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Divot mix gets green light for agronomy



Becker Underwood demonstrates that divot mix coloured with Green Lawngrer™ not only gives a cosmetic benefit but also has agronomic advantages

Becker Underwood demonstrates that divot mix coloured with Green Lawngrer™ not only gives a cosmetic benefit but also has agronomic advantages.

Throughout golf's history, divots have caused unsightly conditions and negatively influenced play, making divot repair and divot management programmes an integral part of golf course management.

The use of green divot mixes has traditionally been seen as an expensive 'luxury' which is used in high profile televised golf tournaments and football matches.

However, there is ever growing interest in the use of specialised pigment based technologies to give agronomic values to modern day sports turf management. It has been identified that the use of green coloured sand has more than just an aesthetic 'Green Up' benefit but also has an agronomic benefit in terms of quicker seed germination and establishment when used as a divot mix.

A recent trial conducted in March 2012 by Becker Underwood Inc., showed that an 80/20 divot mix coloured with Green Lawngrer™ (green pigments) increased the speed of germination and estab-

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The pigments and Colorlock™ technology in Green Lawngrer, which is manufactured by Becker Underwood Inc, physically coats the sand particle and changes the colour from a light brown to a dark green.

By changing the colour of the sand from a light brown to a dark green this helps maximise the sun's energy by raising the temperature of the divot mix. This happens due to the darker colour being able to absorb more of the light spectrum which includes infrared light (warm light). Light brown coloured sand has the ability to reflect more light radiation and keep the divot mix cooler, which slows the germination rate down to that of the darker material.

By absorbing more radiation (heat) in the divot mix this helps create conditions that are more conducive for seed germination when quick establishment is required in the spring and autumn.

Preparing Green Divot mixes is straight forward and costs as little as .7p per Kg to produce. Mixing small amounts of divot mix can be carried out by using a portable cement mixer or similar mixing device.

Green Lawngrer is the leading turf colourant in the world, which is used throughout the year to improve the colour of stressed areas, which is caused by drought, fertiliser and pest damage. Green Lawngrer has become well recognized by grounds maintenance professionals and has made appearances at many significant sporting events, including the Olympic Games, FIFA World Cups, European Champions League and major golf events.

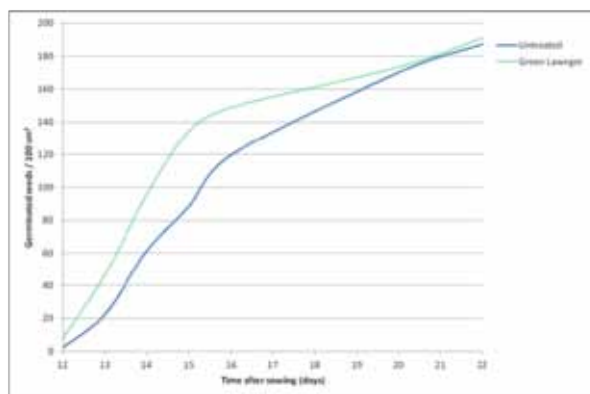
For more information regarding Green Lawngrer, please contact Becker Underwood UK, 01903 732323 or e-mail info.uk@beckerunderwood.com

(Figure 4) – Ryegrass establishment (Lolium perenne, var. Ligala Amenity PRG. DLF Trifolium, Worcester). Photo taken 13 days after sowing.



ABOVE (Figure 3) - Bent grass establishment (Agrostis stolonifera). Photo taken 26 days after sowing.

(Figure 1) The graph below demonstrates that sand treated with pigment increases the speed of seed germination of creeping Bentgrass (Agrostis stolonifera).



