

yards. There's a lot of risk and reward golf – if you want to take the big stick out and try and get the distance there are birdie opportunities.

“But, if it doesn't quite come off you will be heavily penalised. It's a varied challenge from hole to hole.”

Sid explained the changes they've made in a bid to regain the Red Course's place in the Top 100 Courses in the UK list. They have built new tees, put in some new bunkers and replaced old sand with new in others, as well as putting drainage sumps in some of the sand traps.

He added: “The greens are a blend of Agrostis grasses and poa annua – and the vast majority are natural heathland greens. We've tried to produce better performing greens by reducing organic material – thatch – then diluting it with pure sand so the greens become firmer, faster and improved. The thatch coverage has never been bad but it's just been a little more than I would ideally like.

“We've also started using a Clegg Hammer as well as the stimpmeter and moisture meter to check the smoothness, trueness and firmness.

“The Clegg Hammer measures impacts on the surface which gives you a firmness reading. We got some readings of 120 which was too hard so we aim for 100 – really firm, fast greens.

Last year at the European Tour qualifying the greens were running at 11 and we were asked to slow them down – it made my day! So we missed the second cut out and we took the turf iron out to take them down to 10.5.”

The team follow identical aeration programmes on each course. They micro hollow tine twice a year – usually in March and then in July or August, and aerate deep with the aid of a machine they've recently purchased called GP Air. This is basically a spear which has compressed air pumped into it.

It's then plunged into the turf and shatters the soil underneath, allowing quick and easy drainage.

Sid explained that over time, the silt particles in the greens migrate and settle at various depths, so this

## EQUIPMENT LIST

### Some of the key machines in the team's fleet...

#### GREENS MOWING:

TORO 3150 x 12, TORO FLEX 21 x 3

#### SURROUND MOWERS

TORO 3100D x 4  
FAIRWAY MOWERS, TORO 5510 x 3  
SEMI ROUGH MOWERS, TORO 4500D x 2  
JD OUT FRONT MOWERS x 2

#### AERATION

TERRA SPIKE x 1  
TORO PRO CORE SR72  
PLANET AIR x 1  
GP AIR x 1  
TORO HYDROJECT x 1  
SHATTERMASTER  
JD AERCORE

#### SPRAYERS

TORO MULTI PRO 5800 x 1  
GAMBETI BAR x 3

#### BUNKER RAKERS

TORO 3400 x 3

#### BLOWERS

TORO PRO FORCE x 1  
TORNADO BLOWERS x 2

#### TURF ROLLERS

TRU TURF x 2  
VIBRATING ROLLERS x 1

#### CUT AND COLLECT/LEAF COLLECTION

AMAZONE GHS 180 x 2

#### UTILITY VEHICLES

TORO MDX WORKMAN x 6  
JD GATORS x 4  
TRACTORS x 13 ALL JOHN DEERE

#### BERNHARD GRINDING EQUIPMENT

EXPRESS DUAL 4000  
ANGLEMASTER 4000

#### TOP DRESSING

DAKOTA 410 TURF TENDER



Make your greens the tournament talking point!

Applied as a spray, the Silica and Potassium content of Spike increases plant cell wall turgidity and stimulates a more erect leaf blade to allow for more uniform and consistent cutting. Pre-tournament applications improve surface playability and provide rapid wear recovery.

- Stimulates a more erect leaf blade
  - Improves ball roll consistency
  - Increases greens speed
  - Promotes the rapid healing of ball and spike marks
- Combine with Magnet Rapide for superb surface colour.

# SPIKE

For a whole new ball game

**RT**  
rigby taylor

Freephone 0800 424919  
www.rigbytaylor.com

“Last year at the European Tour qualifying the greens were running at 11 and we were asked to slow them down – it made my day!”



machine ‘blasts’ this layer to help the infiltration.

