

AUSTRALIAN

ISSN 1442-2697 www.agcsa.com.au

Turfgrass



VOLUME 23.3 MAY-JUNE 2021

MANAGEMENT JOURNAL

Welcome to the Gold Coast

2021 Australian Sports Turf Management
Conference (21-24 June)

Central Coast Stadium
Mariners' home turf gets a makeover

Making its mark

Green light for Brisbane's
Minnippi public golf course

De Australische hoofdgreenkeeper

One super's journey from
Bonnie Doon to Belgium

It's been a while between drinks ...

But we're looking forward to seeing everyone at this year's ASTMA conference. Be sure to drop by Syngenta's stand to find out all the exciting things we've been working on:

NEW

An exciting **NEW FUNGICIDE RELEASE** to be announced!

NEW

Greencast
Tools and
Services



Weather



Growing
Degree Days



Disease
Mapping



Calculators

NEW

Turf Fungicide Guide
**Your knowledge. Our Science.
Less Disease. Fast Recovery**

**LOTS OF
PRIZES!**

ASTMA Conference competition



Follow @SyngentaTurfANZ
on Twitter to enter

**Visit the Syngenta stand at the ASTMA Conference
June 2021 for more details**

syngenta®

For more information 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 Syngenta Group Company. ™Trademark of a Syngenta Group Company. All products written in uppercase are registered trademarks of a Syngenta Group Company. © 2021 Syngenta. AD 21-179.

®

Published by the Australian Sports
Turf Managers Association (ASTMA)

Editorial

Brett Robinson
Office: (03) 9548 8600
Mobile: 0434 144 779
Email: brett@agcsa.com.au

Advertising

Pam Irvine
Office: (03) 9548 8600
Mobile: 0402 069 489
Email: pam@agcsa.com.au

Art Direction & Design

Jo Corne

Printed By

Southern Impact Pty Ltd



Australian
Sports Turf Managers
Association

Suite 1, Monash Corporate Centre
752 Blackburn Road, Clayton, VIC 3168
P: (03) 9548 8600 F: (03) 9548 8622
E: admin@agcsa.com.au
W: www.agcsa.com.au
ABN 96 053 205 888

ASTMA Board

Peter Lonergan (president), Chris Burgess (treasurer),
David Thomson, Ben Tilley and Damian Hough

Chief Executive Officer

Mark Unwin
Office: (03) 9548 8600
Mobile: 0438 320 919
E: mark@agcsa.com.au

Membership

Allison Jenkins
E: admin@agcsa.com.au

Accounts

Philip Horsburgh
E: philip@agcsa.com.au

Events and Education

Simone Staples
E: simone@agcsa.com.au
Pam Irvine
E: pam@agcsa.com.au

AGCSATech

Bruce Macphee (Senior Agronomist)
E: bruce@agcsa.com.au
Tim Fankhauser (Agronomist)
E: tim@agcsa.com.au

Social Media

Keally Nankervis
E: keally@agcsa.com.au

www.facebook.com/TheASTMA

www.linkedin.com

www.instagram.com/the_astma

[@TheASTMA](https://twitter.com/TheASTMA)

Copyright © 2021

The ASTMA 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 ASTMA, 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 ASTMA



Australian
Sports Turf Managers
Association

PREMIUM PARTNERS

The Australian Sports Turf Managers Association is indebted to the support of the following premium partner companies



PLATINUM



GOLD



SILVER



JOHN DEERE



BRONZE



The Australian Sports Turf Managers Association encourages all members to support these companies who support your association



COVER STORY

COOLANGATTA TWEED TEES UP 34

Coolangatta and Tweed Heads Golf Club will host the 2021 ASTMA Golf Championships, presented by Toro, for the first time when the Australian Sports Turf Management Conference returns to the Gold Coast in June. The 36-hole facility has a long and proud history when it comes to the turf management profession, with three of its superintendents, including incumbent Peter Lonergan, having held the role of president of the ASTMA/AGCSA. Association life member Lonergan provides ATM readers with an insight into the busy facility as it gears up to host the hotly contested race for the Toro Red Jacket.

Cover: The closing hole of the River Course at Coolangatta & Tweed Heads GC, with 18 West to the right.

Photo: Brendan James, Golf Australia Magazine.



FEATURES

- Mariners' home turf makeover 8
- De Australische hoofdgreenkeeper 14
- Minnippi set to make its mark 20
- The full treatment 26
- Your guide to Gold Coast 2021 30



ALSO IN THIS EDITION...	
Foreword Thinking	4
Picture perfect posts	6
Regional Profile – Mount Compass GC, SA	60
Association Reports	66
Up the last... Tuning in	70
Book review	72



COLUMNS

PETER MCMAUGH AM	46
JOHN FORREST	50
BEN GIBSON	54
TERRY MUIR	58

People First

People First

Ben Gibson

Ben Gibson

Developing an Engaged Safety Culture through Effective Leadership

"People First should be in every club facility across the country."
—Peter Gibson, Golf Course Superintendent, The Australian Golf Club

72

Contributors to Australian Turfgrass Management Journal Volume 23.3 (May-June 2021): Tim Allen (CSTM, The National Golf, Belgium); Shane Baker (CSTM, GCSAWA); Leo Barber (Paraparaumu Beach GC, NZ); Nathan Bennett (CSTM, SAGCSA); Nathan Bradbury (CSTM, NSWGCSA); James Correll (STA ACT); John Forrest (Forrest and Forrest Horticultural Consultancy Services); Ben Gibson (The Toolbox Team); Shane Greenhill (VGCSA); Brendan James (Golf Australia Magazine); Scott Johnstone (HydroPlan); Brenton Kay (McMahons); Erik Kinlon (HG Turf Group); Peter Lonergan (CSTM, Coolangatta & Tweed Heads GC); Garry McClymont (CSTM, Twin Waters GC); Paul McLean (CSTM, GCSAQ); Peter McMaugh AM (Turfgrass Scientific Services); Terry Muir (epar); Keally Nankervis (ASTMA); Matt Overall (Mount Compass GC); Phil Ryan (Pacific Coast Design); Kate Torgersen (Environmental Golf Solutions); STA Victoria; Mark Unwin (ASTMA); Jenny Zadro (Turf Australia); ASTMA and STA Graduate of the Year finalists.

Reconnecting on all levels

If the COVID-19 pandemic has taught us one thing (among many), it's the importance of relationships and our connections with people. Having endured multiple lockdowns here in Melbourne, the second of which dragged on for over three months, you certainly start to appreciate the simpler things in life and just how vital every-day interactions are, whether it's with friends, family or your work colleagues. Zoom is a fantastic medium, but it will never replace talking to someone face-to-face.

The lockdowns were particularly difficult for those who had family and friends either interstate or, as in my case, overseas. Not only wasn't I able to go and visit them due to the world shutting down, what made it even more difficult was having to watch on helplessly from afar as they dealt with some pretty serious health and personal issues. One of my best mates, a former newspaper colleague, was diagnosed with myeloma, a form of blood cancer, just a week before New Zealand was plunged into its first lockdown. Another lost his job as a result of COVID and was out of work for the best part of eight months, trying to support a wife and two young boys, one of whom has autism. Then there was my old man's ongoing health issues that come with being the ripe old age of 83 and having a body that is now feeling the full effects of a hard life, albeit one well lived.

It was therefore an extremely emotional moment for me in early May when I was able to quickly duck back across the Ditch for a few days to catch up with some of the most important people in my life. With the travel bubble finally open between the two countries, as soon as the last magazine was signed off I took advantage of it and made the dash (lucky I did in light of recent events). I normally keep my emotions pretty much in check, but there were tears in my eyes when the Air New Zealand A320 dropped beneath the clouds and I could see my hometown of Auckland a few thousand feet below for the first time in 18 months.

The next four days were food for the soul and I'm not just talking about my mum's famous homemade pavlova which was plonked in front of me for dessert on the first night. It was an opportunity to sit and talk, reminisce and reflect, laugh and cry often over a few magnificent New Zealand craft IPAs and APAs. Being able to plug back in and reconnect with loved ones, even for just a few short days, was something that I greatly needed and one that I will look back fondly upon given the unique circumstances which surrounded it.

While on a completely different level, the upcoming Australian Sports Turf Management Conference and Trade Exhibition will have a similar feeling for many as an industry prepares to meet up again for the first time in two years. The fantastic conference in Brisbane in 2019 seems like a lifetime ago and after last year's event in Melbourne had to be called off due to the pandemic, there is a great level of anticipation for the week coming up on the Gold Coast. Yes, as I write this, the state of Victoria is three days into a circuit-breaker lockdown which threatens to throw a spanner in the works, more so for those of us coming from Victoria, but the conference will go ahead and will be good.

Registration numbers have been very strong, proving that the industry and its people need this conference to connect, reconnect and reflect on what has been one of the most unique periods we have ever been through. You only have to look at some of the state events already held this year to see how much such events mean. The VGCSA's two events in March and May were fully subscribed, with numbers only capped because of COVID protocols.

I very much hope to see everyone on the Gold Coast from 21-24 June (and I say this with every finger and toe crossed). Dare I say that the education component of this year's event will be somewhat secondary given the events of the past year. As we all know it is the networking and reconnecting at these events where often the most important exchange of information occurs. I am sure the buzz that will resonate around the education halls of the exhibition centre, on the trade show floor and in the places of gathering of an evening will again ignite the passion in many that we have for our profession. Enjoy the read...



Brett Robinson, Editor



Gold Coast 2021 – an industry prepares to re-engage

Always a highlight of the annual turf industry calendar is the Australian Sports Turf Management Conference and Trade Exhibition. Perhaps more so this year than any other, due to the forced cancellation of the 2020 event because of COVID-19, the opportunity to continue education, network with peers and reconnect has seen delegate and exhibition registrations near all-time highs.

The four-day event, to be held this year at the Gold Coast Convention and Exhibition Centre from 21-24 June, promises to be an outstanding event, with a number of keynote speakers involved to share their experiences and learnings, combined with over 100 hours of management education related to agronomy and leadership across golf, sportsfields and management streams. More information on the conference education and networking sessions, as well as information pertaining to the two-day trade exhibition, is highlighted in this edition's Conference Guide which runs across pages 30-45.

Always a highlight of the conference is the National Turf Industry Awards, where outstanding achievement in the profession is recognised on the opening night of the week. This year the ASTMA Awards programme has been expanded with the introduction of two new awards – the **Excellence in Sportsfields & Grounds Management Award** (presented by Toro) and the **Sports Turf Management Team of the Year Award** (presented by Nuturf) – completing the recognition of exceptional performance and achievement by Australian sports turf managers. For those unable to make the event, a full write up on the conference will be included in the July-August 2021 edition of Australian Turfgrass Management Journal, along with a comprehensive review of all 2021 award winners.

While the focus is very much on delivering an exceptional experience on the Gold Coast in the coming weeks, looking ahead many will have seen the announcement regarding a change for the 2022 conference. The ASTMA has signed a partnership with Golf Management Australia (GMA) to combine education conferences into a united event to be held next June, further strengthening the relationship between the two associations. The 2022 event will be held in Melbourne and will make it Australia's largest golf industry event and one that is not to be missed.



Australian Sports Turf Managers Association

In other ASTMA news, a significant pillar of the association's five-year Strategic Plan was to support and prioritise initiatives that promote best practice education for environmental management and sustainability programmes. Two of the larger initiatives well underway reflecting this priority are the **Golf Course 2030** programme (with input and representation from each of the state associations) and the **Environment and Sustainability Program** in conjunction with GEO and 25 golf clubs across Australia. With thanks to the clubs and turf managers involved for their time and input into the Golf Course 2030 programme working groups, these initiatives are well advanced and further updates will be delivered at the conference.

Another focus of the Strategic Plan was to continue and expand the level of support to the state associations. We have recently worked through some significant developments in this area and in the early weeks of June announced an important partnership with Repco, offering discounted products and services to all association members. Such a partnership has at its core an approach for sustained long-term support for members and each of the state associations to assist in continued delivery of education, events and research. For more information on this partnership and benefits, visit the ASTMA website or discuss with your state association.

EMPLOYMENT CHALLENGES

While the above are all great news for Australian sports turf managers, the sobering fact remains of the considerable challenges faced by the industry. One of the most significant, without question, is employment. While this impacts some states more than others, many turf managers I speak to indicate that staff and labour shortages is the most pressing challenge faced at their facility. Involving both the difficulties in attracting new talent and challenges of retaining talent, this is a major issue that requires considerable

attention, both in assisting turf managers in the short-term but also the long-term sustainability of the industry.

As an example, from 2017 to 2020 the number of people working in turf management grew slightly from 18,400 to 20,300 (source: www.joboutlook.gov.au). While on the surface this may be seen as a strong story for the industry, it is underpinned by some concerning trends. Foremost among them is the reduction in the numbers of qualified staff, which have fallen from 62 per cent to 48 per cent over the same period. This indicates that the number of qualified turf managers in the industry has fallen dramatically over the past three years and facilities are straining to retain or attract qualified staff. Couple this with declining education enrolments and worryingly low completion rates, prospects for industry labour rates over the long-term are concerning.

In the second half of this year, the ASTMA is undertaking an employment initiative in conjunction with all state and territory governments, in particular each of the state Departments of Sport & Recreation, Education and Employment, to help address this critically important short- and long-term issue.

This is a quite detailed programme related to attracting future talent into sports turf management and the retention programmes to train and develop qualified turf managers and keep qualified and trained staff in the industry. While the initial components to the programme and facilitated meetings have been undertaken with department representatives, it is envisaged that this initiative will be a multi-year programme combining a range of short-term programmes and continuous initiatives to drive outcomes for the years to come.

Forming part of the initial stages will be determining an industry baseline and identifying areas of opportunity. As such, the ASTMA will be sending out a detailed survey to members in relation to employment issues, trends and workforce participation numbers during July. I would ask that members set aside some time to complete the survey, which will give us a highly comprehensive overview of the industry. Results will be combined for an Australia-wide perspective, while state-based insights and localised information will be used to determine and prioritise itemised approaches with each state. Please keep an eye out for the employment survey in the weeks ahead.

I look forward to reconnecting with you all on the Gold Coast for the 2021 conference. 🌱

The smart *play*



Tetrino[®]

Introducing Tetrino, a new insect control solution from Bayer, offering an unmatched combination of performance, ease of use and efficiency. Delivering fast control and lasting protection against a broad-spectrum of turf insect pests with a low rate of active ingredient, Tetrino is **the smart play** for flexible and sustainable insect control.

LAUNCHING AT THE 2021 ASTMA CONFERENCE

ALWAYS USE ACCORDING TO PRODUCT LABEL
Bayer CropScience Pty. Ltd., Environmental Science,
Level 1, 8 Redfern Road, Hawthorn East, Vic. 3123
Technical Enquiries: 1800 804 479 // es.bayer.com.au
Tetrino[®] is a Registered Trademark of the Bayer Group

© 2021



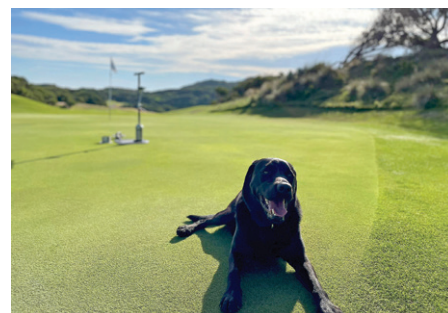
PGA OF AUSTRALIA

Turf managers appreciation post. Here's to the countless hours and total dedication of the maintenance staff keeping our fairways looking immaculate. (This photo, re-posted by the PGA, was taken by Ballarat Golf Club superintendent and ASTMA member Jeff Powell. @jelpow63)



Picture perfect posts

ATM scrolls through its social media feeds to curate some of the best (and interesting) images recently snapped by our many talented turf managers and industry professionals.



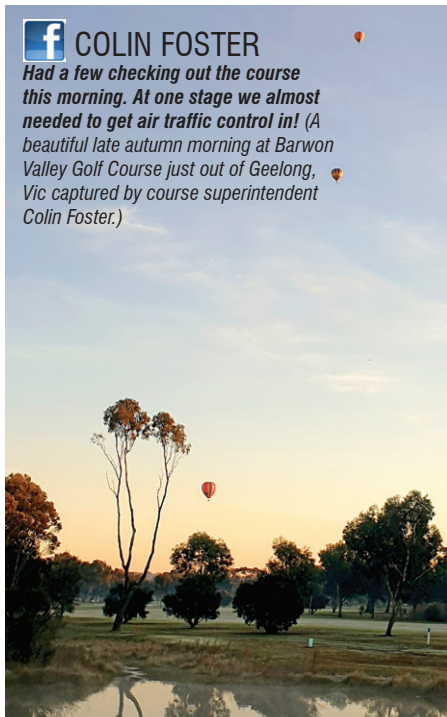
BRENTON CLARKE

First Warrnambool Golf Club Championships out the way. Couldn't be prouder how four staff presented the course and one hound! Great results (Clarke was appointed new Warrnambool superintendent in September 2020. Pictured is Rama, Clarke's five-year-old black Labrador and assistant hole changer.)



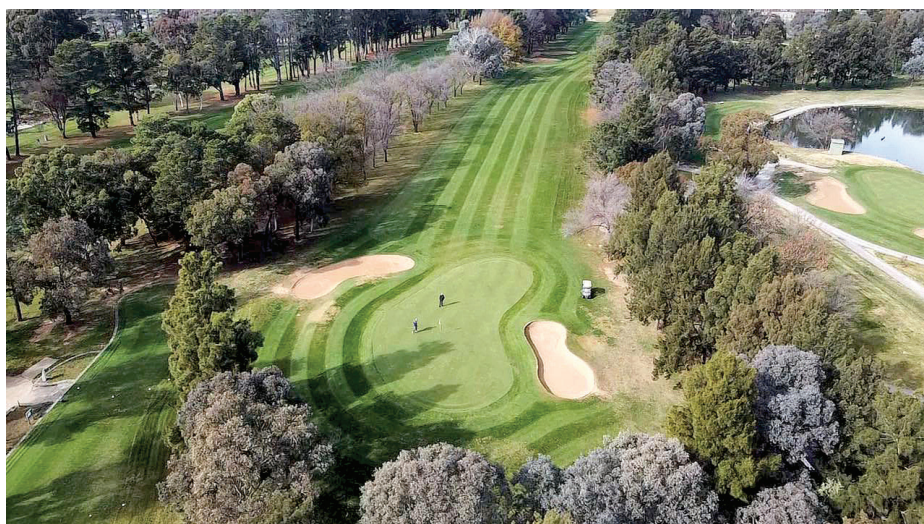
f TYLER WILLOUGHBY

1 April to 24 May. All greens back in play from the flood damage as of last Friday. (The nine-hole public access Rum Corps Barracks Golf Club west of Sydney, where Willoughby is superintendent, was one of the hardest hit during the March floods. Photos show the 1st green immediately after the floods and seven weeks later after reseeding.)



f COLIN FOSTER

Had a few checking out the course this morning. At one stage we almost needed to get air traffic control in! (A beautiful late autumn morning at Barwon Valley Golf Course just out of Geelong, Vic captured by course superintendent Colin Foster.)



f BRANDON WILLIAMS

Yowani CC leading into winter (Canberra's Yowani Country Club stripping up nicely as the temperatures start heading south. Pictured is the 1st hole taken by third year apprentice Brandon Williams.)

t IDRIS EVANS

Well this just made my morning. #grumpysuper (Western Australian Golf Club superintendent Idris Evans unwittingly strikes a buried golf ball while solid tining one of his greens in late April)



Mariners' home turf gets a makeover



It boasts one of the most picturesque outlooks of any stadium in Australia and to accompany that it now also has one of the most state-of-the-art pitches. HG Turf Group's Erik Kinlon looks back at the project to resurface Gosford's Central Coast Stadium, the home turf of A-League side Central Coast Mariners.

Among Australia's ever-evolving stadium landscape rests Central Coast Stadium, situated in Grahame Park, Gosford on the central NSW coast. The stadium is immediately recognisable globally due to its idyllic location and stunning backdrop.

Although various sports have been played on the site since the reclamation of land in the early 1900s, it didn't come into being as a stadium until 1999. A rectangular stadium with seating and stands only constructed on three sides, it opened in 2000 as the host venue for the now dissolved Northern Eagles NRL team.

The stadium design called for the southern end of the ground to remain open, affording amazing views of the adjacent Brisbane Water harbour through a row of palm trees. It certainly boasts one of the most picturesque outlooks of any stadium in the country.

Since 2004, Central Coast Stadium has been home to the Central Coast Mariners, one of the original eight founding clubs that kicked off in the new A-League competition that same year. It is one of the smaller stadium venues in the league with an all-seater capacity of just over 20,000. The Mariners have tasted success at the top echelon, winning the A-League title

in 2013 and are now hoping for a return to such glory days with a new HERO Hybrid Turf pitch which went down this past summer.

SHOWING ITS AGE

Central Coast Stadium is perfectly located in Gosford, a bustling town with a continually growing population and a demand for year-round entertainment in the form of sport, live music and events. Given the existing playing surface was over 20 years old and suffering from problems inherent with a pitch of that age, in 2019 the decision was made to lay a new surface.

Over a four week period in February and early March, the pitch at Gosford's Central Coast Stadium was replaced with HG Turf Group's new HERO Hybrid Grass product



In late 2019, following a robust tender process, stadium owners Central Coast Council awarded the contract to HG Turf Group. At the heart of HG's bid for the project was the inclusion of their HERO Hybrid Grass 'ready-to-play' product, a system that is in use at some of the world's best soccer stadiums and clubs, including Real Madrid's Cicaud Training Facility and Manchester City's CFA Academy. It was also recently used in the resurfacing of Auckland's Eden Park which was covered in the last edition of Australian Turfgrass Management Journal.

Launched in 2016, the HERO system grass is anchored to a grid via a knitting process. The artificial grass is five per cent of

the playing surface and protects the natural grass, increasing the durability of the turf. It is designed to suit different sports and

The crew responsible for transforming the Central Coast Stadium surface, with HG Turf Group project manager Nathan Humphreys (far left) and Green Options turf manager Tom Jenkin (third from left)



natural grass cultivars, including warm and cool-season varieties. Hybrid turf like the HERO system is a long-term solution with a 10-plus year life for stadium pitches and for multi-functional stadia like Central Coast Stadium which is backed up with additional replacement turf for concerts and events.

GREEN SIDE UP

With contracts finalised, HG set about laying the 12,000m² of HERO hybrid carpet at a turf farm in Windsor, NSW in April 2020. HG rents some property off Michael Muscat, owner of GreenLife Turf Group, and has developed a strong relationship with the Muscat family, growing its hybrid turf products for many other stadiums there, including ANZ Stadium and Bankwest Stadium.

The nursery pad was trimmed and prepared to specific design grades and a team of eight from HG installed, sewed together and infilled the hybrid carpet to a depth of 35mm with a USGA sand over the course of 10 days. Prior to laying the carpet, a layer of thin plastic was placed followed by a layer of geofabric. The reason for this was to limit the amount of rooting into the underlying profile and create its own enclosed environment for the turf to grow and mature in. Such a growing environment can be tricky, as the profile depth is only 35-40mm thick.

At the time of harvest, the plastic layer remains and the HG patented removable geofabric backing that has attached to the product via root growth is separated mechanically. Removing the geofabric root prunes the product and ensures there is no root balling, contamination or migration of undesirable material into the stadium when it is installed. By pruning the roots, any decaying or deleterious root matter is removed, leaving strong white roots that are ready to fire into the new growing medium profile of the stadium environment.

Particular care is taken with the infilling process to ensure that the synthetic fibres in

PHOTOS: HG TURF GROUP



Due to high existing nematode numbers, prior to resurfacing the stadium's profile was fumigated by Melbourne-based Draslovka Services using a product called EDN

the HERO carpet do not get buried. The sand is placed in specific 5mm layers and after each layer of dressing is applied the fibres are brushed, raked and groomed with specialist equipment to ensure that they are upright. This same process is continued until the desired infill depth has been achieved. Following nutrient testing of the sand, applications of amendments and pre-start fertilisers are made per the requirements to give a nutritional kickstart for the new turf.

AgriDark couchgrass was the specified variety which had been grown locally by QualTurf. With the planting stock approved and certified by the client consultant, the process to propagate the field could then begin. The 12,000m² of HERO carpet was sprigged at a rate of 15 per cent to guarantee successful establishment and rooting of the stolons prior to the winter. A further 5mm dressing was applied over the top of the stolons to give a blanket cover to protect the plant and in the initial weeks constant watering by syringe cycles through the sprinkler heads was the main focus.

As with all of HGs speciality hybrid products that are grown for projects or under

contract for stadiums, dedicated, experienced and qualified turf managers were on hand to manage the grow-in and establishment right through until harvest. Due to the aggressive establishment and growing characteristics of AgriDark, the turf nursery achieved 70 per cent substantial cover prior to winter which was a great result.

OUT WITH THE OLD...

With the turf farm works completed, attention turned to the detailing work required prior to physically turning up on site to complete the resurfacing works. The existing turf surface at Central Coast Stadium had a mixture of grasses and agronomically was proving harder and harder to manage each year and deliver an elite standard playing surface. The biggest issue was the presence of nematodes, with high threshold counts meaning that fumigation of the playing surface was called for as part of the tender process.

