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Toro Student of the Year 2005 Preview

GI gets up close and personal with the eight Finalists competing for the 2005 Award.

While thousands of fortunate families escape Britain for sunnier shores to rest, relax and top up that fading sun bed tan, for the members of BIGGA there is no such relief, as June though to September remains the busiest time of the golfing year. Inspired by The Open and the US PGA Championship, playing demand from cultured golfer to wannabe Woods increases spectacularly over the summer period, putting high pressure on greenkeepers' time. These months also witness numerous high profile Section, Regional and National BIGGA events and 25 student greenkeepers took time out of their hectic schedules to attend the Regional Finals of the Toro Student of the Year Award 2005.

BIGGA's Education and Training Manager, Ken Richardson, racked up the miles once again as he travelled the country to whittle down the 25 Regional Finalist to eight National Contenders. During his quest, Ken 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. Combined, these men made the difficult decisions of which eight will be coming to BIGGA HOUSE on September 26 for the Grand Final.

The first day of the judging was held on July 4, which coincided with the planned G8 protest in Edinburgh. Despite the events of the day, all ran efficiently and all five nominees managed to get to their interviews. As a result, representing Scotland at BIGGA HQ will be Darren Leith and Tommy McFadden.



Darren, 27, is single and works at Haga Golf Park in Oslo, Norway, as an Assistant under the guidance of Head Greenkeeper Stefan Toft. Darren is now in his second season at the Club, previously having worked on the Duke's Course and The Old Course, at St Andrews, and Garmouth and Kingston Golf Club.

The Garmouth lad holds a NC and HNC qualification in Accounting, but after deciding this particular career path was not for him entered Elmwood

College in 2003 to achieve his NC in Greenkeeping. Darren returned to the College in 2004 to complete a HNC in Golf Course Management, while also winning the Best Practical Greenkeeping Student of the Year Award at the institute. He will back once again in October to tackle a HND in Golf Course Management.

"I am very keen to learn and very keen to pass on any information to others. I am at the beginning of a long learning curve and am confident I will achieve my goals and intend to end up improving greenkeeping in a less developed country," said Darren.

Tommy McFadden is also from the Elmwood stable. Employed as an Assistant on the New Course at St Andrews, the 22 year old is studying Amenity Horticulture at HND level. He started his greenkeeping career at Ballycastle Golf Club under the watchful eye of Head man Godfrey Clarke, father of Ryder Cup player Darren. In his short career Tommy has made his mark, being honoured with a R&A Bursary Award to help with his studies. The sport's Governing Body handed out just six of these Awards, with four of the recipients working under the title of Head Greenkeeper or Course Manager. Tommy has just experienced working on his first Open Championship, where Tiger Woods again reigned supreme.

"There's not many people who

count themselves lucky to be getting up at 4.30am to go out to work, but then again there is not many people who get the opportunity to work at the Home of Golf and on an Open Championship," remarked the youngster.

Moving down to the North Region, where the interviews were held at Manchester Airport. Five candidates were in competition here and it was Emmet Reilly and David Newton who rose above the rest to qualify for the Final.



21 year old Emmet is an Assistant at The K Club, Ireland, and has been working there since April 2005, in preparation for the 2006 Ryder Cup. The third Finalist to be taught at Elmwood College, Emmet has just completed a NHC in Golf Course Management. He also has the NCVA Level 3 in Greenkeeping and both the NPTC and Chainsaw Certificates under his belt. Despite finishing his course, it is no means the last time Emmet will enter the classroom.

"Looking to the future, I think education is a fundamental part of greenkeeping in order to be associated with the best. Demands from the golfer are higher than in previous times, as they expect golf courses to be in pristine condition all year round. Higher education becomes paramount in this," stated Emmet, who plans to return to college to take on a HND and possibly a Degree in Sportsturf Management in the future.



David Newton, 47, is the oldest of the 2005 set of Finalist. Married for 16 years, he is First Assistant at Arrowe Park Golf Club, Birkenhead. Having only discovered the profession some 12 years ago, David has gained his PA1 and PA6 along with his NVQ Level 2 at Reaseheath College, and is now studying for his NVQ Level 3. Said David: "As a mature student I found it a pleasure to study with enthusiastic staff and students and to swap new ideas with like minded individuals. I

found the whole experience very gratifying."

