





For more information contact your local Nuturf Territory Manager on 1800 631 008 or visit www.nuturf.com.au



I wish to apply for: One year's subscription to Australian Turfgrass Management

(Six editions per year)

PLEASE TICK BOX

ONE COPY PER EDITION

\$65.00

O/S ONE COPY PER EDITION

\$105.00

Prices include GST.











SUBSCRIBE NOW AGCSA

ORDERS CAN BE MADE SECURELY ONLINE THROUGH www.agcsa.com.au

Name:	
Company:	
Postal Address:	
Town/Suburb:	State: Postcode:
I enclose cheque for (a	amount):
Please charge my cred	lit card: 🔲 MasterCard
	☐ Visa
Card Number:	Expiry Date:/
Cardholder Name:	
Address:	
	Signature:
Funds have been	paid by electronic transfer to Westpac BSB 033 380 Acc 385360
Please send me n	nore information about becoming an AGCSA member
Forward to:	Australian Turfgrass Management Suite 1, Monash Corporate Centre, 752 Blackburn Road Clayton, VIC 3168
	FAX: (03) 9548 8622

Australian Turfgrass Management Journal published by:

Australian Golf Course Superintendents' Association ABN 96 053 205 888

Production:

Editorial/advertising: Brett Robinson Ph:(03) 9548 8600

brett@agcsa.com.au

Art Direction & Design: Jo Corne Ph: (03) 9548 8600 jo@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 Twitter: @AGCSA2

AGCSA Board

President: Brett Balloch **Directors:** Darren Wilson Peter Lonergan Stephen Lewis

Events and Education Manager

Simone Staples simone@agcsa.com.au

Membership Coordinator

Allison Jenkins admin@agcsa.com.au

Accounts

Philip Horsburgh philip@agcsa.com.au

AGCSATech

Andrew Peart andrew@agcsa.com.au

Bruce Macphee bruce@agcsa.com.au



Printed By

Southern Colour Pty Ltd 2 Southpark Close Keysborough Vic

Copyright © 2016
The AGCSA believes that material sourced and produced for Australian Turfgrass Management is accurate, but gives no warranty in relation thereto, and disclaims liability for all claims against the AGCSA, its subsidiary companies, its employees, agents or any other person which may arise from any person acting on the materials contained within. No portion, in whole or part, may be reproduced without the written permission of the AGCSA.

CONTENTS



COVER

Brisbane Golf Club: The 8th hole at Brisbane Golf Club. Photo: Brett Robinson, AGCSA



LEAD STORY: A Champion course

After a hiatus of 25 years, Brisbane Golf Club will return to the tournament spotlight when it plays host to the 2016 Isuzu Queensland Open in late October. Between 2013 and 2015 the club undertook a major greens reconstruction and resurfacing programme which has seen the installation of Champion ultradwarf hybrid couchgrass, becoming the first club in Australia to utilise the variety. ATM editor Brett Robinson catches up with Brisbane superintendent Mitch Hayes to look back at the project and his ongoing management practices with the Champion variety and also previews the Open which officially kicks off what is set to be a dramatic Australian summer of golf.

FEATURES



Ultradwarfs – The big considerations

With Arundel Hills in the midst of converting their bentgrass greens to TifEagle and Coolangatta & Tweed Heads about to do likewise, ultradwarf hybrid couchgrasses are quite the talking point in Queensland at present. USGA agronomist Todd Lowe looks at some of the management lessons learnt from the US where conversion to ultradwarfs has been ongoing for nearly two decades now. ATM also canvasses a number of Australian superintendents both here and abroad who have ultradwarf greens to see what does and doesn't work regarding their ongoing management



Baltusrol bound

2016 has been a ground-breaking year for up and coming Adelaide greenkeeper Kane Pedler. After being part of the crew that prepared The Grange Golf Club for the 2016 Women's Australian Open in February, six months later he was in the US helping to prepare the famed Baltusrol Lower Course for the 2016 US PGA Championship.

Highland fling

12

30

After volunteering at the 2012 and 2015 US Opens, Northern Golf Club superintendent Michael Pearce journeyed to the Gil Hanse-designed Castle Stuart in early July to assist with course preparations for the 2016 Scottish Open.



Class acts

ATM profiles 2016 AGCSA and STA Australia Graduate of the Year Award recipients William Koopmans and Kurt Dillon.



TIME FOR SOIL TESTING!

Let us provide you with a truly independent soil report



Ph. 03 9548 8600 Fax. 03 9548 8622 Email. andrew@agcsa.com.au bruce@agcsa.com.au

Suite 1, Monash Corporate Centre 752 Blackburn Road Clayton 3168 Vic

COLUMN

Grass-roots with John Neylan

ATM columnist John Neylan reports back on the 5th European Turfgrass Conference held in Portugal in June and also reflects on his visits to a number of war cemeteries along the Western Front in France and Belgium.



Also in this edition.

Foreword Thinking	4
AGCSATech Update	36
Projects - Indooroopilly Golf Club, Qld	48
Regional Profile –	
Howlong Golf Resort, NSW	50
Around the Trade	56
Association Reports	62
Up the last	72



Contributors to Australian Turfgrass Management Journal Volume 18.5 (September-October 2016)

Stuart Bothe (Vanderbilt CC, USA); Bazz Bryant (SAGCSA); Martin Burger (NZGCSA); Brent Condon (North Lakes Golf Resort); Lincoln Coombes (RACV Royal Pines Resort); Kurt Dillon (Green Options); Danny Edmunds (STA Victoria); Peter Fraser (Hervey Bay G&CC); Charlie Giffard (Indooroopilly GC); Stuart Gill (NSWGCSA); Neil Graham (GCSAWA); Tony Guy (STA WA); Mitch Hayes (Brisbane GC); Shane Heaney (Ocean Shores CC); Phil Hill (Barnbougle Dunes); Paul Irvine (Howlong Golf Resort); Mark Johnson (TGCSA); Jyri Kaapro (Bayer); William Koopmans (13th Beach); Todd Lowe (USGA); Paul McLean (Sanctuary Cove G&CC), John Neylan (Turfgrass Consulting and Research); Luke Partridge (Emirates GC, Dubai); Pat Pauli (Maroochy River GC); Michael Pearce (Northern GC); Andrew Peart (AGCSATech); Kane Pedler (Robert Trent Jones GC); Mat Poultney (VGCSA); Kellie Rose (STANZ); Richard Stephens (Turf Australia); Ben Tilley (GCSAQ): Anthony Toogood (Commercial Club).

Along for the ride

ou know you're getting old when your 10-year-old son has more devices than you. Here's the current state of play in my household: Me - iPhone; son - two iPads (because one isn't enough obviously) and an iPod, not to mention an Xbox One (I'll let that one slide as I have spent just as many mindless hours on it than he has to date...)

Now I consider myself pretty savvy when it comes to technology, but it is quite breathtaking the rate at which my son not only digests all this technology but how quickly he becomes proficient with it. While I'm still high-fiving myself over some amateurish slow-mo or time lapse videos I've cobbled together on my iPhone, he's editing multiple angle videos and uploading them to social media and getting more 'likes' than I care (or want) to imagine.

As much as I shake my head sometimes at the intrusion technology has in today's world, it has become such a critical component in our lives, especially when it comes to communicating our achievements. For superintendents and turf managers, who have traditionally struggled with that concept, the advent of social media provides an incredible opportunity to shine a light on the often unheralded work they undertake daily.

Twitter is just one of many platforms available and it is great to see a growing number of Australian superintendents and turf managers starting to utilise it. It is perhaps the perfect social media tool for the time-poor turfie. The speed at which you can post something is what makes it so appealing as well as the ability to connect you with fellow turf management colleagues from around the globe and get a snapshot of their work.

A perfect example of how good a promotional tool it can be and how to use it effectively was the recent 41st Ryder Cup hosted by Hazeltine National Golf Club. Given the magnitude of the event and the huge amount of interest from fellow turf managers the world over, superintendent Chris Tritabaugh used his Twitter account @ct turf to regularly post about his course preparations in the months and weeks leading up to and during the event.

Tritabaugh's candidness about his preparations was something to behold and it gave those fortunate to follow him on Twitter a spectacular insight into the incredible amount of work that went into presenting a golf course for arguably the game's greatest of rivalries. I started following him through the AGCSA's Twitter account (@AGCSA2) at the start of this year and to see the course emerging from its winter hibernation and its gradual transition into the one which ultimately presented in late September was simply rivetting.

Being able to read his comments about their cultural practices and view his photos and Vine posts made it feel like you were along for the ride and brought an immediacy that only social media can do. It was fascinating to get such an in-depth look and hats off to Tritabaugh who was happy to answer any questions along the way. Very little seemed to be out of bounds, all except divulging green speed which he dealt with in good humour - his standard post when asked how fast the Hazeltine greens would be was '#RyderCup speed'.

As mentioned, Twitter is starting to become more popular among superintendents and associations in Australia and our industry's own social media guru Nadeem Zreikat (@ campbellturf) has long been a proponent of embracing it. As he poignantly mentioned in his talk about building your profile using social media at this year's Melbourne conference, social media platforms like Twitter are now such a vital tool in helping professionals build their personal brand, promoting their expertise and leveraging that for career advancement. If you don't have an online presence through such platforms and not using it to your advantage, then chances are you could be selling yourself short. Enjoy the read...



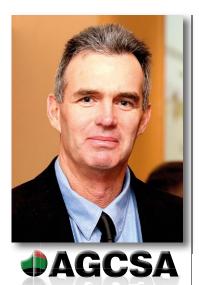
Brett Robinson, Editor



LOOKING FOR GREENKEEPING STAFF?

Advertise on the AGCSA website - the Australian turf industry's LEADING online job resource Post your job online now at www.agcsa.com.au or email admin@agcsa.com.au

New era as AGCSA farewells Frewin, welcomes Wood



t has certainly been an interesting few months for the AGCSA and as I am sure most of the industry will be aware the association now has a new chief executive officer. On 19 September the AGCSA Board announced that Craig Wood had accepted the role following the departure of former CEO Peter Frewin in mid-August.

Let me start by saying a big thank you to Peter for his tireless efforts during his near five years with the AGCSA. He has left the association in excellent shape and this is in no small part due to his love for the AGCSA and the industry as a whole. Peter left to take on a newly created role with Rain Bird Australia and we wish him all the very best in his new endeavours and thank him sincerely for all his hard work during his time at the AGCSA.

Craig's appointment as CEO follows an extensive procurement process and it was his zest for the position and positive ideas on moving the association forward that really came to the fore during his interview and struck a chord with the AGCSA Board. Craig comes to the AGCSA with an extensive background in senior management positions with Bayer Crop Science, Boddingtons Australia, ACTA and FMC Australasia, all companies that have involvement with pest control within the turf and agricultural industries. Craig started his new role with the AGCSA on Monday 3 October and we look forward to a very exciting next phase of our great association with him at the helm.

CONFERENCES

The AGCSA Board recently attended the TGCSA Conference and Trade Show held in conjunction with STA Tasmania at Barnbougle Lost Farm, during which time we also held our quarterly Board meeting. This is the second year that the Board has

ventured to support the states holding their smaller conferences around the country (we were in Western Australia last year). We have found it beneficial to be able to have some face-to-face time with the state committees and members while also offering our support by providing speakers if required.

Lost Farm has a magnificent clubhouse but in a 'back-to-our-roots' couple of days the conference and trade show was held in superintendent Phil Hill's new maintenance facility. It was pleasing to see near 100 people in attendance and every one of them were very happy to see a number of patio heaters discreetly positioned throughout the shed, even if the weather was balmy by Tasmanian standards!

On the national front, feedback has been collated from the 2016 Melbourne conference with a very pleasing large amount of surveys received from both delegates and exhibitors. Overall results were excellent and it comes as no surprise that **Dr Frank Rossi** was the standout presenter. Comments received from these surveys are used to investigate ways of improving future conferences. Planning is well under way for next year at Twin Waters and if any member who did not complete a survey has any thoughts on speakers they would like to hear, feel free to contact either myself, the AGCSA office or any Board member.

On the topic of conferences, it would be remiss not to mention that planning is also under way for the proposed joint conference with the NZGCSA in Wellington in 2018. The AGCSA Board has formally agreed to the joint venture and is buoyed by the positive feedback that it has received from throughout the industry. A Partnership Advisory Group will be formed with representatives from both associations and the trade being involved.





After nearly five years in the CEO role, Peter Frewin departed the AGCSA in August to take on a newly created position with Rain Bird Australia

SUMMER OF GOLF

It is still a few weeks off yet, but I find my thoughts wandering towards the upcoming summer of Australian golf, with the highlight being the World Cup of Golf at Kingston Heath Golf Club (superintendent **Hayden Mead**) in November. A very good field is being assembled and with the change of format to fourball and foursomes, some added pressure is sure to be felt by the players. One thing I am sure that will not change is the players' praise for the course.

While most of the attention is focussed on the 'major' tournaments, there are a number of second tier events also being held and also the seemingly never-ending programme of Pro-Ams. The pressure that is placed upon superintendents at these courses is in some ways just as great as those hosting major events. A lot of this pressure can be self-induced but to some of the smaller clubs the Pro-Ams are their 'Australian Opens'.

We all like to show off the course at these events, but the question I will pose is this, 'Is it sustainable from year to year?' The club championships, guest days and even board events are just as important to the members of your club. The ability to be able to communicate why the course cannot be presented in, let's call it, 'Pro-am condition' for the whole of the year is paramount to making the rod for ourselves a little more flexible, especially in these times of having to do 'more with less'. However you choose to do it, whether by newsletter, the club website, presenting to the board or general conversation with the members, make an effort to do so.

In closing, best wishes to all those holding events and I will leave you with the following – people forget how quickly you did a job but they remember how well you did it. ^{JU}

PROUDLY AUSTRALIAN PROUDLY INDEPENDENT



"The Australian turf industy's leading provider of agronomic services."

- CONSTRUCTION SPECIFICATIONS
- EXPERT AGRONOMIC ADVICE
- SOIL, PLANT AND WATER ANALYSIS. DISEASE DIAGNOSIS
- ENVIRONMENTAL AND WATER
 MANAGEMENT PLANS

"All funds generated through AGCSATech services are re-invested for the benefit of the Australian turf industry"

CONTACT AGCSATECH (03) 9548 8600



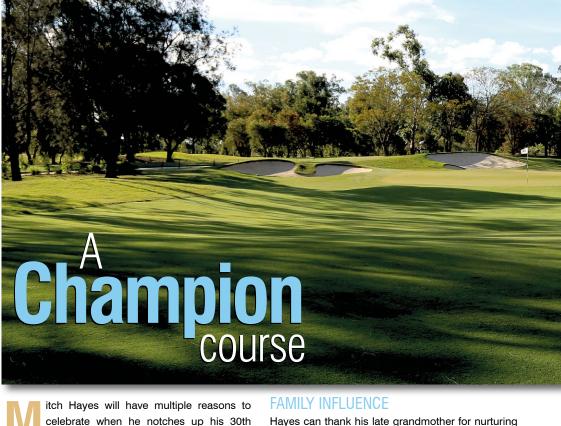
Senior agronomist - Andrew Peart andrew@agcsa.com.au 0422 418 038



Environmental agronomist - Bruce Macphee bruce@agcsa.com.au 0409 183 710

COURSES

Over a two year period Brisbane Golf Club became the first in Australia to convert all its greens to Champion ultradwarf couchgrass. Pictured is the 8th green and approach which was also heavily changed as part of the course improvement works



Between 2013 and
2015 Brisbane Golf Club
converted its greens
from 328 to Champion
ultradwarf couchgrass.
ATM editor Brett Robinson
catches up with Brisbane
superintendent Mitch Hayes
to look back at the project
and the impending 2016
Isuzu Queensland Open
which returns to the club
after a 25 year hiatus.

itch Hayes will have multiple reasons to celebrate when he notches up his 30th birthday in the last week of October. First and foremost it's a milestone – what better excuse to get all your friends and family together for a big party. Second, he will be celebrating four years in charge as course superintendent of Brisbane Golf Club. And third, he'll (hopefully) be toasting the successful hosting of the 2016 Isuzu Queensland Open which returns to the club for the first time in 25 years the week before.

Whichever way you look at it, it's going to be a big night and no doubt at some stage Hayes will pause and reflect for a moment on the path that he has taken to get where he is. It has been an interesting journey for the boy from Grafton, NSW but one which proves that if you are willing to make some sacrifices along the way the rewards will come.

Hayes is testament to the old saying that in order to move forward you first have to take a few steps backwards. Taking on his first course superintendent role at the relatively green age of 23, it was two years into it that he came to the realisation he needed to make a change in order for his career to progress further down the line.

Going from superintendent to a lowly intern in the US, where he was earning a pittance and working huge hours, was the path Hayes would ultimately choose. As he will tell you though, being in this industry is a lifestyle choice not just a career and it would be the best move he could ever make. It reignited his spark, exposed him to new ideas and paved the way for his return to Australia where he now finds himself as superintendent of a top 100 ranked course and hosting the state's premier Open event which is now in its 91st year.

Hayes can thank his late grandmother for nurturing his passion for horticulture. Hanging around her Grafton-based nursery on weekends as a kid along with his brother and two sisters, Hayes became fascinated with plants. His uncle, Brett Nay, also ran the local jockey club and calling in a few favours managed to get his 16-year-old nephew some work alongside the track manager.

It was a week's work experience at Grafton District Golf Club during his final year at school where Hayes would get his first taste of greenkeeping and when, by chance, an apprenticeship was advertised there Hayes duly got the nod from superintendent John Nelson. Completing his apprenticeship, Hayes' next move was to South West Rocks where he joined as an assistant superintendent under Wayne Hensley in October 2007.

There for 15 months, he then headed north as construction assistant at Townsville Golf Club under Duncan Lamont. Reportedly Queensland's oldest golf course, Townsville was about to embark on a major course upgrade which appealed to Hayes as he had always wanted to get his hands dirty.

Just three months into his time at Townsville, however, Hayes found himself as superintendent. Unfortunately due to a number of circumstances the reconstruction didn't go ahead and for two and a half years Hayes toughed it out as the only qualified greenkeeper on staff. It was his first time managing a course in a tropical environment and in 2011 he had to endure the destruction that Cyclone Yasi brought to the region.

It was in the aftermath of Yasi that Hayes began to contemplate the bigger picture and started questioning where he wanted his career to go. During his days at South West Rocks he had made







Brisbane Golf Club superintendent Mitch Hayes

enquiries about The Ohio Program but never went through with it. Needing a change, he decided that the time was right to revisit it.

"The Townsville gig was tough, but it helped to make me what I am today," reflects Hayes. "I was pretty young when I took on that role and it was a very steep learning curve. It was after Yasi that I thought to myself how was I going to move forward and that's when I started looking into Ohio again.

"I knew I would be taking quite a few steps backwards, but I was still young and to be exposed to those courses in the US and their practices would be worth it in the long run. It was certainly a rude awakening going from a superintendent to being an intern but looking back it was probably the best thing I could have done."

Hayes' first placing in the US couldn't have been a bigger contrast – Quail Hollow. The Charlotte, North Carolina based course is steeped in history and in the coming years will host the 2017 US PGA Championship and the 2021 Presidents Cup. Within three weeks on the ground at Quail, Hayes was helping prepare the course for the 2011 Wells Fargo US PGA Tour event, a bigger introduction to the world of tournament management he couldn't have wished for.

In addition to being exposed to major tournament preparations, Hayes also got to experience the transitioning of the course. Quail Hollow oversows its couchgrass surfaces with ryegrass for the winter, so Hayes got to see first-hand the whole process, both heading into and coming out of transition. Shortly after the Wells Fargo, Hayes was elevated to spray technician. As superintendent Jeff Kent told Hayes at the time, "I'll pay you 50 cents extra an hour and you can do all my spraying; it won't make you rich but it'll count for something in the long run".

"It was an incredible experience," says Hayes. "Up until my time at Brisbane Golf Club, the 13 months I spent at Quail Hollow were probably the best I have had in this industry. The camaraderie was amazing. It was a big crew – 45 – and all the interns lived together. We were pulling 80-plus hour weeks and the variety of work meant you were exposed to so much. To be part of the overseeding process and then transitioning back was fascinating and the amount of work that went into it. The tournament was something else. We had 120 guys on the crew for that week and the level of precision and the meticulous way the course was prepared was something I had never witnessed before."

After his time at Quail Hollow, Hayes would spend a further six months on placement at Kiawah Island across the border in South Carolina. During his time there he helped prepare the Ocean Course, one of five on the island, for the 2012 US PGA Championships.

"My time in the US taught me a lot of things and it helped to set me up for where I find myself now," says Hayes. "The biggest thing I got out of my time in the US was the attention to detail you need to succeed and the commitment and professionalism you require. Being in this industry isn't just a career,

Brisbane will play as a par 70 for the 2016 Isuzu Queensland Open with the par five 1st (pictured) and 9th holes playing as par fours





Despite the more intensive maintenance requirements, the new greens have been embraced by the members who like the smooth and fast ball roll that the Champion variety can generate

it's a lifestyle; the golf course needs attention 24/7 and you have got to be prepared to put in the hours."

With two years under the belt and a more rounded appreciation of the industry, it was time to head home. Ironically it was through one of his colleagues at Quail Hollow that he got in contact with then Brisbane Golf Club superintendent Brett Morris. After some quick email correspondence Hayes found out about the club's major plans to reconstruct all greens and their conversion from 328 to Champion ultradwarf couchgrass.

It was the perfect fit in many ways. Brisbane was a well respected club looking at making significant improvements to reinvigorate the course following the devastating floods in 2011, it involved a lot of construction work that Hayes was still keen to experience and with Grafton just a few hours down the road it meant he could be close to family again.

Arriving at the Yeerongpilly course in October 2012, Hayes was straight into the thick of things helping reconstruct the par three 13th green, the first green on the championship course to be converted to Champion. Within six months Hayes found himself promoted to assistant superintendent and when Morris decided to take on a technical role with Amgrow, Hayes found himself at the helm just 10 months after arriving back in Australia.

COLF CLUB PORT OFFICE M 6.11.4 - 6.11.2 - 5.8 - 10.8 - 5.6 -

The flood indicators in between the 10th and 18th fairways provide a solemn reminder of 2011

The 'mother of all greens'.

Brisbane's 21st green was converted to a Champion nursery prior to the

POINT OF DIFFERENCE

Few will forget the Brisbane River floods of 2011. The members and staff at Brisbane Golf Club certainly won't forget that second week in January when their course was laid to waste by one of the greatest natural disasters in Australia's history. Some 85 per cent of the course went under, including the maintenance facility, and it took a mountain of work to get the course cleaned up and reopened.

Although back in play very quickly given the extent of the damage, long-term the greens would start to feel the impacts of the floods. The 328 never really got back to full health and the amount of weed species that came in with the flood water only added to the management headaches.

From a club perspective the floods hit hard too. A number of members left and the club knew it had to rectify the course and get it back to a level where it could starting attracting members back. They needed a point of difference and it would be Morris, who arrived at the club as superintendent in 2011 (his second stint at the club), who would ultimately facilitate that.

No sooner had he started, Morris was charged with devising a course improvement plan. In addition to all the infrastructure works to mitigate future flood disasters, a core component of his plan was the reconstruction of all greens. With the assistance of the then operating Redlands Research Station in Cleveland, Morris undertook a series of trials to determine the best greens variety and ultimately decided upon Champion ultradwarf couchgrass.

Champion, together with its ultradwarf counterparts TifEagle and Mini-Verde, had been successfully adopted in similar climatic zones in the US and having had past experience with it Morris knew it would work well at Brisbane.

Champion's tight, dense canopy, its smoothness and ability to generate excellent speed were all characteristics that Morris saw as a good fit for the club and he had little hesitation in recommending it. It also gave the club its point of difference – Brisbane would be the only club in Australia with Champion greens.

Given the go ahead, Morris converted the club's par three 21st hole (Brisbane has 21 holes) into a nursery green. The 21st would become 'the mother of all greens' and provide the source material from which the initial greens would be propagated.

Although not part of the initial trial work, it was Hayes who would pretty much oversee the bulk of the conversion following Morris's departure in 2013. With the par three 13th completed first, a further three greens were taken out of play in the first 12 months and converted. However, the club fast-tracked the project and with the signing off of the 2nd and 8th holes in 2015 the conversion was complete within two years.

In total, six greens were completely rebuilt down to the sub-base, with contouring changes made on almost every green. Establishment of the new greens averaged around 12 weeks with Hayes given the luxury of not having to rush them back into play. While they were ready after eight weeks, that extra month's worth of grooming ensured they were in prime condition when opened.