HG enlisted Melbourne-based fumigation specialists Draslovka Services to eradicate and control the nematode problem. In times gone by methyl bromide would have been used to fumigate the soil, however, due to the



The 12,000m² of AgriDark couchgrass destined for Central Coast Stadium was initially grown at QualTurf before being sprigged into the HERO carpet and grown in at a separate turf farm west of Sydney

Montreal Protocol, which was an agreement designed to stop the production and import of ozone-depleting substances and to reduce their concentrations in the atmosphere, methyl bromide has now been phased out. Following many detailed conversations and group Zoom calls with Draslovka Services, they had a product called 'EDN' that would give the results needed.

"EDN fumigant (C2N2) is a rapid acting, volatile, colourless, flammable, broad spectrum chemical used for fumigation of soil prior to planting certain crops and, in the timber industry, to control various insect pests and pathogens, nematodes and weeds," explains Draslovka Services' technical sales specialist Simon Schifferle. "CSIRO Australia invented EDN as a replacement to methyl bromide. EDN is not a new molecule. It was discovered in 1815 but was not manufactured on a large scale until the early 21st Century.

"EDN is used in other industries for various purposes. It has been introduced into the fumigation market as a viable and non-ozone depleting alternative to the now commonly banned methyl bromide. Although it has toxic qualities, it is safe to use when applied in controlled environments as per the regulatory standards which apply to all fumigants. It can be applied by different methods to different commodities. It is registered for commercial use in Australia, Korea and Malaysia, with many other countries having registration pending."

Once the methodology was approved by Central Coast Council, supported by all of the necessary approval, consents, OH&S and product and safety data sheets, the first phase of the works was scheduled for the first week in February 2021. As with any project delivered over the last 14 months, HG needed to have a couple of different plans and contingencies in place due to COVID-19 and the constant threat of border closures. Fortunately on this occasion all went to plan, with the works carried out in three phases over a four-week period, led by HG project manager Nathan Humphreys.

Phase one was to remove and dispose of the existing playing surface down to a depth



HG's programme allowed for five days to install the new surface, with around 2500m² of turf harvested by the crew at the farm each day and freighted the two-hour journey to Gosford



JOHN DEERE
GOLF

0% P.A.*

FINANCE AVAILABLE

ON JOHN DEERE GOLF EQUIPMENT



Committed to you.
Committed to the game.

It's your job to deliver the very best golfing experience. It's ours to support you with John Deere Golf's proven technology, backed by over a decade of experience on courses all over the world. It's all part of our commitment to Australian courses and the game we love.

**Talk to your local John Deere Golf dealer or
find out more at JohnDeere.com.au/Golf**



OFFICIAL
GOLF COURSE
EQUIPMENT
SUPPLIER

*Conditions apply. John Deere Financial Limited. Approved commercial applicants only. Based on 20% deposit, GST back and 36 month term. Fees and charges apply. Expires on 30/09/21



As well as being home to the A-League's Central Coast Mariners, Central Coast Stadium has also been the home away from home for the NRL's New Zealand Warriors during the COVID-impacted 2020 and 2021 seasons

of about 80mm. This would remove the turf and the underlying organic layer and bring the surface back to original levels. Once the surface was removed and all infrastructure in the pitch protected and lowered, the field was bleccavated twice to turn over the profile material to create pore spaces for the EDN gas. All outlets from the pitch also had to be capped to ensure that none of the EDN gas could escape.

Phase two saw the Draslovka Services team come in and instal the plastic sheeting needed for fumigation and ensure that everything was sealed and welded. With the plastic sheeting in place the EDN gas could then be applied beneath. It was decided to do the works at night to reduce risk and any possible interactions with the public around the venue at the time of application. This process took around eight hours to complete with the site then being vacated for the following 10 days to allow the EDN gas to fumigate the sand profile before coming back in to remove the sheeting.

"Working with Simon and the team from Draslovka was great," says HG operations manager Simon Edmonds. "They had everything under control and gave us great assurance and confidence in how successful the fumigation works would be. Post completion testing has proven to be 99 per cent successful in the control of nematodes."

...IN WITH THE NEW

The final phase of the works was for HG to remobilise for the HERO installation works. Prior to resurfacing, the team had four days to prepare the exposed sand profile for the new turf. This included repositioning and auditing all of the sprinkler heads, ensuring all post sockets and pitch infrastructure was in place and identified and final laser levelling and consolidation of the surface. Amendments had also been added to the sand profile to increase nutrient levels before the turf arrived.

HG's programme allowed for five days to install the new HERO surface, with around 2500m² of turf harvested by the crew at the

farm each day and freighted the two-hour journey to Gosford. Due to tight access and lack of room around the outside of the stadium, everything needed to run smoothly and on time so that there weren't any hold ups or backlogs which created traffic issues.

Central Coast Stadium is maintained under contract by NSW-based Green Options and under the watchful eye of stadium turf manager Tom Jenkin the new surface was laid, consolidated and irrigated each day before being handed over. After transplanting, the turf was monitored for a few weeks to ensure it responded well to the EDN fumigation, showed vigorous root growth and provided a healthy turf suited for elite level use.

The resurfacing works were completed on 5 March 2021, with the Mariners playing their first game on the new surface just three days later. The Mariners christened the new turf in perfect style with a 2-0 win over A-League newcomers Macarthur FC. What made the win even more memorable was that debutante Matt Hatch, a local Central Coast lad who used to be a ball boy for the Mariners, came off the bench to score the home side's second goal in the 81st minute with his very first touch in A-League football.

Central Coast Stadium has also continued to be a home away from home for the New Zealand Warriors in the NRL competition. Stationed there during last year's COVID-affected season, the Warriors have again been using the stadium as their home venue for the 2021 NRL season, having played five games on the new surface since the start of the competition on 13 March.

"We are thrilled to install the first full stadium pitch with HERO Hybrid Grass and 100 per cent couchgrass here in Australia," says Humphreys. "The new surface has bedded in nicely and performance testing by Labosport has shown the works to be completed to an exceptionally high standard.

"We treat every project and client with the same level of importance, whether it be the MCG or Central Coast Stadium, and this project has been a great success. Working closely with our project team and, on the client side, David Langford (Central Coast Council), Kath Casey (Central Coast Stadium), Green Options and Keith McAuliffe (Labosport), has been very rewarding."

Going forward, HG will support Central Coast Stadium in developing maintenance and renovation programmes and will be engaged to complete an annual renovation of the pitch to ensure the HERO synthetic fibres are interacting at the surface. This in turn will guarantee 10-plus years and a great return on investment for the client. What a fairy tale it would be if the Mariners could go on and win the A-League title this year and become heroes on their own HERO pitch! 🏆



Central Coast Stadium is maintained under contract by Green Options and headed by stadium turf manager Tom Jenkin

The power of 3

Penetrates

Spreads

Retains



H2Pro TriSmart is a high quality wetting and water conservation agent. Formulated with three water management surfactant technologies, TriSmart provides great water penetration, even water spread through the rootzone and improves the water holding capacity of rootzones.

For more information visit
www.icl-sf.com/au

ICL

The National Golf Brussels was officially opened in 2017 and is part of a major residential and lifestyle development on the outskirts of the Belgian capital. Inset below: The National Golf's Australian course superintendent (or 'Australische hoofdgreenkeeper' as it is said in Dutch) Tim Allen



De Australische hoofdgreenkeeper

Asia and the Middle East are often favourite destinations for ex-pat Australian superintendents to ply their trade overseas. Former Bonnie Doon assistant superintendent Tim Allen (M.Ag, CSTM) has taken a slightly different route, however, and now finds himself heading maintenance operations at The National Golf Brussels, one of the newest and most unique courses in Belgium.

Like most 17-year-olds, when I finished up at school on the Sunshine Coast I didn't really have much of a clue what I wanted to do going forward. I eventually found my way down to Sydney to live and one day was looking in the local newspaper for jobs and saw an ad for an apprentice greenkeeper at Double Bay Bowls Club.

Located in Sydney's eastern suburbs, I thought it sounded like a good thing and duly called the number. Rob Fetherston had the

contract for Double Bay and also Randwick Bowls Club at the time, with current-day Bondi Golf Club superintendent Darren Peebles also working with him.

It was a fascinating introduction to turf management. Rob used traditional methods, such as washing out greens after scarifying, flooding all the dead material to the surface and pushing it off (I have never seen such a clean result since). Everything was done by hand, except for coring. While working under Rob I attended Ryde TAFE and after finishing

my Certificate III and starting my Certificate IV, in early 2005 I went for a job interview at Bonnie Doon Golf Club. I remember I had been scarifying greens at Randwick all day and was covered in dirt and dust for the meeting. That didn't seem to faze superintendent David Scaife who offered me a position as a greenkeeper which I eagerly accepted.

Just under a year working there I was elevated to assistant superintendent and having just started my Masters degree course at the University of Sydney juggling the two



PHOTOS: TIM ALLEN/THE NATIONAL GOLF BRUSSELS

was quite the challenge. Thankfully we had a great crew, in particular Brad Glen who was and still is foreman today (27 years now). I learnt a lot how to run a team working with Brad over the years and a huge amount about the game of golf.

Working with David was also an advantage due to his bowling green background. He gave me a lot of rope to work with, would give me the plan for what he wanted done for the week and between Brad and myself we made it happen. We also had an excellent equipment technician in Glen Hawkins and irrigation technician Martin Dyball who I learnt a lot off over the years.

In 2011 Bonnie Doon commenced a major course redevelopment to be completed in several stages over a number of years. It was an excellent learning experience to be involved with and we used a lot of different techniques. During the first stage of construction, in early 2012 David left which was a big shock to us all, especially as we had a solid team at the time. David had always said everybody was replaceable and that even if he left somebody else would soon be sitting behind his desk.

That person ended up being me after the club appointed me as acting course manager. With such a strong and experienced team at the time it made the transition a lot smoother.

TAKING A PUNT

The club took a long time to appoint a new superintendent, nearly 12 months, and despite putting my hand up the club wanted to take another direction. I ended up leaving Bonnie Doon near the end of 2014 and after looking around at several options my wife Anna and I decided to broaden our horizons and head overseas. Based out of Poland (Anna's home country), we were travelling in Sri Lanka around New Years in 2014, when we both ended up with job interviews – hers was in Belgium and mine was in Norway. We went to Norway first, but Anna's job opportunity in Belgium, working with European Union institutions, was much more interesting.

Based in Brussels and initially supposed to be just a short placement, Anna's contract kept getting extended. When we first came to Belgium, I was doing some freelance work online, but come spring I doorknocked several golf course maintenance facilities to see if I could get some work back on a golf course. This didn't work. The normal reaction of turning up unannounced looking for work was one of surprise and after talking some seemed interested but nothing eventuated.

Eventually I saw an advert online and got a five-month seasonal role at Chateau de la Bawette, in the French-speaking part of Belgium about 30 kilometres south of Brussels. It was nice to get back out there and I didn't care what I was doing – cutting tees, raking bunkers, a bit of everything. I saw it as good experience and an opportunity to learn something different before going back to freelancing in the off season and taking the opportunity to travel through Europe.

A strange but really specific series of events then occurred which would lead me on the path to taking on my current role. It all started with a meeting with the owners of a new large new golf course development – The

National Golf – that was underway just on the outskirts of Brussels. Ironically, at the time we were getting ready to leave Belgium as I had managed to get two other offers in different countries, but there was something about this project that I found appealing.

Deciding to stay in Belgium and pursue this new opportunity, I was first put on for a short contract to assess the contracts from maintenance companies that had put in tenders, as well as source more offers to maintain the golf course once completed. Contract maintenance is more common here, with six courses in Belgium and more than 100 in neighbouring The Netherlands under such management. I was also tasked to simulate if we did everything ourselves, so initially I spent most of my time in the company's offices in Brussels and not at the construction site.

By this stage course construction was well underway. The driving range, clubhouse putting green and compact course (a six-hole par three course) were finishing irrigation installation and fine shaping stages. The championship course was just in the early stages of bulk earthworks. It didn't take long for me to get involved in the construction process, working with our project manager who, despite being experienced, had never worked on a golf or turf project before. I was therefore given specific tasks to handle as well as generally observe the construction works as they progressed.

Coming onto a project late is never ideal and it's far easier to come in after the fact and say this should have been done this way or this should have been executed better. As I was representing the owner, I saw some construction methods and practices that needed to be questioned and I remember getting into some very heated discussions with the construction foreman.

When all the numbers were crunched and tenders considered, the owners opted to go for an in-house maintenance set-up and I was duly tasked with setting it all up and taking on the role of course superintendent. Starting with literally nothing is something I



Designed by Belgian architect Bruno Steensels, The National Golf Brussels is an 'inland links' style course with lots of man-made mounding and slopes



The National Golf Brussels layout is partially built on the site of an old racecourse that had been built prior to the outbreak of World War II. The course includes some three hectares of lakes and water features

know will most likely never happen again in my turf management career, but it was a great experience. We had an empty maintenance facility, no people, no tools, no equipment and no materials, so it was very much starting from scratch and adding things bit by bit.

By far the most difficult aspect was staffing. There is no greenkeeping school or TAFE-style system in Belgium, so qualified or experienced people are hard to find. I ended up looking for local people, ideally with some outdoor garden work experience and began training them. Most really enjoy the work and have stayed on, although we have lost some along the way as everybody does.

FROM RACECOURSE TO GOLF COURSE

The site that The National Golf resides on has a very interesting history. It was originally a hippodrome (racecourse) built in 1937 to replace another of the country's racetracks. Shortly after it held its first race in 1939, World War II broke out and during Germany's occupation of Belgium the Nazis used the site as a horse hospital. After liberation by the Allied Forces, the Americans used it as a prisoner of war camp and army depot.

Following the war, the hippodrome returned to its former glory as the country's largest racecourse, up until the 1980s when interest in racing started to wane and the land and infrastructure fell into disrepair. The site was left untouched for years before being put up for sale in 2004 when it was purchased by the husband and wife entrepreneur team of Frank Monstrey and Petra Noé. They had a vision for a major residential and lifestyle development which would become known as The Sterea Project. In the years since, they have transformed the site, about 10km out of Brussels, into an area that now comprises not

only the golf course and resort, but a series of villas and apartments.

The National Golf comprises an 18-hole championship golf course designed by Belgian architect Bruno Steensels, with a six-hole par-three 'compact course' and driving range. The championship course has been designed as an 'inland links' style course with lots of man-made mounding and slopes, not to mention over three hectares of water. The course was officially opened in early June 2017 with top Belgian touring pros Nicolas Colsaerts, Thomas Pieters and Thomas Detry among the dignitaries.

From the back tees the championship course measures 6646m with two hectares of greens, 2ha of tees, 25ha of fairways and



The two hectares of greens comprise a bentgrass mix of Declaration, Ignite and L93 XD. The fairways, semi-roughs and tees are a rye/fescue mix called BAR Intensive RPR

20ha of roughs. The course also has extensive wildflower areas, small forests, three beehives (which we maintain), as well as wheat and oat areas for native birds. An old tunnel, that entered into the centre of the old racetrack, now runs under the 8th fairway and is being used to encourage a growing population of native bats. The par three course currently measures just 508m, but there are plans to extend to a real nine holes in the near future.

My role as course superintendent is not just solely focused on the golf course. I'm involved in all different aspects of the project at varying levels, so it's always interesting to say the least. While my main focus is the golf terrain, there are some days when I don't get to think about it at all. Still to finish as part of the overall complex is a fitness centre, hotel, tennis courts and clubhouse, offices, one apartment block and seven villas. We are also looking into the possibility of adding a high level football pitch.

There is always something happening here. For example, we recently had to rebuild our back tee on the 1st as one of the swimming pool retaining walls interfered with it. It involved removing and rebuilding a large natural stone wall, sewer, power and adding a new path with automatic gate. And just for something different, we decided to reshape the 10th carry at the same time to give some greater definition.

ON THE COURSE AND IN THE SHED

All grass varieties at The National Golf Brussels come from seed company Barenbrug.

The greens comprise a bentgrass mix of Declaration, Ignite and L93 XD. The fairways, semi-roughs and tees are a rye/fescue mix called BAR Intensive RPR. This particular mix has really impressed me and you can treat it how you want to have either more rye or fescue. The tees you would think are pure fescue, but there is that rye underneath which helps with divot recovery and traffic. In the fairways the ryegrass dominates more, with the fescue there to help improve ball lie. The roughs are a mix called BAR rough (tall, red and Chewings fescues) and are cut and cleared in winter.

Staffing levels at The National Golf fluctuate from as low as eight and up to 14 people. We use a mixture of returning seasonal workers that come for 7-8 months and student workers. I have two assistants, both from Ireland, and we are considering adding an equipment technician in 2022 (all the machines are currently looked after by the dealer). We have a good set up of all Toro equipment, Husqvarna small engine stuff and John Deere tractor among other items.

We get four real seasons here in Belgium. Our average yearly rainfall since opening has

been around 870mm. We have had record summers since opening, especially in 2018 where we had a string of very hot and dry days, with many hitting 40°C. By contrast, the winters are cold with average temperatures between 3-6°C. The past winter had the most snow I have seen in my time here by far, with lows of -10°C for two weeks. We open every day possible, with roughly 30 frost delays annually, and will only close for around 10 to 20 days.

Our irrigation system is a Toro GDC with a Lynx central control. Water for the course is supplied from the constructed lake system. Very little water is released in the summer months and we recover as much as we can (although we are still looking at other ways to improve this). Due to the freezing temperatures that can prevail in winter, the irrigation system is emptied and blown out around November and then restarted March/April.

The weather dictates our cultural practices heavily. With our cutting regimes, we can go from a frequency of cutting greens six days per week during the height of the growing season to nothing for up to two months. Tees and fairways are cut 2-3 times per week at peak time and rolled 3-4 times per month, but those numbers plummet when the temperatures do. Cutting heights vary too depending on the season – greens 3-5mm, tees 10-12mm, fairways and approaches 14-16mm and semi rough/1st cut rough 38mm.

Renovations comprise 8mm solid tines across the greens every six weeks depending on firmness as well as spiking using a Sarel roller in between if necessary. In the peak season we sand the greens weekly, while tees are generally topdressed 4-5 times per year. So far we have not scarified or hollow cored the greens and don't intend to. This



Enhancing the natural environment is a very important part of operations, with the course featuring extensive wildflower areas, small forests, beehives, as well as areas of wheat and oat for native birds

was strange to me at first, but we measure the organic matter and other parameters with the STRI and we keep control through sanding and nutrition management.

We don't use any granular fertiliser products, with the possible exception of some agricultural grade products for the roughs and fairways in spring. Greens are liquid fertilised weekly and tees and fairways roughly 4-6 weeks depending on growth. Rates are adjusted as necessary. We also have an extensive wetting agent programme to get the most out of our water, with everything getting monthly applications April through to September. Hotspots on greens are micromanaged with a GPS field scout.

I also use software to track all of our maintenance tasks. I can pull up data on any area, person or task to determine labour and material inputs and costs. For me this data is priceless.

UNIQUE CHALLENGES

The National Golf is a busy course and we currently have around 900 members who play about 35,000 rounds of golf each year (this number doesn't include nine-hole rounds or short course players). We have large surfaces to maintain and with lots of water and bunkers it is not the most maintenance-friendly course. We also do everything on the driving range (collect balls, washing, cutting etc). It measures in at just under 3ha, is 300m long and you can hit from both ends – one end has two levels of mats while the other has a very large grass tee.

Like most mainland European countries, Belgium has very strict regulations in place regarding chemical usage. In the French speaking part of Belgium (the south), all chemicals for golf have been banned for the past 2-3 years, with some predicting our region will follow in a few years. There is a website

Irrigation Water Systems

featuring HYDROVAR® or a custom control system.

Create a variable speed booster station to your technical specifications.

- Maintain constant pressure
- Optimized pumping efficiencies
- Longer lifetime and reduced lifecycle costs

Lowara's extensive pump range together with our large selection of custom control options, offers a complete line of booster systems ideally suited for the diverse requirements of the turf, landscape and golf courses markets. Contact us to find your solution today.



 Brown Brothers
Engineers
Australia Pty Ltd

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

DELIVERING PUMPING SOLUTIONS



One of the unexpected benefits Allen has had thanks to COVID has been getting the chance to spend quality time on the course with daughter Zofia (3)

which tells you what you can and cannot use and it's literally updated daily.

We can make just one herbicide application per year, so the timing has to be spot on and can only be for broadleaf weeds. As of two years ago all insecticides were banned. Fortunately, the only pest we see are leatherjackets and the main damage we have is what the birds can do to the turf trying to get to them. We have no stem weevil or black beetle in this climate which is a big plus.

Fungicides such as azoxystrobin, metconazole, fluopyram, trifloxystrobin, fosetyl-al, boscalid and pyraclostrobin are under limited use. Azoxystrobin can be applied just four times a year and the rest once. The main disease we see is *microdochium nivale* and while we can treat with the fungicides we have available, we rely more on micronutrients, seaweeds, plant proteins and products to coat the leaf to keep disease at bay.

COVID has also had a significant impact on our operations over the past year. At its worst, last October Belgium recorded a peak daily case load in excess of 23,000 but that has since dropped. We were closed for seven weeks when the pandemic first hit which impacted our plans a lot. My now three-year-old daughter Zofia got to spend a lot of time on the course during this period which was a lot of fun!

To this day we still have the course crew split into two teams, staggering start and finish times and breaks. It has made things much more difficult to plan and has decreased efficiency and keeping good habits is hard to impossible. COVID has been very close to us, but we have dodged it so far which I think is more down to good luck than good

management. The numbers in Belgium continue to fluctuate anywhere between 2000 to 5000 cases per day in recent months, with little sign of getting anywhere near the levels in Australia anytime soon.

ADAPTING AND LEARNING

Working in your trade in an overseas environment certainly has its challenges. As greenkeepers it's in our nature to be adaptable and that character trait comes to the fore when you are working overseas. The Belgian and Australian industries are very different and for me it starts with education and attitude. As mentioned, there is no official school for turf management, only some garden and landscaping courses which are smaller scale.

Adapting to a different culture and language has had its moments and can be a little frustrating at times, especially in a country where there are two main languages spoken – French and Dutch. All paperwork for the government and environment organisations is slow too. I remember when I first came and was at a French-speaking city office to register. Somebody helped in English which was nice, but when I returned a week later the same person would only speak in French!

Golf in Belgium is still a very small industry, especially when you compare it to the likes of football (soccer). It is growing but there is still the association that it is for the well-to-do or business types. At our club we have a good mix of members with a healthy contingent of younger members and also business members. Due to our location and with more things coming online in terms of facilities, we won't struggle for members or traffic.

I am currently a member of the Belgium greenkeepers association (GAB). Before COVID hit there were six or so meeting days per year, one being a golf day and another combined with The Netherlands Greenkeepers Association. Again, language can be interesting and depending on who is speaking and the location it can either be in French, Dutch or English.

I always try to visit as many other courses as possible to see how they do things, but with COVID that has stopped. Everybody has their own way of doing things, but just because it works for one does not mean it will work for another. Soccer is obviously huge in Belgium and I have visited one of the football training centres. Ironically, the day when the Belgium greenkeepers visited the football training centre was the largest turn out they have had, showing just how popular football is.

As with every new posting, you continually learn and adjust to the conditions. The summers I have seen here in my short time have really made me think differently about water use – using it efficiently as possible and trying not to waste anything. Last summer I tried, unsuccessfully, to source Latitude 36 couchgrass stolons out of Spain which has good cold tolerance. I still haven't managed to get anything yet, but I want to try it on our driving range tee to see what happens in winter.

I have now spent the best part of nearly seven years in Belgium and the experience to date has been wholly rewarding, albeit challenging at times. Certainly the route I have taken is not for everyone, but for fellow Australians looking at making the leap and working overseas, I would wholeheartedly recommend it. Yes, it can be a risk, but without giving it go you will never know for sure. Be open minded, look, listen and learn and try to connect with others in the industry locally and get a feel for what they do in their own conditions.

At the end of the day however, I will never forget where it all began for me. Even now I still think back to the days when I was a first year apprentice, topdressing bowling greens all day, then making the 25 minute walk to Bondi Junction to catch a train for 50 minutes before another walk home. Hard work and perseverance pays off in this industry and while it can be a hard job at the best of times, it is ultimately one of the most rewarding and can certainly take you places. 🌱



Winters can get pretty cold in Belgium. Pictured is one of the centrepieces of The National Golf course – the two Venus De Milo-inspired sculptures which reside in the middle of the lake adjacent to the 18th green

EZTee® Line

EXPERIENCE A GREENER WORLD AND A BETTER GOLF GAME

EZTee® Line can be installed over a compacted aggregate road base or concrete (concrete will extend the life of the product). EZTee® Line permits continuous use, eliminating the need to relocate and reseed driving range areas.

Product
available for
immediate
dispatch



Pile Height: 32mm | Roll Width: 1.5m | Roll Length: 30m

- Long pile height construction allows golfers to hit off using a regulation golf tee.
- Increased Range Rotation Flexibility.
- Realistic playability, similar in look, feel & performance to natural grass.
- Reduced maintenance costs.



