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# Turfgrass



VOLUME 15.1 JAN-FEB 2013

MANAGEMENT JOURNAL

## Zoysiagrasses

The environmental turfgrass



## The end of two eras

O'Shannessy salutes  
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Forward to: **Australian Turfgrass Management**  
 Suite 1, Monash Corporate Centre, 752 Blackburn Road  
 Clayton, VIC 3168  
 FAX: (03) 9548 8622

## Australian Turfgrass Management

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 Australian Golf Course  
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**Production:**  
**Editor:**  
 Brett Robinson Ph: (03) 9548 8600  
 brett@agcsa.com.au

**Art Direction & Design:**  
 Jo Corne Ph: (03) 9548 8600  
 jo@agcsa.com.au

**Advertising:**  
 Peter Frewin Ph: (03) 9548 8600  
 peter@agcsa.com.au



**AGCSA**  
 Suite 1, Monash Corporate Centre  
 752 Blackburn Road, Clayton, VIC 3168  
 P: (03) 9548 8600 F: (03) 9548 8622  
 E: info@agcsa.com.au  
 W: www.agcsa.com.au

**AGCSA Board**  
**President:** Peter Lonergan  
**Directors:** Darren Wilson  
 Tony Fogarty  
 Brett Balloch

**General Manager**  
 Peter Frewin  
 peter@agcsa.com.au

**Events and Education Manager**  
 Simone Staples  
 simone@agcsa.com.au

**Membership and Administration**  
 Lyndel Conway  
 info@agcsa.com.au

**Administration**  
 Allison Jenkins  
 admin@agcsa.com.au

**Accounts**  
 Philip Horsburgh  
 philip@agcsa.com.au

**AGCSATech**  
 Andrew Peart  
 andrew@agcsa.com.au

**HR & Best Practice Manager**  
 Daryl Sellar  
 daryl@agcsa.com.au



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## COVER

**The Lakes Golf Club:** Looking from behind the par three 9th green towards the 1st hole at The Lakes Golf Club in Sydney. The Lakes hosted its third consecutive Australian Open in December.

**Photo:** Brett Robinson.



## COVER STORY: Royal Canberra set for centenary spotlight

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From having to deal with soaring summer temperatures through to winters where the mercury regularly drops below zero, managing the playing surfaces at Royal Canberra Golf Club is perhaps one of the most challenging jobs in Australian turf. ATM editor Brett Robinson visits the exclusive club which as part of the city's centenary celebrations will be hosting the 2013 Australian Women's Open in mid-February.

## FEATURES

### Kingston Heath's new master

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After 19 years at Spring Valley Golf Club, last May Hayden Mead made industry headlines when he was sought out by Kingston Heath Golf Club to be their new course superintendent. ATM editor Brett Robinson catches up with Mead during his first major test at the club – the 2012 Talisker Masters – to see how he coped having a major tournament so early into his tenure.



### The Lakes blows them away

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The 2012 Emirates Australian Open at The Lakes Golf Club will be long remembered by both the players and course maintenance personnel after a dramatic final round that was impacted by Sydney's notorious weather. ATM catches up with course superintendent Anthony Mills to review the tournament, his first major Tour event since taking over at The Lakes last July.



### Small in stature, big in heart

22



From Keysborough Golf Club as an apprentice through to being head curator at the AFL's Waverley Park and overseeing the construction and maintenance of Hidden Valley Golf & Country Club, 65-year-old Mick O'Shannessy has packed in quite a bit during his 52-year turf management career. Having retired last October, ATM sits down with one of the gentlemen of the profession to reflect on a wonderful journey.

### The environmental turfgrass

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Turf breeding expert Dr Don Loch provides a general overview of zoysiagrasses and some of the unique and beneficial characteristics of this under-utilised turf variety.

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Recently retired TAFE teacher Frank Dempsey kicks off a series of regular articles from the National Turf Education Working Group on issues facing the delivery of turf management education in Australia. This edition's article looks at AQF3 chemical license training.



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#### Contributors to Australian Turfgrass Management Journal Volume 15.1 (January-February 2013)

Nathan Bradbury (Eastlake GC); Barry Bryant (SAGCSA); Col Caulfield (Pine Rivers GC); Chris Chapman (STA NSW); Frank Dempsey (National Turf Education Working Group); Darryl Edwards (Burleigh GC); Chris Fletcher (Ipswich GC); Peter Frewin (AGCSA); John Geary (St Andrews Private GC); Charlie Giffard (Indooroopilly GC); Craig Gillin (Mt Gambier GC); Tony Guy (STA WA); John Halter (City GC, Toowoomba); Brendan Hansard (Twin Creeks G&CC); Steve Hewitt (VGCSA); Jeff Keast (Albert Park GC); Richard Kirkby (Pennant Hills GC); Dr Don Loch (University of Queensland); Peter Lonergan (GCSAQ); Stephen Mallyon (The Lakes GC); Hayden Mead (Kingston Heath GC); Anthony Mills (The Lakes GC); Craig Molloy (NSWGCSA); Stuart Moore (Southport GC); John Neylan (Neyturf); Kelvin Nicholson (Pacific Harbour G&CC); Mick O'Shannessy; Andrew Peart (AGCSATech); Nick Price (The Cut); Adam Robertson (Kew GC); Matt Roche (Australian Sports Turf Consultants); Tony Smith (TGCSA); Simone Staples (AGCSA); Richard Stephens (Turf Australia); Glenn Stuart (Metropolitan GC); Anthony Toogood (Commercial Golf Resort); Nathan Tovey (STA VIC); Jim Vaughan (Turf Queensland); Michael Waring (Royal Canberra GC)

# A significant year

Chances are the letter that some NSW golf clubs and turf facilities received from the NSW Environment Protection Authority around Christmas time didn't contain a hearty 'Season's greetings' from the jolly fat man in the red suit.

As this edition of Australian Turfgrass Management was being finalised in mid-December, the NSW EPA announced it was starting to send out penalty infringement notices in relation to the ongoing investigation into alleged breaches of the Pesticides Act 1999 by turf industry practitioners. These are on top of the more than 130 notices already served to golf clubs, turf producers and chemical supply companies requesting information relating to chemical purchases, spray records and chemical training records.

In the second week of December, EPA NSW officers met with representatives from the NSWGCSA, Golf NSW and GMA NSW to update them of their ongoing investigations. As well as the abovementioned notices and fines being sent out, the most alarming point of the discussion was the EPA's claim that they have evidence suggesting some of the information being supplied to them is false or misleading.

The NSW EPA has made it known that it wants its investigation to effect change rather than drive the industry into the ground and to date it has done so. The NSWGCSA's environmental best practice covenant initiative comprising 42 golf clubs throughout the state is a perfect example of that and the NSW EPA has commended the industry on such a proactive measure.

However, practitioners are shooting themselves and the industry massively in the foot if the EPA's claim of misleading and false information is correct (and there's nothing to suggest it isn't). It turns the situation from a relatively simple matter of issuing fines to heading down the path of prosecution – and the penalties for knowingly providing incorrect information are harsh. In response to this development the EPA has turned up the heat by indicating that it will now be interviewing 2ICs and spray technicians under direction as a means to find out the exact information about spray and chemical use practices!

During the meeting the EPA NSW also informed the group that the wheels were in motion to unify laws governing the control of use of pesticides across Australia. ATM understands that a Bill to this effect has already been drafted and is based around the provisions contained in the NSW Pesticides Act. The NSW EPA has already been in contact with its interstate counterparts and envisages little resistance to getting something like this through. Should this eventuate it would be a massive game-changer for the turf industry, in particular for Victoria which has for a long time operated under very different laws. So, with this in the pipeline and potential prosecutions to come, 2013 has all the hallmarks of shaping up to be a very significant year for the turf industry.

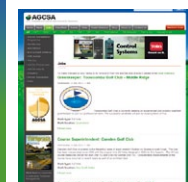
In light of the ongoing situation in NSW, it is also worrying to hear out of the recent National Turf Education Validation Meeting in Albury that some private registered training organisations are fast-tracking chemical licensing training. In response to this and other concerns, in this edition the National Turf Education Working Group kicks off a series of regular articles which will examine some of the increasing pressures being placed on turf management education providers. The highly respected Frank Dempsey, a TAFE teacher of some 30 years (who incidentally was bestowed life membership of the STA NSW recently), pens this first article which all practitioners in the industry should read (see page 56).

Enjoy the read...



*Brett Robinson*

**Brett Robinson,**  
Editor



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# Increase in rounds a positive sign for golf industry



**A**s I write this, 31 December is just days away and it provides a good time to think about the year that is coming to a close. It is hard to believe I have been in this role for over a year and it has certainly been a very interesting first 12 months.

I am very fortunate to hold this position and work in a wonderful industry that is full of dedicated and hard-working professionals. During my first year I have had the opportunity to visit all states and speak to a great cross-section of industry people. The one quality that is evident in all of those I have met is their desire to represent and promote the industry in a positive light.

The summer sport season is well and truly here and I am pleased to report that golf playing numbers are on the rise, if the Australian Golf Industry Council's 2012 Competition Rounds Report released in September is anything to go by (the report can be viewed at [www.agic.org.au](http://www.agic.org.au)). The report shows strong growth in competition golf in Australia with the 2012/2013 summer expected to deliver further momentum. According to the report:

- From July 2011 – July 2012 about 12.085 million rounds were recorded by GolfLink across the same facility base, a 3.5 per cent increase over the previous 12 month period;
- Total rounds played in formal club competitions grew by 3 per cent over the 2009-10 financial year, averaging over one million rounds per month;
- Male competitive play increased almost 4 per cent with female play up 2 per cent;
- Single handicap rounds accounted for approximately 50 per cent of all rounds played;
- National rounds played in March 2012 fell by 9 per cent over the prior year as NSW experienced its second wettest March on record.

- Average frequency within male golfers is up by an average of 3 per cent across the country.

What is also pleasing is that golf is again being telecast on 'free to air' television. From my experience at the recent Emirates Australian Open and the Australian PGA, it would also appear that attendances at events are on the rise.

While on the topic of summer sport, I would like to thank all those that have been involved in the preparation of their sporting facilities, whether for golf, cricket, bowls etc... The playing surfaces produced in this country are in my opinion the best in the world and are a credit to all involved. I would like to make particular mention of AGCSA members **Anthony Mills** (The Lakes) and **Dean Henderson** (Palmer Cooloom Resort) who both produced excellent courses despite having to contend with some 'unusual' circumstances.

During the week leading up to the Emirates Australian Open at The Lakes the AGCSA Board had their regular meeting. Following the meeting the Board also took the opportunity to meet with the presidents of the various state superintendent associations, including, for the first time, our neighbours from New Zealand and representatives from Turf Australia. The discussions in those meetings were excellent and while all associations represent their individual member base, the one underlying thing that was evident was the desire to work together to promote the industry and where possible reduce duplication of activities.

As I have reported previously, planning for the 2013 Australian Turfgrass Conference and Trade Exhibition is well underway. I am happy to report the STA and SAGCA will again conduct sessions at Twin Waters in 2013. Their involvement adds to the event and I hope it continues in the future. The other



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good news is that the trade exhibition has sold out and the AGCSA thanks all those companies that are supporting the event.

Work is well underway engaging speakers to present a high quality education component to the week on the Sunshine Coast. The conference will kick off on Monday 24 June with the first of a series of workshops that will be presented in partnership with AGCSA Gold Partner Jacobsen. We plan that this will be the first of a regular series of workshops that will be supported by Jacobsen and we hope they will be a great addition to conference week.

One of the workshops will be hosted by conference keynote speaker **Dr Thom Nikolai** which will have an agronomy theme. Dr Nikolai was a popular presenter at the 2010 conference on the Gold Coast and we look forward to welcoming him back to Australia. The other workshop will be hosted by a well-known Australian golf course photographer who will guide attendees through the process of taking quality photos of their courses. This is a little different than normal but I think it will be a great success.

As most would be aware, **John Geary** has left his role as environmental agronomist at the AGCSA to go back to the Mornington Peninsula to construct a new course. John's enthusiasm for the environment and sustainable turf management will be missed greatly at the AGCSA, but I am sure all will wish him well as he moves onto the next chapter of his life.

In closing I hope everyone had a Merry Christmas and that 2013 brings everything you hope for. As always please feel free to contact me on 0418 593 072 or [peter@agcsa.com.au](mailto:peter@agcsa.com.au) should you have any issue or suggestions. 🙏

## LETTER TO THE EDITOR

Dear Editor,

Congratulations! Yesterday I received the latest issue (**ATM Volume 14.6 – November-December 2012**) which I took home to read. As a general manager whose career of nearly 40 years includes working on the golf course, I believe I am qualified to comment on the subject matter that you wrote of in your editorial (**'A great deal' – page 3, Vol 14.6**). Frequently in your publication you produce articles that should be compulsory reading and that is certainly the case with the message that you wrote regarding the oft unrealistic expectations of members.

By way of endorsement of your sentiments I believe that you will find there are many of us that share your views. There are many private clubs that need to heed your message and we must strive to educate members that they must appreciate the reality that the pole may well have been raised too high."

**JOHN STAMP**  
GENERAL MANAGER  
WOODLANDS GOLF CLUB, VIC



AUSTRALIAN GOLF COURSE SUPERINTENDENTS' ASSOCIATION

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**The Royal Canberra brains trust – course superintendent Michael Waring (left) and long-serving assistant Andy Heskett**

In mid-February Royal Canberra Golf Club will host, for the first time in its history, the Australian Women's Open as part of the capital's centenary celebrations. ATM editor Brett Robinson catches up with course superintendent Michael Waring to look ahead at his preparations for the Open and the impending course redevelopment which will include the long-awaited reconstruction of greens, surrounds and bunkers.

Fans of Monty Python's Flying Circus will well know the infamous 'Four Yorkshiremen sketch'.

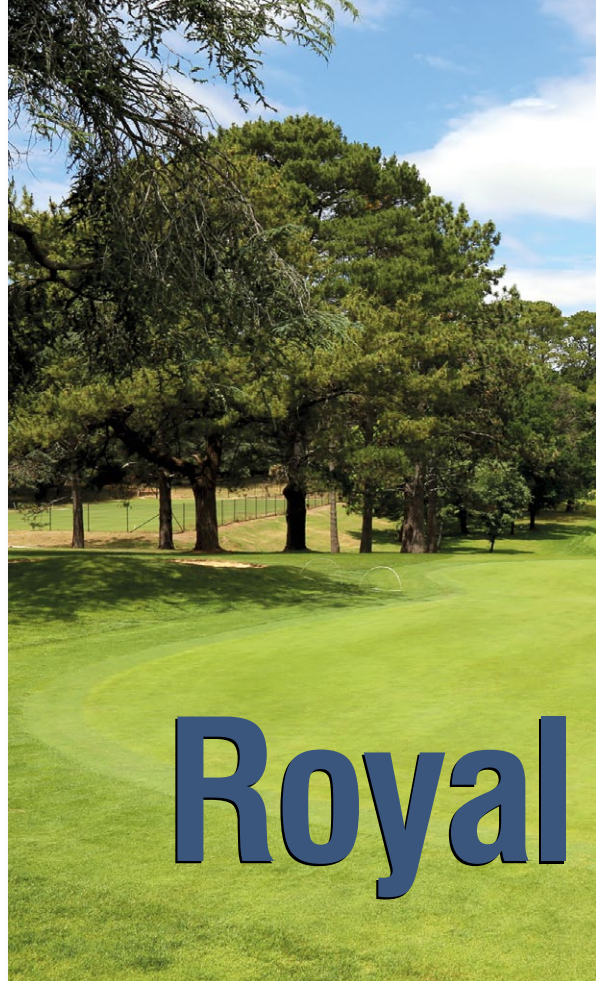
For the uninitiated (do yourself a favour and Google it), four pompous Yorkshiremen are sitting around in their lounge suits, drinking red wine, smoking cigars and reminiscing about their youth.

As the sketch progresses, the conversation deteriorates into a wildly absurd contest to see who can out-do each other in regards to how tough their respective upbringings were. "You lived in a cardboard box? Luxury!" chortles one of the characters. "For three months we lived in a rolled up newspaper in a septic tank... And when we got home from working in the mines our father would thrash us to sleep with his belt". And on it goes...

It's a sketch that Royal Canberra Golf Club course superintendent Michael Waring could no doubt relate to. A regular attendee at Australian Turfgrass Conferences over the years, there would have been some occasions when hearing of the issues his colleagues are facing elsewhere around the country where he may have inwardly thought to himself 'Luxury!' Given the challenges he has had over the past 17 years maintaining the capital's No.1 course, which was bestowed 'Royal' status back in 1933, Waring is doing well to keep fighting what has become an increasingly difficult fight.

Like any turf manager plying their trade in Canberra, it's hard to be envious of the conditions in which Waring has to operate. Its natural beauty and aesthetics aside, Royal Canberra has little going for it in terms of providing a conducive environment for maintaining a golf course. In fact, just about every factor at present – and they are numerous – conspire to make it one of the toughest jobs in turf.

First and foremost there is Canberra's unique climate. Summer temperatures can regularly reach maximums in the mid-to-high 30s with the occasional peak into the 40s, while in winter and into spring minimums can often plummet to -6°C or -7°C, with an average of 90 frosts per year. Needless to say both warm- and cool-season grasses will struggle at some point during the year.



Next are the heavy clay/silt soils – moist in winter, hard as a rock during the height of summer. Vertidrainage bounces down fairways and good luck to the staff member who goes out to change a hole without taking a mallet. As a result, root systems on most of the greens are shallow and combined with their age (50-plus years) the intensive level of maintenance required to keep them performing would be enough to haemorrhage the bottom line of less affluent clubs.

Then there are the trees. Much of the attraction and character of the Royal Canberra layout, attributed to designer Commander John Harris, comes from the fact that it is routed through the Westbourne Woods Arboretum. As custodian of the arboretum, Royal Canberra is responsible for the upkeep and preservation of more than 200 species of trees and plants, some very rare and significant. Trees and fine turf, however, are rarely compatible and with hundreds of monstrous pines flanking fairways, a silent subterranean war is being waged to see who can out-compete the other for water.

Then, of course, there are the members – knowledgeable, affluent and who love to play golf, a lot of it. Royal Canberra pumps through in excess of 70,000 rounds per annum which would make it one of the country's more heavily utilised elite member clubs. There are members comps most days and it takes a lot for them not to turn up. They also know what sort of course they like and place very high expectations on Waring, his invaluable assistant Andy Heskett and the crew to deliver that year round, regardless of any impediments.



# Canberra

## set for centenary spotlight

PHOTOS: BRETT ROBINSON

So, take all of the above to start with and then, just for good measure, chuck in a drought, like that which was experienced just a few years ago, and see what happens when you attempt to keep alive 42 hectares of irrigated cool-season turf (including 2.1ha of bentgrass greens) with club-imposed restrictions which slashed water availability by over half. As Waring notes with a wry grin, he and the crew have had their work cut out for them in recent times.

"It has been pretty challenging," states Waring. "We got through one of the toughest periods in the club's history during the recent drought and with the amount of water that we had to work with on the course, it was probably some of the toughest greenkeeping we have ever done.

"The staff worked very hard to present a golf course that was playable. Greens, tees and surrounds were at a more than acceptable standard, but it was the fairways that suffered badly and it was hard as greenkeepers to see that deterioration. During those times you did worry that you couldn't provide the surfaces that you wanted to, but under the circumstances we were doing the best we could.

"Surprisingly, it wasn't the summers that were the issue. The members knew it was hot, knew we had limited water and the little bit of common and South African couch we had around the place had started to spread. The most difficult time was winter and explaining to the members why they were poor. Because the ryegrass started to break up and we had massive *Poa* drop out during the height of summer, we didn't have the cool-season base to the

fairways come winter. When the couch fell over the members just expected the cool-season grasses to kick in, but because they had been wiped out during summer, the fairways they had become accustomed to in winter just weren't there. It was a very tough time, and not just for us but all clubs in Canberra."

### COOL FOR CANBERRA

As a result of the most recent drought, a number of courses in Canberra, such as Federal Golf Club and Gold Creek Country Club, took the bold step and converted their fairways to couchgrass. Royal Canberra too seriously considered the option and together with feasibility studies into securing more water, a range of trials were established. Plots of various couchgrass varieties, both seeded and

Royal Canberra Golf Club is renowned for its natural beauty and aesthetics, however, a range of factors including the local climate, soils, level of play, its many trees and general age of the course, make it a very intensive course to manage

**In going back to being a predominantly cool-season course, a massive oversowing and topdressing programme has been instituted over the past 18 months. Pictured is Royal Canberra's sublime 16th, considered one of the best par fours in Australian golf**





**In anticipation of the reconstruction, the greens on 19 (above) and 20 (below) were converted to Authority and A4 creeping bentgrass respectively. At this point in time Authority is ticking all the right boxes**

vegetative, were established in the nursery, while Wintergreen and Legend couch were line-planted into the 3rd and 17th fairways respectively to see how they would go competing against the South African variety brought in years earlier.

Although continuing to monitor the couch and its performance, as it stands today Royal Canberra is still and will be for the foreseeable future a predominantly cool-season course. As Waring admits, while the couchgrass trials were very interesting, at the end of the day the members simply don't want couch. They want a cool-season course and that's what the club has gone back to, a decision which has been aided somewhat by the return to normal rainfall patterns over the past couple of seasons.

"We went down the couch line as far as we could go without flicking the switch to a full conversion," says Waring. "The decision has been made to go back to cool-season and over the past 18 months we have oversown the fairways heavily to get them back to a predominantly ryegrass mix again with about 5 per cent couch still there.

"In my opinion, I don't think you can go past the ryegrass, but only if you have the water. That's the critical thing. You only have to look at the flow chart over a 12 month period to see that in terms



of playability and quality the ryegrass has the best longevity. It obviously holds together very well in winter, even when it gets frosty, and in the height of summer it's really only a 10-12 week period between the middle of December and the end of February where it stresses. It's only when you get those extreme peaks in temperature that it really starts to struggle but you can generally bring it back.

"We are now waiting on information to come back from Ogilvy Clayton Golf Course Design which the club has engaged to draw up a master plan and come up with some preliminary ideas for fairway turf varieties. Fescue and couch are in their thoughts, but with our golfing programme and the amount of play we get, that in itself creates a lot more dramas when it comes to determining what grass type to go with. It simply isn't an issue of colour, aesthetics and growth habits, but hardness, playability and tolerance of traffic and shade – all of these things need to be taken into consideration.

"The right grass depends on a number of factors – water availability, soil types and climate. Water is the big thing and while I think temperature-wise ryegrass is probably the best grass to maintain and is the most playable for the majority of the year, that's only going on having an all but unlimited water supply. The cool-season option is definitely what the membership wants, so it then becomes a management issue – how do we secure the water to do what the membership wants."

## FRESH START

Grass varieties aside, the other significant issue currently facing Royal Canberra is the simple fact that the course is now of an age where it is increasingly difficult to sustain the modern day demands placed on it. Aside from the Brindabella loop of nine holes, designed by Thomson and Wolveridge in the 1990s which gave Royal Canberra a 27-hole layout, the Westbourne Course holes (1-18) have hardly been touched since the course was opened back in 1962.

With the improvement of the playing surfaces of those holes as a primary focus, the club engaged Ogilvy Clayton and a master plan is currently in the final draft stage. The course redevelopment was planned to start straight after the 2013 Australian Women's Open in February (more on that below), however, it is more than likely to be later in 2013 if not 2014 before things really kick off.

As far as Waring is concerned, the redevelopment is all about one thing – dragging the greens into the 21st Century. The push up bentgrass/*Poa annua* greens have notched up half a century of loyal service and while still providing a fantastic surface, they are only doing so because of Waring's expertise and a very resource intensive management regime.

During summer Waring will have teams of guys out handwatering greens around the clock. Due to the heavy clay soils, the bentgrass has a very shallow root system, so syringing regularly throughout the day instead of wetting them up at night is the only

viable option. Add to this a lot of insect (stem weevil) and disease (pythium and rhizoctonia) activity and it's a no brainer that the greens require a significant facelift from top to bottom.

