# No doubting Thomas



#### Toro Student Greenkeeper of the Year 2012 is

Thomas Flavelle, greenkeeper at Lingdale Golf Club in Leicestershire. Steve Castle spoke to him hours after the 23-year-old scooped the award...

Thomas Flavelle tucks into a well-deserved fried breakfast as he attempts to find the words to describe winning the coveted prize. Thomas, and the other six Student of the Year finalists, endured 24 gruelling hours during which they were interviewed by experts, completed an in-depth course report to a tight deadline and faced an agonising wait to see if they had emerged victorious.

"Wow, it was unbelievable. I was shocked. I was aware there were five other lads who were more than capable of winning the award, so it could have gone to anybody. It's nice to come out on top, but they were all so good - they wouldn't have got this far if they weren't - and I know they'll go on and do great things in their careers.

"Now it's all about looking forward to America. I had a really good chat with last year's winner Matt Perks, and his advice was just to throw yourself into it and make the most of every minute. It's going to be

fantastic for me on both a personal and professional level.

"I'm under no illusions, it's going to be a very, very intense few weeks of incredibly hard work going into highly technical detail. But I can't wait to take on the challenge, it will help my education massively."

Thomas joins an illustrious group of winners who have gone on to work on some of the UK's finest

His attitude and outlook belies his 23 years, and it's immediately clear how seriously he takes both greenkeeping and the sport of golf - he has a handicap of two.

His father Dave is a hugely experienced greenkeeper, and while he's proud to follow in his footsteps he's pleased to be making a name for himself away from his family con-

"It does help that my dad is a greenkeeper, and it also means that people come up and talk to me instinctively because they know him, but I've never actually worked with him and I'm making my own way in the industry.

"I always wanted to work outdoors, and I've spent most of my life on golf courses either working or playing."

He studied A-levels but admits he was distracted because he was so intent on becoming a greenkeeper, and after completing his exams he clinched a trainee position at Lingdale. He then took his Level Two qualification and is close to completing Level Three at Myerscough College.

"After I've completed Level Three I'm going to probably look at doing a foundation degree and also consider other options to progress my career."

So why did he enter the competition?

"I used to look at the faces of the winners on the front of the magazine and think I'll never, ever be good enough for that.'

"But, in the last 18 months, I feel I've really progressed as a greenkeeper. I now know where I'm going with my career and just entering the award was a fantastic opportunity.

"Even a nomination stands out



#### **Message from Thomas**

"I'd like to thank both my Level Two and Level Three tutors - Kev McAdams and Jonathan Knowles at Myerscough, who have helped me so much. Lingdale Golf Club have given me time and the support I've needed to enter this competition, as well as now having to allow me two months off to go to America! They've also helped me immensely right from the start of my career as an 18 year old.

"I'd also like to thank TORO and BIGGA, and I have to mention Lingdale's Head Greenkeeper Andy McGreal. He's pretty much taught me everything I know since I joined five-and-a-half years ago.

"He's helped with my college work, preparing for this competition and has always been there for me. He's very realistic and knows what we have to do to make the absolute most of the budget we have at the club. I wouldn't be the greenkeeper I am now without him."

#### FACTFILE

Name: Thomas Flavelle

Born: Leicester, 2 October 1988

Marital Status: Engaged to Kathryn

Handicap: 2

Hobbies: Golf, shooting, fishing

Favourite Sports Team:

Leicester City





on a CV, and I just wanted to be a part of it and increase my knowledge.

"I also thought the experience of interview situations would be vital, and I really focused on that side of it. Toro and BIGGA are looking for someone who can represent them in the States, and I knew I had to present myself well as a greenkeeper and as a person to do well in the competition."

Was he nervous during the final? "We've been really, really busy at work on the course so I didn't have time to get apprehensive until the weekend came round. I drove up and was fine until I got within about five miles of BIGGA HQ and the nerves really set in.

"I met all the other lads and they also seemed nervous, but we sat down together and had some food which was exactly what we needed – it calmed everyone down and there was a really good atmosphere.

"As for the task, it's nervewracking because you've no idea what you're going to be asked to do. I made the decision to only spend about 40 minutes on the course at Aldwark.