Once completed and open to the public in mid-2022, Minnippi Golf Course will provide many social, environmental and economic benefits for the wider Brisbane community



PHOTOS: PACIFIC COAST DESIGN/MCMMAHONS

Minnippi on course to make a mark

After many years in the planning, the long-awaited Cannon Hill public golf course in Brisbane is under construction, a public private partnership between BMD Group entity, Urbex and Brisbane City Council. As ATM's environmental expert Kate Torgersen writes, it is set to transform what was once a degraded site into a highly sustainable public asset that has environmental best practice as a guiding philosophy.

New golf course builds can often receive bad press if the environment isn't put first. "The construction and maintenance of golf courses is harmful to fragile ecosystems the world over" decried The Guardian newspaper in 2007, while the current COVID-19 pandemic has again brought attention to the debate, especially as to how

public golf course land should best be utilised.

Golf course construction projects don't just get an automatic green light. Many projects take decades to be approved (with many not making the cut), often being tied down by environmental protection battles. One such example has been the Minnippi Golf Course project which forms part of a major development south of Brisbane in Cannon

Hill, a blend of residential homesites nestled among over 125 hectares of open space, environmental habitat and parkland.

With BMD selected as the preferred developer of Minnippi in 1999, the development has experienced significant delays in obtaining State Government approvals to proceed, resulting in delays from the original anticipated timeframes.

The Minnippi Golf Course will be Brisbane's first 18-hole publicly-owned golf course constructed in 70 years, coming after the likes of Victoria Park and St Lucia Golf Links north of the Brisbane River. The Brisbane City Council course, designed by Pacific Coast Design (Phil Ryan and Paul Reeves) and constructed by McMahon's, is located on 72 hectares of bushland. The area sits on a floodplain and the remediated Cannon Hill tip.

The golf course component of the development comprises an 18-hole layout, with around 50ha of the 72ha parcel of land being used during construction. The project is being guided by Brisbane City Council to ensure that all measures, along with appropriate rehabilitation works, are undertaken to minimise environmental impacts, manage important habitats and preserve the site's ecological features.

The golf course will also get the green treatment with landscaping and vegetation plans allocated to 33ha of the public space. Approximately 75,000 native trees and shrubs will be planted as part of the project's Regeneration and Revegetation Plan. The plans also include the creation of a number of lakes and billabongs which will assist in the maintenance of water quality and the conveyance of stormwater to Bulimba Creek.

The protection of squirrel glider habitat has been an important factor in the project. Squirrel glider habitat remediation works involving the establishment of grasslands and wetlands, as well as the planting of new trees, have taken place so far.

From design to delivery, BMD Group has enhanced, revegetated and innovatively landscaped the site with 80,000 natives planted to date and hundreds of mature trees saved through detailed earthworks modelling



Due to the Minnippi course being located on a floodplain, PCD didn't include any sand bunkers in the design, instead incorporating unique timber faced mounds which will act as hazards

and the implementation of restricted work zones. In the core habitat areas, over 30ha of lantana and other invasive weed species have also been cleared.

BMD's delivery of these initial works and the construction of the residential estate have been recognised for industry awards, including an environmental excellence award at the 2018 Queensland Urban Development Institute of Australia Awards and a 2017 Civil Contractors Federation Earth Award.

This approach to minimising impact and maximising habitat development, along with installing nest boxes, fauna poles and monitoring cameras, has been undertaken to minimise potential construction impacts on the resident squirrel glider colony. Keeping a close eye on the colony is Dr Ross Goldingay of Southern Cross University, assisted by a PHD student, funded by the project for three-and-a-half years to research and monitor the site's population and habitat. Upon completion, the project will have doubled the site's squirrel glider habitat to 60ha.

DESIGN CONSIDERATIONS

Speaking to those involved with bringing the Minnippi course to life, including McMahon's golf business manager Brenton Kay and Pacific Coast Design (PCD) director Phil Ryan, it is clear that the protection, design and ongoing maintenance of the golf course will be centred around environmental best practice. The project is particularly significant for Ryan who has been involved since the Cannon Hill concept was first mooted all those years ago.

"Pacific Coast Design won the public tender along with BMD Group over 24 years ago," reflects Ryan. "It has taken that long to go through the process of getting a permit and I am probably one of a few from those days that still remembers the original site."

"In all honesty the site was a real mess, with stock grazing resulting in major environmental damage and massive weed problems. There were man-made 'drains' throughout the site, major rubbish dumped in multiple areas and zones used by local trail bike riders. It has been a huge commitment

Quali-Pro® Enclave®

Not one, not two, not even three, but four modes of action!

If you REALLY want to be sure you control key diseases – Enclave is your go-to fungicide.

Containing the trusted a.i.'s Chlorothalonil (Group M5), Iprodione (Group 2), Tebuconazole (Group 3) and a first for the Australian turf industry, Thiophanate Methyl (Group 1).

Trust Enclave to control diseases such as Brown Patch, Dollar Spot, Fusarium, Anthracnose, Helminthosporium, Grey Leaf Spot and Spring Dead Spot this season.



QUALI-PRO®
BY ADAMA

Visit
ADAMA.COM
to learn more



ADAMA

Follow us  

©Registered trademarks of an ADAMA Agricultural Solutions Company.



PHOTO: NEARMAP

Located 10km from the Brisbane CBD, the Brisbane City Council's Minnippi Golf Course development at Cannon Hill is the city's first new public golf course in 70 years and the only public course south of the Brisbane River

by BMD over many years to clean the site up, secure it, remove the stock and maintain the site to allow native plants to re-establish.

"Under three holes (14, 15 and 16) was an old rubbish tip and as a part of the process BMD completely dug up and remediated the site to prevent leachate moving into the adjacent Bulimba Creek. What people see now on site is a lot different from the original 24 years ago and a real testament to BMD. I very much doubt that such work would have been carried out if the site was not to be developed into a golf course."

Ryan notes that PCD always approaches its designs by not only trying to retain and protect environmentally sensitive zones, but to improve all zones from an environmental perspective. Together with fellow PCD director Paul Reeves, Ryan walked the site many times over to ascertain things such as retaining established trees important to squirrel glider movement (they fly from tree top to tree top), laying out the golf holes so as to complement

sensitive areas and develop a bulk earthworks profile that assisted flood flows. Lakes have also been designed to both capture water during rainfall events and also protect and enhance fish species within the site's old man-made drains.

In another 'first' for Australian golf, the PCD team have developed a proactive, automated recycling/drainage system. The golf course has



From design to delivery BMD Group has enhanced, revegetated and innovatively landscaped the site with 80,000 natives planted to date and hundreds of mature trees saved through detailed earthworks modelling and the implementation of restricted work zones

been shaped to shed water to the sides where it is collected in swales. It then moves into a major subsurface drain system which collects the water and is then physically pumped out of the interconnected system into the irrigation lake. The system is automatically operated by a float switch and enables the recycling of water (irrigation and rainfall) from the golf course back into the lakes. This means that any potential excess nutrients will be moved back through the lake system and in turn be irrigated onto the turf which minimises the use of fertiliser and mitigates movement of any materials from the golf course into the adjacent creek, environmental zones or site drains.

Several of the golf holes (10, 12 and 13) have also been designed around the site's marine vegetation which had re-established over the 20 years since BMD took over the site. These areas have tidal influence, so the balance of enhancement, earthworks and golf finishing required careful design. The design not only took into account golf play but also traffic movement, with specialised raised 'boardwalk' bridges being constructed to ensure golfer movement and tidal action can coexist.

The original small creeks throughout the site were destroyed in the 1940s and replaced with straighter 'man-made drains' by those using the site for grazing. However, in the 20 years or so since BMD took over the site, remnant vegetation areas had established along and within the drains. Holes 2, 3, 13, 14 and 17 all cross those drains so PCD had to be careful in both planning and detail design. The landing zones for golf, the shaping to contain water and hitting across the zones required specific detail design and ongoing management plans.

SUSTAINABILITY AND ENVIRONMENTAL FOCUS

In this day and age of golf course management, sustainability is a word some may say is being overused. However, we cannot ignore it and as an industry we need to be the leaders in sports sustainability. With this in mind, the maintenance of the new Minnippi course will have sustainability and



the environment as a key day-to-day focus according to Brenton Kay who has been overseeing construction for McMahons.

"All of our projects are treated with great care when it comes to the environment and none more so than this project," says Kay. "From the very start, taking care of the natural environment is our number one priority and a close second is ensuring that everything we do is only enhancing and increasing the quality of these areas."

During the grow-in phase of the project, the focus is to grow in the fairways and roughs as quickly as possible, meaning initially an intensive fertility programme. Once coverage is achieved, those inputs will be backed off and mainly comprise foliar applications to minimise leaching and potential effects of run-off to the natural environment. Once in maintenance mode, the use of chemicals on the playing surfaces will be kept to a minimum, with most of the spraying undertaken in the native areas to control weeds.

The project's development approval stated that the fairways were "to be planted with salt tolerant grasses which should not require traditional high levels of weed control and fertiliser." The team decided to go with Wintergreen couchgrass on tees, fairways and roughs and 328 on the greens. The decision to



McMahons is overseeing the construction of the Pacific Coast Design course which has sustainability and the environment as a key day-to-day focus

plant these varieties was based on agronomist John Neylan's advice following his reports on floods in Brisbane (for Golf Queensland) and also in Thailand (for The R&A) over golf courses in 2011.

As previously mentioned, the Minnippi Golf Course project is situated on a floodplain. Recent history shows that the site will flood every few years, with 15 of the 18 holes likely to be flood-impacted at some point. With the wet start to 2021 in South East Queensland there have been a number of floods already and the grasses chosen are best suited to

minimising maintenance material uses, salinity and flood recovery.

Further to the issue of flooding, the course will have no sand bunkers, instead incorporating timber faced mounds which will act as hazards, in what PCD and McMahons believe to be a first for an Australian course. Such hazards will be easy to maintain and won't suffer damage like traditional sand bunkers would during flood events.

In regards to vegetation, a consulting ecologist had been involved in the project for several years prior to hitting the go button. An

A SOLUTION FOR EVERY GOLF COURSE

Get in touch with Doug Amos

0428-409-885 — damos@agleader.com

Come and visit us at the
ASTM Conference
BOOTH 32





With 15 of the 18 holes at Minnippi likely to be flood-impacted at some point, Wintergreen couchgrass was selected on tees, fairways and roughs and 328 for the greens

extensive list of native plant species suitable to this particular environment was put together and in a lot of cases focused on creating new squirrel glider habitat and corridors for them to move through the site.

Another great initiative developed more recently with the Port of Brisbane is the harvesting of mangroves from drains in the port area that are to be cleaned out. These have been transplanted into the existing and new marine plant zones at the Cannon Hill site along with other marine plant species harvested from site.

There are also many revegetation areas that are in play around the golf course, with the plant selection (being trees only) and placement of such being carefully planned and will be assessed on a hole-by-hole basis as the construction progresses. The management of retained large trees throughout the site has been a focus since clearing was completed, with extensive dead wooding and habitat pruning being undertaken for safety and playability of the golf course. This has also enhanced the visual aspect that these mainly eucalypts provide, with some magnificent specimens that only the canopy was visible prior to removing invasive undergrowth.

SIGNIFICANT ASSET

In July 2020, the Australian Golf Industry Council (AGIC) released its 'Golf: Benefits to the Environment' document which highlighted the range of unique ways that Australia's golf courses contribute to the conservation and management of our natural resources.

In that document AGIC chair Gavin Kirkman stated: "We want to build community awareness around the land used by golf. Golf courses are more than just an asset for community sport and recreation; they are an integral component of effective town planning and design, offering significant environmental benefits, especially in urban areas.

The Minnippi development certainly aligns with that statement and covers off some of the most important benefits that golf courses of

its nature can provide to the local community. Among these include:

- Preserving open space and remnant vegetation in rural and urban environments;
- Promoting indigenous flora and fauna and the Australian landscape experience;
- Protecting and acting as wildlife sanctuaries;
- Utilising, treating and enhancing water resources;
- Rehabilitating degraded landscapes;
- Improving air quality and moderating heat;
- Protecting topsoil from degradation;
- Beautifying the environment; and
- Enhancing community education.

Once completed and open to the public in mid-2022, Minnippi Golf Course will tick all the above and create many social, environmental and economic benefits for the wider Brisbane community.

Editor's Note: At the conclusion of this year's Australian Sports Turf Management Conference and Trade Exhibition on the Gold Coast, a tour of the Minnippi Golf Course will be conducted for delegates. The tour, to be held on Friday 25 June and led by the team at McMahons, will aim to give attendees an insight into the scale of the development while discussing the various construction methodologies being used and environmental considerations. Buses will depart the Gold Coast Convention and Exhibition Centre at 9am for a 10am start on site and arrive back at 1pm. 🚌



The Minnippi course development comprises an 18-hole layout, with around 50ha of the 72ha parcel of land being used during construction

VISIT US AT THE ASTMA CONFERENCE AT BOOTH 66 TO DISCUSS ALL YOUR GOLF COURSE NEEDS!

SUPPLYING THE BEST NOTHING LESS

CCI COUNTRY CLUB
INTERNATIONAL

 SAFETY
FENCING



SAFETY NETTING

- World's best practice in both design & componentry.
- Aesthetically providing the best in translucent installations.
- Fully designed & engineered for your requirements

 GOLF COURSE
EQUIPMENT



GOLF COURSE EQUIPMENT

- Providing clubs the solution for their hardware needs.
- Supporting major international brands.
- Delivering turf professionals with the right tools for all applications.

 WATER
MANAGEMENT



WATER MANAGEMENT

- Versatile & low maintenance.
- Providing full 'environmental wash bay design'.
- Extremely effective for all waste water recycling applications.

*Sourcing the right tools to do
the job **has never been easier.***

GO GET ONLINE TODAY.

www.countryclub.com.au



FREE CALL 1300 138 905 TO SET UP YOUR ONLINE ACCOUNT TODAY.

The full treatment

Using recycled water for irrigating turf surfaces is a balancing act at the best of times. To mitigate a deteriorating recycled water supply, Twin Waters Golf Course in Queensland has invested in a state-of-the-art pump and dosing system to ensure its turf surfaces remaining in peak condition.

Twin Waters Golf Course is a Thomson, Wolveridge and Perrett design that was constructed 30 years ago at Mudjimba on the Sunshine Coast, Queensland. It has consistently ranked among the top 10 Australian resort courses over many years since.

Recycled water is the sole water source for the golf course and, while a valuable resource, the water quality presents several challenges that require careful management by Twin Waters course superintendent Garry McClymont to maintain a sustainable high quality surface.

In 2020, Queensland-based irrigation design consultants HydroPlan was commissioned to design a new pump station fully integrated with irrigation controls along with an automated dosing system to amend the recycled water for improved plant health.

The original Twin Waters pump station was a single pump (75kW) fixed speed unit with a manual dosing system added later and without a flow meter. The new pump station has multiple pumps with variable speed drives that can deliver constant pressure across a wide range of flows at best efficiency to ensure minimal water hammer, extend pipe life and reduce operating costs.

The pumps were selected for high performance and their ability to handle aggressive water, both corrosive and abrasive particles. The CAP Industries iCon control panel has remote access for smart devices and interface with central control software for monitoring and alarms.

An electromagnetic flow meter was added that has a high degree of accuracy across the flow range and can handle aggressive water conditions. The flow meter is integrated with the pump control panel, the Toro Lynx irrigation

central control for advanced flow management functions to compare database flows versus actual flows and the dosing system pump controls for automated proportional dosing.

RECYCLED WATER QUALITY AND ITS CHALLENGES

There is not a lot of consistency across recycled water availability or cost nationally, which in many cases largely depends on the water authorities' licences with regulators in terms of discharge limits and reuse targets.

The recycled water classifications are mostly concerned with public health and environmental risks rather than in terms of agronomic elements. There are some elements that may have agronomic value if not excessive, such as nitrogen and phosphorous, while other factors present a risk to plant health, such as pH and toxic salts, that require a higher level of management.

Twin Waters Golf Course has been able to improve the condition of its playing surfaces tee to green thanks to a greens salt mitigation plan and installing a state-of-the-art pump and dosing system



WORDS: SCOTT JOHNSTONE PHOTO: SYLVIA ABERTE/SYLVIA ABERTE PHOTOGRAPHY

The recycled water quality at Twin Waters presents several agronomic challenges that are common to many sites that use recycled water, including high salts, high pH and water hardness. Since a change of sewage treatment plant over the last 10 years, the water quality supplied to the course has deteriorated, including some significant factors;

- Total dissolved salts (TDS) has increased 24 per cent from 850ppm to 1050ppm;
- Sodium (Na) has increased 50 per cent from 200ppm to 300ppm;
- Sodium Absorption Ratio has increased 43 per cent from 7 to 11;
- Chloride (Cl) has increased 58 per cent from 300ppm to 475ppm. This is a manageable issue from the water authority as a result of disinfection which can be reduced while protecting public risk.

Incoming pH levels have been consistent around 7.5 to 8, with pHc in the 8 to 8.5 range.



The Twin Waters recycled water storage pond. Note the aerators in the pond for circulation plus Diatomix additive for pond management. Water colour variance is related to oxygen levels, reactive silica, nutrient and algae loads. The new pump station and dosing system shed can be seen bottom right

The pH level in the on-site storage pond tends to rise to 8 to 8.5 in the warmer months of the year. Maintaining good water circulation and oxygen levels in the irrigation storage pond is important to prevent algae build-up and increased pH levels. Twin Waters has both aeration and Diatomix treatment processes in the storage pond to limit deterioration of the water quality.

The level and frequency of treatment or turf management options will vary for different sites based on a range of environmental conditions including soil types and seasonal weather. For example, sandy soil profiles and high intensity seasonal rainfall may flush toxic elements better than heavy soils in low rainfall areas. Micro-environments within a site or changing weather patterns may also have similar impact on various management or treatment strategies.

TURF MANAGEMENT FOR RECYCLED WATER

The elevated salt levels have prompted a more rigorous salt mitigation programme at Twin Waters that has been provided by Greenway Turf Solutions, plus a dosing system designed by HydroPlan to cope with a range of water quality issues efficiently.

The salt mitigation programme, developed primarily for the greens, has a suite of turf management practices based on a monthly cycle which may incorporate;

- Broadcast granular applications;
- Boom spray foliar application;
- Mechanical aeration; and
- Irrigation water dosing.

For the irrigation water dosing system component, three key treatment requirements were identified;

- Acid for pH amendment to improve availability of nutrients and microorganism activity, reduce bicarbonates and sodicity, plus improve efficiency of some chemicals and pesticides that suffer from alkaline hydrolysis. In this case 'Irrisol Max' is applied.
- Liquid calcium to reduce sodium toxicity, improve soil structure and reduce associated diseases. In this case 'Socal' is applied.
- Surfactant to combat water hardness associated with recycled water and hydrophobic surfaces, to improve absorption and water use efficiency plus reduce dry patches. In this case 'Broadwet' is applied.

DOSING SYSTEM

The detailed design or specifications of many dosing systems in the golf and sports turf industry are often overlooked and not well thought out, to the point where they may not be used effectively or neglected altogether due to serviceability issues. Given the importance of the treatment to promote a healthy turf surface and the cost of the chemicals, the dosing system warrants due consideration in design.

The key factors in the brief for the design of the Twin Waters dosing system was to ensure the treatment solutions could be applied automatically with maximum accuracy, uniformity and efficiency, while being serviceable, maintaining the highest level of safety for operators and preventing potential environmental risks. The result is one of the highest quality dosing systems currently in the Australian golf course management industry that meets all the required objectives.



The new multiple pump unit at Twin Waters with variable speed drives in a control panel that has remote device access which is fully interfaced with irrigation central control and advanced flow management system

A dosing package was developed in conjunction with ProMinent, with each of the three dosing pumps selected to apply the required amount of solution (L/ML) adjusted automatically to the irrigation pump station's flow range. The dosing pumps are remotely controlled from the irrigation central control software and associated with targeted programmes for tees, fairways and greens where required. The dosing system's inputs also reports dosing pump availability and tank level alarms with the irrigation control interface.

HydroPlan developed a calibration chart linked to the irrigation flow meter for each dosing pump to accurately determine chemical application rates (L/ML) for variable water quality input levels and meet output expectations of turf performance criteria which may vary between surfaces to align within the operating budget.

Along with performance, operator safety and risk management were among the highest priorities. The dosing system is designed to allow for easy isolation to flush the system, replace worn parts or perishables. Perspex screens protect operators from potential splashes, while there are detailed operations

and maintenance instruction manuals, full safety signage, an eye wash/shower as well as full operator training.

The dosing skid is fitted with two 1000L intermediate bulk container (IBC) shuttles and a 200L drum to supply the three dosing pumps. To mitigate environmental risks, the dosing package is fully bunded to contain potential leakage from the containers, plus a spill kit is located within the pump shed. The containers also have level switches to raise level alarms and the injection quills are live extractable to allow cleaning without shutting down or emptying the mainline.

BENEFITS AND CONSEQUENCES

When using recycled water that has issues such as salinity and pH, there are a host of benefits in having an effective turf management plan to amend the water quality using a dosing system alongside of producing a healthy turf surface and environment. Among the benefits include savings in fertiliser, chemicals (disease/pests), water, power and labour.

The consequences of not amending recycled water will vary based on a range of site factors including soil types, water quality,



Top: Acid dosing pump and pH analyser with Perspex doors and live extractable quills

Above: The surrounds of the 12th green at Twin Waters showing the deleterious effects that using high salinity recycled water can have on turf

weather conditions and other management plans. The initial signs of lack of treatment often start with tip burn and bare patches which left untreated can lead to algae black spots and crusty hard pans which can leave the ground under repair. Such areas take time and expense to recover or may need to be fully renovated and replaced, in which case prevention is significantly better than the cure.

Editor's Note: Both Garry and Scott will present a session at the upcoming Australian Sports Turf Management Conference on irrigation dosing and the above solutions being employed at Twin Waters (Agronomy Stream, 11am, Thursday 24 June). For more information on the Twin Waters project, contact Scott Johnstone on 0427 327 790 or email sj@hydroplan.com.au



Left: Twin Waters superintendent Garry McClymont in front of the new pump shed showing bunded dosing skid, IBCs (acid, calcium), drum (surfactant), safety eye wash/shower, extra roller door height for IBC access and safety signage

Below: McClymont (left) with HydroPlan principal consultant Scott Johnstone





AR530

ALL TERRAIN. ALL YOU NEED.

Redesigned from the ground up, the AR530 contour rotary mower is built to give you the best.

Designed with TRUEDECK™ heavy-duty contouring decks, with best in class clippings distribution and superior after-cut quality, it climbs hills and contours smoothly, eliminating the risk of scalping.

The AR530 offers quick and easy deck adjustments and a trustworthy Kubota® engine you can rely on.

CUT WIDTH 90" <small>(2.3M)</small>	CUT HEIGHT 0.75" - 4.5" <small>(19MM - 114MM) 0.25" (6MM) INCREMENTS</small>	CUTTING CAPACITY UP TO 5.66 AC <small>(2.29HA) / HR AT 7MPH (11.26KPH)</small>
FUEL CAPACITY 17 GAL <small>(64.2L)</small>	MOWER ENGINE KUBOTA® 50.2HP <small>(37.4KW) DIESEL</small>	TRANSPORT SPEED 12 MPH <small>(19.3KPH)</small>

For information and support:
www.jacobsen.com



100

SINCE 1921

YEARS

JACOBSEN®

After hosting in 2010 and 2014, the Australian Sports Turf Management Conference and Trade Exhibition returns to the Gold Coast Convention and Exhibition Centre from 21-24 June



Welcome to the Gold Coast

After missing a year due to the COVID-19 pandemic, there is a real sense of anticipation as the industry gets set to converge on the Gold Coast in late June for the 2021 Australian Sports Turf Management Conference and Trade Exhibition. Over the next 16 pages, ATM looks at some of the highlights of the week at the Gold Coast Convention and Exhibition Centre.



JOHN DEERE
GOLF

syngenta®



The Board of the Australian Sports Turf Managers Association, together with staff, management and key conference sponsors and partners, welcome all delegates to the Gold Coast for the 2021 Australian Sports Turf Management Conference and Trade Exhibition (21-24 June). Featuring more than 100 hours of education across a variety of streams, in addition to the industry-leading trade exhibition and famous social functions, the conference is the not-to-be-missed event for all sports turf managers in 2021, especially after the absence of last year's event due to the COVID-19 pandemic.

Due to the pandemic, this year's event has been shortened by a day, with the ASTMA Golf

Championships, presented in partnership with Toro, now being played on the Monday instead of Sunday. That dovetails nicely into that evening's traditional opening night highlight – the Syngenta President's Dinner – which incorporates the National Turf Industry Awards.

To be held at the outstanding Gold Coast Convention and Exhibition Centre, which has hosted the conference previously in 2010 and 2014, this year's event will bring together a phenomenal line up of local and interstate speakers, including presentations from a range of experts in communication, mental health and wellbeing and leadership, as well as local superintendents, sports turf managers and agronomists. Here is just a snapshot of some of the presenters and topics...