"Greens reconstruction is a non-negotiable," says Waring. "A big part of our working day here in summer is about maintaining greens. It's a constant battle. The driving force behind the redevelopment is to improve the greens and greens complexes and bring them into the modern age and as such they will be full USGA-spec constructions.

"As far as the design is concerned, there won't be any huge changes to the greens. The club has asked Ogilvy Clayton to keep the philosophies of Commander Harris in mind and requested only minimal changes to contouring and green shape. The other big part of the redevelopment will be the bunkers. We have 98 bunkers across 27 holes and with our big, steep clay faces, we get a lot of contamination issues, especially after storms. The silt, dust and pollen from the trees clog up the sand very quickly which slows down the drainage, so that'll be one area of the reconstruction that is an important consideration for us."

As far as a new greens turf variety, at this stage it is a two horse race between A4 and Authority with the latter ahead by a comfortable margin to date. Over the past couple of years Waring has established a nursery containing both varieties and converted the chipper to Authority. Two greens out



on the course – 19th and 20th – were also converted with Authority and A4 respectively and have been closely monitored for their in-play performance.

"At the moment Authority seems to be ticking all the boxes for us," says Waring. "They have both performed well, but having reviewed all the trial data from the AGCSA bentgrass trials and our own work here, Authority consistently comes out well across a range of parameters. The germination rate of the Authority was excellent."

As for other possible grass varieties, as mentioned above fescue has been thrown into the mix as a potential for surrounds and even fairways. As such a fescue trial site was seeded in September with plots of Chewings and creeping red fescues either as single varieties or in blends.

"Fescue isn't a grass we have had many dealings with here, but as with everything you don't

**Bunkers have been a prime target in the lead up to the Open, in particular removing contaminated sand and replenishing with fresh sand. Reconstructing bunkers will also be a significant part of the course redevelopment**

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Having trialled couchgrasses extensively for the past five years, Royal Canberra has recently put in fescue trial plots to see how they will cope in Canberra's unique climate

rule it out," says Waring. "In the right situation it's a beautiful grass and you only have to look at Barnboughe Dunes and Royal Melbourne to see how good it can be, but every course is different. We know what the ryegrasses and couches are like here, so now we'll give the fescue a chance.

"They are at the stage now (mid-December) where they are being cut at 13mm and in another few weeks that should be down a bit more. They were travelling along nicely up until we got a couple of hot days in late November which knocked them around. But that's what we wanted. We want to see how they handle our conditions and when we get some more hot days over summer we'll keep putting them under more pressure – foot and cart traffic – to see how they fare."

## OPEN FOCUS

While the redevelopment looms as an exciting prospect on the horizon, the immediate focus for Waring and his crew has turned in recent times to the 2013 ISPS Handa Australian Women's Open. Having hosted the ActewAGL Ladies Classics in the past three years, the Open heads to Royal Canberra for the first time in the event's history from 14-17 February 2013 and headlines Canberra's centenary celebrations. The tournament will be played on the Westbourne Course (1-18) and as it is co-sanctioned with the LPGA and European Ladies tours, one of the strongest fields ever for a women's golf event in Australia is expected.

Having got the club championships out of the way in October, Waring has deliberately backed off pushing the course in an effort to safeguard it against the excesses of summer. As he points out, the second week of February is the worst possible time of year to host a tournament on a cool-season course in Canberra, so his management goal in the lead-up will be to ensure that no turf is lost during the key December-January period.

With the drought having had a huge impact on the quality of fairways, Waring has instituted a massive topdressing and oversowing programme in the lead-up to the Open. Using a 50/50 blend of RPR and Striker Gold ryegrass seed, all 27

fairways have been oversown three times (last spring, this past autumn and again this spring) at 200kg/ha while more than 800 tonnes of an 80/20 topdressing mix was also spread each time. Greens were renovated in spring (scarified then cored with 5/8" tines, amendments added, topdressed and later vertidraind with 8mm needle tines) and following the club championships heights were lifted to 3.5mm.

"Most of our preparations are geared around getting the course through the worst of the summer," explains Waring, who has also attacked the bunkers with vigour in order to clean out any contaminated sand. "After the club championships we lifted cutting heights and have kept moisture levels right up in the greens and fairways in order to take the pressure off the turf as we head into summer.

"We'll keep a real close eye on the greens over summer and get stuck into them with the grooming heads when we get cooler periods. It's just a matter of trying not to stress them out too much and keeping a surface. I guess we are trying to get the greens to a stage where they are about 70 per cent tournament ready over the summer so that when it comes time to pull the trigger a few weeks out we have the grass cover there to work with.

"We generally have a firm, bouncy green for tournaments, so you have got to be aware that you can't push them too hard. That's the nerve wracking thing about having the tournament at that time of year; you have to be very conscious of how far you can go. And then you also have to be mindful of getting the course back up post-tournament.

"So we are adopting a 'take it easy' approach. The membership are understanding that the course will be a little bit damper this summer as a result, but the theory is that if we can get the course through the heat of summer with the grasses intact then we can bring it up very quickly come the Open. You simply can't afford to lose grass here over the Christmas and New Year period because you won't be able to get it back."

Preparations for the Open will ramp up about 3-4 weeks out when patterns will start to be burnt into the ryegrass fairways and with 10 days to go it will be all hands to the pump with a tournament crew of around 50 likely at this stage.

"The senior guys have all been given an area of responsibility and we are now starting to work through who we'll have doing what," says Waring. "All the guys are looking forward to it and I have a lot of old staff wanting to come back and volunteer, as well as local staff from other courses helping out.

"These events are not just about me or the senior staff; it's about all the guys and their futures so I'm very mindful of the boys playing a real big part in the event. It will be a tough event to do properly given our environment at that time of year and the long range forecast isn't promising, but hopefully someone will smile on us and we'll catch a cool break for the week." 🌞



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The 2012 Talisker Masters was Hayden Mead's first major test since taking over as Kingston Heath course superintendent in June 2012

ATM editor Brett Robinson reviews the 2012 Talisker Masters, the first major tournament for newly appointed Kingston Heath Golf Club superintendent Hayden Mead.

## Kingston Heath's new master

The back half of 2012 will be a period that Hayden Mead will reflect upon in years to come as perhaps the most significant juncture of his career as a turf manager. After 19 years at Spring Valley Golf Club, a course where he cut his teeth as an apprentice before eventually progressing through the ranks to superintendent, in May 2012 Mead made industry headlines when he was sought out by Kingston Heath Golf Club to be their new course superintendent.

It's not every day that Australia's number two and world number 27 ranked golf club comes a-calling, but after parting ways with Martin Greenwood earlier in the year, Kingston Heath set about drawing up a shortlist of candidates to fill the top job. Having quietly and impressively gone about his trade during a seven year stint as Spring Valley superintendent, including hosting four successful Victorian Opens from 2009-2012, Mead's name made the final cut and along with a number of other highly experienced superintendents was duly approached.

Despite an enjoyable, challenging and ultimately rewarding tenure at Spring Valley and still very much motivated to implement further changes there, Mead knew that the opportunity presented by Kingston Heath would rarely, if ever, come along again during his career. Coming out of the blue as it did, he had little time to mull over the invitation to put his hat in the ring, however, a short walk around the famed sandbelt course was enough to confirm in his own mind that it would be the right fit should he be given the nod.

Sitting adjacent the Kingston Heath practice range on the opening day of the 2012 Talisker Masters last November, some five months after confirmation of his appointment as Kingston Heath's new custodian, 37-year-old Mead can now afford a chuckle when asked what the first few months of his tenure have been like. "Hectic" immediately springs to his mind and when you work your way through Mead's 'to do' list he has certainly hit the ground running.



Already with eight Australian Opens and the 2009 JBWere Masters to its name, Kingston Heath Golf Club hosted the 2012 Talisker Masters from 15-18 November (pictured is the tournament 8th)

PHOTOS: BRETT ROBINSON

No sooner had he set foot inside the Kingston Heath sheds than new machinery purchased prior to his arrival rolled through the gates, while plans for the club's new irrigation system, to be installed in 2013, and a long overdue upgrade of the maintenance facility to improve staff amenities also required his immediate attention. Add to all that getting to know the crew, the course layout, the vagaries of an ageing and temperamental irrigation system, not to mention the small matter of getting the course up for the Masters, and Mead has been tested right from the get-go.

"I think I have adapted pretty well," reflects Mead on the start of his time at Kingston Heath. "My course management philosophies have stayed pretty much the same since coming across from Spring Valley. I'm still focussed on the turf surfaces first and foremost and approaching course presentation from the members' perspective, but with bigger budgets and more staff come greater expectations.

"It has been a hectic start, but good. There

was a lot going on to get my head around when I started, but with the Masters so soon the main priority was concentrating on making sure we had all the surfaces right for that. Fortunately I took over the course in very good condition and the crew were fantastic, especially (assistant superintendents) Bob Simmons and Jarrod Castle who were brilliant in

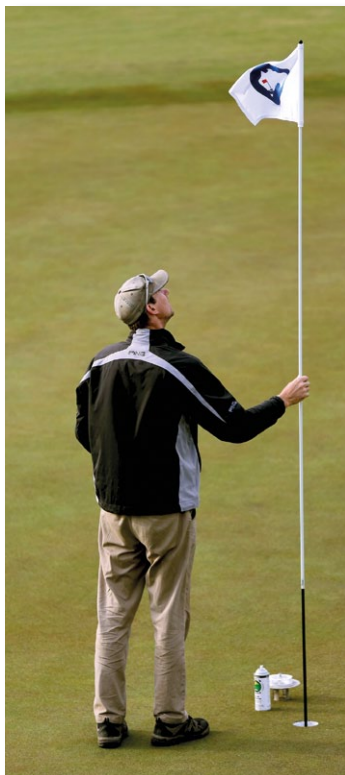
**Assistant superintendent Bob Simmons, who has been at Kingston Heath for 32 years, hand-waters the 15th green**





◀ **Kingston Heath staff Mark Bouma (left) and Craig Harrison (right) tend to the 15th green and surrounds ahead of the second round**

**Masters volunteer James Newell, assistant superintendent at nearby Woodlands Golf Club, sets the cup and pin on the par four 17th**



helping me understand everything, although I'm sure it probably felt at times like they were having to deal with a first year apprentice!

"It might seem quite insignificant, but one of the hardest things was getting my head around the course layout. The standard course layout has the 10th hole in play and the members hit off holes 1 and 7 (which play 10 and 1 for the Masters) during the week. Then two days a week they play the Masters layout. So needless to say I owe the guys a few slabs already for getting the order of holes totally wrong and popping up sprinkler heads where they shouldn't."

## MASTERING PREPARATIONS

Having the tournament so early into his tenure was something of a double-edged sword for Mead. While it provided a fantastic opportunity to see how he and the crew would gel in the high pressure environment of a major tournament and to what extent he could push Kingston Heath's surfaces, the very fact that it was such a high profile event also tempered Mead's ability and desire to institute any significant changes to management practices.

Although not normally his style, in a number of areas Mead erred on the side of caution during the lead-up and readily admits that there would be a number of things he would do differently the next time round.

"With the Masters such a primary focus I couldn't afford to take any risks, so we kept things pretty simple," explains Mead. "Keeping the surfaces clean of *Poa* was a big issue but I couldn't exactly go around trialling different herbicides with the tournament so close. Watching the *Poa* keep on growing has been very hard but with the tournament over we'll be addressing that.

"That was probably one of the disadvantages of having the tournament so soon after starting. There would have been a lot of things I would liked to have tried at this time of year (November) just to

see how they would react here with the climate and weather compared to my past experiences at Spring Valley. Although the two courses are literally just a few kilometres down the road from each other, they are very different. At Spring Valley we had bent/*Poa* push-up greens, whereas here they are pure bentgrass USGA constructions – totally different circumstances and environments and the same products can behave very differently.

"It was the same with our greens preparations. We got all our programmes in place about 6-8 weeks out and then we solid tined greens (100mm depth) with small star tines about four weeks out. I did that because I wanted to use a standard wetting agent and get it down through the profile. I also put a preventative fungicide out at the same time, so I wanted to get that deep penetration. Because of the tournament, I went out at a light rate with the wetting agent, but in hindsight I could have gone with a heavier rate to get better longevity.

"With the star-tining, we did it first in August and kept a good eye on the greens which came back well after two weeks. On the back of that we went out with them again four weeks out from the tournament and thought we'd be ok, but as the greens started to dry out they began to show through a bit it. So again, with hindsight, I probably would have star-tined 5-6 weeks out."

Despite the many learning curves in the lead-up to the tournament, few could fault the condition of Kingston Heath come the middle of November. Indeed, many players and pundits were quick to highlight the fantastic condition of the course (see the breakout on page 16 for some of the comments on Twitter), while the tournament organisers got the grandstand finish they hoped for as Adam Scott and Ian Poulter traded shots over a sublime final 36 holes.

Mead's crew expanded to 24 for the tournament from the usual summer contingent of 16, with volunteers coming from a number of local clubs

including Huntingdale, Metropolitan, Victoria, Woodlands and Spring Valley, while one volunteer journeyed all the way from Tura Beach Country Club on the NSW south coast.

At the request of tournament organisers, green speeds for the Masters were kept at a modest 11'-11.5'. Greens, which were being cut (with Toro Greensmaster Flex 2100s) at 2.75mm the week prior, were lifted to 3mm during tournament week, with select greens receiving a single cut before each round and some only brushed. Fairways (9mm) were cut by two crews (one crew operating two Jacobsen 3800 units and the other crew of three operating Toro Reelmaster 5610s). Surrounds were maintained at 7mm with two Jacobsen G-Plex triplexes while a Toro TriFlex 3400 tended to the tees (6mm).

"Our cutting regimes were a bit over the place to be honest," admits Mead. "Because of the dry weather and the dusting we were doing, the speed and firmness was already in the greens. Before I started the club had implemented a heavier dusting programme on a three-weekly basis which kept the firmness in the greens a lot better. As a result, it was probably the first tournament here in a long time that we didn't roll greens."

"The greens were between 12'-13' for the members in the lead-up to the tournament, but we brought that back down to 11'-11.5". We stimped all the greens after the Wednesday Pro-Am and some had blown out a little in regards to their firmness with all the traffic – we had 240 playing – so some were just brushed using the brushes on the front of the walk-behinds with cylinders not engaged, while others were cut and brushed. The putting green, which is small, copped a battering and we only cut it once in the five days leading up to the opening round and it still stimped 11'4".

"We did have to chase our tail a little on a couple of greens, most notably our double green (tournament 2nd and 16th). When we stimped it on the Tuesday night before the tournament, half of the green (the 2nd side) was a foot quicker than the other. So when we prepared it ahead of the opening round, we single cut the 16th side of the green, went over the mound to the 2nd half, dropped the brush down, disengaged the mower and kept going!

"But, overall I was very happy with the way the course came up. It was a real team effort by the guys and they did a great job to get it to the level they did."

## HAMMER TIME

One of the key components of his pre-tournament greens management programme was undertaking regular Clegg Impact Hammer readings on all greens to determine surface hardness levels. Although having had little dealing previously with the Clegg, Mead quickly realised the benefits of using the device as part of his tournament management strategy.



"Our greens preparation for the Masters was all about chasing a consistent speed across all the greens and also keeping firmness consistent and that's where the Clegg came in very handy," explains Mead. "Martin (Greenwood) was right into it and although I had never used it at Spring Valley, as soon as I started using it and got an understanding of it I could really see the benefits."

"Fortunately things ran pretty smoothly in the lead-up to the tournament so we were able to concentrate on using it on all greens and using the results to assist with our greens management. About two weeks out from the tournament readings were taken on all greens at nine locations (three front, three middle and three back with the 0.5kg flat-head hammer) and they all averaged about 185 gravities."

"We were aiming to have them up around 200 for the first round and when we took readings again the Friday before tournament week they were up to 211. We then went out on the Tuesday before the Pro-Am and they were back down to a 205 average which is where they remained for the tournament."

"It proved to be a really handy tool to make sure we had that consistent firmness across each green and also across all greens. For instance after we took the readings on the Tuesday there were a few greens that were noticeably softer at the back. We were able to go out and take a closer look at those greens and sure enough those areas were a

**Clegg readings taken across all greens in the lead-up to the tournament saw averages of around 205 gravities**



**The 13th fairway gets an early morning cut courtesy of two Jacobsen 3800s**

**Warren Kneivt leads the crew up tournament 4 on the Toro 5610 fairway units**





◀ **Logan Galloway cuts the surrounds on the par 3 15th**

little greener than the rest of the green, so we were able to tell the hand-watering guys to stay away from them. It was very handy in that regard and something that we'll continue using."

### NO REST

Mead has had little time to reflect on this debut Masters and no sooner had all the tournament

infrastructure been pulled down he was overseeing his first significant renovation which was scheduled the week before Christmas. As this edition was going to print Mead was due to rip into the greens with 5/8" hollow tines as well as scarify the Santa ana couchgrass fairways.

He then has a six week gap to get the course up for The Open Championship's International Final Qualifying on 29-30 January, an event the club has hosted the past six years, while club championships start a few weeks later.

Following those events, the primary focus for 2013 will be the complete upgrade of Kingston Heath's irrigation system starting in March/April. Planning for the new system started long before Mead's arrival and it will see new storage tanks, pumping station, mainlines, control system and sprinklers installed over a six month period. The greens will be on a completely separate system – separate mainline and ring lines around each green – which will give Mead far greater control of what water goes on the greens.

Three new one megalitre storage tanks, to be used solely for greens and surrounds irrigation, will be installed next to the maintenance facility, with the existing tanks to be used for fairway and tee irrigation. To contend with the high bi-carbonate levels in the club's bore water, a sulphur burner has also been purchased from overseas. Much like an acid injection system (which uses sulphuric acid), a sulphur burner heats up a solid form of sulphur to form sulphite ( $\text{SO}_3$ ), a gas that reacts with water to form sulphurous acid ( $\text{H}_2\text{SO}_3$ ). Untreated bore water will fill the tanks and then the water will circulate through the sulphur burner and tank until the desired pH is reached.

As part of the fit out, the plan is to also install infrastructure, such as water outlets for toilets and hospitality suites, to make it easier when Kingston Heath hosts major tournaments in the future. 🌱

## KINGSTON TWEET!

**What the players and pundits were saying about Kingston Heath Golf Club and the 2012 Talisker Masters on Twitter...**

**@IanJamesPoulter:** Kingston Heath is totally awesome. Someone please tell modern day architects we don't need 8000 yard tracks, they're not enjoyable. Best yet. (Poulter finished runner-up to 2012 Talisker Masters champion Adam Scott)

**@GeoffShac:** I had to turn it off. Too depressing. Kingston Heath is just way more interesting than anything we have here! (Geoff Shackelford is a US-based writer/blogger for Golf Digest)

**@StewartCink:** Want to see what a golf course ought to look like? Tune in to Golf Channel's coverage of the Talisker Aussie Masters at Kingston Heath.

**@NickOHern:** Watching Aussie Masters from the US... how good does Kingston Heath look!!!! One of the best in the world. Length isn't everything!

**@IanJamesPoulter:** Par 3 15th is in the top par 3s in the world it's only 152 yards 9 iron today. None of this 245 yard crap we see so often. Pure brilliance.

**@GeoffShac:** I can't imagine Kingston Heath looking better than it did during the Talisker Australian Masters. Dare I nominate it as the best looking and best playing course we saw in tournament golf this year?

**Defending champion and eventual Talisker Masters runner-up Ian Poulter was full of praise for Kingston Heath**



**Metropolitan volunteer Ben Matthews shaves the 4th green. Greens were cut at 3mm and ran between 11' and 11'5" on the stimpmeter**



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Sunday morning dawned picture perfect for the final round of the 2012 Emirates Australian Open, belying the conditions which would later mar the tournament when play was suspended for three hours. Pictured is the par three 9th with the 1st fairway in the background

# The Lakes

## blows them away

Eventual winner Peter Senior described it as one of the “toughest days ever on a golf course”. The 2012 Emirates Australian Open finished in dramatic circumstances as Sydney’s weather conspired to make The Lakes Golf Club a brutal test for players during the final round. ATM looks back at the tournament, the first Open for recently appointed course superintendent Anthony Mills.



The photo above shows the par three 9th at The Lakes Golf Club in Sydney on a seemingly picture perfect Sydney morning early last December. It's 6.25am, the sun is blazing, a southerly zephyr barely registers on the course's weather station and The Lakes' 50-strong tournament crew, headed by course superintendent Anthony Mills, have been on course just shy of two hours going about their preparations for the final round of the 2012 Emirates Australian Open.

Fast forward a few hours and Sydney's fickle weather is doing its best to shatter that idyllic scene. The clouds have rolled in, the southerly breeze is now registering between 40-60kph and the change that had been forecasted by the Bureau has well and truly arrived... early. To coin a phrase from veteran Sydney superintendent Gary Dempsey who resides just down the road at NSW Golf Club, the wind was now starting to 'blow oysters off the rocks'.

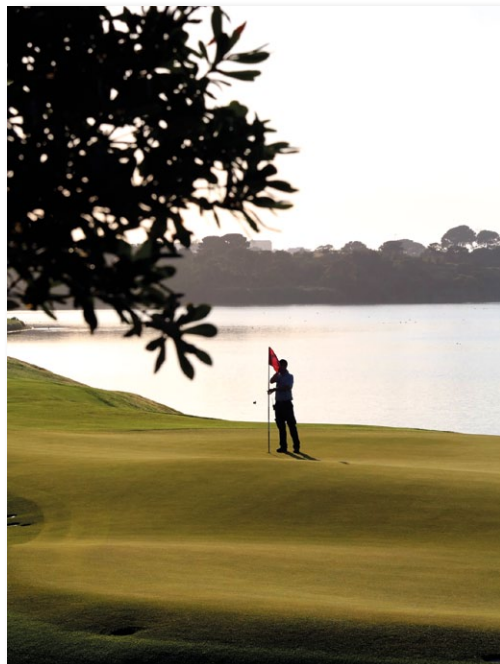
Out on the course it's getting dicey. Balls begin to move on the double cut A4 bentgrass greens (one on the 1st green runs five feet while over on 12 another moves two feet), corporate marquees begin to implode, while just after 11.30am an 80kph gust of wind causes the steel-frame camera tower behind the 18th green to collapse into the rear right hand bunker, narrowly missing the putting surface.

With the course becoming unplayable and the safety of players and spectators at risk, tournament director Trevor Herden makes the call to suspend play at 11.43am with the leading groups still to tee off. For the next three hours the course is buffeted by strong winds and even when play does resume shortly before 3pm, it's still borderline. Indeed about an hour after the resumption Mills receives a call from Herden asking him what it would take to get the course ready the following morning should he have to suspend play for a second time.

Thankfully that doesn't eventuate and at 7.35pm as sunset descends, Peter Senior rolls in a par putt on the 18th to sign for a 72-hole total of 4-under and become the oldest winner of the Stonehaven Cup at 53 years of age. The final group of Justin Rose and John Senden finish moments later, the latter carding a horror final round 10-over despite having started the day with a two stroke lead. As Senior later comments at his press conference, "It was one of the toughest days I have seen on a golf course".

### GETTING INTO THE GROOM

While Senior and Senden will remember the tournament for very different reasons, Mills certainly won't forget the 2012 Emirates Australian Open in a hurry either. In what was his first major tournament since taking over as course superintendent in July,





PHOTOS: BRETT ROBINSON



**The Lakes course superintendent  
Anthony Mills**

it rounded out what was a hectic and at times challenging first five months in charge.