"I must admit I was a little concerned when I saw some of the finalists had brought agronomical equipment with them, but I was confident I would be able to take samples from three of the greens and gain enough information from that. It was quite a stressful couple of days, I have to say."

Thomas, consumed by golf as a youngster, says he always dreamed of following the family tradition and becoming a greenkeeper. However, from a young age he also displayed a real talent for playing the sport.

He says: "I played all sorts of sports – rugby and football as well as golf - when I was younger. Of course it would have been nice to have been a professional sportsman, no-one would turn that down, but I wouldn't change what's happened. Ultimately, my dream was to be a greenkeeper."

And the future?

"The next step is hopefully a deputy's job before moving on to being a head greenkeeper or course manager. It would be nice to work for a big, prestigious golf course and I've also got an ambition to work in course design and agronomy, although you never know what opportunities are going to present themselves.

"Personally, my fiancée Kathryn and I would love to buy a house at some point, but we'll have to see how the next few years progress and where our careers end up."





### Toro Student Greenkeeper of the Year 2012

#### Thomas was presented with his award at BIGGA House on Monday 17 September.

Pictured above are (back row, from left); Rachael Duffy (BIGGA Learning & Development Executive-Administration), Jim Croxton (BIGGA CEO) Chris Sealey, (BIGGA vice chairman), Bruce Jamieson (golf course consultant), Sami Collins (BIGGA Learning & Development Manager), Trevor Chard (TORO Key Accounts Manager), Tony Smith (BIGGA Chairman) and Stuart Green (BIGGA Learning & Development Executive–Technical).

Front row, from left; Neil Ivamy, Stuart Imeson, Peter Thompson, Thomas Flavelle, Christopher Watson, Aaron Launchbury, Matt Perks (2011 winner).



### Thomas becomes the 24th winner of the Toro Student Greenkeeper of the Year competition

The two runners-up were Christopher Watson, Assistant Greenkeeper at Peterculter Golf Club (Elmwood College) and Peter Thompson, Assistant Greenkeeper at Sunningdale Golf Club (Oaklands College).

The other finalists were Stuart Imeson, Head Greenkeeper at Dunstanburgh Golf Club (Newcastle College), Aaron Launchbury of North Foreland Golf Club (Hadlow College) and Neil Ivamy of Trevose Golf & Country Club (Duchy College) – congratulations to all the finalists.

The candidates were interviewed by golf course consultant Bruce Jamieson, TORO Key Accounts Manager Trevor Chard, BIGGA vice chairman Chris Sealey and BIGGA's Learning & Development Manager Sami Collins.

Thomas wins a once-in-a-lifetime eight-week trip to the United States, which includes a six-week study course at the University of Massachusetts and trips to visit the GCSAA's Golf Industry Show in San Diego and Toro's base in California.

Christopher and Peter win an expenses paid trip to the Continue to Learn programme at BTME 2013.



## Day of the Triffids

Kevin Whitby offers you the chance to pick up basis points as he warns us of the dangers of giant hogweed...

Though not as deadly as the walking plants that feature in the plot of John Wyndham's novel 'The Day of the Triffids', the invasive species Giant Hogweed is not to be messed with. If the sap of this plant comes into contact with the skin it can cause a severe skin condition known as phytophotodermatitis. Worse still, contact with the eyes can cause permanent blindness.

Giant Hogweed (Heracleum mantegazzianum) is a non-native invasive species that was introduced into the UK in the late 19th century from South Asia, as an ornamental species for large gardens and estates. Soon after introduction the plant escaped and has now spread to many areas of the country. Giant Hogweed belongs to the Carrot family (known as Apiaceae or Umbelliferae), which has more than 2500 species contained in 275 genera. These include plants native to the UK such as parsnip,

carrot, celery, fennel, coriander, dill, parsley, and the poisonous hemlocks.

Giant Hogweed is listed under Schedule 9 of the Wildlife and Countryside Act 1981 which makes it an offence to plant or otherwise cause this species to grow in the wild.