Recruitment

Royal Cinque Ports Golf Club

Assistant Links Superintendent required

Our team requires a highly motivated, forward thinking individual for the position of Assistant Links Superintendent at one of Britain's oldest and finest links courses, and host to the 2013 Amateur Championship

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- Minimum of 5 years links experience
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- PA1, PA2 and PA6 essential
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- Good team/motivational skills

- A keen eye for presentation and detail
- Preferred but not essential qualities include:**
- Championship course experience
- Tournament experience
- A working knowledge of machinery/workshop tools
- A good level of competence with modern irrigation systems
- Experience in golf course construction

A competitive salary and benefits package is on offer, based around 45 hours per week, including every 2nd weekend. The successful candidate will work closely with the Links Superintendent to continue forward momentum and improvement of this top level course. Please send your CV and covering letter to the Links Superintendent: chris.barnard@royalcinqueports.com Closing date 23rd July 2012



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Recruitment



Royal Winchester Golf Club

Assistant Greenkeeper

Royal Winchester Golf Club is an 18 hole Downland private members golf club. We are looking for a motivated Greenkeeper to join our excellent hard working team. Someone who can work to, or wishes to learn, to work at a high standard of presentation.

The applicant should have a minimum of two/three years experience and preferably qualified at NVQ2 and holding spraying certificates PA1 & PA6a, a good understanding of general greenkeeping practices, a team player and prepared to be flexible in methods of working and hours.

Salary is dependent on qualifications and experience.

To apply send CV, with covering letter by post to Mr Andy Barber, Head Greenkeeper, Royal Winchester Golf Club, Sarum Road, Winchester, Hampshire, SO22 5QE or email via manager@royalwinchestergolfclub.com



Grounds Maintenance Supervisor Cheshire West and Chester Region

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Candidates should have experience of leading a team of ground workers, ideally within a similar environment. Duties will include:

- Supervise and monitor standard of work on a day to day basis
- Provide hands on operational support as part of the team in undertaking of green keeping operations
- Maintain line manager responsibility for Grounds Maintenance
 - Oversee compliance with Health & Safety legislation
 - Ensure high levels of customer care

For further information please contact Paula Jamieson, Business Development Manager on 01244 377086 ext 305.

For an application form and job description please visit our website www.brioileisure.org or contact HR Directly on 01244 377086 .

Closing date: Tuesday, 10 July 2012.

Interview date: Thursday, 19 July 2012



Royal Ascot Golf Club

Requires a

Deputy Course Manager

The successful candidate must possess the following attributes.

Qualified to NVQ level 2 and 3 with Chainsaw and Spraying certificates PA1, PA6 and PA2A.

An experienced team player with the enthusiasm and ability to lead and mentor others. Highly motivated with a fine attention to detail.

Salary is commensurate with experience and in line with Bigga guidelines.

Applications should be made in writing and accompanied by a full C.V to.

David Ansell, Course Manager, Royal Ascot GC. Winkfield Road, Ascot, Berkshire, SL57LJ

Closing date for applications Friday 3rd August 2012

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For full information and application details see

<http://www.askham-bryan.ac.uk/recruitment>

Closing Date for receipt of applications is 20th July.

Interviews will be held on 27th July.

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www.askham-bryan.ac.uk/jobs

BEACONSFIELD GOLF CLUB COURSE MANAGER

Our current Head Greenkeeper retires in the spring of 2013 so we are seeking an outstanding replacement to manage our Harry Colt designed course and associated grounds, at this traditional Members' Club.

You will be a first-class leader, manager and motivator, with an exceptional eye for detail. Above all you will be passionate about producing consistently excellent playing surfaces and continuously improving the entire course presentation.

You will demonstrate expertise in all areas of fine turf management including the latest products and machinery. You will almost certainly be a competent golfer and you must be appropriately qualified, computer literate and fully conversant with Health and Safety legislation, best practice and required documentation.

The successful candidate will play a pivotal role in an impending major project to modernise our Greenkeeping buildings and associated facilities for machinery and staff.

The current team comprises seven full time personnel plus part-timers.

The Club has full membership with over 750 playing members and a waiting list to join.

It is hoped the selected candidate will take up the position by 1 March 2013. Accommodation is available as part of a competitive remuneration package.

All applications will be treated in the strictest confidence.