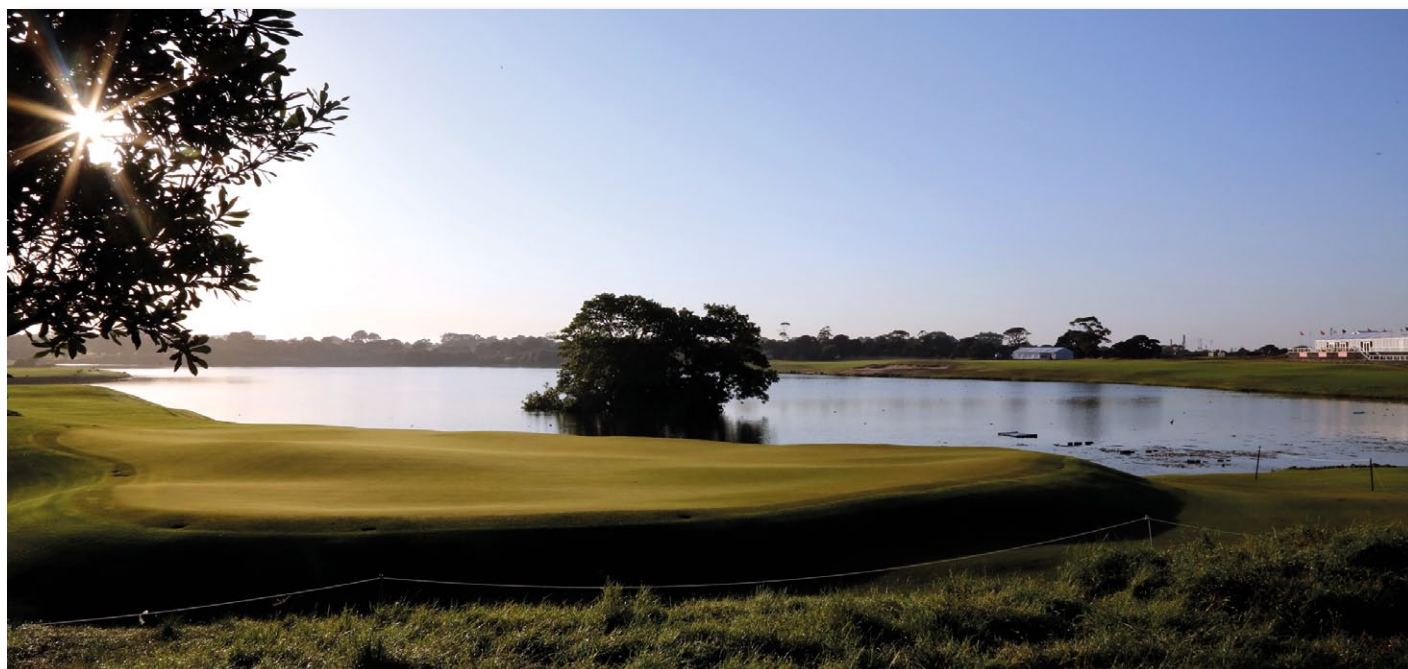
Originally joining The Lakes as an assistant in June after spending the previous three years as grow-in superintendent at the new Stonecutters Ridge course, just three weeks into that role Mills was elevated to superintendent following the departure of former superintendent Russell Fletcher. Thrust into the top job with the Open just months off was enough to focus Mills straight away and together with a new assistant (in the form of ex-Roseville Golf Club assistant Stephen Mallyon who also joined The Lakes in the lead-up to the Open), preparations began in earnest for the tournament.

The immediate area of focus was the greens. Somewhat thin and bare in parts and suffering the effects of nematode damage, Mills set about getting

a good surface back on them as well as grooming heavily in order to promote a finer leaf on the A4. Starting in September, Mills scarified the greens three times a month apart in the lead-up to the tournament. After getting stuck into them on the first two occasions, Mills lifted the heights so as just to tickle the grass on the third scarify a month out from the tournament. Combined with regular dusting the end result was impressive and throughout the Open many golfers commented how true the greens rolled.

In an attempt to control nematodes, the bane of The Lakes since the completion of its redevelopment in 2009, Mills put out three applications of Agador fortnightly in the lead-up to the Open, the last going out the Wednesday prior to the Open. A total of six hectares comprising greens, surrounds and isolated

**Below and left: Assistant  
superintendent Stephen Mallyon  
sets the pin on The Lakes'  
penultimate hole**





The par three 7th receives a double cut ahead of the final round. Greens were maintained at 3mm for the tournament with the rollers used just once ahead of the third round



The kikuyu fairways were cut mornings at 10mm

spots on fairways were sprayed, with three crew members working a 10pm-3am shift to complete the job on each occasion (two spraying and one watering in).

Prior to the applications, sting nematode counts on the worst affected 4th green were up in excess of 900 (the treatable threshold for sting nematodes is just 20 per 200mL of soil), but following a nematode count conducted a week after the Open, those numbers were back down to just over 100.

### GREENS WITH ENVY

Despite a howling wind which greeted players for the Wednesday Pro-Am, up until the afternoon of the final round the Open had been pretty much played in perfect conditions. With his usual crew of 17 bolstered by more than 30 volunteers from golf clubs and turf companies across the state, Mills was

able to have the course cut and prepared in a matter of a few hours each morning.

Greens were double cut at 3mm all four mornings with the rollers brought out on Saturday after they started to slow a bit on Friday. Stimp meter readings throughout the duration ranged from 10'7" for Thursday's opening round through to a maximum of 11' for Saturday's third round. With 45kph winds forecast for Sunday, greens were still double cut, although Mills received a call from Herden at 5am Sunday asking whether it was possible to just single cut greens. With the crew already half an hour into cutting the greens, it was quickly agreed that they weren't about to double cut some and single cut others. The greens stimped 10'7" for the final round and they were also given a bit of water.

When the eventual change did come it came quickly and caught everyone by surprise. At 10.48am the Bureau of Meteorology station at nearby Sydney Airport recorded a maximum wind gust of 87kph (the forecast predicted maximum gusts of 70kph) and it wasn't long after that that the camera tower behind 18 crashed into the greenside bunker causing minor damage to the face.

As well as having to repair that, Mills and his crew turned part-time security guards during the three hour suspension of play. The tournament tee markers, which feature a model of an Emirates Airlines A380 airplane, were considered prime souvenirs by some spectators so the crew had to roam the course along with police to make sure they remained in place.

When play did end up resuming Mills had to send a couple of staff out with backpacks to blow off sand that had been whipped out of bunkers and



The 12th green surround is trimmed at 10mm



onto the likes of the 12th and 16th greens as a result of the strong winds.

"It was certainly something different," reflects Mills when speaking to ATM a week after the tournament. "Apart from four NSW Women's Opens when I was an assistant at Oatlands Golf Club, I had never done a major tournament like this, but I think we did a pretty good job.

"There were a few thin areas on fairways that we didn't quite get 100 per cent covered, but that was certainly not through a lack of trying. We probably should have foliar fertilised a bit more as they responded well to that, but certain areas didn't come back in time which meant we had to do some last minute turfing and had a few preferred lies around.

"Everything else came up well and it was satisfying to hear the comments from the players about the greens rolling true given the work we had done to fine the surface up. The tournament organisers and the club's board were extremely happy too so as a superintendent I guess I can't ask for too much more than that." 🙌

**Above: The Lakes' second hole shortly before sunrise on Sunday**

**Right: Royal Sydney's Alistair Dunn, seen here cutting the 8th green, was one of more than 30 course volunteers to join The Lakes crew for the tournament**



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Hidden Valley's 18th hole which features its iconic island green. Mick O'Shannessy (far right) spent the past 13 years up until his recent retirement in November 2012 overseeing the transformation of the land from a collection of horse paddocks to a fully maintained championship golf course

# Small in stature, big in heart

One of the true gentlemen of the Australian turf industry, Mick O'Shannessy retired last October after an incredible 52 years in the profession. From Keysborough Golf Club as a raw 14-year-old apprentice through to overseeing the construction and maintenance of Hidden Valley Golf & Country Club, the 65-year-old AGCSA member reflects on a challenging and ultimately rewarding career.



**B**orn just a stab kick away from Princes Park in Carlton and raised in the south east Melbourne suburb of Dandenong, Mick O'Shannessy was destined for a career in turf management. School never agreed with him and at the tender age of 14 he found himself walking through the gates at Keysborough Golf Club where he would come under the tutelage of legendary superintendent Horrie Brown.

That set in motion a 52-year turf management career, one which came to an end on 31 October 2012 when he left Hidden Valley Golf & Country Club, north of Melbourne, for the last time after a 13 year stint as construction and maintenance superintendent. Along the way O'Shannessy held positions at Tirhatuan Lakes Golf Course, Waverley Private Golf Club and the AFL's Waverley Park where he was head curator for seven years. ATM caught up with O'Shannessy a few weeks after his retirement to look back on a celebrated career.

**ATM: Congratulations Mick on a wonderful and successful career in the turf management profession. Take us back to where it all started. How and why did you get into the turf industry and what was the industry like back then?**

**Mick O'Shannessy:** I started my working life as a 14-year-old in 1961. My parents suggested "you're old enough to earn a quid now" and I didn't take too much prompting as school was not my favourite

place. Having a brother working as a groundsman at Southern Golf Club and hearing all the stories about 'the good life' working outdoors with sport, animals and plant life, it really appealed, so when I was told of a situation vacant at nearby Keysborough Golf Club I successfully applied for the job. To get to work each day required a bus trip from North Dandenong to Dandenong central where I was picked up by the assistant curator and taken to the course. Back then Springvale Road was just a dirt track!

Meeting the curator 'Mr' Brown was very daunting. He was a huge (well, everyone was huge when you were a skinny 14-year-old), six foot man with dark brown hair brushed straight back and wore braces to hold his pants up! To this day I am forever grateful to Horrie Brown for teaching me a strong, hard-working ethic and his assistant Les Abrehart for all his tuition regarding greenkeeping practices and pushing me on to other things. They were definitely the most influential people in my career.

The industry at that time was very labour intensive. The Keysborough staff consisted of 14 groundsmen, an assistant curator and the curator. My first task consisted of hand mowing around *all* trees on the course. In due course I was allowed to 'progress' to raking bunkers! When I finally was able to do greenkeeping I was shown how to 'manually mix' and spray fungicides, apply fertilisers and herbicides and pesticides, all those good old products containing mercury, cadmium, DDT etc.



## MICK O'SHANNESSY – CAREER AT A GLANCE

### Keysborough GC

1961- 1975

Apprentice/greenkeeper

### Tirhatuan Lakes GC

1975-1984

Course superintendent

### Waverley Private GC

1984-1986

Course superintendent

### Shanford Turf

1986-1993

Owner operator

### Waverley Park

1993-2000

Head curator

### Hidden Valley G&CC

2000-2012

Construction and maintenance  
superintendent

My first pay packet was five pounds ten shillings (about \$11 today) of which I promptly gave mum two pounds 10 shillings and the rest I spent on a new pink shirt and Roy Orbison's 'new' single Working for the Man. After four years the club paid for me to attend Burnley College for a six-month, two nights a week greenkeeping course which enabled me to become 'qualified'.



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As head curator, O'Shannessy was involved in the major reconstruction of the AFL's Waverley Park

I had some good times and learnt many things during my time at Keysborough. I remember applying copper sulphate instead of ferrous sulphate to nine greens which proved to be rather embarrassing while the funniest thing I saw was a front end loader getting bogged to the sump on the construction site of 1st green and having to be dismantled to free it!

**ATM:** After 14 years at Keysborough you moved to Tirhatuan Lakes, Waverley Private and then started your own business. Talk us through these moves and what you achieved.

**MO:** I progressed on to become curator at Tirhatuan Park, a course developed by the Dandenong Valley Authority (DVA), constructed in a flood basin designed to protect Dandenong from flooding. As you could well understand winter times were very difficult. My time here came about due to after-hours work that I did preparing the turf wicket for Berwick Cricket Club. Graeme Rooke who was the number one engineer for the DVA played there and was impressed by my turf knowledge and wicket preparation. He is also the father of Greg Rooke, current Southern Golf Club superintendent and an ex-apprentice of mine.

Apart from the horrendous wet winters, vandalism and theft were rife. We were broken into and cleaned out in two successive weeks, the second time only two days after all equipment was replaced. Another interesting time came when

the professional rang early on Saturday morning asking me to come in and change the cup on the 18th green as it smelled. When I arrived I found someone had defecated into the cup and smeared the surrounding turf!

From Tirhatuan I moved onto (drier?) Waverley Golf Club literally across the road with Bill Powell maintaining the bowling greens and advising me re: all the quirks about the golf course (e.g.: sprinklers coming on the 12th green when toilets were flushed in the maintenance facility). My time here with Bill was very enjoyable.

After a couple of years there an opportunity arose to try my hand at operating my own business – Shanford Turf. I purchased a Toro Hydroject and did contract work. As well as this I reconstructed and maintained sports grounds, school ovals and private lawns, but after several hard years the desire to get back into greenkeeping returned.

**ATM:** And what a way to re-enter the fray – taking over at the AFL's Waverley Park football ground?

**MO:** In 1993 a phone call came from Turf Grass Technology asking if I could help out with some problems they were having at Waverley Park football ground. Although I was very busy at the time operating my own business, I managed to help out with some turf laying (I could not refuse to help John Neylan, Euan Liard and David McGeary after the assistance they had given me over the years).

Working there for 1-2 days led to 1-2 weeks until the oval was returned to a safe playing surface. Just prior to the start of the 1993 AFL season I was asked by the late Jill Lindsay (AFL arenas manager) if I would stay on permanently. My first reaction was 'No, I am far too busy', but after discussing it with John Neylan I decided to accept.

**ATM:** You joined Waverley at a time when the ground was coming under constant criticism due to the surface. Talk us through the reconstruction of Waverley and the challenges you faced during your time as head curator.

**MO:** The first 12 months were very difficult. The surface was uneven and continually patched and the irrigation system faulty. Through John Neylan's consulting with the AFL, John and I finally convinced

Waverley Park in 1995 looking resplendent after its reconstruction (below) and (right) the aftermath of hosting the U2 concert



Ian Collins that the oval needed a complete overhaul. When the AFL agreed on a costing, I stripped all existing turf, removed the top 300mm of soil, sand and whatever else was in it, installed a new drainage grid and a new sprinkler system, then re-sodded the oval with Legend couch.

Initially the oval was to be sodded with Wintergreen but after my visiting Bill Casimaty at his turf farm and seeing the Legend growing parallel to Wintergreen, I said to John "this is the one we should use" and the AFL became the first user of this variety. From this time on the surface and Waverley Park was considered the best in the country, getting personal compliments from the likes of Kevin Sheedy, Mick Malthouse, Gary Ayers and David Parkin. Probably the most satisfying moment was during the finals the second year after reconstruction and hearing the public entering the stadium saying, after a very wet year, "Wow, look at the oval!"

Around 1996 Michael Jackson had booked the stadium for a concert (imagine the reaction of my young daughters Cynthia, Narelle and Megan when I told them!), but due to the pop star's personal problems at the time it was cancelled (again, imagine my daughters' reactions!). Around the same time U2 staged a concert at Waverley Park. This was something I had never experienced.

With the ground in pristine condition, oval manager Graeme Finn and I stayed at Waverley Park

for 48 hours straight (no sleep) to ensure all proper efforts were made to protect the turf. We had 35 Pantech truckloads of staging, cranes, forklifts and roadways laid across the turf, so it was a massive undertaking. The concert was considered a huge success (although I would have preferred Elvis, The Beatles or The Stones), but then came the clean-up and repair work. After the staging and temporary roads were removed, 12 staff emu-bobbed the oval for debris. When they had all left I hired a metal detector and picked up a full 10-litre bucket of bolts, nuts and screws!

**ATM Is it true you once mowed the entire oval with a Scott Bonnar walk-behind?**

**MO:** Yes, there was a time when I mowed the oval with the old Scott Bonnar Queen mower which was used by John Maley during World Series Cricket. It took about six hours mowing from goal to goal!

**ATM: From Waverley Park you got back into golf when the Hidden Valley development came up. What attracted you to the job and looking back what were the 13 years like there?**

**MO:** At the end on the 1999 AFL season, I was informed of Waverley's impending demise as a venue so I started looking around for future employment. I got a call from a former colleague Chris Young who asked if I would like to be construction foreman at the Hidden Valley Golf & Country Club in Wallan.

“I had some good times and learnt many things during my time at Keysborough. I remember applying copper sulphate instead of ferrous sulphate to nine greens which proved to be rather embarrassing!”

Mick O'Shannessy

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**Hidden Valley's island 18th green during construction. All machinery, turf, sand and gravel had to be driven onto a barge and transported across a 100m stretch of water, taking 20 minutes there and back**



After meeting Chris out there and inspecting the site I accepted the challenge.

I thought I had worked in some cold places (like Waverley Park), but nothing was as cold and windy as Hidden Valley. Enormous challenges lay ahead as Densal was offered only \$500,000 for construction. For this amount nine greens and other minor areas were built. The greens were constructed to USGA standards but no sprinklers, with just one quick coupling valve per green.

As work progressed more money 'dribbled' in allowing for works on the other nine to proceed. There was no cultivating or shaping of fairways and we just used Roundup and sprigged Santa ana couch straight into the ground. Again there were no sprinklers, only QCVs at 60m spacings on the edge of the rough!

We continued our own work hoping to leave the famous Hidden Valley 18th until last, but a phone from the developers early in June changed all that – they wanted it done now! Those who might not be aware, Hidden Valley's par three 18th green is situated on an island in the middle of a 100ML lake, so all access to the island was done by a barge hauled along a cable anchored to the mainland and island (see photo above).

All machines, excavators, dozers, bobcats, all turf, sand and gravel were driven onto the barge and transported across a distance of about 100m. Each trip took 20 minutes there and 20 minutes back. The only access we had after construction was by means of a 1.2m wide floating bridge, so for mowing a walk-behind mower was used while at renovation time all sand had to be barrowed across!

During my 13 years at Hidden Valley we had some daunting times – working as a contractor for a developer is no piece of cake. My return to golf course work at Hidden Valley under the Densal banner (Dave Pulling and Chris Young were excellent employers) and with Pacific Coast Design's Phil Ryan was made a lot easier. A good

personal relationship was formed with the developer and in the following years an association was formed with golf professional Craig Parry in regard to layout changes. My maintenance crew of three were great toilers and great blokes, as were the estate staff.

As much as I enjoyed the construction side of things, I derived just as much pleasure in maintaining and presenting a perfectly groomed course. It was certainly one of the most satisfying times of my career to see Hidden Valley turn from what was a collection of horse paddocks into a championship golf course. The one thing I won't miss about the job though was the daily commute – a 162-kilometre round trip from my Ferntree Gully home!

**ATM: Looking back on the journey Mick, what will you take away most from the turf industry and what advice would you give to apprentices coming through?**

**MO:** There have been a number of moments that gave me great satisfaction over the years – being appointed as curator for the first time, achieving 'the impossible' at Waverley Park and, as mentioned, creating Hidden Valley from nothing. Above all, though, it has been dealing with the people in our industry. The most interesting people I have met in life have been my peers and all associated turf people and you soon find out that we all share the same problems and desires. There are many people to thank – my last employers Densal and all staff, John Neylan for 30 years of assistance and friendship and Ron McCartney and Terry Woodcock for their help in the early days.

There have been plenty of changes during my career, and the biggest and most obvious for me were the advancements of ride-on machinery, the increased turf expertise available and the knowledge re: handling and application of chemicals. As for advice to those coming through, it's pretty simple – be aware it's a 365 days a year job and make sure you are totally dedicated.

**ATM: So what now for Mick O'Shannessy?**

**MO:** I'll see what the New Year brings. I am enjoying being a baby-sitter to my three beautiful grandchildren – Isabelle, Tom and Max – and with two more on the way in 2013 I think my wife Helen and I will have enough on our plates! 🌱



**Another iconic feature of Hidden Valley are the many conifers which flank the course's fairways. Pictured right is the 11th hole as seen today and (above) planting the conifers as mature specimens**



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**Allan Shorland**  
Secretary Manager  
The Metropolitan Golf Club





While the recent *Poa annua* forum in Sydney did not reveal any new 'silver bullets', it did introduce some new strategies as well as reinforce the basics for effective control techniques

# The *Poa* brains trust



In his latest column, John Neylan

reviews the *Poa annua* forum conducted in early December which brought together course superintendents and turf experts from around Australia to share their knowledge and experiences in attempting to keep the old enemy out of bentgrass putting surfaces.

In November 2008, 14 golf course superintendents from several states got together to discuss in detail how to manage pure bentgrass surfaces and in particular how to keep these surfaces 'free' of *Poa annua* (see ATM Volume 11.2, March-April 2009). Over the past four years the group has continued to tackle this ubiquitous weed and during last December's 2012 Emirates Australian Open in Sydney they met up again to continue discussion on their successes and failures.

Seventeen superintendents from three states converged on Concord Golf Club (host superintendent Mark Parker) along with chemical company representatives and consultants including yours truly, Dr Henk Smith (Syngenta), Jyri Kaapro (Bayer Environmental Sciences), David Worrall (Living Turf), Andrew Peart (AGCSA) and Peter Kirby (AMGROW). The representatives of the chemical industry provided valuable insights into the available chemistry, legislation and the process of product registration and permits.

The golf clubs represented were selected on the basis that they are all trying to keep *Poa annua* out of bentgrass greens and had expectations for the highest quality putting surfaces. Each superintendent gave a short presentation with Jyri Kaapro and Dr. Henk Smith chairing the sessions, while I gave a closing address which summarised

the collective observations which had been made during the two-day get-together.

Because the superintendents came from far afield and represented a range of locations, climates and management techniques, the symposium provided a broad range of strategies that can be more broadly applied. As in 2008, the aspiration of each superintendent was similar in that they were aiming to produce a high quality bentgrass putting surface year round while keeping the greens 'Poa free'. Not surprisingly, it is still easier said than done!

With each of the superintendents providing an insight into their programmes, it was interesting to note that while there were obvious similarities, there was little repetition. This highlighted the fact that every set of circumstances is different and while the general principles remain similar, the specifics can be quite different.

So what was discussed and what can the industry take from it? The first and most important point to make is the value of getting together with your peers and sharing experiences, both positive and negative! The following information has been compiled from notes taken during the forum.

## DOING THE 'FOUR STEP'

Possibly the most compelling strategy presented was based around one prominent Melbourne sandbelt superintendent's four step programme. The programme can be adopted for many aspects of course management and is a very clear and logical approach that allows for the best possible result with the least amount of anguish. It must be said that most of the presentations incorporated a similar strategy. According to this programme, the four key steps to *Poa annua* control are as follows:

## STEP 1: PRODUCT RESEARCH AND TESTING

This is probably the most important aspect of undertaking any weed control programme and for that matter introducing any new pesticide or fertiliser into a programme. The key is to pre-test on an out-of-play area such as a turf nursery, chipping or practice green. This provides the advantage of understanding the reaction of the chemicals under your management regime without having to explain why a section of a green in play has been damaged.

It was interesting to note that on the turf nursery at Avondale Golf Club where Nominee™ is being trialled that it could be clearly seen that this product has had a growth retarding effect. This is a very important observation, particularly if there is any lack of turf density or health that could be further exacerbated due to the growth retarding effect. These trials are very important in observing the accumulative effects of multiple applications even when the herbicide is applied at quarter and half rates.

Allow time for full test and evaluation of results. As a general guideline for Nominee™ allow 6-12 weeks, while for endothal allow 2-6 weeks depending on the number of applications and the influence of any other additional treatments (e.g.: where paclobutrazol may be introduced into the programme). A product such as Nominee™ can have phytotoxic effects depending on soil moisture content, wear, temperature and turf health.

Once a strategy has been determined then it is time to undertake some small plot trials on an in-play area. It is absolutely essential that when these on-course trials are undertaken that the committee and members are informed about what is taking place and possibly what to expect. One innovative superintendent had a large out of play turf area available where a series of *Poa annua* control strategies were trialled and the wear aspect was provided by a daily game of soccer!

## STEP 2: PREPARE THE TURF FOR THE HERBICIDE APPLICATION

Preparing the turf prior to the application of herbicides ensures that the bentgrass will have maximum tolerance to the herbicide, there will be quick recovery on completion of the programme (i.e.: the bentgrass will fill in the areas vacated by the dead *Poa annua*) and the *Poa annua* will be most susceptible to the herbicide. The key elements are:

- Harden the bentgrass in the lead-up to the herbicide application;
- Ensure the nutrition programme maximises the health and density of the bentgrass;
- Make sure that all preventative treatments are up to date (e.g.: insecticides to control pests such as Argentine Stem Weevil and fungicides to control pythium, or any other pests that are likely to occur at that time of the year);
- Apply wetting agent 10 days before applications;

- Hand water known dry patches and/or bunker edges in the week leading up to application;
- No cutting on the day of application;
- Remove growth regulators;
- Weather monitoring (e.g.: Nominee™ is temperature sensitive and paclobutrazol, being a growth regulator, should be avoided during periods of stress);
- The style of green construction, locality and traffic will have an effect on greens preparation. In heavily shaded areas the bentgrass will be weak and have a poor root system and the application of any *Poa annua* control herbicide could adversely affect the health and density of the bentgrass.