In addition to the Champion, a 1.2 metre collar of zoysia matrella was also installed around the greens to stop encroachment. A number of fairways, such as the 5th, were also recontoured, extra drainage installed on others (like the 2nd) and select bunkers also refurbished. The 8th, the last hole to be completed, saw the biggest changes and in addition to the greens conversion the fairway was heavily reshaped and the existing water body extended right to the front and side of the green (see this edition's front cover).

"It was definitely a risk to go with Champion, but it is one that has definitely paid off," says Hayes. "For me, Champion is a superior grass. The canopy that it produces is so tight and you can get good speed out of it and smooth ball roll. The members here like fast greens and with this grass you can consistently deliver that expectation in this climate."

MANAGEMENT CHANGES

The switch to an ultradwarf variety has obviously brought with it a change in the way the surfaces are managed. With only a handful of Australian golf courses managing ultradwarf greens, Hayes has relied on a lot of management tips from the US. In regions like Florida, ultradwarfs have been managed now for nearly two decades and Hayes has been able to draw on the experiences of superintendents there to get the best out of his new surfaces.

"I do look overseas for information and early on I relied a lot on the GCSAA forums and took their



learnings on board," explains Hayes. "For instance, I couldn't figure out initially why the Champion greens were drying out like they were. So I jumped on the forums and found out that the guys over in Florida were splitting their wetting agent applications every two weeks.

"I also head over to the GCSAA conference each year and attend an advanced ultradwarf management workshop. It's a room full of 50 guys all growing the same grass who have similar problems sharing ideas and techniques. It's great to be able to hear their experiences in regards to cultural practices – whether it's fertility or moisture management – and you can bring that back and add your own twist on things."

With time comes experience and with the oldest Champion green now 3.5 years old, Hayes has been able to gradually refine his management practices at Brisbane. Grooming and dusting regimes are critical,

The par three 13th was the first green on the championship course to be converted to Champion





The Champion greens will be maintained at 2.75mm for the Open

as is managing moisture levels, and in addition to schooling the crew it has also been a process of educating the members of the importance of the new greens management regime.

"Champion is not too dissimilar to the other ultradwarfs," says Hayes. "It likes to be fed and likes a lot more nitrogen than my past experiences with 328 or Tifdwarf. I average about 0.3kg of actual N/100m² per month, give or take, which we split 50-50 between foliars and granulars. Obviously during renovation periods we increase our rates and reduce them during winter.

"One of the main characteristics of Champion is its ability to produce such a dense canopy and because it puts all its energy into doing that it can be quite shallow rooted. I have had to be a lot more mindful of moisture levels than in the past, to the point where the guys will go out with moisture probes 3-4 times a week. The one thing you can't do is let Champion dry out as it takes a lot longer to recover. It's not like 328 where you can pour a heap of water and it bounces back overnight.

"The key to providing a smooth, fast surface is light and frequent renovations, verticutting and dusting every fortnight. We also solid tine every month throughout the growing season and core aerify three times a year. Our big renovation generally occurs in October where we pull 12mm cores and use 8mm at the other times.

"During the growing season we backtrack verticut (up and back in the same pass) every fortnight changing direction and also dust that week. The following week we will put the groomers down before going back to our verticut and dust. It is quite intensive and like with anything you do you have got to balance what is right for the members and what is right for the health of your greens.

"That's been the biggest challenge to date – trying to change the culture of the members and impressing upon them the importance of doing these practices every fortnight during the growing season. We copped a bit of flack in the early days but now that the greens are in and they are producing the surface that the members were after, they are very happy."



Fertility and moisture management are key considerations with Champion ultradwarf

As part of the greens conversion, a 1.2m zoysia matrella collar was also included to assist with encroachment issues



BACK IN THE SPOTLIGHT

The conversion to Champion has certainly created a lot of interest throughout the industry and together with a landscape master plan which has seen the installation of 10,000 native plants to date, Brisbane is starting to get noticed again. Indeed, when Australian Golf Digest and Golf Australia magazines issued their 2016 course rankings list, Brisbane was back inside the top 100.

As Golf Digest noted: "Here is a course on the climb. Major renovations were recently completed including the conversion of all the putting surfaces to Champion ultradwarf – the first Australian course to do so. These greens are already better than the Bermuda greens they replaced and in time will lead to higher rankings for Brisbane."

Another fillip came when it was announced that the Queensland Open would be returning in 2016 to coincide with the club's 120th anniversary. Brisbane hosted the state's inaugural Open championship way back in 1924 and last held it in 1991. Brisbane will host the tournament for the next three years and Hayes is determined to showcase the course and its unique greens in the best possible condition come 20-23 October.

With the playing surfaces coming through well over winter and all pre-emergents down, in late August the greens received a 4mm hollow tine while the tees were vertidrained, topdressed and given a granular feed to perk them up. The greens received their first verticut and dust in the first week of September, a practice that will continue every fortnight in the lead-up to the Open along with regular fertiliser applications.

Cutting heights on the greens have been gradually reduced from their winter setting of 4mm and will get down to 2.75mm for the tournament. Green speeds will peak around 11.5-12. Fairways, which will be cut in a 50/50 pattern, will be at 12mm and tees and aprons 8mm.

"The whole club is excited to have the Open back at its rightful home," says Hayes. "It's great to have something to work towards and it is a great opportunity to showcase the course and all the works that we have undertaken in recent years.

"We hosted the Australian Men's Interstate Teams matches in May and that gave us a good feel for what needs to be done for the Open and helped us to refine some practices. It was good for the crew to experience that event as many of them hadn't had the exposure to that level of detail before. They are now pretty well versed in what is required and the expectations I have of them and the hard work that needs to be put in.

"We got the course to a very high level for the Interstate matches and received a lot of good feedback which was pleasing. The goal is to have it in that condition or better for the Open and looking ahead for the next couple of tournaments I'd like to think we can improve every year." **

THE BIGGEST AND BEST IN CLASS



The Truckster XD by Jacobsen is a true heavy duty utility vehicle. It has the largest standard payload capacity, a rugged and durable cargo box and is paired with a powerful Kubota diesel engine. The allnew Jacobsen Truckster XD is designed to make your toughest jobs easier.

- Effective and effortless The largest payload makes quick work of your biggest jobs and the high torque Kubota diesel engine provide effortless hauling of the heaviest loads.
- Tough and durable the cargo box is constructed using heavy gauge steel, 75% thicker than competitors and has 20% more volume. Bespoke stake sockets and multiple tie-down points provide the versatility to easily tackle those big jobs.
- Comfort and control a suspension seat provides increased comfort and there's 25% more room than the competition, providing a superior operating platform.

To see for yourself how the Jacobsen Truckster XD can improve productivity on YOUR course, visit www.jacobsen.com to find your local dealer.

www.jacobsen.com











With Arundel Hills in the midst of converting their bentgrass greens to TifEagle and Coolangatta & Tweed Heads about to do likewise, ultradwarf hybrid couchgrasses are quite the talking point in Queensland at present.

USGA agronomist Todd Lowe looks at some of the lessons learnt from US superintendents regarding ultradwarf greens management.

Itradwarf bermudagrasses (TifEagle, Champion and Mini-Verde) were developed in the 1990s and began being established on Florida golf courses in 1997. These early pioneers laid the groundwork for other golf courses in the southern states of the US to develop maintenance practices that offered improved putting green smoothness and speed when compared to older varieties like Tifdwarf or Tifgreen (328).

Early research showed TifEagle, Champion and Mini-Verde provided consistently better playing conditions than other varieties in university trials (Morris, 2003) and such characteristics have proven superior on golf courses as well. In fact, ultradwarfs have now become the standard for putting greens in Florida.

We have learned many things about these grasses in the past 15 years and this article addresses a few key observations that may surprise some readers and hopefully will prove useful at your facility if you are considering their use. Every region is different regarding the effects of climate and peak-season play and these regional observations may differ slightly from yours, depending on location.

LESSON ONE

Ultradwarfs are not just for high-end golf coursesOne of the first lessons learned is that ultradwarfs perform well under a wide range of management regimes. For the first few years, only high-end golf

facilities converted their greens to ultradwarfs, and many of these golf courses employed intensive turf management programmes to produce fast green speeds. Due mostly to the success of these early programmes, it was thought that ultradwarfs required aggressive surface management and low mowing. These grasses soon became analogous with championship conditioning and very fast speeds.

Championship conditioning through aggressive management deterred some golf courses from converting to an ultradwarf early on. It was not uncommon to hear comments such as "an ultradwarf would not be a good fit for our course because our golfers cannot play on fast greens" or "we can't afford an ultradwarf because we cannot verticut and topdress greens every seven days."

While the ultradwarfs can produce faster speeds than Tifdwarf or 328, they can also produce similar conditions, if desired. Over the past decade, we have seen ultradwarfs be successful on less-intensive programmes and we have learned that they do not require extremely low mowing or aggressive verticutting to maintain acceptable playing conditions.

Every golf facility has its own unique set of standards and expectations. Those that demand firm and fast putting surfaces often employ an aggressive surface management plan to achieve such conditions. However, ultradwarfs can

be maintained under a less-intensive and more economical agronomic plan while producing speeds of 8 to 10 feet as measured using a stimpmeter, and even faster during the winter play season.

Some golf facilities also have excellent success with maintaining fast greens without mowing low. Early on, many ultradwarf greens were maintained at or below a height of cut of 0.10 inch (2.54mm) to produce consistently fast putting greens. While some golf courses still mow low, we have observed faster/smoother greens with innovative fertility and grooming (Lowe, 2012).

The principles of these improved fertility programmes include significantly reduced nitrogen and only granular sources. The traditional approach in Florida has been to apply 8-12lb N/1000ft² annually (3.9-5.85kg/100m²), using both granular and liquid sources, but proponents of this new programme apply only 4-6lb N/1000ft² (1.95-2.93kg/100m²) which is a 50 per cent reduction.

Golf course superintendents feel that the switch from liquid nitrogen to granular nitrogen is just as important as reducing overall nitrogen and that it creates a more hardened or less succulent leaf. Liquid micronutrients are applied on a weekly basis to maintain good colour and potassium is regularly applied as well. Like traditional programmes, a plant growth regulator is applied weekly and light sand topdressings are administered every 7-14 days.

Increasing mowing height not only improves health but also allows more sand to remain within the turf canopy following topdressing applications. Similar sand topdressing programmes are conducted with conventional putting green programmes, but a high percentage of sand is picked up when greens are mowed at lower heights of cut. Increasing sand incorporation within the turf canopy provides a smoother, faster ball roll. Putting green firmness also should improve as sand concentration increases within the upper rootzone.

Such improved fertility programmes have resulted in consistent growth and playability and they drastically reduced the need for low mowing heights to provide fast putting speeds. While this is a new concept for many Florida superintendents, it has been successfully implemented at several golf courses for over a decade. We are hopeful these innovative programmes will continue to gain popularity as higher mowing creates deeper roots and healthier turf.

LESSON TWO

Effective thatch management does not require overly aggressive cultivation.

There are a variety of core aeration and surface management (verticutting, grooming and brushing) programmes employed on Florida golf courses. Early reports from turfgrass researchers discussed the tendency of ultradwarfs to produce more thatch and organic matter than Tifdwarf (Gray and White, 1999; Guertal and White, 1998).

As a result, aggressive turf management programmes were developed at many golf courses to dilute thatch and organic matter. Early on, we visited some courses that utilised as many as five or more aerations annually using half-inch-diameter hollow tines or larger. Since then, aeration equipment technology has improved and procedures have been refined. Consequently, turf managers are able to remove more soil cores with each aeration event and increase organic matter dilution (Lowe, 2011; Oatis, 2002; O'Brien and Hartwiger, 2003).

We have learned that acceptable organic matter dilution can take place with less invasive procedures and less disruption to golfers. Furthermore, other practices like 'venting' with small-diameter solid tines, also known as needle or pencil tines, are also valuable, especially during the winter play season.

CONTINUED ON PAGE 15

TIF TIPS - STUART BOTHE

Vanderbilt Country Club, Florida

Originally from Nhill in Victoria, Stuart Bothe has been based in Florida, USA since 1998 and for the past 12 years has been course superintendent at Vanderbilt Country Club. Vanderbilt recently underwent a \$US3million course renovation which included the resurfacing of their TifEagle greens which were originally constructed in 1998. Bothe penned the following on his maintenance practices with the TifEagle.

"We foliar feed our TifEagle greens once per week, usually .05N, .01P and .09K pounds per 1000 square foot (20g N/100m², 48g P/100m² and 40g K/100m²). We always use Primo in foliar rates from 2-4oz/acre (0.15-0.3L/ha). Total N per annum is 6-8lbs/1000ft² (2.93-3.9kg/100m²), P per annum is 2lbs/1000ft² (0.98kg/100m²) and K per annum is 20lbs/1000ft² (9.8kg/100m²). I use a 1:3 ratio of N to K (mainly granular).

From April-October (summer) granular is used along with weekly foliar. Programme consists of: Week 1 – 8:3:17; Week 2 – 0:0:22; Week 3 – soil spray with wetting agent; Week 4 – 8:3:17; Week 5 – 0:0:28; Week 6 – soil spray with wetting agent; Week 7 – 8:3:17; and Week 8 – 0:0:22. Granular frequency is reduced during winter and more emphasis is put into foliar feeding.

Our height of cut ranges from .125" to .150" (3.2mm-3.8mm). We keep heights a little higher in summer as we are verticutting and topdressing weekly and the higher height means we don't pick up as much sand. Lower heights are for the

winter months during our busy season.

We pull cores three times per year, groom weekly and also use rotating brushes on our walk mowers. We topdress every 1-2 weeks depending on growth rate. We use dry sand in the winter months with walk spreaders as canopies are much tighter. We solid tine at least monthly and more during periods of low light.

Keeping up with the cultural practices so they don't form a thatch layer is critical if you have new TifEagle greens – verticut, topdress and don't feed them too much N at one time. Keep the Primo on them year round and change rates according to clippings rate.

Don't over water your greens and minimise shade. TifEagle requires at least eight hours of direct sunlight. If planted in partial shade, management practices need to change and not be as aggressive, especially when it gets cooler as it won't respond and become thin. Go into the cooler months of the year healthy and with lighter cultural practices." You can follow Bothe on Twitter @stuartbothe



TIPS - LUKE PARTRIDGE, EMIRATES GOLF CLUB, DUBAI



Due to the Dubai climate, Emirates
Golf Club can afford to undertake
aggressive and frequent renovation
and cultural practices

ince undertaking a US placement through The Ohio Program in 2005, South Australian Luke Partridge has gone on to forge a successful career in the Middle East and China. He is presently the assistant course superintendent at Emirates Golf Club in Dubai, UAE which hosts the European Tour's Desert Classic every February. Here he writes about his experiences with TifEagle greens and the unique management practices employed in the extreme climate of Dubai.

"At Emirates Golf Club we run an almost exclusively foliar feeding programme with our TifEagle greens. We apply controlled release granular fertiliser with soil amendments twice a year scheduled to coincide with aerification events in the summer. Due to the 12 month growing season here in Dubai we apply a comparatively high amount of nitrogen. In the warmer months between May and October (summer), we apply around 0.4kg N/100m² per month and from November through April (winter) this is usually cut down to around 0.2kg N/100m² per month. This works out to around 4kg N/100m² annually. We do not experience complete dormancy in this region but growth rates and the plant's use of N are diminished in the winter time.

TifEagle can maintain adequate smoothness and ball roll at a range of mowing heights. We are in a situation where we host a ladies European Tour event in December followed by the Men's European Tour in February eight weeks later. We maintain our greens at around 3.5mm running at 12.5 on the stimp for the ladies event. The higher height of cut ensures the plant remains healthy during the event (without sacrificing firmness or ball roll) and remains



strong in to the lead up to the Desert Classic where we lower the cutting height to around 2.8mm, with a target speed of 13.5-14. The key is a well-implemented cultural programme in the summer time, effective use of plant growth regulators, high frequency of cut and a strong soil moisture monitoring programme. By placing a high emphasis on firmness and ball roll first and foremost, green speeds, we find, generally follow suit.

At Emirates we aim for two major aerifications per year, with a target to impact 15-20 per cent of the greens surface area during each event. This year, in June, we ran the Gradens in two directions at -12mm followed by a 1/4 inch hollow tine and an application of around three tonnes of silica per green. In August we ran 5/8 hollow tines at two-inch spacings and hand-brushed a further three tonne of silica per green. In addition, verticutting is scheduled every two weeks during summer usually at a depth of -2 or -3mm. We always back track in the opposite direction over the first pass in what we call a "freaky" verticut in an effort to minimise grain. This same technique is used when using brushes on greens mowers which we use 3-4 times a week and once or twice per week in the winter. A light dust is generally scheduled to be applied behind the verticut every two weeks. In the winter time we maintain the same frequency of verticutting and dusting but adjust the bar setting to 0 or +1mm to tease the leaf, maintain smoothness and minimise spiking.

For those with new TifEagle greens – topdress, topdress, topdress! During establishment regular heavy topdressing is essential to control thatch and promote tillering. Don't be shy about getting cutting heights down quickly. The sooner the cutting heights are down around 3.5-4mm during grow in, the faster the stolons will creep together to provide good canopy density.

TifEagle's biggest downfall is its poor shade tolerance. If it is not getting a minimum of eight hours of full sunlight each day it will struggle. Any effort to reduce shade will help in maintaining canopy density. Where removing shade is not possible, raising cutting heights and getting the shaded turf on a regular program of foliar aminos will assist in maintaining healthy turf, but it will always be out performed by turf in full sunlight.

We are fortunate to be in a climate that allows for aggressive renovation and cultural practices. We experience very little rainfall, high sunlight intensity and hot weather, ideal conditions for growing TifEagle. The same renovation and cultural programmes should not be undertaken on TifEagle greens in regions that experience high rainfall and low sunlight intensity like Asia and northern parts of Australia. Without optimal growing conditions in place, maintenance of TifEagle in these regions can be far less forgiving. You can follow Partridge on Twitter @LPartridgeTurf.



CONTINUED FROM PAGE 13

Verticutting procedures for ultradwarf greens have nearly come full circle. It was initially thought that aggressive dethatching with units like the Mataway, Graden or SISIS was going to be standard for ultradwarfs in Florida. Turf thinning and slow recovery occurred at some courses and other implements like carbide-tipped blades became viable alternatives.

Many courses have simply continued 'grooming' with thin-bladed verticutters, along with prudent nitrogen fertility and frequent sand topdressing to maintain excellent surface smoothness. Light and frequent programmes have been the most successful for good surface management and it is necessary to allow time for such procedures to take place. Aggressive verticutting/dethatching is still employed at some courses, but it usually takes place in conjunction with scheduled summertime core aeration.

Aeration and verticutting are still necessary throughout the year to provide optimum playability, but effective thatch management requires a holistic programme, beginning with proper nitrogen inputs. We have learned that the ultradwarfs, and perhaps Tifdwarf as well, simply do not require as much nitrogen as traditional programmes for bermudagrass putting greens.

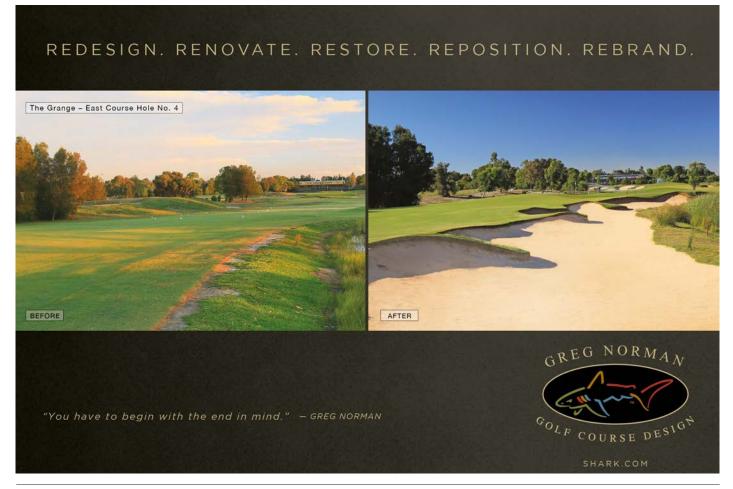
Historically, putting greens in Florida have been maintained on annual diets as high as 18-24lb



N per 1000ft² (8.8-11.7kg/100m²) for Tifdwarf bermudagrass (especially overseeded Tifdwarf). Nitrogen fertility has been reduced over the years with improved product efficacy and the ability to spoon-feed putting greens on a weekly basis.

While some researchers continue to advocate very high nitrogen diets, USGA Green Section agronomists feel that less nitrogen is better for the turf and the game of golf. The average fertilisation programme in Florida is still quite high at 0.75 to 1 pound nitrogen per 1000 square feet per growing month (360-488grams/100m²) but it is trending downwards, with many golf facilities at nearly half that rate (Foy, 2011). Ultradwarfs perform

It was originally thought that aggressive verticutting and sand topdressing were necessary to maintain proper thatch and surface quality on all ultradwarf bermudagrass greens. Dethatching is still employed on some greens but generally as part of summertime core aerations





Many ultradwarf greens were originally heavily verticut, but this practice became unpopular due to turf injury and prolonged recovery

well at lower nitrogen inputs, but increased thatch management programmes will be necessary to provide acceptable playing conditions if nitrogen fertility for ultradwarfs is kept similar to Tifdwarf.

LESSON THREE

Most ultradwarf greens are still growing strong, but their lifespan remains a mystery.

A question asked by many concerns the longevity of ultradwarf greens. John Foy's 2003 USGA Green Section Record article 'Making a change' mentioned that the 'lifespan' of Tifdwarf greens in Florida averaged between 10 and 15 years. It also discussed several key factors to evaluate before renovating Tifdwarf bermudagrass greens, including proper construction, loss of surface area from encroachment and off-type contamination.

It was initially thought that maintaining lower mowing heights on ultradwarf bermudagrasses would discourage encroachment from the surrounding rough-type bermudagrass, yet such intrusions still occur on ultradwarf greens. Encroachment reduces putting surface area over time and it is necessary to eventually re-turf/renovate greens to recapture lost putting surface perimeters.

Off-type bermudagrass contamination is a major concern on Tifdwarf bermudagrass putting greens,

as they perform poorly at certain times of the year and cause significant turf damage. Some ultradwarf putting greens planted over a decade ago are still quite pure and continue to provide excellent playing conditions. However, we have seen a significant increase in off-type bermudagrasses in ultradwarf putting greens in recent years (Lowe and Foy, 2012).

Off-types grow in size and number each year and maintaining consistently good playing conditions can be a difficult task on putting greens with 40 per cent or more off-type contamination. If these off-types perform poorly, then it is recommended to renovate putting greens at some point.

We have also learned that ultradwarfs are not bulletproof and are still stressed by similar factors that cause decline on Tifdwarf bermudagrass greens, including poor drainage, shade and nematodes.

A less-expensive alternative to conventional putting green renovation is no-till regrassing, where the turf and underlying soil are left intact and ultradwarf sprigs are planted into existing putting greens. It is unreasonable to expect significantly better playing conditions with ultradwarfs on putting greens that have failed previously with other grasses, unless the reasons for failure are addressed.

Also, ultradwarfs are poor competitors and generally cannot overtake other grasses, even at low mowing heights. Increased off-types (most likely re-emergence of the previous grass) have been observed on many putting greens re-established using no-till methods throughout Florida.

SUMMARY

In closing, perhaps the greatest benefit of being a USGA agronomist is visiting so many golf course superintendents and learning from their successes and failures. Superintendents are like chefs in that they all use different ingredients and recipes to get the desired result. While some superintendents still mow low, aggressively cultivate/verticut and apply more nitrogen than is needed to produce quality surfaces, others have learned better techniques for managing their greens.

The ultradwarfs burst onto the golf course scene well over a decade ago now and we continue to improve techniques, refine fertility practices and lower economic inputs, all the while providing conditions ranging from acceptable for the budget-conscious golfer to putting surfaces worthy of hosting the best players in the world.

ACKNOWLEDGEMENTS AND REFERENCES

Australian Turfgrass Management Journal wishes to thank author Todd Lowe and the USGA Green Section Record for allowing this article to be re-printed. The original article appeared in GSR Vol 51 (1), January 11, 2013. Todd Lowe is a senior agronomist in the USGA Green Section's Florida region. A full list of references for this article can be obtained from the AGCSA.



Encroachment from surrounding rough-type bermudagrass occurs on ultradwarf putting greens. The probe indicates where the original green edge was



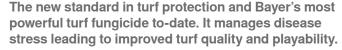


Do you want the latest innovation in turf fungicides





Intelligent Turf Management



- All stage disease protection that prevents, cures and eradicates
- ☑ Broad spectrum control including dollar spot, brown patch, fusarium, helminthosporium, rust and grey leaf spot
- ☑ Ultimate flexibility effective year round, even when turf is stressed
- For use on closely mown, professional and recreational lawn surfaces





At Maroochy River GC, superintendent Pat Pauli prefers grooming his young TifEagle greens over dusting: "Grooming in our situation with high golfer numbers seems to work better. I think the bowling greenkeepers could teach us a lot and I try to follow some of their methods."



