



out the winter and some will also try to create their own micro climate by installing sub-air systems.”

After the snow has melted and damage is revealed, the task of repairing begins. Depending on a courses budget, re-turfing, either from their own nurseries or by buying from abroad may be the only option. At Hauger, turf from a small nursery compliments an over-seeding programme which is usually carried out.

“This is something that both staff and members have to be patient with. Getting quick seed establishment in the spring time is a must and with daily temperature sometimes changing from -15 at night to + 20 during the day this is often a challenging experience. The use of growing covers in the spring time is getting more and more common both to help keep up soil temperature and also to combat wind desiccation.

This is complimented with a heavy scarifying and over-seeding programme. I find that shallow hollow coring followed by drop seeding with a variety of creeping bents gives an ideal result.”

Eoin went on to further describe

how his techniques could be applied to UK golf courses and how some are specific only to his climate.

“Well bringing a 120 hp tractor onto a green is, I suppose, a definite no go. My experience over the last 10 years has certainly taught me a great deal on how not to panic in stressful situations when pressure to open the course comes from all angles.

“Learning how to re-establish greens in a 3-4 week window is certainly an experience which can be of benefit back home. Managing to create a correct bed for seed establishment along with holding soil temperature up is something which is maybe forgotten about in the UK. Hardening off the grass plant for the winter period is also a high priority, along with cutting with newly sharpened units late in the season.”

Winterkill, although more severe in climates such as Norway, can be frustrating and as Eoin said there is no right or wrong way to help prevent it. Factors such as budgets, local climates and how a course was designed in the first place come into play when considering and combating damage done.



ABOVE: Work continues and
BELOW: Snow blowing



Take a fresh look at the problem of worm casts on turf



Graham Paul offers you the opportunity of gaining some Basis points by looking at the work of the humble earthworm

Every year when autumn approaches we are reminded of the presence of those hidden creatures living beneath the soil, as our grass is once again speckled with worm casts.

The majority of earthworms are entirely beneficial to the environment and do not cause a problem for man.

However, in the same way that our human society generates a minority of troublemakers, the earthworm community beneath our lawns gives rise to a small fraction of problem-causing 'outcasts' – the worms that leave their mess on the surface! In the case of earthworms though, it's a species thing.

In the UK scientists have identified around sixty species of earthworm, but only 26 of these are indigenous to these isles and the majority do us nothing but good.

A small group of the British earthworms are known to leave casts on the surface; in fact we now believe there are just two or three species that make all the mess on our lawns, sports grounds and golf courses.

In this article I will be taking a fresh look at the earthworm, its varied habitats and the problem of worm casting on grass surfaces.

The earthworm is a segmented, annelid* worm (*from the Latin Annelus – 'little ring') belonging to the phylum Annelida, a group which also contains leeches! It has both circular and longitudinal muscles that are coordinated to achieve movement by stretch-

ing and constricting the tubular shaped body. There is a primitive blood circulatory system that consists of two main blood vessels running the length of the worm. Blood is pumped around the body by a series of 'hearts' located in the head end of the worm.

Earthworms are hermaphrodites, reproducing by mutual cross fertilisation where both partners exchange sperm for egg fertilisation. The eggs are sealed inside a special protective membrane sack secreted from the clitellum (a thickened part

Throughout the world we believe there could be as many as 5,500 different species of earthworm but we cannot be more precise as some regions do not have the resources to study soil ecology in great detail

of the body wall sometimes referred to as the saddle and usually located closer to the head than the tail). This egg parcel is often buried deep in the soil to protect the emerging juveniles from predators.

Earthworms evolved very early on in the history of this planet and were already hard at work when dinosaurs roamed the earth. Their very existence results in an improvement to the structure and fertility of soils that enables so many other organisms to thrive.

History records that in the reign of Cleopatra V11 (51 to 30 BC) the importance of earthworms to soil fertility was already recognised and

the export of worms from Egypt was banned on penalty of death! Charles Darwin studied the benefits of worms for over 40 years and described them as one of the most important creatures on earth.

