers infesting a golf tee showed that the grubs aggregated under grassy areas. They suggested that this may be due to the female laying eggs which hatched in batches and the grubs did not move far from their preferred food source of grass roots. The grubs were less associated with bare areas or areas colonised by broadleaved weeds. Therefore, spot treatment of grassy

areas infested with chafer grubs may be possible.

Research is required here to determine whether nematodes are successful at treating chafer infestations on golf courses and if the longer grass on rough areas presents a major problem in preventing nematode penetration into the soil. If, and when, this research occurs we will let you know the outcome! Other research at STRI, such as our Pests and Disease Survey 2001, will help to determine which years chafers cause the most

damage and if they are slowly moving North into Scotland as we suspect. Therefore I would like to remind all greenkeepers about returning their questionnaire. There is no time limit on these and the more we receive the better the results we can give you. If you have not received a copy of the STRI questionnaire please contact me.

Dr. Ruth Mann is the Turfgrass and Plant Pathologist at STRI. Ruth and the rest of the STRI team can be contacted on 01274 565131; e-mail info@stri.co.uk; or visit our website www.stri.co.uk



Roland Taylor gives some tips on establishing wild flower areas on your golf course ...

Wild things

A golf course is ideal for developing areas of wild flowers, but if these floral havens are to continue to flourish, they need to be carefully managed. If left to their own devices the dominant species will eventually crowd out the other plants. Most of the wild flowers found in today's mixtures originally thrived in old meadows where farmers grazed livestock and had made hay. This meant, that periodically, the top growth was removed and any nutrients this would have produced were not returned to the soil. Strange as this may seem, it encouraged many species, especially the rarer varieties to survive. The removal of the cut material is critical for another reason - left on the surface it suffocates the plants underneath.

When establishing wildflower areas, this scenario has to be created and managed. It is not just a matter of hurling on the seed and sitting back expecting results. This is a sure-fire way to failure.

When a site is being considered, it is important to sow or plant indigenous species to the area. At this stage calling in the experts is strongly recommended. There is a wealth of experience out there to draw from and suppliers can advise on suitable species and the management necessary to ensure success.

Preparation of the site is similar to that for most seeds, but there are important differences. A fine weed free tilth is necessary if healthy germination is to occur. The soil should be low in nutrients. In areas known to have high fertility, annual weeds need to be eradicated with a systemic herbicide and then allow the ground to remain fallow if possible. There are two alternative methods: use subsoil or remove the topsoil. Whichever one of these is used the final seedbed needs to be cultivated to a depth of 10cm with a fine surface tilth.

Sowing can take place any time of

the year as long as the right seedbed conditions can be created, but the best time is from mid August to the end of September.

The seed will need mixing thoroughly to ensure an even distribution of the different species of wild flower.

Recommended sowing rates are 5grams per m² for mixtures that contain grasses and 0.5 to 1 grams per m² for pure wild flower. Broadcast the seed and follow by raking or harrowing to a depth of 5 mm. Finally, roll with a ribbed roller to cover the seed and ensure its contact with the soil particles. There are machines on the market that will carry this out in one operation.

If the mixture is made up of small seeds, this can be bulked out with silica sand or ground barley at a ratio of 4:1. Irrigation is not recommended - let nature take her own course.

The seeds have germinated and everything is looking good, so what next? Bearing in mind this is like growing a crop, it is necessary to remove any competition from weeds and grasses. As herbicides cannot be used, an alternative is necessary and this is where mowing comes in. In the first year begin cutting in March or April depending on conditions. Cut down to a height of 5cm every two months or when the sward reaches 15cm. It is important that all the cutting material is removed.

The final cut will be between September and October. Something else that needs to be taken into account is that any persistent weeds, like docks, will require spot herbicide treatment or removal.

By the time the second year comes round the wildflowers should be well established and the mowing regime is completely different. Between March and April the first cut and collect

should be carried out leaving the sward at a height of 7.5cm. The second cut is done at the same height at the end of the flowering season, which can occur somewhere between August and October depending on climate. A further tidy up operation may be required in the autumn.

Failures can occur especially in the first year and amongst these is that the high levels of maintenance required have not been realised plus all the cut material must be removed. This later operation can be extremely expensive and labour intensive if the right equipment is not used.