The site also features acid grassland and ancient fenland, and some of the older trees were felled recently to rehydrate the fenland. In turn, this encouraged natural flora and fauna to return, which allowed various species to flourish. Burrowing wasps, rare beetles, treecreepers, buzzards, red kites and kingfishers can be spotted by the more eagle-eyed golfer.

Lancastrian Sid worked at various courses in the UK before becoming part of the team constructing Golf D’Apremont, a course 40km north of Paris. He was then Head Greenkeeper at Royal Portrush in Northern Ireland before joining Frilford Heath in February 1994. He turns 60 this year – so what advice would he give young greenkeepers?

“It’s absolutely vital to keep abreast of all issues, developments and changes – whether they be environmental, technical or mechanical. I achieved my Master Greenkeeper Certificate in 1997. It’s not made me a better or a worse greenkeeper – I did it for my own personal CPD.

“The whole picture is important – the way you dress, portray yourself at meetings and social events, how you speak to the members...if you want respect you have to conduct yourself in the right manner.

“I never stop seeking ways to educate myself further and keep

improving. I remember going to BTME, sitting with the likes of Walter Woods, Jack McMillan and George Brown and just letting their knowledge rub off on me.”

Sid and I then headed up to the clubhouse balcony which overlooks the 18th green, and his thoughts returned to the BIGGA National.

BIGGA members hoping to follow in the footsteps of current champion Oly Browning can play two rounds of golf plus dinner on

the Monday evening for just £90. There are prizes for best gross and nett scores plus various prizes for nearest the pin and longest drive.

“I’m looking forward to hosting the guys even though I’m sure some of them will be picking holes in elements of the course!

“That’s natural for greenkeepers and I’m looking forward to meeting them all. I’m also playing in it so we’ll see what happens there!”

See you in October.



This year's BIGGA National Championship, sponsored by Charterhouse and Kubota, is at the superb Frilford Heath Golf Club on October 7-8, with the first prize of £500 worth of vouchers



# Become the next BIGGA Champion

Fill in the form below to book your spot

2012 winner Oly Browning at The Irvine Golf Club

## BIGGA National Championship 2013, Frilford Heath Golf Club, October 7-8 • Entry Form

### Please select the relevant category:

- Full Member  
 Affiliate Member

The entry fee of **£90** includes all golf fees, lunch both days and dinner on Monday evening. Please note that there is no accommodation provided.

Name .....

Address.....

..... Post Code.....

Mobile.....

E-mail.....

Membership No. ....

Handicap .....

BIGGA Section.....

Golf Club .....

### Payment method (please tick)

- I enclose my cheque made payable to 'BIGGA Ltd' value **£90**  
 Please debit my Mastercard / Switch / Visa / Delta card with the fee of **£90**

Card number.....

Start Date ..... Expiry Date .....

Last 3 security digits.....

Issue No. (Switch/Delta only) .....

Signature.....

Date .....

Or E-mail your details to:

**rachael@bigga.co.uk**

Ensure you receive confirmation of entry by return email.

### Deadline for entry is 6th September 2013.

Completed entry forms should be sent to:  
**BIGGA National Championship, BIGGA House, Aldwark, Alne, York YO61 1UF**



The main tournament for the Challenge Trophy will be played over 36 holes, medal play, with the best overall gross score producing the BIGGA National Champion, who must be a greenkeeper member. The greenkeeper player with the lowest nett score will be presented with the BIGGA Challenge Cup.

There will be prizes for the first five over 36 holes in the gross category. The top three in the nett competition will also receive prizes. After each day of 18 holes there will be prizes for winners of handicap divisions. The BIGGA Regional Team Cup and prize will be calculated from the 8 best nett scores over the first day of play. There will also be various nearest the pin and longest drive competitions, featuring prizes.

# A day in the life

Six months after his first greenkeeping crash course in Cheshire, Steve Castle joined the team at Immingham Golf Club the day before a major event with hundreds due to attend. What could possibly go wrong?