## STEP 3: APPLICATION PROCESS

The application of any herbicide can have a dramatic impact on the efficacy of the herbicide and the potential for a phytotoxic reaction. The rate of water volume, the application equipment and the weather conditions can all affect the end result. A key point is to make the applications on a low play day so that the applicators are not rushed and are able to think about what they are doing. Use small hand-operated booms because it is less affected by contours in the surface.

**Seventeen superintendents from three states converged on Sydney for the forum along with chemical company representatives and turf consultants**





High traffic zones, particularly walk-on and walk-off areas and around pin placements, can be areas that have a higher population of *Poa annua*

Applications of herbicide can be more effective when they are made on an overcast day and in particular no sun. The benefit is there is less volatilisation, less UV degradation and less chance of a phytotoxic response (NB: These aspects must be trialled and confirmed on your property.)

Other important considerations to note:

- Thoroughly clean the equipment prior to use on greens; and
- Superintendents must be heavily involved in the instruction of the application, oversee the mixing of products and guide the operation and applicator in the field.

#### STEP 4: AFTER CARE

Following the application of the herbicide treatment, the ongoing after care is very important for the recovery of the surface, the kill rate on the *Poa annua* and grow-in of the bentgrass. The key aspects are:

- No cutting for as many days as possible after application;
- Let the product stay on the surface or intended area for as long as possible;
- Traffic post-treatment can adversely affect the bentgrass and it is important to consider the pin positions (critical) and the management of the walk-on/walk-off areas. (I recently noted at one golf course where golfers had deliberately ignored signs and ropes to direct traffic away from surrounds treated with a sulfonylurea herbicide and the impact that the subsequent tracking had on the bentgrass surface).
- Monitor the results before re-applying. Make subsequent applications only when the bentgrass is healthy enough to do so. For example, while the Nominee™ label recommends “two consecutive applications should be applied 14 to 21 days apart”, some experience would indicate that it could be a minimum of 28 days.
- Consider spot applications on the perennial *Poa annua* plants. Almost all of the superintendents were undertaking spot treatments as a follow-up to the broad area applications.

“*Poa annua* control in bentgrass greens is considered to be possible only where there is a “whole of golf course” approach. That is, *Poa annua* has to be controlled in fairways, roughs and surrounds.”

John Neylan

## WHAT THE SUPERS HAD TO SAY

During the wide ranging discussions the following key points were highlighted:

**Bentgrass under stress:** Where the bentgrass is under stress it makes it very difficult to control *Poa annua*, with the two main issues being shade and traffic.

Shade has an impact for two reasons. First, it provides a cool, moist environment where *Poa annua* thrives and the lack of sunlight causes the bentgrass to thin out. Second, the weakened bentgrass is less able to cope with both pre- and post-emergent herbicides. Shade will often result in a weakened root system in bentgrass and consequently any herbicide application that retards growth will make the bentgrass more susceptible to diseases such as pythium.

High traffic zones, particularly walk-on and walk-off areas and around pin placements, can be areas that have a higher population of *Poa annua*. In these areas the bentgrass is weakened, loses density and the surface is compacted which provides an ideal area for *Poa annua* to establish. While pitch marks are not necessarily traffic related, they are a consequence of golfing activities and any unrepaired damage does create a space for *Poa annua* plants to germinate. Consequently, for an effective *Poa annua* control programme, greens should be kept dry and firm and pitch marks repaired.

There is no doubt that as the number of rounds of golf increase there is more stress on the bentgrass due to wear and surface preparation and when combined with the high demands of surface performance it becomes increasingly difficult to control *Poa annua* intrusion.

**Turf nutrition:** At the first meeting in 2008, an interesting aspect of the discussion was where turf nutrition fitted into the programme. For many years there has often been a strategy of ‘starving out’ the *Poa annua* by maintaining very low levels of fertility, in particular nitrogen. What was and still is apparent is that it is not so much about the quantity of nitrogen applied but when.

A key aspect to *Poa annua* control is to maintain the density of the bentgrass so that it can resist invasion during autumn and winter. Keeping the bentgrass as healthy as possible is an integral part of the overall *Poa annua* control strategy.

**Bentgrass cultivar:** Many of the presentations involved greens that were greater than five years old and even up to more than 10 years old. Even with the older greens, with a committed and diligent programme, it was still possible to keep the *Poa annua* population below five per cent. Bentgrass cultivar selection definitely has a role to play in minimising the opportunity for the invasion of *Poa annua* with the higher density cultivars providing a distinct advantage.

**Water quality:** Water quality was raised in a different context compared to the previous discussion in that as the water quality improved there was an increase in the *Poa annua* population. When the water was high in salinity and bicarbonates, there was greater stress on the *Poa annua* and this reduced the opportunity for germination and establishment to occur. When water quality was improved, through the reduction in salinity and bicarbonates, this correlated with an increase in *Poa annua*.

**Renovations and dusting:** There is no doubt that hollow coring and scarifying in the cooler months can stimulate *Poa annua* germination and create spaces for seedlings to establish. Almost without exception, all the golf courses that took part in the discussion do not renovate in the autumn. Some golf courses avoid any surface disturbance and look towards an intensive dusting programme to manage thatch or in some cases a programme of resurfacing.

As a general principle, there was a strong emphasis on keeping greens as firm and as dry as possible through a programme of regular dustings and carefully monitored irrigation. Irrigation management is seen as an important tool in restricting the conditions suited to *Poa annua*. That is, deep infrequent irrigations that allow the surface to dry out are preferable to frequent, shallow irrigation.



**Hygiene:** *Poa annua* control in bentgrass greens is considered to be possible only where there is a "whole of golf course" approach. That is, *Poa annua* has to be controlled in fairways, roughs and surrounds. Other important aspects of maintaining hygiene include:

- Stopping buggy movement across greens to reduce wear and tracking *Poa annua* seed;
- Hand-mow greens to reduce tracking of seeds from other parts of the golf course (e.g.: the movement of triplex mowers across fairways and roughs that may contain *Poa annua*);
- Equipment and hoses are restricted in their movement across greens.

**Shaded greens provide an ideal cool, moist environment where *Poa annua* thrives, while the generally thinner, weaker bentgrass on such greens is less able to cope with pre- and post-emergent herbicides**

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**A key aspect to *Poa annua* control is to maintain the density of the bentgrass so that it can resist invasion during autumn and winter**

## SO WHAT'S WORKING?

There were several *Poa annua* control programmes discussed and generally they have not changed too much since the last discussion. However, since that time there have been a few changes that affect the overall strategy. These include:

- The herbicide Nominee™ has been introduced and provides another option for controlling *Poa annua*. There is little doubt that this herbicide takes careful management and a 'try before you buy approach' is absolutely essential. Do your own research. Most superintendents are taking an approach of using it at reduced rates at more frequent intervals. Do not apply it if the bentgrass is under stress;
- The pre-emergent bensulide has been withdrawn from the market due to a revision by the APVMA. With the absence of this active there are no other pre-emergent herbicides registered for bentgrass greens except for ethofumesate. Ethofumesate is registered for use on bentgrass and may provide an option. There has been limited experience with ethofumesate on bentgrass though it is incorporated into some programmes but only as a one-off application in autumn. It should only be used following on-site trials;
- Over the past four years ethephon (Intercept™) has been introduced to suppress seedhead production and provides another management tool. At this point in time the APVMA has required a label change that includes a seven-day re-entry period. This restriction will make it difficult for most golf courses to include it into a management programme. This prohibitive restriction is currently being reviewed;
- There has been a greater emphasis on the use of spot treatment with dabbers or atomiser sprays. Herbicides typically being used are endothal and Nominee™;
- Hand-weeding is still considered to be an important method of control though the labour costs are becoming prohibitive.

## REINFORCING THE BASICS

So what can we draw from this Sydney get together? Well, without question *Poa annua* is still undoubtedly the greatest of weed species and is a true opportunist. Its genetic diversity, ability to seed prolifically at low cutting heights and for the population dynamics to alter with changing conditions makes it a formidable opponent.

The forum did not reveal any new 'silver bullets' but it did introduce some new strategies as well as reinforcing the basics:

- Plant health and turf density is imperative in any control programme;
- Know your grasses and herbicides and do your homework;
- Know your site conditions and monitor the interactions between your conditions and the herbicides;
- Start your control programme early in the life of the green;
- The whole golf course must be included in the control strategy;
- Use a combination of strategies – herbicides, nutrition, cultural practices etc;
- Dusting as a key element in keeping the thatch under control and to provide firm and dry surfaces;
- Manage the wear and high traffic points;
- Communicate to the board and members when implementing a strategy;
- Monitor the results of the control strategies and in particular regularly assess the *Poa annua* population.
- Assess the resources and costs involved in the control programme.

**Author's note:** The *Poa annua* control strategies stated in this article are general in nature and are not meant to be implemented without careful thought and planning and taking into account local conditions. Any reference to chemicals not registered in Australia is mentioned for education purposes only. 🌱

## DR FRED YELVERTON - THE *POA* PROFESSOR

As well as Australian superintendents and turf experts sharing their knowledge on the age old question of *Poa annua* control, the recent forum in Sydney also featured North Carolina State University Professor Fred Yelverton who joined in the group discussion via Skype from the US.

Dr. Yelverton continues to be the lead scientist in the USA in the evaluation of new herbicides for *Poa annua* control in bentgrass and assessing various programmes using a combination of herbicides. Dr. Yelverton still considers paclobutrazol to be the primary post-emergent 'herbicide' for use against *Poa annua*. This would also support the experience of AGCSATech agronomists where paclobutrazol consistently rates highly in any *Poa annua* control strategy.

Amicarbazone is now registered in the USA as Xonerate™ and Dr. Yelverton has used it in conjunction with paclobutrazol. The early

results for a four-week programme indicate that it works very well. At this time the product is not registered in Australia.

As a general viewpoint, Dr. Yelverton stated that the new herbicide, methiozolin, is considered to be the best *Poa annua* control herbicide he has trialled. Methiozolin is still two years away from registration in the USA. At this time the active is not registered by the APVMA and therefore there are no prospects for a product registration in Australia for at least two years.

There have been ongoing trials with bispyribac-sodium (Velocity™ in the US – Nominee™ in Australia) and it has been noted that it has potential to cause extensive turf injury, particularly in cold climates.

With the loss of bensulide from the Australian market there was interest in what may be in the development pipeline for a new pre-emergent for bentgrass putting greens. Unfortunately, there is nothing happening in this area in the USA.

**- John Neylan**

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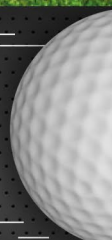


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**The AGCSATech golf course benchmarking project was undertaken over a 12 month period, primarily at nine golf courses within Melbourne, with three greens on each course evaluated for a range of parameters**



# Benchmarking

## study rolls to a close

AGCSATech recently wrapped up its year-long golf course benchmarking study conducted across nine golf clubs in Melbourne. AGCSATech senior agronomist Andrew Peart reviews some of the findings of the project which has aimed to establish a set of course quality objectives that can assist superintendents in improving the management of their playing surfaces.



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Over the past 12 months, Australian Turfgrass Management Journal has carried regular updates on the AGCSA's Horticulture Australia Limited (HAL) project 'Golf course benchmarking study – Developing course quality objectives' (TU11003). This project, which started in September 2011, came to an end in late September 2012 with data analysed and prepared for a final report which has been submitted to HAL for review.

The aim of this project has been to determine the most appropriate test criteria for providing data on course quality, namely golf greens. Almost all of these judgements previously have been based on opinions, with little or no knowledge of why a particular playing surface performs the way it does on any particular day.

The project was undertaken over a 12 month period, primarily at nine golf courses within Melbourne, with three greens on each course being evaluated. The nine courses were split into three categories:

- Elite golf clubs (EGC)
- Mid-high standard private golf clubs (MPGC); and
- Public golf courses (PGC)

This classification was based on their status within the industry, membership classification and available budgets. Budget and staffing numbers of the three categories could be loosely described as follows:

- Public golf courses: 3-4 staff with a budget of between \$100,000 - \$500,000;
- Mid-high private clubs: 8-10 staff with a budget of between \$500,000-\$1 million.
- Elite clubs: 13-15 staff with a budget up to \$1.5 million. (NB: Budgets include wages).

In addition to greater staff numbers and higher maintenance budgets, the mid-high level and elite clubs had newer greens which can result in a dramatic difference in surface performance which alters the ability to achieve certain target ranges for performance.

The establishment of course quality objectives provides a means of assessing the maintenance factors that can limit a club's ability to meet its vision for the course. Course quality objectives provide a means of deciding what improvements have to be implemented or conversely what adjustments need to be made to the expectations of the club to fit with the available resources.

### GREEN SPEED AND SURFACE HARDNESS

Two of the most discussed aspects of course quality are green speed and surface hardness. Figures 1 and 2 provide a graphical representation of the data obtained throughout the project at the nine Melbourne-based clubs when split into their respective categories.

The public courses generally had slower and softer greens for the majority of the year. This was due to a combination of higher heights of cut (generally 4mm), no rolling, less frequent cutting, more deviation in ball roll and higher levels of surface moisture. Unfortunately, this was not substantiated with the correlation data for those individual variables. It may, however, be as a result of the combination of those variables which will affect green speed.

Most of the greens at the public courses were old 'push up' type constructions with slow drainage compared to the newer and well-drained playing

surfaces at the mid-high level and elite clubs, which was also the major contributor towards them being softer.

There was not a great difference in the green speeds observed between the mid-high private clubs or the elite clubs, however, on occasions the elite clubs provided faster paced greens, primarily due to a reduction in cutting height at one of the courses and an increased rolling regime.

Surface hardness was not only measured using the Clegg Impact Hammer with the dome head, as shown in Figure 2, but there were also many thousands of readings recorded with both the USGA's TruFirm® device and Clegg hammer with the flat head. The number of readings taken provided the ability to undertake a regression analysis on all three types of apparatus.

Figure 3 shows the regression analysis of the Clegg hammer (flat head) compared to the Clegg hammer (dome head). Therefore by using this chart the comparative values for either the flat head or dome head can be calculated.

## MOISTURE CONTENT

Volumetric water content of greens was assessed using a Fieldsout TDR300 moisture probe. Initially moisture readings were only taken using 120mm probes, however, moisture content readings using the 38mm probes were also taken in the second half of the project.

The results for volumetric water content measured using the 120mm length probes indicated that the public courses had a higher soil moisture content within the profile than those of the mid-high private and elite courses. This was particularly evident over the late autumn and winter months.

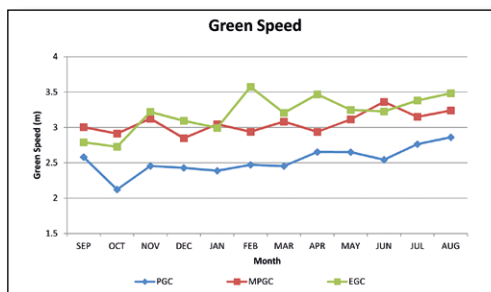
The results with the 38mm probes showed that the public courses generally had a higher soil moisture content within this region as well, with the exception of the March result when the mid-high private clubs had the higher moisture content (see Figure 4).

## ORGANIC MATTER

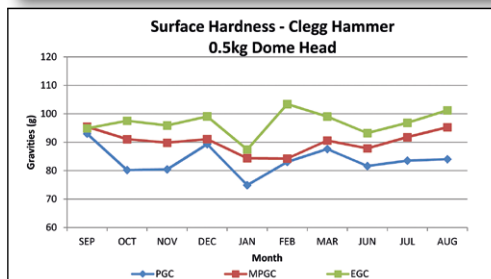
Loss on ignition tests were undertaken at the start and completion of the project and those results can be seen in Figure 5. The loss on ignition test was undertaken not only to measure the amount of organic matter present but to see whether there had been a reduction over the duration of the project.

The results indicated that in the upper 20mm of the profile there was no reduction in organic matter across all golf course categories. In the 20-40mm layer there was little change recorded among the categories with a slight reduction being observed on the public courses.

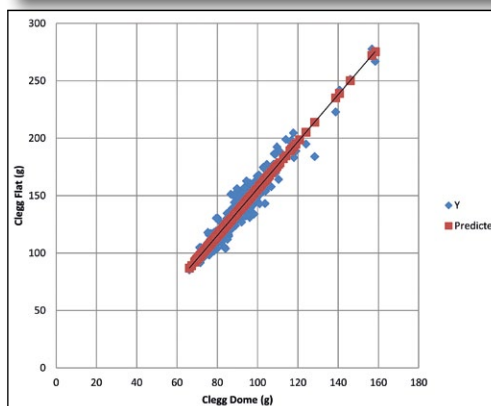
There are published ideal target ranges for organic matter from the UK-based Sports Turf Research Institute which suggest golf clubs should aim for 4-6 per cent loss on ignition in the top 20mm and less than 4 per cent lower down. According



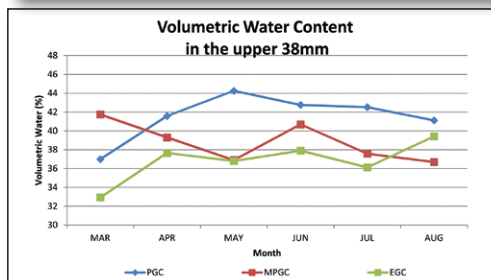
**Figure 1: Green speed measurements as taken with a stimpmeter averaged across the three course categories**



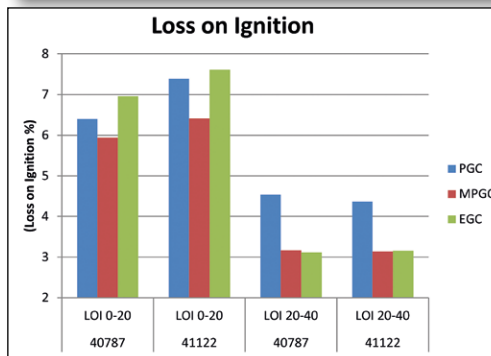
**Figure 2: Surface hardness measurements as taken with the Clegg hammer (dome head)**



**Figure 3: Regression analysis of surface hardness for the Clegg (flat head) versus Clegg (dome head).**



**Figure 4: Moisture content in greens as measured with a TDR Fieldsout (38mm probes)**



**Figure 5: Loss on ignition measured at 0-20mm and 20-40mm. Loss on ignition tests were undertaken at the start and completion of the project**



**All golf courses should use a TDR probe or similar device to monitor soils for moisture content**

to the data obtained from this project the public courses are higher than this at both depths, whereas the elite and mid-high private clubs conform to the lower depth with only the mid-high private category close to the range in the upper portion.

This would tend to indicate that a much greater amount of sand dusting should occur to dilute organic matter in the upper portion within all categories and the public courses should implement



Target ranges for surface hardness and green speed have been developed as part of the AGCSA's benchmarking project

far more coring and topdressing to reduce organic matter within the lower portion.

## RELATIONSHIPS

Correlation coefficients were calculated to determine the relationship between all of the variables used to measure the performance of the greens. The different categories of clubs exhibited differing relationships, however, the most apparent was that green speed is influenced by surface smoothness and overall surface quality opposed to any other factors, particularly at the mid-high level private clubs and elite clubs.

There was a secondary relationship observed showing that surface smoothness was most influenced by surface hardness and an inverse relationship to mowing height, (i.e.: the smoother the surface [higher the reading], the lower the height of cut). It could therefore be stated that surface hardness has some influence on green speed, however, it is more from providing a smoother surface i.e.: reduction in foot printing and divotting, rather than simply a direct correlation of firmer is faster.

## FAIRWAY ANALYSIS

As well as the assessment of greens, data was also taken on three fairways at each club. Additionally, the Toro Precision Sense machine was used on one fairway per course. The use of the Precision Sense machine (see AGCSATech Update – 'The precision touch' – in ATM Volume 14.5 for more on this machine and the results obtained) highlighted the

influence of soil type and grass species on surface quality and identified areas of the fairways that were under stress (but not necessarily noticeable with the human eye).

It highlighted the impact that trees and shrubs had on turf health and in particular on water usage along the edge of fairways. It also provided excellent data on the uniformity of fairway soil moisture.

## RECOMMENDATIONS

Following the completion of the project, some recommendations have been provided to assist superintendents and golf course managers in the ongoing management of their greens. Among these are:

- All tools measuring surface hardness can be accurately related to one another, however, the Clegg hammer with the flat head may be the preferred option as it does not leave a depression in the surface following use.
- All golf courses should use a TDR probe or similar device to monitor soils for moisture content in order to manage irrigation and overall surface quality.
- If a club wishes to achieve faster greens it requires providing smoother surfaces, rather than simply trying to produce firmer surfaces.
- Target ranges for green speed have been developed:
  - Public courses: 2.0m-3.0m (6'6"-10')
  - Mid-high private clubs: 2.5m-3.7m (8'-12')
  - Elite clubs: 2.6m-4.0m (8'6"-13')
- Target ranges for surface hardness have been developed [Clegg dome head (flat head)]
  - Public courses: 68(90) gravities – 100(156)g
  - Mid-high private clubs: 78(112)g – 102(160)g
  - Elite clubs 83(120)g – 111(180)g
- The analysis of the fairways with the Toro Precision Sense platform showed that the use of this device could dramatically assist in improving the long-term quality, uniformity and maintenance of fairway playing surfaces.

## ACKNOWLEDGEMENTS

AGCSATech wishes to acknowledge funding from Horticulture Australia Ltd throughout the project. The full and final report, once approved by HAL, will be available for download from the AGCSA website. Thanks are also extended to the golf course superintendents at the nine Melbourne based golf courses during the year, as well as the three superintendents in Sydney and Brisbane for the one-off assessments at their courses. The authors also wish to acknowledge the assistance of Toro for the use of their Precision Sense machine.

## EDITOR'S NOTE

Previous updates on this project (TU11003) appeared in ATM Volumes 14.5 (Sept-Oct 2012), 14.3 (May-Jun 2012), 14.2 (Mar-Apr 2012), 14.1 (Jan-Feb 2012) and 13.5 (Sept-Oct 2011). 🌱

The analysis of the fairways with the Toro Precision Sense platform showed that the device could dramatically assist in improving the long-term quality, uniformity and maintenance of fairways



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It may be one of the Melbourne sandbelt's youngest golf clubs having only opened in 1941, but Huntingdale, without question, holds a unique place in the Australian golfing landscape. The undisputed home of the Australian Masters for an incredible three decades between 1979 and 2008, the Allison Colt-designed course has seen many of the game's greats stride down its exquisitely manicured fairways – Thomson, Nicklaus, Palmer, Player, Watson, Norman and Woods to name but a few.

During its residence at Huntingdale, the Masters developed a reputation as one of Australia's most endearing golf tournaments. It produced some spectacular moments – Greg Norman's six Golden Jackets heading an exemplary list – and you could always guarantee that the tournament would either be decided coming down the 72nd hole or in a dramatic playoff.

Another aspect of the tournament that players and spectators came to appreciate over the years was its meticulous presentation. First under the guidance of John Spencer and then through his successor and current day course superintendent Michael Freeman, Huntingdale's intricately patterned cut greens, tees, fairways, approaches and surrounds always aroused the senses.



Huntingdale course superintendent Michael Freeman with one of his new fleet of Toro Greensmaster Flex 2100S

Huntingdale certainly set a benchmark for tournament presentation in Australia and it's a fact that Freeman, who took over the top job in 2002, and the club is justly proud of. Despite Huntingdale's run of hosting the Masters each year ended in 2008, Freeman and his crew of 15 continue to maintain the elite standards that have come to be expected at Huntingdale and it comes as little surprise to learn that they rely on one brand and one brand only to achieve this – Toro.