#### What to look for:

Giant Hogweed has very large, coarsely toothed lower leaves (up to 1m long) that will squeeze out most other native plants by competing for space, light, water and nutrients. The stems are hollow, ridged with downward pointing hairs. The lower parts of the stems are thick (up to 10cm) and are characterised by dark red or purple blotches which bear stiff hairs. In the early stages of growth it can be confused with our native Hogweed (Heracleum sphondylium) that grows to a maximum height of 2m but when it gets above head height there is no mistaking it!

Numerous white flowers are born in large 'umbrella' shaped heads called umbels - up to 50cm across. It has been estimated that each plant can produce up to 50,000 seeds, which are dispersed easily by water or by soil movement, and can remain viable for up to 15 years.

Giant Hogweed prefers a riparian (riverbank) habitat and will readily disperse downstream to populate new ground. The seeds are carried along streams and rivers eventually establishing themselves as they wash up on fresh soil of the riverbed or bank. Giant Hogweed can also be brought onto a site through imported soils containing its seed and will grow very rapidly, sometimes reaching a height of 4 to 5 metres in a few months. The sheer size of the foliage and the vigour with which it grows quickly overpowers and displaces natural vegetation nearby.

The danger to greenkeepers and members of the public is that the sap of the Umbelliferae contain





MAIN ABOVE: Giant Hogweed can grow to a height of 5 metres

TOP RIGHT: Large, coarsely toothed leaves

TOP LEFT: Red/purple blotched stems with stiff hairs

RIGHT: Lower stems can be up to 10cm thick







toxic substances known as 'psoralens'or 'linear furano-coumarins' which, when exuded by the plant from hairs on the leaves and stems. can cause a severe skin irritation where the affected areas become hypersensitive to sunlight.

Skin irritant reactions are known to occur with several other members of the Carrot family; notably 'strimmers' dermatitis, encountered when operators clearing long grass containing Cow parsnip (our native Hogweed - Heracleum sphondylium) get splattered with sap from these plants.

A similar reaction can occur with the sap of Wild Parsnip (Pastanaca sativa). The reason why Giant Hogweed produces the most severe skin irritant reaction is probably because the furano-coumarins are present in higher concentrations and due to the sheer size and vigour of this plant means a large quantity of sap is produced.

The toxic components of Giant Hogweed are stored mainly in the oil channels or ducts in the leaves, stems, roots, flowers and seeds. Therefore all sap bearing parts of the plant can produce a harmful

Psoralens are naturally occurring substances that appear to serve a universal defensive role in some plants, having activity against; grazing animals, insects, viruses, bacteria, fungi and the germination of seeds from other plants.

The skin irritant condition caused by Giant Hogweed is a form of phytophotodermatitis resulting from contact with the toxic components of the sap in the presence of sunlight. The initial reaction to the sap usually occurs 24 to 48 hours after skin contact, so people who are not aware of the danger can become seriously contaminated without a chance to minimise the effect by washing the skin. Large watery blisters are commonly formed and the skin feels very itchy. After the blistering subsides, a dense postinflammatory hyper-pigmentation

#### Claim your basis points

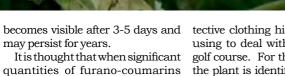
SELF ASSESSMENT

Use the questions below to check your understanding of this topic. Readers can claim BASIS points if the questions are answered correctly!

Circle the correct answer(s)

- 1) Giant Hogweed belongs to which family of plants?
- a) Pea b) Rose c) Onion d) Carrot
- 2) What type of habitat is preferred by this weed?
- a) Woodland b) Riverside c) Marined) Heathland
- 3) What is the potential seed yield for each Giant hogweed plant?
- a) 5000 b) 500 c) 25,000 d)50,000
- 4) What type of chemical present in the sap of Giant Hogweed produces the condition known as phytophotodermatitis?
- a) saponins b) alkaloids c) psoralens d) carotenoids
- 5) Apart from phytophotodermatitis, what other health threatening effects can arise from contact with Giant Hogweed? (more than one may apply) a) diarrhoea b) blindness c) respiratory difficulties
- d) osteoporosis





penetrate the skin in the presence of ultraviolet radiation, localised corruption of DNA occurs, resulting in damage to the 'melanocytic' skin cells that produce pigments to protect the body from harmful radiations in sunlight.