## PROFILE

**Name:** Steve Beverly  
**Position:** Head Greenkeeper  
**Born:** Wirral, 20 July 1979  
**Handicap:** 13  
**Hobbies:** Golf, spending time with wife and two young children  
**Favourite sports team:** Tranmere Rovers

**Back in November I experienced my first proper day in the life of a greenkeeper at Lymm Golf Club which featured digging drainage trenches in torrential rain – so I was extremely pleased to see the sun shining brightly as I headed for Immingham Golf Club, near Grimsby in Lincolnshire.**

The club's four greenkeepers – Steve Beverly, Robin Portess, Rob Bemment and Malcolm Holden – arrived well before I turned up at 7am to continue preparations for the next day's Charity Golf Day, with 130 people expected to play.

My first impression was that the parkland course – which opened in 1975 as a nine-hole venue before being extended to 18 holes in 1985 - genuinely looked superb, taking on a vibrant green hue in the sunshine.

However, I quickly discovered there was still much hard work to complete behind the scenes to fine-tune the course ahead of one of its most important days of the season.

Head Greenkeeper Steve said: "It's vital to have the course looking its absolute best. As well as the money that will be brought in tomorrow, we want to convince some of the players to return and ultimately to become members. It's all about word of mouth, if they tell people they've enjoyed it and it's a

first-class course more and more people will come and play here."

It would be no exaggeration to say the club exists on a shoestring budget, and have had to deal with problems ranging from disastrous floods to vandalism. It's been a challenging time for Scouser Steve who joined the club from Cleethorpes Golf Club (where he was Deputy Head Greenkeeper) in 2006.

"In June 2007 this area suffered horrendous flooding. We had 331mm of rain that month, to put that in context the next highest since I arrived was 154mm in June last year. Part of the course is below sea level and that flooded very badly, and it's clay-based so the water had nowhere to go. Everyone described it as a once-in-a-lifetime month, I just hope they're right!"

My first task was to help Steve empty the bins and ball washers next to the tees, and we began just yards from the impressive clubhouse. He then paused to point out a strange track running through a bunker. I was bemused until he wearily explained the cause.

"Someone's cycled through this. We've really suffered with vandalism. We've had flags stolen or chucked in the pond and greens dug up - but what can you do? We have CCTV, but we can't put a huge fence around the entire course. We just have to deal with it when it happens."

ABOVE: The team: Robin Portess, Malcolm Holden, Rob Bemment, Steve Beverly

As we worked our way around the course he showed me how to trim the holes – exactly the sort of task I did not appreciate as a casual golfer before I joined BIGGA but am now well aware of. It was clear attention to detail was absolutely vital as the club sought to convince many of the next day's punters to return.

This brought us on to the inevitably thorny issue of money in an area which is one of the least prosperous in the UK.

**“Machines are expensive to buy new so generally we all muck in and repair them when something breaks”**

Steve confided that the team had to take a pay cut at the height of the club's financial problems in 2010, and the newest machine the club owns is a five-year-old Toro Groundsmaster 7210. He added: "You have to balance out the cost of continually repairing against the cost of new machinery. These machines are expensive to buy new so generally we all muck in and repair them when something breaks."

After lunch in the shipping container which doubles as a mess room, Steve risked letting me loose

on parts of the course. I attempted to mow the 18th green with a Ransomes Jacobsen Greens King 6, but sadly

I failed to lift the mower up quickly enough and took a bite out of the side of the green – something I stupidly replicated later on a tee box. I've definitely still got some way to go in my greenkeeping education.

My favourite machine was the Toro Groundsmaster 7210. It's controlled with an unusual (to me) pair of hand-held levers. This took a little bit of time to adjust to, but within a few minutes I was confidently driving it around and having more fun than was strictly necessary.

Later, Steve and I spent much of the day painstakingly raking the club's 44 bunkers. He showed me the correct technique – and also showed me how to take the soil temperature, something he does every day – before he continued on the financial theme.

He said: "At BTME I heard a greenkeeper say he'd spent £7,000 on a single bunker. That's fair enough if you've got the money but that's a different world to us. Sustainability is all very well. But we haven't got years to implement it, plus, of course, it all costs money.