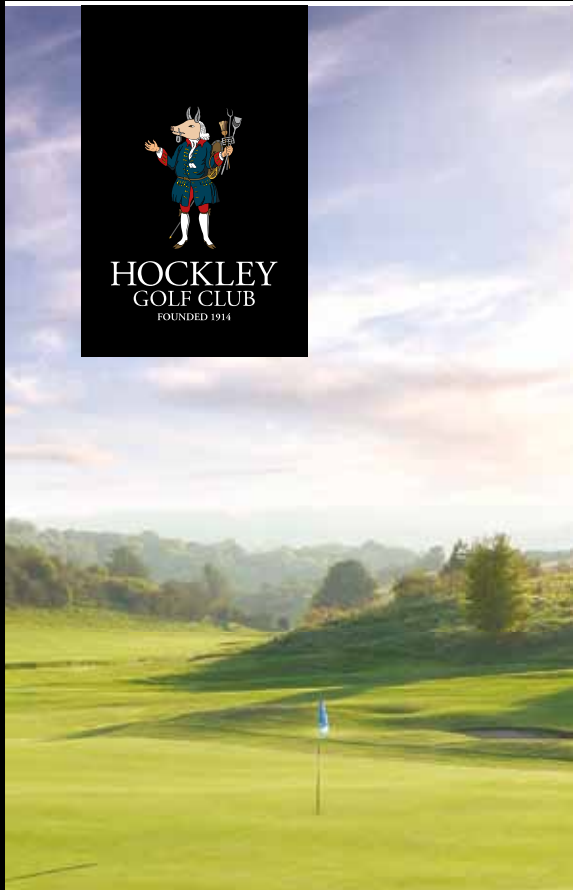
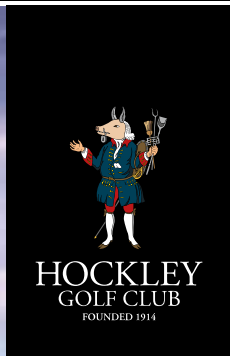
Interested candidates are invited to send their C.V. and a covering letter by 21 September to:

The General Manager, Beaconsfield Golf Club,
Seer Green, Beaconsfield, Bucks HP9 2UR.

Email: secretary@beaconsfieldgolfclub.co.uk

www.beaconsfieldgolfclub.co.uk





Course Manager

As a long established and highly regarded members club, Hockley Golf Club is proud of its heritage and James Braid designed downland course near Winchester, Hampshire.

With a new General Manager, to whom the successful candidate will report directly, the club has a Vision to realise its natural potential to be a pre eminent course in the South of England.

The club are seeking an exceptional, up and coming individual who is looking for a demanding yet rewarding role, within a progressive environment. The club will actively support such an individual with continued professional development, competitive salary, and offer the potential of on-site accommodation.

The successful applicant will be expected to stamp their own mark on the role and will be able to demonstrate experience of:

- Proven track record as a Head Green Keeper or Deputy
- Short and long-term maintenance and renovation planning along with implementation on the course
- Implementation of operational procedures and accurate record keeping including greens performance and labour allocation
- Strong man management and motivational skills
- Development of detailed forecasting budgets and monthly budget reporting
- An ability to communicate confidently
- Machinery condition reviews, repairs and replacement planning

In addition to the above specialist requirements, strong candidates should also have core skills including:

- The ability to train, develop and enthuse staff
- Hands on attitude to the job along with key IT skills
- Knowledge and relevant qualifications in all matters needed in the successful operation of a Green Keeping team

The successful candidate will be an individual driven to maximise Hockley Golf Club's reputation and potential, and in turn seeking to enhance their own career.

Letter of application should be made with complete CV by post or email to general.manager@hockleygolfclub.com

Marc Dryden, General Manager, Hockley Golf Club, Twyford, Hampshire SO21 1PL. Tel 01962 713165 - Closing date for applications 31st July 2012



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As part of our planned growth in the UK we are are creating an exciting new position of **Technical Sales Manager (ref:S011)**, to service both existing and new customers in the Central & Southern U.K. with special emphasis on Sports Grounds, Schools, and other non-golf facilities. This field based professional will be able to support and develop sales of our quality products in the U.K. turf and amenity market and contribute to new product development.

The successful applicant will have relevant experience and be highly motivated, with exceptional communication skills and good customer service. You would be a member of our existing close team of Technical Area Managers, but also be expected to act on your own initiative as well. Applications are invited from persons who wish to be part of a dynamic, rapidly growing company and who has good I.T. skills including, Microsoft Office.