Throughout the world we believe there could be as many as 5,500 different species of earthworm but we cannot be more precise as some regions do not have the resources to study soil ecology in great detail. Most species grow to a length of only a few centimetres, but some tropical earthworms can attain a length of

up to 3.3 m (11 ft). However, in the UK our earthworms are of a more modest size range. Ecologists have divided earthworm species into four groups (ecotypes) according to their habitat and behaviour.

The first group is the Compost earthworms that tend to live mostly above ground in piles of decomposing leaf litter or compost heaps. The breakdown of plant material by bacteria and fungi in the composting process requires moisture and generates significant amounts of heat, providing a cosy environment favoured by members of this group, not to mention a supply of readily digestible food.



Compost worms (e.g. *Eisenia veneta*) are usually bright red and have a stripy appearance.

The second ecotype is the Epigeic earthworm. This group are also inhabitants of the surface, tending not to make burrows and living on plant materials such as leaf litter. Epigeic worms (e.g. *Dendrobaena octaedra*) are red or roan in colour but unlike the Compost worms they are not stripy.

The third worm ecotype is the Endogeic earthworm; a group that live, feed and deposit their casts in burrows in the soil. Some of them can create very deep burrows and because they are rarely seen on the surface, they are usually pale coloured – grey, pink, green or blue. An example of this group is *Allobophora chlorotica*.

The final ecotype is the Anecic earthworm, and it is the members of this gang that get all the ASBO's!

They feed from above ground on leaf litter and grass clippings, which they drag down into their burrows to digest and are subsequently responsible for leaving all the muddy worm casts that spoil our

grass surfaces and outdoor sports facilities.

In our human world it is mainly juveniles and teenagers that get blamed for chewing gum deposits that mess up our streets and pavements but in the world of the Anecic earthworm it is the adults that are responsible for leaving worm cast mess on the surface.

The juveniles remain in the confines of the burrow until they mature. Two of the culprits are; the black headed worm, *Aporrectodea longa* and the lob worm, *Lumbricus terrestris*.

On balance earthworms are a valuable natural asset to our ecosystem. They are nature's farm labourers; aerating the soil, improving the crumb structure, breaking down dead plant material and recycling the nutrients back into the soil to support future crops.

While the deposition of worm casts on the surface of grassed areas would seem to be of no consequence to most other animals, it does affect the lives of a significant fraction of the human race.

With a world population approaching seven billion humans in 2010, there are a large number who regularly take part in sports played on grassed surfaces that become affected by worm casts in the autumn and spring.

These include: - over 100 million who play golf, a staggering 265 million playing soccer (FIFA statistic), 10 million rugby players, and 75 million taking part in club cricket . . . then there are bowlers, hockey, grass tennis players, schools and colleges etc., all of which add up to an estimated 800 million grass sports users worldwide.

This conservative estimate represents 11% of the population, so it seems reasonable to make a case for worm cast control.

In the past worm control chemicals containing chlordane and carbaryl had a bad reputation for damaging the ecosystem. These 'old style' worm killers worked by skin contact and had a long persistence in the soil. The result was that they could eradicate all worms from the soil with just one application.

Although very effective at dealing



with worm casts, chlordane and carbaryl had a broad spectrum of activity against many soil living creatures and micro-organisms, so they were withdrawn from sale on environmental grounds and less damaging products brought in to replace them.

Today carbendazim is the only approved active ingredient available for suppressing worm casts on managed amenity turf, although some users still have difficulty getting good control.

To improve matters we need to understand the life cycle of these casting earthworms. A worm colonised soil will have at any one time; eggs, juveniles and adult worms. Under normal conditions, only the adult worms of casting species will come to the surface to feed. Juveniles generally remain in the burrows and feed below ground.

Only when they mature will the adults emerge above ground; to feed, deposit casts and to mate with another worm.

As soon as they have mated, the eggs are released, fertilised with sperm from the other worm and sealed in a sack which is deposited at the bottom of the burrow.