KURT FEARNLEY

Three-time Paralympic gold medallist Kurt Fearnley AO needs little introduction. Set to provide the closing address of Tuesday's Plenary session, Fearnley has won over 40 marathons, including New York, Chicago and London, in a career spanning more than 20 years. In 2009 Kurt crawled the Kokoda Track in PNG to raise awareness of men's health. He was also a member of the winning Sydney to Hobart yacht crew, Investec Loyal, in 2012. During an unforgettable presentation, Fearnley will share tales of his sporting and life accomplishments, touching on the themes of building resilience, the importance of a strong team and leading through example. **(Plenary, Tue 22 June, 2.30pm)**

JOHN BUCHANAN

The Australian cricket team coach between 1999 and 2007, John Buchanan oversaw an era of incredible international dominance. With a team comprising many of the modern day greats of Australian cricket, he coached the team to a world record number of straight Test match victories (16 wins), consecutive One Day International wins (21) and set an unprecedented World Cup record with two World Cups and 24 games undefeated. At the time of his retirement, the Australian cricket team were the World Cup, Test and One Day International champions and also returned The Ashes to Australia in early 2007. This record of victories makes Buchanan the most successful coach in history with a winning record of over 75 per cent. With over 30 years in international coaching, education and organisational management, Buchanan is passionate about coaching and the striking impact that quality coaching has on peak performance for individuals, leaders and teams. **(Plenary, Tue 22 June, 11am and 11.40am)**

ERIC BAILEY

Former pro-basketballer Eric Bailey is a Los Angeles native who after nominating for the NBA Draft spent 13 years playing NBL in Australia throughout the mid-80s and early 1990s. Following his successful professional career, Bailey turned his passion for coaching into speaking engagements and has become a leading authority on motivation, vision and success. In addition to his Plenary session address, Bailey will also conduct a workshop on mental health. **(Plenary, Tue 22 June, 1.45pm; Workshop, Thur 24 June, 2pm)**

MURRAY ALTHAM

Providing the opening address of this year's conference, Murray Altham began his professional life as a chef before heading into the fitness industry and becoming a leading voice in the area of mental health and wellbeing. Altham energises people, teaching them to embrace their strengths and leaving them with useful actions that will influence their life. **(Plenary, Tue 22 June, 9.15am)**

BEN GIBSON

Leadership expert Ben Gibson is owner and managing director of The Toolbox Team and the Australia/NZ Sports Turf Leadership Forum Series. Gibson has run education sessions for hundreds of turf managers and their staff across Australia and New Zealand and has spent his career building and leading teams. Gibson will deliver an interactive workshop incorporating practical modern leadership concepts and ready-to-use ideas that turf managers can implement with their teams. **(Management Stream, Thur 24 June, 11am)**

RICHARD FORSYTH

After what has been a busy two-year period for the links crew at Royal Melbourne Golf Club, director of courses Richard Forsyth will look back on hosting the 2019 Presidents Cup and the concurrent works around the redevelopment of Sandringham Golf Links and creation of the Australian Golf Centre. In a presentation that will appeal to sports turf managers across all sectors, Richard

MONDAY 21 JUNE

10.30am: ASTMA Golf Championships (presented by Toro Australia) *Coolangatta and Tweed Heads Golf Club*
1pm-4pm: Registration Desk open
6.30pm-10pm: Syngenta Presidents Dinner and National Turf Industry Awards *Gold Coast Convention & Exhibition Centre (Foyers E&F)*

TUESDAY 22 JUNE

PLENARY

8.30am-8.45am: Welcome to Country
8.45am-9.15am: Industry Update *ASTMA*
9.15am-10.15am: Mental health and physical wellbeing *Murray Altham*

10.15am-11am: Morning Tea

11am-11.45am: Co-operation and communication *John Buchanan*
11.45am-12.15pm: Working with general managers/GMA update *Paul Vardy*
12.15pm-1pm: Developing and working as a team *Speaker TBC*

1pm-1.45pm: Lunch

1.45pm-2.30pm: Being a leader *Eric Bailey*
2.30pm-3.30pm: Motivational guest speaker *Kurt Fearnley*

TRADE

3.30pm-5pm: VIP Trade Session (for full registered and Tuesday day delegates only)

WEDNESDAY 23 JUNE

GOLF STREAM (ROOM 5)

8.30am-9.50am: Regional roundup *Mark Spraggs, Brent Hull, Simon Snedden, Chad Gilmour, Brendan Clark*
9.50am-10.30am: Teven Valley *Paul Gumbleton*

10.30am-11am: Morning Tea

11am-11.40am: Sandringham Golf Links, Australian Golf Centre and Presidents Cup *Richard Forsyth*
11.40am-1pm: Construction Projects *Minnippi Public Golf Course, Indooroopilly GC, Neanger Park GC*

1pm-5pm: Trade Exhibition incl. Afternoon Tea

SPORTSFIELDS STREAM (ROOM 6)

8.30am-9.10am: Herbicide resistance in sportsfields *Jyri Kaapro*
9.10am-9.50am: All things horticultural and Parliament House *Paul Janssens*
9.50am-10.30am: Racetrack management and maintenance practices *Michael Wood*

10.30am-11am: Morning Tea

11am-11.40am: Developing a fertiliser programme for sportsfields *Dr Brett Morris*
11.40am-12.20pm: The importance of data: Understanding the numbers *Damian Hough*
12.20pm-1pm: Update on various warm-season grass trials *Tim Fankhauser and Matt Oliver*

1pm-5pm: Trade Exhibition incl. Afternoon Tea

WORKSHOPS (ROOMS 5, 6 & 7)

9am-10.30am and 11am-1pm (Room 7): Construction sand and soil workshop *Bruce Macphee, John Neylan and Gary Beehag*
2pm-3pm (Room 5): Mental Health: Managing your mindset *Eric Bailey*
2pm-3.30pm (Room 6): GDD *Mike Deluca*

ASSOCIATION

5pm-6pm (Room 5): ASTMA AGM

Please Note: Times, topics and speakers listed were correct at the time of this edition going to print. The Technicians Stream programme was also still being finalised. Please refer to the conference app and or the boards inside the GCCEC for any updates or changes to the programme.

THURSDAY 24 JUNE

AGRONOMY STREAM (ROOM 5)

8.30am-9am: ANTEP and ryegrass trial update *Bruce Macphee*
9am-9.30am: Maximising efficiency of fungicide applications *Dr Brett Morris*
9.30am-10am: Effective management of ERI fungi *John Neylan*

10am-11am: Morning Tea

11am-11.40am: Irrigation and dosage systems *Scott Johnstone and Garry McClymont*
11.40am-12.20pm: The benefits of oxygenated water on turf surfaces *Professor Greg Leslie*
12.20pm-1pm: Soil greenhouse gas emissions from Australian sportsfields *David Riches*

1pm-2.30pm: Trade Exhibition incl. Lunch

MANAGEMENT STREAM (ROOM 7)

8.30am-10am: Jacobsen management workshop – Developing effective presentation skills to engage an audience *Carmen Sederino*
11am-1pm: Modern leadership for turf managers *Ben Gibson*

PLENARY (ROOM 5)

2.30pm-3.30pm: Inspirational final session *Michael Kasprowich*

SOCIAL

6pm-8pm: Farewell Bash, presented by Greenway Turf Solutions Garden Events Lawn, Star Complex (ex-Jupiters)

FRIDAY 25 JUNE

TOUR

9am: Minnippi Public Golf Course (Cannon Hill), Brisbane (Buses depart GCCEC at 9am for 10am start on site and arrive back approx. 1pm)

will discuss the challenges related to leading his team through a period of significant change and the logistics and highlights of hosting a global tournament in the midst of a construction zone. (*Golf Stream, Wed 23 Jun, 11am*)

MICHAEL WOOD

Racecourse manager of Sydney's Royal Randwick, Michael Wood has worked at the famed Australian Turf Club for the past eight years, rising to the top role in July 2019. Wood will look at the management of the Royal Randwick track and how his team go about preparing it for its major meets during the year, including The Championships and Everest Carnival. Michael will also discuss how he has recently incorporated the use of drone imaging to assist in managing the track. (*Sportsfield Stream, Wed 23 Jun, 9.50am*)

CARMEN SEDERINO

Business and marketing professional Carmen Sederino will present a Jacobsen management workshop on developing effective presentation skills to engage an audience. Sederino has over two decades of experience supporting individuals and businesses through communication and developing content that is both engaging and delivered with impact. (*Management Stream, Thur 24 June, 8.30am*)

TEVEN VALLEY GOLF COURSE

Superintendent Paul Gumbleton will talk about the transformation of Teven Valley Golf Course under the auspices of course designer and pro golfer Craig Parry. Gumbleton will



Keynote speaker, Paralympian Kurt Fearnley

discuss the unique grass selections chosen, in particular the use of Sir Grange zoysia across the fairways and tees, drainage and irrigation solutions and environmental considerations. (*Golf Stream, Wed 23 June, 9.50am*)

SAND WORKSHOP

To be led by an expert panel containing ASTMA senior agronomist Bruce Macphee, Sporteng senior agronomist John Neylan and Gary Beehag, the workshop will take delegates through a review of available sands, material selection, understanding and interpreting soil testing methods, moisture release curves, bunker sand testing and sand selection for various sports turf profiles. (*Workshop, Wed 23 June, 9am-10.30am and 11am-1pm*)

PAUL JANSSENS

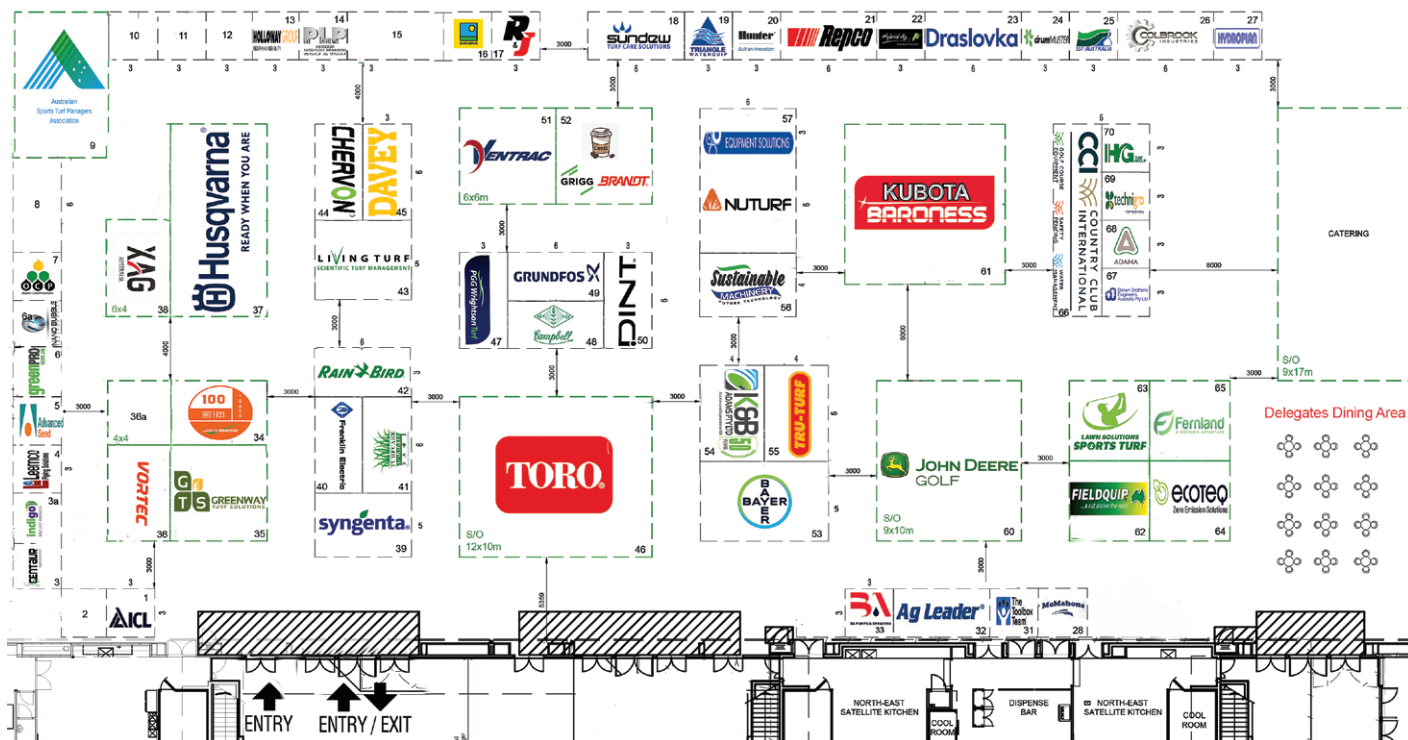
The assistant director of Landscape Services at Australian Parliament House, Paul Janssens has seen many changes across the site over the past 25 years. In his current role, he is responsible for 20 staff, 10 hectares of turf, 13 hectares of gardens and the residence of the Prime Minister. Paul's presentation will look at some of the complexities around managing the horticultural areas of Parliament House in Canberra. (*Sportsfield Stream, Wed 23 June, 9.10am*)

POST CONFERENCE TOUR

The traditional Friday tour is back on the programme in 2021 with a trip planned on 25 June to the new Minnippi Public Golf Course development (Cannon Hill). Project construction managers McMahons, in conjunction with Toro, will be hosting a tour of the site currently under construction, 10km from Brisbane. (*Tour, Fri 25 Jun, 9am*)

In addition to industry-leading education and networking opportunities, the conference also includes the sports turf management trade exhibition on the Wednesday and Thursday (23 and 24 June). With more than 60 of the industry's leading companies showcasing their products and services, there will be a number of special deals for delegates as well as a number of innovative new product launches.

And to unwind at the end of it all, Greenway Turf Solutions will again be sponsoring the famous Farewell Bash (Thursday from 6pm). The ASTMA looks forward to welcoming everyone to the Gold Coast for what is set to be a great week of education and networking. 🏌️



The two-day trade exhibition will feature more than 60 leading companies across 3500m² of floorspace

Right Advice, Right Support, Right Products

Right around Australia



greenwayturf solutions.com

The 36-hole Coolangatta and Tweed Heads Golf Club comprises the River and West courses. Pictured is 18 River with 18 West to the right

Coolangatta Tweed tees up

Coolangatta and Tweed Heads Golf Club will host the ASTMA Golf Championships, presented by Platinum Partner Toro, for the first time when the conference returns to the Gold Coast in June. Association president and life

TORO

member Peter Lonergan provides ATM readers with an insight into the 36-hole facility.

TORO

Coolangatta and Tweed Heads Golf Club (CTHGC) was established in 1926 on land that is now occupied by the Gold Coast Airport. The land was deemed unsuitable and in 1930 they relocated to the current site in Tweed Heads South where nine holes was established. In 1951 a second nine came into play, a third was opened in 1974 and the final nine in 1979.

Poker machines have, until the past few years, always been a big income source for the club and in 1939 the club made an annual

profit of £366 of which £323 came from the pokies! In 1985 the club made a profit of over \$880,000, but then in 1992 poker machines were legalised in Queensland and, as happened to the Murray River courses in 1991, the busloads of tourists stopped coming.

The ever-declining income from the pokies and increased competition for golfers from the myriad of resort courses popping up on the Gold Coast saw the club fall on some difficult financial times in the early 1990s and four hectares of land was sold to allow the expansion of neighbouring Tweed

City shopping centre. This required a major modification to the West Course and these works were carried out by none other than fellow ASTMA life member Doug Robinson in conjunction with Graham Papworth.

Doug was superintendent at the club from 1980 to 1985 when he left to build Sanctuary Cove and was succeeded by Jeff Gambin who held the position until 1991 when he left to move to Royal Pines. So the club has had a rich relationship with the ASTMA, with three presidents having worked here. The club also first hosted a 'Greenkeepers Day' in 1951 and



The TifEagle green on 1 West gets a solid line and roll in the last week of April

were made to the design of the greens and the works were performed essentially in-house with Trevor and Scott King on the bobcat and excavator.

When the West greens were converted they were essentially 'welled out' and taken back to their original size, with the drainage exposed and tested. Once drainage was confirmed the greens irrigation loop was replaced with all new product and then the greens were refilled with a sand that met USGA specifications. The top 100mm of the greens was amended with seven per cent zeolite, four per cent granular humate, 2.5 per cent organic compost and 14 per cent gypsand by volume.

The depth of sand that was removed varied from nearly one metre on the 11th to barely 300mm on the 15th and the quality of some of what we found was questionable at best. The greens were then stolonised with TifEagle and were generally back in play 10-12 weeks after planting. **(See ATM Volumes 18.6 – Nov-Dec 2016 – and 19.2 – March-April 2017 – for the full story on the conversion of the West Course greens to TifEagle – Ed.)**

GO-TO GRASS

In 2007 the club joined a research project conducted jointly by the then AGCSA (now ASTMA) and the Queensland Department of Primary Industries trialling five new 'ultradwarf' varieties of couchgrass with a view to their suitability as a putting green grass at CTHGC. To their credit the club invested more than \$30,000 in the construction of the nursery to ensure that the growing medium would be the same as that used in any future greens resurfacing.

Five varieties were planted – Champion, Mini Verde, Flora Dwarf, Mini Supreme and TifEagle – with Tifgreen 328 added at our

have had many more since, so has always been a great supporter of course maintenance staff and the turf industry.

In the 1980s the club hosted several televised professional tournaments that were won by the likes of Gary Player, Payne Stewart, Graham Marsh, Bruce Crampton, Greg Norman and David Graham. The tournaments were often held in February which is the hottest and most humid month and exceptionally difficult to have healthy bentgrass. It is a great credit to both Doug and Jeff that they were able to deliver the course in such fine fashion for these events.

SWITCHING UP

The club originally had blue couch greens and these were converted to bentgrass in the 1970s and proved very difficult to maintain

during the hot, humid summer months when the putting surface was often unsatisfactory. In 1980 there was a recommendation from then course superintendent Les Neuhaus to convert the greens to Tifgreen 328.

It took 18 years for this to happen and in 1998 the back nine greens of the River course were totally reconstructed and grassed with 328 to a design that was done by former Royal Melbourne superintendent Peter Williams. I arrived in 1999 and duly reconstructed three of the front nine greens and resurfaced the remaining front nine greens with 328.

The West course greens remained bentgrass until 2016 when the club decided to convert to TifEagle. The back nine were completed in 2016 and the front nine in 2017. Course architect Graham Papworth was involved in some of the minor changes that

PHOTO: BRENDAN JAMES, GOLF AUSTRALIA MAGAZINE

AT A GLANCE – COOLANGATTA AND TWEED HEADS GC

THE COURSES

River Course: Greens Tifgreen 328 cut at 3.5mm (summer) and 4mm (winter). Fairways and tees common couch

West Course: Greens TifEagle kept at 3.4mm year round. Fairways a mix of Santa Ana, common couch and blue couch/kikuyu. Common couch tees.

Irrigation and water sources: Some irrigation pipework and infrastructure dates to the 1970s. Hydraulic system, predominantly Toro sprinkler heads. Single row 690s on the fairways. Every type of irrigation pipe known to man! Hunter radio control system. Grundfos pump station comprising 2 x 11kW pumps and 4 x 22kW pumps.

Courses utilise recycled water from Tweed Shire Council. The line was installed in 1980 which potentially makes the club one of the longest users of recycled water. Capacity to supply 1.2ML per day which is about half of what is needed.

THE CREW

Superintendent Peter Lonergan, assistant superintendent Simon Walford (20 years at the club), qualified greenkeepers (5), turf equipment technician, irrigation technician, groundspeople (2), apprentices (2), clubhouse gardener and two casuals.

THE SHED

10 x Toro Greensmaster 3250D greens mowers (four for greens, two for tees and collars, four as dedicated de-thatchers); 2 x 7000D fairway mowers; 2 x 4700D intermediate rough mowers; 4 x John Deere 1570 outfront rough mowers; 2 x Toro 3040 Sand Pros; 3 x electric rollers; Toro Multi Pro 1750 and 5800 spray rigs; 8 x Carryalls and 2 x 4trax motorbikes; Thatchaway verticutters and scarifiers; 2 x Toro Pro Core 648s and 1298 – the latter has just been delivered, bring on spring!; 3 x compact, 2 x 35hp and 1 x 50hp front end loader tractors; Vertiquake used as a root pruner.



The 2021 ASTMA Golf Championships will be held on the West Course which boasts TifEagle couchgrass greens

site for comparison. All of the dwarf varieties proved to have a much finer leaf than 328 and therefore provided a superior putting surface, with TifEagle the standout and becoming the 'go-to' grass for CTHGC. Hence the decision on the grass type wasn't made in haste and the greens have settled in well and provide a firm and quite fast surface, particularly in the low growth winter months. We don't get frosts and daytime winter temperatures average between 16-20°C so we don't really lose colour but there is very little growth.

TifEagle is certainly a different turf to maintain and there are several approaches that can be taken while still achieving a good putting surface. In the late 1990s the guidelines for maintenance meant that a lot of clubs shied away due to the high level of work recommended. I first planted TifEagle in 2005 and even by then the guidelines had eased somewhat with regards to the intensive maintenance and it has certainly been found that you don't need the high inputs originally suggested to achieve a result.

At a seminar I attended in the USA in 2015, the researcher opened with the comment, "We got the maintenance practices for the ultradwarfs wrong at the start." Much has changed since 2000 with regards to maintenance practices as more and more courses have converted their greens to

TifEagle and other ultradwarfs. I have travelled to the USA to further study TifEagle maintenance and on each occasion I have gone looking for answers and come back with more questions.

What I most definitely have learned is that almost everyone maintains their TifEagle differently and almost all succeed with achieving a good putting surface. The main area of difference seems to be the de-thatching and dusting programmes. Essentially you are either a de-thatcher or a duster. I have lent towards de-thatching for thatch control as I feel it results in the best putting surface here.

WEATHER WOES

The weather always seems to be a dominant topic which is understandable in our sub-tropical climate. We moved from the driest ever July-December period in 2019 to the wettest ever January-March period in 2020 and then the wettest ever December 2020-April 2021. 1947mm of rain fell from 11 December 2020 to the end of April 2021.

The course is very flat and provides very little fall, but somehow whoever did the drainage did an amazing job when the course was first laid out. Despite the minimal fall, the water somehow moves off the courses amazingly well, albeit slowly. Having a generally sandy soil profile helps out as well



Lonergan has lent towards more of a de-thatching regime as opposed to dusting to control thatch levels in his TifEagle greens. Pictured is 4 West

Extensive rain (1947mm from 11 December 2020 to the end of April 2021) combined with low light conditions have made for a challenging summer and autumn



although there are some areas of marine mud on the West course that stays very wet for an extended period following rainfall. I remember talking to Jeff Gambin when he was here and he was telling me about a drainage project they were doing at the time that utilised 900mm pipes which I could barely comprehend. We definitely need them I can assure you!

The constant rain we have had this past summer has two major consequences. Firstly golf carts need to be restricted and the lack of sunlight has a deleterious effect on the turfgrass, particularly the greens. Interestingly, the West course TifEagle greens have handled the low light intensity quite well. If golf carts are restricted then our player numbers are also

restricted which impacts revenue and player contentment. We store over 300 member carts onsite and the club own a fleet of 50 carts, so they are a big part of our club culture.

As I write this it is now mid-May and we have started to dry out a little and the weather has been back to somewhat normal. We lost turf in some low areas of fairways where there was water lying for up to six weeks which is disappointing, but all in all the courses are in great shape for a facility that has been getting an average of more than 200 players per course per day.

The club is looking forward to welcoming the field for the ASTMA Golf Championships, proudly sponsored by Platinum Partner Toro Australia, and I trust that all players will enjoy the challenge that the West Course and its TifEagle greens will provide.

Editor's Note: Make sure you check out Loneragan's course maintenance blog <http://coolangattatweedgolfcoursemaintenance.blogspot.com/>. Loneragan updates the blog regularly and provides a fantastic insight for members as to what's going on maintenance wise of the two courses as well as any interesting news from across the industry. Well worth a read. 📖

Coolangatta & Tweed Heads GC is a busy facility with up to 200 players out on each course every day. Pictured is 1 West



Quali-Pro® Twister™

Want rapid knockdown of Argentine Stem Weevil, Billbug and Black Beetle AND longevity? Can't be done, right? WRONG!

A higher than industry standard concentration of Indoxacarb (group 22A) provides the quick knockdown, while Novaluron (Group 15 – a new group for turf) provides the longevity.

A great rotational tool to take the stress out of key pest control this season.



QUALI-PRO®
BY ADAMA

Visit
ADAMA.COM
to learn more



Follow us  

©Registered trademarks of an ADAMA Agricultural Solutions Company.



Queensland's ASTMA Graduate of the Year representative Ryan Murphy in action volunteering at the 2019 Australian PGA Championship at RACV Royal Pines Resort

Future stars

The Australian Sports Turf Managers Association and STA Australia will honour their outstanding apprentices in their respective Graduate of the Year Awards to be announced on the opening night of the Gold Coast conference. ATM takes a look at this year's finalists.