In this country you cannot bank on the weather, and if the past few years are anything to go by, more often than not it's going to be soaking wet and thick lush growth. Cutting and collecting can be a nightmare in these situations. Machinery continually has to be stopped and the system unblocked, thus considerably slowing down the operation. When considering mowers for this type of work there are some important points to take into account. The rotary principle relies heavily on moving grass out of the cutting deck fast, otherwise it quickly builds up and slows down the blade, this compounds the problem and results in the unit finally stalling. During this process, both engine power and fuel are soaked up, plus components are placed under considerable loading.

Bearing all this in mind, the ideal machine is one that gets rid of cut material from the deck fast, so the outlet chute needs to be as wide and as deep as possible with no obstructions between blade and the back of the collector. In addition, the cutting system has to be designed so that the maximum power is constantly available to

the blades to maintain tip speed.

When considering machinery for this type of application, demonstrations should be carried out on the same day in the same conditions, preferably wet, then a true picture can be seen of each one's capabilities. Cutting dry, fairly short vegetation is relatively easy. It's the tough, lush, wet growth that sorts the men from the boys.

Conclusion

- Get the initial seedbed right.
- The quality and purity of the mixtures is vital, so only the best should be used. As with most products today, cheapness can be a recipe for disaster as some projects have proved in the past.
- Check the mixtures that you are buying are clean and not just harvested straight from a meadow. Use reputable companies who specialise in wild flowers.
- Follow the correct mowing schedule.
- Before deciding, have mowers demonstrated in the worst possible conditions, i.e. wet and thick growth. The wrong equipment can turn it into a very expensive labour intensive operation.

After the first year, the maintenance programme is relatively straightforward and a wild flower site will virtually take care of itself, providing the correct mowing programme is carried out. Because suitable conditions are available, other species than those sown will often colonise it.

The key to success is to seek expert advice from day one and ensure you have the right mowers to maintain the sites.



Jim Crabbe explains how taking care of drainage issues can reduce course closures when the rains come...

Drain power

Hands-up all those clubs who have tried to hire a drainage contractor this summer, only to be told that somebody beat them to the top of the list. After the wettest autumn and winter since records began at the Met Office, there can be little surprise that drainage has suddenly become a hot topic and a priority for many clubs around the country.

We will all have witnessed the adverse effects that the very wet weather has had on sports turf facilities, many clubs through last winter were forced to close, with surfaces lying under pools of water, causing damage to the sward that would take many months to recover, in fact some establishments are still suffering, and

no doubt are now having to placate some very unhappy members, not to mention the revenue that has been lost.

Yet some sporting facilities did remain open and courses and pitches were played upon. How? Because of efficient drainage, and unless you are fortunate to have a naturally free draining facility then a drainage scheme should be a priority.

Effective drainage is vital to all Sportsturf whether an existing facility or a new construction. A system, which has been carefully designed and installed by skilled contractors, will have enabled many courses and pitches to provide a service to its members and attract valuable revenue to the club despite the appalling weather conditions.

In 1998/1999 St Mellion in Cornwall installed an intensive piped drainage system, when the club records began in 1995 1100mm rain fell, since then the club has seen a significant increase in the rainfall, last year an overwhelming 1600mm fell. Despite this huge increase the course was only closed for a handful of days. Simon Marsh, the Course Superintendent explained that had the work not been undertaken it would have meant the closure of the club for some four to five months. The loss of revenue for any

business having to 'close shop' for such a period would be catastrophic, according to Simon "the drainage installation has made the world of difference to St Mellion".

So a clear example of the benefits for undertaking the work, but what does it actually involve? Firstly, the design. A site investigation will be undertaken to assess the actual problem and the needs. The designer will work closely with the client to decide upon the intensity of the actual scheme as the selection of drain spacing is often based on experience and soil type as well as the site location and the underlying soils, the sporting activity, frequency of use, and the rainfall. For example the club that relies solely on membership will have to consider the overall value it provides for its members and therefore what proportion of its spending may be allocated to a specific area, where as the course that has to open its doors at set times for set events cannot afford not to take all the necessary actions to ensure that the course will be available at the required time and not closed due to water logging.

The scheme should be suitable for machine installation; pipe junctions should be kept to a minimum in order to avoid blockages and breakdown, and where possible main drains