When we use carbendazim we can only control those individuals that are adults at the time of treatment. A few weeks after spraying, some juveniles will start to develop into new adults and we begin to see a few casts appearing on the surface. By the time the problem has got bad enough to spray again, a whole new batch of eggs have been laid and so the worm colony survives.

available food and that will involve collecting grass clippings when mowing and removing fallen leaves from surrounding trees in the autumn. This is not always feasible on large areas such as sports pitches and golf course fairways but if it is possible to 'box' the clippings and clear away fallen leaves, this will help reduce the severity of the problem in the long term.

Starting with cultural practices, the first thing that comes to mind is to remove the source of freely available food and that will involve collecting grass clippings when mowing and removing fallen leaves from surrounding trees in the autumn

In order to get the best results with worm cast control, we need to adopt an integrated approach that includes cultural methods to discourage worm colonisation and ways to achieve the efficient use of the chemical.

Starting with cultural practices, the first thing that comes to mind is to remove the source of freely

Next, consider improving the drainage in badly infested areas. Worms need plenty of moisture to move around in so drying the ground will help to slow them up. Improving drainage is going to be a costly operation but it would bring benefits to the quality of the playing surface as well as discouraging worm casts.

Another consideration is the soil pH (acidity) – earthworms prefer a neutral or slightly alkaline soil, so in some circumstances we can discourage them by lowering the pH with careful use of acidifiers such as sulphur.

This is by no means an easy task and you would need to start off by having a soil test done and then taking professional advice from an agronomist, as the pH of the soil will also have a profound effect on the health of the turf.

Even if we chose not to manipulate the soil pH with acidifiers, we should avoid using lime or calcified seaweed on areas that have a worm casting problem.

In turf that is irrigated on a regular basis, it is worth having the pH of the water tested as this might be adding to the problem. Tap water can often have a pH in the high 7's or low 8's indicating a fair degree of alkalinity. Bore hole irrigation can have a high pH as well, particularly if the hole is drawing from chalky or limestone soils.

The second part of our integrated approach is to optimise the effectiveness of the worm killer. Carbendazim works by ingestion rather than by skin contact so we need to apply it in such a way that the worm will take the product in with its food.

This is best achieved by spraying the chemical onto the turf so that most of the droplets remain on the leaf, allowing it to dry and then cutting the grass without collection boxes so that the clippings remain on the surface for several days after treatment.

On fine turf areas such as golf greens or on bowling greens and cricket tables during the playing season, this is not always possible due to the demands of play.

For bowling and cricket then, the best time to tackle the problem is in the early autumn and early spring when these areas are not in play. On a golf green the Greenkeeper must choose a window when there are no important fixtures.

When spraying a wormkiller we should also consider adding an appropriate adjuvant to the spray tank to improve the efficacy of the product.

For example, 'Aqua Tick' is a water conditioner that creates the ideal pH environment in the spray tank, buffering it to a value of around 5.0 and preventing alkaline hydrolysis of the chemical.

Research has shown that carbendazim breaks down rapidly at pH 9.0 having a half-life of just 12 minutes.

This means that at this extreme pH, 50% of the carbendazim added to the tank will be ineffective within 12 minutes of adding it to the tank. In contrast, at a pH of 5.0 carbendazim has a half-life of 30 hours.

Alkaline hydrolysis only occurs in dilute solution so once the chemical has dried on the plant leaf it will not be rapidly broken down and so will remain available to deal with the casting worms.

Using carbendazim in this way gives us selective control of the casting species, leaving all other worms unharmed, since it is only those two or three 'Anecic' species that feed and cast on the surface.

The only other surface feeding species belong to the Epigeic ecotype and these are worms that inhabit ground with lots of cover such as long grass and hedgerows and are unlikely to be targeted by carbendazim.

In recent years we have seen the spread of a new casting worm species on golf greens and other fine turf areas. This worm is very small, measuring only 10 - 35 mm in length and has been identified as *Microscolex phosphoreus*.

Interestingly, this worm glows in the dark when disturbed, presumably to deter predators such as feeding birds.

It exudes a luminescent fluid² from the mouth and along the body wall. It is a non-indigenous species originating from temperate South America and was first recorded in Britain³ as early as 1899.

I have seen this worm infesting greens on courses in Essex and Suffolk, in one case it was living in hollow core holes that had been filled with top dressing.