We're proving here that you don't need a massive budget to create a great course."

The team have a genuine affection for the club and each other. At 3pm, you might have expected them to have sprinted off home after another tough day, but in fact the opposite was true. Robin quickly got some practice in on the putting green (the whole team are very keen golfers with low handicaps) and we then headed for a well earned drink in the clubhouse.

A couple of members were very keen to praise the course despite the harsh economic realities. Comments included "it looks and plays fantastic", "these lads are doing a great job" and "it's the best course in the area". I've been made well aware that BIGGA members feel their tireless work is sometimes



**WIN a Go-Pro Hero**  
visit [qualibraextreme.co.uk](http://qualibraextreme.co.uk) for more details!

# Experience **NEW** standards of performance...

**"Greens treated with Qualibra were clearly healthier and provided better playing surfaces."**

**Ian Coote**  
Royston Golf Club,  
Herts

**"From what I have seen, using Qualibra would mean I may only need to irrigate once a week – a big saving in time and money."**

**Glenn Rayfield**  
Felixstowe Ferry Golf  
Club, Suffolk

**"Where we had sprayed Qualibra there has been a marked and sustained improvement in sward quality."**

**Philip Baldock**  
Ganton Golf Club,  
Yorkshire

**AERATION PROGRAMME**

Steve says: "We have two 'maintenance weeks' when aeration and heavier top dressing is carried out, with routine aeration regularly carried out throughout the year.

"The greens maintain slightly higher levels of thatch than we'd ideally like so a mixture of hollow coring, solid tining and verti-draining is carried out.

"The greens are solid tined at 3-4 week intervals depending on the golf calendar using a mixture of 8mm and 14mm tines at varying depths. They are fed using granular fertilisers from spring to autumn and liquids in winter. We use lawn sand in the spring, 12-0-9 in summer and 3-0-22 in the autumn. We're trialling two different types of bio-stimulants which comprise sugars and seaweeds amongst other elements.

"We've reduced fairway verti-draining due to the high cost of fuel, and fairway scarification is required but unfortunately is not financially viable."

**MACHINERY LIST**

Jacobsen Greens King 6  
 Jacobsen G-Plex 2 fitted with 2002 thatchaway units  
 Jacobsen LF3800  
 Jacobsen TR3  
 Kubota 5240 tractor  
 TYM 390 tractor with loader  
 Toro Workman 3300  
 Toro Groundsmaster 7210  
 Dakota 410 topdresser  
 John Deere 220 handmower  
 Hardi 200 litre sprayer  
 Charterhouse 7416 verti-drain  
 Turfmec 360 tractor mounted blower  
 1x Knapsack sprayer  
 1x flymo  
 1x backpack blower  
 2x strimmers

MAIN LEFT: Steve Beverly changing the ball wash  
 INSET LEFT: Steve Castle trimming the hole



unappreciated by many golfers at their clubs, so it was refreshing to hear this positivity. The only complaint I heard was that Immingham – with its tough par threes and fours, some blind tee shots and undulating fairways – was too hard!

Steve says: "It is a tough course and probably doesn't get the credit it deserves. Like any course if you take care with your course management - and hit it down the middle - you won't end up in trouble!"

I then noticed that a window on the second floor of the clubhouse was being repaired. I feared another

sad tale of mindless vandalism until Robin started laughing, and tried to explain how one visiting golfer had managed to whack a ball through it while practising in a net far below.

He said: "He must have accidentally hit it back off the iron frame, it's sailed just past his head, shot 20 feet up and gone through the window. It was like CSI Immingham the next day with us all trying to work out how he'd done it."

All in all, a hugely enjoyable and informative day and I left knowing I'd discovered a hidden gem of a club.

# Qualibra

## Deeper thinking

**New wetting and water conservation technology that moves water from the surface AND holds it deeper and more evenly in the root zone.**

 **Qualibra**<sup>®</sup>  
Wetting agent

 syngenta.