While 328 is still very much the industry standard for couchgrass greens in Australia's warmer climes, ultradwarf varieties like TifEagle are becoming an increasingly popular option when it comes to resurfacing or reconstructing greens. ATM asks a group of local superintendents how they manage their ultradwarf greens and some of the do's and don'ts associated with their maintenance.



PAT PAULI MAROOCHY RIVER GC, QLD

Maroochy River Golf Club opened in 2015 and has TifEagle greens, whereas the old Horton Park site had 328. We do somewhere between 60-65,000 rounds of golf a year so what we would like to do with the new TifEagle greens and what we actually do are poles apart due to the amount of play, weather and time available.

In regards to fertility, because the greens are still new we use a mixture of granular and foliar feeds. We need to fertilise a lot more than we were doing at Horton Park with the 328. We are trying to provide reasonable levels of Ca, Mg and K along with looking after the trace elements. Our old greens would survive on 3kg/100m² of actual N a year, whereas at present we are well over 4kg/100m². It is much the same for K.

We mow the TifEagle daily (3mm in summer and up to 3.5mm, sometimes 4mm, in winter) except during winter when we will either dew broom, roll and mow once, maybe twice, a week. Sometimes if it is windy we may do nothing – we have a very exposed site and it has been a huge change from the old parkland style course. I am fairly confident given the right conditions (i.e.: more time and less golf) you could make a pretty slick and smooth surface, but most members don't want them any quicker than they are now.

At the moment we renovate the greens twice a year, which includes light dethatching with triplex mowers, coring and, because the greens are new, rubbing that core material back into the surface before tidying up, applying a granular fertiliser and topdressing.

Dusting occurs for a month or so after October renovations and then we start grooming. Weather conditions dictate what happens with grooming and dusting after the February renovations. I prefer grooming to dusting. I think the bowling greenkeepers could teach us a lot and I try to follow some of their methods. Grooming in our situation with high golf numbers seems to work better and is easier to do.

Regarding disease, we do a preventive black beetle spray but rarely do a grub/caterpillar spray. We would probably do 4-5 fungicide applications a year (we sometimes get pythium after renovations).

For those with newer/young TifEagle greens it is important to be on top of your fertiliser and water requirements. The surface gets quite tight and it can be difficult to get water into and through the surface. When constructing greens make certain you add plenty of amendments to your greens sand and have it mixed through the entire profile (and get it mixed off site). Don't put your amendments on top and try and rotary hoe them in – you just end up creating layers. The top will look after itself, produce its own organic matter and all we have to do is add sand (topdress/dusting).

BRENT CONDON NORTH LAKES RESORT GC, QLD

The TifEagle greens at North Lakes are now 15 years old and are still providing a very healthy and consistent putting surface. Our regular mowing height is 3mm which he never go beyond and during the winter we up that to 3.5mm. Average green speed is roughly 10-11 feet.

We apply a fortnightly foliar feed to keep the TifEagle healthy and full of colour with two different combinations. Nitrogen rates are applied at 15L/ha along with humic acids. Other key ingredients include concentrated silica, calcium and potassium. As we have poor quality recycled waste water, a rich calcium liquid formulation is applied which also has trace elements. I have found the available calcium counteracts the negative effects of sodium.

A granular Maxxstart 15:24:12 is applied at renovations. This is a great starter and recovery fertiliser and the TifEagle seems to respond very well. Another granular (21:0:21) is applied going into winter, then coming into spring a 20L Kelpak is washed in to activate vigour and growth.

We usually renovate the greens in the first week of February. We use thatchaway heads at minus 3mm (twice over the green) and the ProCore with a 50/50 combination of 8mm hollow and solid tines. It is quite severe but the TifEagle only takes 3-4 weeks to fully recover. TifEagle likes thatch reduction and we do a fortnightly groom and dust all year round except over winter when we back off to a monthly routine due to the slow recovery rate. I tend to use the in-head groomers on the cutting units quite a lot as well as solid tines on the greens every three months to get some air into the profile. This also reduces any thatch problems.

The most common diseases we have to contend with are white/black helmo and fairy ring. Early on this year, due to the high humidity and unusually warm minimum overnight temperatures, we had a moderate case of pythium. Once sprayed, it didn't take too long for the disease to disappear or for the TifEagle to recover. TifEagle is more likely to attract disease due to wet and shady areas or conditions.

TifEagle likes to see at least 10 hours of direct sunlight to produce the ultimate putting surface and performance. As mentioned it doesn't like wet, shady or poorly draining conditions – it will go bare



and thin out over time and the recovery rate is slow. You can never beat natural sunlight, airflow and rain. In saying that, do not let the TifEagle dry out. As soon as dry patch appears you need to hand water straight away or you will find it could take months to recover. A monthly application of a wetting agent and a soil recovery product prevents this.

and a soil recovery product prevents this.

LINCOLN COOMBES

RACV ROYAL PINES, QLD

Our situation at RACV Royal Pines Resort was a little different given that we solid turfed our 1.22 hectares

TifEagle boasts a very tight and dense canopy, with regular dethatching, dusting and grooming benefitting its quality overall



EQUIPMENT SOLUTIONS



Call us on 02 9827 1311, or Stan Wells 0428 263 516, Mike Pauna 0414 821 694, Brian Taylor 0439 808 840



TifEagle doesn't like wet, shady or poorly draining conditions – it will go bare and thin out over time and the recovery rate is slow



of TifEagle greens due to the narrow timelines to get the greens back up for the Australian PGA Championships. I feel that the first year was always the hardest and hopefully as they really settle in the surface will become good. In saying that we are starting to see signs of stress through the winter.

My fertiliser programme is made up of two parts - foliars and soil applications. The foliars (normally twice a month) involve hi K, magnesium chelate, iron chelate, Calsap and manganese. In winter nitrogen is added to the foliar applications and in summer backed off to lower rates and every second application. Soil applications (once a month) include wetting agents, Kelpak, liquid humics and a calcium source such as liquid dolomite or Calsap. A granular (20:0:24+Fe) was applied heading into winter to improve turf going into the cooler months. A couple of greens struggled with low light and high traffic and I used a few Floratine products to get us through when needed. We tend to find that the greens will lose their fertility after rain so I try to follow with a foliar application ASAP.

Moisture management is a key with TifEagle. Do not let it dry out and as soon as dry patch appears hand water straight away or it could take months to recover



The lowest we have cut the greens has been at 3mm. Due to some undulations we now have, 3mm is low enough and still gives us plenty of ball speed around 10 foot (we can easily get them faster if we have to). As far as renovations go, we haven't had the chance since the 2015 PGA until now as player demand to play the tournament course has been so high. We have just started renovating the front nine with a double dethatch and 6mm hollow tine with the back nine to follow.

As an observation, the thatch levels seem to be pretty good at the moment, but I have noticed that TifEagle does respond to more nitrogen than I like to put out. It is still very much a learning curve for me and the team as we head into another growing season. Encroachment is another thing that we really need to keep an eye on as the Wintergreen surrounding the TifEagle really motors in.

In regards to disease pressures, I jumped on the front foot early and sat down with Peter Kirby to talk about a preventative fungicide plan mainly for root diseases, ERI, pythium and brown patch. At the moment we haven't been hit with anything that has caused me a lack of sleep.

Overall I think the TifEagle has been a good grass choice here, but I am definitely still learning in terms of its health. The back nine greens have just had their first birthday and the front nine are now two years old, so there's still plenty of growing and maturing to go. The TifEagle has a tight leaf and looks good, with regular dethatching and dusting benefitting its quality overall. I have been fortunate to have agronomist John Neylan to bounce some ideas and observations off and, touch wood, to date nothing has gone astray.

SHANE HEANEY OCEAN SHORES CC. NSW

At Ocean Shores we maintain both TifEagle and Tifdwarf varieties in a sub-tropical environment just south of the Queensland/NSW border. A question I am commonly asked is "Which do you prefer?" My answer is nearly always the same, "Splitting hairs, but TifEagle by a nose".

We find both are relatively easy to encourage green speed and purity and both respond well to being maintained consistently at 3mm or just below without the risk of scalp or shuttering type mower damage from grain. With similar growth habits our maintenance and cultural practices differ very little between the two. So for me, the decision to marginally favour TifEagle over Tifdwarf at our course is mainly based on the performance of the putting surface as opposed to maintenance techniques and associated challenges.

Here we observe that the TifEagle greens perform very consistently and in the event of missing a scheduled verticut/dust from factors beyond our control playability is not overly sacrificed. We also

CONTINUED ON PAGE 22

Keep your greens on par with Drive® XL.

For effective control of summer grass, white clover and suppression of kikuyu.



For unsurpassed post emergent control of summer grass, white clover and suppression of kikuyu in turf, nothing compares to Drive® XL. Now available in a new, easy to use formulation which is rainfast in as little as one hour.

Visit www.agro.basf.com.au for more information.





In addition to a monthly 8mm solid tine and verticut at bench height and fortnightly dust, superintendent Paul McLean (Sanctuary Cove) throws in a 'double cut' once a month with the in-head groomers engaged before dusting

CONTINUED FROM PAGE 20

observe that because of its density, any type of very aggressive verticutting/de-thatching can significantly wound the TifEagle, even at bench height.

To manage this we concentrate our de-thatching to renovation time and groom September through February to avoid opening ourselves up to ERI disease during the months when it is at its worst (March through June). During these times of disease pressure we try to combat any other kind of stresses (e.g.: heat and heavy rain) by being vigilant with penetrating and wetting agents and encouraging the plant's natural defences with two granular fertiliser applications (slow release 18:2:24 at 2kg/100m² in March and May) in an otherwise predominantly light and frequent liquid programme.

The TifEagle offers up all the same challenges as any other warm-season variety in my experience, however, the end result is seemingly a superior putting surface.

PAUL MCLEAN SANCTUARY COVE G&CC, QLD

The Palms course, redeveloped under the auspices of Ross Watson between 2009 and 2011, has TifEagle greens compared with the Pines course which is your conventional 328.

As far as nutrition is concerned, every month is the pretty much the same all year round. Because of the large amounts of sodium in our effluent water (regularly over 1000ppm), we stick to a strict salt mitigation programme with weekly Calcium-influenced foliar applications backed up with monthly applications of TX10 and granular gypsum both at 3kg/100m². Here is a sample of our Palms greens programme for 2016:

Week 1: Tri-Gyp gypsum (3kg/100m²) and TX10 at (3kg/100m) applied before topdressing; Rocastem (10L/ha) and Terreplex (5L/ha) applied at 400-600L/ha water volume and washed in; dust ¼ gate (sand amended with gypsum and humate); verticut at bench height

- with thatchaway units; and mini-tine with 8mm solids at 1 inch spacings.
- Week 2: Ferro-Cious Stable N (20L/ha), Resilience (5L/ha), Kelpak (5L/ha), Maxi Mang (5L/ha) and Primo Maxx (all applied at 400L water volume and left on the leaf).
- Week 3: Supa Stand Phos (20L/ha), Systacal (15kg/ha), Terreplex (5L/ha), Ensure penetrator (5L/ha) and Ensure LTX (20L/ha) applied at 400-600L/ha water volume and washed in. Dust ¼ gate (sand amended with gypsum and humate);
- Week 4: Ferro-Cious Stable N (20L/ha), Resilience (5L/ha), Kelpak (5L/ha), Maxi Mang (5L/ha) and Primo Maxx (all applied at 400L water volume and left on the leaf).

Because of the steep slopes on our Palms course, green speed plays a major role in the setting of our cutting heights. The TifEagle seems to like 3mm for spring and summer while during autumn and winter we lift the mowers up to 3.5mm simply so the greens don't get too fast. Generally, the greens run somewhere between 10-11 feet on the stimpmeter day in, day out.

As part of our greens programme we aerate with 8mm solids, verticut at bench height with thatchaway units monthly and dust fortnightly. We throw in a 'double cut' with the in-head groomers engaged before the dusting, normally at the Week 2 stage of our programme. They are given one big renovation in January, which includes a heavy dethatching at -3mm, core with ¾ inch hollows, any required soil amendments (normally more calcium and humate) and then a topdress.

And as Shaun Cross from Byron Bay Golf Club would say "sand, sand and more sand"! We find that the more we dust during the growing season the less thatch we generate and in turn less grain. Because the TifEagle is such a lateral growing grass with a really tight canopy little and often is the key.

With the greens that I have grown in since starting at Sanctuary Cove (e.g.: our short game area) I have found that making sure you have amended your growing medium with humate and calcium before you plant is the best thing you can do. Because the canopy is so tight, it is really hard to amend the soil from the top down.

Moisture management is an interesting one. After attending this year's GCSAA conference in San Diego, I came home and purchased a TDR moisture probe which has changed the way I water. I now irrigate greens only when they need it with a goal of keeping moisture content around 25-35 per cent. We have now implemented a 'deep and less frequent' approach which has resulted in a deeper root system and fewer fairy ring outbreaks.

One observation to note is that when starting your Primo applications for the year, start off at very low rates (e.g.: 50mls/ha). As the picture left shows two days after Primo Maxx was applied at 500mls/ha, the TifEagle (left) is not as tolerant as the 328 (right).

TifEagle (left) and 328 (right) after an application of Primo Maxx at 500ml/ha. TifEagle is not as tolerant as 328 at higher rates





For industry-leading durability and performance,

choose Rain Bird. Industry professionals know that Rain Bird rotors are built for long-term durability, performing reliably for decades. But these rotors are about more than rugged construction. With 80 years of experience in The Intelligent Use of Water,™ Rain Bird builds innovation into every rotor with the use of industry leading high-efficiency nozzles and surge-resistant solenoids. With Rain Bird, you get better results with less maintenance while saving water— resulting in more green for your course and budget.

Contact Your Rain Bird Sales Representative:

Peter Frewin • pfrewin@rainbird.com.au • 0418 593 072 National Sales and Marketing Manager – Golf

Mac Ross • mross@rainbird.com.au • 0427 720 139 NSW, Tasmania, South Australia and New Zealand

Paul Woloszyn • pwoloszyn@rainbird.com.au • 0409 115 000 *Victoria, Queensland and Western Australia*

1800 RAIN BIRD (1800 724 624)



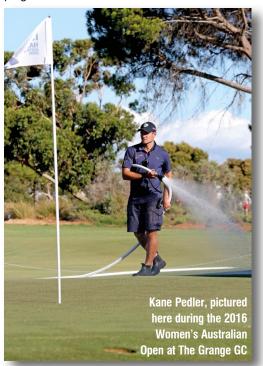


breaking year for up and coming Adelaide greenkeeper Kane Pedler.

After being part of the crew that prepared The Grange Golf Club for the 2016 Women's Australian Open in February, five months later he was in the US helping to prepare the famed Baltusrol Lower Course for the 2016 US PGA Championship.

y name is Kane Pedler. I am 22 from Adelaide and am currently a member of the 2016 Ohio State University international intern programme (TOP). Prior to joining TOP I was working at The Grange Golf Club in Adelaide under course superintendent Richard James.

I found out about TOP first during my schooling at TAFE SA Urrbrae. I had a few mates go on to do the programme who spoke nothing but good words about it and that prompted me to get in contact with programme coordinator Mike O'Keeffe. As most will



be aware, TOP enables international turf students the opportunity to travel to the US to work, study and further their careers on some of the world's top golf courses.

Shortly after The Grange Golf Club had hosted the 2016 Australian Women's Open in February, I was on a plane to the US and my first placement at Robert Trent Jones Golf Club in Gainesville, Virginia. The course, designed by Robert Trent Jones Snr, was opened in 1991 and is routed around the beautiful Lake Manassas. RTJ is a premier golf course – membership is by invitation only – and it has hosted the Presidents Cup on four occasions, including the inaugural event in 1994. The 18-hole course consists of bentgrass greens, tees and fairways, ryegrass short cut and fescue rough.

As part of your placement with TOP, interns are given the opportunity to either work at a course hosting a US PGA Tour event or to volunteer at a Tour event. Being involved in tournament preparations is a huge buzz and during my time at The Grange I was privileged to be involved in preparing the course for the 2014 Astor Trophy and the 2016 Women's Australian Open. These events gave me a great insight into tournament preparation and whetted the appetite to experience more.

This year's Women's Open was my first 'major' tournament and it was very exciting to be involved with the entire lead up, preparation and to see what goes into hosting a televised golf event. In addition to preparing the turf surfaces for the week and seeing the hours of mowing and detail work that goes into preparing for a tournament, it was also

interesting to see the set-up of the infrastructure such as rope lines, TV towers and grandstands.

With that experience under the belt, I was therefore extremely excited while in the US to get the opportunity to work at both the 2016 Quicken Loans US PGA Tour event at Congressional Country Club in late June as well as the 2016 US PGA Championship at Baltusrol Golf Club in late July.

Arriving at Congressional for the Quicken Loans, I was taken in by the sheer scale of everything. PGA Tour events are big and it quickly became apparent the amount of money that goes into hosting such an event. Everything was bigger with Congressional running a ground crew of 75 for the event.

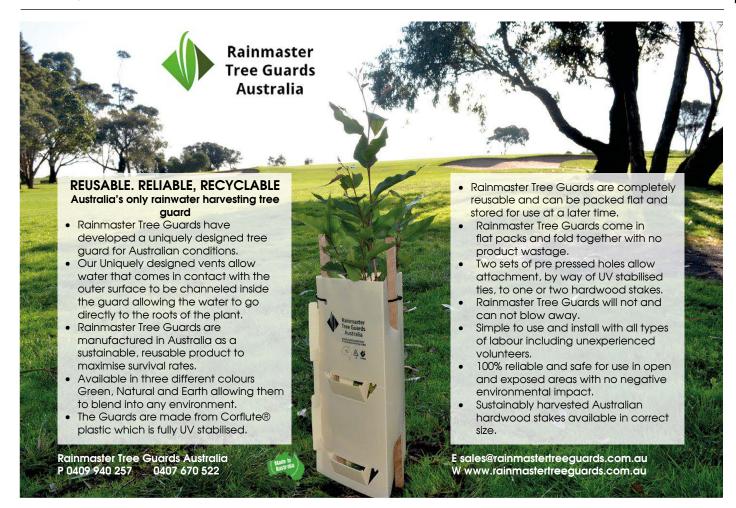
As much as Congressional was a fantastic experience and an amazing course to work at, it paled a little when compared to the US PGA. Located in New Jersey, the A.W. Tillinghast designed Baltusrol is a club that screams tournament history. In its 120-plus years it has hosted seven US Opens (the last in 1993), four US Amateurs, two US Women's Opens and two US Women's Amateurs. More recently it hosted the 2005 US PGA Championship won by Phil Mickelson with the 2016 PGA its second.

I arrived at the course the Saturday of lead-in week. All the volunteers were given their uniforms before being given a tour of the facilities by Lower Course superintendent Dan Kilpatrick. There was definitely a different vibe in the air compared to the Australian Open and the Quicken Loans.



Baltusrol has two courses – Upper and Lower – with the latter playing host to the PGA. The Lower course comprises bentgrass greens, tees and fairways, ryegrass intermediate cut and fescue rough. On our tour of the course you could definitely tell this wasn't just another PGA event; it was a 'major'. The fairways on 16, 17 and 18 were lined tee to green with sponsor marquees, all greens had huge grandstands behind them and in the middle of the course there was a marquee the size of a football field for patrons to get food, drink and watch the golf. The Upper course was also taken over and utilised for car parking, media and other tournament administration.

With the eyes of the golfing world watching, every square inch of ground at a major venue comes under intense scrutiny and it is vital the tournament crew is on the same page





Far right: The grand scale of 'major' golf tournaments has to be seen to be believed. Everything is supersized – the crew, the preparations, the marquees and the galleries (45,000 a day)

Above: The tournament crew fuels up prior to heading out on the course. Pedler was one of 110 to help prepare Baltusrol for the 2016 US PGA Championship holes include the back-to-back par five 17th and 18th holes. The 17th is 650 yards, which John Daly made famous by being the first person ever to reach the green in two, while the dogleg 549 yard 18th is riddled with bunkers and a water hazard. Jason Day, who would go on to eagle the 18th in his final round to push eventual 2016 champion Jimmy Walker right to the last, said Baltusrol is a course where every hole looks similar off the tee, but it forces you to think about your shots. Such a simple but complex design certainly came to the fore during the tournament which director of agronomy Mark Kuhns and the Baltusrol crew were able to showcase.

TOURNAMENT TIME

Our work officially began on the Monday of tournament week. Arriving at the course at 3.30am for a 4am meeting, Mark first talked a bit about the history of the course and the PGA Championships and what it meant to be hosting a major. Mark mentioned that he and his crew first found out that Baltusrol would be hosting the PGA Championship back in late 2013 and you could tell they had been counting down the days since then.

He went on to talk about how the week would unfold from a course preparation perspective and it was then that you got a real sense of the excitement that such a tournament generates. With the tournament on their doorstep, the level of anticipation was palpable.

With six inches or rain falling during tournament week, a huge amount of time was dedicated to repairing bunker washouts





Mark then handed over to Dan who proceeded to go through the many jobs allocated over the course of the week. The tournament crew numbered 110 for the week and with such a large number it was a huge exercise in logistics to make sure that everyone knew what they were doing, when and where. Dan had everyone's name written up on a board along with their assigned job and designated team leader.

Once you had been given your job you assembled with the other members of your team and your leader would brief everyone on how they wanted the task to be completed. I was on the fairway mowing team. Toro had provided 18 fairway mowers for the week and we were given two fairways each which we split with another person.

After our morning assignments, we would bring the mowers in and then go out and help the bunker crew. We had all morning tasks completed by 9am after which we would go and have breakfast and a brief meeting to discuss how things went. For the volunteers the first three days were akin to practice rounds for the golfers.

The afternoon shift didn't start until 4pm so that gave you an opportunity to get some rest in, walk around the course and watch some golf as well as talk to all the other course staff and volunteers for the week. At previous tournaments I had worked, those who volunteered were either interns or apprentices, however, at the PGA the majority of the volunteers were either superintendents, assistant superintendents or former superintendents who were now working in the trade.

As many will appreciate, in this industry it is not what you know but who you know and to be given the opportunity to network with these people was extremely invaluable. As a result I made many new friends and connections with people from around the world, something I would never had the chance of doing were it not for being a part of TOP.

As mentioned, the afternoon shift started at 4pm where we would gather for dinner before being assigned our duties. Mark and Dan kept everyone's jobs and the format of the week's schedule the same, so by the time the opening round of the tournament was upon us everyone was in sync and knew what had to be done.

Despite all the meticulous planning, the one thing you can never prepare for is the weather and over the course of the tournament week we received

CONTINUED ON PAGE 28













The impressive Robert Trent Jones Golf Club in Virginia has been home to Pedler for six months as part of his placement with The Ohio Program

CONTINUED FROM PAGE 26

a significate amount of rain – up to six inches! That amount of rain in such a short period of time washed out 90 per cent of bunkers which made the evening and morning bunker preparations all the more challenging and time consuming. After everyone had finished their morning assignments it was all hands on deck in bunkers. It was quite amazing to see over 100 people solely working on the bunkers.

Due to the heavy rains, green speeds only reached 12 on the stimpmeter and the surfaces were a lot softer than what was hoped. The wet fairways and greens provided a different challenge for the golfers, not to mention for us preparing them, but this didn't detract from the golf course as the layout came more into play. Despite the weather, the quality of golf on display was sensational and for Walker to go wire to wire and beat Day by a shot made for a memorable finish to what was a fantastic week.

EXPERIENCE OF A LIFETIME

Working a major tournament like the PGA is something you have to experience. While a PGA Tour event is special, a major is another level up. Everything is supersized – the crew, the preparations,

the galleries (45,000 a day!). With the eyes of the golfing world watching, every square inch of ground at a major venue comes under intense scrutiny and it is vital the tournament crew is on the same page. It was an absolute credit to Mark, Dan and everyone else involved in the week that despite the challenges the weather threw at us the course held up and was prepared in such incredible condition.

Coming away for my experience at Baltusrol, I was left feeling an enormous sense of pride and achievement. Going back to RTJ was a little bit of an anti-climax but it made you appreciate what you have done, the people you have met and the opportunities that exist for those of us lucky enough to work in this industry.

Working a major has shown me that the industry we are in is not just as simple as cutting grass and changing cups. It's a form of art mixed with a team sport. It takes a great eye for detail and a huge team effort to be able to present a course for a tournament. Having been involved in a number of tournaments both here in the US and back home, I now have a huge amount of respect for anyone in charge of preparing a course for any major event.