It leaves miniature worm casts on the surface and unlike native species that cast mainly at night, it seems to deposit casts throughout the day.

The worrying thing from a Greenkeeper's perspective is that it is not susceptible to carbendazim.

With the exception of *Microscolex phosphoreus*, carbendazim based wormkillers such as 'Caste Off' offer a sustainable solution to the problem of casting on turf.

They only target the few species responsible for the casts, leaving all other beneficial worms unharmed. They do not persist long enough to eradicate these casting species, because it is only adults that are targeted.

Their use is restricted to a very small percentage of the landmass and this is land that is not involved in any way with food production.



SELF ASSESSMENT

Use the questions below to check your understanding of this topic. Readers can claim two BASIS points if the questions are answered correctly, by filling in the form online at:

www.sherriff-amenity.com/technical.asp?newsid=18

Circle the correct answer(s)

1) In whose reign was the export of earthworms from Egypt banned?

- a) Hatshepsut
- b) Tutankhamun
- c) Ramesses V11
- d) CleopatraV11

2) Which of the following are earthworm ecotypes? (More than one may apply)

- a) Ectoplastic
- b) Endogeic
- c) Mesoteric
- d) Anecic

3) Earthworms are hermaphrodite, which means that they . . .

- a) live entirely alone
- b) indulge in self fertilisation
- c) reproduce by mutual cross fertilisation
- d) do not copulate

4) Which stages of the earthworm's life-cycle are susceptible to carbendazim?

- a) eggs
- b) juveniles
- c) adults
- d) adults and juveniles

5) Which active ingredients were used in the 'old style' wormkillers mentioned in this article? More than one may apply

- a) Thiophanate methyl
- b) carbaryl
- c) carbamate
- d) chlordane

6) In which part of the world is the worm *Microscolex phosphoreus* thought to originate from?

- a) South Africa
- b) South Georgia
- c) South America
- d) Southend-on-Sea

REFERENCES

1) The Earthworm Society of Great Britain – Information from their website: <http://www.earthwormsoc.org.uk/>

2) John E Wampler "The bioluminescence system of *Microscolex phosphoreus* and its similarities to those of other bioluminescent earthworms (oligochaeta)" - in *Comparative Biochemistry and Physiology Part A: Physiology* Volume 71, Issue 4, 1982, Pages 599-604

3) Dr David T Jones & Dr Kate Entwistle, "Your help needed" - in *Pitchcare Magazine* Apr/ May 2010



Letters

Please email your notes to: scott@bigga.co.uk

Toro Student Greenkeeper of The Year Award

I have been fortunate, over the last few years to be involved in the Regional and National judging of The Toro Student Greenkeeper of the Year Award.

The standard of the students has improved year on year; with this years applicants being exceptional. Both at Regional and National level, judging is becoming increasingly difficult and trying to separate the candidates is very hard.

This year's finalists included Sean Borrett who chose to give up a promising career in the City to become a greenkeeper. Sean's teenage ambition was to become a professional golfer, however he followed a very different path and undertook a degree in Business and Finance that led him to a career in the City. Disillusioned with City life, Sean the decided on a career change, following his original passion for golf and decided to retrain as a greenkeeper. Sean is now Assistant at Ellesborough Golf Club in Buckinghamshire.

This Award, now in its 23rd year, offers a great opportunity to Student Greenkeepers. The quality of the candidates proves the future of the industry is in good hands.

I would like to take this opportunity to personally thank Toro for their continuing sponsorship of this popular and important Award.

*Chris Sealey, Course Manager, Chippenham Golf Club
BIGGA Board of Directors*



Sean Borrett



Cover of the GI issue showing the winner of the award, Andrew Stanger

Best wishes

I would like to say how sad and surprised I was to learn that our Chief Executive, John Pemberton's decision to resign from his post.

John has held a senior post within the BIGGA Management for some 17 years, firstly as our accountant and number two to Neil Thomas, our first Chief Executive.

It was during my year of Chairmanship that Neil became seriously ill, 2003 was such a tragic year for his wife, Elaine, and the family, when he sadly died. Neil was our first CEO, and did a tremendous job for our Association,

That year was also a difficult time for all at H/Q especially for myself, an 'inexperienced Chairman.' It was at this time we had to find a new CEO, it was the Board's unanimous decision that John Pemberton be offered this position.