Those affected by this condition will become hypersensitive to sunlight and even relatively weak exposure will cause sunburn. This painful condition can persist for a number of years.

The sap can also cause an allergic reaction in the airways, causing potentially life threatening respiratory problems; if it gets in the eyes it can cause temporary or even permanent blindness, so there is a real danger of serious health risk if it becomes airborne during cutting operations.

The threshold concentration of furano-coumarins (10-100 µg/ml) for a phytophotodermatitic reaction is well exceeded during the active growing season. The highest concentration is in the leaves, the lowest in the stems.

Contact with the Giant Hogweed sap in sunlight produces a reaction in almost everyone. The degree of symptoms will vary between individuals, but children are known to be particularly sensitive. Sap leaking from cut plants will remain active for several hours. I know of one greenkeeper who was injured on the wrist by contact with sap on the outside of some items of pro-

tective clothing his staff had been using to deal with the weed on a golf course. For this reason, when the plant is identified growing in a public place it should be dealt with swiftly to prevent harm to others. On a golf course if the plant is 'in play' it should be designated as either 'temporary out-of-bounds' or 'Ground Under Repair' (GUR) to prevent golfers from slashing at the leaves/stems in search of their missing golf balls. In other areas with public access, such as parks or play areas, the weed should be isolated by roping off and a suitable warning posted nearby. Removal or control of the plant must then be carried out without delay.

#### CONTROL MEASURES

Complete eradication of the weed can only be achieved by controlling all sources of infestation from upstream. Seeds can remain viable in the soil for as long as 15 years so many retreatments will be required to prevent seedlings from reaching the flowering stage.

#### Chemical control

The most effective method of chemical control is achieved by spraying with formulations of 360g/L glyphosate such as Roundup Pro Bi-active, applied at 6 litres/ha. Plants may be sprayed as soon as they reach 1.0m in height (usually from March to early April) but due to the size and vigour of Giant Hogweed, several applications may be needed to kill



ABOVE LEFT: Flowers born in

ABOVE: Each plant can produce in to 50,000 seeds

the plants completely. Watch for seedlings that germinate and grow very rapidly, spraying these before they get beyond 1.5m high.

Giant Hogweed can compete with other vegetation to such an extent that blanket spraying with glyphosate could cause serious soil erosion in winter, especially on riverbanks. In these situations it would be better to use a weed wiper or a stem injection system to apply the chemical.

If plants are well established when discovered, they can be carefully cut above ground (using full protective clothing to avoid sap contact) and then the stems injected below the first node with a 10% solution of glyphosate in water.

Mechanical Control - Full protective clothing required when cutting and handling the plant.

Flowering heads may be carefully removed by cutting before they have set seed. The whole plant can be removed by digging below 20cm and removing the crown. Alternatively make an angled cut with a sharp spade and sever the tap roots a few inches below soil level. Mechanical equipment for slashing or strimming is best avoided due to the risk from the sap.

Flower heads should be carefully placed in marked polythene bags and disposed of along with any other cut plant material, in accordance with the rules for controlled waste.

Bare soil left after removing the plants should be re-sown with a fast establishing grass seed to discourage re-colonisation.

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# Karl's brush with fame

Jim Cook talks to the Course Manager who has designed a new brush system from scratch with his own bare hands

#### It's no surprise that Karl Parry admits to relying on the odd energy drink to help him through the day.

Not only does he manage Denbigh Golf Club, he's spent countless hours developing, launching and marketing a new brush system which is designed to improve playing surfaces.

He's also a nine handicapper, has established a separate lawncare business and is the proud dad of a two-year-old girl – so how does this enterprising 27-year-old fit everything in?

He says: "I start at 5am so I can fit in appointments for Turf Brush Systems later in the day, then go home to my daughter and girlfriend who's so supportive.

"It might sound a bit cheesy but I just love my job, I've got a real passion and drive for it and enjoy it so much.

"Denbigh is a great golf course and we've got a fantastic team here.

"Then, when I go out to do demonstrations later in the day or fit a new machine, I get to meet new people and greenkeepers from across the country.

"It's fascinating to chat to them, find out why they're doing what they're doing and look at their courses.

"You can pick up so many tips or ideas from other greenkeepers."