Just one of the many events impacted by the COVID-19 pandemic, it is with great anticipation that the ASTMA and STA of Australia will be able to bestow their Graduate of the Year Awards in person during this year's Australian Sports Turf Management Conference on the Gold Coast. With last year's conference postponed, both associations had to announce their winners remotely, with Angus Beasley (Scone Golf Club, NSWGCSA) and Matt Wolfe (City of Albany, STA WA) adding their names to an exalted list of former recipients.

While this year's awards will be handed out during the opening night of the conference, judging for this year's ASTMA Graduate of the Year Award was still conducted remotely via Zoom on 19 and 20 May. The seven state finalists were asked to prepare a 10-minute presentation which provided an overview of their role at work, commitment to work, achievements (both at work and study) and their future aspirations in the sports turf management profession. Following their presentation, the five-person judging panel then asked each a series of technical and general questions to further ascertain their level of knowledge and proficiency.

At the time of this edition going to print, the STA of Australia was due to undertake their judging on Thursday 3 June, with STA

Queensland and STA NSW still to name their candidates. Always one of the most prized honours during the annual National Turf Industry Awards, the ASTMA and STA Australia, together with award sponsor Toro Australia, congratulate the following finalists and wish them all the best for the announcement on 21 June.

ASTMA GRADUATE OF THE YEAR

JAMES CORRELL Federal GC | STA ACT



Twenty-four-year-old Correll started his apprenticeship in 2016 before taking a year off and returning in 2018 to complete his studies through the Canberra Institute of Technology. Once qualified he was given the opportunity to be Federal's irrigation technician, a role which he continues to thoroughly enjoy. From a young age Correll enjoyed playing golf which got him interested in how turf surfaces were looked after and presented.

During his time at Federal, Correll has been fortunate enough to be involved with three Federal Amateur Open tournaments which gave him a huge insight to the expectations of major event preparation. From course preparation to feedback received from the players, such experiences gave him

valuable knowledge and practices that he still uses today. The one thing he enjoys most about the job and industry is the personal reward that comes with the hard work put in, as well as the mateships gained. Correll is currently completing a Diploma in Sports Turf Management and is also a member of the STA ACT committee.

ADAM D'EVELYNES

Wanneroo GC | GCSAWA



Twenty-two-year-old D'Evelynes started his turf management journey by taking on an apprenticeship at Wanneroo Golf Club in Perth's northern suburbs in 2017 under superintendent Jon Carter, attending South Metropolitan TAFE for his studies. During his time at Wanneroo, D'Evelynes has been heavily involved in some key projects at the club, including the lake redevelopment, construction of tees and greens, new pump installation and finishing of the clubhouse extension and landscape surrounds.

He also gained valuable tournament experience when Wanneroo hosted both the Australian and Western Australian Amateur Championships in 2018 and 2019. D'Evelynes was also bestowed the Bayer Award for best

student in his turf management year. He has recently taken on the role of irrigation technician and is looking forward to the next couple of years when the irrigation masterplan is completed.

THOMAS LYON

Ballarat GC | VGCSA



Twenty-one-year-old Thomas Lyon becomes the second Victorian Graduate of the Year finalist to hail from Ballarat Golf Club in the past five years. Lyon started his apprenticeship under Ballarat superintendent Jeff Powell in 2018 and attended The Gordon TAFE. He is currently undertaking his Diploma also through The Gordon.

Lyon became involved in the turf industry through his passion for a wide range of sports, especially footy and golf. He says the best part of the turf industry is the people he gets to meet and the unique stories that they all have, along with the wide variety of skills and knowledge required to perform the job day-to-day.

Among some of the major highlights during his time in the industry include being involved in preparations for the ALPG's Ballarat Icons Pro Am, PGA National Futures Championship and being able to participate

in the trial of a Para Golfer at the club. Going forward, Lyon has aspirations to continually learn and develop his skills to hopefully one day become a course superintendent and a leader in the turf industry.

RYAN MURPHY

Lakelands GC | GCSAQ



Queensland representative Ryan Murphy has had an extremely interesting journey in the few years he has been in turf management. His very first experience in greenkeeping came in 2014 and 2015 during a working holiday in Whistler, Canada, where he worked at the Nicklaus North Golf Club during the summers. Returning to Australia in 2016, he entered a professional career in sales until October 2017 when he decided to pursue his love of golf and took on a mature age apprenticeship at Lakelands Golf Club under superintendent Phil Soegaard.

Completing his apprenticeship in May 2020, Murphy is currently working at Kingston Heath Golf Club as a qualified greenkeeper. His journey to get there was just as interesting as his initial forays into the industry. Offered the Kingston Heath role in February 2020, due to COVID-19 his start date got postponed twice, the first in March and then again in July.

WIN-WIN-WIN WITH TORO® SMART IRRIGATION SOLUTIONS.

GOOD FOR THE PLANET. GOOD FOR THE BUDGET.
GOOD FOR THE GAME.

Keep Your
Course In Peak
Condition With
Toro's Precision
Irrigation
Technology.



Lynx® Central Control - integrated smart irrigation management system



INFINITY® Series Sprinkler with Smart Access® and Lynx® Smart Module



Lynx® Smart Hub and Lynx® Smart Satellite

1300 130 898
toro.com.au



/toroaus



/toroaus



/toroaus



/toroaustralia



Count on it.

Murphy was actually half way from Brisbane to Melbourne when the Victorian capital went into lockdown last July, forcing him to spend three months working at Ellerston in the Hunter Valley before eventually making it to Melbourne in November.

Over the past few years Murphy has accrued some fantastic experience, being involved with course preparations at the 2018 Queensland Open (Brisbane GC), 2018 and 2019 Australian PGA Championships (Royal Pines Resort), 2019 US PGA Championship (Bethpage), 2019 Australian Open (The Australian GC) and the 2020 Commercial Bank Qatar Masters at Education City GC.

THOMAS NORTH

Royal Hobart GC | TSTMA



North's journey in turf management began in 2016 when he started his apprenticeship at Royal Hobart Golf Club. Being a keen junior golfer and a scholarship holder at the club, as well as growing up on a farm, the outdoor nature of turf management really appealed and under the watchful guidance of long-serving superintendent Steve Lewis North continued to excel.

Completing his education through TAFE Tasmania, North was involved in numerous events during his time at Royal Hobart, among them the Australian men's and women's Interstate Series, Tasmanian Opens, Australian Left-Handed Championship, corporate days and club championships. North also played a part in Royal Hobart's masterplan works, including the reshaping of the 7th and 8th holes and constructing a new practice area, including a chipping green and practice tee.

Since finishing his apprenticeship North has taken on the role of superintendent at the nearby Llanherne Golf Club, the former home of 2017 TGCSA graduate finalist Brad Palmer. During his six months at Llanherne, North has been able to further develop his skills in addition to managing a large group of keen volunteers who assist with the maintenance of the nine-hole course.

KURT PETERS

Horizons Golf Resort | NSWGCSA



The 2020 Vince Church NSWGCSA Graduate of the Year winner, Peters started his career as an apprentice at Horizons Golf Resort. The first day of his apprenticeship in 2017 was quiet daunting considering he'd never set foot on a golf course or even held a golf club, but after a few weeks he quickly grew into the role and its many facets. Not long into his third year, superintendent Duncan Begley gave him a taste of management when allocating him to manage the weekend shifts throughout hot summer periods with younger apprentices.

After working 3.5 years and completing his apprenticeship with Horizons, Peters shifted to Newcastle Golf Club at the start of 2021. At the same time, Kurri Kurri TAFE nominated him for the NSWGCSA Graduate of the Year Award. Flying high, the crew at Newcastle and course superintendent Earl Warmington have welcomed their new recruit with open arms. Peters says he has learnt so much in the short period of time he has worked there, with the quality of the course a true reflection of the hard work and dedication of the team.

JORDAN SHERRATT

Thaxted Park GC | SAGCSA



For as long as Sherratt can remember his life has revolved around golf. He started playing at 11 and by the age of 21 had turned professional, competing in some big Tour events on some of the best golf courses around the world. This sparked his interest in the greenkeeping/turf management side of golf and he began volunteering at Adelaide's Thaxted Park Golf Club in 2016. Not long after he started a traineeship and has now progressed up the ranks to be course superintendent in a very short amount of time.

Sherratt says he finds it very rewarding when members and guests compliment the course, especially one that he has grown up on and is now responsible for. He believes that having a playing background has really helped with his understanding of what is expected by golf club members and guests and delivering on those. He also thrives on the team atmosphere of working with his crew and together trying to get the best out of each other. Sherratt has also relished the opportunity to volunteer at two Women's Australian Opens, not just for the chance to present world class turf surfaces but to work alongside a group of like-minded turf management professionals.

STA AUSTRALIA SPORTS TURF GRADUATE OF THE YEAR

COOPER LEEMON

Melbourne Cricket Club | STA Vic



Leemon started his apprenticeship in September 2017 at the Sale Turf Club after working there as a casual for several years while completing high school. Following the first year of his apprenticeship, he applied for and was successful in getting a job with the Melbourne Cricket Club (MCC). In the two-and-a-half years since, Leemon has worked across all of the MCC's venues and has become a valued member of the turf team.

While attending his first year at Melbourne Polytechnic, Leemon was asked to study his Diploma while completing his Certificate III. At the end of 2020 he received both, achieving

high grades in all subjects. Since joining the crew at the MCC Leemon has excelled, with a major highlight coming in the 2019-2020 cricket season when the cricket wicket and ground he prepared and delivered each week won the Victorian Premier Cricket ground of the year award.

Leemon loves that his role provides him the opportunity to prepare sporting surfaces for some of the best athletes in the world, as well as working under some of the best curators in the turf industry and having the opportunity to pick their brains on their past experiences and knowledge. Leemon also has a keen interest in new technology and equipment in the turf industry and one day hopes to start his own company developing machines or equipment that assist those working in the industry and change practices for the better.

JAMES KORBER

Trinity College (Gawler) | STA SA



Korber completed his apprenticeship at Trinity College's Gawler campus, with his main role now looking after the college's five sporting fields. Korber undertakes all forms of turf preparation and maintenance, from prepping cricket wickets, mowing ovals, line-marking, renovations and all irrigation work. After work hours, Korber is also the head curator of the South Gawler cricket square.

Being a keen sportsman, Korber is very passionate about his job and has a high attention to detail that ensures he produces his best regardless of the task. Making sure that everything is 'on point' gives him a great feeling of satisfaction and he also has a huge willingness to learn new things in order to help further his career.

KENNEDY SORRELL

Scotch College | STA WA



The 2020 Western Australian Turf Apprentice of the Year, Sorrell got into the turf industry in 2017 when he was taken on as an apprentice by All Saint's College in Perth.

After completing his apprenticeship there and through South West Metropolitan TAFE, he moved across to Scotch College to focus more on sports turf management.

Sorrell loves the outdoor nature of his work, being involved with sports and takes a lot of pride and satisfaction from preparing sports turf surfaces. He enjoys both the team and individual aspects of his roles and loves the people he has met and worked with in the industry to date. 🌱



Banish Winter Fusarium from your course

Cool temperatures, constant high moisture and low light are ideal conditions for Winter Fusarium (or Microdochium Patch) to develop. Symptoms are evident from May to September in the southern states of Australia or in cooler climates. It's important to keep your turf protected through autumn and winter, as scarring will only start to recover in spring when active growth resumes.

Your complete Winter Fusarium program:

1 First Line Option

 **Instrata**
Turf fungicide

Systemic
Contact
Group 3 | Res 12

(R) Rotation Option

 **HeritageMaxx**
Turf fungicide

Systemic
Group 11

✓ Can also be used

 **Medallion**
Turf fungicide

Contact
Group 12

syngenta®

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

Syngenta Australia Pty Ltd, Level 1, 2-4 Lyonpark Road, Macquarie Park NSW 2113. ABN 33 002 933 717. ®Registered trademark of Syngenta Group Company. ™Trademark of a Syngenta Group Company. All products written in uppercase are registered trademarks of a Syngenta Group Company. © 2021 Syngenta. AD 21-062.

®

FLAME-23/06/2016-3/22

Best in show

More than 60 of the turf industry's leading companies will be exhibiting their wares across 3500m² of exhibition space at the upcoming 2021 Sports Turf Management Trade Exhibition. ATM takes a look at some of the new products, services and promotions set to feature.

ASTMA PLATINUM PARTNER TORO (46)

Sustainability is not a new concept for The Toro Company. It is deeply embedded in its purpose – to help customers enhance the value, productivity and sustainability of the land. Toro's innovative all-electric, battery and hybrid machines are ideal for courses everywhere, especially those near homes, resorts and anywhere with noise restrictions or regulations in place.

Along with reducing operating costs, the highly efficient operation with zero or low engine exhaust emissions also helps turf managers and facilities meet environmental and sustainability goals for a better future.

Some of Toro's latest additions to utilise this technology are:

- Greensmaster eTriFlex 3370 features lithium-ion power providing quiet, efficient operation.
- Two other Greensmaster hybrid mowers are the petrol-powered TriFlex 3320 and diesel-powered TriFlex 3420, featuring an all-electric reel drive that eliminates hydraulic leaks and delivers plenty of power.

- The all-electric Greensmaster e1021 mower utilises lithium-ion technology to ensure long operation time, high productivity and reduced operating costs.
- Reelmaster 5010-H uses PowerMatch technology to pair the diesel engine with a self-charging battery pack, the industry's first and only reel mower with a true hybrid drive system.
- With efficient engines matched with Smart Power and SmartCool technology systems, the Groundsmaster 4000 and 5900 save time and maintenance costs.
- Get quiet performance from a utility vehicle, too, with the Workman GTX lithium-ion.

To learn more about Toro battery, all-electric and hybrid mowers and utility vehicles, visit the Toro 'Club Room' located at Stand 46.
www.toro.com.au | 1800 356 372

ASTMA GOLD PARTNER SYNGENTA (39)

Last year, an exciting new fungicide became available from Syngenta – Posterity! Now Syngenta is thrilled to announce the new label extension on Posterity to include control



of spring dead spot and winter fusarium/microdochium patch. The latest SDHI on the turf market, Posterity delivers exceptional disease control. Gain control for spring dead spot or use Posterity to supercharge tank mixes when dealing with dollar spot and winter fusarium. This fungicide sets a new standard for power that lasts.

Australian and USA trials have demonstrated that Posterity is the next step in disease management, delivering superior control with low use rates. Fast uptake through the leaf ensures optimal distribution within the plant, plus effective, long-lasting and consistent control for foliar disease. Posterity's long soil residual and activity means it stays where you place it – working longer and harder on spring dead spot.

Posterity offers long-lasting preventative and early curative control against difficult-to-control diseases; balanced distribution within the plant and outstanding rainfastness; excellent soil residual activity; smarter chemistry that is exempt from poison scheduling; a highly effective option at rates as low as 500mL/ha to 1L/ha; and a formulation that is compatible with a wide range of commonly used products – including PRIMO MAXX when used as a foliar application – so turf managers can supercharge their tank mix.
www.syngentaturf.com.au | 1800 022 035

ASTMA SILVER PARTNERS BAYER (53)

Bayer is pleased to formally launch two new products on the Gold Coast. The new products further extend Bayer's focus on solutions to improve turf health and playability in the face



Toro's innovative all-electric, battery and hybrid machines will be on display on the Gold Coast

of the pressures applied by the demands of golfers, climatic extremes and pest and disease issues.

Tetrino is a new insect control solution from Bayer, offering an unmatched combination of performance, ease of use and efficiency, while delivering fast control and lasting protection with a low rate of active ingredient. Bayer looks forward to working with its customers who face issues with pests such as Argentine stem weevil, African black beetle, billbug and armyworm, who will enjoy the benefits that come from using Tetrino. Tetrino will be available in winter 2021 in a 3L pack.

Dedicate FORTE Stressgard is a new turf fungicide that delivers excellent disease control and enhanced plant health effects. Dedicate FORTE Stressgard contains tebuconazole and is Bayer's first DMI fungicide for Australian turf managers with Stressgard formulation technology. Dedicate FORTE Stressgard will provide an excellent tool for early season preventative applications targeting fairy ring. In addition, applying Dedicate FORTE Stressgard in this early season application window will reduce inoculum of other diseases that typically don't appear until summer, but become active in early spring. Dedicate FORTE Stressgard will also be available winter 2021 and comes in a 1L pack.

bayeramplifyturf.com.au | 1800 357 917



JOHN DEERE (60)

Committed to you. Committed to the game. John Deere has a dedicated team whose sole focus is to help turf managers deliver the very best sports turf and golfing experience. The only thing stronger than its commitment to the turf manager is its commitment to the industry, which is why John Deere continues to invest in pioneering technology to help keep Australian turf in superb playing condition.



John Deere's extensive line-up of innovative golf equipment is now available with low interest finance (conditions apply). Plus it's supported by John Deere's team of local golf experts who are committed to helping turf managers deliver the very best golfing experience possible. The John Deere team is here to help, so come visit them at Stand 60. www.deere.com.au/en/golf-sports-turf

ASTMA BRONZE PARTNERS ADAMA (68)



Adama is proud to announce the launch of Quali-Pro Twister, a new combination insecticide for the control of Argentine stem weevil, billbug and African black beetle. Quali-Pro Twister contains the active ingredients novaluron and indoxacarb, with novaluron (Group 15) being a new active ingredient to the turf industry and indoxacarb (Group 22A) being at a significantly higher concentration (720g/ha) compared to solo registrations (187.5g/ha).

Both novaluron and indoxacarb act mainly by ingestion during larval feeding and are also taken up through direct contact via the cuticle. Novaluron and indoxacarb have similar foliar and soil residual activity, strong rainfastness and low volatility, which increases the likelihood of target pests ingesting both active ingredients. By combining novaluron and indoxacarb, Quali-Pro Twister brings to the Australian turf market a brand new mode of action, new strategy for resistance management of Argentine stem weevil, along with billbug and African black beetle control.

Also officially launching at the conference is Quali-Pro Enclave, the first four active ingredient and mode of action fungicide in Australia to contain the new active ingredient thiophanate-methyl (Group 1). This new to the Australian turf market active ingredient is well known in other regions for control of diseases such as brown patch, fusarium, anthracnose and dollar spot. Combined with the well-

recognised actives chlorothalonil (Group M5), iprodione (Group 2) and tebuconazole (Group 3), it brings a powerful disease control option that covers various foliar diseases and spring dead spot. Visit Stand 68 for more details. www.adama.com.au

GTS (35)

Come and check out the quality brands from leading manufacturers of turf maintenance products at the Greenway Turf Solutions (GTS) stand (No.35). GTS is a privately owned Australian company with over 40 employees working out of customer service centres in Sydney, Melbourne, Brisbane, Adelaide and Perth. GTS specialises in providing innovative products, equipment and agronomic services of the highest quality to turf professionals across Australia and overseas. The GTS team of qualified agronomists and experienced turfgrass managers work with their clients to deliver quality outcomes.

greenwayturf.com.au | 07 3382 7187

ALSO EXHIBITING... AG LEADER (32)



If you are thinking, "Ag Leader is in the business of providing solutions to farming operations, what do golf courses have to do with that?" the answer is more than you think. Both have budgets for chemicals and fertilisers, both strive to be good stewards of the land and environment and turf management is farming – you are just growing a different crop.

Working with Jay Infanti, superintendent from Eastern Golf Club in Victoria's Yarra Valley, Ag Leader was able to demonstrate the worth of how technology can improve efficiency, save on chemicals and relieve the stress of mower drivers striving for those perfect straight lines on the fairways.

The Eastern Golf Club has 3ha of greens and Jay used to budget for 3.5ha of chemicals and fertilisers to ensure he had enough coverage. After trialling Ag Leader's DirectCommand spray technology, Jay was confident in budgeting for the exact 3ha required. Jay also says that the spray operators are more confident to spray up to the edge of the greens due to the system's ability to shut off nozzles that are close to or overhanging onto the green. The operators

"The quality of cut that we are getting now with the John Deere equipment is second to none." – Sam Keats, Tara Iti, NZ

also spray faster because the technology is handling spray control tasks that the operator used to have to do manually. Come and see the team at Stand 32 who look forward to showing delegates how farming and golf courses are not that dissimilar.

Douglas Amos 0428 409 885 | damos@agleader.com

BROWN BROTHERS (67)

The Lowara Smart Pump range incorporates state-of-the-art technology which reduces energy usage and dramatically decreases operational costs while enhancing performance. The smart, easy-to-set integrated drive can operate single, twin or multi-pump systems of up to three pumps, with no need for an external control panel or PLC. The Smart Variable Speed Drive matches the pump operating performance to demand, reducing energy use. And it allows smart pumps to communicate with other systems in real time, maximising efficiency.

The Lowara Smart Pump range is all about the right combination of motor, variable speed drive and pump. With an integrated intelligent pumping system with an electronically driven, permanent magnet motor, dubbed the 'e-SM', the Smart Pump range meets EU performance standards with its 'ultra-premium' IE5 motor and a power drive system of IES2 (highest efficiency class). This equates to up to a 50 per cent savings in costs when compared to a similar standard non-VSD pump.

The e-SM has the capacity to handle extreme environmental temperatures from as low as -20°C and up to 50°C. Product features include an intuitive interface and integrated control panel, low operating costs, built in harmonic and electromagnetic filters and reduced mechanical stress and wear. Visit Stand 67 to find out more.

www.brownbros.com.au | 1300 4 BBENG



ECOTEQ (64)

Proudly Australian owned and operated, EcoTeq has launched a range of 100 per cent zero emission outdoor maintenance equipment, featuring commercial mowers, street sweepers, street washers and litter



EcoTeq's latest offering is a range of 100 per cent electric mowers by Mean Green

vacuums, each designed with the environment front-of-mind. Sourced from leading manufacturers in Europe and the US, EcoTeq equipment is manufactured from up to 92 per cent recyclable materials with low-impact manufacturing processes. Featuring innovative technology and advanced design, utilising quality components and engineering, EcoTeq machines are robust, powerful and efficient.

Don't choose between the environment, safety or productivity. Achieve all three with EcoTeq's unique and sustainable battery-powered equipment range. Built from the ground up as electric vehicles, EcoTeq equipment is lighter weight and therefore more efficient than machines converted from diesel. Fully electric also allows for operation without public disturbance, delivering noise output 30 per cent quieter than diesel equivalents. Better still, advances in electric vehicle technology have made it possible for EcoTeq's range to deliver the performance needed to power through a full shift.

EcoTeq's latest offering is a range of 100 per cent electric mowers by Mean Green and they are fast capturing local attention. With incredibly low noise output, commercial

electric mowers are perfect for busy public and urban spaces. Innovative, technology-led design, quality componentry and engineering means there is no compromise to run time or performance. EcoTeq is backed with over 40 years of expert service and support provided by Conquest Equipment.

www.ecoteq.com.au | 1800 826 789

OCP (7)



Among the products that Organic Crop Protectants will be showcasing on the Gold Coast is their new Eco-nemguard organic nematocide. Eco-nemguard is a registered organic nematocide produced

from garlic extract containing a guaranteed level of 26g/L of various polysulphides. Eco-nemguard kills nematodes on contact and breaks down readily in soil leaving no residual effect. This is an important and positive attribute because it does not cause lasting impacts on the beneficial soil biodiversity and fertility. No residual effects also mean that users can be confident that any potential spills or treated soils running off into sensitive environmental areas will not have any impacts.

Eco-nemguard is a great tool for nematocide resistance management because it is a new active and does not belong to any insecticide or fungicide group important to insect or disease control in turf. It can also be used with germinating seeds as it has no effect on sensitive root hairs and root tips. Eco-nemguard has no withholding periods and you can re-enter sprayed areas after the product is dry. Eco-nemguard is available in 10L containers as a concentrated liquid and in 20kg bags as a free-flowing granular product (Eco-nemguard G).

www.ocp.com.au | 1800 634 204

TRADE EXHIBITION – HOURS AND REGISTRATION

The Trade Exhibition will be open from **9am-5pm Wednesday 23 June** and **9am-2.30pm Thursday 24 June**. It is a ticketed event with all those attending needing to register before entering onto the trade show floor. To save time we encourage you to pre-register via the ASTMA website (www.agcsa.com.au) so that a QR code can be sent to your email or mobile enabling you to scan and enter upon arrival. All full and day delegates can access the trade exhibition at any time by showing their delegate badge. See page 32 for tradeshow floor plan.



JOHN DEERE
GOLF

0% P.A.*

FINANCE AVAILABLE
ON JOHN DEERE GOLF EQUIPMENT



Committed to you.
Committed to the game.

It's your job to deliver the very best golfing experience. It's ours to support you with John Deere Golf's proven technology, backed by over a decade of experience on courses all over the world. It's all part of our commitment to Australian courses and the game we love.

**Talk to your local John Deere Golf dealer or
find out more at JohnDeere.com.au/Golf**



OFFICIAL
GOLF COURSE
EQUIPMENT
SUPPLIER

*Conditions apply. John Deere Financial Limited. Approved commercial applicants only. Based on 20% deposit, GST back and 36 month term. Fees and charges apply. Expires on 30/09/21



The Hawkesbury Valley flood this past March was the worst in three decades. While not the highest on record, it was a very fast and dirty flood and had multiple impacts on turf paddocks and farm infrastructure



PHOTOS: TURF AUSTRALIA

The Noah Syndrome

ATM columnist Peter McMaugh AM looks back on the recent floods in NSW which had a major impact on Hawkesbury Valley's turf production community.