And luckily for me it doesn't just end with the 2016 US PGA Championship. I will be doing it all over again at the 2017 US PGA Championship which will be held at Quail Hollow. I will also be heading to Liberty National Golf Club in New Jersey next March for six months in the lead-up to the 2017 Presidents Cup in late September. There I will be involved in all aspects of tournament preparation – from burning in the first fairway stripes, to the rush of tournament week and then the arduous clean-up after the event. I can't wait!

I can do nothing but thank Mike O'Keeffe at Ohio State for the opportunity he and the programme has afforded me. To be able to experience the American golf course industry, its incredible courses as well as the culture and lifestyle is an opportunity not to be missed. I fully encourage those starting out in the industry back home to seriously look into it – you will not regret it!

Achieve strong, healthy and disease resistant turf with ProTurf.



Unique to ProTurf, Polyhalite is a naturally occurring mineral composed of Potassium, Magnesium, Calcium and Sulphur. New high impact fertilisers designed for use on tees, surrounds, fairways, sports fields and lawns. ProTurf contains a combination of Poly-S controlled release fertiliser technology, readily available urea Nitrogen and a unique multi-nutrient compound fertiliser-Polyhalite.

Rely on the ICL range of specialty turf fertilisers for superb turf colour and vigour.

Sierrablen ProTurf Sportsmaster













TOURNAMENTS

Right: Castle Stuart, just outside of **Inverness in the Scottish Highlands,** stretches spectacularly along the banks of the Moray Firth. Pictured is the par three 11th

Below: Castle Stuart has hosted the Scottish Open four times in the past six years. Pictured is the 4th with iconic Castle Stuart in the background



After volunteering at the 2012 and 2015 US Opens. Northern Golf Club superintendent Michael Pearce journeyed to the Gil Hanse-designed Castle Stuart in early July to assist with course preparations for the 2016 Scottish Open.

Melbourne. Here I'll meet up with good friend of mine and superintendent of Hervey Bay Golf & Country Club Peter Fraser to make the day-long journey to the other side of the world to volunteer at the 2016 Aberdeen Asset Management Scottish Open.

There is quite the sense of déjà-vu as I wait in the departure lounge. Just 13 months prior I was embarking on a similar trip to the US to volunteer at Chambers Bay for the 115th US Open. I was one of 120 volunteers, including five Australians, to make the journey to Washington State in 2015 and also among that number was a gentleman by the name of Chris Haspell, course manager of Castle Stuart Golf Links in Scotland.

The Gil Hanse-designed Castle Stuart hosts the European Tour's Scottish Open which immediately Having volunteered at Chambers Bay as well as the 2012 US Open at The Olympic Club in San Francisco, I had always wanted to experience tournament preparations on a true links style course.

Striking up a good friendship with Chris while at Chambers Bay, he mentioned that the course was hosting the Scottish Open for the fourth time in six years in July 2016 and that they would be bolstering the crew to assist with course preparations. No sooner had I arrived back in Melbourne after the Chambers Bay experience, plans were quickly put in motion for a trip to Scotland to volunteer.

SPECTACULAR SIGHT

Arriving in Edinburgh after a 23 hour flight, Peter and I jumped in a car and began the three hour hike north to Inverness in the Scottish Highlands. After the obligatory pit stop at St Andrews to briefly take in the Home of Golf, we arrived in Inverness and before heading to our accommodation decided to call in on Castle Stuart to have our first look.

We were met outside the clubhouse by general manager Stuart McColm who walked around with us and provided a brief history of the course. To say that Peter and I were blown away by how spectacular the course was would be an understatement. Located 10 kilometres northeast of Inverness, the course sprawls across 95 hectares of superb links land on the banks of the Moray Firth. Opened in 2009, Castle Stuart was designed by two Americans, managing partner Mark Parsinen and golf course architect Gil Hanse. The course affords incredible vistas of









Castle Stuart's 3150m² putter (top) and looking down to the 11th green from the 18th tee (above)

the Firth and overlooks well known landmarks that are synonymous with Inverness and the Black Isle region, including Kessock Bridge and Chanonry Lighthouse.

Our accommodation for the duration of our stay was a local farmhouse and upon arrival there we were met by the owner Kath who ushered us into the kitchen to meet the nine other tournament volunteers who were also staying there. One of those happened to be another Aussie Robert Arestia who is assistant superintendent at Spring Valley Golf Club in Melbourne. We were also introduced to volunteers from Carnegie Club Links, Royal Dornoch, Camberley Heath Golf Club, Tilford Farnham Surrey and other local courses. What amazed us was how welcoming and open everyone was – it was as if we had known each other for ever!

After a short sleep, we were all up at 3.30am to be at the course for a 4.30am start. Upon arrival at the maintenance shed we made our way into the meal room where all the other volunteers had congregated. To ensure the four-day European Tour event ran smoothly, Chris had assembled a 46-strong international field of volunteers to complement his usual course staff of 14. It was a bit like the United Nations with ground staff from Australia, USA, Canada, New Zealand, Switzerland, Germany, Sweden, Denmark, Ireland and England assisting for the week, including five links course managers, as well as deputy head greenkeepers and apprentices.

Chris, who has been superintendent at Castle Stuart since day one of the course being constructed,

outlined our duties for the week before providing a bit of history of the course. The total managed area of the course is 25 hectares, with 2.5 hectares of greens. The entire course is a fescue mix (Sheeps and creeping red fescue) along with *Poa annua*. The greens are pure fescue and consist of four different types. Tournament height of cut for the greens was 4.5mm and fairways and tees 9mm.

Once all the formalities had been completed, we all received our uniforms, passes and were divided into our specific groups to start the morning's work. When we finally got out onto the course, it was hard to concentrate on the task at hand given the spectacular surrounds.

From my perspective, Castle Stuart has succeeded in combining every element that makes a truly great golf course. Visually the course seems to just cling to the banks of the Moray Firth and is

The wonderful undulations – or 'rumple' as the locals call it – on Castle Stuart's 14th fairway





 Australian Scottish Open volunteers (from left) Rob Arestia, Peter Fraser and Michael Pearce with Castle Stuart course manager Chris Haspell (second from right) breathtakingly beautiful. It is a split level layout, with six holes that appear to hang over the Moray Firth and 12 holes above on a natural plateau overlooking the water. Every hole on the course has its own characteristics, with no two the same or similar.

What I found amazing about the course was how it gives the sense of being completely natural. When you look at the undulations on the fairways and greens, you would think that all they have done is mown the grass to signify the greens, fairways and tees. That's how natural the course looks, whereas in reality the course was completely manmade. The shaping of the course is a credit to both the designers and the construction crew.

As Parsinen writes in the Castle Stuart course guide: "Surrounding the golfer is a rugged and natural landscape comprised of vast expanses of gorse, broom, heather and sea marram. This mosaic often tightly frames the vistas beyond and combines an immediacy of natural surrounds with a grand sense of distant vistas. Enjoying the visual experience on any given hole is a private pleasure as other holes and conflicting inland views are out of sight.

"Castle Stuart's presentation of its manicured playing surface within its rugged natural beauty harkens back to a simpler era of golf, the 'transitional period' 1890 to 1935. Wayward shots find thin wispy fescue and pockets of bare sand where balls are easily found and recoveries manageable. The bunkering is characterised more by open sandy areas with pockets of light vegetation than by formally revetted manicured bunkers. All in all, Castle Stuart can be described as a throwback to golf as it once was – a simple walk through pleasing natural surrounds with some companionable and competitive rules attached to it."

There were a few holes that really stuck out for me, including the driveable short par four 3rd with its green that appears to be on a peninsula and the following par three 4th which has the iconic Castle Stuart looming large in the background. The 8th is another lengthy par three (218 yards) with a punchbowl green that requires some imagination if you end up on the wrong side, while the 9th was recently lengthened by 30 yards to just over 400 yards. The 599 yard par five 12th requires two blind shots before you can actually see the green, while the green on 13 is framed beautifully by the Kessock suspension bridge in the distance.

The par four 14th (386 yards) was one of my favourites due to the amazing contouring of the fairway towards the green. At no point from about 100 metres out would you be standing on a flat piece of ground. You would be either playing your shot from above or below your feet or on the side of mound due to the uneven ground that the locals call 'rumple'. To conclude, the 18th at 607 yards is a truly memorable finishing hole. At the tee you can look over the course and marvel at where you have been before having to contemplate yet another blind tee shot.

A LONG WAY FROM HERVEY BAY

f you're going to head overseas for the first time, then you may as well do it properly. For Hervey Bay Golf Club superintendent Peter Fraser, volunteering at the 2016 Scottish Open at Castle Stuart was his first trip overseas and given he'd travelled to the other side of the world he certainly made the most of it.

As well as taking in the hallowed ground of St Andrews (including getting the obligatory snap on the famous Swilcan Bridge), Fraser also managed to sneak in visits to a number of other courses including Brora, Royal Dornoch and the exclusive Carnegie Golf Club.

"We had time between shifts at Castle Stuart to do what we like, so on the first Monday a few of us headed north of Inverness to play Brora Golf Club," says Fraser. "It was an absolutely brilliant traditional links course which followed the coastline. The bunkers were revetted, the rough was knee high and there were electric fences around the greens to keep the sheep and cattle off them.

"After the tournament I met my wife and we had a holiday during which time we stayed at the Royal Golf Hotel next to the 1st tee at Royal Dornoch Golf Club. Naturally I had to go for a look and get some photos... what a course! While we were staying there George Duncan, whom I met volunteering at Castle Stuart, picked us up and showed us around Carnegie Golf Club where he is assistant manager. It is a very exclusive club and I am not allowed to post any photos or say too much about the place, but it was an incredible facility. They have only 2500 rounds a year compared to my club Hervey Bay which gets through 72,000.

"I would like to thank Hervey Bay Golf Club members and the committee for all their support in sending me over to volunteer at the Scottish Open and also Chris Haspell and his staff at Castle Stuart for giving me the opportunity. It was a fantastic experience."



Hervey Bay's Peter Fraser at Royal Dornoch and St Andrews

OPEN TEST

With The Open Championship immediately following, the 2016 Scottish Open attracted a strong field that included the likes of Henrik Stenson, Phil Mickelson, J.B. Holmes and Steve Stricker. Although not featuring among the eventual leaders at Castle Stuart – that honour would go to Swede Alex Noren

- that quartet would ultimately go on to finish top four the following week at Royal Troon.

For the Scottish Open, Peter and I were assigned fairway cutting duties while Rob was cutting tee complexes. The morning shift saw:

- Fairways cut using eight Jacobsen Super LF-1880 fairway mowers;
- Greens cut using Jacobsen walk-behinds (six staff cut three greens each);
- Tees cut using Toro 1000 walk-behinds (six staff to cut three tee complexes each);
- Rake and broom all bunkers:
- Two crews of four staff to dew-whip all fairways once cut by fairway mowers. This was to remove any clumps of clippings left behind by the mowers.
- Holes and tee markers changed.

In the afternoon we were all divided into two teams and taken out on to the course where we divotted fairways and removed any broadleaf weeds from fairways (the divotting sand was mixed with fescue seed).

From Sunday through to Wednesday we worked in split shifts – 4am to 9am and then 8.30pm-10.30pm. The one thing that amazed me was the length of the days. From about 3am through to 12am was daylight with only about two hours of slight darkness during the entire summer period. I was wondering how the normal crew coped with the extended daylight hours, but they were quick



to point out they enjoyed the summer months as winter was the exact opposite – very short and very cold days!

The opening round of the tournament proved to be very interesting with strong winds coming in off the Moray Firth. The greens were coming under intense scrutiny as balls were oscillating due to 43mph winds. We managed to get through the opening day, but the afternoon shift started late as the last groups didn't complete their rounds until 8.30pm.

Due to the weather conditions and the requirement by the European Tour to have the tournament completed on time so that all competitors could make their way to The Open, each morning Chris would instruct the greens crew to wait at their greens before advising them if the green would be cut or rolled using the mowers.

Both Mick Pearce and Peter Fraser were on fairway duties. Castle Stuart's fescue/Poa fairways were cut by eight Jacobsen Super LF-1880 fairway mowers at 9mm







Above: Castle Stuart is wall to wall fescue and *Poa*. The greens contain four varieties of fescue and the fairways are a mix of Sheeps and creeping red. Pictured is the approach to the 8th green

Below right: "Castle Stuart can be described as a throwback to golf as it once was – a simple walk through pleasing natural surrounds with some companionable and competitive rules attached to it."

Below: Plenty of fun to be had around Castle Stuart's 13th green

Chris would head out with the European Tour representative, stimp each green and then make the call whether to cut or roll. The greens were rolling between 10.5 feet to 10.8 feet. Greens weren't cut ahead of the second round with some rolled and the rest left as they were. The third day saw some of the greens cut and the others left, while on the final day, with only a slight breeze predicted and some rain the previous night, all greens had a full cut.

In a post on the Castle Stuart blog following the tournament, Chris said it proved to be a very challenging tournament for both the volunteers and his crew: "The Open provided a great learning experience not just for our own staff but for green keepers from around the world. With strong winds and rain affecting conditions, it was a tough challenge for the team.

"It was a great learning experience for everyone and the team loved being involved in the tournament. Many did not have previous experience of such a large event and the organisation that goes with it, but the feedback I received was very positive. Hopefully they learned a few things they can take back to their own courses.

"All in all, it was a tremendous tournament which tested us on a daily basis. But the team always rose to the challenge and the feedback we've received about the condition of the course was fantastic. The Highland weather also ensured all our visiting ground staff got the full links experience."







There were numerous highlights from the tournament, but what really struck me was how they managed to design and build a course that made every aspect look and appear so natural; it was truly amazing. The second was how everyone involved in the tournament was so welcoming. Everyone got along with each other and to sit and listen to others talk about their experiences and to bounce ideas of each other and hear things from a different perspective was really refreshing. The best thing was that everyone, no matter what club or country they were from, worked together effortlessly, as everyone shared the same passion for greenkeeping and golf course management.

Even though the Scottish Open isn't one of the 'majors', I will always cherish the experience and value the friends that both Peter and I formed. I learned a lot about different approaches to common issues and gained valuable experience through working with greenkeepers from all over the world. Working on the European Tour was a truly remarkable experience and one that I'll always be willing to go back to.

Comparing the Scottish Open to other tournaments I have had the fortune to be part of, it was fantastic to experience one on a proper links golf course. I thought The Olympic Club was the pinnacle in organisation, but the Scottish Open was on a par or even better. It was brilliant and an absolute pleasure working alongside Chris, his crew and all the other volunteers. And as for the views, well, you could never get sick of the views...

Editor's note: You can follow Chris Haspell @ manfescue and Michael Pearce @Mick1207 on Twitter. For more on Castle Stuart and to read their regular blog, visit www.castlestuartgolf.com.







For more information ask your Syngenta Agent or go to www.greencast.com.au

Right and below: The poor condition of roughs can detract from the enjoyment golfers derive from their round

The **ONC**

Roughs, carries and areas
of high wear often come
in for heavy criticism by
members and players.
As AGCSATech senior
agronomist Andrew Peart
writes, focussing on these
'one percenters' can make
a world to difference to the
perception and enjoyment
of your course.





here is no doubt that on golf courses the condition of the main playing surfaces – greens, tees and fairways – is critical to the overall enjoyment of the game. However, to many who play, it is often much more than just hitting golf balls off manicured surfaces. While the vast majority of resources should, rightly, be directed towards ensuring consistent and high quality primary playing surfaces, other areas on the golf course must also present a suitable playing surface.

The condition of roughs and carries is often heavily scrutinised at most courses. In some respects the roughs may well be akin to the local vegetation and provide the golfer with a sense of place, whether that be grasslands, native vegetation or sandy wastes.

Unfortunately on newly constructed golf courses the establishment of rough areas or the transition of disturbed ground back to native vegetation is generally poor due to a combination of insufficient money, poor soil types, lack of irrigation or simply because these areas are not deemed important enough. On the odd occasion though the opposite occurs, where much time and effort is invested into establishing rough, usually to provide a distinct contrast with the fairway surface, only for it to fail due to the ongoing expense of water or other resources.

The rough on most golf courses should provide a complete grass coverage unless there are particularly environments or design philosophies which dictate sandy or wispy areas. New golf courses are often opened for play once the main playing surfaces have met certain handover requirements, primarily for grass coverage and levelness, however, the roughs are often ignored with the pretence that they will 'improve over time'.

Once a course opens for play the amount of time

and input into promoting grass coverage within the roughs is often neglected due to the requirements to maintain the primary playing surfaces. Simply there is often not the manpower or resources available. However, the success of these courses, particularly if they are pay-for-play courses, is often dependent on the golfer's perception of the entire golf course. Thin lies in rough areas, that should be fully grassed, will not leave a good impression, particularly if the golfer is more often hitting from the rough than the fairway.

Establishing rough can be challenging, especially if it needs to survive over the summer with little or no permanent irrigation often on hard, compacted clay soils. Where the rough is a blend of cool-season grasses, establishing those areas from seed can be particularly difficult due to poor soil types and lack of available irrigation. In warmseason grass climes where the rough needs to be established post-construction, the existing fairway vegetation should be utilised as the base grass composition.

Utilising cores or scarifying is an ideal way of promoting greater grass growth within the roughs. It is obviously important that these living plants have very good soil contact, so some sort of soil cultivation is required in the rough beforehand to expose and prepare a seedbed for the vegetative material to take root. Once distributed over the surface, the material should be rolled into the soil to provide good soil contact but also to smooth the area and then marked as GUR.

Irrigation of these areas can be problematic though especially if a course only has single row irrigation or hard-edged irrigation which does not throw into the roughs. Irrigation is vital if successful grass establishment within the roughs is to occur. The ideal scenario would be to have a

QCV somewhere nearby where a soaker hose can be set up to water the new sprigs. The advantage of a soaker type hose is the lower precipitation rate meaning the water soaks into the soil rather than simply running off.

There are also adaptors available to convert electric valve-in-head sprinklers into a QCV which means that a nearby sprinkler may also be able to act as a convenient irrigation source for watering new areas during the day. There is also manual watering with a water tank and pump, although this is far more labour intensive.

Vegetative material also requires constant fertility to keep the new plant actively growing. Ideally an application every 10-14 days at 0.1kgN/100m² of a starter type fertiliser with roughly equal proportions of N, P and K is recommended.

It would be hoped that a complete warm-season grass coverage could then be established over the summer period and then if needs be a cool-grass grass could be oversown into it during the autumn months to provide any desired contrast. It is hoped that cool-season grasses being planted during the autumn would not need the same irrigation requirement, although that depends on the club's expectation for the rate of the cool-season grass's establishment.

One club that has implemented such a plan is Settlers Run Golf and Country Club in south east Melbourne, not because of poor grass coverage within the rough but due to an inability to maintain high quality cool-season fine fescue rough due to the high inputs required.

Their programme required spraying out specific sections of rough, rotary hoeing the area, then broadcasting couchgrass (Legend) sprigs that had been scarified from the adjacent fairway, power harrowing and watering. The subsequent rough will have far more consistent grass coverage all year round yet can still be cut at a significantly higher height to provide adequate fairway definition.

Other areas of the golf course that often struggle for coverage are those subjected to high wear such as walk offs from greens and tees and the ends of cart paths where traffic is funnelled. Clubs often utilise hoops, ropes or line markings on the turf to remind cart drivers to stay out of certain areas, although it can be very difficult to 'break' people's habits.

If rotation of heavy wear areas cannot be successfully achieved, grass loss is inevitable and depending on the grass species and climatic conditions at the time it may not rejuvenate at all. Often it can be far easier to simply sod cut the affected area out and replace than try and get recovery.

Many areas of the golf course can provide excellent 'harvest zones' from where suitable grasses can be sourced and re-laid in high wear areas. It is also worth noting that soil compaction is often inevitable in those areas so some form of soil





compaction relief is strongly recommended before the new turf is laid.

Ideally the source of where the new turf came from should be 'out of play' and generally at the start of a fairway is ideal. If significant areas are required then a 'runway' of mature turf should be left allowing foot and cart traffic through. Additional fertility and irrigation should then be applied in these areas to promote a quicker recovery as well as being marked as GUR.

The use of on course turf can be a huge saving for clubs rather than buying in turf, although there may well be some disruption to normal play if clubs do not have a dedicated nursery area. However, if turf is taken from the start of fairways, and only taken during the growing months, the recovery and ultimate 'disruption' should be minimised. ##



Rough improvement works at Settlers Run Golf & Country Club

Often it can be far easier to sod cut affected high wear areas out and replace than try and get recovery





ATM columnist

John Neylan

reports back on

the 5th European Turfgrass

Conference held in Portugal
in June and also reflects
on his visits to a number of
war cemeteries along the

Western Front.

The European Turfgrass Society held its fifth annual research conference in Portugal in June n June I had the privilege of attending the 5th European Turfgrass Society (ETS) conference in Albufeira, Portugal. The ETS is a relatively new association and was established in 2007 with the following objectives;

- The spread of innovative applications and encouragement of a holistic view of turf, particularly with respect to its influence on urban and environmental quality;
- Provide a forum for scientists, consultants, companies and practitioners to discuss technical issues related to the provision of turf surfaces;
- Spread innovative applications for the benefit of the turfgrass industry, national and local government and the European public;
- Encourage a systems-based approach to the study of turfgrass through multi-disciplinary groups working at different levels; and
- Consider turfgrass knowledge in the broadest sense, including its use in sport and leisure, its role in improving urban quality and its importance in the mitigation of environmental effects such as soil erosion.

While the ETS is a new organisation it does highlight that there is an interest in turfgrass research in Europe and in particular having an emphasis on resolving the challenges of maintaining and presenting suitable playing surfaces in a sustainable manner. It also provides a forum for those interested in the science of turf to get together and discuss the issues of the day.

The conference theme was 'Turfgrass – Towards sustainability and perfection for aesthetic, recreational and sports'. The theme of the conference was quite apt given the challenges that many turf managers have of trying to balance expectation within sustainable practices.

It was a refreshing change to attend a turf conference that was not dominated by research from the US and provided a broader European view. Europe faces many challenges like Australia in terms of water availability and environmental protection. The Mediterranean countries such as Spain, Portugal, Italy, Greece and Turkey all have arid climates like Australia and there is a lot to be learnt from their research programmes.

The ETS organises its scientific turfgrass conference every two years with this year's conference organised by The University of Algarve. The Algarve region is a major tourist area of Portugal and has about 40 per cent of the country's golf courses with water availability being the main challenge.

There were 115 attendees at the conference with 42 oral presentations and 37 poster presentations. The scientific programme covered seven main topics;



- Turfgrass genetics and breeding;
- Turfgrass and landscape;
- Turfgrass pests (diseases, insects, weeds);
- Technology advances and turfgrass maintenance:
- Water management;
- Turfgrass nutrition and physiology; and
- Turfgrass sports

There was much to be gleaned from the presentations and a few of the key points that I found interesting included;

- Collections of native Cynodon sp. throughout the Mediterranean region are providing an increase in the available germplasm and the potential for improved water use efficiency.
- Economic studies of the value of golf in Europe indicate that golf has a value of around Euro 2-5/square metre whereas agriculture returns about Euro 0.02-0.05/square metre. The study indicates that golf is a small user of water with a high value return for the water used.
- An economic study of a USGA profile compared to a soil profile demonstrates that the USGA profile has a higher upfront cost, however, there is a break even at about year five.
- Research on shade and low light tolerance of grasses was presented in several papers, however, the reality is that there are no 'silver bullet' solutions to low light.
- There is a lot of research taking place on the use of organic biostimulants and none of the papers presented demonstrated any tangible benefits over traditional practices.
- With the advent of drones and specialist cameras, the aerial evaluation of turf areas has become a major area of study. This ranges from monitoring turf farms using LandSat satellites to fixed cameras in sports stadia and drones that can be flown across turf areas. This work emphasises that there are many more tools available for evaluating turfgrass health and surface performance.
- Herbicide resistance is a topic never too far away. A topic that piqued my interest was one that investigated the possibility of creating



herbicide resistance in seashore paspalum as a means of being able to control couchgrass in SSP. The research used the approach that we are familiar with in that the same herbicide was used on a regular basis in order to trigger a change in the gene that makes SSP susceptible to herbicides such as fenoxaprop. Not sure that this is what the turf world needs but it does demonstrate how easily herbicide resistance can develop.

- Veynote speaker Dr. Tom Hsiang from Guelph University presented a review paper on improving disease resistance in turfgrass by activating the natural defence mechanisms. This research is in response to the ever-increasing pressure to reduce the use of fungicides. These compounds include mineral oils, phosphites, chelated metals and silicon. In the context of the research it was notable that iprodione and chlorothalonil are to be lost to turf in Canada due to a Government edict. These fungicides have been stalwarts of the Australian turf industry for many years and would be a considerable loss in any area of turf management.
- The Scandinavian region is one of the more environmentally sensitive zones of Europe and there is a strong emphasis on using/promoting the biodiversity that golf courses provide.