John, on a personal note, thank you for your friendship, not only to me but countless others. I would also like to take this opportunity to thank you for all that you have done for our Association, especially during those, and these, difficult times, I know that I speak for all of our Members in wishing you every best wishes for the future.

*Yours Sincerely,
George Brown, Turnberry Golf Club*



Refund of fees

I work at Garforth Golf Club, in Leeds, and just wanted to take the time to thank all of the staff in the Learning and Development department along with contributions by the Gold and Silver key sponsors who have helped me with a big part payment of my course fees.

In this day and age it is very hard to gain anything and a leg up really helps. I would have waited a lot longer to do my course due to the current economical climate. It is with great pleasure that I hope it continues to support and raise the standards of the greenkeeping industry.

Kevin Moore

AGM Notice

The Annual General Meeting of BIGGA will be held on Wednesday January 19, 2011 at 5.15pm in the Queens Suite at the Harrogate International Centre.

All paperwork including the Agenda and proxy voting forms will be available on the BIGGA Website from December 20.

The meeting will be followed immediately by an Open Forum where members will have the opportunity to discuss matters of concern to them with the Board of Directors.





THE HOW TO SERIES

Download and learn

- How to conduct a one-to-one meeting
- How to conduct a team briefing
- How to prepare for an appraisal
- How to recruit the right staff
- How to write a job description

Exclusive to BIGGA members

1. 'How to Cascade Goals to Teams and Individuals'

Introduction
The formation of goals that set out what a business is aiming to achieve is a key part of business planning. Teams and individuals throughout the organisation need to be briefed about what the goals are and what they should do to help achieve them. This requires a management process to be in place that cascades top-level goals down through the organisation.

Definition
A goal describes a measurable outcome or result that needs to be achieved.

1. Cascading goals
Cascading goals means breaking down the organisational goals into a series of smaller goals that describe what each unit or department needs to achieve. These goals are then broken down further until each individual in the unit has their own performance goals. In this way, progress throughout the organisation is measurable.

In some areas of the organisation, it may be enough to cascade goals down to the team level (e.g. in administration or production teams where they work together more as a team than as individuals). For some it is more appropriate to agree individual goals (see 'How to Develop an Appraisal System', and 'How to Prepare for an Appraisal'). What is important is that you get it right for your organisation.

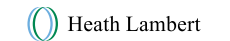
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“How To...” guides are now available exclusively to BIGGA Members, on a range of Human Resource topics.

These short, handy guides provide practical, step by step guidance on a range of subjects. The guides can be downloaded and used to help you develop your knowledge and implement new processes within your workplace.

To access the “How To...” guides, log on to the **BIGGA Members Area** at www.bigga.org and **click on Member Resources**.



The 'How To...' guides are a new benefit of BIGGA membership and are brought to you thanks to the continuing support of the contributors to the Learning and Development Fund.



DEALER OF THE MONTH

The series aimed at celebrating the great work done by dealerships up and down the country

GOLF AND TURF EQUIPMENT LTD

Location and size

Based in Wokingham Berkshire covering Berkshire, Surrey and London

Employees and size of premises

30 employees 35,000 sq ft over two depots

Number of service vans

8

Brief history of company

Established in 1987, Golf and Turf Equipment have been providing grounds care machinery solutions to both commercial and domestic users throughout the South East of England, including London, Berkshire, Surrey, Our association with John Deere has been unbroken since the founding of the business and we have since grown to become one of the largest independent John Deere grounds care dealers in the UK.

Initially based at Bramshill in Hampshire, the company moved to our present base in Wokingham in 1991 and it was at this time that Golf and Turf became part of the Burdens Group, which at the time was the UK's leading distributor of John Deere agricultural machinery. Based in Lincolnshire the Burdens group also supplied the horticultural and construction industry and the partnership has allowed Golf and Turf to improve our initiative aimed at furthering customer choice and providing quality parts and service support.