Visit [www.greencast.co.uk](http://www.greencast.co.uk) for more information

# Turning Japanese



How lethal injection is the best way to tackle Japanese knotweed – one of the most invasive weeds you will come across

**Invasive weeds are damaging and difficult to control but Japanese knotweed, the general name given to a group of species belonging to the genus *Fallopia* (family Polygonaceae), and native to Japan and parts of China, stands head and shoulders above the rest. In their native Asian range they are primary volcanic colonisers and generally far less vigorous because plant growth is kept in check by co-evolving natural biological control agents, including arthropod natural enemies and pathogens.**

The species of Japanese knotweed usually found in the UK is *Fallopia japonica* var. *japonica*, introduced from Japan two centuries ago.

Japanese knotweed continues to destroy ecosystems and urban infrastructure and is one of few

herbaceous weeds requiring direct placement of herbicide inside the plant to ensure quick complete control.

The introduction of Japanese knotweed as an ornamental plant into early Victorian gardens must have seemed like a good idea at the time but it has left a huge and growing weed legacy. Capacity for vegetative spread in situ through enormous fast growing and resilient rhizomes, made easier by the very nature of its favoured riparian and urban environments, is the secret of Japanese knotweed's success.

Dense growing stands restrict access for riverbank inspections and increase flood risks through large quantities of dead stems and leaves washed into rivers and streams. Attempts to remove established stands from riparian areas can cause instability in river banks and increase the risk of soil erosion.

Urban site infestations cause







considerable damage to hard surfaces. With stems that can penetrate concrete tarmac is no barrier to Japanese knotweed. The severity of Japanese knotweed is clear to see from the legislation used to limit spread and damage. It's scheduled under the 1981 Wildlife and Countryside Act making it an offence to plant or cause it to grow in the wild. It is also classified as 'Controlled Waste' under the Environment Protection Act (1990) and must be disposed of at a licensed landfill site in accordance with the Environment Protection Act (Duty of Care) Regulations 1991.

**A multi-faceted weed**

Red-coloured, spear-like aerial shoots emerge in spring - reaching 30cm by April and forming a massive foliar canopy two to three metres tall by summer's end. Plants produce large numbers of white flowers in summer but hardly any viable seed, probably due to UK climatic restrictions on sexual reproductive development.

Above ground stems die back and dry out in autumn, but overwintering rootstock and rhizomes

**PAGE 28 MAIN LEFT:** Japanese Knotweed produces lots of flowers but hardly any viable seed

**INSET LEFT:** The 'Injectordos' from Micron Sprayers in action. The robust needle is inserted into a stem near to ground level and pushed in until halted by the brass 'stopper'. The hole which is visible is now lined up with the cavity in the hollow stem. The herbicide passes through this hole and into cavity of the hollow stem.

**PAGE 29 TOP LEFT:** New shoots in spring look innocent enough but by summer's end they could be 3 m high

**LEFT ABOVE:** Even the worst native weeds like greater bindweed (vining plant in the background) are no match for Japanese Knotweed

**RIGHT ABOVE:** Jointed stems of Japanese Knotweed. Some of last year's stems, now brown and dead, are still very much in evidence

(underground stems) are so fast growing, all pervading and consuming that nothing else stands a chance - even during the only 'knotweed-free window' during late autumn and winter. Dead stems and leaves decompose very slowly to form a deep litter that prevents the germination of other seeds.

Failure to produce viable seed is more than compensated for by a fast growing and robust system of rhizomes allowing Japanese knotweed to exploit and dominate environments through vegetative propagation.

Rhizome systems may extend up to 7m from the parent plant and to a depth of 3m. Rhizome fragments as small as 0.7g can generate new plants and pieces of fresh aerial stem will grow shoots and roots in soil or water. Plants achieve up to 3m of aerial growth and 6m of rhizome growth in a single growing season.