CONTINUED ON PAGE 41

More than half of the 700 hectares of ground under the Commonwealth War Graves Commission's control is given over to fine horticulture with over 900 gardeners employed

Main photo opposite: The Villers-Bretonneux Military Cemetery in France is just one of hundreds maintained by the Commonwealth War Graves Commission. The commission cares for cemeteries and memorials at 23,000 locations in 154 countries



A DISTINGUISHED CAREER DESERVEDLY REWARDED



2016 AGCSA Distinguished Service Award recipient Euan Laird, together with the support of various boards, dragged the AGCSA kicking and screaming into the 21st century during his tenure as CEO

was very pleased to see Euan Laird bestowed the 2016 AGCSA Distinguished Service Award, a more rewarding and influential recipient I cannot think of. Having known Euan from the first day that he ventured into the turf industry, I have always admired his career progression and achievements. Among these he took on possibly two of the most challenging roles in managing the fledgling Australian Golf Course Superintendents' Association and then one of the most political positions in horticulture as the chief executive of AusVeg.

Euan joined the Turf Research and Advisory Institute (Victorian Department of Agriculture) in the late 1980's as a new graduate from the University of Melbourne. From the very first day he had all of the attributes of a good extension/advisory officer. He was friendly, engaging and confident and related very well with the greenkeepers and golf course superintendents that he dealt with as he visited golf clubs, bowling clubs and tennis clubs around country Victoria. His engaging manner made him the perfect advisor to the many volunteer greenkeepers in far flung places such as Swifts Creek and Merbein.

Euan has always been a conservationist at heart and during one trip to Swifts Creek rescued an injured wombat, transporting him on the back seat of the government vehicle. He also showed some early leadership qualities as he led a band of impressionable, young Department of Agriculture staff in an after-hours rally cross in a government vehicle around the bush tracks of the Ballarto Road field station!

The Turf Research and Advisory Institute had a name change to Turfgrass Technology and was eventually restructured and moved from Frankston. Euan was a key member of the new organisation along with David McGeary, Michael Robinson and myself. It was not long into this tumultuous period that I received the dreaded phone call from Euan telling me that he had been appointed as the AGCSA's CEO. I must admit that I was very disappointed and uttered a few unmentionable

words in response. When an organisation loses a go-getter like Euan it is very difficult to replace.

Euan is a dynamic personality and with the support of the AGCSA Board, dragged the AGCSA and, by default, a good part of the turf industry kicking and screaming into the 21st century. The turf industry has always been very conservative and reluctant to put itself forward and to challenge convention. With Euan and the Board of the AGCSA this changed considerably.

The building of the conference, the AGCSA's own publication, trade relationships, developing resource material and challenging the education system were all pioneering initiatives. Most of this work was done by Euan as conference organiser, journalist, member relations and trade relations. In the process of developing the AGCSA Euan trod on a few egos and conventions. However, there was a mandate and a need to develop the industry and that meant that sensitivities could not always be considered. As a side note it has often been this conservatism that has slowed the progress of the turf industry. Euan and the AGCSA Board ensured that the AGCSA became industry leaders.

In late 1999 Euan rang me and asked if I would be interested in joining the AGCSA. At a time when I was in need of a change, the timing was perfect. I was to be the first employee of AGCSATech, a bold initiative dreamed up by Euan where he identified a niche market for an independent technical service. Euan also saw the importance of undertaking research projects that were relevant to golf course management. The prospect of being involved with the AGCSA and its new initiative were both exciting and daunting.

Euan was a salesman of the highest order and was able to sell me his vision. As with many of the AGCSA's initiatives the naysayers were out in force and in particular the trade were venomous with their criticism. One story being peddled was that the AGCSA was going to become a mega buying group! To the credit of the AGCSA Board and Euan they stuck fast and AGCSATech has now provided 16 years of independent advisory services and research to the turf industry.

When I joined the AGCSA in 2000 I was amazed at how much Euan did. He was incredibly supportive and was always ready to help, including the preparation and planting of our first trial plots. The day Euan resigned was a tough day for me personally because of his support and leadership. Euan was worn out and it wasn't until I had a short stint in his position that you realise how taxing the job can be.

Well done Euan on the award, a most deserving recognition of helping to create the foundations of a great organisation.





CONTINUED FROM PAGE 39

There was also a paper from Scandinavia that reported on the research undertaken to use nonherbicide methods for the control of weeds. This study failed to demonstrate a viable alternative.

The conference highlighted to me that in Australia we are undertaking minimal research compared to the rest of the world and what is being undertaken is being funded by state superintendent and sports turf associations. There is currently very little interest in research from the organisations that control the sports. It is unfortunate, given some of the challenges that we face around weed control, herbicide resistance and expectation vs sustainable surfaces to name a few.

LEST WE FORGET

During my trip to the ETS conference, my wife Gayle and I took the opportunity to tour the World War I battlefields in France and Belgium. I have a great interest in World War I history and my wife had two relatives killed in the early days of the battles at Pozieres and Ypres. Our intention was to find her relatives' graves and in doing so it revealed an unexpected horticultural bonus.

The Commonwealth War Graves Commission (CWGC) ensures that the 1.7 million people who died in the two World Wars will never be forgotten. They care for cemeteries and memorials at 23,000



locations in 154 countries. On the Western Front there are over 900 cemeteries scattered across the countryside. It was a common sight to find cemeteries in the middle of a cereal crop where the agricultural surrounds added another beautiful element and sense of renewal in an area that had been absolutely devastated by war.

With gardeners and horticultural experts working in all these countries, the CWGC is one of the world's leading horticultural organisations. More than half of the 700 hectares of ground under the Commission's control is given over to fine horticulture with over 900 gardeners employed.

On the Western Front there are over 900 cemeteries scattered across the countryside, such as the Australian **Corps Memorial in Le Hamel, France**



Australian Distributors of Spectrum Monitoring Equipment



- **NEW 2900ET Weather Station** efficient AND economical
- Full featured ET weather station measures temperature, humidity, rainfall, wind, and solar radiation.
- Weather station can be customized with additional plug-in sensors eg: soil moisture, light, barometric pressure to suit your needs.
- 3 connection options- direct connect, wired modem or 900 MHz (license-free) radio.
- Standalone or integrates fully with Toro Lynx central control software.









Bailoy Decoders

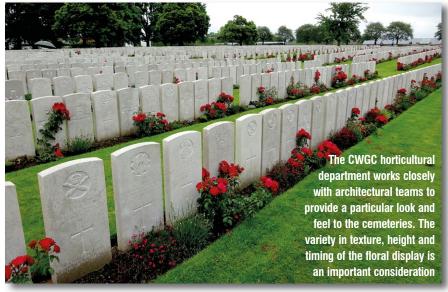
All Network CDS course customers your future upgrade path is with Bailoy.

- You will not have to change your decoders or solenoids.
- Windows platform.
- GTS (Gemini Trident) manufacturer support and extended warranty packages are available.



Talk to us for your cost effective upgrade path.

Parkland Australia Pty Ltd Ph: 07 3267 3522 info@parklandaustralia.com.au www.parklandaustralia.com.au



TS 2.58 PRIVATE

A.W. BLENNEN HASSETT

AUSTLANNY MEDICAL CORPS

32D SEPTEMBER 1916 AGE 24

CXEATER LOVE HATEING MAN

Gayle Neylan's great uncle Arthur Blennerhassett, a stretcher bearer, was killed at Pozieres during World War 1

Attendees at the 3rd Grass Court Forum held at Shepparton Lawn Tennis Club in August The horticultural department works closely with the architectural teams to provide a particular look and feel to the cemeteries. The variety in texture, height and timing of the floral display is an important consideration and this was most apparent during our visits. Each headstone border is planted with a mixture of roses and herbaceous perennials with low-growing plants immediately in front of headstones. According to the CWGC this is to ensure that inscriptions are not obscured and to prevent soil from splashing back during rain. There are also many fine expansive lawn area consisting of bentgrass, fine fescue and ryegrass. All the lawns were beautifully maintained.

Sir Frederic Kenyon, director of the British Museum, was tasked in 1918 with developing the principles for the cemeteries. In his document on 'How the Cemeteries Abroad Will Be Designed', he stated that, "There is no reason why cemeteries should be places of gloom." Sir Kenyon recommended that the feeling of the cemeteries should have the general appearance of a British cemetery with flowers, borders and paths. The cemeteries are living places and the CWGC gardeners maintain the grounds to the highest standards. From our experience this has undoubtedly been achieved.

On a personal note, we found the grave of Gayle's great uncle Arthur Blennerhassett who was

a stretcher bearer in the Australian Field Ambulance killed at Pozieres. His brother, who survived the war, was at the other end of the stretcher when his brother was killed. We were also fortunate to find the grave of another relative, Herbert Spencer, killed in Belgium and buried at the Lijssenthoek Military Cemetery. For more information about the CWGC and the work it undertakes, visit www.cwgc.org.

SHEPPARTON SERVES IT UP

And finally, I recently ventured to Shepparton Lawn Tennis Club to participate in the 3rd Grass Court Forum organised by Tennis Victoria. The forum recognises the important role that lawn tennis courts play in country Victoria.

The principle driver of the event is Swan Hill Lawn Tennis Club curator Dan Gardner (if you're on Twitter check him out @GreatManDan) who manages over 50 lawn courts (by himself!). Dan recognised that tennis was spending a lot of time on the new synthetic surfaces and failing to acknowledge that the many lawn courts are maintained either by volunteers or greenkeepers that had fallen into the profession. There was a need to have a forum where the challenges of maintaining lawn tennis courts could be discussed.

It was a great day of old fashioned, but highly effective, turfgrass extension. There was great interaction between the attendees and discussion around the topics of the day. Well done to Dan, Tennis Victoria and Shepparton Lawn Tennis Club. I would also like to add that if you are a golf course superintendent in the country and there is a lawn tennis court complex in your area, reach out to the greenkeeping staff and share your experiences.

Poa annua control survey

Thank you to all those course superintendents who took part in the *Poa annua* control in warm-season grasses survey conducted earlier this year. The comprehensive questionnaire, compiled by Jyri Kaapro, Daryl Sellar and myself, and with the support of the AGCSA, was designed to gain a better understanding of whether there is a lack of chemical control and if so the extent of the problem.

Over the past 10 years or so the options for controlling *Poa annua* in warm-season grasses has been reduced. With an increasing reliance on selective herbicides from the same chemical group, herbicide resistance has become increasingly apparent.

This survey was the biggest of its type conducted in Australia on this very pressing issue and we had a good response. Now begins the process of analysing the data and it is anticipated that we will be able to present some of the findings in the next edition of ATM.

John Neylan





THE ICV IS THE TOP-OF-THE-LINE VALVE YOU CAN COUNT ON

for superior durability and the ability to handle exceptionally high pressures in challenging water conditions. It includes both a fabric-reinforced EPDM diaphragm and seat, and flow control as standard features, with an option for integrated pressure regulation. It's strength and durability for the most demanding projects.



All Hunter ICVs are equipped with flow control to fine-tune each zone. Handles available in purple to identify non-potable water sources.



Filter Sentry to option scours
the filter clean twice during
each valve cycle, perfect for
use with dirty or reclaimed
water. It is easily added
after valve installation.



Accu-Sync™ valve pressure regulator provides the ability to run an ICV zone at the proper pressure. Available in adjustable and fixed pressure models.

RESIDENTIAL & COMMERCIAL IRRIGATION | Built on Innovation

Learn more. Visit hunterindustries.com



National Free Call: +1 800 HUNTER Toll Free Fax: +1 800 651 680 www.hrproducts.com.au hrsales@hrproducts.com.au



Tel: 1300 856 368 Fax: 1300 856 369 www.nelsonirrigation.com.au info@nelsonirrigation.com.au



Suite 7, 202 Ferntree Gully Road, Notting Hill, Melbourne, Victoria 3168 Tel: +61 3 9562 9918 Fax: +61 3 9558 6983 Call today for your free Hunter catalogue +1 800 811 370



ATM profiles 2016 AGCSA and STA Australia Graduate of the Year Award recipients
William Koopmans and
Kurt Dillon.





hey may have embarked on their turf management careers in different states and in different sectors of the industry, but 2016 Graduate of the Year winners William Koopmans and Kurt Dillon share a heap in common. It was their love for sport – golf in the case of Koopmans' and rugby league in Dillon's – that kindled their interest in turf and with a few years in the trade now under their belts that passion has only intensified.

At the 32nd Australian Turfgrass Conference in Melbourne, Koopmans and Dillon respectively collected the AGCSA and STA Graduate of the Year awards, presented in partnership with long-standing sponsor Toro Australia. In both instances they beat home an extremely strong field of fellow state finalists, with Koopmans becoming the third VGCSA representative to win the AGCSA award in the past six years. Likewise, Dillon became the second NSW representative to win the STA award which was inaugurated back in 2011.

In collecting their awards both Koopmans and Dillon were quick to congratulate their fellow finalists and were in little doubt as to what the award would mean to each of them as they progress through their careers. Indeed, the awards have quickly opened up further opportunities, Koopmans in particular, and both will journey to the US in 2017 as part of the prize for winning the awards courtesy of Toro.

OPENING DOORS

For Koopmans, golf has been an integral part of his life since primary school. It was during these formative years that he managed to collect his first tournament win at Mt Xavier Golf Club which sparked a desire to one day work on a golf course and prepare playing surfaces.

He didn't have to wait too long for that opportunity to come about in the form of an apprenticeship at Ballarat Golf Club which was advertised in the local newspaper. Duly taken on by course superintendent Jeff Powell, Koopmans' skill and ability as a young apprentice quickly shone through and he became a key member of the crew.

Part of a small maintenance crew and joining the club shortly after it relocated to a newly constructed course, Koopmans was immersed in a huge variety of course maintenance practices during his apprenticeship – cutting, spraying chemicals, renovating playing surfaces, bunker maintenance as well as changing holes and setting markers.

As with any maturing golf course, Koopmans was also exposed to a raft of ongoing remedial works including installing two kilometres of fairway drainage, bunker improvements (drainage, replacing sand and making improvements to lips and faces) as well as enhancing the course's fledgling landscape areas. He also helped prepare the course for two PGA Futures Championships. In addition to his on the course training, Koopmans completed his schooling through The Gordon Institute of TAFE and since finishing his apprenticeship has continued on to do his Diploma.

"I love everything about golf, both the playing and course maintenance side of it," says Koopmans who qualified for the AGCSA Graduate of the Year Award after being named the VGCSA Graduate of the Year in May. "Being a keen golfer outside of work has made me a much more passionate turf manager

as it gives me a better understanding of what standard golfers want the playing surfaces to be at.

"I enjoy constantly learning the turf trade as it is my passion. I love the day-to-day challenges that the job brings as no two days are the same. I love working in a positive environment and working with great people that I have met either through trade school or on the golf course. It is very satisfying looking back on your work at the end of each day and I take great pride knowing that I have helped to create something that the members enjoy.

"I gained a great deal of experience and knowledge during my apprenticeship at Ballarat Golf Club. Superintendent Jeff Powell and assistant Dan Oswin, a former AGCSA Graduate of the Year winner, were fantastic mentors and I couldn't have wished for a better grounding in the industry.

"My teachers at The Gordon have also played a huge role in my success to date, including Greg Ollis, Paul Deller and Chris Deppeler, and I wouldn't be where I am today without them. They taught me the do's and don'ts of turf management and have been outstanding mentors to look up to. They haven't just taught me turf management skills but also the importance of responsibility, maturity and leadership."

Since winning the AGCSA Graduate of the Year Award, Koopmans has departed Ballarat to take up a short-term placement at 13th Beach Golf Links. Earlier this year Koopmans volunteered there for the 2016 Oates Victorian Open, which he describes



as a fantastic experience and one all apprentices should put their hand up to do, and will reside at the Bellarine Peninsula course until he heads to the US in early 2017.

Courtesy of Toro, Koopmans will attend the University of Massachusetts Winter School for Turf Managers between 9 January and 17 February. The six week programme focuses on a range of topics including the principles of turf management, basic soil science, disease, insect and weed management, environmental management, arboriculture, irrigation as well as a range of other specialised subjects

Above: STA Graduate of the Year winner Kurt Dillon (centre) with STA Australia president Chris Chapman (left) and Laurence Bingham (Toro)

Far left: 2016 AGCSA Graduate of the Year winner William Koopmans (centre) with fellow state finalists and Toro representatives at the 2016 AGCSA Awards ceremony





Above: Kurt Dillon with Shark Park curator and long-time mentor Steve Brassington

Above right: A hard-hitting representative rugby league front rower, Dillon couldn't have landed a better job than assistant curator at Shark Park, home ground of the NRL's Cronulla Sharks

THE CLASS OF 2016

2016 AGCSA Graduate of the Year Award Finalists

William Koopmans (Ballarat Golf Club, Vic), Trent Le Rossignol (Tasmania Golf Club, Tas), Caleb Swinbourn (Complete Turf & Landscape, ACT), Keenan Hutchings (The Grange Golf Club, SA), Mitchell Gibbs (Bankstown Golf Club, NSW), Steve Lindley (Meadow Springs G&CC) and Ashley Hill (Arundel Hills Golf Club, Qld).

2016 STA Graduate of the Year Award Finalists

Kurt Dillon (Green Options, NSW), Beau McFarlane (Stadium Turf Management, ACT), James Stamatis (Landscape Solutions, Qld), Marcus Kightley (Adelaide Oval, SA), Matthew Pokorny (Danny O'Brien Racing, Vic) and Jayden Pickering (City of Kalgoorlie-Boulder, WA).



including grooming greens and developing effective personal and organisational communication skills. After the UMASS experience, Koopmans will then take up a 6-12 month placement through The Ohio Program.

"My life has changed a lot as a result of winning the AGCSA Graduate of the Year Award," says Koopmans. "It has opened many doors for me so far and I hope it will continue to do so in the future. I want to use this award to grow myself as a turf manager but to mainly help others in the trade, especially apprentices. This award is a great stepping stone and could potentially guide me down a variety of different paths, whether it's teaching the trade or moving further up in an organisation and becoming a course superintendent.

"When I return to Australia I would love to step into a second in charge role and eventually work my way up and become a superintendent. Once I have gained an ample amount of experience I feel I would greatly enjoy a teaching role, sharing my experiences and what I've learnt with apprentices. Knowing how much I appreciated my teachers, I'd like to learn from my experiences with them and try and provide that for others."

KICKING GOALS

As a hard-hitting front rower, Kurt Dillon has seen plenty of turf up very close during his representative rugby league career, so it is little surprise that he has ended up in the turf management profession.

Playing in the Holden Cup (rugby league's national Under-20s competition) for the Cronulla Sharks, getting the chance to run out on NRL-level fields week in week out intrigued a then 17-year-old Dillon and as soon as he finished high school he sought out an apprenticeship. As luck would have it, he was offered one with Green Options, who just happened to maintain Shark Park (Southern Cross Group Stadium), the home ground of Dillon's beloved Cronulla-Sutherland Sharks.

"When I was playing Holden Cup, every week I would get excited about running out on the really good NRL fields," recalls Dillon, who currently plays reserve grade for Cronulla's feeder club Newtown Jets. "I was always really intrigued and interested as to how these surfaces were in such impeccable condition all year round, so when I was offered the apprenticeship with Green Options I took the opportunity with both hands. I also think the fact that

I played all kinds of sport growing up gave me that invested interest in sports playing surfaces, which also made choosing a career in turf management really appealing."

Despite spending most of his apprenticeship at Shark Park, during his time with Green Options Dillon has also had the chance to work at a number of different sites including Cranbrook (a private boy's college), Randwick Golf Course and Gymea Bowling Club. He is currently back at Shark Park where he is the second in charge under head curator Steve Brassington who has proven to be a key figure in Dillon's development as a turf manager.

"There have been a number of people who have been really influential in my career so far, especially my teachers at NSI Ryde TAFE," says Dillon. "But the person that has helped me most is Steve who has been my supervisor/mentor since day one. We have worked closely together for four years now and the fact that I have had the opportunity to work with the head curator of an NRL stadium every day has really excelled my learning.

"Steve has a wealth of knowledge and experience. The main thing that he has taught me is that no two situations are the same and that to be successful in this industry you have to be flexible and open-minded. He has also impressed upon me the fact that there is no set in stone way of being a successful turf manager and that you have to adopt practices and innovative ways that work best for you and your situation.

"There are a number of different things that I enjoy about the turf industry and they are still the same areas that I enjoyed as an apprentice. Number one is being able to produce a surface to the best of your ability, which takes a real team effort. I find it really rewarding working in a team environment where every individual is working towards a common goal. And when it is achieved I gain a sense of accomplishment which I find really fulfilling and worthwhile."

Dillon says that winning the STA Graduate of the Year Award was a huge honour and really enjoyed spending the week in Melbourne for the annual conference. Networking with the other finalists as well as fellow industry colleagues proved to be an uplifting experience for Dillon who is looking forward to continuing to broaden his knowledge before eventually taking the next step up the career ladder.

"My immediate goal and ambition in turf management is to travel overseas to work on a world class sports surface," says Dillon. "Whether that is soccer, rugby or on a golf course, I really want to see what turf managers in different countries do to maintain and prepare their surfaces in comparison to how we do it in Australia. I'd love to be able to bring that knowledge back to Australia and apply it to my own work. Looking further ahead, my major goal is to one day manage or curate a first class sports surface, whether here in Australia or overseas."

High performance and quality of cut, even in challenging conditions.



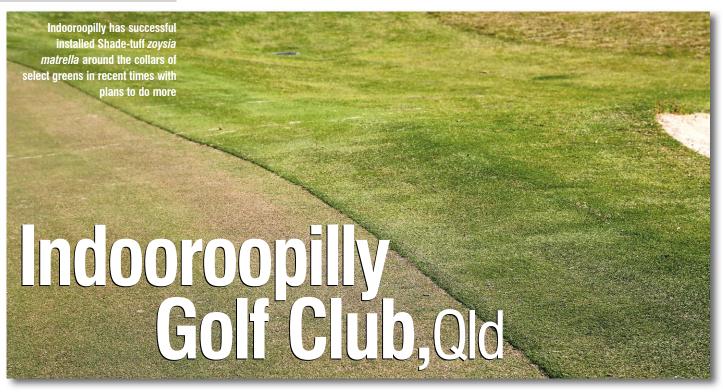
The 9009A TerrainCut™ Rough Mower is the latest addition to the John Deere golf course maintenance equipment range.

You can now maximise both your productivity and the quality of cut while having more control over how it performs on the course. It has a deep shell deck design, contour following double yoke, Tech Control display, and a large 2.7 metre cutting width.

Mow wide, mow better, with the new John Deere 9009A TerrainCut Rough Mower.

See your local John Deere Golf dealer for more information.





Indooroopilly Golf Club superintendent Charlie Giffard writes about the club's ongoing work to install zoysia matrella on bunker surrounds and greens collars.

From a playability perspective, the ball sits up nicely on the tips of the zoysia matrella

ince major redevelopment work here at Brisbane's Indooroopilly Golf Club and after trying, with mixed success over a number of years, to find a suitable grass that could be used around newly propagated greens that could act as a buffer to encroachment from the Greenlees Park couch and offer acceptable playability, I heard of some work being done with *Zoysia* spp that warranted further investigation.

In November 2014 we planted the front half of a 328 green that was contaminated with Plateau couchgrass with a new 'sport' I was developing the previous season. This 'sport,' or off-type, of our existing 328 couchgrass was selected after isolating a number of different colonies within the green sward. The best two were selected and it was this that was planted on the front half in 2014. The green was ready for play by the opening of the season in February 2015.

I took this opportunity while the green was out of play to experiment with a full 1.8 metre width collar of *Zoysia matrella*. The cultivar chosen – 'Shade-tuff' – was one that was developed by Dr Don Loch at the Redlands Research Station.

The following season, I repeated the process on the back half, replacing the older 328 with the new off-type (which is sometimes referred to as 'Indro-green'). The green has been in play in its entirety since February 2016 and the zoysia has been a great success. It has kept encroachment of the Greenlees Park at bay and any incursion into the green is relatively easy to control with selective herbicides such as MSMA/DSMA, although with the leaf being of such a fine nature it hardly presents a massive problem. To date, the only downside has been some unsightly brown seed head in the late summer, though we've found this can be controlled with an application of PGRs and iron.







The success of the zoysia prompted us to look at its potential use in other areas around the course. In September 2015 we developed a practice area in between holes 5 and 6 on the Red course complete with opposite facing bunkers around a newly planted green. There was a provision on either side for some fairway and approach grass and I took this opportunity to trial the zoysia in an apron and green surround situation. This was done to gauge its wear potential and playing characteristics.

What was very noticeable was the finish the grass provides on the bunker edge. After an edge was cut, the grass would maintain its edge for a considerable time, negating the need for constant edging. On initial observations, I would guess it would cut the maintenance of edging and encroachment issues by between 70-75%.