Our customer base now includes many of the UK top 100 golf courses, premier ship football clubs, Local Authorities, Private Estates and National Trust Properties.



Key services offered

Sales Parts Service

Specialist services

Contract Hire, Golf Buggy Hire, Specialist Short term and seasonal hire (eg top dressers vertidrains core collectors scarifiers debris collection chippers and many more)

How has the dealership changed?

Quite early on we noticed that our customers were faced with the difficult purchasing decision between buying new day to day mowing and maintenance equipment or specialist seasonal equipment like overseeding and vertidrains. So we decided to add the specialised seasonal equipment to our hire fleet and this has proved to be very popular with our customers and has been our biggest growth area.

Service facilities

Golf and Turf parts department carry over £200,000 worth of parts in stock. Also being a main dealer for John Deere, Stihl, Charterhouse and Dennis we are able to call on overnight delivery from their vast UK stock and in the case of John Deere their European and American stock too.

So with our industry best parts service you will have less down time, saving cost and inconvenience and removing the uncertainty of repair times and making planning around unfortunate breakdowns much easier.

We also stock tools, work clothing, oil, John Deere merchandise (including toys) and many more accessories related to gardening and grounds maintenance.

Franchises

John Deere, Charterhouse, Stihl, Yamaha, Major, Tru-Turf, Dennis, Scag and GreenTek,

Customers

Chelsea FC
Hampton Court Palace
RBG Kew
Royal Parks
Royal Blackheath GC
Swinley Forest Golf Club
The Crown Estate
National Trust
Bearwood Lakes GC

To nominate a GI Dealer of the Month contact Scott MacCallum with your reasons why the dealer of your choice should be featured...
Email scott@bigga.co.uk



Safety Management System



RJ International Golf Course

The BIGGA/GCMA Safety Management System, sponsored by Ransomes Jacobsen, has been developed to:

- Make golf clubs safer
- Introduce best practice
- Standardise Health & Safety throughout golf
- Reduce costs for golf clubs

Why do you need a Safety Management System?

Because:

- It incorporates all your legal requirements to comply with Health & Safety Legislation
- Clubs have responsibilities
- There are penalties for not complying – up to £20,000 fine and/or course closure
- Golf clubs are hazardous places to work

The Safety Management System contains help and guidance to enable golf clubs to:

- Set a Health & Safety Policy
- List hazards and assess risks
- Plan for the future
- Introduce audit and review procedures

The Safety Management System is accessed through the Members area of the BIGGA website (www.bigga.org.uk) and the GCMA website (www.gcma.org.uk)

sponsored by



Section Notes

Please email your notes to scott@bigga.co.uk by the 5th of the month

All the latest news from your Section

Around The Green



Scottish Region



North

As I write the clocks have just gone back and the daylight hours are seemingly disappearing. The Winter Leagues are starting and these are the most important competitions that some of your clubs golfers play in. It seems there are more that turn out for the Winter Fours than they do for the Summer Medals. They are religious, but they still want the course presented the best it can. It's never ending!

We held the AGM at Oldmeldrum Golf Club on October 21. It was a pay as you play day and a Stableford was agreed to keep it all fair. There weren't too many people turn up but still enough to hold an AGM and for there to be a few pounds passing between the golfers for who scored the most points on the day. The 200 Club final draw of the year was drawn and the following were the lucky winners - £100 John Geddes (FIX); £30 S. McCain, K. Strachan and N. Banner.

Thanks go to Bob O'Donnell and his staff for preparing the course as I understand that it didn't stay very dry and the last thing you probably needed in October was us lot turning up, so on behalf of the Section Bob. Thanks very much.

There is really a lot of news this month so really all I've got to say is to wish all our members a very Merry Christmas and a Happy New Year whatever you get up to, enjoy it. There are the Work's Nights out so again enjoy them. That is if you have one!

Happy greenkeeping
Ben Brookes
Murcar Links
07813889374



Central

The Section finally got its Autumn outing played on October 13 at the third attempt at a bright and breezy Downfield which was playing a massive 7,580 yards (or at least the scores suggest that). Seriously though Paul Murphy and his team had it looking great following all the rain we have had in this area over the past few months and our thanks go to them and the club for hosting us, along with the patrons for supporting the Section.