As well as golf, David enjoys cycling and fishing and is keen to progress his career up to Head Greenkeeper status. His dream is to work on a links course.

Next up was the Midlands' leg, where Alastair Ogilvie and James Lindsay shone through as the two candidates worthy of a visit to BIGGA HOUSE.

Alastair, who is a retained Fireman, attends The College of West Anglia, where he is taking his NVQ Level 2. Since 2002 he has been an Assistant at the Gog Magog Golf Club, under the tuition of current BIGGA National Chairman Kerran Daly. Alastair is part of a big greenkeeping family, with three of his relatives within the profession, and has big plans for his future. Short term goals include NVQ Level 3 in Amenity Horticulture in Sportsturf and finishing his spraying



certificates, while in the long term an NVQ Level 4 and an MSC in Sports Surface Technology are in the pipe line.

"My NVQ Level 2 has really supported my thoughts on greenkeeping. It has given me the background to the career and I cannot wait to get stuck into the Level 3," said an excited Alastair, who was part of the BIGGA Open Support Team at St Andrews this year.

Deputy Head Greenkeeper at The Bedfordshire Golf Club, James Lindsay began his greenkeeping career at the tender age of 14, working at Ringdufferin Golf Club, Northern Ireland, during school holidays. James, now 27, is presently studying at Merrist Wood College, tackling a NVQ Level 3 in Sportsturf and he has a long history of education.



James has gained a National Certificate in Amenity Horticulture at Distinction Level, as well as a National Diploma in Turf Science at Myerscough College. After earning the latter qualification he was awarded a place on the Ohio State University Intern Programme, employed at the Southward Ho Country Club on Long Island, New York.

"On completing my Level 3 and gaining the appropriate experience, I would like to become a Course

Manager and eventually host a major event. I would also like to continue studying and improving my knowledge by enrolling on a degree course, as the greenkeeping profession is continually moving forward and becoming more professional," commented the well travelled Deputy. The venue for the last stage of the Regional Finals was Kettering. Here Deputy Head Greenkeepers Alan Pierce and Daniel Spencer saw off stiff competition to make it into the National Final.



Alan, 24, works at Ham Manor Golf Club under Head man Jon Budd, after leaving his position of Assistant at Royal Eastbourne GC recently. A qualified Mechanic, Alan has worked as an On Call Service Technician at John Shaw Machinery, he also has NVQ Level 2 in Amenity Horticulture and NVQ Level 3 Sportsturf Management on his CV. He is in the final stages of his NVQ Level 3 in Amenity Horticulture at Plumpton College at the moment.

"My new position at Ham Manor is something I have aspired to for a long time, as the course is highly regarded in the local area. As for my future aspirations I would like to make the best of this opportunity and support my Course Manager. I would also like to do either NVQ Level 4 or a HND as the scientific side of turf care is something that interests me," stated Alan, whose hobbies are slightly on the wild side, as he enjoys motorcycling, scuba diving and playing the guitar in his limited spare time.

Daniel Spencer can be found at

Oaklands Collage working towards his NVQ Level 3 after completing his NVQ Level 2, PA1, PA2 and PA6 in previous years. Daniel, 24, got into the world of greenkeeping at 15, gaining two weeks' experience at Brocket Hall Golf Club under John Wells. He is now the new Deputy Course Manager at Welwyn Garden City Golf Club, in Hertfordshire, working with Course Manager Brett Cox. He has been at the club since April 1997, starting out as a



trainee and has qualified as a mechanic - a responsibility of his new role will be to train up the next mechanic at the club.

"At the age of 24 I believe that to become a Deputy Course Manager of one of the best maintained golf clubs in Hertfordshire is already quite an achievement. Within the next five years I would like to have become a Course Manager," said Daniel confidently.

So there you have the eight Toro Student of the Year 2005 Finalists. All will visit BIGGA HOUSE in a late week in September and compete for the Grand Final prize of the Toro Scholarship. This involves an eight week trip to the USA, where for six weeks the University of Massachusetts will be home, as the lucky winner completes a residential Turf Management Course. The trip also includes visits to the Toro Headquarters in Minneapolis and to the GCSAA Golf Industry Show, in New Orleans, in February 2006.

The final itself will entail a further interview and the completion of a survey of the Aldwark Manor Golf Course. This will include evaluating nine holes of the York based course, where BIGGA HQ is situated.