Over a normal spring/summer /autumn period I would estimate this could save many man hours and improve the consistency and appearance of tongues and bunker edges substantially. The cost savings for labour and materials hasn't been extrapolated as it has yet to go through a full season, though I'd expect to make significant savings in routine bunker maintenance.

From a playability perspective, to date we have found the zoysia to be an excellent grass to have around the green, mainly as it affords a superior lie to that of most, if not all, hybrid couches I've experienced. The ball tends to sit on the tips of the leaf due to its stiff nature and not within the grain as is usually the case with couchgrass.

For the average member this can only be seen as an improvement due to the well-known difficulty of hitting a chip shot 'against the grain'. We haven't as yet tested the divot and general wear capabilities of the grass, though I would hope to get a better handle on these both on the practice area and as we roll it out onto other parts of the golf course. To date I haven't noted any issues from disease or insect as the turf comes under the normal regime of preventative fungicide and insecticide sprays due to its proximity to the green.

In conclusion, we feel there has been a lot of promise shown thus far with the zoysia matrella at Indooroopilly Golf Club and perhaps in southeast Queensland. I can only hope these attributes will prove a winner when it comes to addressing the ever shrinking budget versus the ever increasing player expectation we all need to manage.



With the success of the zoysia on greens collars, Indooroopilly has also trialled and is now using it on bunker surrounds where it is replacing the existing Greenlees Park couch. The zoysia holds a defined edge a lot longer than couch











Traditional links grasses the choice at Cape Wickham Links, King Island





For the name of your nearest distributor call (03) 9462 0340 www.adseed.com.au



You can take the boy out of the country but you can't take the country out of the boy. After seven years honing his skills in Melbourne, in 2013 Paul Irvine returned to the Murray River to take over as course superintendent at Howlong Golf Resort.

Superintendent: Paul Irvine, 38.

Nickname: Irv, Swirve.

Family: Fiancé Shandell, dog Ollie (3yo Border collie)

Period as a superintendent: 3.5 years.

Association involvement: AGCSA (8 years), VGCSA, VGA, STA ACT.

Turf management career: Murray Downs Golf and Country Club (apprenticeship, 1994-1998), Rich River Golf Club (greenkeeper 1999-2000), Finley Golf Club (head greenkeeper, 2001-2006), Kew Golf Club (senior greenkeeper, 2006-2007), Kingston Links (assistant superintendent, 2007-2008), Royal Melbourne Golf Club (senior greenkeeper and foreman, 2008-2013), Howlong Golf Resort (superintendent 2013-present).

Qualifications: Cert III Turf Management (Trade Certificate) & Cert IV Sports Turf Management (Diploma).

Social media: Twitter @HowlongSuper.

Where in Australia is Howlong Golf Resort? Howlong is a small sleepy town located 28 kilometres from Albury/Wodonga on the Murray River. The town consists of a lot of elderly couples who have relocated from larger centres to chase the better weather and cheaper housing prices, as well as younger families. The club offers a 32-room resort style motel, a choice of two dining areas, 78 poker machines, TAB and large outdoor area overlooking the golf course, as well as bowls and croquet.

The region is well known for its close proximity to the Rutherglen wineries with the likes of Campbells, Bullers, All Saints and Rutherglen Estate within a 15km radius.

Tell us a bit about your background and how you came to be a superintendent. It was certainly my love for golf that got me into the trade. The outdoor working environment combined with machinery usage and manual labour was an appealing factor. I did work experience at Murray Downs Golf Club and after my VCE started my apprenticeship working under Richard Forsyth (that's some 22 years ago).

The real turning point in my career was shifting to Melbourne and working on some highly respected private and public courses. This stint really set me up for where I am now and I believe working on courses from both ends of the spectrum teaches you to keep all options open. I knew I was always just passing through Melbourne and when the position came up at Howlong Golf Resort I leapt at it.



The Howlong Golf Resort crew, from left, Jason McGrath, John Anderson (assistant superintendent), Jessy Wilson, Richard Matheson, Bill Danby, Joel Mansell and Paul Irvine (superintendent) Who were some of your early mentors in the industry? My boss for the main part as an apprentice was David Reinheimer. As I was a reserved and quiet teenager I went about my business without asking too many questions. It was a good grounding and I can look back on it and say there are a lot of practices I would still adopt and some I wouldn't. It is nice to have worked under an array of superintendents and now I can use my own grounding to help make the correct decisions in my role.

How did the job at Howlong come about and what do you like most about being the superintendent there? After I saw the position advertised I immediately got in touch with the general manager for a chat about the course and club. My initial thoughts were positive and I proceeded to head up to Howlong for a game. It was a 40 degree day and a good reminder of how hot and dry it can get on the Murray. I think I only got through playing 15 holes as I was too busy taking notes on the course. I stood on the bowling green after playing golf talking to the general manager for an hour, got fairly sunburnt and struck up a good relationship with him. The country lifestyle is the best thing about being at Howlong - camping and fishing on the river and being out of the hustle and bustle slows the heart rate down.

Give us an overview of Howlong Golf Resort and some of its unique characteristics. The course is a high volume facility aimed at golfers from all levels. We see many social groups on weekends which at times can cause a bit of grief, but brings in a lot of money for the club. The members are allowed to drive their own carts from home or on trailers which combined with 18 hire carts means in excess of 16,000 rounds per year with carts. The challenging part of my job is to keep the turf maintained to a high standard with this amount of traffic and in excess of 50,000 rounds per annum.

The way golf cart usage has evolved, it is such a high source of income for Murray River clubs and it is only going to increase. I would like to see a small annual levy for private cart users put in place with funds to be put back into the course for future improvements, but I'm not holding my breath. The tight layout and heavily treed roughs at Howlong is what keeps most golfers honest. It is a 'hit to position' sort of course which is not long but certainly strategic.

What are some of the unique features about Howlong Golf Resort from a turf management perspective? Shade is our number one enemy. We have thinned out many casuarinas and eucalypts which has made a big difference once sunlight and UV is increased. Many of our rough lines are a coolseason blend which we are always careful with when applying certain herbicides to our fairways. Mobility in the soil and tracking onto these areas makes the timing of applications crucial.



Is it an easy/hard facility to manage? I don't think many supers would say their course is an easy facility to manage. I find with each summer that passes I learn a bit more about certain microclimates and characteristics unique to Howlong. The most challenging aspect has been dealing with the wet winters, particularly the most recent one. When I have to disallow golf carts due to wet conditions it makes me a bit unpopular with people who can't play on foot.

Take us through your turf management operations there and any major changes you have implemented. During autumn, spring and summer we tend to do something to the greens every day, whether it be mow, roll or dew remove. Fairways are cut twice weekly and Primo Maxx is used from mid-December to mid-March. We regularly double cut tees and green surrounds. Greens are verti-drained with bayonet tines every 6-8 weeks and groomed and dusted when the opportunity arises. A lot of tree work has been done to improve playability and speed play up. A bi-annual audit of the irrigation system is conducted and a programme is in place for Poa control in the greens using growth regulators.

What other maintenance changes are you wanting to introduce? I would like to use the Air2G2 over the greens as I feel they would benefit from it considerably. We will shortly start laying Penn A1 from our greens nursery onto greenside surrounds to help with couch encroachment.

Howlong boasts 1.3 hectares of Pennlinks/Penn A1 greens

Howlong's 11 hectares of Legend couchgrass fairways are heavily tree-lined. Fairways are cut 10mm-12mm twice weekly during the growing season





One challenging aspect for Irvine when starting at Howlong was improving bunker drainage. The club excavates out holding pits away from the bunker and irrigation heads and uses a stacked load-bearing American cube like product to remove water from the bunker

What are some of the major challenges facing Howlong Golf Resort both from a turf management and general club management perspective? Our number one revenue source comes from poker machines. With many online gambling options and anti-gambling TV campaigns in place, it is getting harder to make them as appealing. The club's operations manager works extremely hard to get numbers in to play the pokies and use the other facilities.

Fortunately the club has a multitude of different revenue areas from accommodation packages, bowls, croquet, functions and dining. Without these other areas performing it could result in my budget being reduced. The general manager is big on all departments working together toward one goal. Murray River clubs are all chasing the same dollar and with so many good courses being within close proximity we have to offer services to a high level in order to get return customers.

Outline any major course improvement works recently completed or in the pipeline. The club will later on this year speak to a course architect in regards to a course enhancement plan. We don't intend to rip the place to bits but more so implement some strategic ideas in relation to boundary issues, future-proofing the course and hole alignment. This will be exciting times as we are always looking to extract the most out of what we have available.

Our capital works budget sets money aside each year for priority projects including bunker

rebuilds, cart paths, tee rebuilds, greens nursery, bowling green laser levelling and drainage works. These projects are predetermined before the start of the financial year by myself and a greens committee.

One challenging aspect when starting at Howlong was improving the bunker drainage. It sounds pretty easy, but when you are as flat as we are it becomes a headache. Our model, which is working well, sees us excavating out holding pits away from the bunker and irrigation heads and stacking a load-bearing American cube like product, much the same as milk crates on top of one another, to remove water from the bunker (see photo left).

The cubes are then lined with geofabric material with the pipe from the bunker falling into the holding pit. We tend to over build the holding pits and put a PVC sleave into them if ever they need pumping out. The water naturally infiltrates through the base and walls of the pit and gets away even after a few inches of rain. Although it is a fairly expensive way to remedy the problem, we have had great success eliminating the poorly performing bunkers one by one. It has also allowed us to use sand that is most suited for our bunkers.

Water is obviously a critical issue for any golf course. How is Howlong Golf Resort faring in the water management stakes? Fortunately we have 209ML of high security bore water which is of good quality. It doesn't need treating and is pumped directly from the ground onto the golf course. Even during a really hot and dry summer we are pushing to use our full quota.

The weather and climate is always a great leveller for a course superintendent. How has Mother Nature treated the course in recent times? The summers here have been what I bargained for but I didn't prepare for how wet the winters have been. As we are about an hour and a half from the snowfields the weather gets pretty damp in winter. This combined with flat, heavy soil means a lot of our conditions are dictated by Mother Nature.

When I think about some supers who have had to deal with floods, fires, locust plagues and snow, we don't have it too bad here. We have had a few -4°C frosts with the sand in the bunkers freezing, combined with a mini-tornado just before my time when Brett Skinner was super. This flattened a number of mature trees around the course and tore the roof off the bowls shed. On average we have planted 200 trees per year to regenerate thin areas in the roughs.

The one product I couldn't manage my course without is... Wetting agents. A good quality wetting agent allows our greens to hang on for much longer and reduce overall water consumption. Wetting agents have improved so much in the time I have been in the trade and we now have plenty to choose from.

Howlong's river water allocation was sold five years ago to help fund the installation of the current Toro irrigation system. Fortunately a 209ML allowance for bore water means water usage is far from an issue for the club



What are some pros and cons of being a regionalbased superintendent? It is nice to not have the expectations of the world on our shoulders in the country. Most golfers here wouldn't know what Poa is and are only concerned about putting on a true green with full coverage. If we were like the private clubs with a zero tolerance to Poa we simply don't have the manpower or budget to enable this to occur. This doesn't mean we encourage Poa and even in the bush we are striving for pure surfaces. The work ethic in the country would tend to be a little more relaxed, but most guys know when it is time to push the intensity button and lift the work rate.

Are expectations of course presentation and conditioning any less than those placed on your metropolitan counterparts? I do think the overall presentation levels are hugely dictated by the resources at hand. There are a lot of country courses which provide superior surfaces to some metropolitan courses. There are so many variables with water restrictions, budgets, machinery and chemical registrations which determine the end product. It is unfair to compare any two courses to one another for these reasons. We all strive to provide the best with what we have available whether it be with two staff or 20.

Do you have to be more resourceful as a regionalbased superintendent? We all have to be multiskilled and not confine one person to a certain job. Our mechanic is able to operate all machinery and rake bunkers when he is not swinging spanners and our bowling green guy is trained up to do everything on course. We have to be inventive to make machines work for jobs they aren't always intended for and sometime do our best to patch up a machine while waiting for spare parts. To have flexibility in staff to do as many jobs as possible gives everyone good job rotation too.

If you could change one thing about your job as a regional superintendent what would it be and why? To be honest I don't feel isolated or out of the loop in the country. We tend to get most deliveries overnight and have everything available that the metropolitan courses have. Social media is a big one for keeping up to date.

How important are the relationships you have with other course supers/trade reps? I keep in touch with most of the Murray River supers as we are usually fighting the same battles. It is nice to call on guys to be able to borrow something we don't have. I have reps that visit from Canberra, Sydney and Melbourne that provide good technical assistance. Reps provide a good second opinion as they often see a number of different situations.

What are some of the more unusual requests/ things you have had to do as a superintendent



of a regional course? We had a ladies breast cancer fundraising golf event and purchased pink tee markers to go with the signage at each tee. The Ladies Captain asked if we could use pink underwear instead of golf flags! I had to kindly turn down this request not knowing whether she was intending to use second-hand or new ones! I had an image in my head of these pink undies hanging from the flag poles like parachutes in the wind!

I had another request at a previous course to remove some squatters who decided to set up camp in the middle of one of the fairways, light a camp fire and roll out their swags. I asked that they be gone within 10 minutes or the police would be called.

What have you got in your shed? 2 x Toro 3250Ds, 2 x John Deere 2500s. Toro 5610. Toro 4300. Toro 3500, Toro 3100, 3 x Toro MDX Workmans, E-Z-GO utility vehicle, Toro Sand Pro 5020, Toro Pro force blower, 2 x Toro 1240 Greenspro rollers, Toro Multipro 1750, John Deere 3750 tractor with 4-in-1 bucket, John Deere 4410 tractor and Vertidrain, Ford 2600 and tipping tandem trailer, David Brown tractor and Dean tipping trailer, Tycrop topdresser/ dusting machine, John Deere 997 Z-trak, an array of three-point linkage attachments, small plant and equipment and bowling greens equipment.

What's your favourite piece of machinery and why? What's on the wish list? It would be our Toro Multipro spray unit with my mobile phone being a close second. To carry a phone around that can control an irrigation system and do everything it does reduces the time needed to be spent in the office.

In the next financial year we will purchase a new rough cutter, heads for our current 5610 fairway mower, dusting unit and triplex mower. These are all a part of our equipment rotation plan to stop machines being run into the ground. A new maintenance shed is on my wish list us we currently operate out of a facility which was built 30 years ago and only required to accommodate half of our current fleet. It is like a game of Tetris putting things away at the end of the day.

Howlong is looking at embarking on a course enhancement plan in the near future to implement some strategic ideas in relation to boundary issues, future-proofing the course and hole alignment



The Toro irrigation system is fed by three Grundfos pumps which can push out 1600 litres per minute at full capacity



Howlong has a warm temperate climate with cool to mild winters and very warm to hot summers. Average rainfall is 700mm

Do you have any interesting pieces of machinery? We have a 1972 David Brown tractor which pulls a Dean tipping trailer. I'm not sure how many times it has gone around the clock but it just won't die. We also keep a John Deere 2500 going to mow our greenside surrounds which has an impressive 4600 hours on it. The offset heads are safer than the normal triplex for bunker edges which have the potential to give way.

Favourite spot on your course? 3rd hole. It is a strong par four which we have made many alterations too which makes it rewarding.

Best advice you have received about being a course superintendent/greenkeeper and who gave it to you. "There is no elevator to success; you have to take the stairs to get there". A former co-worker Nick Launer said that to me a few years back while we were sitting at a South Yarra bar contemplating life...

What do you think is the most challenging aspect of a superintendent's role today? What areas have you personally focussed on developing? Not only does a modern day superintendent have to have good agronomic knowledge, he has to be a people manager, in control of his own budgets, a stock control officer and an HR manager. These are not things we think about during our turf management apprenticeship and don't come naturally to everyone. Forward planning and organisation skills reduce stress levels in my role. I have had to develop my budgeting and presentation skills to be able to deliver my messages effectivley at committee and management levels.

What gives you the most job satisfaction? The final course inspection on a Friday afternoon when everything is prepped up for the weekend is satisfying.

Most pleasing/rewarding moment during your time as Howlong Golf Resort superintendent? To see my team of guys bond together at tournament time and do over and above what is required to achieve results gives us all a sense of achievement. It is always nice for the motivation levels to receive accolades from visitors and members who don't usually hand out bouquets.

AT A GLANCE - HOWLONG GOLF RESORT, NSW

Course specs: 18 holes, 5689 metre par 70. 1.3 hectares of Pennlinks/Penn A1 greens, 1800m² Penn A1 nursery, 1ha Santa Ana tees, 11ha Legend couchgrass fairways, two Tifdwarf bowling greens, two croquet lawns. Total area is approx. 75ha.

Members/rounds: 1500 full members, 2800 'remote' members (outside 50km radius). Annual rounds 52,000.

Major tournaments: NSW Open Regional Qualifying Round, Murray Masters and Top of the Murray.

Annual course budget: \$800,000k plus wages, cap-ex and op-ex.

Staff structure: Paul Irvine (superintendent), John Anderson (2IC), Richard Matheson (senior groundsman), Joel Mansell (4th year apprentice), Bill Danby (mechanic/groundsman), Jessy Wilson (2nd year apprentice), Janet Rogers (clubhouse gardens), Peter Turton (motel lawns and gardens), bowling greenkeeper (currently vacant).

Climate/rainfall: Howlong has a warm temperate climate with cool to mild winters and very warm to hot summers. Average rainfall is 700mm (27 inches). Prone to frosts in winter and occasional overnight temperatures above 30°C in summer. This past winter has seen the highest rainfall in 21 years (309mm from start of May to end of August).

Soil types: Heavy loamy soils on fairways.

Tees and greens are built with local sands that perform within required guidelines. Pockets of clay exist in low lying areas.

Water sources: 209 megalitres of bore water located 50 metres below our pump shed. River water allocation was sold to help fund the current irrigation system. Infrastructure is still in place to access river water if required. Irrigation system: Toro electric valve-inhead, satellite and Osmac system (five years old). Three Grundfos irrigation pumps – 1600 litres/minute at full capacity.

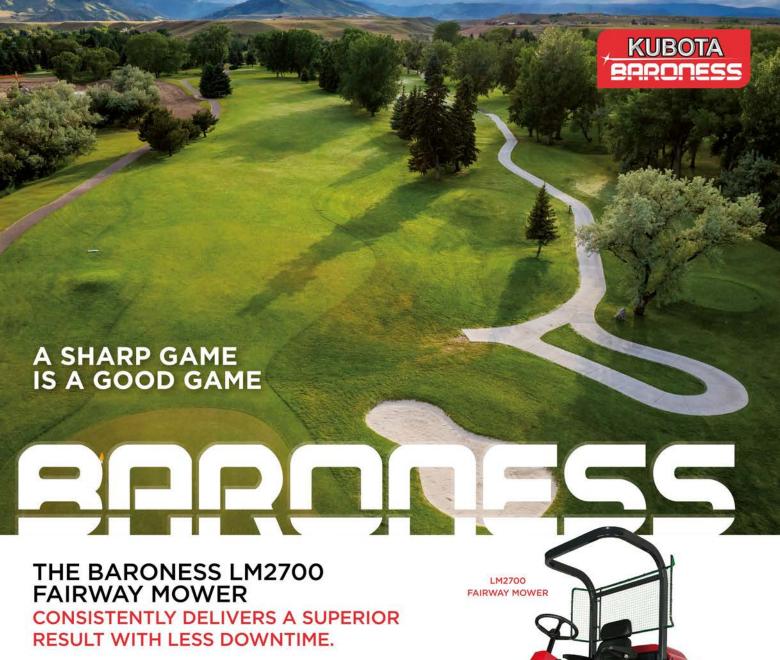
Cutting heights/regimes: Golf greens cut at 3mm-3.5mm 3-4 times a week and rolled on alternate days. Tees and greenside surrounds cut at 8mm twice weekly during the growing season. Fairways cut 10mm-12mm twice weekly during the growing season. Bunkers hand raked twice weekly and rough cut when required at 40mm. Bowling greens cut at 2.5mm 4 times a week and wire reeled fortnightly.

Renovations: Greens get a full renovation every two years (hollow core and scarify) and are dethatched, dusted, verti-drained and dry-jected between renovations. Although not ideal, I am working with my general manager to increase the frequency of renovation practices. Fairways are scarified each year by Lawn and Turf (contractors) and tees are hand scarified in-house annually. One bowling green is laser levelled each year and this summer we are looking at doing a

shaving renovation to bulk remove the thatch layer to 1.5cm as our bowling greens are over 20 years old.

Major disease pressures: With the wet and cold conditions this winter we currently have a very bad outbreak of spring dead spot on our Legend fairways and Santa Ana tees. On our golf greens we usually see no disease pressure until the second half of January. A preventative programme is in place to minimise pythium, curvularia and brown patch between December and April, depending on the summer. We have had issues with high nematode and stem weevil numbers in our golf greens and I find disease pressure is much higher in conjunction with insect damage. The usual suspects like winter fusarium and dollar spot appear if not treated.

Nutrition management: Greens are soil tested annually and tissue tested monthly during the growing season. A lot of applications are dictated by these figures. Fortnightly foliar feeds of kelps, root-biostimulants and amino acids are used to invigorate the root system. Very little nitrogen is used and slow release IBDU fertiliser is used twice annually with an analysis that fits our nutritional requirements. Our approach is towards soft feeding the greens to keep a consistent and healthy sward and prevent any growth spikes from occurring and unwanted *Poa annua* outbreaks.



- / Rear roller power and speed restriction for high quality cut and finish.
- / Large diameter cutting reels built to manage long, thick grass.
- / Nickel-chrome-molybdenum cutting reels.
- / Tungsten tipped bedknives to ensure a sharp edge.
- / Full roll over protection system and golf ball protection net.
- / Powerful and reliable Kubota diesel engine.
- / Selectable 2WD or 4WD on demand as standard.
- Swing-out rear cutting units for easy maintenance and adjustments.



Terms and conditions: Offer is only available for ABN holders who are using the equipment predominantly for business purposes. A minimum 10% deposit, 36 monthly repayments, minimum financed amount of \$4,000 and no lump sum final payment. Credit provided by Kubota Tractor Australia Pty Ltd ABN 72005300621, Australian Credit Licence Number 442007. Terms, conditions, fees, charges and credit criteria apply. Offer ends 31/12/2016. Subject to availability.

FOR MORE INFORMATION ON THE KUBOTA BARONESS RANGE PLEASE CONTACT:

Trent Saunders on 0437 814 392 or baroness@kubota.com.au

For Earth, For Life べいりつけつ

TORO UNVEILS NEW GREENSMASTER RIDE-ON AND WALK-BEHIND



Above: The new Greensmaster Flex 2120 walk-behind greens mower includes Toro's new EdgeSeries reels

Right: The 3120 adds to Toro's Greensmaster family of ride-on triplex green mowers



n addition to the Workman GTX and Reelmaster 3355-D and 3575-D fairway mowers launched at June's Australian Turfgrass Conference in Melbourne, Toro also unveiled two new Greensmaster greens mowers – the Flex 2120 walk-behind and 3120 triplex ride-on.

Toro's new Greensmaster Flex 2120 walkbehind mower garnered plenty of attention at the show and includes a user-friendly multi-disk wet clutch for easy drive engagement and feathering for ease of operation. As a result, operators can engage at lower RPMs to make turnarounds in tight areas more convenient.

The clippings basket is connected to the suspension cross-arm, as opposed to the traction unit frame. This change allows the baskets to follow the cutting units precisely regardless of undulations of the terrain.

A key enhancement to the Flex 2120 is the incorporation of the new EdgeSeries reels into the Dual Point Adjustment (DPA) cutting units. The height-of-cut (HOC) adjustment on the Flex 2120 has also been simplified thanks to the integration of wave washers on the HOC screws on all DPA cutting units.

Likewise, the 3120 adds to Toro's family of ride-on Greensmaster triplex green mowers and according to Toro Australia's Senior Marketing Manager – Equipment Elise Willemsen is a "perfect blend of functionality and affordability".

The Greensmaster 3120 is powered by a 16-horsepower Briggs & Stratton Vanguard V-Twin engine with a HydroGear hydrostatic transmission. The mower also features a transport speed of up to 11.3kph. Like the Flex 2120, the Greensmaster 3120 also includes Toro's new EdgeSeries reels that deliver improved cut quality and efficiency as a result of refined manufacturing techniques and geometry changes.

The Greensmaster 3120 also features familiar and convenient controls for the operator and accepts the same array of accessories as previous Greensmaster models, making it easy to incorporate into existing Toro fleets.

"The 3120 delivers all the performance you expect from a Toro ride-on greens mower and allows superintendents to incorporate a highly productive mower into their fleet at an economical price point," says Willemsen.