## EXCLUSIVELY RED

Freeman's rise to the peak of his profession comes as little surprise considering his background. His entire life has revolved in and around golf courses and he has many memories of being dragged around Royal Melbourne, Metropolitan and Kingston Heath by his father Lawrence who for 23 years was superintendent at Yarra Yarra Golf Club. Freeman joined the Huntingdale groundstaff as a 17-year-old apprentice in 1982 and quickly rose through the ranks to be assistant under Spencer for 12 years before finally taking over the reins.

Those who know Freeman well will be quick to tell you that he is a demanding taskmaster of both man and machinery. Having been immersed in the golf course maintenance industry for such a long time, Freeman knows what he wants and how to go about getting it, which is why as soon as he took over at Huntingdale he set about targeting a number of aspects of the club's maintenance programme. Top of the list was to attend to the mixed bag of machinery in the Huntingdale sheds and for Freeman the solution was obvious.

"Machinery has changed a lot over the years from when I first started and the expectation of course presentation by members has increased dramatically," says Freeman. "To produce a high standard of course presentation you need to have top of the range equipment and that's why when I took over as superintendent at Huntingdale I started the push towards becoming a 'red shed'."

That red tide has gradually engulfed the Huntingdale maintenance facility to the point where it is now exclusively Toro, something Freeman doesn't foresee changing anytime soon. Whether it's the ease of use, operator comfort and, of course, the exceptional quality



of cut provided by its industry-leading cutting units, Toro, in Freeman's eyes, provides the total package and enables him, his assistant Rod Ferry and the crew to present the course to the exacting standards demanded by Huntingdale's members.

## WALKING THE WALK

With a machinery replacement programme in place which sees course maintenance equipment turned over regularly, the past year has seen a number of new red machines take residence in the Huntingdale sheds. As well as six brand new MDX Workman utilities which have become a must have for any efficient course maintenance operation, Huntingdale's stocks have been bolstered with a new Reelmaster® 3100-D (Sidewinder) surrounds mower, a Reelmaster® 5610 fairway unit and a prized fleet of new Greensmaster® Flex™ 2100 walk-behind greens mowers.

"Since taking over as superintendent we have exclusively used Toro walk-behind mowers to cut greens and surrounds at Huntingdale and never had a problem with them," explains Freeman. "At this time of year we are going out 5-6 times a week with

**Course:** Huntingdale Golf Club, Melbourne, VIC **Superintendent:** Michael Freeman



For 30 years Huntingdale Golf Club in Melbourne set a benchmark for tournament presentation hosting the Australian Masters. That tradition continues today and Toro machinery plays an integral part to the club's high level of conditioning

allows the cutting units to pivot around the centre of the front roller to master undulations and prevent side-to-side scrubbing of the putting surface. Add to that Toro's elite Dual Precision Adjustment (DPA) cutting units and the most efficient clipping collection system, and it's easy to see why Freeman and many of his fellow superintendent colleagues rate the Greensmaster Flex series above all other walk-behinds as their mower of choice.

### FAIRWAY KING

The same applies to Reelmaster 5610 fairway units. The true workhorses of Huntingdale's fleet, the 5610s have their work cut out maintaining 18 hectares of couchgrass fairways, but Freeman knows he can rely on them to deliver time and time again. While the Reelmaster's DPA cutting units have developed a reputation as producing the best after cut finish in the business, it's also the ergonomics which complete the package in Freeman's eyes.

"You'll have to ask my guys, I'm not on them much anymore!" quips Freeman when asked what impresses him most about the 5610. "When you are on these machines for eight hours a day, operator comfort becomes such an important feature. The ergonomics of the 5610 are second to none and are so good that we never get any complaints from staff."

them and the precision cut you get with the Greensmaster walk-behinds is unsurpassed. We don't even entertain the thought of putting triplex mowers on our greens now.

"We originally used the Greensmaster® 1000 walk-behinds, but more recently we have switched to the new Flex 2100s. We have a couple of very undulating greens here at Huntingdale and the beauty of the Flex 2100 is that the floating head follows the contours of those greens to perfection. The quality of cut is, like the 1000s, outstanding and the other beauty is there are no oil leaks."

Toro's Greensmaster Flex walk-mowers improve upon the industry-leading cutting performance superintendents have come to expect from the Toro Greensmaster 1000s. The Flex 2100 (21-inch cutting width) and 1800 (18-inch cutting width) models come with added innovations that improve playability and turf health, enhance productivity and simplify service.

The patented Flex suspension enables superior contour following capability, utilising an integrated 'Flex' linkage system which



Huntingdale has taken delivery of six new Toro Workman MDX utilities this past year

# Toro Turf Tour **TORO**

**Course:** Huntingdale Golf Club, Melbourne, VIC **Superintendent:** Michael Freeman



The Toro Greensmaster® 3100-D Sidewinder makes quick work of Huntingdale's sizable surrounds



The Reelmaster® 5610s have their work cut out maintaining 18 hectares of couchgrass fairways

"Our fairway mowers work very hard. While the greens mowers are out there for only a couple of hours a day, the fairway mowers are out there four to five days a week up to eight hours at a time. They get a serious workout at Huntingdale and the precision cut they provide is unbeatable. Their reliability too is excellent and we have never had a problem – no oil leaks, no engine breakdowns – which is impressive for the amount of hours they do."

The top of the range model in Toro's outstanding 5010 fairway mower series, the 5610 has certainly marked its territory as the king of the fairways. Built to handle heavy workloads pass after pass and year after year, the 44.2hp (33kw) 4-cylinder Kubota® Turbo diesel engine provides the muscle to get the job done with power to spare. The 5610 comes standard with the larger 7-inch (17.8 cm) diameter 8 or 11 blade cutting

units and is available in standard 2-wheel drive or CrossTrax® all-wheel drive system (Huntingdale has the latter).

In developing the new and improved 5610, Toro has broken the mould in terms of the one thing that really matters – a better cut. New DPA cutting units deliver superintendents and sports turf managers a championship edge in cutting and aftercut appearance that other reel mowers simply can't match. The new Reelmasters are also easier to operate in all types of terrain and as Freeman highlights the level of operator comfort ensures that he gets the most out of his crew.

Another key feature of the Reelmaster and one that Huntingdale turf technician Lance Davison can vouch for, is its improved serviceability. The Reelmaster® 5010 series mowers follow Toro RSM (Reduced Simplified Maintenance) standards. RSM helps increase access to service compartments

for faster repair and maintenance. Routine service points are all conveniently located on the left side of the machine. Hinges in the hood, operator platform and rear screen allow quick access to the engine, reel speed controls, radiator, and other areas that might require routine maintenance or inspection.

"It's Toro's level of professionalism across the board – the quality of the machinery that Toro consistently brings out, the ease of use and the impressive after sales service and back-up," sums up Freeman when asked what makes Toro such a good fit at Huntingdale. "For a club of our size and stature we are expected to deliver a high end product to the members and Toro does the same thing for me – Toro delivers high-end, high quality machinery which enables us to create the product we are looking for. As a superintendent I couldn't ask for anything more."



Whether it's the ease of use, operator comfort or the exceptional quality of cut, Toro is a perfect fit at Huntingdale

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**Count on it.**

Dusting has become an important cultural practice for many golf course superintendents in the management of their greens, whether warm- or cool-season. The Pulse asks superintendents what dusting practices they employ at their club and what their primary goal is in implementing such a programme.



# Sands of time

“Dusting of greens has become a very important part of our practices here at City Golf Club in Toowoomba. We have Pennncross bentgrass greens and are gradually changing over to Penn A1 as new greens are being built. In the past, the club used to only dust when it was thought necessary, but now it is almost a monthly ritual (except during winter).”

The greens are tined using bayonets and then fertilised with a low N fertiliser with a little more water than usual so that the greens do not stress. This is done a week before we dust. On the day of dusting the greens are groomed and then a third to half a cubic metre of topdressing sand is applied using a Dakota Turf Tender 410 per green, depending on the size of the green (our average size is 400m<sup>2</sup>). This is followed up by five minutes of water, especially during summer as the bent is a little fragile with the heat and having the drag mat pulled over it.

We mainly dust for the reduction in thatch levels, improved roll and ball speed and to help with the recovery of pitch marks.” **John Halter, City Golf Club, QLD**

“At Ipswich we follow normal dusting practices. In summer we verti-cut the greens monthly and dust at the end of the month. We use a Toro ProPass on a very fine setting and just use a dew broom to rub the sand in and then set a syringe cycle. The aim is to produce a nice smooth surface and keep bumps and pitch marks to a minimum. During winter I might dust every six weeks. Obviously, weather plays a big part in all these practices.” **Chris Fletcher, Ipswich Golf Club, QLD**

“I generally don’t have a dusting programme as my operating budget is very limited. However, this year I have had to make a special effort to dust after renovations as there were some areas of concern on our Tifdwarf greens which we maintain at 3mm.

I have dusted at a thickness of 2.5mm (twice in the same week) and once at 5mm. I found this has helped to firm the surface immensely and also filled the voids left after renovations. I am planning to groom the surfaces in the coming weeks and will dust again at around 2-3mm thickness to help with thatch control, fill low spots and improve ball roll.” **Col Caulfield, Pine Rivers Golf Club, QLD**

“After an early spring renovation (late August/early September) I like to dust at 14-day intervals. This continues for around six weeks and the 328 greens would have received another two light verti-cuts during this time. Primarily this practice is to achieve smoothness and encourage lateral growth in the greens after renovations. It is around this time I let the greens settle in for a month.

In November I like to verti-cut at 0mm every week and dust every second week. This is to keep a check on thatch levels, smoothness of ball roll and green speed as I try to keep rollers of the greens at this time of year. As I start to apply Primo to greens and they tighten up, the dusting applications decrease and are then applied if verti-cutting needs to be carried out at a greater depth until an autumn renovation.

Throughout the winter months I carry dusting as required and do an extra light dust 2-3 weeks prior



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Daryl Sellar 0408 322 397 daryl@agcsa.com.au



to any major club events. My method of application is with a Turfco twin-spinner topdresser and I use approximately 5-6m<sup>3</sup> per 1.2ha. This methodology is in a best case scenario and the applications may vary due to course traffic and weather conditions."

**Darryl Edwards, Burleigh Golf Club, QLD**

"At the Commercial Golf Resort we still do a regular spring and autumn renovation of the greens. This does not always involve hollow tining but usually a reasonable topdressing. In between we always look to do at least one dusting in the winter and maybe two in the summer when we get a little more growth.

We have an old style drop spreader and we only just get the sand on thin enough, which is why we always dust on a Monday and resume cutting regularly on the Friday. The members have become accustomed to the benefits that a regular renovation programme and a few dustings can do for the putting surfaces and they are generally accepting of the programme.

We don't generally do anything to prepare the greens for dusting, such as an application of fertiliser, as I believe that this takes away some of the benefits of the dusting. The reason for the dusting is to maintain the speed, firmness and smoothness of the greens which is what the members want."

**Anthony Toogood, Commercial Golf Resort, NSW**

"Dusting to me is one of the most important practices in maintaining quality putting surfaces. We have L93 bentgrass greens and while probably not the nicest variety of bent, it copes a lot better with our high salt levels than other varieties. They do tend to thatch up quite quickly, however, so dusting is especially important.

Thatch control and green firmness are our main reasons for dusting. We dust fortnightly using the Toro ProPass and use anywhere from 6-9m<sup>3</sup> over 1.3ha depending on the rate of growth and amount of grass on the greens at the time. We endeavour to do this all year round, but during summer when temperatures and salt levels are higher we sometimes will wait for cooler weather before doing the application.

"The dusting process we employ at Southport Golf Club is aimed primarily at obtaining trueness of all our 328 putting surfaces. Because we have several older greens around the course positioned in locations that can be only described as 'a good idea at the time', maintaining evenness throughout becomes an issue, with individual treatments required especially at renovation times (e.g.: verti-draining biannually, varying size hollow tines accompanied with varying degrees of stolon and thatch removal).

The dusting process at Southport occurs fortnightly during the growing season (or when possible weekly, on Mondays) to achieve firmness, uniformity of ball roll, combat thatch levels outside renovation periods and, as mentioned above, obtain trueness. We use a Tycrop Quickpass 300 (with spinners), towed by a Daedong DK50 tractor to distribute sand. Prior to dusting, we mow with groomers engaged or alternatively the

club's thatch-away units are used on the greens triplexes at minimal depth.

The amount of sand we apply is minimal and basically disappears as soon as it reaches the green's surface. Previously we were using a 1000 fine sand, but currently use a 750 fine sand which is sourced from Bribie Island.

Once dusting is complete, that evening greens irrigation is applied as per normal with no additional amounts of water required. Greens are cut the next morning with no negative effects to mowers or to the membership. With only a hectare of greens, the whole process only takes a few hours.

We have been carrying out this practice for several years now and when combined with scheduled renovations have seen increased positive member feedback, but most importantly we have been able to control thatch levels within our varying greens." **Stuart Moore, Southport Golf Club, QLD**



I like to groom my greens the day before dusting to get a nice firm and hopefully true surface. We base our verti-draining and gypsum applications around our dusting as well. Verti-draining after the dusting ensures the surface is nice and firm, therefore there is minimal surface disruption after the machine has been over them. Our monthly application of gypsum works well after dusting as the few minutes of water to wash it in also helps the sand settle and helps the plant reseal itself after the broom has been over it."

**Nick Price, The Cut, WA**

"At Pacific Harbour we dust fortnightly all year round (we try and stick to this, but with absences and golf days it does change a bit) and through summer we even go out weekly. We have TifEagle greens which are very aggressive so our main aim with dusting is to keep the thatch layer down and produce a nice

# superintendents and golf clubs course maintenance standards



firm surface. We have very low pH water (5) which tends to be very dissolving so the sand we use has lime added to it to keep our Ca levels up.

In conjunction with our dusting programme we use our groomers 2-3 times a week set at -2mm and once a month verti-cut at -1mm up and back on the same pass. Once a month we apply either Dolomite or Cal-rite in conjunction with our verti-cut and dusting application. We use a Tycrop ProPass 200 which is brilliant and enables us to dust without hardly any disruption to the golfers and we get all greens done in about three hours. We put out about 5 tonnes of sand per application and irrigate immediately after. We have been doing this for a few years now with good success." **Kelvin Nicholson, Pacific Harbour Golf & Country Club, QLD**

"We do not undertake dusting here at Albert Park due to a lack of funding, equipment and staff, but it would be the next step towards improving our putting green surfaces if we were to have the resources. When I was at Yarra Yarra Golf Club in the late 1990s we would dust the bent/Poa surfaces about 7-8 times per year, including two renovations. I was sceptical of the practice for a long time, but my fears proved unfounded and the results we had were impressive – firm surfaces even when damp, a finer leaf and a smoother putting surface." **Jeff Keast, Albert Park Golf Course, VIC**

**"A**t Pennant Hills we have been dusting our 70-year-old, 60 per cent Poa/40 per cent bentgrass greens for over 10 years every 2-3 weeks, but have increased that frequency to fortnightly since our Water Reclamation Plant came online in 2008. With the nitrogen from the recycled water at about 12-15ppm we have experienced quite high increases in thatch levels. To combat this we are verti-cutting at -1.5mm to -2mm on alternate weeks to dusting.

Dusting has been very successful in reducing surface sponginess, improving

firmness, ball roll and speed. The dusting is generally carried out on a Monday and we pull a two metre wide dew broom over the green, irrigate that night and don't cut the following day. The greens are under Primo from September-May with rates ranging from 0.5l-1l/ha. We use a Toro ProPass 200 and use about 5 tonnes of air dried sand over 22 greens. These current cultural practices help us to achieve green speeds around the 9'6"- 10'6" on the stimp meter most of the year."

**Richard Kirkby, Pennant Hills Golf Club, NSW**



"Here in southeast Queensland, particularly with our sub-tropical climate and grass type, greens dusting on a regular basis is essential, especially if we want to achieve smooth and consistent putting surfaces on a regular basis. Dusting represents a major foundation of our greens maintenance practices at Indooroopilly and with all the other benefits such as thatch and disease control, dusting on a regular basis has proven to be a crucial method in helping us keep smooth, healthy turfgrass year-round.

We can dust pretty much throughout the year, but we do concentrate most of our efforts in the September-March period. Our method, after trialling a number of different approaches, is to groom/de-thatch first, before applying the light dusting of sand. We have found that to help offset damage to reels and bedknives (and keep a slightly less grumpy technician) we typically won't mow the next day and even substitute a cut or two with a roll. We lift heights of cut marginally (0.25mm-0.5mm) again in an effort to minimise potential damage to the cutting units. We find a light syringe immediately prior to mowing also helps reduce the risk of sand dulling reels and blades.

A combination of these various methods ensures we can groom and dust every 7-10 days with little compromise to the putting surfaces in the short-term and definitely provides that improvement in appearance and playability we all strive for. With the advancements in machinery technology over the past few years, we have found it easier than ever to consistently apply light sand dressings. These days, we can apply a dusting of around 1-1.5m<sup>3</sup> and have it rubbed in before the daily field!" **Charlie Giffard, Indooroopilly Golf Club, QLD**

At Eastlake Golf Club in Sydney I am dealing with greens that are 80-90 per cent Poa so I am on a very strict dusting programme. I start the program 4-6 weeks after spring renovations with very light dustings and increase the amount as the growing season progresses. The first dusting normally uses between 3-4 tonnes of 90/10 over one hectare of greens and by the end of the growing season we are using up to five tonnes of sand.



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The greens are verti-cut every second Monday in the growing season using the Toro triplex verti-cutter heads set to a depth of 4mm. The greens are then blown off immediately to remove any excess matter still sitting on the surface and then finished with a roll. Once a month when this practice is undertaken the roll is eliminated and the greens are dusted using a Turfco Widespin 1540ec tow-behind topdressing unit. This unit has adjustable spinners which allow us to increase the trajectory of the sand (normally between 4-6 degrees above neutral). By doing this it allows us to only make 2 passes on each green and gives a light, even coverage.

Once the dusting is complete the sand is rubbed into the verti-cutter grooves lightly by dew brooms and finished with a syringe irrigation cycle. The greens are only rolled for the following two days and not cut. This practice most of the time coincides with growth regulator applications. The main reason for this programme is to eliminate the thatch in the top canopy of the old greens and to help increase the speed and firmness of the greens." **Nathan Bradbury, Eastlake Golf Club, NSW**

Dusting greens plays an important role in our cultural practices at Twin Creeks. I believe it's probably one of the most important practices we can do as it helps keep the Providence 1019 bentgrass surface firm, true and assists thatch degradation. During the growing season we try to dust once a week and in winter will drop back to monthly.

The application process is via a Tycrop ProPass either wheel-to-wheel or edge-to-edge dependent on conditions. Once the sand is dry we then run a dew broom over the greens followed by a heavy water-in at night. We find minimal disruption to play and ball movement and the following day no sand is picked up by the mowers. Grooming and aerating with needle tines prior to dusting also gives us a chance for a heavier dust." **Brendan Hansard, Twin Creeks Golf & Country Club, NSW**

"Here at The Kew Golf Club we have been religiously dusting for eight years or so now. We first started dusting using a Vicon spreader with medium sized sand once a month (this was if the sand was dry



enough). Member acceptance wasn't high initially but in time they came to embrace the practice as they experienced improved firmness and speed.

Over time our dusting process evolved to a frequency of every two weeks which would go out to three weeks over winter. A Dakota spreader is now used with the sand distribution rate being approximately 50-60kg per 100m<sup>2</sup>. We use a greens mower with lightweight brushes to follow behind the Dakota rubbing in the sand. The even, thin distribution of sand can be played on basically straight away without a problem.

Mondays are our designated dusting day with timing being am or pm depending what corporate or club events we have on. It takes us about two hours to dust 20 greens. Greens aren't mown on the morning prior to dusting as having a little leaf on the day helps to lock in the sand. Greens are cut at 2.8mm for nine months of the year so absorbing (if that's the right word) the sand into the surface can be difficult. An irrigation cycle is then applied early evening to help move the sand in. Tuesday and Wednesday mornings following dusting, the greens are syringed (two minutes) to moisten the sand to avoid mower pickup. They mow up and present very well for play.

Summer or winter the process is the same and the agronomic benefits of dusting are great." **Adam Robertson, Kew Golf Club, VIC**

"Dusting represents a major foundation of our greens maintenance practices at Indooroopilly. With all the other benefits such as thatch and disease control, dusting on a regular basis has proven to be a crucial method in helping us keep smooth, healthy turfgrass year-round."

**Charlie Giffard**  
Indooroopilly GC



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# The environmental turfgrass

At the upcoming 2013 International Turfgrass Society seminar in China, Queensland-based researchers Dr Don Loch and Yi Zhou will present a paper highlighting their recent research on zoysiagrasses. Here Dr Loch provides a general overview of this largely unheralded turf variety and some of its unique and beneficial characteristics.

**Above: *Zoysia matrella* has been used on golf course fairways at many locations around Asia. Pictured is Clearwater Bay Golf & Country Club in Hong Kong**

The main cultivated zoysia turfgrasses, *Zoysia japonica* and *Zoysia matrella*, are native to southern and eastern Asia and the Pacific Rim (with *Zoysia matrella* extending into far north Queensland), but now grown worldwide from the tropics through to temperate regions. To these can be added a third species, *Zoysia pacifica*, for ornamental rather than turf use. These species cross readily and hybrid cultivars are also available.

The zoysias are medium-to fine-textured turfgrasses, superficially similar in appearance to the more widely grown couchgrasses. But if managed according to optimum practices for these other grasses, zoysias will grow poorly or even fail.

The rules for growing well-managed zoysia turf are different. Zoysias grow noticeably slower than other turfgrasses. This requires some extra care and patience during establishment, but quickly becomes their strength once established. The frequency of mowing can be reduced relative to the faster-growing couches and buffalo grass.

The zoysias are low fertility species, seen at their best under low rates of nitrogen fertiliser which would lead to weed contamination and eventual failure with green couch. This further reduces their mowing requirements, leads to lower water use, minimises thatch levels, and reduces pest and disease activity.

While not yet widely used in Australia, interestingly, the use of zoysias in the USA has increased over the past 60-70 years, with some 7000 hectares of zoysias now grown on golf courses alone and much more extensive plantings for prestige home lawns. Over the past 20 years, Australia has seen 12 new buffalo grass varieties but only nine zoysias, while the US has registered 29 new zoysias and only seven buffalo grass cultivars.

## ORIGIN AND ADAPTATION

The different zoysia species share some key attributes in common, notably their slow growth rates and low fertility status as well as their excellent resistance to wear and ability to grow in high strength soils. At the same time, they also show several distinct differences in adaptation, which add to the range of choices available among the zoysiagrasses to meet specific requirements (see Table 1.)

**TABLE 1. CHARACTERISTICS OF ZOYSIAGRASS SPECIES**

Attribute	<i>Z. japonica</i>	<i>Z. matrella</i>
<b>Growth rate</b>	Very slow	Very slow
<b>Nutrient needs</b>	Very low	Very low
<b>Thatch acc.</b>	Medium	High
<b>Tolerance of:</b>		
Heat	High	Very high
Cold	Very high	High
Drought	High	High
Shade	Medium-high	Very high
Salinity	Medium-high	High-very high
High soil strength	Very high	Very high
Wear	Very fast	Very fast

*Zoysia matrella* is the more tropical of the two main species, with greater heat tolerance but less tolerant of cold than the best *Zoysia japonica* varieties. It is finer textured than *Zoysia japonica*, equivalent to the best of the green couches in quality and with bright green leaves. *Zoysia japonica* varieties have bluish-green coloured leaves (similar to blue couch), but range from medium to coarse in texture. Both species produce high shoot densities, with *Zoysia matrella* a little more prone to thatch development if over-fertilised.

*Zoysia matrella* is one of the best turfgrasses for shaded situations, maintaining good dense growth under lower light conditions than buffalo grass for example. It also shows a high degree of salt tolerance. Both zoysia species show good drought tolerance, better than buffalo grass but not quite as drought tolerant as the green couches. In this respect, their slow growth and low fertility needs help to reduce plant demand on soil water.

Zoysias grow well on a wide range of well-drained soils from sands to loams and even clay soils from pH 5 or less through to about pH 8 (i.e.: strongly acid through to neutral or mildly alkaline). They will tolerate short periods of temporary waterlogging, but not permanent waterlogging or clay soils that remain wet for extended periods. Table 2 (page 49) lists those zoysia varieties currently available in Australia.