Salary is negotiable and offers benefits after a successful qualifying period

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Check out www.bigga.org.uk/careers for more detailed information

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Under the general guidance of the Course Manager carrying out turf maintenance, preparation of the course for play, machinery operation and maintenance, course construction, estate maintenance and identification of different grasses and plants. The role includes early mornings and weekend work.

You must demonstrate effective organisational skills and the ability to use initiative. You will have a NVQ Level 2 Qualification. Clearly customer focused, with a passion for greenkeeping, and a positive and progressive outlook. You will be flexible and able to work early mornings and weekends.

Interested candidates should forward a current C.V. to:

cmoore@mentmorecountryclub.co.uk

www.MentmoreCountryClub.co.uk



Course Manager

(Reporting to: General Manager)

Weybrook Park Golf Club



Weybrook Park Golf Club is a members owned course with a growing membership of approx 600 situated just outside Basingstoke in Hampshire. We are currently an 18 Hole Golf course, although we are half way through an exciting extension project which will conclude with 27 Holes, we are now looking for a Course Manager to take our club to the next level who is a Dedicated and committed person who shows initiative and drive. Responsible for the maintenance of the golf course and clubhouse grounds and to supervise the servicing and maintenance of all golf course equipment and golf carts in compliance with maintenance standards.

Further responsibilities are to:

- Organise, implement and participate in a comprehensive program of maintenance work, including greens, tees, fairways, bunkers, roughs and all other areas of the golf course to ensure that the course is being maintained and presented to the agreed segmentation standards.
- Ensure the safe and effective operation of all golf course equipment, irrigation system and golf carts, to supervise their maintenance and repair and to ensure that appropriate service records are maintained.
- Maintain the security of the golf course and maintenance compound and to ensure that all internal areas are maintained to a satisfactory standard.
- Make all necessary purchases of supplies and materials from approved vendors within budgetary limitations and to maintain appropriate records.
- Prepare Yearly Maintenance Plans and to submit to the GM for approval.
- Produce an annual budget in order to achieve the agreed standards and being representative of the proposed maintenance plan.
- Follow the Maintenance plan, any subsequent reports and adhere to the agreed budget.
- Maintain a close business partnership with the General Manager.
- Train, motivate and effectively direct all members of staff, as well as following appropriate maintenance procedures upon hiring, disciplining and terminating any employee contracts.
- Conduct and chair Health & Safety meetings with all maintenance staff on a quarterly basis.
- The candidate should also have had some construction experience inc Greens/ Tees & should also have a level of grow-in knowledge.

Letter of application should be made with complete CV by post to:

Martin Hucklesby, General Manager, Weybrook Park Golf Club, Rooskdown Lane, Basingstoke, Hants RG24 9NT (or e mail to manager@weybrookpark.co.uk)

Closing date for applications will be 20th July 2012

NB. The above list is not exhaustive or exclusive and the Course Manager may be expected to undertake other work commensurate with the nature and seniority of the position within the Company at the reasonable request of the Company.

The Back Nine

A new column for writers and members to air and share their views on golf greenkeeping topics

This month, Robert Laycock, delves into nutrients and the potassium fallacy

Getting turf nutrition wrong can cost a greenkeeper his reputation and possibly his job. So it is important to get it right. Take potassium. In my experience, many golf greens are fed far too great an amount of potassium salts each year. The advice I give my agronomy clients is to maintain adequate potassium levels but not to provide more than the turf needs.

Cast your mind back to your days at college. Do you remember being taught that if you analyse healthy grass clippings, the ratio of the major nutrients N, P and K is roughly 9N:1P:6K. If you analyse turf leaf tissue it will contain the major nutrients in this approximate ratio, depending on the species of grass concerned. It always did and it still does! When expressed in the way the fertiliser trade traditionally does this, using the oxides of phosphorus (P2O5) and potassium (K2O), this becomes 4:1:3. This indicates that the turfgrass plants need these elements in this kind of ratio and fertiliser programs should be planned to reflect this. This isn't rocket science. It is basic plant science (or botany, as universities called it when I graduated). The trouble is that many of the people who sell fertiliser and some of the people acting as agronomists do not have much knowledge of plant science!