Karl had the idea for the brushes while working in 2008 at the PGA Greg Norman Shootout, at Tiburon Golf Club, Florida.

He said: "We had very grainy grass fairways there.

"We mowed the fairways every two days and every other week we would send out extra machines using verticutters and extra labour in an attempt to control the severe grain issues.



"This obviously was very expensive to do and labour intensive, so I thought there must surely be a better more productive method of controlling grain.

"We did have groomers but they didn't really have much effect and due to the aggressive nature of grass constant breakdowns occurred.

"So I came up with a heavy duty stiff brush attachment to fit individually to each cutting unit.

"I spent my spare time working on a prototype for one unit and once completed I went out and tested it to great effect. I soon left to come home and was very keen to pursue my idea."

Karl was working as a greenkeeper at Mold Golf Club at the time For more information about the Turf Brush System visit the Facebook page at: www.facebook.com/brushsystem



and lacking finances or industry contacts, so decided to make the brushes himself.

"I started making my own brush systems from blocks of wood cut by hand and drilled thousands of holes for the bristles to fit into.

"To get the bristles I bought push brooms from B&Q, pulled them out and counted out hundreds of thousands of bristles and divided them equally into all the holes.

"At this point my girlfriend was heavily pregnant at eight months and we had a fair few orders to get through.

I drafted in her friends when they came around by getting them to count bristles while I stayed up all hours into the early mornings, fitting, gluing and drilling. It was a great time looking back now but very hard back then."

After Karl was appointed course manager of Denbigh Golf Club he had the opportunity to develop the idea further and has now found a business partner.

Karl added: "To take my business to the next level I needed some investment and the facility to make prototypes on various types of equipment.

"This is where my new business partner and friend John Osman came to the rescue.

"I now have the facility to test on any machine mower on the planet, facilities to make custom design on site in minutes and a great base to operate from."

Whilst the idea of brushes in front of blades is not new, there are a number of original features on the system.

The brushes are independent units that can be fitted to work in front of the mowing blades of most cylinder cutting machines including greens, fairway and semi.

The Greens TurfBrushSystem has two separate sections which have been designed to overlap each other so that the width is identical to that of the machine and so that there is no gap in the brushed area of grass.

They move to the contours of a green, which has been reported to give an improved cut.

Two wide-tread castor wheels on each section are designed to give control, with little ground pressure, and each section is adjustable depending on the aggressiveness of brushing required.

The castors have seals on each bearing and in the centre which should improve their lifespan, especially if they are used immediately after topdressing.

The brushes can be removed or

fitted in a few minutes and each brush is reversible, again, to lengthen their life.

The aim of the brushes is to improve the overall quality, performance and health or condition of the turf's surface.

The theory behind the brushes is that they glide along the surface in front of the blades, removing dew and debris and helping to stand up grass.

This in turn leads to a cleaner cut and also smoother ball roll. They may also be used to brush material after topdressing.

Karl also said they help reduce thatch build up over time.

Alister Beggs, STRI's Northern Area Manager and Official Consultant to the R&A Committee, said:

"They will help with meadowgrass management because at the time of the year when it is producing seed head in the spring, these units seem to help lift seed head off.

So if you're trying to control the spread of meadowgrass then taking seed head off is an important part of it.

"Because you are effectively taking more grass off with any one cut, then essentially over time you are going to help reduce organic matter and thatch build up at the base of the turf.

Whilst you're not probably going to use a brush to deal with thatch directly, the use over time, as with groomers, helps to keep the turf surface healthy and keep organic matter and thatch development under control."

"The only potential negative would be stress on the turf.

"I understand you can set these brushes in terms of the aggressiveness of them.

"The only danger as with any turf refinement tool is that if you use them too much and set them too aggressively you can add to turf stress and turf decline.

"If you use common sense and set them properly and use them at the right frequency then they shouldn't be detrimental to turf.

"It's another tool for greenkeepers to get the objective they're looking for.

"And of course every course is different with different grass mixes, so the way you would use them and set them would be different.

"There are other brush systems out there but I was impressed with what I saw."

Used in the correct way and at the right time, the brushes will prove a valuable asset to any club.