To learn more about the new range of Greensmaster walk-behind and triplex mowers, visit www.toro.com.au.

INTRODUCING DAVID TURF



AGCSA Bronze Partner David Golf has recently branched out to the wider 'non golf' turf industry with the launch of a new division – David Turf. David Turf has its own identity within the David Golf company, with specific catalogue, pricing and a brand new website www.davidturf.com.au.

According to national sales and marketing manager Casey Johnson, the David Turf catalogue contains Australia's most extensive range of tools and hardware specifically positioned for use by curators, turf managers and other turf professionals in the industry. "The David Turf division is a new venture for our company, David Golf, which has

been servicing golf course superintendents and turf managers throughout Australia, New Zealand and other countries throughout Asia since 1956," says Johnson.

"Lawn bowls, cricket wickets, race tracks, councils, schools and AFL grounds are all covered by the product offerings of this new division. With categories containing items from our BMS Turf Tools range, custom signage, irrigation components, safety and environmental products, this catalogue has all the tools you need for your turf."

Visit www.davidturf.com.au to sign up and become a member, call 1300 790 890 or email info@davidturf.com.au.

PERMIT EXTENSIONS FOR MONSTAR AND IMPEDE

Campbell Chemicals has successfully applied to the Australian Pesticides and Veterinary Medicines Authority (APVMA) to have its minor use permit for Monstar extended. The new permit (PER14379) for Monstar, used to control fairy ring in golf greens, comes into effect on 1 October 2016 and lasts until 30 September 2017. Visit the Campbell Chemicals website www.campbellchemicals.com.au to view the permit as well as Monstar MSDS and label.

BASF Australia has also received a label extension for Impede insecticide. The product provides control of insect pests in recreational, domestic and commercial turf ornamental garden beds and within potted ornamental plants. Containing the active ingredient fipronil, Impede effectively controls key turf pests such as Argentine stem weevil, mole crickets and all nesting and nuisance ants.

Visit www.pestcontrol.basf.com.au for more information or to find your local sales contact.

DINT HOLES OUT

AGCSA Bronze Partner Dint Golf Solutions released its brand new insert putting cups at the 2016 Australian Turfgrass Conference in Melbourne. Thrilled with feedback received from superintendents across the country, Dint says the cups have become extremely popular and orders to date have been excellent.

The main features and benefits of the new insert putting cup include;

 Powder coating on the outside: Powder coating the outside of the cup allows it to slide in and out of the ground easily, meaning staff can change holes quicker and save time.



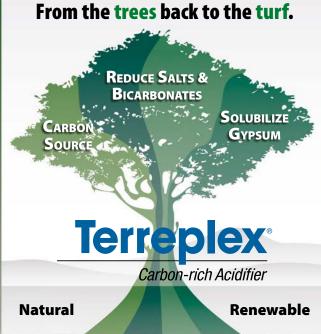
Logo inserts: A club logo and message can be digitally printed on the cups. Popular messages so far include 'Please repair pitch marks', 'Monthly medal' and 'Club championships'.

The cups come in both short and long sizes and all materials and components are 100 per cent Australian made. All Dint reps nationwide have samples of these cups and are taking orders now. For more information, visit www.dint.com.au.

CONTINUED ON PAGE 59

A club logo and message can be digitally printed on Dint's new insert putting cups

Two products to combat the toughest conditions







14 Sonia Street, Carrum Downs VIC 3201 • (03) 9708 2911

www.oasisturf.com.au

INAUGURAL GOLF BUSINESS FORUM A HUGE SUCCESS

Lodewijk Klootwijk (CEO of the **European Golf Course Owners** Association) far right and Golf **Business Forum co-directors Guy** Chapple and Andrew Davis right.



Over 200 golf industry leaders converged on Melbourne in late July for the inaugural Golf Business Forum, Australia's largest gathering of golf facility owners, operators, industry leaders and business partners.

"We set out to create a new opportunity for industry owners and operators to engage with industry leadership, suppliers and other participants, with a focus on facilities servicing public golfers", says Forum co-director Andrew Davies. "We were thrilled to see so many respond and have received great support from across the industry to take the Forum further."

A range of golf facilities were represented at the Forum, including municipal golf facilities, private golf clubs, driving ranges, mini-golf facilities, virtual golf facilities, hotels and holiday resorts. Industry suppliers and organisations, including the AGCSA, were also well represented.

The Golf Business Forum featured a trade show and theatre, offering the attendees an array of speakers on topics relevant to all golf businesses across three key themes:

- Market dynamics insights into international and local sports and golf participation trends;
- Facility development and innovation including a showcase of leading Australian golf facilities;
- Customer engagement and experiences - critical insights into harnessing digital marketing and community relations to engage golfers, building loyalty and delivering memorable experiences.

Speakers were sourced from both Australia and abroad, with keynote speakers Jay Karen (CEO of the National Golf Course Owners Association) and Lodewijk Klootwijk (CEO of the European





Golf Course Owners Association) both providing highlights. "To get the international perspective from leaders like Jay and Lodewijk is a huge bonus," said Forum co-director Guy Chapple. "Their insights gave many confidence that we can embrace the trends in other markets and leverage their experiences to our advantage here."

Feature case studies were presented by Wembley Golf Complex in WA, Moore Park Golf in NSW, Yarra Bend Golf in Victoria and Club Parkwood in Queensland. Each facility showcased their story with detailed presentations showing the benefits of long-term planning, an investment strategy and committed leadership.

In his presentation, Stephen Pitt, chief executive officer of Golf Australia, outlined the array of programmes the industry body is rolling out to drive participation of golf into the future. "Getting engagement with all golf facilities, both public and private, is critical for us in order to grow the game in this country," Pitt said. "We were pleased to be a part of the Golf Business Forum as its Foundation Partner."

Leading sports digital expert Sean Callanan from sportsgeek.com offered valuable perspective on the state of the digital landscape, and identified practical steps golf facilities can take to manage their online presence and create engagement with customers in the use of content, data and social media. "Golf facilities are like stadia and sports clubs around the world," Callanan said. "They need to engage with their fans, and increasingly that means a carefully managed digital strategy."

Delegate Alison McCaig, RACV's general manager of hospitality support services says the forum was extremely valuable and is looking forward to the next one. "There was a huge amount of information, really testing the way we think about participation in golf in this country. I'd be encouraging a lot more clubs to be attending this; I think it could only get bigger and better."

Visit www.golfbusinessforum.com.au for a full



Sean Callanan spoke of the importance of online presence to engage members

CONTINUED FROM PAGE 57

GRADEN FLEXES ITS MUSCLES

On show for the first time at the recent Australian Turfgrass Conference in Melbourne, AGCSA Bronze Partner Graden Industries has released its new Z2R Flex greens roller into the Australian market.

Unlike conventional rollers, the Z2R can transport itself (16kph transport speed) thus eliminating any WH&S issues caused by hitching, lifting and positioning onto a utility vehicle. Not needing to be towed also frees up a utility vehicle to be employed elsewhere and increases the speed of rolling operations.

With all four rollers providing traction and a simple button to lift and lower the wheels, the Z2R Flex is powered by a 23hp V-twin Vanguard engine. Tapered rollers reduce the chance of creasing the green and the flex system of roller suspension allows movement of rollers in all directions, helping to conform to green contours. Some of its many features include LED lights as standard, an adjustable seat and steering wheel, a utility tray, a hole cutter stand and a cup holder.

For further information or demonstrations, contact Mark Bainbridge on 0457 422 464 or email mark@graden.com.au. Alternatively visit www.gradenturf.com to view videos of the Z2R in action.



BAYER TURF RESEARCH DAY

AGCSA Silver Partner Bayer held another successful Turf Research Field Day at the University of Sydney Plant Breeding Institute trial site in Cobbitty, NSW in mid-August. Overseen by Bayer's research manager Jyri Kaapro, around 60 industry members viewed Bayer's latest trial work in what was the sixth occasion the company has held the day.

Among the trial plots on show were:

- Numerous herbicide tank mix treatments with Destiny, Tribute, Spearhead and Tribute Total.
 Tribute Total is a new herbicide still in evaluation:
- Trials using Bayer's new pre-emergent herbicide Specticle launched at the recent Australian Turfgrass Conference (a.i.: indaziflam). Trials have shown some post-emergent effects on

Unlike conventional greens rollers, Graden's Z2R can transport itself, saving time and eliminating WH&S



Bayer held its 6th annual Turf Research Field Day in August



weeds and a common symptom is the inhibition of root growth;

- The effects of gibberellic acid;
- StressGard fungicides and Aquatrols wetting agents. Demonstrations were also set up to test the compatibility and turf safety of Reserve StressGard when tank mixed with a range of other StressGard fungicides as well as growth regulators;
- Kikuyu removal from couchgrass including a programme of MSMA/DSMA and Tribute applications which have so far shown the best level of control. Trials this year indicated that Tribute Total could also have a place in the management of this weed;
- Ryegrass removal from sportsfields using Destiny and Tribute; and
- Dollar spot trials which demonstrated control with Bayer's current fungicides as well as new ones which are currently in development.

"It was a very successful day and thanks go to everyone for attending at a time when renovations were on the agenda for many," says Kaapro. "The gibberellic acid demonstration started some interesting discussion. Some people had seen it used on cricket wickets and bowling greens to keep couch growth during the winter months. Others had used it on bentgrass greens with undesirable consequences. The response in *Poa* plants is quite dramatic. In NZ it seems to improve weed control if applied prior to the use of sulphonyl urea herbicides.

"The day couldn't have proceeded without the assistance of David Bateman (University of Sydney), Matthew Bywater (Aquatrols), Grant Thomas (Amgrow), James Royal, Craig Burleigh and Wendell Arnett (all Bayer) and Gary Beehag who presented on the recently released Australian reference book Pest Management of Turfgrass for Sport and Recreation. Trials have already been sprayed for the next field day in 2017."

INDUSTRY APPOINTMENTS AND ANNOUNCEMENTS



FREWIN ASSUMES NEW RAIN BIRD ROLE

AGCSA Silver Partner Rain Bird Australia has appointed **Peter Frewin** (pictured) as the

company's new national sales and marketing manager for golf. Frewin, who started his new role on 1 September, arrives at Rain Bird following a successful tenure of almost five years as the chief executive of the AGCSA.

"Peter will be a great asset to Rain Bird and the irrigation sector in general," says Rain Bird Australia general manager Tony Irvine. "He brings a wealth of experience to the role and we look forward to him representing Rain Bird's golf systems and solutions."

Frewin's career in the turf industry is well documented and has spanned 35-plus years. Winner of the 2009 AGCSA Distinguished Service Award, he has a long association with Rain Bird which commenced when he was superintendent at Barwon Heads Golf Club. The club was one of the first courses in the world to use the Rain Bird 'hybrid' central control. He was also one of the original members of the Rain Bird Irrigation Advisory Council.

The newly created role covers both the Australia and New Zealand golf markets. Frewin can be contacted on +61 418 593 072 or email pfrewin@rainbird.com.au.



LIVING TURF SNARES HENK SMITH

Living Turf has appointed **Dr Henk Smith** (pictured) as its
new technical and marketing

director. Officially starting his new role on 1 August, Dr Smith joins Living Turf after nearly 11 years with Syngenta's Australian division.

"With an academic pedigree in plant physiology and an impressive professional career in turf and agribusiness, Henk is excited to be back at the coal face with customers," says Living Turf founder and managing director Rob Cooper. "After a long association with Living Turf in his previous employment, Henk is well aware of our innovative approach to business and our desire to be a thought leader in our industry."

Dr Smith joined Syngenta's Australian team in October 2005 after two years with the company in his native South Africa. Smith was initially appointed technical manager for

lawn and garden, a role he held for more than six years until his elevation to Syngenta's business unit manager for turf and landscape in June 2012. Dr Smith can be contacted on 0499 100 600 or email hsmith@livingturf.com.



JENSEN GETS AIR TIME

Airgronomics, which utilises the technology of Air2G2 to aerate sports and amenity turf surfaces, has appointed **Alex Jensen** as

technical services operator. Jensen (pictured) has a Certificate III in Sports Turf Management and in 2014 was awarded the STA Queensland Graduate of the Year Award.

Most recently, Jensen travelled to the UK for a five-month internship with Campey Turfcare Systems which specialises in sports and amenity turf renovation machinery. While there he travelled throughout the UK and Europe demonstrating equipment to potential customers at major stadiums. Before travelling to the UK, Jensen was head groundsman for White Hill Recreation Reserve, QLD.

Airgronomics started operating full-time on 5 September and can be contacted by email info@airgronomics.com.au.





PRINCESS:77 Certified Hybrid Bermudagrass

Faster. Cleaner. Better.

Princess-77 is PGG Wrightson Turf's elite bermudagrass (couch) variety. Fast establishing and clean, it has outstanding drought tolerance, and is extremely suited to winter ryegrass over-seeding. Its dark green colour makes it a great choice for sports fields, golf courses and amenity situations.

For further information contact your PGG Wrightson Turf Representative or free phone 1800 DURATURF

info@pggwrightsonturf.com.au f facebook.com/pggwrightsonturf



VGCSA 🝮



Eastern Golf Club assistant superintendent Jay Infanti conducted the course walk during the VGCSA's recent spring meeting



RACV Royal Pines Resort Lincoln Coombes ventured back to his home state to present at the meeting

Eastern Golf Club's third nine holes (pictured is what will be the 21st green) will open in October he annual two-day country meeting continues to be a popular one with 112 members gathering at Rich River Golf Club (superintendent **Andrew Johnson**) in early August for this year's instalment. While disappointing that the rain on the first day cancelled the golf event (although a few did attempt nine holes and came off second best), it gave an opportunity for an impromptu forum to be conducted to discuss relevant industry issues.

Among the topics discussed were *Poa annua* control in couch, the question of any *Poa annua* resistance, plant growth regulator use on golf greens and various turf renovation techniques. The openness of the forum ensured plenty of discussion and is a testament to the industry where turf managers are willing to share information.

A full day of education followed with guest speaker David Meagher providing insight into human resource management and workplace ethics which is now such a major part of everyday operations for a superintendent and their assistants. John Neylan presented further results of the latest trials involving microbiology in golf green profiles, while the event's trade sponsors presented on new products and how to get the best out of those already on the market.

More recently, we have just completed our spring education meeting at The Eastern Golf Club

which covered the topic 'all things construction'. Around 60 members and trade representatives headed out to the Yarra Valley east of Melbourne to hear from former counterpart and now RACV Royal Pines Resort superintendent Lincoln Coombes as well as Syngenta's Dan Docherty and Eastern Golf Club assistant superintendent Jay Infanti and general manager Ben Telley.

Lincoln, formerly superintendent at RACV Cape Schanck on the Mornington Peninsula before taking on the Royal Pines role in 2011, spoke about the multi-million dollar redevelopment of the Gold Coast championship course over a two year period in between hosting the Australian PGA Championships and Ladies Masters events.

It was great to see Lincoln back down in Victoria and in addition to discussing some of the construction issues they faced, he spoke of the challenges associated with entirely solid-turfing a reconstructed golf course and then getting the playing surfaces tournament ready.

Dan Docherty from meeting sponsor Syngenta then talked about the company's new Greencast spray calibration app before Jay Infanti and Ben Telley spoke about Eastern Golf Club's recent relocation from its old Doncaster site. Ben impressed upon the group the importance of his staff during this process and praised the efforts of course superintendent Clayton Howell, Jay and their team in getting the new course up and running and transitioning successfully across.

With Clayton taking some well-deserved annual leave, Jay led the group on a course walk which followed the presentations. Eighteen holes of the new course have been open for play since July last year and during the walk Jay discussed maintenance practices and performance of the T1 bentgrass greens as well as the construction and continuing grow-in of the third nine holes which will open in October. He also discussed some of the limitations they face in regards to chemical applications (due to its proximity to the Yarra River the course is restricted to using just 32 chemical products) and also some of the ongoing drainage works being carried out (an additional 8km of drainage has been installed since opening with plenty more in the pipeline).

Sponsorship options for next year's VGCSA meetings and newsletters have been distributed to trade members who I'm sure will gobble the options up quickly. The association is again very fortunate to secure some great venues for our meetings in 2017, including Metropolitan Golf Club (superintendent David Mason) which will host the AGM. Also set to host meetings next year are Peninsula-Kingswood, Huntingdale, Tocumwal, Medway and Riversdale.



MAT POULTNEY PRESIDENT, VGCSA

NZGCSA

or most of us it has been a very wet winter but spring is here and temperatures are increasing quickly. The spring growth will continue to test the mowers but will provide some of our best playing conditions.

At the recent New Zealand Turf Conference in Auckland, the NZGCSA, in conjunction with Jacobsen and the distributor Power Turf New Zealand Ltd, held its latest Future Turf Managers' Initiative (FTMI). This one-day educational event is aimed at up-and-coming golf course staff focused on making the career leap to superintendent or course manager.

This year's delegates were Sam Keats (Royal Wellington GC), Ben Taylor (The Hills GC), Lance Shaw and Matt Ellis (Royal Auckland and The Grange GC), Matt Spraggs (Boulcotts Farm Heritage GC), Brett Smith (Paraparaumu GC), Ryan Trembath (Cape Kidnappers) and Noel Hill (Kaiapoi GC). Continuing as mentors for a further year were Brenden Allen (superintendent, The Hills GC) and John Spraggs (superintendent, Royal Wellington GC).

The intense day of education was facilitated by David Bancroft-Turner, who was flown in from the UK by Jacobsen, to impart his expertise in areas such as leadership skills, human behaviour, identifying behavioural preferences, crucial and difficult conversations, developing strategies for motivation and utilising business communication techniques.

Commenting on his FTMI experience, delegate Ben Taylor said the information gained from the day will be a great tool to use as he progresses through his career. "The mentors were brilliant; they have so much knowledge of fine turf management and were happy to answer any questions we put to them. I would recommend anyone with ambitions to become a superintendent to get on this programme next year. It has been invaluable to me and, although very intense, I cannot thank Jacobsen and their staff enough for the opportunity."



2017 FINE TURF SEMINAR

For those that may be interested in a late winter holiday in 2017, the Southern Turf Managers Association of New Zealand will be hosting a Fine Turf Seminar in Dunedin to celebrate its 50th anniversary.

Celebrations will kick off on 20 August 2017 with a golf tournament at Otago Golf Club, the oldest golf club in the Southern Hemisphere, followed by a dinner in the evening. The Fine Turf Seminar will be hosted over the following two days at the unique and very impressive Forsyth Barr Stadium, one of the few successful roofed stadiums in the world with a natural turf playing surface.

If you are thinking of attending, why not take the opportunity to stay in Dunedin for the week and arrange a trip down the Catlin's Southern Coast Road or even go up through to Central Otago and visit some of NZ's great golf courses. The All Blacks also play the Wallabies in Dunedin the following weekend (26 August).

For further information about the Fine Turf Seminar, contact John Humphries of the Southern Turf Managers Association committee +64 27 5550398.

The NZGCSA held another successful **Future Turf Managers' Initiative at** the recent NZ Turf Conference in Auckland

MARTIN BURGER PRESIDENT. NZGCSA



SECURE AND ATTRACTIVE FENCING SOLUTIONS

- Boundary Parking
- Enclosures & Partitions

p. (03) 9437 1472 | **e.** sales@melchain.com.au www.melchain.com.au/golf



GCSAQ Golf Course Superintendents Association of Quients and



The GCSAQ's Turf Industry Golf Day proved to be a huge success with 31 teams tackling an immaculate Lakelands Golf Club in early September

he GCSAQ held its 2016 Annual General Meeting at Royal Queensland Golf Club in early August with around 40 members taking to superintendent Marcus Price's superbly presented firm and fast course. The marquee group of Paul McLean (Sanctuary Cove), Richard Chamberlain (Richard Chamberlain Golf Design), Brian Cox (Murwillumbah GC) and John Halter (City GC, Toowoomba) took away most of the honours with the former shooting 78 to take out the A-grade stroke event and an NTP.

Cox followed suit in the B-grade scoring 38 points, while Chamberlain took out the trade event with a fine 40 points. Charlie Giffard (Indooroopilly GC) was the best of the C-graders with an honest 32 points. NTPs went to Garry McClymont (assistant, Twin Waters GC), Garry Kunz (assistant, Byron Bay GC) and Jeremy Parry (Kooralbyn Resort), while Kristy Pratsch (Riversands), the only female in the field, claimed the longest drive!

Over lunch, more than 50 members listened to Byron Bay superintendent and GCSAQ committee member **Shaun Cross** entertain us with a presentation on his 2015 trip to the US which he gave at the recent Australian Turfgrass Conference in Melbourne. Following his presentation and lunch the GCSAQ held its AGM with last year's committee being re-elected. The GCSAQ committee for 2016-17 comprises:

- President: Ben Tilley (Headland GC)
- Vice-president: Shaun Cross (Byron Bay GC)
- Treasurer: Stuart Campbell (Maroochy River GC)
- Secretary: Garry McClymont (Twin Waters GC)
- Committee: Brock Agnew Sanctuary Cove G&CC), John Halter (City GC), Phil Soegaard (Lakelands GC) and Brendan Clark.

The GCSAQ sincerely thanks **Ben Marshall** and Toro for their continued support of the AGM event and their ongoing sponsorship of the Queensland association.

More recently the GCSAQ held a very successful Turf Industry Golf Day at the magnificent Lakelands



Golf Club (host superintendent Phil Soegaard). Thirty one teams from GCSAQ partner companies, individual golf clubs as well as well as Golf Queensland, GMA and PGA took the opportunity to play one of the Gold Coast's finest courses. Nineteen GCSAQ sponsors also displayed their products and services in what was a fantastic day of networking.

Thankfully the forecast 15mm of rain didn't eventuate with the team from Bonville taking out the main prize. Second place went to the team from Greenway Turf Solutions, Golf Queensland finished third and Murwillumbah Golf Club won the leading club prize.

It was great to see the trade get behind the event and thanks go to the following companies and individuals who assisted Phil and the Lakelands crew in their preparations by donating products, equipment or their time to ensure the day was a success.

- Fertiliser/chemicals: Greenway Turf Solutions, Turfcare Solutions and Globe;
- Equipment: Tru-Turf and John Deere (Phil even rolled fairways!);
- Sand: Riversands;
- Trial plot areas: Bayer, GTS, Floratine and Living Turf:
- On-course and post-golf refreshments: Richard Chamberlain Design and Syngenta;
- On the tools course preparation: A big thanks to none other than Jeff Gambin (Australian Consolidated Training) and Jake Bushell (David Golf); and
- Also a big thanks to Chris Chapman (GTS) for photos and PowerPoint presentation

Finally, hot off the press, **Brent Robinson** has been appointed as the new course superintendent at Arundel Hills Golf Club on the Gold Coast. Brent has been assisting father Doug in the greens conversion to TifEagle there and this was the catalyst for his return to the superintendent ranks. We wish him all the best in the new role and also **Mitch Hayes** and the crew at Brisbane Golf Club as they get ready to host the 2016 Isuzu Queensland Open in late October.

BEN TILLEY PRESIDENT, GCSAQ



n 16 and 17 August the TGCSA, in conjunction with STA Tasmania, successfully staged the Toro Tasmanian Turf Conference at Barnbougle Lost Farm. The first morning saw 100 participants assemble at host superintendent Phil Hill's new maintenance facility which had been converted into a conference venue for the two days. Platinum sponsor Toro and Pellows Saws and Mowers kicked off proceedings with the rest of the morning comprising machinery demonstrations and sponsor introductions.

The afternoon saw nine holes of golf around the magnificent Lost Farm layout, sponsored by Tas Turf Solutions, and a course walk with Phil. The rest of the afternoon saw delegates enjoy happy hour in the trade show before the golf presentations were made. Congratulations to Daniel Templeton from Longford Golf Club on collecting the honours.

Dinner, sponsored by Globe, was held at the Lost Farm restaurant with entertainment provided by Adrian Black (Melbourne Olympic Parks Trust), David Talalla (Cricket Australia match referee) and Martyn Black. The always popular after dinner drinks were sponsored by Roberts Ltd.

First on the agenda for day two was the respective TGCSA and STA Tasmania AGMs followed by a presentation from Toro and Pellows Saws



and Mowers. The day also saw some educational presentations from Dan Docherty (Syngenta) and Warren Braybon (Turf Culture). AGCSA president Brett Balloch (Anglesea Golf Club) presented some work that he had done to highlight problems with his course and the actions needed to address them to his board, while John Geary spoke about the progress of Cape Wickham and some of the ongoing maintenance challenges.

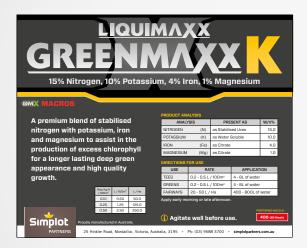
AGCSA senior agronomist Andrew Peart discussed his work with the AFL on getting regional football grounds up to scratch to host AFL preseason games and also presented on his trip to the UK in 2015 where he took in a number of famed links courses.