When it rains and rains, then rains again, that is when you get floods. Floods are complex happenings and if you are in tropical regions they are generally associated by extreme cyclonic weather patterns. These are sourced by very warm ocean temperatures which create drops in atmospheric pressure above them and the circular wind flows which suck up the moisture from the ocean surface.

In Australia these are generally confined to the northern tropics be it east or west. Sometimes the tail ends of these cyclones will travel south, as they did in the 1950s, causing the massive east coast floods of that era. So big and so fast did the rivers flow that the

surface erosion on the surrounding terrain tore literally millions of tonnes of top soil off the ground, carrying most of it out to sea. In some of the tributary streams of the major rivers there was massive silting up.

It is the massive amounts of moisture that these cyclonic systems suck up out of the ocean and then redeposit on the land in a single event so vast that there is no way the land can absorb it and the extreme runoff causes floods.

There are other more subtle and less ferocious systems that often are brought about by the confluence of two depressions or lows travelling from different directions that will cause massive rainfall events. Sometimes these can be less than massive but follow a

pattern of frequency that makes the Noah's Ark events look minuscule.

In the 1980s in the Sydney Basin, especially in the period from 1983-1986, there were two years in particular where for the first year it rained every second day and in the second year it rained two days out of three. This resulted in every farm being so totally sodden that on mine the worm casts were 20mm-plus high and 150mm apart in every direction. While this may be a tribute to the healthy worm populations of that soil, what they effectively did was prevent any farm work of any kind and a total lack of harvestable grass.

This had a number of impacts on the industry of turf farming in the Hawkesbury

region. Personally it was an economic disaster. I had the contract for the grassing of the new Royal Pines Resort on the Gold Coast and I was relying on using the Hawkesbury farm to provide the planting stock. It couldn't and I had to source grass in Queensland which cost far more than I had costed for the project.

The second major consequence was that every time the vegetable farmers got a crop up, they lost it to one of the six floods we had within two years. The local district agronomist at the time was a chap called Hugh Alan. His concern for the plight of the vegetable farmers of the area led him to recommend that they try growing a small area of turf on their farms which would give them the buffer of diversity and a better recovery cycle after floods than vegetables. This changed the face of turf growing in the Hawkesbury Valley because once the vegetable farmers realised both the reduced manual labour input needed and the economic stability that turf gave them, they quickly converted their farms to 100 per cent turf.

Because the majority of vegetable crops grown in the district at this time were commodity crops, the same attitude towards turf came with this transfer group. Because kikuyu was easy to grow and plant and required less skill to produce than other grasses, it became the staple of their supply chain. Things began to change when John Tebbut (Peninsula Turf) began to grow the first commercial crop of Shademaster buffalo grass. Up until then the demand in the housing and landscape industry had been dominated by kikuyu, but a new quality standard had been established and this sparked a more general interest in the prospects of buffalo to increase the profitability of turf farming.

It was followed up by the short-lived name 'Evergreen' from Charlie Courtney who had cooperated with Brent Redman from the Hunter River, with a clone with superior quality for winter colour as well as a lower thatching and more vigorous lateral growth. Plant Breeders Rights had become a reality and I was able to put that grass into the system, achieving registration as 'Sir Walter'.

This name was no accident. In looking for a name I used the grass characteristics of 'winter active' and 'low thatching' to come up with 'WALT'. I added 'ER' as 'environmentally responsible', even though that may be a stretch too far. So we had 'WALTER'. I used the inspiration of the USA variety Raleigh to choose to put 'Sir' in front and thus 'Sir Walter' was born. (The whole story of the market development of Sir Walter is a totally different story for another day, but what history has

Paul Saad of Southern Cross Turf in the Hawkesbury Valley talks with Federal Government Minister David Littleproud and Federal Member Susan Templeman in the aftermath of the March floods



Many farms bordering the Hawkesbury River sustained major erosion of their river embankments, especially where trees were dislodged and undermined by rapidly moving water

shown is that a properly marketed product can change the whole face of an industry.)

Buffalo grasses, however, have one big weakness in relation to being submersed. Gray leaf spot is a very severe disease of some varieties, the most notable popular one being the widely grown Palmetto. Any submersed buffalo is going to be subjected to increased vulnerability to leaf diseases as they dry out. Kikuyu is also extremely susceptible to leaf disease after submergence. Kikuyu generally has good rhizome development, so its long-term survival and recovery is reasonably assured, but you would not be able to expect a commercial harvestable crop for one full cycle.

There is an excellent discussion of the performance of grasses under submergence in a paper contained in Volume 12 of the

International Turfgrass Research Conference Journal by lead author John Neylan which draws on the experiences of flooding in Brisbane and Thailand in 2011, some of which he reprised in his column in the last edition of ATM (*'Surviving inundation'*, ATM Volume 23.2, p38-41).

MARCH FLOODS

It was very interesting for me when attending a flood crisis meeting of turf producers arranged by Turf Australia at Pitt Town Sports Club in late March to hear many current growers pleading for help to know what to do to aid recovery from damage sustained in the most recent flooding in March. Thirty years without major flooding in the Hawkesbury has left a big hole in the experience of these events. There was a comparatively minor event just 12 months ago which left severe damage, more on golf courses in the area than on farms.

This most recent event was far more damaging. While not being in the very big height category, it was a very fast and dirty flood. Among its biggest impact was the severe damage it did to river banks where tree growth in the riparian areas led to much erosion as the trees were dislodged. Areas where the banks had been undercut by the wash from speedboats/water skiing activity also suffered severe erosion. Interestingly, the areas with strong couchgrass establishment on the banks were the least affected.

One of the most vocal at the meeting was Nathan Ball, course superintendent at Lynwood Golf Club. His major concern was how slowly the water was draining off his course. There are two aspects which control this. One of these is the condition of the flood mitigation drains that take water back into the river as it drops. These have not been well maintained and the consequences are now being felt. The second is that there have





been massive housing developments (and still ongoing), along Killarney Chain of Ponds which now feeds much more water more quickly into the system where Lynwood is located.

There are several aspects of inundation water that need to be understood. Water normally contains about 6-8 per cent oxygen which declines as it heats up. By 20°C there is no oxygen left and the system becomes anaerobic. Saturated ground also contains no oxygen and this anaerobic condition causes a quick decline in plant health. In greens, black layer will develop quickly. In Neylan's ITRC Journal article, it notes that there was much more severe damage under water of 500mm depth than under 300mm. The authors attribute this to possible lack of light penetration and that much more research is needed in this area.

As a consequence of the crisis meeting, I was approached by Horticulture Innovation Australia (HIA) to prepare some points for growers to aid recovery (see some of the key



Poorly maintained flood mitigation drains meant water took a long time to drain off farms and golf courses

summary points in the breakout below). This was done at speed and HIA included some documents from the USA re: flood recovery of sports fields. It was interesting that they seemed totally unaware of the Australian experience reported in the ITRC Journal.

As a final word on the topic, I would like to congratulate the team at Turf Australia and Turf NSW, led by Jenny Zadro and Matt Plunkett, for the great job they have done in looking after the growers' interests. I have never seen

so much interest from politicians at all levels in our industry... do I smell elections in the air?

REFERENCES

Neylan, John J., Loch, Donald S., Biddle, Shane G., Lambrides, Christopher J., and Baker, Dennis E. (2013). *Brisbane and Bangkok 2011: A tale of two floods. ITRC 2013: 12th International Turfgrass Research Conference, Beijing, China, 14-19 July 2013.* Overland Park, KS, USA: Intertec Publishing.

TURF AND FARM MANAGEMENT AFTER MAJOR FLOODING

In response to the recent flooding across the Australian east coast, Horticulture Innovation Australia, together with Peter McMaugh AM, Turf Australia and Turf NSW, put together a resource sheet identifying a number of consideration points to help assist turf producers assess and manage turf-related flood issues. Key points included...

FLOOD DAMAGE

- Mature turf swards ready for harvest are at greatest risk of damage.
- Soft grasses such as kikuyu suffer more damage than stiffer grasses.
- Grasses with rhizomes have an 80 per cent higher chance of survival.
- Buffalos susceptible to grey leaf spot have greater risk of damage.
- Grasses with very dense verdure will stay wet for longer and risk rotting underneath.
- Turf buried under windrows will be badly damaged if left covered for more than three days.

SILT AND DEBRIS

- Faster floods carry increased sand and silt, with increased damage if slow to recede.
- Do not traffic sodden fields with tractors or mowers until they are dry enough to avoid further damage.
- A light cover of silt or clay (1-2mm) will generally wash easily off leaves.
- A mature crop ready for harvest will fare worse under 25mm of silt/sand or clay than an immature crop.

- A 25mm layer of sand can possibly be windrowed when dry and some 80 per cent removed – working the residue into a mature turf with a road broom may allow harvest after recovery from damage.
- A 25mm layer of silt/silty sand/clay on a fully mature turf will generally mean the total crop will be unharvestable and a quick decision to turn the crop in will mean a shortened recovery time and a quicker return to cash flow.
- Where large amounts of organic debris exist (e.g. water hyacinth, pumpkin vines and trees), remove as soon as possible to a designated stockpile area for removal.

WATERLOGGED SOILS AND STAGNANT WATER

- If stagnant water temperatures rise above 20°C dissolved oxygen disappears. If they rise above 30°C turf will burn.
- If soils are saturated, aeration machinery should be used with great care on mature turf to avoid further damage.
- Cultivation should only occur after a minimum of 48 hours clear of water – cultivating wet soil will cause structural damage.
- Specialist decompaction machines such as Verti-drains may be the most appropriate machines for use after floods.
- Any erosion areas requiring backfill will need a period of consolidation and resettlement before regressing – to avoid hollows redeveloping.
- If you have to regenerate crop areas, take

the opportunity to re-establish surface uniformity on any low areas to prevent future water logging.

ON-FARM CHEMICALS

- Check with your agronomist and read chemical labels for pre-emergent chemical recommendations for sodden ground.
- If chemical drums or other hazardous substances wash up on your property, contact the EPA regarding appropriate clean up collection.

OTHER CONSIDERATIONS

- Growers of certified varieties and Plant Breeders Rights (PBR) grasses run increased risk of crop contamination.
- In regions with kikuyu pasture there is likely to be an increased burden of kikuyu seed left behind as the floods recede. Low rates of appropriate chemicals will take out seedling weeds as they germinate. If the seed bands are clearly defined, a Turf Vac may be appropriate (when dry).
- Check lateral move and pivot electrical circuits before attempting to move them.
- Use industrial fans or heaters to dry flooded pumps – make sure silt is removed.
- If moving turf, consider the limits wet turf will cause to truck weights.
- Expandable coir products are generally the most appropriate for removing oil, diesel or chemical spills.

MENTAY

MENTAY 3000 CUSTOM

***Roll out your turf care
problems with the
Mentay 3000!***



THE GREAT AWARD WINNING TURF ROLLER

Our equipment can be seen at most major grounds in
Australia including the Melbourne Cricket Ground

www.mentay.com.au

You can contact
the Mentay team by:

telephone: **03 5339 5004**
facsimile: **03 5338 1006**
email: **info@mentay.com.au**

or call us toll free on

1800 037 075



Caught in a trap

While bunkers can improve the look and playability of a hole, their maintenance and upkeep requirements must be factored into their design

PHOTOS: JOHN FORREST

One of the most contentious parts of any golf course are bunkers. They play an important role in the playability and aesthetics of the course, but ask any superintendent and they will tell you they take up far too much time and money as the mythical outcome of 'the prefect bunker' is sought.

Televised tournament golf gives the average golfer the opportunity to see the top courses with their deep, treacherous and spectacular bunkers. Golfers competing in the televised tournaments demonstrate an amazing prowess for playing bunker shots, but one thing I do notice is that none of them land in poorly raked bunkers or bunkers that have not been raked (not that the players rake the bunkers mind you, that's one of the caddie's many responsibilities).

If a footprint is left in a bunker on the US PGA Tour circuit then it is traced back to who left it and the player is fined. In an article by Sam Farmer for the Los Angeles Times in February 2020, UK professional Justin Rose commented, "If your ball plugs you accept it as it is generally part of the game. But if you walk into the trap and see a poor rake job, it's frustrating for sure."

Tournament golf presents consistent bunkers due to the amount of maintenance that is put into them. At private clubs or public golf courses bunkers impact on the viability of the course and tournament golf on television certainly creates an unrealistic expectation.

There is an expectancy from club golfers for all bunkers to be the same, an outcome difficult to achieve unless staffing and budgets are large enough. For the majority of courses,

Bunkers... every course superintendent's favourite word. John Forrest rakes over one of the most contentious aspects of modern day golf course maintenance.

the consistency is not possible for many reasons and expectations of golfers are difficult to meet. Unfortunately, a golfer's skill level is one of the most important ingredients to be able to get the ball out effectively. Those who struggle often want to blame the sand and changing sand is an expensive process that does a lot of damage to the course.

There are a number of reasons why bunkers cannot be the same...

- When a golfer enters a bunker, they walk on the sand thus compacting it. When playing a shot, a club is used to splash the ball out by driving the club through the sand. A rake is then used to rake out the footprints with tines entering the sand surface. Unless consistent pressure is applied to the rake the sand density is altered and cannot be the same, especially as the sand next to the where the golfer has just been is left untouched.
- If trees and vegetation surround bunkers, then debris will fall into the bunker and as it is raked or blown out small pieces will remain and accumulate in the lowest section of the bunker, increasing the

sand's ability to hold on to water. In these areas when rain or irrigation lands on the surface, it consolidates more than sand with lower organic levels.

- Where the bunkers are located plays a large role in the impact on the sand surface. If it is a bunker with high use, it will have a very different surface to bunkers that see very little traffic. Keeping a level base in a high use bunker is difficult as golfers drag the sand in one direction, leading to the base sloping to the lowest point which means the majority of balls roll to that point, thus increasing the problem.
- Shaded bunkers are different to drier bunkers.
- If water pools in bunkers, then finer particles such as clays, fine silts and organic matter can float. When the water drains, the fine particles remain on the surface, thus holding more water.

One of the considerations about bunkers is the impact they can have on the time that a round takes. Low handicappers have little difficulty playing out of bunkers, but higher handicappers can have a fear of bunkers and have trouble getting out of them. Heavily bunkered holes increase the time the hole takes to play and too many bunkers can take the joy out of playing golf for many who struggle with them.

BUNKER MAINTENANCE

It is not unusual for a private members course to have up to 50 bunkers and such a number requires many worker hours to maintain them. Bunker design plays an important role in the maintenance needed. Steep, large sand

Golfers are quite happy to whinge about the state of bunkers, but if they cannot leave a bunker in a condition that will not adversely impact golfers following, then blaming the sand is a poor excuse

faces are difficult as often golfers walk up them to play a shot, especially if their ball has plugged. Once this occurs the face is softened, increasing the likelihood of more balls being plugged. In Australia many courses also have resident kangaroos and they can create havoc on large bunker faces.

Revetted bunkers are an option if smaller bunkers are suited to the course, but they are the same as bunkers with large faces and need a sand that will hold on the face. An angular particle shape is needed to allow sand particles to lock together. One of the major issues in Western Australia is finding sand that does not have rounded particles, a result of weathering making the sand prone to moving which results in no or limited consolidation. Designs with a steep face to the bunker and rounded sand particles may be subjected to the face being undermined to the point that the edges of the bunker collapse.

Grass-faced bunkers can be used but the grass has to be maintained. Even though growth regulators can be a big help, as is the case with bunker tongues where ride-on



mowing equipment cannot be used, there is still a time factor in their maintenance.

ENTRY AND EXIT POINTS

Golfers have to be able to enter bunkers from as many points as possible to minimise wear. Today's courses often have 50,000 rounds or more per year which puts considerable pressure on entry and exit points. Steep entry points can be dangerous for elderly golfers

who may not be so sure-footed, increasing the risk of rolling an ankle or twisting a knee. The further a golfer steps down into a bunker the larger the imprint into the sand, thus increasing the amount of sand needed to be dragged back over the footprint to smooth the bunker surface.

Mechanical bunker rakes have reduced the amount of time to rake bunkers but design once again impacts how they can be used.



Wiedenmann ... the best in Deep Tyne Aeration

Available through dealers in Australian & NZ · Call 1800 454 150 to arrange a demonstration

FIELDQUIP PTY LTD
199 Bridge St, Oakey QLD 4401,
Australia
www.fieldquip.com.au



Courses with large populations of kangaroos know all too well the damage they can cause to bunkers. This bunker has the added issue of being located adjacent to a number of trees

Small narrow bunker floors can make it difficult to turn without leaving an uneven finish. If there is a drop into the bunker, damage can occur to the turf edge on exit where wheels may spin slightly as they try to get traction to drive the machine out. The more the bunkers are raked the greater the damage.

HOURS OF MAINTENANCE

Fifty bunkers for a staff of six to eight is a huge challenge, especially with 50,000 rounds of golf. Large sand faces require sand to be kept on the face, irrigation and rainfall erodes these faces and sand has to be returned by manually dragging it back up the faces. As workers do this, they are walking on the faces which softens them, making them prone to ball plugging and accentuating the problem.

Large bunkers require edging and the distance around the bunker perimeters may be up to 3-4 kilometres. Weed spraying and physical removal is required. Moving sand to maintain level surfaces and topping up sand as it is splashed out of the bunkers all takes time. If there are bunker tongues, edging is increased and mowing has to be completed by hand. If the sand is rounded and dries, steep tongues may have sand moving from under the edges, undermining them and creating a drop for golfers if the tongues are an entry point into the bunker.

It can be difficult to estimate the amount of time to maintain 50 bunkers as all bunkers and courses are different. Talking to one superintendent here in WA who has 56 bunkers on his course and has eight staff (including himself), he said bunkers are raked three times per week. Tuesday is the big

bunker day with the whole crew working on them for a total of 14 hours. Thursday sees eight hours and Saturday morning three hours just on the bunker floors. Obviously, this is increased if large rainfall events occur.

That is a total of 25 hours per week and even then the superintendent stated that they were one of the courses that did less hours as the sand they used had slightly more fines which held up well on the faces. Edging, weeding and moving and replacing sand occurs once per month in summer, spring and autumn and about every seven weeks in winter, taking about 144 worker hours at a time. That equates to approximately 1.3 staff members per year doing nothing but bunkers.

THE FUTURE

For many golf courses to be sustainable, bunker design has to be well thought out

and another opportunity for golf architects or course designers to work with the superintendent to come up with the best solution. Minimising the size of bunkers has to be an option unless the course has the budget. They are a very important part of a golf course and there are many cases of well-designed bunkers, but before the design is finalised a consideration of the cost of upkeep is very important.

Unfortunately, something that developed from where the sheep took shelter from the wind has developed into a highly manicured playing surface that all golfers have a strong opinion on. The debate needs to move on from simply whether rakes should be left in or out of the bunkers. At the end of the day if a golfer cannot leave the bunker in a condition that will not adversely impact golfers following who land in the bunker, then blaming the sand is a poor excuse. 🏌️



Large bunkers require edging and the distance around perimeters may be as much as 3-4km



Narrow bunker tongues are a maintenance nightmare, especially if they are a primary entry and exit point



Soprano

Elite Perennial Ryegrass



Soprano

Elite turf perennial ryegrass

- Exceptional very dark green colour
- Forms a dense, fine turf of high quality
- Retains good quality in humid summer conditions
- Rapid speed of establishment for a dark cultivar

Soprano is an attractive, very dark green, turf perennial ryegrass with outstanding density and fineness making it a great choice for sports fields. Soprano has good resistance to summer diseases allowing it to maintain high quality in humid conditions over summer.

We are exhibiting at the 2021 Australian Sports Turf Management Conference and Trade Exhibition. To chat to us about Soprano and the rest of our portfolio of high performing turf type perennial ryegrasses, come visit us at Booth 47.



AUSTRALIAN SPORTS TURF MANAGEMENT
CONFERENCE & TRADE EXHIBITION
GOLD COAST 2021

Experts from earth to turf.

Call 1800 DURATURF or visit pggwrightsonturf.com  facebook.com/pggwrightsonturf

PGG Wrightson Turf



Having effective communication skills will enable you to get a handle on dealing with the many conversations you have on course each day

Having difficult conversations

As humans, we are hardwired to avoid conflict. People generally do not like upsetting other people. This is due to a genetic disposition to connect and be a part of a group that stems back to the prehistoric era, in which connection with a group meant safety from predators. We also have an innate desire to be approved of and liked by others. Even today, we are still seeking connection for protection whether in teams, businesses, industries or countries.

This is obviously stronger in some individuals than others, but at work people generally want to contribute to the overall goals of the organisation and are seeking safety through connection and conformance to team vision, values and goals.

When we upset others we create potential threats, become worried or anxious about potential conflict and, as a result,

Arguably the biggest challenge for turf managers in a leadership role is their reluctance to have difficult conversations. The Toolbox Team's Ben Gibson provides some tips and strategies to improve the way you can effectively approach and handle such conversations at your facility.



frequently delay or completely avoid difficult conversations altogether.

Ask yourself these questions... In your life, has delaying, avoiding or 'stuffing something under the rug' and hoping it would go away ever made the situation better? Has it ever improved the outcome for you, the team, or other party involved? I'm guessing the answer to both is 'No'.

Over time and with experience, it becomes easier to have difficult conversations with others. Before approaching the conversation, it is beneficial to consider the following:

- What has led to the need to have the conversation?
- Our own performance and that of the other party in the lead up to the conversation.
- Use empathy – put yourself in their shoes to see from their angle what has led to this.
- Do their actions align with the team culture and vision communicated to them?

"In leadership, sometimes you have to make the tough calls, tackle prickly subjects and stand up for what you and the team have worked so hard to achieve."
- Pat Wilson, Pambula Merimbula GC

- Are they acting in their own best interest or that of the team?

These are just some ideas (that can be done in a few minutes) prior to having a difficult conversation, which can provide great perspective and have a significant impact on the likelihood of a successful outcome.

THE CONSEQUENCES OF DOING NOTHING

Failing to have difficult conversations can do fatal damage to the team and culture you have worked so hard to develop. The damage is done to your team not by what you have said, but by what you fail to say. If you have a staff member, contractor or senior manager in your organisation who is treating you or the team unfairly, unethically or intentionally being disruptive, your team is watching intently to see the actions you will take.

"In leadership, sometimes you have to make the tough calls, tackle prickly subjects and stand up for what you and the team have worked so hard to achieve," says Pat Wilson, course superintendent at Pambula Merimbula Golf Club on the NSW South Coast. "Things don't get better if you just avoid them. I think the passion for what we are doing and seeing how hard the team works to achieve it makes it pretty easy for me to stand up for them and the club."

Taking no action just screams from the rafters, "I am kind of okay with this level of performance/behaviour" or alternatively, even worse, "I do not care enough about this team and what we are trying to achieve that I cannot have a tough conversation on their behalf."



In former roles, I have witnessed just how damaging this behaviour is to the productivity and engagement of the rest of the team – "They don't care, so why should I?", "They really don't have our backs even after all we have done for them", or "They are all talk and no action"... the list goes on.

This is a huge opportunity to demonstrate the 'cut of your leadership jib', how passionate you are about the vision for the team, how much you value the team's contribution and that you have their back.

TAKE IT ON!

Difficult conversations become easier when you align with your why and the team's objectives. If the behaviours are damaging to the hard work and culture of something you have poured your blood, sweat and tears into, funnily enough, it gets much easier to address the issue because you don't want to see all your hard work come undone.

One thing is certain – when having difficult conversations, things can sometimes get heated. If you are talking to someone about their performance, their first reaction is often to get defensive, take it personally and, at times, make it a personal vendetta or grudge.

One of the primary aims of facilitating difficult professional conversations is to take any opportunity to keep the conversation factual and nonpersonal. Do not use opinions or general consensus, but rather black-and-white examples that are far more difficult to be disputed. De-personalising the conversation has a great impact on maintaining open lines of communication and professionalism.

When conversations get heated, they can get emotional and if the other party is particularly upset it can be easy to get rattled and lose your train of thought (and importantly, the objective of the conversation). If you do get rattled, you can forget to raise and address important elements of the conversation and

Exciting News On The Weed Control Front

STATURE®

COLIN CAMPBELL (CHEMICALS) PTY LTD • (02) 9725 2544
HORTICULTURE • POST HARVEST • TURF

80 Years in 2020 • Est. 1940 • campbellchemicals.com.au
100% Australian owned & operated.

Campbell

LOWER RATES

Stature's advanced formulation allows for flexible rates of 500mL-2L per hectare

TURF SAFETY

Stature is safe on warm and cool season grasses

LESS CHEMICAL

Stature's total loading of chemical per hectare is 50% of comparable to other 3 way mixtures.

Stature also features no smell in concentrate or after application



The skills of listening, using empathy and communication are the keys to being an effective leader

miss the opportunity to resolve the issue or attain the desired outcome.