"The standard of entrant to the Toro Student of the Year competition improves year on year. In turn this makes the judge's job even harder, and we have all had to make tough decisions to get the eight National Finalists. All of those reaching the Regional Finals have gone through a selection process when 3000 students has been cut down to 25. All should be very proud of themselves, but unfortunately, we can pick only eight finalists," commented Ken Richardson after returning from his week long interviewing around the UK.

Catching the Worm

Kate Entwistle investigates nematodes, their effects on cool season turfgrasses and possible methods to control them.

WHAT ARE NEMATODES?

Nematodes are a large and diverse group of unsegmented roundworms that occur in virtually every conceivable location worldwide. They can be found in films of water in all natural soils, in bodies of water across the planet and in plant and animal tissues both as saprophytes and parasites. There are about 2000 described species of nematodes that obtain their nutrition from different plants around the world and cause damage or disease to their host in the process.

Given these facts, why should the association of certain nematodes with turfgrass disease problems still be viewed with scepticism by some in our Industry? I can only think that it is related to the relatively little attention that they have been given over the years compared

with that afforded to other invertebrate pest and fungal disease problems. This is especially the case on cool-season turfgrasses although nematode damage on warmseason turfgrasses has long been acknowledged and accepted worldwide.

NAMING NEMATODES

The nematodes associated with plant diseases are commonly named so as to describe the symptoms that are seen on infected

roots, for example stubby-root, root-knot, lesion and cyst rather than by their Latin names, Paratrichodorus,

Meloidogyne, Pratylenchus and Heterodera for example. In other cases, common names describe a specific characteristic of the nematode's shape or anatomy, for example sting, spiral and lance (Belonolaimus, Helicotylenchus and Hoplolaimus, respectively).

These are all examples of plant parasitic nematodes but the phylum 'Nematoda' as a whole contains two additional major groups of nematodes, the saprophytic nematodes and the entomopathogenic nematodes. Any healthy rootzone will support high populations of various saprophytic nematodes. They will aid the natural breakdown of decaying organic material and their presence should be an indicator of a healthy rootzone.

Entomopathogenic nematodes of the genera Heterorhabditis and Steinernema feed only on insects and their larvae and they are currently being investigated and used as a biological control for insect pests including chafers in amenity turfgrass. These nematodes will not cause damage to turf since they do not feed on the plant and application of products containing these nematodes can be made in the confidence that they will target only the invertebrate pest populations in the treated area.

APPEARANCE AND LIFE CYCLE

With regard to plant parasitic nematodes, those that are capable of damaging turfgrasses are generally transparent and about 1mm long x 0.02mm wide, although their length will vary between the different genera and between males and females of the same nematode type. Male nematodes are invariably 'eel-shaped' being round in cross-section and unsegmented along their length. The females of some species, however, become swollen at maturity and can have distinctly rounded bodies. All nematodes produce eggs that hatch in to juveniles. The inveniles often recemble the adult and

The juveniles often resemble the adult and enlarge through four moults, the first usually occurring inside the egg. After the final moult, the nematodes differentiate in to male or female and the female completes the life cycle by producing eggs, either after mating or parthogenetically (i.e. reproduction without fertilisation) if there is no male around. The length of the life cycle will vary depending on the type of nematode and the

local conditions but on average it will be around 30 days. One feature common to all plant parasitic nematodes is that they

possess a stylet or 'spear-like' structure in the head end that

Damage to roots caused by Meloidogyne minor infection

FACTORS AFFECTING NEMATODE POPULATIONS

they use to pierce the plant cells and feed on the cell contents.

Almost all plant parasitic nematodes live part of their life cycle in the rootzone with temperature, moisture and aeration affecting their movement and population development. Nematode populations will fluctuate both seasonally and spatially across any given area but generally it is thought that their populations frequently peak during spring and autumn. However, damage to the sward is generally only observed some time after these periods of population growth when the turfgrass is under additional environmental stress.

The exact size of any nematode population that is likely to cause damage (i.e. the threshold level) is still largely undefined for cool-season turfgrass. Details of damaging population numbers have been published for certain nematodes but much of this work refers to situations in the US



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General yellowing patch symptoms of Meloidogyne minor infection

and since factors including rootzone material, temperature, grass type and nutrient status can affect nematode population effects, this information may be of limited value in the UK. Presently, the best way to determine population effect and cause of symptom expression is likely to be achieved by comparing population levels between affected and adjacent unaffected areas of turf. This is by no means a scientific way of determining threshold levels but it is a method that will show if local population increases are likely to be causing damage in the affected area.