## ESTABLISHMENT

Like other turfgrasses, maintaining good soil moisture is crucial until a new root system is well anchored through the soil below newly-laid turf. Pre-watering the underlay soil beforehand helps ensure that the whole profile starts out fully wet. Water again with at least 25mm immediately after the turf is laid.

Frequent light watering (at least twice a day for the first 2-3 weeks in summer, and more often on very hot or windy days) is required to replace moisture lost from the newly-laid turf through evaporation. Then gradually reduce the frequency of watering and increase the amount applied each time to encourage the developing root system to seek moisture at greater depths.

Withhold fertiliser for the first 4-6 weeks after laying to encourage the initiation and development of new roots. Then apply fertiliser sparingly to support the new planting. Use up to 0.5kgN/100m<sup>2</sup> in a low P fertiliser blend (e.g.: 3kg/100m<sup>2</sup> of CK88 or similar product) and preferably make not more than two applications during the first year. Do not apply high rates of P fertiliser. Zoysiagrasses require very little P and even moderate rates can drastically reduce root and shoot development (see more on this in the breakout article on page 48).

## MANAGEMENT

Back in 1988 in their landmark article "Establishing and Maintaining Zoysiagrass" which appeared in Grounds Maintenance magazine (US), the late Jack Murray and Kevin Morris wrote the following about zoysias:

*"In the past, many people mistakenly managed zoysiagrass like other turfgrass species. Inappropriate management practices diminished its strengths and magnified its weaknesses; as a result, few people regarded zoysiagrass highly. However, when zoysiagrass is correctly and fully established it:*

- *Forms a dense attractive turf that survives high temperatures and humidity;*
- *Is very winter-hardy and weed-resistant;*



**Zoysia matrella (left) and Zoysia japonica (right)**

- *Requires less supplemental fertilisation and irrigation than most other turfgrasses; and*
- *Provides an excellent wear-tolerant playing surface on golf courses and athletic fields, even while it is dormant.*

*"Zoysiagrass is at its best when you use low water, nitrogen and pesticide rates. Under what would normally be considered poor or extremely low maintenance, zoysia shows its greatest competitive advantage against weeds and other turfgrasses. In fact, when zoysiagrass is fully established, higher maintenance levels tend to increase thatch levels, disease activity and mowing requirements.*

*"If you require higher quality turf for specific uses, such as golf courses or athletic fields, zoysiagrass will respond to more intensive management."*

As Murray and Morris note, the zoysias have very particular management requirements compared to other warm-season grass varieties and the following provides some more in depth points to consider:

**Nutrition:** Once established, zoysiagrasses require little or no fertiliser to maintain good turf density and quality with few, if any, weeds. Use no more than 1kgN/100m<sup>2</sup> per year split between spring and summer to improve colour while not producing excessive thatch. Overall, growth of the zoysias is driven more by water (good soil moisture following rainfall or irrigation) than by nitrogen.

**Mowing:** Once established, the slow growth of the zoysias means less mowing than with faster-growing grasses like green couch and buffalo grass. However, the universal "one-third rule" still applies – mow to remove no more than one-third of leaf and thatch at a time. Zoysiagrass should not be mown

**Zoysiagrasses can provide an excellent wear-tolerant playing surface on golf courses and athletic fields**





◀ The impressive landscaping look achieved with *Zoysia pacifica* (formerly known as *Zoysia tenuifolia*)

when wilted, as it does not cut cleanly. For best results, keep mower blades sharp.

Leaving zoysiagrass too long between mowings can cause scalping by removing more than one-third of the top growth, including most of the active growing points. There is less thatch development and scalping under shorter mowing heights, which reduce shading of the plant base allowing new shoots to develop from dormant basal buds. On golf courses, groomers can also be used to encourage development of basal buds by cutting through the stolons.

**Weed control:** Established zoysia lawns maintain a dense, weed-free sward especially under low fertility conditions where couch and buffalo become thin

and weak. In shade, *Zoysia matrella* still competes strongly with any shade-tolerant weeds.

In the event that chemical weed control is necessary, zoysias are tolerant of a wide range of broadleaf herbicides, including 2,4-D, MCPA, dicamba, fluroxypyr, triclopyr, metsulfuron, flazasulfuron and mecoprop. Research work has also shown good tolerance to some grass herbicides, notably fluazifop, alone and in mixtures, which could lead to registration for selective control of grass weeds.

**Pests:** Fewer pest problems are encountered with zoysias than with other warm-season grasses. They are more tolerant of lawn grubs (armyworm, webworm) than the couches, though significant infestation is more likely in tropical areas and where excessive N fertiliser has been used. Curl (scarab) grubs have been recorded, though only of minor importance. Mites (both eriophyoid and false spider mites) can affect zoysias, but are more of a problem to turf producers than lawn owners and managers.

**Diseases:** There are two main diseases found on zoysias. Large patch (brown patch), a root disease caused by *Rhizoctonia* fungi, can develop under wet soil conditions with poor air movement so that moisture remains on the leaves for longer periods. The first signs are a loss of vigour and bronzing of the leaves, particularly around the margins of the affected patch which progressively becomes thinner and weaker. Large patch is generally less significant in warmer areas.

Zoysia rust can be seen on *Zoysia japonica* leaves for short periods under intermediate

## RESEARCH PROJECT LOOKS INTO ZOYSIA ESTABLISHMENT AND NUTRITION

University of Queensland researchers Dr Don Loch and Yi Zhou will present a research paper on zoysias at the International Turfgrass Society's 12th International Turfgrass Research Conference to be held in Beijing, China from 14-19 July 2013. Their research looks at the effects of foliar nutrient and biostimulant applications and soil moisture and nutrient status on the establishment of newly laid zoysia sod.

As mentioned in the main article, zoysias have many positive attributes as low maintenance, slow-growing warm-season turfgrasses once established, producing high quality turf with low nutrient inputs and requiring less frequent mowing than alternative turfgrass species. During establishment, however, their slow growth is seen as their major weakness. In light of this, Loch and Yi undertook five short-term pot experiments (one in 2010 and four during 2012) at The University of Queensland's glasshouses in Brisbane.

These experiments were designed to simulate in pots the laying of vegetative

zoysiagrass (*Z. matrella* – Shadetuff and *Z. japonica* – Ozeboy) sod onto a bare soil base, maintaining moisture in the turf sod and growing medium via capillary watering from below. This avoided the need for heavy overhead watering, thus enabling the effects of foliar nutrient and biostimulant treatments to be considered without being complicated by leaching into the sod and underlay medium. The artificial sand-peat (or coir) growing media were strongly acid (pH 4.5-5.3) and low to very low in terms of sufficiency levels of N, P and K, and most other major and minor nutrients.

The research found that, despite these low nutrient levels, root development under newly-laid zoysiagrass sod and the partitioning of dry matter production into root rather than shoot growth were enhanced by maintaining low soil fertility and not applying any fertiliser at establishment.

The results also showed that none of the foliar nutrient (high N, P or K) or biostimulant treatments (kelp or microbial supplementation) made during the first 21

days resulted in a positive response in terms of root development during the first six weeks of establishment. Growth increased with temperature, leading to higher dry matter production but with reduced partitioning of this into roots.

One unexpected, but significant, finding was the sensitivity shown by both zoysia species to moderate-high P levels: excessive amounts of P reduced both shoot and (in particular) root growth. In one combination treatment, even the small amount of P (2 per cent) found in kelp significantly reduced plant growth when added to the P already applied as fertiliser.

Drying out of zoysiagrass sod prior to laying did not disproportionately affect subsequent root development, and had relatively little effect on final establishment for the first two days of drying out. However, it did appear that the maintenance of good sod and soil moisture was of paramount importance during early establishment to protect delicate new root growth once this had been initiated.

TABLE 2. ASIAN ZOYSIA SPECIES IN AUSTRALIA

Cultivar	Marketing name	Species	Leaf texture	PBR
<b>Vegetative</b>				
BA-189	UltimateFlora™	<i>Zoysia japonica</i>	Coarse	Under examination
El Toro		<i>Zoysia japonica</i>	Coarse	2001
Jamur		<i>Zoysia japonica</i>	Coarse	
Palisades		<i>Zoysia japonica</i>	Coarse	2002
SS-300	Empress™	<i>Zoysia japonica</i>	Medium	2002
SS-500	Empire™	<i>Zoysia japonica</i>	Coarse	2002
Z-3	Ozeboy®	<i>Zoysia japonica</i>	Medium	-
ZT-11		<i>Zoysia japonica</i>	Medium	-
A-1	Shadetuff®	<i>Zoysia matrella</i>	Medium-fine	2008
Cavalier		<i>Zoysia matrella</i>	Medium-coarse	2002
Emerald		<i>Zoysia matrella</i>	Coarse	
Facet		<i>Zoysia matrella</i>	Fine	2002
Royal		<i>Zoysia matrella</i>	Medium-fine	
Zorro		<i>Zoysia matrella</i>	Medium-coarse	
BA-305	PristineFlora	<i>Zoysia japonica</i>	Medium-fine	Under examination
		<i>x Z. pacifica</i>		
De Anza		<i>Zoysia japonica x Z. matrella x Z. pacifica</i>	Medium	
Victoria		<i>Zoysia japonica x Z. matrella x Z. pacifica</i>	Medium	
<b>Seeded¹</b>	No-Mow	<i>Zoysia pacifica</i>	Very fine	Varieties highlighted in light orange are available commercially in Australia.
Compadre		<i>Zoysia japonica</i>	Medium-coarse	
Zenith		<i>Zoysia japonica</i>	Medium-coarse	

¹ Seed of Chinese or Korean common *Zoysia japonica* also available occasionally under names like "Sunrise" and "Traveler".

temperature conditions. Some zoysia varieties will also show occasional leaf spots and dollar spot under humid conditions.

**Editor's note:** This article contains references to several chemicals that are not registered for turf in Australia. 🌿



The rules for growing well-managed zoysia turf are different to the likes of other warm-season grasses such as couch

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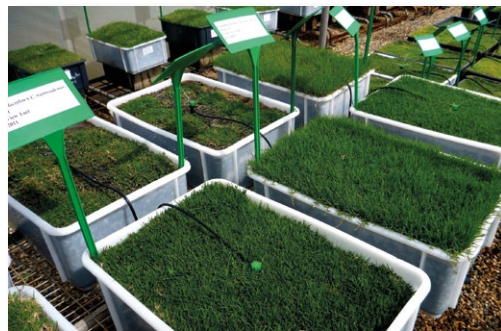
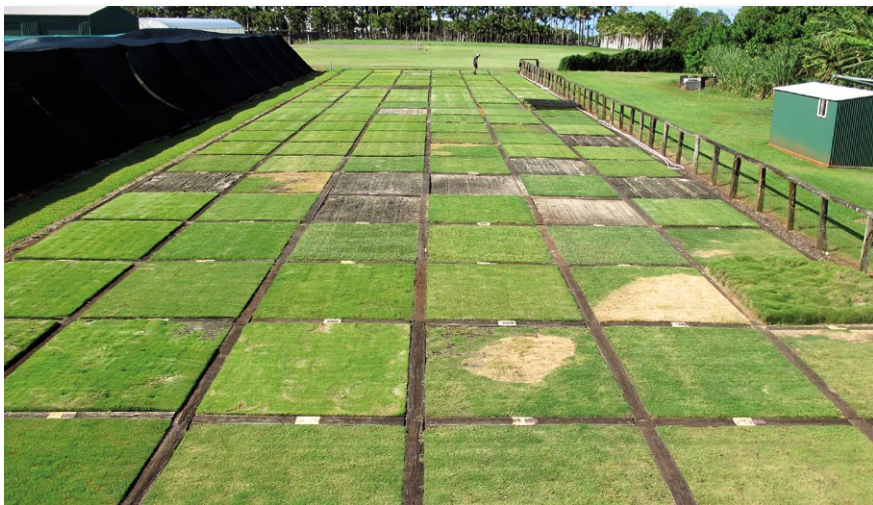
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**Back-up material of all warm-season reference collection plots plus additional cultivars are preserved in tubs at Redlands in an attempt to limit encroachment or contamination and maintain genetic purity**

# Redlands era comes to an end

Queensland Government budget cuts announced last September had a major impact on turf research in Australia with the Redlands Research Station closing. Departed lifestyle horticulture team leader Matt Roche looks back on the facility's research achievements of the past 13 years.



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**Above: DAFF has provided assurance that the Redlands warm-season reference collection, known as the Living Library, will be able to remain at the facility for the next 12 months**

After nearly 13 years, research activities at Redlands Research Station in Queensland have come to an end. The termination of the Life-style Horticulture programme, which included flower, nursery and turf research, development and extension, was a result of the Queensland Government's decision to cease activities in this area in an effort to save money.

On 11 September 2012 all Redlands staff members, with the exception those associated with the \$8.6million glasshouse facility located at the site, were told that their substantive positions were no longer required. Permanent staff members, including those in the turf research team, were given the choice to take a voluntary redundancy or be redeployed elsewhere within the Queensland Public Service.

The decision came as a complete shock to all staff located at the site which is located about 45 minutes from Brisbane's CBD. The Department of Agriculture, Fisheries and Forestry (DAFF) site was one of many victims of the massive cuts announced by the state government with an estimated 14,000 full-time equivalent public sector jobs axed.

At the time of writing this article (December 2012), the future of the research facility remains unclear. The 60 hectare site will remain in-situ for a minimum of 12-24 months before any action is taken. It may take more than five years for the site's research capacity (infrastructure) to be 'lost'.

There is talk of potential development across the site which would see the western side of Hilliards Creek sold off first. This area used to house the chemical phytotoxicity testing facility, wear trial and poultry research centre and currently contains the Horticulture Australia Limited (HAL) funded project 'Erosion Demonstration Control Facility' (TU12005)

which is now being led by Shane Holborn of Biosciences Australia Pty Ltd.

As for the eastern side of Hilliards Creek, the infrastructure and (trial) borders which are situated on prime agricultural land (red krasnozem soil) is likely to stay in-situ for some time. This area also houses Australia's largest warm-season reference collection, encompassing some 178 genotypes of  $C_4$  ornamental turfgrasses.

This reference collection, dubbed the turf industry's Living Library, was established in 2000. Vegetative material for this collection was largely acquired by former principal scientist Dr Don Loch from overseas universities and breeders and from sources across Australia. Since construction, the turf demonstration plots have been maintained at Redlands Research Station as part of the facility's efforts to supply vegetative material for research projects, but also education to the Australian turfgrass industry and wider community.

Matt Roche, former senior research scientist at Redlands, is working with DAFF management, Turf Australia and HAL to preserve the collection in its current form. DAFF has provided assurance that the collection, which also contains Genetic Resource Centre material for the purposes of Plant Breeder's Rights (PBR), will be able to remain at Redlands for just over 12 months.

After this time the collection will then have to be removed off site and Roche, who has since set up and is now director of Australian Sports Turf Consultants (ASTC), will be working with Turf Australia to achieve this goal, hopefully with the full support of the wider turfgrass industry.

## IMPORTANT RESEARCH

Turf research at Redlands Research Station was undertaken to service the whole turf industry, from producers to facility managers, homeowners to professional turf managers, from roadsides and urban open space through to golf courses, bowling greens and sportsfields.

During this period Redlands (the lifestyle horticulture crew numbered 25), was involved in

many important industry research, development and extension activities including:

- Lead research group or primary collaborator in 19 HAL funded (VC and/or levy) projects (see Table 1 for the full list of projects);
- Forming guidelines for the Turf Accreditation Process (TAP);
- 25 Plant Breeder's Rights registrations;
- Between 2001 and 2010, a total of 76 products consisting of 187 different treatments were tested at the Redlands phytotoxicity site. During the first three years alone, 39 products were comprehensively examined, resulting in the registration of 12 new products for the Australian turf industry;
- Genetic improvement work and breeding;
- Sportsfield characterisation and benchmarking of elite and community sports fields;
- Extensive wear studies;
- Turf pest and diseases;
- Extension with a focus on providing the industry and general public with independent information. This was disseminated through websites, fact sheets, magazines, field days, phone and email, and national and international seminars;
- Desktop studies;
- Various confidential and fee-for-service studies.

On behalf of the turf industry I would like to thank the collaborators (e.g. HAL, Australian Golf Course Superintendent Association, University of Western Australia, Sports Turf Institute, University of Queensland, state golf, sports turf and turf producer associations, various councils and turf related companies) and the following persons who were part of the Redlands Turf Research team at some point during the facility's 13 years: **Dr Don Loch** (principal scientist), **Tarek Lees** (scientist),



**Dr Rachel Poulter** (scientist), **Cynthia Carson** (senior extension officer), **Alan Duff** (principal experimentalist), **Russel Durant** (technician), **Tony Troughton** (technician), **Bartley Bauer** (scientist), **Kaylene Bransgrove** (plant pathologist), **Mitch Wall** (technician), **Lin O'Brien** (technician), **Will Pearce** (technician), **Shane Holborn** (lifestyle horticulture team leader) and **Jon Penberthy** (principal chief experimentalist).

For further information or assistance regarding the Redlands site, contact Matt Roche on 0412 197 218, or email [matt.roche@ASTCs.com.au](mailto:matt.roche@ASTCs.com.au).

## EDITOR'S NOTE

Australian Turfgrass Management Journal, which has carried numerous research updates from the Redlands facility since its inception, wishes to sincerely thank the turf research team and its members for their contribution to turf industry research during the facility's operation. A list of articles attributed to Redlands which appeared in ATM from Volume 11 onwards can be viewed at [www.agcsa.com.au/atm\\_journal/research](http://www.agcsa.com.au/atm_journal/research). The AGCSA website also contains final reports and updates on the work undertaken at Redlands and these can be viewed at [www.agcsa.com.au/agcsatech/research](http://www.agcsa.com.au/agcsatech/research). 🙌



**The traffic tolerance of warm-season turfgrasses under community sportsfield conditions was one of 19 HAL projects the Redlands team undertook during its operation**

**TABLE 1: HAL PROJECTS UNDERTAKEN AT REDLANDS RESEARCH STATION**

Project Code	Description	Period
TU00001	Water use studies and implications for management of subtropical C <sub>4</sub> turfgrasses in dryland and irrigated urban open space	2000-2003
TU00011	Chemical phytotoxicity testing facility for warm-season turfgrasses	2001-2004
TU02005	Amenity grasses for salt-affected parks in coastal Australia	2004-2006
TU02007	Best management practices for sustainable and safe playing surface of AFL league sports fields	2003-2007
TU04013	Adaptation and management of Australian buffalo grass cultivars for shade and water conservation	2005-2009
TU04006	Extension of chemical phytotoxicity testing facility for warm-season turfgrasses	2005-2006
TU05001	Management guideline for new warm-season grasses in Australia	2006-2009
TU06006	Establishment and maintenance of salt-tolerant amenity grasses to reduce urban salinity effect	2007-2010
TU06008	Extension of chemical phytotoxicity testing facility for warm-season turfgrasses	2007-2010
TU06019	Best use modelling for sustainable Australia sports field surfaces <sup>1</sup>	2007-2009
TU08018	Traffic tolerance of warm-season turfgrasses under community sportsfield conditions	2008-2012
TU08033	Optimising turf use to minimise soil erosion on construction sites <sup>2</sup>	2008-2009
TU08034	Quantifying surfactant interaction effects on soil moisture and turf quality	2008-2009
TU09033	Status assessment of water use research in turf growth and maintenance	2010
TU09039	Developing new innovative technology for benchmarking turfgrass performance <sup>1</sup>	2010-2011
TU09001	Adaptation of warm-season turfgrasses for the tropics	2010-2012
TU09002	Improvement and maintenance of turf demonstration plots for national research and extension	2008-2012
TU10015	Ryegrass transitioning in couch turf <sup>1</sup>	2010-2012
TU10025	Erosion control – Turf research and development facility	2011-2012

NB: <sup>1</sup> Lead agency Sports Turf Institute (STI); <sup>2</sup> Lead agency Landloch Pty Ltd

The picturesque Mt Gambier Golf Club is the largest membership club in the region, boasting bentgrass/*Poa annua* greens maintained at 3mm. Pictured is the 14th



# Mount Gambier Golf Club SA

Nestled in the southeast corner of South Australia, Mount Gambier Golf Club has been home to course superintendent Craig Gillin for the past couple of years. Here he gives ATM an insight into maintaining the town's picturesque and much-admired golf course.

**Superintendent:** Craig Gillin.

**Nickname:** Gill.

**Age:** 39.

**Years as a superintendent:** 2.5 years.

**Association involvement:** AGCSA and SAGCSA

**Qualifications:** Certificate III Turf Management (NMIT Parkville).

**Turf management career:** Warrnambool Golf Club (apprentice, 1999-2002 and 2IC, 2002-2005); Warrnambool Lawn Tennis Club (2006-2009); Allan Border Field, Brisbane (2009-2010); Mount Gambier Golf Club (superintendent, 2010-present).

**Where in Australia is Mount Gambier?** Mount Gambier is located 450km southeast of Adelaide, just 17 kilometres from the South Australia-Victoria border. It is known for its limestone and volcanic features including the famous Blue Lake.

**Tell us a bit about your background in turf management and how you came to be at Mt Gambier GC.** I grew up in a golfing family and as long as I can recall I had a golf club in my hand, so I think I had a natural calling to get involved in the golf industry somewhere. My earliest stints involved working at a public course in Warrnambool during school holidays and summer time. I got a bit of a break in 1998 when I got asked to do some casual

work at Warrnambool Golf Club and the following year I was offered a mature age apprenticeship. I progressed through the ranks and was offered the 2IC position in the last year of my apprenticeship. I stayed on there until 2005.

After a brief time out of the turf industry, I got the opportunity to work with my former WGC superintendent Ross Corbett at the Warrnambool Lawn Tennis Club which, I would have to say, has some of the best lawn courts outside of any metropolitan city. In 2009 I took on a position as field maintenance officer at Allan Border Oval working for Queensland Cricket. It was a great opportunity to be able to work with and around cricketers at the highest level. While I was there we had the West Indies touring side and Pakistan A playing Australia A and Queensland. In 2010 I was appointed course superintendent at Mt Gambier GC.

**Give us an overview of Mt Gambier GC and some of its unique characteristics?** The club has had three alterations to its design and layout since inception in the 1950s. In 1977, the course underwent a major reconstruction. The course uses elevation and undulation on every hole. No holes are

flat, nor are they straight. The greens are generous in size and roll very true. As with the rest of the terrain, there are no flat greens. If you get on the wrong side of the hole the ball just slides on by. The course is extremely well bunkered with 50 in total.

One of the most popular holes is the par three 8th. The view from this highly elevated tee is spectacular. The hole plays very differently depending on the wind direction. Its only 155m but the distance is really irrelevant some days. Pick a club and hit it low is usually what is required hitting into a predominantly southern breeze. This is one of the most exposed parts of the course.

#### **What are some of the unique features about Mt Gambier from a turf management perspective?**

Limestone has a major part to play with the course. The free draining profile makes irrigation very hard to keep up with. The worst part of the course is the irrigation system. Everything we do with water has a manual component to it – there is no 'set and forget'! All greens irrigation that is running is watched until they come up and are working adequately.

We are constantly fighting a battle with limestone/rock/sand in the bore water. Flushing sprinklers is a ritual that never seems to end during the watering period. A filtration system that was fitted assisted with screening the water, but the pressure drop was so significant it could not be used.

#### **How have you fine-tuned your turf management operations during your time as superintendent?**

There are a number of tasks that we have fine-tuned in the last two years. Things like the mowing of fairways straight up and down as opposed to angle mowing. This in itself can reduce mowing times by 3-4 hours and saves on fuel. Irrigating in the early morning and not in the evening has greatly decreased disease pressures during summer. Reducing *Poa* numbers and increasing the bentgrass with the use of ethephon and trinexapac-ethyl applications. Rolling and not cutting all the time can save on the wear on mowing heads also.

**Any special environmental considerations that you have to incorporate into the management of the course?** The past two years has seen the club sell off a parcel of land for housing development. Within the next year homes will be built and families will have moved in. For so long the club has been in an isolated area away from the general community. In the future everything that we do will be under the close attention of neighbours living on the golf course fringe.