So, if you are like me, you do not have many spare hours to prepare for difficult conversations. But I want to share with you a simple structure, which can be done in five minutes and fit on the back of a beer coaster. The benefits of allocating even a few minutes of planning before going into your conversation are significant. Planning helps you:

- Ensure you have covered all the topics/elements you wanted to discuss.
- Review the facts of the situation to avoid opinions or generalisations.
- Create a structure to fall back on if the other party starts getting emotional.
- Ensure the conversation sticks to a practical time limit (neither party waffles off track).
- Ensure you leave the conversation with mutual understanding of what is expected in the future (often forgotten, but a vital part of difficult conversations).

1. FACTS

When having difficult conversations, use only facts. Hearsay, personal opinions or generalisations will only lead to frustration and emotion from the other party. That person will end up feeling accused and judged which is not the basis for a successful conversation.

2. CONCERNS

This is a particularly important step in this process (they are all important) as this is where you explain the impact that their behaviour is having on the team (not just on you) and highlighting the fact that you are not just raising this because it annoys you personally, but because you are worried about the impact on the wider group. No one wants to be the person who upsets or offends the group or

creates more work for their teammates. Here's an example...

The correct way: "Do you understand that when you fail to put the tools away properly at the end of your shift, it means the entire team has to stay back half an hour and put them away for you?" The incorrect way: "It really bugs me when you don't put the tools away at the end of your shift."

3. IS EVERYTHING OKAY?

Remember, we trust and think the best of our team, contractors and suppliers. Show them you are concerned about the fact that they have been late, have made a mistake or have offended someone. Do this by expressing your concern – "Michael, this behaviour is really unlike you. You are one of our strongest team members." We really want to give the person an opportunity for input here and a chance to explain their behaviour or performance and the reasons for that.

If we are talking to a team member who has had a distinct change in performance or behaviour, in my experience, I have usually been able to identify a change in circumstance. They could be moving house, broken up with their partner, working a second job, struggling at TAFE etc... If you use your listening, empathy and communication skills, you can often get to the bottom of and resolve the issue here.

Unbeknownst to you, let's say, the club may not have paid a contractor's last two invoices, so they have stopped attending site. Being open and giving them the opportunity for input is vital in working toward the most favourable outcome for all parties. "Oh, sorry mate. Let's ring the club right now and get this cleared up!" Boom, done! But you would not have even known if you had not effectively planned, used your emotional control and communication skills as a leader.

4. CLEAR COMMITMENT

Every difficult conversation must finish with a clear communication of future performance expectations and agreement from both parties to commit. "Brad, moving forward, I need you to complete a Pesticide Application Record every time you spray. Do you understand and agree to do this?"

This is for a couple of reasons:

- To increase the likelihood you will actually get the improvement or change being sought.
- It makes any following performance management clear as they have committed to the level of performance required.

Here is an example which employs the above strategies... Michael has been late for work three mornings out of the last eight. It is very out of character for a long-term, reliable team member who previously prided himself on his punctuality.

- **Facts:** "Michael, on Tuesday the 15th, Friday the 18th and Monday the 21st you were more than an hour late for work" (factual). Not, "Michael, it seems to me you are always late for work" (personal, generalised opinion).
- **Concerns:** "Michael, I am concerned as you being late is having a big impact on the entire team. We cannot allocate work tasks properly in the morning as we do not know if you are turning up and it means we are rushing to get things done. We are not doing the best job we can as we try to cover for you."
- **Everything okay?:** "This is really unlike you Michael. You have always prided yourself on your punctuality. Is there anything preventing you from getting to work on time? Is everything okay?"
- **Clear commitment:** "From here on, I need you to be at work at 6am every day and call me at least one hour before if you are unable to come in." Then, importantly, "Do you understand and agree to this Michael?"

Difficult conversations become easier if we are clear, factual, fair, provide an opportunity for input and clarify future expectations. Get a handle on this aspect of your leadership and see improvements across your team and feel your stress reduce.

Editor's Note: Ben Gibson will be conducting a session at the upcoming Australian Sports Turf Management Conference titled 'Modern leadership for turf managers' (*Management Stream, Thursday 11am-12.30pm*). The Toolbox Team will also have a Stand (No.31) in the Trade Exhibition where copies of Gibson's recently released book 'People First: Building an Engaged Safety Culture Through Effective Leadership' will be available. Check out ATM's review of the book on page 72.



RYEGRASS



FINE FESCUE



SUPER BENTS





For years, the concept of 'stranded assets' in the golf sector seemed largely hypothetical and of little concern. Due to climate change, however, that is no longer the case. A stranded asset is something – a piece of equipment or a resource – that once had value but no longer does. This is due to changes in technology, markets, increased litigation, regulation and societal norms.

As a basic example, when electricity started replacing oil lamps for illuminating homes, lighting businesses suddenly found their oil lamp inventory of little use. Also the whaling industry lost a key market for whale oil which left entire fleets idle. Those unneeded lamps and ships became 'stranded assets'.

As the golf sector faces increasing environmental challenges and shifting social norms, stranded assets will become commonplace within the next five years. And, as we move deeper into this decade and progress towards a decarbonised industry, many assets in turf maintenance operations are set to become stranded in the pursuit of climate-friendly alternatives, especially so when it comes to shed design and infrastructure.

There are a wide range of current and emerging risks that are poorly understood, but in recent infrastructure design conversations with superintendents the following were identified as high risk potential stranded assets associated with course maintenance infrastructure design:

- **Fuel area:** Is a high cost banded, roofed hardstand area, with oil water treatment systems, and a large fuel tank likely to become a stranded asset in an industry that is transitioning to the electrification of its fleet as part of a decarbonising strategy? Will fossil fuels be your primary energy source to power your fleet in five years' time?
- **Fertiliser store:** Is a large, banded and ventilated building likely to become a stranded asset in an industry that may be regulated to reduce the use of nitrogen to minimise its nitrous oxide emissions? (Nitrous oxide gas has 310 times the global warming potential of carbon dioxide).
- **Workshop:** Is a hoist a necessary long-term investment given the likelihood of a transition to electric vehicles? Is a spend on a containment area for waste oils, oil filter crushers and waste solvents a long-term investment or a short-term fix?
- **Concrete:** In a climate-friendly future in which golf courses want to decarbonise, the extent of concrete hardstands will require careful consideration. Increased temperatures, humidity and temperature



PHOTO: RONNARONG/ADOBESTOCK.COM

Don't get stranded

Compliance expert Terry Muir discusses the growing concern over climate change related 'stranded assets' in golf course maintenance infrastructure.

fluctuations will all impact the integrity of concrete slabs and their joints. If your club is looking to decarbonise, careful assessment of concrete hardstand areas is a must.

- **Fleet and storage shed:** Will your future fleet be electrified and will you need a large shed for plant and equipment storage? Have you considered large roof top spaces and appropriate battery storage areas to take advantage of solar panels?
- **Car parking:** Have you considered how to future-proof parking structures as fewer commuters drive to work? The advent of electric cars, autonomous vehicles, bicycle and electric scooters, ride hailing/sharing needs to be considered? How big will your workforce be in five years' time?

From a golf business perspective, new infrastructure assets are highly vulnerable to potentially abrupt and material devaluation. With critical infrastructure and millions of dollars across the sector at risk, managing stranded asset risk from environmental drivers should be an important part of the risk management strategies adopted by every superintendent.

Innovation is key when designing and building something that is new and climate

adaptable. Creating pioneering practices that demonstrate a new way of doing things will be the sector's challenge that inspires people to think differently and realise new ideas.

Infrastructure design is just one aspect of asset stranding the sector must consider in analysing every golf club's exposure to climate change. The industry requires an ongoing shift toward greater awareness of stranded assets and broader climate consideration. After all, severe climate impacts are not sufficiently far off for the golf sector to avoid scrutiny and infrastructure designs and investments must now be based on a carbon-constrained future.

The faster the pace of decarbonisation, or the more pronounced the impacts of climate change, the greater the chance of asset stranding and the higher the likelihood of economic, social and political impacts on the club.

By applying a future-ready lens and integrating adaptive reuse into golf course infrastructure design, superintendents will have the flexibility to transition their new space to meet current and future needs. Given the climate transition trends that are evident, it makes sense – socially, financially and sustainably – to future-proof the design. If not, there is a real risk of them becoming stranded assets even before they are built. 🏌️



Teven Valley Golf Course. *The First Wall to Wall Sir Grange Zoysia Golf Course in Australia.*

The newly completed Teven Valley Golf Course offers visitors a truly unique and tranquil experience on its nine-hole boutique course. Located on the Northern Rivers of New South Wales, a 20-minute drive from Byron Bay, the course becomes part of its natural environment allowing players to enjoy and take in the stunning scenery of Teven Valley.

The 9-hole, 18-tee revamp was designed by Craig Parry, a professional Australian golfer. The environmental sustainability of the course remained a top priority throughout planning and it was essential to ensure that the turf variety chosen was going to not only look great but require less maintenance for an environmentally friendly option.

With these environmental concerns in mind, a decision was made to use Sir Grange Zoysia (BRF Zeon Zoysia) for the course fairway, roughs, green surrounds and tees. With TifEagle as the choice for the greens.

"Once Craig saw that Sir Grange was available, he said 'If that's available here in Australia, then that's what we want'; Craig had

played on it in the USA and loved it." Teven Valley Superintendent Paul Gumbleton said.

Sir Grange was chosen for this project due to its versatility to be used across the course when mown at different heights. The Zoysia exceeded the team's expectations of a sustainable grass, due to the low inputs of fertiliser, water and chemicals required, less mowing and high drought and wear tolerance.

Upon the completion of this project, golfers have been rushing to the course to experience the serene and luscious landscapes. The completed course has become a hit with both locals and visitors, resulting in the number of memberships growing dramatically.

"I am really pleased that so many locals are considering the course a real gem for them and you can just feel the local community taking pride in it. This is part of their community and something that's added to it. That's the thing that's surprised me and one of the things that I'm really proud of." Teven Valley Owner Curt Zuber said.

REGIONAL PROFILE

With stunning vistas like the one pictured, it is easy to see why the Mount Compass layout jumped up 23 places in Australian Golf Digest's Top 100 Australian Courses list in 2020. Pictured is looking back across the property from behind the 10th green

Just a few clicks south of Adelaide, near one of the world's most famous wine growing regions, is the picturesque Mount Compass Golf Course, home to first-time superintendent Matt Overall.



Superintendent: Matthew Overall (28).

Family: Fiancée Brooke and daughter Indi (4).

Social media: Facebook (@matt.overall.18) and Instagram (@moverall62).

Period as a superintendent: Five months.

Association involvement: ASTMA and SAGCSA.

Turf management career: Kooyonga GC (apprentice 2011-2015), Foxhills GC, UK (casual 2015), Kooyonga GC (senior greenkeeper 2015-2019), Mount Compass GC (2IC 2019-2020 and superintendent December 2020-present).

Qualifications: Certificate III Sports Turf Management and Horticulture.

Major hobbies/past-times: Golf and cricket. Got to a handicap of +4 when I was younger.

Where in Australia is Mount Compass GC?

Mount Compass is located on the Fleurieu Peninsula about 55 minutes south of the

Adelaide CBD. It is nestled between the McLaren Vale wine region and the very popular Victor Harbor/Port Elliot beaches. It was known for holding Australia's only cow race which happened every January – it has since been cancelled...

Tell us a bit about your background and how you started out in the turf industry. I finished school in 2010 and played a bit of golf before getting a job as an apprentice greenkeeper at the prestigious Kooyonga Golf Club. Being a very keen golfer, getting into an industry that I enjoyed was what I wanted. Originally I did an apprenticeship to have something behind me as I wanted to become a professional golfer, but the more and more I worked I realised that golf would be put on the backburner. I ended up finishing my trade in late 2014 and stayed on as a qualified greenkeeper until April 2015 when I took up an opportunity to play cricket

in the UK for six months while also working at Foxhills Golf Club in Chertsey.

On my return I got into landscaping before quickly realising it wasn't for me. I got in contact with Steven Newell at Kooyonga hoping to get my old job back. Thankfully I did and was soon promoted to a senior greenkeeping role which came with a bit more responsibility. I stayed in that role until April 2019 when I accepted the role here at Mount Compass as assistant superintendent. I was in that role until December 2020 when the superintendent's job opened up.

You spent nine years at Kooyonga. Talk about your time there and some of the highlights. My time at Kooyonga definitely shaped me into the greenkeeper I am today. There were many great things about working at Kooyonga – state-of-the-art equipment, plenty of staff and good people to work with. The best thing was hosting a lot of big national tournaments, among them the Women's Australian Open. There was so much planning that went into this event years in advance and to see it all come together for that one week was amazing. To this point, it was my most enjoyable time in the industry and something I'm incredibly proud to say I worked at.

Who were some of your early mentors?

Steven Newell was Kooyonga superintendent when I first started. He was a very good leader



The Mount Compass crew (from left) comprises Chris Baker (assistant), course superintendent Matt Overall, David Roser and Tomas Vitkunas



PHOTOS: MOUNT COMPASS GC/DAVID BRAND

GC, SA

and was hard but fair. He was someone that got the best out of people and especially me – I certainly owe him a lot. Adam Fry, who is currently still there as the 2IC, is someone who also taught me a lot about work ethic. He is one of the hardest and most dedicated workers I know. He gave me a lot of responsibilities and got the best out of me which I thank him for. Richard James was there towards the end of my time and he gave me a lot of new responsibilities which I hadn't been exposed to before. They have helped a lot since.

You took on the role of assistant at Mount Compass and then not long after were promoted to superintendent. How did you handle such a quick rise up the ranks?

When I took the assistant role it was certainly an eye opener. Coming from the luxuries of

having new machinery, a full-time mechanic and 14 staff, it took me a while to get used to the hands-on approach needed at Mount Compass. With four staff and a lot of area to cover with ageing machinery, it definitely presented its challenges, but ones we are slowly trying to rectify.

Stepping up into the superintendent role was a big step at first with a lot more added responsibility, but I feel as though I have kept on top of it and been able to get some good plans in place. It hasn't just been the golf course that has been a big step up but also running the water business at the golf course. We supply 180 neighbouring houses with their drinking water and it's something we have to monitor and attend to whenever it's required.

The biggest adjustment for me was having plans in place. Up until taking over as superintendent I was used to having someone else's plans to work off. Now I have to put together my own plans and trust that they are going to be effective. It's still something I'm working on to try and get the right ones in place that best suits how we work.

Give us an overview of the Mount Compass course.

Mount Compass GC is a very challenging golf course. It has generous fairways, but if you do happen to miss them you are more than likely to lose your ball either in a water hazard or to the South African lovegrass (which we call 'yum yums') which lines the fairways. The greens are quite large (1.5ha) which gives players the best chance to hit it on the green but can also give you some very long putts. The best thing about the golf course is that, depending on the weather, every hole can play completely different every day. You can attack holes and be rewarded, but if you're slightly off you can find yourself with a large number on your scorecard. There are also many holes that are easy on the eye with some great views.

Is it an easy/hard facility to manage? You would never say anything is easy, but having no golfing committee definitely makes things easier. Decisions are made between myself and owner Stephen Connor. Making decisions are quick and easy rather than having to



The Mount Compass greens are Pennlinks bentgrass. Tees and fairways are predominantly Santa Ana couchgrass with the back nine oversown with ryegrass. Pictured is the 13th green

IMPRESS YOUR MEMBERS SECURE YOUR FACILITY

- Brush Panel Fencing
- Chain Link Fencing
- Tubular Steel Fencing
 - Ball Screens
- Equipment Enclosures



MELBOURNE
CHAIN WIRE
FENCING



p. (03) 9457 1704 | e. sales@melchain.com.au
www.melchain.com.au/golf



The Mount Compass layout is a challenging one. While the fairways are generous, if you happen to miss them you will more than likely end up in a water hazard or losing your ball to the South African lovegrass which lines the fairways. Pictured is the 4th green with 2nd above

go between the board and committees and getting the outcomes that improve the golf course. The most challenging aspect so far would just be having to remember where everything is and the importance of them! Still being relatively new to the course, I still surprise myself most weeks with finding things I didn't know about. I'm lucky that one of the crew, David Roser, has been here 11 years and knows where and what everything does.

What changes have you implemented during your time as superintendent and why? Just having proper structure with our plans going forward. The other thing with that is having the guys across the plans so they know what we are out there trying to achieve. I'm also a neat freak so I have done my best so far to tidy the place up with the spare time we sometimes get. The one percenters go a long way for the eye. Now it's about maintaining that!

Talk through some of the unique turf management challenges you face there. We have a huge amount of wild animals occupying the course, mainly kangaroos. They love freely bouncing through our freshly raked bunkers and leave giant imprints in our greens. They are great animals but can frustrate you a lot when it comes to presenting the course.

How has COVID-19 impacted the club and your operations? We have tried to not let it affect us too much. The club overall benefitted, with our number of rounds since COVID-19 almost doubling. We were obviously quite lucky in SA with it not getting as bad as other states, but we found a lot of people new to golf coming out and playing as their form of exercise and have continued to do so.

What are some of the major challenges facing Mount Compass from a turf management perspective? Our irrigation

system is old and outdated. We currently use Toro SitePro on Windows 95 and haven't been able to back up the system. We are talking with Toro at the moment who are putting together some designs and quotes to upgrade our system to the popular Lynx set up. It will go a long way to a more accurate set up and then hopefully down the track we can update the irrigation also as fairways have been widened in the past few years which has caused areas to dry out on the edges in extreme weather due to not getting enough water. A complete overhaul is what will be required.

Any course works ongoing or in the pipeline? We want to upgrade our tee areas to give them a better surface as well as make them bigger and wider to allow the spread of wear. At the moment a lot are quite skinny and not very level, so it's something we want to start to alter in the short-term. We are working through the best course of action to take and will maybe do a couple of tees each year. During the winter months we also have a very extensive tree clearing and lifting programme. A lot of trees have been left over time and need to be tidied up or taken out.

How is Mount Compass GC faring in the water management stakes? We are quite lucky to have three bores which pump into to a dam on each side of the course. With our annual rainfall they usually hit their capacity at the end of winter which gives us enough water to last a few months. But with the bores we have the option on filling those dams up when required to keep them relatively full to allow us to water the amounts that we need.

How has Mother Nature treated the course in recent times? This year has been quite weird as it certainly hasn't reached the highs of the summers of previous years but has still had an equal amount of rainfall. This being said, the turf has loved it and continued growing a lot later than usual and also not requiring as much irrigation throughout the summer. That also has me worried about what the future holds as it usually comes back to bite you at some point!

Are expectations of course presentation and conditioning any less than that placed on your metropolitan counterparts? That's



Built on an old sand mine, Mount Compass is blessed with pure sandy soils. The greens (pictured is the 18th, with the 15th in the background) are kept at 3.25mm year round

hard to answer but what we are trying to achieve here is to be recognised up with the Tier 1 courses. We want to be the best presented and conditioned club in the public system and then aspire to be put on the same pedestal as the Tier 1s and that's what drives us. We understand that with budgets and staff numbers that will make things difficult, but we want to set goals that we think we can achieve. It's nice when the metropolitan courses comment on the standard we are setting with low staff numbers and smaller budgets. Our boys work extremely hard to achieve what we do each week.

How important are the relationships you have with other course supers/trade reps as well as the local community?

Being new to the job I have had limited contacts. The golf courses down this way try to keep in contact where we can and form relationships to assist each other with knowledge that may help each course. The trade reps have been very good to me passing on their knowledge of products. We try our best in supporting local businesses by buying products and equipment we need from them and hope that they return the favour in supporting us.



A unique aspect of the set up at Mount Compass is that as a side business it provides drinking water to the all residences surrounding the golf course

What have you got in your shed? Toro triplex hybrid 3240, Toro Greensmaster 3150, two Toro 5510s (one AWD), Toro Workman HDX and MDX utilities, Toro Sand Pro 3040, Toro Multi Pro 1250, Tru Turf petrol roller, Kubota rough cutter F3680, Ryan GA30, Buffalo turbine blower, Kubota tractor B7500, Dakota Turf Tender 410, John Deere front end loader, Kawasaki four-wheel motorbike, Turfmach scarifier and Howard nugget slasher.

The Multi Pro spray unit is pure genius and can get us out of trouble when we have an outbreak of something and can also provide a pure consistent growth when you apply your fertilisers. We are currently in the process of buying a Pro Core which will be extremely beneficial for the golf course. We have an old Ryan GA30 which has done its time, been repaired countless times and doesn't stand up to the work required anymore. I have a lot of



AT LAST.

A NEMATICIDE SAFE TO USE ANY TIME & ALMOST ANYWHERE.

See us on
Stand 7 at
**AUST SPORTS TURF
CONFERENCE 2021**

Introducing **eco-nemguard® organic nematicide for turf.**

☒ New Mode of Action to Reduce Nematicide Resistance

☒ Minimal Impact on Soil Bio-Diversity

☒ Fast Acting & Degrades Naturally in the Soil

☒ Easy to Use in Liquid or Granular Form

☒ Fast re-entry when turf dries

☒ Approved as an Organic Input (ACO & NOP)



Microscopic view of a nematode taken from an infected root system.





Input for Organic Production
ACO CERT. NO. 222

For more information call 1800 634 204 or visit [ocp.com.au >](http://ocp.com.au)

The Mount Compass Golf Course is nestled between the McLaren Vale wine region and the popular Victor Harbor/Port Elliot beaches. Pictured is the 16th with 14th above



plans for the Pro Core and I think the greens will really improve with a regular programme.

Favourite spot on the golf course? It would have to be the walk from the 10th green to the 11th tee. You get a view of the 1st, 7th, 8th, 9th and 10th holes (see main photo page 60). The definition with the short cut grasses and the tall South African lovegrass makes for a great photo. The 12th tee is also a great spot with a large dam to clear for the 170m par three. It is one of the best tee shots in SA in my opinion.

Do you think regional superintendents have a better work-life balance than their metro counterparts? Until I have been in their

shoes that is hard to comment, but I think in a country set up it probably doesn't quite get as stressful as what I had seen at Kooyonga. With so many projects and reconstructions in the works, it can get quite demanding and maybe hard to take your mind away from work, especially when all eyes from the outside are waiting for the finished product.

Best advice you have received about being a superintendent? Probably not so much advice but just the leaders I have worked under setting such a high standard with work ethic and presentation. It's something that drives me now as I always want the course to look at a high standard.

What do you think is the most challenging aspect of a superintendent's role today?

Thinking about the course 24/7, whether it's hoping things will hold up overnight or did I put enough water on last night, to worrying about the jobs required the next day/week/month. It's hard to stop your mind sometimes.

What have you worked on personally in recent times to improve your skills as a superintendent? My communication skills and how I explain things to people. Especially with required jobs as they can easily be taken differently and you can have different outcomes at the finish. The main thing is being clear and precise.

What gives you the most job satisfaction?

Just watching people enjoy the golf course we present for them. Hearing people say how much they enjoyed the challenge and that they can't wait to play it again. It's also nice to hear when people comment that they are liking the changes we are making to the course and the condition it is in.

Most pleasing/rewarding moment during your time at Mount Compass to date?

Watching us climb the course rankings – in the 2020 Australian Golf Digest Top 100 rankings we jumped up 23 places. Seeing how much time and effort everyone puts into the place, it's extremely rewarding to see the guys get the recognition they deserve. 🏌️

AT A GLANCE – MOUNT COMPASS GOLF COURSE, SA

Course specs: Par 72, 6116m, 19 hectares of maintained turf. Greens are Pennlinks bent. Tees and fairways predominantly Santa Ana couchgrass with back nine oversown with ryegrass.

Members/annual rounds: 136/22,000.

Major tournaments/events: PGA Trainee events.

Staff structure: Matt Overall (superintendent), Chris Baker (assistant), David Roser and Tomas Vitkunas.

Climate/rainfall/terrain/soil types: 950mm annual rainfall. Terrain reasonably flat but has a few high points. Slowly getting to a links style course. Pure sand (built on a sand mine).

Water sources/irrigation: Three bores which can pump water into two major dams. We have water run offs that also fill the dams, but if we have a dry spell we can utilise the bore pumps. Irrigation system comprises of

two pump sheds with four Grundfos CRNE pumps in each which were installed 2.5 years ago. The pumps at our desired rate usually use 66m³/hour and each pump will run at around 87 per cent. We use approximately 90ML annually.

Cutting heights/regimes: Greens 3.25mm, tees/surrounds/fairways 10mm and roughs 50mm.

Renovations: Currently we have a major renovation each year in October where we core our greens with 5/8" tines. We have contractors (Glenelg Turf Ace) come in with four guys and they core, harvest and topdress for us, leaving us to rub greens and put out granular fertiliser and gypsum. This is done to allow us to get it all completed within the day as it's the only day we close the course. We scarify our tees every year and have done the odd fairway or two in previous years, but again, due to time management,

that varies each year. Currently we are in line to purchase a Pro Core to be able to ninja tine and verti-drain our greens and other areas on course more often.

Major disease pressures: With Mount Compass having more rainfall than nearby Adelaide, we have trouble with dollar spot and fusarium throughout the wetter months of the year. We are currently more reactive than proactive due to needing to put more money into other areas. As long as we have a keen eye for any breakout, we have been able to stay on top of it before anything becomes major.