The ideal conditions for maximum nematode population growth are, unfortunately, the same conditions that support ideal plant growth, i.e. mild to warm rootzone temperatures, adequate, but not excessive or limiting, soil moisture and light textured rootzone materials. Low levels of plant parasitic nematodes can be found in most rootzones but damage to the turf is caused when their populations increase and especially when affected plants are further stressed by unfavourable growing conditions or high temperature and low water/nutrient availability.

Since most nematode damage will be confined to the turfgrass roots, the symptoms expressed on the sward will resemble those generally associated with water and nutrient stress or other root feeding insects, i.e. yellowing, wilting or loss of turf vigour. Movement of nematodes can be facilitated by water movement across the sward or through the rootzone and as such, it is possible to see symptoms of 'streaking' across the sward, following the known pattern of water flow.

WHAT ARE THE MOST COMMONLY SEEN COOL-SEASON TURFGRASS NEMATODES?

Over the past four years I have noticed a definite increase in turf samples received in to my laboratory where the plants are showing symptoms associated with nematode infection. There are several different nematodes that have been found, but those most commonly seen are the root-knot nematode Meloidogyne sp. (both on creeping bentgrass and on annual meadowgrass) and the root galling nematode Subanguina sp. on meadowgrasses.

Meloidogyne species of nematodes feed on over 3000 plant species worldwide and the females are referred to as sedentary endoparasites. In turf, this means that they are parasitic nematodes that enter the root, migrate to a feeding site and then become non-motile. Once the female has established a feeding site, she remains in place for the rest of her life. These nematodes are able to alter the entire physiology of the infected turfgrass plant causing significant damage as the nematode population increases. After emerging from the egg, the juvenile nematodes can invade previously infected roots, further enlarging the swellings that are already present. Normal development of the water and nutrient channels in the roots (the xylem and phloem) is disturbed and root functions decline directly reducing plant growth and quality (Shurtleff & Averre III, 2000).

In 2001, Meloidogyne minor was identified as a new species of root-knot nematode associated with yellowing circles and patches that had been recorded on creeping bentgrass greens across the UK and Ireland since the late 1990's (Entwistle, 2003). Although both the male and the female nematodes enter the plant roots during their life cycle, it is the female which remains inside the root, causing the formation of so-called giant cells which facilitate her feeding and disrupt the water and nutrient movement through the plant. The stimulated deformity of the roots is clearly apparent if they are washed free of rootzone material but the female herself is difficult to see without the use of a hand lens or microscope.

Although most nematodes are colourless, the mature female root-knot nematode resembles a small, white pearl approximately 0.5mm diameter. She lives with her body embedded in the root but the egg masses that she produces during her life, which can be five times larger than the female's body, protrude on the outside of the root and are tan in colour. Each egg mass will contain up to around 500 eggs.

Comparisons made between affected and unaffected areas of a golf green that were showing symptoms of infection by this nematode, recorded differences in population levels from <100 per 100g dry soil in the unaffected areas to between 1700 and 3400 per 100g dry soil in the affected areas (Karssen et al, 2004).

The fact that these nematodes are colonising the root system of the creeping bentgrass cultivars and annually causing the yellowing patch symptoms of damage between April and November, is no longer in doubt, but what is still under investigation is how best to deal with them. Since the nematodes disrupt the healthy flow of water and nutrient through the plant it is essential to help the plant to take up sufficient nutrient to maintain its growth during the year and this can best be achieved through foliar feeding.

Encouraging strong root growth will also benefit the plant by minimising the overall effect of the damaged root system on the sward. Knowing that the nematode is present in the rootzone with the potential to cause damage will enable you to adjust your management of the infected turf accordingly to try and minimise the potential damage during times of increased turfgrass stress. We have noticed that the apparent severity of damage by these root knot nematodes declines after about 5 years and this is likely to be, at least in part, as a result of the eventual build-up of antagonists in the rootzone that will stabilise the nematode population.