When potassium is deficient in turfgrass plants it renders them prone to drought damage and infection by pathogens. Applying additional potassium under these circumstances is beneficial. However, applying additional potassium to turf that is already well supplied does not convey additional disease resistance or drought-tolerance.

Potassium salts are soluble and so one would expect them to be leached from soils, particularly the sandy soils encouraged for golf greens. However, many soils contain vast amounts of potassium and, time and again, university research

has shown the capacity of grasses to exploit "non-exchangeable" soil potassium to satisfy their requirement for potassium without the need for potassium fertiliser supplements.

Plants can take up nutrients that soil tests don't detect as being available to them. Surprisingly, many sands contain potassium which is available to turfgrass plants. Soil tests that show low "available" potassium may not account for potassium from the natural weathering of sand, for example. With the right sand, it is quite possible for turfgrasses to survive with no potassium inputs, relying solely on the potassium content of pure sand for their needs.

So what if grasses take up too much potassium. Is that a problem? Yes, there are downsides.

Unfortunately, when grasses take up potassium, they don't know when to stop and are able to take it up far in excess of their actual requirements! "Luxury uptake" occurs, which can be shown to depress the content of magnesium and calcium in the cells of the turfgrass plants. In agricultural grassland this leads to nutritional disorders of grazing animals, such as hypomagnesaemia, where luxury uptake of potassium lowers the amount of magnesium in grass and forage with severe effects on the health of the animals that eat it. In broad-leaved herbaceous plants, induced magnesium deficiency symptoms can be easily spotted.

In these species other than grasses, where larger leaf size means that deficiency symptoms are easier to monitor, the effects of low calcium on plant structure would become apparent, but these are not so clear in grasses.

But there may be other consequences: when he was working at Cornell University, David Moody completed some interesting research which confirmed earlier US research findings that the effect of a high level of potassium on the content of other nutrients are more wide ranging than previously



thought. For example, in the case of induced calcium deficiency caused by high potassium levels, the most important finding is that low cell calcium content was correlated with a greater incidence of both pink and grey snow mould. Analysis of cell contents shows that there was a subclinical deficiency of calcium within the cell which interfered with cell biochemistry, specifically with the Krebs cycle, which is the series of chemical reactions the turfgrass plant uses to produce energy. This finding contrasts with the traditionally held idea that high potassium levels improve disease resistance.

The aim when feeding turfgrasses must be to achieve a natural nutritional balance. This will produce healthy turf, which is less prone to pest and disease attack.

So what if grasses take up too much potassium. Is that a problem?

about the author



Robert Laycock has had a wide-ranging career as a turfgrass scientist, beginning with MSc research at Imperial College, London. This was followed by six years cutting edge research at the STRI and then working with a plant breeder in the grass seed industry before becoming Technical Director of Rolawn and General Manager of Karsten Turf Science. He is a Chartered Biologist and a Fellow of the Institute of Horticulture and first began working as an independent professional agronomist 20 years ago. Recently relocated to the North York Moors National Park, Robert is mainly occupied advising on golf courses of all types across the UK. www.robertlaycock.co.uk

If you are going to apply potassium to turf, compare the available sources. Potassium nitrate is frequently used as a source of nitrogen and potassium because it is soluble and readily available. Unfortunately, potassium nitrate (13-0-46) contains far more K than N and when used on its own can cause oversupply and luxury uptake.

Unbalanced turf nutrition renders turfgrasses liable to infection by diseases and, I suspect may be at the root of the recent problems with nematodes, something which has never been a problem in the past even though nematodes have always been around. Nematode resistance is certainly related to plant nutrition in other plant species, with high fertiliser potassium being associated with higher nematode activity.

To summarise, potassium deficiency exists and is occasionally seen in turfgrasses but it is rare so in most cases only a little extra potassium needs to be applied as fertiliser each year.

The views expressed within this column are not necessarily those of Greenkeeper

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