Practices that we have been able to do in the past may have to change. Things like the early morning use of machinery or spraying of pesticides which hasn't been any issue in the past could now well be. I know there are a lot of clubs who do this on a daily basis and think nothing of it, but for the MGGC it's going to be a steep learning curve. As a



superintendent I can only prepare the club for so much, but I know as time goes on there are going to be some issues.

#### **What are some of the major challenges facing Mt Gambier GC both on and off the course?**

I think like many we are being hit with financial issues. The 500 memberships don't come close to covering the cost of running the course. We've had to lose a member of course staff this year just to try and free up dollars to put back into the course. It's a tough situation to be in because on one hand you want the financial help in the budget, but then the course starts to suffer because of the lack of manpower.

You become more practical about what has to be done and can be achieved in the day-to-day running of the course. Much of the finessing is cut out and the basics are implemented. It's unfortunate because that then comes back at you as we are the ones answerable to the members. Many don't understand what constraints we have on us and probably nor do they care. I wouldn't say this was only unique to us though.

#### **Outline any major course improvement works completed in recent times or coming up.**

There have been two major improvements in the last couple of years. The first has seen the ongoing removal of pine/cypress trees from various parts of the course with 25 removed to date. The playing surfaces which were being affected have greatly improved. As a club we are fortunate to have members who are involved in the timber industry so we were able to get access to the machinery required to drop and clean up these monster pines.

**The Mt Gambier crew (from left) Tod Lillicrap, Craig Gillin (superintendent) and Alan Goldspink**



**In November 2012 the remaining eight Mt Gambier fairways were converted across to Santa ana. Pictured is the uphill 15th**

**The Mt Gambier greens are vertidraind spring and autumn using half inch solid tines. Pictured is the 16th green**



## Mt Gambier's popular par three 8th



Another improvement has been the total conversion of fairways to Santa ana couchgrass. Some years back the club converted six fairways and in November of 2010 we row planted the remaining eight fairways (5ha). The club wanted the fairways playable through this so we went with the conversion method into the existing cool-season grasses. That summer saw cooler than average weather and wet periods and thus slow growth. Last year was marginally better but we didn't get the heat to get a full coverage. So far this year we have seen a dramatic improvement with coverage reaching 90-95 per cent. It's been a slow process but one of the great upshots is the dramatic reduction in irrigation times.

With the impending housing development, a number of holes are to be reconfigured. Some bunkers and trees are to be taken out and some to be added to take the line of play away from adjoining properties. Drainage ponds are also being constructed in various collection areas around the course. A lot of this work is being completed by the property developers but not all unfortunately.

**The one product I couldn't manage my course without is...** wetting agent, especially in summer.

With a small staff we don't always have the manpower to be out hand-watering. A good wetting agent can get us through and usually buy us some time until we can get there.

**What are some pros and cons of being a regional superintendent?** There are many pros and the biggest one is being able to work in a relaxed environment. You can't beat the country lifestyle. The lower cost of living is also a good upside with housing more affordable. You probably tend to get more involved within the club. There aren't too many downsides really, although staff sizes and course budgets of our city counterparts would help.

**Are expectations of course presentation and conditioning any less than that placed on your metropolitan counterparts?** My expectations of the course are probably fairly high. For me it wouldn't matter if I was in the country or not, I expect to produce the best we can for what we have and I think we do alright for where we are.

**Do you have to be more resourceful as a regional-based superintendent?** Without doubt. Anytime we have a breakdown or a broken part we try to repair it ourselves. If we can find parts locally that are the same or similar to the manufacturer we will use them. Our welder has seen us get operational on quite a few occasions. I don't know if we are bush mechanics, but sometimes you'll give anything a go to get it working again. None of us are trained mechanics, but after working in this industry for a number of years we've dabbled in many different areas of expertise.

**How important are the relationships you have with other nearby country course supers/trade reps?** In our area we are the biggest membership club. We are surrounded by a lot of smaller clubs who use volunteers or employ people on a limited hour basis. A number of these turf managers are not trade qualified and are doing the best they can to keep the golf courses operational. We have a number of them or someone on their course committees approach us for ideas to any problems that they are having. I am only too happy to help give them the information they need or to give them the contacts that can steer them in the right direction.

I have been working closely with Adam Bell at Independent Turf Sales with his knowledge and resources he has on hand. In my time here we have definitely tightened up and got smarter with our chemical and fertiliser usage. I would also like to mention Ross Corbett at Warrnambool Lawn Tennis Club who I have had as a mentor and a good sounding board to discuss many issues.

**Given your distance from the major metro areas, how do you make sure you keep abreast of the latest turf management techniques and methods?**

**Mt Gambier is well-regarded for its undulating and interesting layout. Pictured is the 11th**



The most obvious is the Internet. There aren't too many problems which you can't research on the net. I like to read all trade issued magazines cover to cover when I receive them. I also get a great deal out of the AGCSA conferences. You think you know your stuff but each year something new appears. It is good to try different things to get better results. Sometimes you have got to get out of your comfort zone and give it a go.

#### What are some of the more unusual requests you have had as a regional course superintendent?

The members must think superintendent stands for snake handler. There have been a few requests for relocation services. Let them go on their way is generally my response.

**What have you got in your shed?** It's a little bit red: Toro 3400 TriFlex greens mower, 2 x Toro 3150 greens mowers (used for surrounds and grooming heads), Toro 7000D fairway mower, Toro 6700 fairway mower, 2 x 328 Toro roughcutters, Toro SandPro bunker rake, Toro Workman 200I sprayer, Smooth Roll greens roller, John Deere frontend loader, Toro topdresser, Toro MDE, MDX and 2110 Workmans, David Brown tractor.

**Which piece of machinery gets trashed the most and why? What's on the wish list?** Our roughcutters get trashed the most. We have volunteers who come in and give us a hand, so sometimes this is fraught with danger – for the roughcutters anyway! We are hoping to purchase a ProCore next. Being in our location, we are about two hours away from the nearest contractor and it would enable us to tackle other problem areas that we can't do now because of the cost involved.

#### Any interesting pieces of machinery/equipment?

We have a tipper trailer that has carted a great number of loads in its day. We've replaced the



frame, hydraulics, tray and tyres, so pretty much everything! For what we use it for, the old girl just keeps on keeping on.

#### Do you think regional/country superintendents have a better work-life balance than their metro counterparts?

In general I would say yes but it comes down to the individual's commitment to the job. When you sign on to be a superintendent you know it's not a 9-5 job by any means. You just know if you start cutting corners it will come back to bite you. I find it hard to switch off when I'm not there. There are so many variables that can occur on any given day which can interfere with your work-life balance.

#### Most pleasing/rewarding moment during your time at Mt Gambier?

It's always good to get some positive feedback about the condition of the course, whether it's from a member or a visitor. The one thing about being a superintendent is that you are never satisfied; there is so much more that can be done to get better. 🌱

**In coming years the land around the Mt Gambier course will be redeveloped for housing, meaning a number of holes will be altered**

## AT A GLANCE – MOUNT GAMBIER GOLF CLUB

**Course specs:** 18 holes, 6012m.

**Greens:** One hectare in area, bentgrass/Poa mix (3mm HoC).

**Tees/Surrounds:** 1.5ha in area, combination of Santa ana couchgrass and cool-season varieties (10mm HoC).

**Fairways:** 10ha in area, Santa ana couchgrass (10mm HoC).

**Roughs:** First cut at 25mm, secondary cut 50mm.

**Members:** 500.

**Annual rounds:** 18,000.

**Major tournaments:** Spring tournament held in October and Win TV Breast Cancer Charity Day.

**Annual course budget:** \$270,000 (incl. wages).

**Staff structure:** Craig Gillin (superintendent), Alan Goldspink (assistant superintendent) and Tod Lillicrap (mature age apprentice).

**Climate:** Temperatures in the summer average between 26-35°C with highs of 40+°C. In winter we can get down to single figures and usually peak at about 15°C.

**Soil type:** Sandy loam.

**Water sources:** Club operates on bore water (88ML annual licence)

with three bores around the course. With all the fairways recently converted to couch, we are able to cope much better.

**Irrigation system:** We have a labour-intensive manual system. Greens and tees have Toro 835 sprinklers which are all keyed on and off manually. Fairways have a main line up the middle and we use a Toro Typhoon impact sprinkler, which we manually plug into each QCV.

**Renovations:** In spring and autumn we vertidrain greens to a depth of 8-10 inches with a ½" solid tines, amendments added and topdressed. Monthly grooming from September to April. Dusting is carried out at various times throughout the year where time permits. Tees are solid tined 6-8 inches with a ¾" tines and topdressed in spring.

**Major disease pressures:** Winter fusarium is prevalent during the cooler months. The daytime temperatures usually don't climb out of the mid-teens for about 3-4 months. In the depths of winter we go days with minimal sunlight and moist greens. Aside from fungicides, we use wetting agents to combat heavy dews or occasional frosts. Dew brooming or drag matting greens instead of cutting has given us good results also.



The usual time taken at TAFE to receive an AQF3 chemical license for new students is between 16 to 20 hours. Some private RTOs are fast-tracking this important component, raising serious concerns about the quality of training being provided to the industry

# Setting the standard

This edition sees the start of a regular series of articles by the National Turf Education Working Group on issues facing the delivery of turf management education in Australia. Former NSW TAFE teacher Frank Dempsey kicks things off by looking at concerns over the inadequate level of chemical training provided by some private RTOs.

In early December 2012, turf management teachers from around Australia converged on Albury for the annual National Turf Education Validation Meeting. This meeting, which has been held for the past eight years, sees teachers from all TAFEs offering turf management in Australia join with industry representatives from sportsfield, golf and bowling for two days of talks, presentations and meetings, as well as validating the delivery of the apprenticeship to ensure consistency across all states.

Through the efforts of the National Turf Education Working Group (NTEWG), many positive changes have been made to the turf training package in recent times, with the past year seeing the roll out of the new Certificate in Sports Turf Management. The NTEWG, which comprises representatives from across the turf education sector and key turf industry bodies, strives to ensure that those hoping for a career in turf management have access to the best training methods and materials possible.

The past year, however, has also seen significant challenges thrown the way of the TAFE system. Extensive funding cuts announced by various state governments threaten to undermine the quality of education that TAFE institutions provide, while at the same time millions of dollars are being pumped into private registered training organisations (RTOs).

The NTEWG is concerned about these developments and the potential they have to impact the quality of education provided to apprentices coming through the system. With this in mind, in this and coming editions of Australian Turfgrass Management Journal, the NTEWG will highlight

particular areas of concern and how it is vital that the industry continues to support those TAFE institutions that educate apprentices to industry developed minimum standards.

## CHEMICAL TRAINING

One of the most topical issues discussed at the recent validation meeting was the growing concern among superintendent and sports turf associations across Australia that chemical training qualifications are being devalued. The NTEWG's concern is that despite the substantial efforts made to improve standards of chemical handling and application training over the past decade, this could be undermined and the industry dragged back down to the low level that was present around the time of the Warringah Golf Club disaster in 2001.

The problem with the current chemical training environment is that some private RTOs are now offering cheaper AQF3 chemical licensing training (the minimum standard for the Australian sports turf industry) delivered in a very short timeframe.

This approach is acceptable in an open and competitive education market, provided the training meets the national sports turf minimum standards. Unfortunately, this is not always the case with training varying from between eight and 12 hours. In one reported case all the training and assessments were completed in only four hours.

The usual time taken at TAFE to receive the AQF3 chemical license for new students is between 16 to 20 hours and is delivered and assessed by experienced trainers. Refresher courses to maintain a license should be taken over eight hours.

Some superintendents and curators might be attracted to the idea of having students 'off the tools' for a shorter period of time and facility managers may like the financial incentives being offered by private providers for the fast-tracking of chemical training, but ask yourself this – would the EPA or WorkCover have the same fast-track mentality were they to come and conduct a random check at your facility? I think not.

## SETTING NATIONAL SPORTS TURF INDUSTRY STANDARDS

The NTEWG has been consistently working since 2003 to set minimum levels of assessments for the Australian turf industry. Every unit taught in the greenkeeping trade course (currently Certificate III in Sports Turf Management) has minimum standards of assessment set by industry. This includes all of the chemical units which make up the AQF3 chemical licensing course (required for all powered spray equipment). All students must be competent in these assessments before they achieve a license.

These minimum standards of assessment for sports turf chemical training can be found in the Certificate III Delivery and Assessment Guides available on the AGCSA website [www.agcsa.com.au/education](http://www.agcsa.com.au/education). These guides list the minimum standard all new trainees need to have reached to be deemed competent in the units 'Prepare and Apply Chemicals' and 'Transport, Handle and Store Chemicals' which cover the AQF3 chemical license.

## THE EPA

At the December 2012 validation meeting, Martin Bowles from the NSW EPA addressed the gathering about the organisation's current investigations into breaches of chemical compliance by the sports turf industry in NSW. Some of the issues uncovered by the EPA included:

- Use of unregistered products without proper permits (e.g.: ethephon);
- Off label use without a permit (e.g.: atrazine);
- Not following label instructions leading to off-target harm;
- Gaps or inaccuracies in recordkeeping; and
- Training not always current.

Bowles commented that these points should be emphasised in the national sports turf chemical training and that the EPA too had concerns about some of the 'fast track' training being offered by private RTOs.

Remember, applying chemicals is to the sports turf industry what paving is to the landscape industry – it forms an integral part of our core trade skills. The last thing the industry needs is for governments to start banning chemical use because they believe our practitioners are simply not competent and can't be trusted. It is therefore important that the sports turf industry demand that the minimum industry training standards be met and if an RTO can't do this then go somewhere that can.



TAFEs which validate the current turf training package provide good quality chemical training that meets all levels of chemical licensing requirements of this country. The national sports turf industry is being professional and proactive in setting minimum standards of training and assessment across Australia and it is important that turf facilities and their managers demand these standards be met. 🌱

**Applying chemicals is to the sports turf industry what paving is to the landscaping industry - a core trade skill**

## AQF3 CHEMICAL LICENSING TRAINING SELF TEST

If you have completed the AQF3 Chemical Licensing Training in the past 12 months you should remember and be able to answer the following self test questions. These are only a part of the minimum level of assessments in chemical training for the sports turf industry (there are practical sessions that need to be completed as well), but see how you go...

### 1. Legislation

List three current legislation acts that govern you and your responsibilities in the use of chemicals and state who is responsible for enforcing these acts in your state. **Score: /3**

### 2. IPM

Name nine methods of pest control which could form part of an IPM programme. **Score: /9**

### 3. UN chemical standards

List four changes to chemical labels and MSDS's which form part of the 2011 WHS ACT and the global harmonisation system in Australia. **Score: /4**

### 4. PPE

Name three tasks as part of a risk assessment that you will need to carry out before you can select the correct PPE for any chemical application job. **Score: /3**

### 5. Calibration of equipment

- Name the steps in calibrating a hand held sprayer. **Score: /6**
- Discuss how you would go about carrying out the calibration of a new powered boom sprayer for the first time. **Score: /10**
- What are some options if the water output of the machine you are calibrating does not meet the water application rate listed in the label. **Score: /3**

### 6. Chemical spills

Discuss in order the six steps you would carry out for a chemical spill, if one occurred while you were spraying. **Score: /6**

### 7. Chemical storage areas

Name 12 requirements for good chemical storage areas. **Score: /12**

### 8. Poison schedules

List the four poison schedules for chemicals on sports turf. **Score: /4**

So how did you go? Your final score will be out of 60. If you scored 50 or more, well done. If you achieved less than 50 then you have not met the minimum standards in your training that apprentices and refresher students receive at a TAFE college before they can receive an AQF3 Chemical License.

## ST ANDREWS PRIVATE GOLF CLUB TAKES SHAPE



**Construction of the new St Andrews Private Golf Club is due to start in January 2013 with grassing expected early February**

Victoria's famed Mornington Peninsula is to become home to another golf course with construction set to start January 2013 on the new St Andrews Private Golf Club. The new exclusive members-only course is located in the prized Cups region and will reside adjacent to the Tom Doak-designed St Andrews Beach Golf Course which opened to much acclaim in 2006.

St Andrews Private Golf Club has been routed by Ross Perrett of Thomson-Perrett, designers of the nearby Moonah Links Open and Legends courses as well as The National's Ocean Course. Overseeing construction of the new course is experienced superintendent John Geary who up until early December 2012 was environmental agronomist with AGCSATech, a position he held for just over four years.

Construction of the new St Andrews Private course is due to kick off in January, although planning for the course has been in the pipeline for many months. Fairways were sprayed out in late November/early December with irrigation and machinery tenders locked in the week leading up to Christmas. The slab for the pump shed was poured before Christmas with the installation of the irrigation system, to be undertaken by Victorian based company A&M Watering, due to start in early January. The hope is to have water on the site by late January/early February and grassing starting shortly after. A projected opening date is late 2013/early 2014.

Features of the new course include revetted bunkers, three massive double green complexes, creeping bentgrass greens (variety still to be determined) and fescue surrounds. Although couchgrass fairways were initially in the turf specification, the option of having fescue fairways is being seriously considered but will be dependent on the availability of water.

"At this stage we are exploring the option of having fescue fairways instead of couch, but in order to do that we need to secure more water first," says Geary, the former superintendent at Frankston

Golf Club for 17 years between 1986 and 2004. "Having fescue fairways would give the course a real point of difference from others on the Mornington Peninsula and is in keeping with the vision of having St Andrews Private modelled on the Scottish links style courses."

The development of the new course will take care of some unfinished business for Geary who was the former construction and maintenance superintendent of St Andrews Beach Golf Club between 2004 and 2007. That chapter of his career ended on a sour note when owners Golf Club Properties collapsed, leaving staff and investors out of pocket.

Like the new St Andrews Private development, St Andrews Beach was to be an exclusive members-only course with a second public access course, also routed by Doak, in the very early stages of development when the company folded. After being closed for a period, the site was carved up and sold off with St Andrews Beach subsequently reopened as a public access course. It is currently maintained by Turnpoint.

The parcel of land on which the second course was to be built was purchased by Australian businessman Randal Shreeve, owner of Billboard Media. With a vision to establish a truly exclusive members-only golf club, Shreeve commissioned Ross Perrett to come up with the St Andrews Private Golf Club routing.

Having been intimately involved with the construction of the existing St Andrews Beach course, Geary was approached to oversee construction and grow-in of the new course with a view of continuing on as maintenance superintendent once the course opens.

"I am looking forward to playing my part in helping to shape one of the most natural golf course sites you would find anywhere in the world," says Geary. "It's hard not to be captivated by the natural beauty and ruggedness of the site and it is our intention to emphasise these characteristics to accentuate its links style qualities."

St Andrews Private Golf Club will have an exclusive membership limited to just 281. The number holds special significance as it is the score Peter Thomson shot to win the 1955 Open Championship held at St Andrews in Scotland, the second of his five eventual Open victories. Thomson believes the tract of land on which the new course will be built "is the best golf territory in Australia because of its natural undulation and sand base." "The area already has several outstanding courses and the new course at St Andrews Beach could be the best yet," Thomson says.

Australian Turfgrass Management will be tracking the development of the new St Andrews Private Golf Club in coming editions and will carry a series of articles as the course comes to life. 🌱

# Summer Standouts



Princess 77 is one of PGG Wrightson Turf's elite bermudagrass varieties. Bred by Dr. Arden Baltensperger from Seeds West Inc. it has outstanding drought tolerance, great divot recovery and a dark green colour. Its medium fine leaf texture makes it a great choice for sportsfields, golf courses and amenity situations.

*Application rate: 10 g/m<sup>2</sup> (100 kg/ha)*



Regal Staygreen™ kikuyu is a turf-type kikuyu that has a dark green colour and finer leaf texture than other kikuyu cultivars. Its branching habit and shorter internode length forms a much denser and finer turfgrass sward.

*Application rate: 8 g/m<sup>2</sup> (80 kg/ha)*

**For further information contact your PGG Wrightson Turf Representative  
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## JACOBSEN CLICKS ONTO A WINNER WITH TRUESET CUTTING UNITS



"The idea behind the TrueSet cutting unit is to give technicians more time to work on other equipment and projects," says Jacobsen product manager Lee Kristensen. "When the technician hears that click, he knows exactly how far the bedknife has moved and this takes the guesswork out of the adjustment, saving time when conducting their daily maintenance routines. We would advocate checking the air gap between the bedknife and reel with a feeler gauge and the cutting performance with a strip of paper before mowing."

Meanwhile, in other Jacobsen news, the company has recently been elevated to AGCSA Gold Partner status. Jacobsen, a long time supporter of the AGCSA, has been elevated from Silver status to Gold through its additional involvement at the 29th Australian Turfgrass Conference on the Sunshine Coast (23-28 June, 2013), which will see the company sponsor keynote speaker Dr Thom Nikolai.

"We are delighted to elevate our partnership with the AGCSA to Gold status as it demonstrates the commitment of Jacobsen to support the art of fine turf management in Australia, New Zealand and the Pacific Rim," says Jacobsen Asia Pacific managing director Alan Prickett. "The recent appointment of further distributors in Australia and Singapore demonstrates our commitment to the region and our continued support of AGCSA is integral to this."

"Jacobsen has always supported superintendents' associations around the globe, especially in the area of education, which dovetails perfectly with the commitment of the AGCSA to ongoing professional development. In 2013 we are sponsoring the renowned turfgrass academic specialist at Michigan State University, Thom Nikolai on a speaking tour of Australia and New Zealand, which will include dates at the Australian Turfgrass Conference at Twin Waters Resort in June."



**The new Jacobsen TrueSet cutting unit features bedknife-to-reel adjustment easily accessible from the front and top of the cutting unit**

Jacobsen has recently launched the TrueSet cutting unit, a new product that makes adjustments to Jacobsen mowers faster and easier. The bulk of the time savings provided by the new TrueSet cutting unit comes from an innovative bedknife-to-reel adjustment mechanism. Technicians can fine tune the TrueSet adjuster at two points with a gear that moves the bottom block 0.0254mm (0.001 inch) with an audible click.

Adjustments are made from the top and front of the TrueSet cutting unit with a 1/2" wrench, the same tool used for height-of-cut adjustment. This makes the new cutting unit more user-friendly and reduces the number of tools needed to make adjustments. Jacobsen's engineers have also ensured that the new unit maintains its holding power, which equates to 193kgs (425lbs) of force holding the bottom blade in place.

Careful not to tinker with any of the geometry, design or construction, the TrueSet cutting unit is available on Jacobsen's 12.5cm (5") diameter reel fitted to the Eclipse2 walk-behind greens mower (floating head), Greens King IV, GP400 and Eclipse 322 riding greens mowers, the LF550 and SLF-1880 fairway mowers.

## DESTINY NOW REGISTERED FOR CONTROL OF BAHIA GRASS

Bayer has announced that its turf herbicide Destiny (active ingredient 100g/kg Iodosulfuron) is now registered for the control of bahiagrass (*Paspalum notatum*). Bahiagrass has been a particular problem for turf managers in tropical areas with its rapid growth and seedhead production resulting in the need for regular mowing.

Destiny turf herbicide gradually transitions out bahiagrass and stops seedhead production while leaving species like couchgrass and kikuyu to provide the desired turf cover. The added advantage of Destiny is the control of a broad range of broadleaf weeds which will be achieved at the same time.

The best time to use Destiny for bahiagrass control is in a programme of three monthly applications over the summer period. This allows for gradual removal of the bahiagrass with less risk of large areas of bare soil being colonised by weeds.

In other company news, the Bayer Environment Science marketing team of John Hall and Lesley Pepperell have been recognised for their efforts after being named as national finalists in the 2012 Australian Marketing Institute's Awards for Marketing Excellence.

Hall and Pepperell submitted an entry for the launch of its new turf herbicide Tribute into the "New Brand, Product or Service Launch" category at this year's awards. Tribute was launched at the 27th Australian Turfgrass Conference in Adelaide with full



**Destiny is now registered for bahiagrass control**

page advertisements, trade magazine inserts, CDs, banner ads, trade show promotion and give-aways, Turf ID poster, e-book and iPhone app.

"We successfully launched Tribute at the 2011 trade show and within two days we had achieved 60 per cent of budget," says Hall.