Over the past four years, an increasing number of turf samples with Poa annua swards have come through my laboratory and which have associated root galls caused by Subanguina species of nematode. These galls resemble peanuts in appearance although they are much smaller, generally being only around 2mm in length. The Subanguina nematodes are referred to as migratory ecto- and endoparasites being able to feed from the plant cells whether they remain outside (ecto-) or live completely within (endo-) the plant cells.

After feeding on and causing damage to plant roots, they are able to move through the rootzone and cause subsequent damage to other, previously uninfected roots. If individual root galls are removed and broken apart in water, they will be seen - using a hand lens - to release eggs and juveniles that are capable of future damage. Mechanical movement of the galls and infected rootzone is possible on affected turf but as with all other nematodes, their movement relies on the presence of a water film around the rootzone particles.

As with all plant parasitic nematodes, identification of their presence in a turf sample that shows symptoms of damage does not necessarily mean that they are the primary cause and nematodes can certainly be present in a turf area that is not showing any symptoms of damage at all. However, if symptoms of damage are present, the nematode population is high (compared with unaffected samples from the same area of turf) and there is no other possible cause for the symptom development (i.e. no fungal disease, no other invertebrate pest and no chemical/physical/environmental damage), then the nematode must certainly be regarded as the most likely cause of the problem.

There are many parallels that can be drawn between diseases caused by plant pathogenic fungi and those caused by plant pathogenic nematodes. Perhaps the most important is the understanding that the mere presence of the organism (fungus or nematode) does not necessarily mean that they are causing disease.

As with fungi, these organisms are likely to always be present but their localised populations, rate of growth and quality of the turfgrass at any given time will determine whether or not disease symptoms develop on the sward. If they do, accurate identification of the cause of the symptoms is essential and hopefully with a little more information on what potential problems nematodes can cause, you can ensue that all options are fully assessed before chemical applications or other management decisions are made.



General symptoms of Subanguina damage to a Poa annua sward

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Dr Kate Entwistle works at The Turf Disease Centre and can be contacted on 01256 880246.



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4. When it blows, it really does blow and the Windbreaker ensures that you don't feel any of the resulting chill. This stylish top features a soft Teflon coated micofibre outer coat and is a pullover style, with high v-neck and two side pockets. It comes in navy, black or charcoal. Sizes S - XXL. £25

5&6. This top, which is Teflon coated and contains a soft waterproof breathable lining system, comes in two different styles. The Sport Weatherbeater (5) has an adjustable draw cord and is a short zipped pullover style. The Sports Jacket (6) is a blouson style with a full covered zip. Both come in a variety of colours and sizes are available from S - XXL. £42

> 7. The Reversible Waistcoat has two pockets both sides, is fully reversible and has an adjustable elasticised draw cord. Teflon coated, this top comes in black and grey or navy and stone (as pictured), with sizes ranging from M - XXL. £22.50

8 The Gear Crew Neck Fleece is ideal for work and play, is fashionable and practical. Available in S, M and L. Colours red, navy and grey. £22

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It Will Never Happen

Gareth Jones locks the doors and sets the alarm as he examines the best methods and advice to keep out the criminal elements.

How many times have we uttered the immortal words "It will never happen to me"? It is a sentence that escapes the mouth with delicate ease all too frequently. Unfortunately it is also a phrase that has a nasty tendency of coming back to haunt us. We can all think back to one time or another when this has been the unhappy case, and I bet the majority of us can link it back to a time when we have been a victim of crime, either in our personal or professional lives.

If you are one of the lucky people who has yet to experience such things, you may well be sitting down and thinking just that - it will never happen to me. However, as golf becomes more exposed though the media and, as result, becomes more popular to play, so does the awareness of the criminal element that golf equals rich rewards.

Like magpies, they are drawn to the shiny objects abundant at golfing venues the length and breadth of the

UK. From a member's new Callaway clubs to the greenkeeper's trusty old greens mower, if not securely locked away, a thief will gratefully except the opportunity to increase his knowledge of the inside of a golf club's facilities.

While statistics for reported crime occurring at golf clubs are impossible gain, as the majority of the UK's police forces do not have a separate category for golf, it is possible to link the latest general crime figures to the

industry. The 2004/05 Crime in England & Wales Report makes for some interesting reading. Complied from actual police recorded crime figures and the findings of the British Crime Survey (BCS), which documents people's real experiences as various offences often go unreported, the report makes a pleasing impression on the surface. The report shows a dramatic fall in the number non domestic burglaries, as incidents at business property or sporting venues are down by 14% compared to 2003/04. However, burglary, theft and criminal damage remain the highest sectors of British crime, and these elements are the biggest headache for golf club employees.