New shoots arise from the tiniest pieces of rhizome and cut stem-sections will root at the nodes. Crowns can survive drying or composting to produce new canes once in contact with water. Attempts to mechanically control Japanese

knotweed using strimmers, flails or diggers can aggravate spread.

**Herbicide application**

Application of herbicide is the only sure and safe way to manage Japanese knotweed but this is easier said than done due to the sheer size and resilience of its rhizomes. A number of herbicides are effective against Japanese knotweed but by how much and for how long depends on the application technique used. Application technique will ultimately determine the success of chemical control against Japanese knotweed.

Spraying with contact herbicide will burn off the leaves but rhizomes survive and produce new stems. The only sure and safe way to dispatch Japanese knotweed is by placing a systemically acting herbicide (most usually glyphosate) into the plants by injection of intact standing stems low down and at the most appropriate time of the growing season.

Target area is the lower part of the aerial stem to minimize the distance for downward translocation into the rhizome system. Best time is

from late summer through autumn when rhizomes become sinks for soluble food and nutrients which is translocated downwards from the leaves before these senesce and fall off. Injected systemic herbicide is subject to this same strong basipetal (downward) translocation into the rhizome system which is subsequently killed.

**Death by lethal injection**

Japanese knotweed’s hollow stem is its ‘Achilles Heel’. Professional stem injection applicators designed and dedicated to control of hollow-stemmed weed plants such as Japanese knotweed are available.

Stem injectors used to control Japanese Knotweed include:

- ‘Injectordos’ from Micron Sprayers at Bromyard, Herefordshire.
- ‘JK Injection Tool’ from Stem Injection Systems at Stockport, Cheshire
- ‘Stem Master’ from Nomix Enviro at Andover, Hampshire.

The advantages offered by the stem injection technique focus on effectiveness, ease of access and use and all round safety for operators and the environment.

Use of these relatively lightweight and small applicators mean operators can access and treat the most dense stands of Japanese knotweed. By providing a closed delivery system the technique can be safely and effectively used at any time including during rainfall. The closed highly targeted delivery system means there is no danger of product escaping into the environment to damage nearby plants. Also, by delivery of a measured dose into the hollow stem, the injection technique can usually achieve ‘death by lethal injection’ in one application.

Stem injection does a truly ‘inside job’ on Japanese knotweed and is used with good effect on other invasive weeds such as Himalayan balsam and Giant Hogweed which also have hollow stems. Stem injection is something most golf courses can carry out using their own resources.

However, taking into account equipment, expertise and safety – including the need for an appropriate operator’s licence if application is made near water and safe disposal of any debris - then employing the services of a specialist company advertising this expertise may turn out to be the most convenient and effective option.

**RIGHT:** Japanese Knotweed forms extensive dense weed stands  
**BELOW:** Close up on the heart shaped leaves and white flowers  
**BELOW RIGHT:** Stem injection can also be used to control other weeds with hollow stems like Himalayan Balsam shown here alongside a stream on a Hertfordshire golf course

**about the author**



**Dr Terry Mabbett**

Dr Terry Mabbett is a disease, pest and weed control specialist with forty years international experience covering research, advisory and journalism. His current fields of focus are professional turf and alien insect pests and pathogens of Britain’s native and naturalised trees.



**Complete Weed Control offers a specialist contract service for the eradication of all problem weeds, wherever they appear including:**

- \*Total weed control – Hard, soft and gravel surfaces
- \*Selective weed control – For control of broadleaf weeds in grass
- \*Aquatic weed control – Marginal, submerged and floating weeds
- \*Disease control – In fine turf, plants and trees
- \*Grass growth control – Retardation of grass growth in all areas
- \*Insect control – In turf, plants and trees
- \*Fertiliser application – Liquid or granular
- \*Moss & algae control
- \*Worm control – In all grassed areas
- \*Forestry – Tree ringing, bracken control and insecticides

Experience plays a major factor in successful treatment. Knowing when and how to apply the appropriate product can speed up eradication and save time and money. All work is undertaken adhering to strict health & safety guidelines.