## TWIN WATERS EXPO A SELL OUT

It might still be six months away, but the trade exhibition at the 29th Australian Turfgrass Conference (23-28 June, 2013) on the Sunshine Coast is a sell out. The exhibition, which will run for two days from 26-27 June 2013 sold out in late November with a total of 41 companies set to exhibit. A floorplan showing those companies which have booked can be view through the AGCSA website - [www.agcsa.com.au/conference/tradeshow](http://www.agcsa.com.au/conference/tradeshow).

For those trade companies that missed out, the AGCSA has set up a waiting list in the event that a company already booked pulls out, or additional exhibition space becomes available. **For further information about the exhibition contact the AGCSA on (03) 9548 8600.**

## THUMPER REGISTERED FOR NEMATODE CONTROL

Turf Culture has announced that Thumper (active ingredient 20g/l abamectin) has received an updated APVMA registration and is now registered for the control of both couch mite and nematodes

in turf. The updated registration was received on 8 November and its new name is Thumper Miticide & Nematicide.

The key difference from the old registration to the updated version is the newly added product label claims of 'For the control of nematodes in turf as specified in the Directions for Use'. Thumper is still registered for its previous use of controlling couch mite in couchgrass.

For nematode control, the label recommends a rate of 50mL/100m<sup>2</sup> with a repeat application required after 14 days. **For more information about Thumper Miticide & Nematicide visit [www.turfculture.com.au](http://www.turfculture.com.au)**

## INDUSTRY APPOINTMENTS



### HODDER TO MAKE A DINT WITH DINT

Dint Australia has appointed Will Hodder (pictured) as the company's new Victorian sales representative. Hodder joins the Dint team after serving as course superintendent of Tirhatuan Lakes Golf Course in Melbourne's south east suburbs. Hodder started his new role in November 2012 and can be contacted on 0424 957 729 or [will@dint.com.au](mailto:will@dint.com.au)



### PORTER HEADS BACK TO SCHOOL

Jim Porter (pictured) has been appointed by Holmesglen TAFE in Melbourne as head of its turf management department. The former Royal Melbourne Golf Club course superintendent has been working as a session teacher since the start of 2012 and replaces Brett Chivers who left in late 2012. Porter can be contacted on 0418 587 916 or email [jim.porter@holmesglen.edu.au](mailto:jim.porter@holmesglen.edu.au)

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The aim of Turf Australia's R&D Strategic Investment Plan is to drive growth and sustainability of the Australian turf industry



# Building the industry's future

Turf Australia business  
and industry development  
manager Richard Stephens  
provides an update on  
Turf Australia's recent and  
upcoming activities.



[www.turfaustralia.com.au](http://www.turfaustralia.com.au)

In conjunction with Horticulture Australia Limited, Turf Australia (TA) and the Industry Advisory Committee (IAC) have developed a Research & Development (R&D) Strategic Investment Plan for the Turf Industry 2012 – 2017.

"The aim of the plan is to drive growth and sustainability of the Australian turf industry," says IAC chairman Barry Underhill. "It will build on the achievements of the first six years of the Turf Levy programme and ensure investment decisions are based on high priority research, development and extension needs."

The key strategies contained in the plan include:

- Grower business capability – to raise production sector profitability through improved business practices and benchmarking;

- Communications and extension – ensuring positive perception of turf and the turf industries as well as the adoption of R&D outcomes;
- Environmental sustainability – demonstrating the environmental benefits of turf;
- Market knowledge and market development – gathering data on, quantifying and prioritising current and potential market opportunities;
- Industry capacity, resources and data – supporting the industry through good leadership, adequate resourcing and the collection and use of essential data; and
- Biosecurity – building the capacity to respond to turf biosecurity issues as they arise.

A key characteristic of the plan includes recognition of the need to work closely with the turf maintenance sector as well as the nursery and garden industry.

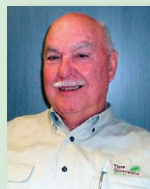
## UPCOMING EVENTS

Targeting young turf producers, Turf Australia is hosting a Next Generation Forum and Workshop from 20-22 January 2013 at Cedar Creek Lodges, Tamborine Mountain in Queensland. The forum is aimed at producers or employees of turf business, who are 35 years or under, and want to gain industry knowledge, develop networks and/or gain leadership skills.

The 2013 programme covers setting business objectives, planning for business growth, marketing and profitability. Speakers will include Suzie Shearer (Coolabah Turf), Lynn Davidson (Jimboomba Turf), Greg Lindore (Allenvue Turf), Gavin Rogers (Sir Walter), Hugo Struss (Tinamba Turf), John Keleher (Australian Lawn Concepts) and Shane Holborn (BioScience Australia).

Turf Australia's 2013 annual conference is also back on and will be held from 1-3 May 2013 at the Mantra Legends Hotel, Surfers Paradise. For further information about the Next Gen Forum and annual conference, contact Christine Hughes on 0402 500 616 or email [admin@turfaustralia.co.au](mailto:admin@turfaustralia.co.au). 🌱

## STRONG FINISH TO 2012 FOR TURF QUEENSLAND



As we review 2012, Turf Queensland is happy with the results achieved for its members over the year and finished strongly through December with sustainability and ongoing viability remaining a critical factor across our industry.

The Turf Queensland board continues to promote productivity improvements and efficiencies on farms, in particular the areas of water, energy, fertiliser and fuel cost and usage. A 12-month project of investigation is nearing completion with some exceptional benchmarking being undertaken with small, medium and large turf farms providing hard

evidence of productivity benefits that can be available to our turf producers. The project is due to be completed in February at which time these benchmarks will be passed on to member companies.

This continues on the back of the Turf Cost Calculator economic module developed in 2012 that the turf farmer can utilise to ensure he understands his costs and appropriate selling prices. Supporting this is the Turf Accreditation Program (TAP) that ensures Turf Queensland member companies operate under a third-party audited accreditation process and are operating at the cutting edge of innovation and development across the industry.

A three-month investigation was undertaken mid-2012 into automation and equipment that could be utilised on the farm, basing the information on global prototype equipment and GPS programmes utilised in the mining and broadacre cropping areas. Fertigation and chemigation processes by centre pivot and lateral irrigation machinery has also been investigated and promoted to the turf industry as productivity improvements.

We look forward to a productive 2013 and on behalf of the Turf Queensland board wish everyone a happy and safe festive season.



**JIM VAUGHAN**  
CEO, TURF QLD

# HIS MOMENT OUR MACHINES

In any sport, there are key moments that create legendary status; great reputations are forged at such times. Take the Jacobsen Eclipse 322, bristling with innovative features; it's designed to overcome all challenges. That's why Arnold Palmer specifies Jacobsen for his golf courses.



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New Zealand  
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**JACOBSEN**

GCSAQ 

Just some of the more than 60 signs that adorned the tees and fairways at Palmer Coolum Resort during the recent 2012 Australian PGA Championships



a major effort from staff, volunteers and contractors to clean up. To Ben and his staff's credit the players were blissfully unaware such an event took place.

In early December I was privileged to play in the Pro-Am at the Australian PGA Championships at Palmer Coolum Resort. While the PGA had its issues with resort management in the lead-up to the tournament (such as the 60 signs spray-painted on tees and fairways without their knowledge), the obstacles overcome by host superintendent **Dean Henderson** and his staff to present the course were numerous and the result was nothing short of outstanding. The greens, in particular, were rolling beautifully which when you consider that Dean was under instruction to only mow every second day until two weeks out from the tournament, makes it an even more impressive result.

In previous years preparations for the PGA started a full two months out, however, with changes to the way the course is operated under the resort's new management, Dean had to condense preparations into a significantly shorter period of time. Major preparations only began two weeks out, while walk-mowing greens began just the week of the tournament. And he had to do all of this with five less staff.

The first major event on the GCSAQ's 2013 calendar will be Tuesday 5 March when golf industry representatives from across the state gather for the Queensland Golf Industry Awards night. Nominations are currently open for the GCSAQ's Apprentice of the Year, Superintendent Achievement Award and Superintendent Environmental Award. Please contact **Peter Lonergan** with any nominations or questions about the night.

And finally, it was on a sad note that we finished 2012 with the passing of esteemed life member **Les Austin**. Les, who was 81, worked at Redcliffe Golf Club for 22 years starting out as course mechanic and finishing up in the big chair as course superintendent. Les spent many years on the committee of the GCSAQ and always maintained a cool head and regularly offered sage advice to his younger fellow members when they encountered troubles at their club.

In retirement Les was always first on the list for our annual bus trip and enjoyed the camaraderie of the current crop of Queensland supers who also had a great deal of respect for him. On behalf of all the members of the GCSAQ, I convey our condolences to Joyce on the loss of our great mate. His legacy at Redcliffe Golf Club will endure for many years. Vale Les.

**PETER LONERGAN**  
PRESIDENT, GCSAQ

## ON THE MOVE

**John Geary:** From environmental agronomist AGCSA to construction superintendent St Andrews Private Golf Club, VIC

**Steve Mallyon:** From assistant superintendent Roseville Golf Club, NSW to assistant superintendent The Lakes Golf Club, NSW.

**David Scaife:** Resigned as superintendent at Bonnie Doon Golf Club, NSW in early December 2012.

**Matt Shuttleworth:** From assistant superintendent Leeton Soldiers Club, NSW to superintendent West Wyalong Sports Club, NSW

**Brad Sim:** From assistant superintendent The Australian Golf Club, NSW to superintendent Cape Kidnappers, NZ.

**Dave Smith:** From 3IC to assistant superintendent The Australian Golf Club, NSW



As I write this the heat of summer has well and truly arrived and the words on everyone's lips are 'When is it going to rain?' At the start of December I had been irrigating nightly for all but 11 nights since 1 August and needless of say am dreading the power bill. Thankfully, we are lucky to have a reasonably good and cheap source of effluent water that is able to keep the course going.

Most areas of Queensland reported an exceptionally dry spring which was particularly good for GCSAQ committee man **Brendan Clark** who has been busy building a new 1st and 10th tee, a new putting green as well as some buggy paths at Cairns Golf Club. Elsewhere in far north Queensland, Mossman and Atherton golf clubs have both employed new course superintendents recently, Mareeba Golf Club has installed some new irrigation cable, while **Malcolm 'Oilly' Ollard** has just finished building a spare hole at Paradise Palms.

Further south, Indooroopilly Golf Club hosted the 72-hole Queensland Junior Open which returned to the course after being washed out by the 2011 Brisbane River flood. Superintendent **Charlie Giffard** has vivid recollections of the event being called off during the second round on Tuesday 12 January:

"I remember like it was yesterday! As we stood on the 5th green I remember looking over to the river as it swirled by and it was by then (about 7am) just breaching the banks on the 3rd hole! I turned to the bloke who was organising the event and mildly suggested they might need to look at holding off the start for the day as I thought we might have been in for a bit of inundation on that part of the course. Little did I realise at the time how much 'inundation' was going to occur!"

Late November 2012 saw some fairly savage storms hit the south east corner of Queensland and I was actually in Noosa on Sunday 18 November and didn't really want to drive home given the look of the radar. Unfortunately for 2012 AGCSA Excellence in Golf Course Management winner **Ben Tilley**, a lot of his excellent course prep work for the Sunshine Coast Ladies Open to be held the following week was washed away by a virtual mini cyclone that took

2012 finished on a high for the SAGCSA with the association handing out three awards at the annual SA Golf Industry Awards Night held at the Adelaide Oval. Long-serving Murray Bridge Golf Club course superintendent **Mal Grundy** was bestowed the SAGCSA Distinguished Service Award sponsored by Metropolitan Machinery, while **Richard James** (The Grange) and **Ryan Smooker** (North Adelaide Golf Links) were also honoured.

Grundy was recognised for a turf management career which has spanned more than 30 years. He joined Murray Bridge not long after leaving school and rose to be 2IC under Bob Vogt during which time he completed his Cert III and IV as a mature age student. For the past 17 years Mal has been course superintendent, during which time he also played a key role on the SAGCSA committee.

James received the Globe-sponsored SAGCSA Excellence in Golf Course Management Award for the impressive works recently undertaken to redevelop the club's East Course, while Smooker won the SAGCSA Graduate of the Year Award sponsored by Toro.

The final SAGCSA event for 2012 was an education day at Westward Ho Golf Club which resides at the Adelaide Shores complex. The day included presentations from a number of our trade suppliers with a great presentation from **Craig Molloy** (superintendent at Shortland Waters Golf Club and president of the NSWGCSA) on chemical use and the NSW pilot programme. After lunch we had several machinery demonstrations to finish off the day. Many thanks to host superintendent **Tim Warren** for his help organising the day.

Looking forward to 2013, we have meetings planned for Barossa Valley Golf Club, Flagstaff Hill Golf Club, a Riverland bus trip, AGM and looking at growing our education day. On behalf of the SAGCSA I would like to wish all in the turf industry the best for the New Year and thank committee members **Richard James**, **Chad Dawe** and **Stephen Chapman** for all their work during 2012.

**BARRY BRYANT**  
PRESIDENT, SAGCSA



**SAGCSA Distinguished Service Award recipient Mal Grundy**



**The Grange superintendent Richard James received the SAGCSA Excellence in Golf Course Management Award**



**SAGCSA Graduate of the Year recipient Ryan Smooker. Photos: Golf SA**

After an extremely wet winter for the southern part of the state, the rainfall has dried up with minimal falls in spring and the early part of summer – how nature makes us adjust!

The final VGCSA meeting for 2012 was a cocktail party held at Victoria Golf Club (host superintendent Ian Todd) sponsored by **Ted Boltong** from Active Safety. During the evening it was a pleasure to announce the winners of our annual awards. **Adam Robertson**, course superintendent at Kew Golf Club, won the VGCSA Superintendent Recognition Award, while **Jim Waring** from Tees and Greens Irrigation Services collected the VGCSA Trade Recognition Award.

Since completing his apprenticeship at Pambula-Merimbula Golf Club, NSW in 1984, Adam has resided in Melbourne ever since. Adam accepted a role at Ringwood Public Golf Course as assistant and was later promoted to superintendent. Adam has spent the last 15 years as superintendent at Kew and is now overseeing some of the most significant changes to the course during his time there. Adam has successfully completed the Associate Diploma in Turf Management and held numerous positions on varying organisations in the turf industry, including three years on the VGCSA committee.

Jim Waring started his career as an apprentice at the age of 16 at Yarra Bend Golf Course and in six years was promoted to the role of superintendent. During this time Yarra Bend

Golf Course was considered one of the best conditioned public courses in Melbourne. Jim took an interest in irrigation and subsequently in 1997 started his own business as an irrigation specialist. Jim has been a member of the VGCSA for over 22 years.

The VGCSA committee has finalised meeting venues for 2013. As always we are very grateful to those clubs for offering their facilities for our meetings. While exact dates are still to be determined, the following meeting venues have been confirmed for 2013:

**March:** Education Day (Green Acres GC)  
**May:** AGM (Kingston Heath GC)  
**June:** Country/2IC Meeting (Cobram Barooga GC)  
**August:** Education Day (Eastern GC)  
**October:** Bayer Golf Day (Huntingdale GC)

An additional meeting is scheduled for early 2013 which will be open to all Victorian golf clubs to attend. The meeting is aimed at highlighting and educating golf clubs in the correct use of chemicals. The meeting will be held in conjunction with the VGCSA, AGCSA, Golf Management Victoria and Golf Victoria.

As a new year begins, it is rewarding to look back on 2012 as a positive year for the VGCSA and we are again very thankful to those generous companies who are continuing their sponsorship of the association in 2013.

**STEVEN HEWITT**  
PRESIDENT, VGCSA

## STA NSW



Frank Dempsey recently received life membership of the STA NSW

A happy New Year to everyone! The STA NSW concluded 2012 with a luncheon in honour of Frank Dempsey and his retirement from full-time TAFE teaching. Frank was bestowed with STA NSW Life Membership on the day and he was very grateful for the recognition.

No doubt 2013 will be another busy one for us all. At STA NSW we are taking a slightly different approach to our events and moving out of town a bit more this year. We will kick off proceedings with our annual golf day at Long Reef Golf Club (host superintendent **Peter Donkers**) at Collaroy on Monday 25 February. This day is always a great way to catch up with other members, so dust off the clubs and book in now.

Other events we will conduct during the year will include a chemical use workshop on Tuesday 19 March that will address the current issues facing the industry. We will also head out to Mudjee for a seminar on 13 May which will be held in conjunction with the Blue Mountains and Western Districts Golf Day on 14 May.

To ensure that our members are given every opportunity to get up to date industry information, we will also produce more publications this year and we have also recently upgraded our website. I hope everyone has a great 2013.

**CHRIS CHAPMAN**  
PRESIDENT, STA NSW

## TGCSA



A happy New Year to all in the turf industry around Australia and I hope everyone had a great Christmas and were able to get a few days off to spend with their families.

The TGCSA held its Christmas break-up day at Mowbray Golf Club on 11 December. The weather was sensational as always in the north of the state for the annual Pellows North v South Cup. Well done to **Andrew Currie** (Seabrook Golf Club) from the North who won the individual stableford with 21 points for nine holes and runner up **Steven Lewis** (Royal Hobart Golf Club) on 20 points.

Remarkably, for the first time in the competition's history the North v South Cup was a draw, with the top four scores from both teams equalling 69 points. Luckily us northerners were the current holders of the cup and therefore retain the cup and bragging rights for another 12 months.

Earlier in the day, **Chris Williams** and **Clinton Shaw** gave presentations on Toro irrigation and finance. Thanks again to Pellows Saws and Mowers and Toro for sponsoring the day. The day finished with a BBQ lunch, presentations and a few refreshments back at the club. Thanks also to **Shane Knott** and the Mowbray Golf Club for hosting the event during this busy period.

The TGCSA's first day for 2013 will be on 19 February at Aurora Stadium in Launceston (host curator **Bryan Dunn**). The day will be sponsored by Globe and invitations will be out around the middle of January. Looking ahead, the TGCSA AGM and Seminar will be held at Scamander Golf Club 13-14 August 2013, so put it in your diary now.

**TONY SMITH**  
PRESIDENT, TGCSA

## STA VIC



On behalf of the STA VIC I hope everyone had a fantastic Christmas and New Year with their families and got a little bit of (but not too much) rest at the end of what was a busy 2012.

Going back slightly (it seems so long ago) STA VIC held its Summer Seminar at Packer Park in Carnegie. It was a fantastic day, as shown by the delegates who attended. Presentations were made by **Peter Warren** (Worksafe Victoria), **John Geary** (AGSCA), **Peter Anderson** (Sportsturf Consultants), **Lois Binnie** (Wyndham City Council) and **David Nickson** (Evergreen Turf). A big thanks to our sponsor on the day, **Mike Baker** from Country Club International. The talks covered

a wide range of issues from machine and personal safety, chemical safety and use through to construction and grass selection.

The STA committee continues to look at what we can best do for our members and the industry, so if you have any thoughts please contact a committee member or the office and pass on any feedback you might have. We will also update and improve our E-news so stay tuned for more information on this as we may do a story on you and your workplace. We also have the STA VIC desk pads coming out in late January and a huge thank you goes to all of our sponsors.

As we move into 2013, the next major event will be the Regional Seminar at Kilmore

Racing Club on 20 March. This should be an exciting day as we continue to take our seminars outside of Melbourne. July 2013 will see the return of our annual Sportsturf and Wicket Seminar and in November we will hold our Seminar and Trade Day. More information about the exact dates and venues for these two days will be forthcoming as soon as possible.

STA VIC looks forward to a productive 2013 and catching up with you at an event soon.

**NATHAN TOVEY**  
PRESIDENT, STA VIC



# PARTNER RECOGNITION PROGRAMME

Support those organisations who support your association

Thank you to all the partners who help the AGCSA provide members with the greatest programmes and services the industry has to offer.



## STA WA



Clockwise from top left: Jordan Beck, Lewis Dienelt, Greg Reimer and Dylan Bentley

On 27 November, the WA turf industry converged on the Scarborough Sportsmen's Club for the annual Turf Awards Night. The evening celebrated graduating turf students with those having completed their studies in 2012 being presented with their trade certificate.

A number of students were also singled out for special recognition awards. They were:

- **Lewis Dienelt (WACA):** CH Bailey & Sons Perpetual Shield for best WA Sports Turf Graduate, sponsored by Baileys Fertilisers;
- **Greg Reimer (Port Denison Bowling Club):** Murray James Memorial Award for the best bowling green apprentice, sponsored by WABGA;
- **Dylan Bentley (Geraldton Golf Club):** Bayer Award for best student in the Certificate of Turf Management, sponsored by Bayer; and
- **Jordan Beck (Melville Glades Golf Club):** Lecturers' Choice Award for best all-round student, sponsored by Lawn Doctor.

This event has now reached its 30 year anniversary since the time when **Jim Clements** was the inaugural recipient of the CH Bailey & Sons Shield in 1982. Unfortunately Jim could not be in attendance on the night. As many people know Jim went on to become a founding TAFE lecturer during the late 1980s and 1990s and taught many of today's leaders in the WA turf industry.

Possibly following Jim's example, the turf department at WA's Challenger Institute of Technology continues to harness the incredible depth of knowledge and talent from local turf managers and superintendents. These committed industry and trade based educators and trainers continually bridge the gap between turf's wider industry at large and these young students, bringing together new technology and approaches with experienced and respected practitioners. Celebratory nights such as this provide an ideal opportunity for industry leaders and the younger generation to come together in support and be damned proud of each other.

In my welcoming address to the gathering I focussed my thoughts on the history of the numerous family businesses generously supporting the WA turf industry and how those core family values, remembering where we all started and a conscious awareness of all that is yet to learn, in many ways explains the resolute strength of this industry. The WA turf industry is a vibrant, incredibly diverse and complex industry of dedicated amateur and professional people working together within and about an amazing product that is so unique.

So, to a new year and the new challenges it may bring! Bring it on, we're ready!

**TONY GUY**  
PRESIDENT, STA WA

## NSWGCSA



Winners from the NSWGCSA Rube Walkerden Trophy Day were (from left) Trevor Ridge, Michael Bradbery and Anthony Dinte

The NSWGCSA finished 2012 with its combined Rube Walkerden Trophy and Annual General Meeting held at an immaculately prepared Elanora Country Club (host superintendent **Dan Cook**) in mid-November.

At this meeting the association was delighted to bestow 2012 AGCSA Distinguished Service Award winner **John Odell** with life membership of the NSWGCSA. Odell, who earlier this year received the AGCSA's highest honour for his distinguished career, which included 24 years as superintendent at Royal Sydney Golf Club, was nominated for life membership by good friend **Martyn Black** (Castle Hill CC) with the vote passed unanimously by members. John joins the likes of **Peter McMaugh**, **Reg McLaren**, **Bill Hopkinson** and **Geoff Hatton** as NSWGCSA life members.

Also recognised on the day was Manly Golf Club superintendent **Michael Bradbery** who won the NSWGCSA Excellence in Turf Management Award for his work overseeing the massive Manly GC redevelopment. Anyone who saw Michael's presentation at this year's Australian Turfgrass Conference in Melbourne will attest that the award is well deserved and as a prize he wins a trip to the 2013 GCSAA conference in San Diego.

Michael added to his spoils by taking out the main honours in the Rube Walkerden Trophy. Sponsored by Maxwell and Kemp, Dad and Dave's Turf and Nuturf and contested by 75 NSWGCSA members, Bradbery posted 36 points to collect the Rube Walkerden Trophy from Roseville Golf Club counterpart Mark O'Sullivan. **Trevor Ridge's** 81 off the stick was enough to secure the President's Trophy on a countback from **Scott Fogg** (Queanbeyan Golf Club), while **Anthony Dinte** won the Peter Ingram Trophy for the trade with 27 points).

The NSWGCSA AGM, sponsored by Toro for the 12th consecutive year, saw just one change on the board with O'Sullivan stepping down after five years' service. He has been replaced by **Shane George** (Shellharbour Links).

Finally, the NSWGCSA would like to congratulate retiring NSW TAFE teacher **Frank Dempsey** on a magnificent career. Frank always strived to meet industry expectations in the training of our future sports turf managers and the NSWGCSA wishes him well in his retirement.

**CRAIG MOLLOY**  
PRESIDENT, NSWGCSA

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