Unfortunately, due to the rescheduling we didn't have a full field but we did come close to it. Winners included the aforementioned Paul Murphy who had the best scratch and Gordon McKie, who had the best nett. Best in the 1st class was Kenny Mitchell, of St Andrews, while Derek Scott, of Scoonie, won the 2nd class. Douglas Baird, of Caird Park, won the trophy for best spring and autumn combined. A full list of prize winners is on the website www.biggacentralsection.org.uk

Following the golf we held the Section AGM where Derek Robson, of the Dukes, took over as Chairman from Gordon McKie. Bob Meikle, of Crail, is the new Vice Chairman and Gordon Moir has replaced Andy Mellon as Secretary/Treasurer. The members present thanked both Andy and Gordon McKie for what they have done for the Section over the past few years. Shaun Anderson, of Piperdam, was elected onto the committee and Stevie Wilson, of the Dukes, and Ganesh Chand, of St Andrews, were the recipients of the Patrons' Award.

Finally, on a personal note, I would like to take the opportu-

nity to thank John Pemberton for all he has done for BIGGA in his 17 years working for the Association and how sorry I am to hear he is stepping down as CEO. John, all the best for the future.



West

Only a few weeks away from Christmas and the New Year, all very hard to take in considering the problems at the start of the season, it's difficult to appreciate the golfing season has gone by so quickly. I'm sure all your courses are recovering from the renovation works carried out weeks ago and are hoping for some respite from the overhead water supply which at times seems never ending, but then again we may experience a similar winter to last year, let's hope not quite so long a period of frost though.

Well, what's happened since the last article, sorry for missing the November issue guys, but I was on holiday at submission date.

Results of the Autumn Outing at Helensburgh, which was in great condition although the weather got a bit unpleasant for a spell, but cleared up to be a great day, are as follows:

Third Class. David Reid, Lenzie GC, 28 pts; 2. Ryan Brennan, Glasgow GC, 26 pts; 3. Colin Kierney, Drumpellier GC, 24 pts. Second Class. 1. Christian Carvel, East Renfrewshire GC, 39 pts; Blair Sommerville, Helensburgh GC, 37 pts; 3. Gavin Jarvis, Helensburgh GC, 34 pts. First Class. 1. D. Mackintosh, Cathkin Braes GC, 36 pts; 2. Andy Peace, Helensburgh GC, 33 pts BIH; 3. Calum Morrow, Drumpellier GC, 33 pts. Trade

prize. Gordon Howatt. Visitors' prize. Stuart Graham, Captain of Helensburgh GC. Apprentice prize. Chris Boyd, Helensburgh GC. Longest Drive. Gerry Bruen, Williamwood GC. Nearest the Pin prizes were won by Christain Carvel and Colin Kierney. The Daval Trophy winner was Christain Carvel, with 76 pts, and, last but not least, the Scratch Prize was won by Stuart Taylor, Glasgow GC, 69. Gavin Jarvis and his crew have to be congratulated on the condition of the course and for all their hard work in preparing the course in such a neat and tidy manner. Thanks to the Captain and Committee for allowing us the courtesy of the course and thanks to the catering and bar staff for dealing with our needs so well.

The annual match against the Club Masters was held once again at Helensburgh on October 18 and the match finished with a victory to the greenkeepers, as usual, 3 games to 2. Thanks to all who played and especially Gavin for organising the Greenkeepers team. Well done.

The Annual General meeting, held at Hags Castle GC, on October 28 was well attended and the Section recruited some new blood on committee for a change with Gerry Bruen and Michael MacIntyre both coming on. The new Section Chairman is John Brown, from Bearsden GC, and the Vice Chairman is David McBride, from Vale of Leven GC. We wish them well in their term of office and hope all runs smoothly.

The AGM was followed by a demonstration of the new range of Toro Equipment, all of which looked excellent and this was accompanied by lunch after and a game of golf, making the day a great success and very enjoyable. Thanks to Hamilton's Brothers for the sponsorship of the day and for the display of equipment. Thanks to Hags Castle Golf Club for hosting