Course superintendent Phil Hill takes delegates at the TGCSA/STA Tasmania conference on a course walk around Barnbougle Lost Farm

Sharpened Claws.



After months of consultation and development, Simplot Partners has reformulated it's range of Ferro-Cious products with the stabilised nitrogen technology of the LiquiMaxx range to create the new LiquiMaxx GreenMaxx® K.

The balanced 15% stabilised nitrogen with iron, magnesium and potassium now offers more choice and flexibility to your program so you can get all the power of GreenMaxx® with the strength and growth benefits of 10% potassium.

simplotpartners.com.au





Trevor Strachan was bestowed life membership of the GCSAWA for his 40 years of service and dedication to the WA turf industry

his year's GCSAWA AGM, held in early August at Wembley Golf Complex, was a special occasion for the association. Just weeks after the announcement of his departure as superintendent of Lake Karrinyup Country Club in Perth, Trevor Strachan was bestowed life membership of the association in recognition for his 40-year involvement in the industry.

The GCSAWA was absolutely delighted to bestow this honour upon Trevor. He has been a leading superintendent in WA for many years and was the driving force in the construction of some of our state's finest golf courses. He hosted many major tournaments going back to his days at The Vines Resort and more recently the Perth International at Lake Karrinyup which was always presented in immaculate condition.

Over his career Trevor served many roles on the GCSAWA committee, including president and, up until the recent AGM, secretary. His contribution to the association and our industry over some 40 years has been invaluable and many hope he continues to pass on his knowledge as a life member.

Trevor's list of achievements in golf course construction and management is unsurpassed and the life membership goes alongside the WA Golf Industry Recognition Award he collected in 2014. Trevor first rose to prominence in the mid to late 1980s when he oversaw the construction, grow-in and subsequent maintenance of the 36-hole Vines Resort. Spending 10 years there, he and his crew hosted a string of highly successful Vines and Heineken Classics as well as the 1993 Queen Sirikit Cup. For his efforts at The Vines. Trevor received the 1993 AGCSA Fellowship Award, now known as the AGCSA Excellence in Golf Course Management **Award**

Between 1996 and 2002 Trevor played a principal role in the construction of two of the state's most dramatic courses - The Links Kennedy Bay and The Cut (Port Bouvard) - before joining Lake Karrinyup as course superintendent in July 2002. Shortly after arriving at Karrinyup, the course hosted the 2003 Johnnie Walker Classic and between 2006 and 2008 Trevor oversaw a major redevelopment of the Karrinyup layout. In 2010 and 2011 the course returned to the tournament spotlight when it hosted the Australian Amateur and Australian Senior Open respectively before hosting four consecutive Perth Internationals.

In addition to Trevor's life membership, a new committee was elected at the AGM. With Trevor and Idris Evans (former vice-president) stepping down we have injected some new blood in the form of Brad Anderson (Sun City CC), Shane Baker (Mosman Park GC) and Nick Kinley (Hartfield CC). The full GCSAWA committee for 2016-2017 is:

- President: Neil Graham (Mandurah CC)
- Vice-president: Jason Kelly (Royal Fremantle)
- Treasurer: Darren Wilson (Wembley Golf Complex)
- Secretary: Brad Anderson (Sun City GC, pictured right bottom)
- Golf Secretary: Shane Baker (Mosman Park)
- Committee (Training and Education): Nick Kinley (Hartfield CC)

A small group of 15 braved some cold and wet conditions to tee up for the GCSAWA Toro Cup. Brad Anderson celebrated his elevation to the committee by taking out the honours, while John Forrest from Challenger TAFE took out the other major prize with nearest the pin on the 2nd. The GCSAWA wishes to thank superintendent Darren Wilson and Wembley Golf Complex for hosting the event.

NEIL GRAHAM PRESIDENT, GCSAWA

ON THE MOVE

GARY CLARKE: From irrigation technician at The Australian Golf Club, NSW to assistant superintendent at Eastlake Golf Club, NSW.

DAMIAN FOX: Appointed superintendent Wentworth Falls Country Club, NSW.

BRENT ROBINSON: Appointed course superintendent at Arundel Hills Golf Club, Qld.

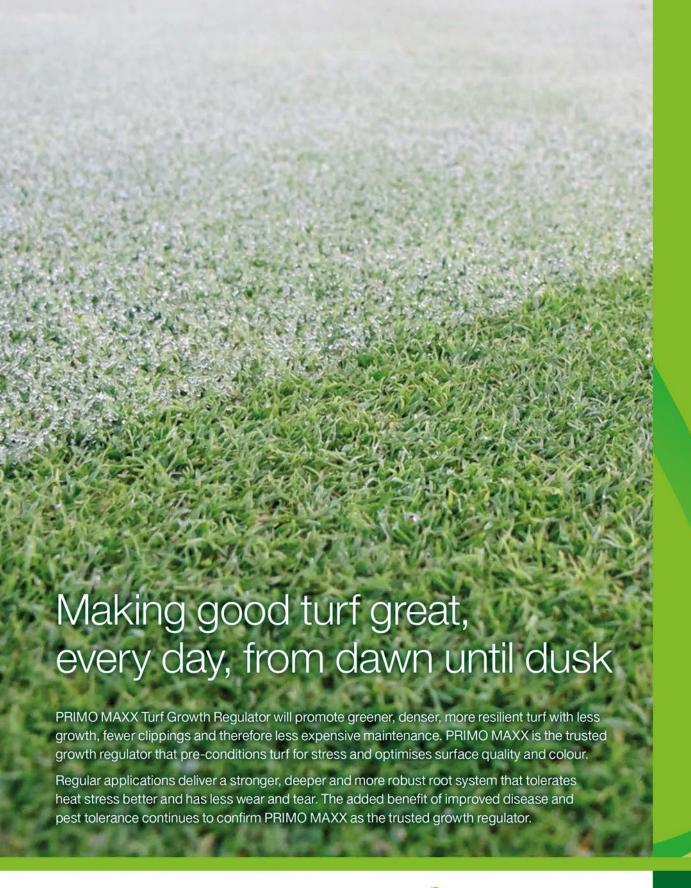
MARTIN ROSE: From assistant superintendent Cape Wickham Links, King Island, Tas to superintendent Ocean Dunes, King Island, Tas.

TOM SMITH: From superintendent Waterford Valley Golf Course, Vic to sports turf manager Singapore National Stadium, Singapore.

LIAM SOMERS: Departed as superintendent of Kwinana Golf Club, WA.

RYAN TREMBATH: From assistant superintendent Cape Kidnappers, NZ to assistant superintendent Brookwater Golf & Country Club, Qld

MORGAN WESTMORELAND: Departed as superintendent of Wentworth Falls Country Club, NSW to return to Victoria.







For more information and to download the full registered label and MSDS, ask your Syngenta Agent or go to www.greencast.com.au.

Syngenta Australia Pty Ltd, Level 1, 2-4 Lyonpark Road, Macquarie Park NSW 2113. ABN 33 002 933 717. ® Registered trademark of a Syngenta Group Company. ™ Trademark of a Syngenta Group Company. All products written in uppercase are registered trademarks of a Syngenta Group Company. AD 15/291

NSWGCSA •

pparently spring is now officially here and with many supers carrying out greens renovations at this time hopefully everyone managed to pick a dry day to get them completed, given some areas in the state have already tipped over their annual average rainfall.

NSWGCSA's first 'walk 'n' talk' event at Bonnie Doon Golf Club was a resounding success, with over 85 attendees. The sun was shining and we even saw **Kevin Booth** from the day sponsor Globe knocking out the BBQ breakfast rolls at a rapid rate of knots.

Superintendent Justin Bradbury took us on a tour through Stage 3 of the course reconstruction which was nearing its final shaping with turf being laid the following week. The tour was very informative and Justin freely passed on as much information as he could and answered a vast array of questions with complete honesty. Special consideration must be also given to NSWGCSA committee Steve Harris who had the unenviable job of lugging the PA system up the sand dunes!

At the time of writing this report, a second 'walk 'n' talk' was to be held at Muirfield Golf Club. Course superintendent **Peter Watts** was the 2015 winner of the NSWGCSA Environmental Award and will be taking attendees on a guided tour of his course as well as talking us through his achievements.

It is with great regret that I announce that **Shane George** (superintendent Links Shell Cove GC) will be stepping down from the committee at the AGM this year. Shane has been looking after field days and more recently the NSWGCSA newsletter. He has been a great asset to the association and will be sorely missed. In regards to the magazine, we continue to need more submissions for the 'Around the Traps' section from courses throughout the state; we would love to hear from more superintendents or their assistants regarding their golf course operations.

STUART GILL PRESIDENT, NSWGCSA

STA VIC



irst of all I would like to thank all members and sponsors for their continued support of STA Victoria. I am honoured to be elected president of this association and look forward to keeping the momentum going over the next 12 months.

STA Victoria wishes to thank Jacobsen once again for being the major sponsor of the 2016 Sports Field & Wicket Seminar held on 20 July at AAMI Park. It was a great opportunity for everyone to see the new Jacobsen Truckster XD that was proudly displayed at the entrance to the seminar venue. The event was well attended with more than 280 delegates from schools, councils, suppliers, sporting associations and local TAFE colleges. Hopefully you all had the chance to catch up with one of the many sponsors in attendance.

We had a terrific array of presenters with topics ranging from control trials, turf diseases and preparation of grounds through to 'change management'. A special thanks to all our presenters for making a great contribution to the day, including:

- Chuck Greif (Jacobsen) change management;
- Tim McCaskill (Cricket Victoria) Junction Oval development;
- John Neylan (Neyturf) Poa annua control trials final report;
- Luke Cooney (Etihad Stadium) USA study tour under STA Graduate Programme;
- Dr Phil Ford (PGG Wrightson Turf) establishment of seeded couch;
- Jarrod Hill (Sporteng) Deakin University's Waurn Ponds sports ground;

- Dr David McGeary (ETP Turf) disease diagnostics for sports fields; and
- Ryan Poole (Pace Health) back fit for safety and injury prevention.

Guest speaker, former Australian cricketer Simon O'Donnell, kept all the delegates entertained with stories from his career ranging from football, cricket and horseracing.

On the formal side, the AGM was held at the beginning of the day including elections for the executive. The 2016 committee comprises:

- President: Danny Edmunds
- Vice-president: Peter Todd
- Secretary: Nathan Tovey
- Treasurer: Garry Woolard
- Committee: John Cann (activities), Grant Greenway (membership), Rob Jenkins (marketing) and Jim Porter (education)

I value the support of the above volunteer committee and the fantastic work done by Jan Fenton in our administration role. Jan is an invaluable member of the team and I appreciate the chance to work more closely with her this year.

The future success of the association is dependent on the ongoing support of our members and sponsors. I encourage anyone who has any feedback regarding the recent seminar or any other matter that they would like the STA to explore, to drop us an email at vic@sportsturf.asn.au and we will be in touch.

DANNY EDMUNDS PRESIDENT, STA VICTORIA

SAGCSA

inter was cold and wet for most areas of South Australia, but with spring now here and renovation time approaching it will be great to see some good weather for a change.

The SAGCSA held its AGM in late July at the Flagstaff Hill Golf Club (host superintendent Aaron Kelly). About 25 attended the day, with nine holes of golf following the AGM and lunch. Special congratulations to The Grange Golf Club assistant superintendent Rowan Daymond who aced Flagstaff Hill's iconic par three 7th! At the AGM the SAGCSA committee was re-elected:

- President: Bazz Bryant (Mt Osmond GC)
- Secretary/Treasurer: Richard James (The Grange GC).
- Committee: Stephen Chapman (Barossa Valley GC), Nathan Bennett (Royal Adelaide Golf Club) and Tim Warren (Links Lady Bay)

In late August the SAGCSA held one of its biggest gatherings of the year at The Grange Golf Club. Around 106 members and industry representatives gathered for an education day at the 2016 Australian Women's Open host venue to hear from a variety of presenters and view machinery demonstrations.

Among the presenters were Jyri Kaapro (Bayer), recently appointed Living Turf technical and



marketing director Dr Henk Smith, Paul Spencer (GTS), Daniel Burdette (3Tier), Brett Morris (Globe), Jim Brennan (Applied Agronomics), Teferi Belayneh (Omnia) and Dan Docherty (Syngenta). Machinery demonstrations came courtesy of Toro, Jacobsen/Turf Equipment SA, John Deere/ Metropolitan Machinery, Ventrac and Graden.

We haven't held a day like this for a couple of years and overall it was a very successful event with a lot of interesting and informative presentations. The SAGCSA thanks all sponsors for presenting on the day and all the clubs for allowing their staff the time to attend.





More than 100 attended the SAGCSA education and trade day at The **Grange Golf Club in late August**

he good news for Australian turf growers is that both an increase in turf sales across Australia (except for WA) and an increase in levy compliance have resulted in a 20 per cent increase in levy collections for the 2015/16 year over the previous year.

Back in 2014, Turf Australia initiated a Levy Compliance Program in conjunction with the Department of Agriculture (DoA) Levies Unit. After an exhaustive analysis of various and multiple turf business names and addresses in Australia, 37 potential non levy payer details were provided to DoA Levies. Of those 37:

- Sixteen have opened a new levies account;
- Seven have been confirmed in writing that they are under the 20,000m2 threshold.

Each of the 66 agriculture and horticulture levies are collected by DoA Levies in a different way. Turf growers will know they are responsible for calculating the amount owing and paying direct to DoA Levies. The reason for this is the turf industry is the only industry where growers sell direct to the end user or consumer and, therefore, the entire supply chain is effectively 'on farm'. For all other industries (except wine grapes), a third party collects the levy owing on behalf of the grower or farmer and submits the amount owing to DoA Levies.

Despite its complexities, the Australian Research & Development Corporation model and levy system is the envy of the international agriculture/horticulture sector. With growers and industry representative bodies fully engaged in the levy investment process, levy investments can continue to provide real and significant outcomes.

While Turf Australia does not have the same level of influence over levy investments under the new Horticulture Innovation Australia, it continues to try to ensure levy investments provide the best outcomes for all turf growers.

To help ensure future turf levy investments are strategic and high priority, Turf Australia has been conducting State Forums across the country, giving growers direct input into the development of a new strategic investments plan for the industry. One of the highlighted areas for investment has been researching facts and figures on the triple bottom line benefits turfed areas provide the community and then promoting these benefits to urban planners, landscape designers, government and the broader community.

RICHARD STEPHENS **BUSINESS & INDUSTRY DEVELOPMENT** MANAGER, TURF AUSTRALIA



STA WA committee members Hugh Gardner, president Tony Guy and Clint Betts at the association's 2016 **Annual General Meeting**

ere we are... winter has passed, the Australian Turfgrass Conference is done, AGM done, Cricket Wicket seminar done (well, at least it will be by the time of printing) and it already seems that we are quickly sliding towards end of year plans.

There are times when it seems that organising and participating in STA and WA turf industry events is pretty full on and when combined with our real jobs it can get somewhat stressful. But one of the things that keep your eyes looking forward is the anticipation of how our industry is evolving and the sheer variety of small changes that occur in a number of ways month after month, year after year.

One of those changes was at the Australian Turfgrass Conference in Melbourne this year where I was proud to pass on the STA Australia presidency to Chris Chapman from STA NSW. Being on the executive committee of the STAA continues to be an amazing experience and I look forward to ongoing work with Chris and the team.

Another clear example that this year is different to the last is the weather. Everyone in Perth has been commenting that this year's autumn/winter weather has been a blast from the past. Although rainfall is still restricted to the new post 2001 average, at least it's on par for a change and its regularity has been a welcome relief to those that turn off the irrigation between June and September.

What has really been jolting the weather memory of the good old days of the 1980s and 1990s has been what can only be described as the extended 'coolness' and 'dampness' of the days and weeks. Yes it has been colder, the daytime and night time temperatures have been statistically lower than average, but the longevity of the cool weather has resulted in a prolonged moist turf profile, easily prone to compaction and wear and quickly turning to mud.

As mentioned earlier, we held our Annual General Meeting in early August where the standing STA WA committee was re-elected. I would like to thank my fellow committee members Hugh Gardner, Clint Betts, John Forrest and Matt Lane for their continued support and assistance. At the meeting, with the help of our core group of supporting members, we had a good look at our events calendar to give some old favourites a shuffle to new dates over the next 12 months.

Two standout changes made were that the end of year Social Day will now move to the start of the year, taking the old timeslot of the President's BBQ Breakfast which will now be combined with the AGM later in August. In 2017, following a suggestion from the floor, we also hope to host a sports fields and wickets renovation seminar, most possibly in March.

At the AGM I was also proud to announce the release of our new website www.sportsturfwa.asn. au. Although it has been a steep learning curve, I am feeling quite chuffed to have successfully figured out how to make sliding flash banners and to change the source code in the iframes so that the flip books and YouTube video open in full screen mode. If you don't understand what all that means, don't worry, neither did I a couple of months ago!

There is still a lot of information yet to add to the site, so please keep checking in to watch it grow and while there go to the trade directory to click on our sponsors logos to be redirected to their sites. They will be very happy you came by.

> TONY GUY PRESIDENT. STA WA

STANZ STANZ



he recent New Zealand Turf Conference and Trade Show in Auckland was a great event, drawing delegates from across the country. There was also a gala dinner for delegates to attend, where well-known Seddon Park turf manager Karl 'KJ' Johnson (pictured left) was awarded for his contribution and promotion of the sports turf sector.

The Media Recognition Award came as a shock to KJ, who says his promotion is borne from passion. It's important to have people like KJ shining a light on a 'behind the scenes' industry like our own to help recruit high calibre people.

Meanwhile it is full steam ahead in the construction sector with a large number of sports fields under construction over the next few months, predominantly in Auckland. There are also three hybrid turf fields being installed including the Westpac Trust Stadium in Wellington.

Oh and if it's okay with you all over in Aussie, we just might hold onto the Bledisloe Cup for a bit longer...

KELLIE ROSE CHAIR, STANZ

ULTIMATE FINISH FOR THE FINEST GREENS



The Jacobsen Eclipse®2 walking greens mower delivers the ultimate finish on the finest greens with its unrivalled ability to define the number of cuts per metre. Using either 11- or

15-blade TrueSet cutting cylinders, Jacobsen's InCommand™ control system allows YOU to easily adjust the frequency of cut according to the unique conditions on YOUR course.

- Clip rate and consistency dial in and lock the required number of cuts per metre and the mower will cut to exactly the same parameters, irrespective of operator - ensuring the consistent putting surfaces across all of your greens.
- Fixed or floating available with fixed or floating cutting units, to suit both flat and undulating greens, the Eclipse®2 is available with a battery or as a hybrid (petrol-electric) drive.
- Sound of silence with the battery version the Eclipse®2 is virtually silent - ideal for mowing in noise sensitive areas such as resort hotels and courses close to housing developments. Reduced noise and exhaust emissions make the Eclipse®2 an environmental champion.

We're obviously biased, so don't take our word for it. Visit www.jacobsen.com to find your local dealer.

www.jacobsen.com













Wanting a challenge outside the ordinary, superintendents Anthony Toogood (left) and Phil Hill tackled the 65km Overland Track in **Tasmania last August**

you'd think you'd make

sure that you had the

water, toilet paper.

theory...

basics covered... food.

Superintendent Phil Hill

doesn't subscribe to that

When you're trekking asmania is blessed with some of Australia's most stunning landscapes and over the years five days in the remote has become a mecca for trampers and hikers wanting to reconnect with nature. One of its most Tasmanian alpine region, spectacular routes is the 65km Overland Track

Mountain-Lake St Clair National Park.

Golf course superintendents are known for their love of the outdoors and it was at the 2014 Australian Turfgrass Conference on the Gold Coast that Barnbougle superintendent Phil Hill and good friend Anthony Toogood, from the Commercial Club in Albury, got chatting over a few ales. They concurred that completing the Overland would be a great test of endurance for a couple of "old supers looking for a bit of an adventure", and at the Hunter Valley conference a year later plans were formalised and a start date of 30 August 2015 locked in.

which wends its way through the heart of the Cradle

Despite Tasmania's weather being at its most fickle at that time of year, both Hill and Toogood agreed that it would spice up the challenge. However, two weeks before they were due to take their first steps, extreme blizzards and snowfalls saw a number of trekkers needing to being airlifted



Normally taking six days, Toogood and Hill completed the Overland track in five



off the Overland by helicopter. Indeed, when they arrived at the Cradle Mountain Information Centre to start their trek they were strongly advised to reconsider their plans as others were turning back after 2-3 hours because of the conditions.

"We were glued to the weather forecast for those two weeks leading up to the trek," says Hill. "The day before we were due to start the walk roads had once again been closed to some parts of the mountain. But we were well prepared for any event, including an EPIRB in case of a catastrophe, so were confident we would be okay.

"The snow-covered mountainous terrain was something you had to see and it wasn't far into the walk that we both realised just how lucky we were to be walking this famous track in these so called 'extreme conditions' which we felt very comfortable with. The Buttongrass Plains were covered with snow 300mm-600mm thick which made for a vastly different landscape than we were anticipating.

"We first thought that we were going to be the only ones on the track and after settling in the hut for the first night we heard footsteps and were greeted by four hikers from the US, Germany and Tasmania. We pretty much walked the track with these guys and we would catch up at the end of each day.

"Beautiful clear days and freezing cold nights added to the whole experience as we worked our way along the track with the big goal of climbing Mt Ossa. Unfortunately the Ossa was covered in ice at the top which made reaching the pinnacle virtually impossible without pick axes and cramp-ons, but it did make for some amazing photos."

The trek normally takes six days, but being the mountain goats they are Hill and Toogood completed the Overland in five, putting in one big day to ensure they knocked it off. "It did hurt a bit, but that's what it's all about - challenging your mind and body in those conditions," says Hill. "We met some fantastic people on the way, saw some amazing landscapes and encountered some extreme conditions, but we both agree it was one of the best things we have done in our lives!"

However, the quick completion time may have been more down to the one somewhat vital item that Hill forgot to include in his backpack. Despite having prepared meticulously, on the first day Hill had to go for a comfort stop only to realise he had left his roll of toilet paper back at home! Needless to say you can imagine the look his walking companion gave him when he asked if he could borrow his... 44



For more information, call 1800 356 372 or contact your Toro Golf Area Sales Manager. **toro.com.au**









Irrigation Water Systems featuring HYDROVAR®

Create a variable speed booster station to your technical specifications.

By utilising the well proven Lowara e-SV™ multistage pump and Hydrovar variable speed drives, you gain an efficient and robust system. You can create a booster set with up to eight vertical multistage pumps that are all controlled by Hydrovar frequency drives fixed directly on the electric motor of each pump. These systems can maintain constant pressure and optimized pumping efficiencies over wide flow ranges.

A selection of golf courses that have installed pumping systems with HYDROVAR®:

Australia

- Ballarat
- Bannockburn
- Barwon Heads
- Bermagui
- Bowral
- Box Hill
- **Brookwater**
- Cape Schanck
- Charlestown
- Clifton Springs
- Criagieburn
- Curlewis
- Dorsel
- Drovin
- Druin
- Elcho Park
- **Emerald Lakes**
- Eynesbury
- Garfield

- Goondiwindi Hidden Valley
- Kingston Heath
- Koohindah Waters Latrobe
- Marysville
- McLeod
- Melton Metropolitan
- Monash
- Montuna
- Morebank
- Moss Vale
- Muirfield
- Ocean Grove
- Ocean Shores
- Pacific Dunes
- Perigian Springs
- Rich River

- Richmond
- Ringwood
- Riverside
- Rockhampton
 - Royal Melbourne
 - Rosebud
 - Rossdale Settlers Run
 - Shell Cove
 - Shell Harbour
 - Shoal Bay

 - Shoalhaven Heads
 - The Goowa
 - Tirhatuan Park
 - Trafalgar
 - Tuggerah Lakes
 - Virginia
 - Wyong

New Zealand

- Akarana
- Auckland
- Cape Kidnappers •
- Carrington
- Clarke's Beach
- Formosa
- Grange
- Hamilton
- Howick Huapai
- Jacks Point
- Kaitaia
- Karori

- Kauri Cliffs
- La Pointe
- Mangawhai
- Matarangi
- Muriwai
- Napier
- New Plymouth
- Omaha Beach
- Omokoroa
- Onewai
- Pauanua Lakes
- Russley
- Sherwook

- Taupo
- Te Awha
- Te Puke
- The Hills
- Titirangi Waikanae
- Waipa
- Wanganui
- Wellington
- Western Bay
- Whangarei







Australia: 1300 4 BBENG www.brownbros.com.au

New Zealand: Christchurch (03) 365 0279 Auckland (09) 525 8282

www.brownbros.co.nz