As a brief outline, London recorded the highest figures of all reported crime, 1,023,806 cases, while it was the Yorkshire and Humber Region that contained the highest theft and burglary levels. In total 589,874 crimes where

recorded in 2004/05 in the area. In Scotland, the Lothian & Borders police force report a 4% increase in recorded crime compared to the previous year. Vandalism has witnessed the most

significant rise in the area and mindless destruction on courses has become the bane of many greenkeepers' lives.

"Vandalism represents almost a third of recorded crime in the Scottish

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Borders and in terms of volume is our biggest single challenge. The most common acts of vandalism are those committed by youngsters often seen as a prank," has stated Challenge Divisional Commander, Chief Superintendent, Charlie Common, in a recent report.

Greenkeepers in Wales and the north east of England can sleep slightly easier at night, as these areas recorded the lowest figures. Just 258,204 crimes were noted in the north east, while Wales experienced 267,642. In the East Midlands burglary has been cut by 19% and theft has been lowered by 14%.

According to the Avon & Somerset Police thieves realise that many properties within a golf club are vacant during the day,

with greenkeepers having to work a fair distance from their facilities at points. This therefore makes greenkeeping maintenance facilities a soft target. This is a view endorsed by the security experts.

"Storage facilities for valuable turf care equipment are often quite basic, this makes them an ideal target for thieves. While many mowers are now fitted with datatags, this is only a trace method and does not prevent a theft happening in the first place," said Ian Howard, Managing Director at Howardson.

So what can the ordinary greenkeeper do to keep his beloved compact tractor safe from opportunist thieves without turning the club into a venue more suited to the likes of Norman Stanley Fletcher or the Bad Girls' inmates?

The major body of advice being issued to golf clubs, by

both the police and security specialists, is to cover as many bases as possible. One service or product will not be enough to halt a determined criminal, however a combination of protective methods may just keep a thief at bay. The key message is to make it as hard and as time consuming as possible for the would be perpetrator. A thief will be put off by any job that will take time as it greatly improves the odds of being caught red hand. They will no doubt move onto an easier location, rather than spend a copious amount of time attempting to break into a greenkeeping version of Fort Knox, as Nottinghamshire Crime Reduction Manager, Dave Fisher, confirms.

"On average, burglars will only spend four or five

minutes trying to break in so it makes sense to slow them down. Burglars seek easy access, so the more difficult you make it for them the less chance they have of success."

There are numerous ways to do just that and protect your greenkeeping facilities and their valuable contents.

IDENTIFICATION

Marking equipment makes it harder for criminal types to sell on, while also making it easier for the police to trace the rightful owner should the unfortunate occur. An ultra-violet pen can put an invisible mark on your chainsaw, which can only be seen using a UV lamp. UV marking on golf equipment is only advised when other marking methods would reduce the value of the kit, as a UV mark can fade in time, especially when exposed to sunlight, and can be washed off so it needs renewing regularly.

Creating an indelible marker on kit, using paint or etching the golf club's name using a punching technique, is advised by the police because it is a permanent mark. However this will not be suitable for most golf clubs if re-sale is planned in the future or the vehicle is leased, plus what will the Greens Chairman say when they see you taking a hammer to your shiny new utility vehicle?

It is recommended that golf clubs invest in an organisation offering property marking and asset registration services. It maybe one of the more expensive options in the short term, but will be vastly cheaper than replacing your equipment when it disappears in the dead of night. "Each method can fall short of providing effective identification, especially where owners apply their own marks or microdots and then fail to register the identification. What is required is a professionally installed irremovable and useable coding system that further deters thieves," said Bob Rowlands, Sales & Marketing Director at Lincmaster.

Systems are now on the market where a unique computer generated number is placed in up to 50 random recorded locations on a machine. This ensures not only the identification of the complete machine but also its component parts. Electronic tags and microdots can also be installed in random locations on a machine, however they require specialist equipment to read them.

BARRIERS & BOUNDARIES

"Golf clubs are increasingly becoming the target for opportunist thieves. With the high number of prestigious vehicles and expensive golf course equipment on site, thieves are making golf clubs their prime target," stated John McClellan, Managing Director of Jaymac Security Products Ltd.