Nutrition: At the moment we have a fertiliser programme which has calcium added into it for our greens that has us spraying them roughly every six weeks, weather dependent. Tees, fairways and surrounds we fertilise quarterly, but that's also growth dependent and can vary.

Lexicon® Intrinsic® Brand Fungicide 'The Ace Up Your Sleeve this Winter'

The autumn to winter transition; a time of crisp mornings, clear days, and foliar disease. As the heat and environmental pressure of summer becomes a distant memory and we observe cool, dewy mornings with slower surface drying time, our disease issues shift as well.

This slightly extended leaf wetness can leave the door ajar for some pathogens to become established and begin impacting our turf. Often this can mean chasing our tails with constant short-term fungicide applications in an attempt to ensure back-to-back protective coverage.

But things are different this year. This time we have a card to play that will quite literally clean up everything, and last for longer. Lexicon Intrinsic Brand Fungicide is a new combination fungicide from BASF that has got you well and truly covered offering both speed and duration of protection.

This is a product that has many potential aces up its sleeve, especially during the autumn to winter window when the dual active ingredients fluxapyroxad and pyraclostrobin are about as good as it gets protection-wise for dealing with seasonal vulnerability.

Here are three key reasons why Lexicon Intrinsic Brand Fungicide is the perfect foundation of your autumn and winter plant protection program.

Powerful residual - Lexicon Intrinsic Brand Fungicide controls diseases for up to 28 days, providing the confidence that comes with long-lasting and reliable control delivered by two unique

characteristics. Firstly, the intrinsic activity and strong affinity of the unique strobilurin chemistry (pyraclostrobin) which binds and holds to the leaf cuticle forming a barrier to fungal infection whilst providing advanced plant health benefits. Secondly, the mobility and responsiveness of the premium SDHI chemistry (fluxapyroxad) to concurrently treat active infections and prevent further fungal activity.

Broad-spectrum foundation - With its broad-spectrum control profile, this Lexicon Intrinsic Brand Fungicide is the perfect foundation product for enhancing the overall performance of your spray program. Two modes of action, a generous breadth of diseases covered by each, positive crossovers in coverage and a highly complementary interaction results in a very powerful package.

More resilient turf - Lexicon Intrinsic Brand Fungicide encourages faster recovery from stressors enhancing the turfs' ability to bounce back from wear, renovations, and other biotic and abiotic pressures. In addition to achieving the disease coverage you expect, you get additional Intrinsic® plant health benefits aimed at optimising health, growth, and turf performance.



Speak to your local Nuturf Territory Manager or visit nuturf.com.au for more information on Lexicon® Intrinsic® Brand Fungicide.

STA VIC



STA Victoria wishes to congratulate **Cooper Leemon** who has been named as our Graduate of the Year Award recipient. We wish Cooper good luck in the final interview for the STA Australia Sports Turf Graduate of the Year Award, presented by Toro Australia, which will be announced at the Gold Coast conference in June.

Cooper studied at Melbourne Polytechnic and started his apprenticeship in September 2017 at the Sale Turf Club as a casual for several years. After completing his first year he was successful in securing a job with the Melbourne Cricket Club and since then has worked at all the club's venues and is a valued member of the turf team. Cooper has gained experience from working under some of the best curators in the turf industry which has opened his eyes to the opportunities available in the industry. Along the way Cooper also achieved a Diploma of Sports Turf Management.

In May, STA Victoria hosted its first face-to-face event since the 2020 COVID lockdown, with Ballarat's Mars Stadium hosting the Regional Seminar, sponsored by Mentay. A zero-degree day did not deter delegates from attending and Mars Stadium shone brightly and provided an excellent venue for networking. Dale and Tristan from Mentay set up a ride-on roller and a pedestrian absorption roller on the oval close by, enabling delegates to wander among the equipment.

Attendees heard from Ballarat City Council stadium manager **Greg Spratling** on the development of grounds in the area. Among some of the information he provided included;

- Mars Stadium is a sand over gravel field, with sand depth of 300mm. Drainage comprises of lateral flat pipe spacing 5m, depth varying between 150-400mm. Irrigation – Rain Bird 8005. Santa Ana couchgrass base oversown with ryegrass (Colosseum and Soprano).

GCSAQ



On 10 May, the GCSAQ held its first members event of 2021 at Teven Valley Golf Course. The event was a 'walk 'n' talk' and it was fantastic to see around 25 turf professionals attending. Teven Valley superintendent **Paul Gumbleton** delivered a detailed overview about how he and his team transformed a sleepy little nine-hole golf course into what it is today. Following the presentation, guests were treated to a delicious



Mars Stadium in Ballarat hosted the STA Victoria Regional Seminar in May

- Total usage in the City of Ballarat in 2016 was 846 games, increasing to over 1100 in 2019, partly spurred by an increase in women's matches and interstate interest.

Attendees also heard from **Dr Phil Ford** (Melbourne Polytechnic) who shared 10 key differences between C₃ and C₄ turf grasses. Some interesting points included;

- C₄ turfgrasses don't suffer heat stress;
- Most C₄ turfgrasses have rhizomes;
- C₃ turfgrasses are very inflexible regarding water budget (8ML/ha per summer). C₄ turfgrasses are very flexible (0-5ML/ha per summer)
- You can oversow a C₄ with a C₃ for better winter performance but not the other way around for better summer performance.
- There was also a discussion on the traction of different grasses and ACL injuries in AFL. The AFL theory was that couchgrass causes ACL injury because of high rotational factor. In reality there are more differences between footy boots than between C₃ and C₄ grasses.

Delegates were also treated to a Q&A session with Greg Spratling and **Jayde Robson** (groundsperson at Ballarat CC and 2019 Victorian Sports Turf Graduate of the Year). We also heard fantastic stories from **Greg Wakeling** and **Jenna Fowlie** of Ballarat Cricket Association about the rise of women's cricket in the region.

Paul Deller and **Chris Deppeler** (The Gordon Institute of TAFE) discussed the transition to the new Sports Turf Management Training Package and the changes made to core units and electives being taught.

BBQ lunch thanks to GCSAQ sponsor Nuturf, nine holes of golf and a few beverages.

The GCSAQ committee is working on a number of member events over the next few months including:

- ASTMA conference (Gold Coast, June): The GCSAQ committee will be hosting a private function prior to the ASTMA conference. Members will be invited to enjoy complimentary drinks and canapes.

Jessie Doull, the facilities and planning manager at the AFL, discussed AFL Victoria's investment into regional Victorian community football and their priorities which include;

- Priority 1: Increase quality/functionality and maximise carrying capacity of existing facilities.
- Priority 2: Plan and develop new facilities in key growth areas.
- Priority 3: Capitalise on opportunities to create regional hubs, provide venues for talent pathways.
- Priority 4: Ensure facilities are catering for the diversity of participants, particularly women.
- Priority 5: Enhance govt relationships.

Andrew Pirchan, commercial partnerships and sales manager at Western United FC, also gave us an outline of stadium development and growth in Wyndham City.

The next major STA Victoria event will be our 28 July Sports Turf Seminar at the MCG, sponsored by Bayer. We are currently putting together a jam-packed programme and have the feeling that the audience will be huge, so get your bookings in as soon as possible. The member rate is worth getting, so check to make sure your membership is up to date. Go to the STA Victoria website for the registration form – www.vicsportsturf.asn.au.

If you are currently a member and want to contribute to the turf industry, STA Victoria has a vacancy on the general committee. Please apply to Jan Fenton via email vic@staaus.com.au. Nominations must be received by 30 June.

COMMITTEE, STA VICTORIA

- General manager and superintendents education and golf event: Keperra Golf Club, August.

Members are reminded to keep an eye on our social channels as well as their inboxes for further updates on social and member events. See you all on the Gold Coast.

PAUL MCLEAN
PRESIDENT, GCSAQ

Autumn is always a welcome relief in Perth, as I'm sure it is around the whole country. No overnight winds, crisp mornings, sunny days, some good rains and dew on the grass is good to have after a long summer.

In mid-April the association held its first event for the year, an 'Understanding Fertilisers' morning hosted by **John Forrest**. May's event was the annual Trade Challenge golf day. This year, 22 teams played the four-ball Ambrose event at Araluen Golf Resort which was in fantastic condition thanks to **Steve Abbott** and his small crew.

With a few spectators, we had 90 people in attendance which is the biggest day the GCSAWA has ever held. Greenworkz, led by **Stephen Dartnall** with **Nick Kinley** (CSTM, Hartfield CC), **Dave Cassidy** (CSTM, The Cut) and **Liam Somers** (Mt Lawley GC), won the day with Globe and GTS filling the places.

May and June is Pro-Am season in WA, kicking off with the PGA Professional Championship at Mosman Park on 14 May



Trade Challenge golf day winners (from left) Dave Cassidy, Stephen Dartnall, Nick Kinley and Liam Somers

and along the way stopping at courses across Perth, down in the south west, before venturing north all the way to Broome with a few stops along the way. The final event is at Wembley Golf Complex on 6 July. Good luck to all the host clubs and superintendents.

Registrations for the Margaret River conference (8-11 August) are coming in thick and fast. It's encouraging to see a lot of East

Coast based trades and superintendents signed up and making the trip west to be a part of it. We definitely appreciate the support. I look forward to seeing many of you on the Gold Coast for the Australian Sports Turf Management Conference.

SHANE BAKER
PRESIDENT, GCSAWA

STA ACT

It has been a dry and frosty April in the ACT with the region recording less than 5mm of rainfall in parts. We broke records with six consecutive nights below 0°C compared to last year's five. With that in mind, the days have been brilliant with plenty of sun and warmer temperatures – good for turf managers across the region although hand watering was still happening late in April.

As most will know by now, long-standing Manuka Oval curator **Brad van Dam** resigned from his role and exited the industry in late April. His turf career spanned almost three decades with 13 of those years at the reins of Manuka Oval. Thanks to Brad, Manuka was put on the sporting map, becoming the 11th Australian Test match venue as well as playing a huge role in the Big Bash League evolution.

Off the field, Brad played a huge part as president of STA ACT, liaising with STA Australia, the Australian Sports Turf Managers Association and sponsors, while still looking after one of Canberra's major sporting assets. Brad has played a major role in organising association golf days and education seminars among other events for association members to enjoy. Brad's 'can-do' attitude rubbed off on all who knew him and he was a huge mentor and role model to younger turfies.

On behalf of STA ACT, its members, sponsors and all within the turf industry across Australia, we would like to thank Brad for his tireless work not only on the tools but also behind the scenes and wish him the best of luck in his new career as a project manager. As Brad was the incumbent president of the STA ACT, he has had to resign from the position, with the committee currently in the process of appointing a new president.

We welcome back to the ACT **Tom Fahey** who has been appointed as Manuka Oval's new head curator. Funnily enough, Tom worked as Brad's offsider for two years between 2016-2018 at Manuka. We know Tom will be a valuable asset yet again to the ACT turf industry and will carry on the fantastic legacy that Brad has left behind.

Our 2020 Turf Graduate of the Year Award interviews were held during March with four quality apprentices nominated by **Bruce Davies** (CIT), **Todd Russell** (Federal GC), **Chris Earle** (Moruya GC), **Michael Jordan** (Racing NSW/Queanbeyan) and myself, **James Correll** (Federal GC), were the nominees. All held themselves very well in their interviews and should be very pleased with their attitude towards the industry and their profession.

I was very privileged to be named the winner and will represent the association in the ASTMA Graduate of the Year Award, sponsored by Toro, at the upcoming Gold Coast conference. I would like to thank **Rob Cooper** (Living Turf) for the sponsorship of the ACT graduate award, as well as **Jon Tait** and **Scott Fogg** for interviewing the nominees.

The committee is in the final stages of planning our 2021 STA ACT Education Seminar which will be held at the Raiders Club Belconnen on 28 July. Speakers will include **Simon Snedden**, who recently hosted the Australian Junior Amateur Championships at Gold Creek Country Club, **Pat Wilson** (Pambula-Merimbula Golf Club) on recycled water, as well as speakers on irrigation and couchgrass trials in Canberra. Our sponsors will also have machinery demonstrations for anyone who may be interested.

If anyone wants to attend, please contact Bruce Davies (brucedavies@cit.edu.au) or myself (correll_1996@hotmail.com). More information regarding online registration and the finer details of the event will be posted on the STA ACT Facebook page.

JAMES CORRELL
COMMITTEE, STA ACT

VGCSA

The 2021 VGCSA Annual General Meeting at Woodlands Golf Club in early May was a great day of golf, a course walk and lunch presentations, including guest speaker **Nick O'Hern**. Nick's presentation was a real highlight and touched on his time as a touring professional, overcoming nerves and anxiety and beating Tiger Woods twice in match play. Thanks to host superintendent **Barry Proctor** for allowing access to Woodlands and conducting a very informative course walk. The day was capped at 100 attendees, with many braving Melbourne's fickle weather to play golf.

At the AGM which followed, the VGCSA committee was confirmed for the next 12 months. The committee comprises:

- **President:** Shane Greenhill (Sorrento)
- **Vice-president:** Simon Muller (The Dunes)
- **Secretary:** Travis Scott (Riversdale)
- **Treasurer:** Adam Lamb (Barwon Heads)
- **Committee:** Hayden Mead (Kingston Heath), Tay Wilson (Koorringal) and Clint Raven (Yarra Yarra)

We bid goodbye to Commonwealth Golf Club superintendent **John Mann** who ended his term on the committee. John joined in January 2017 and served as secretary from 2018-2021. We thank him sincerely for his efforts. We are delighted to welcome

new committee member **Clint Raven**, superintendent of The Yarra Yarra Golf Club, who will no doubt be a great contributor to the VGCSA committee in the coming years.

There has been an enthusiastic response to the introduction of the VGCSA course staff training days to be held across two weeks in late July. Week one will present three sessions on the topic of irrigation with speaker **Jim Waring** (Tees & Greens) plus sponsor presentations by Rain Bird and Toro Australia. Week two will see two educational sessions on turf equipment management with speakers **Dean Hill**, **Michael Licht** and key presenter **Todd Murphy**. The high demand to attend both events (there is currently a waiting list) demonstrates a need among our members. These introductory sessions will make way for a broader training programme in 2022 covering further topics.

As this edition was going to print, the VGCSA was gearing up to host the 2IC/3IC/ Ground Staff Education Day at Cranbourne Golf Club on Monday 7 June. Guest speakers include **Guy Chapple** (Well Played Golf Business Consultancy), **Tom Bickerdike** (superintendent Cheltenham GC) and **Simon Blagg** (assistant superintendent The Lakes Golf Club, NSW). Completing a very informative day will be presentations from

sponsors John Deere and Colin Campbell Chemicals and a course walk by host superintendent James Stewart.

Final touches are also being made to the August Country Meeting schedule at Murray Downs Golf and Country Club from 2-4 August. The final meeting programme will be launched in early July. So far our confirmed guest speakers are Glenelg Golf Club superintendent **Tim Warren** and Royal Melbourne Golf Club director of courses **Richard Forsyth**. After missing out in 2020, we are looking forward to finally getting to Murray Downs for a terrific two-day event.

Another bonus to the meeting is the introduction of a turf technicians programme. In discussions with the Victorian Turf Equipment Technicians Association, we will be running concurrent educational sessions on day two specifically for turf equipment technicians with presentations by ADE Turf Equipment/Jacobsen, Glenmac/John Deere and Toro Australia. A focus on the day will include both battery and hybrid machinery. We encourage all clubs to send their technicians along.

SHANE GREENHILL
PRESIDENT, VGCSA

NSWGC SA

The NSWGC SA held its Annual Ambrose Event and Trade Show on 5 May at Club Catalina on the Far South Coast of NSW. Superintendent **Dennis Grounds** had the course in fantastic condition for the event and the club went above and beyond to cater for us.

The event saw 88 golfers tee off in groups of eight per hole which provided a great chance to network and socialise after what has been a pretty tough 18 months, especially for Dennis and the club who have not only dealt with COVID but were also impacted by bushfires and then floods. Evidence of the fires was still there behind the newly constructed 15th hole.

The day was well supported by the trade with a company representative on each tee displaying their products and speaking with attendees. The event was capped off with 107 attendees socialising in the clubhouse before dinner and presentations, with live music for entertainment. Special mention goes to

NSWGC SA Board member **Pat Wilson** for organising the event. Pat put a lot of thought and time into this event and it was evident by how smoothly the day went.

Congratulations to the winners of the day **Scott Fogg**, **Jake Gibbs**, **Simon Snedden** and **Peter Dunn** (\$250 voucher

each) who notched up a score of 14-under to beat the team of **Luke Partridge**, **Shane Summerhayes**, **Justin Bradbury** and **Chris Boggs**. Third place went to the team of **Simon Laurence**, **Matt White**, **Jeff Sherrit** and **Dan Stott**. Other winners on the day were:

- NTPs: Snedden, James Newell, Lee Sutherland and Simon Blagg.
- Longest drives: Trent Crittenden and Louie Sutherland.
- Straightest drive: Mark Pullinger.
- Raffle winner: Will Ockenden (\$560 was raised for Beyond Blue).

The NSWGC SA would like to thank the major sponsors of the event – PJC SportsTurf, Turfcare Australia, Syngenta and Elite Sand and Soil. Also, all the tee exhibitors that took the time to set up their products to showcase to the attendees, it was great to see everyone enjoying the day.

NATHAN BRADBURY
PRESIDENT, NSWGC SA

ON THE MOVE...

PHIL BEAL: The four-time Australian Open host superintendent (2014, 2015, 2017 and 2019) announced his resignation from The Australian Golf Club in April and will finishing up in October after 11 years at the club.

MICHAEL DENNIS: Resigned as superintendent Royal Perth GC, WA.

TERRY DEWHURST: Appointed superintendent Murray Downs G&CC, Vic.

JEFF MCMANUS: Resigned as superintendent Windsor CC, NSW.

TAYLOR WILLS: Appointed assistant superintendent Brookwater GC, Qld.

KUBOTA
BARONESS

A CUT ABOVE PERFECTION

BARONESS

A SURFACE TO ENVY

The Baroness LM551 from Kubota makes light work of golf course maintenance, delivering unwavering precision from start to finish.

0.9% FINANCE
PA UP TO 60 MONTHS*

ACROSS THE BARONESS RANGE

See the Kubota/Baroness range at the **Turf Management Conference** in June 2021.



LM551

LIGHT-WEIGHT FAIRWAY MOWER

MOWING HEIGHT

6-20mm (LH52) and 8.45mm (LH62)

UNCUT TURNING RADIUS

147cm (front inside cutting unit)

MIN. TURNING RADIUS

180cm (front wheel, inside tyre)

CUSTOM CUTTING UNIT OPTIONS

Cut width - 245cm

OPERATOR AREA

Comfortable and ergonomic operator area

FUEL TANK CAPACITY

51 litres



LM101



L4240HDC



RTV-X900



LM315



F3690



LM2700

kubota.com.au

FOR MORE INFO
PLEASE CONTACT TRENT SAUNDERS

0437 814 392
BARONESS@KUBOTA.COM.AU

For Earth, For Life
Kubota

*Offer is available for business borrowers only. This 0.90% p.a. finance rate offer is only available with a minimum 10% deposit, 48 monthly repayments and minimum financed amount of \$4,000. Terms, conditions, fees, charges and credit criteria apply. Different term and different deposit may result in a different rate. Credit provided by Kubota Australia Pty Ltd ABN 72005300621. This finance offer is available until 30/06/21 and applies to new Baroness series models.

Leo Barber, general manager and superintendent at Paraparaumu Beach Golf Club in NZ, delves into the world of podcasts and highlights a few which his fellow turfies may find enlightening.

We are all acutely aware that regardless of the country we live in, right now the world is going through an unprecedented period of upheaval and this of course is bringing with it a large degree of disruption to many industries as we know it. In many ways this was happening prior to COVID-19 and, in some cases, the last year has simply accelerated the change due to acute financial necessity. Businesses are trying things and technology is making leaps and bounds.

Last year I woke to the horrifying news that cricket was no longer going to be broadcast over the radio here in Kiwi-land with our sports channel shelving it due to increasing costs and dropping listenership. An avid listener of sport growing up on the 'wireless', I look back with fondness at my childhood and, like many I am sure, it was a part of my life since birth.

At stages the transistor radio was almost connected by an umbilical cord as it followed the family to the beach, the garden, the garage or observing a DIY project while the dulcet tones of often long-serving, well-known voices kept us all company through the airwaves. Media, however, is one of those industries that has faced significant change and while the printed news came almost exclusively through the letterbox and the cricket through the transistor, nowadays the digital world is providing faster and more varied options for people to digest news and information.

CHECK OUT THESE OTHER PODCASTS...

TurPhdudes (Twitter - @TurPHDudes):

Topics focus on turf health, nutrition, control solutions and the latest in academic research.

The Greening Out Podcast (Instagram

@greenkeeper_jenno): NT-based Aussie greenkeeper Alex Jensen chewing the fat.

Frankly Speaking on TurfNet (Twitter - @

turfnet) and Cornell Turfgrass Turf Show (Twitter - @Cornell_Turf): The man, the legend that is Cornell University turf expert Dr Frank Rossi.

Superintendent Radio Network (Twitter - @GCIPodcasts): Podcast from US-based Golf



Tuning in...

My father constantly laments the lack of community sport in metropolitan newspapers grappling with these changes in the modern world, yet via social media there has never been more discussion and information on this form of sport and faster delivery than traditional forms with just the simple click of a 'follow'.

Golf in my part of the world (and I suspect yours) has likewise struggled for coverage in recent times, but lately (with the help of the kids admittedly) I have discovered podcasts and found that golf is incredibly well covered through this medium. Whether you wish to listen to forums on instruction, current tour news, the personalities or my particular interests of architecture and course maintenance, there is something for everyone.

Once you have downloaded the app (or in many cases the app is already there on your phone), it's as easy as searching for your subject, selecting your option and listening. Yes, I know in many instances I will be preaching to the converted here and giving away my age, but I am sure there will also be many 'old dogs' looking for some new tricks.

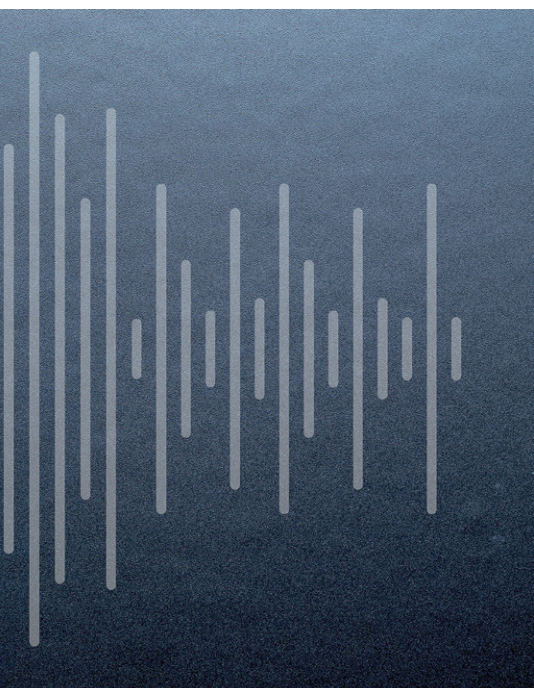
If we drill down from sport, turf management goes hand in hand and this subject is well catered for via podcasts. The following list, while by no means exhaustive, contains a brief summary of but a few of my favourites that I think would add some value to anyone working in the turf management industry – golf, sportsfields or racing.

THE FRIED EGG

The Fried Egg is one I really enjoy and hosted by the passionate American Andy Johnson. It is concentrated on course architecture and turf management. He interviews designers and greenkeepers and those that are keen students of discussions around playability. He is currently highlighting a superintendent a month which are extremely relatable listens for all of those working on the tools.

TURFNET RADIO/ FRANKLY SPEAKING

TurfNet Radio covers the spectrum and its features are broad and wide ranging. Yes, they meet the people behind the tools, but they



MAKSYM/STOCK.ADOBE.COM

get right into the management and discuss everything from grass selection to interviewing techniques and how to select the latest products. It is a massive resource and features US personalities Dr Frank Rossi's Frankly Speaking podcast and Dave Wilber's Turfgrass Zealot Project. The most recent Frankly Speaking podcast (April 2021) features leading Australian agronomist John Neylan.

INSIDE THE ROPES

Recently celebrating its 200th episode, Golf Australia's Inside the Ropes features hosts Andy Maher and experienced golf journalists Mark Hayes and Martin Blake who discuss the game not only in Australia but right around the world. Among the regular co-hosts are Mike Clayton who, as we know, is a passionate student of the history of the game and its architecture and always provides a fascinating insight being both a former Tour player and a course designer.

THE GOOD-GOOD GOLF PODCAST, STATE OF THE GAME AND THE THING ABOUT GOLF

All part of the Talking Golf podcast network, these three extremely insightful shows are hosted by multiple award-winning Australian golf journalist Rod Morri. In the Good-Good Golf Podcast, Morri is joined by Adrian Logue

and Derek Duncan for what they describe as one of the most eclectic golf podcasts going around, where golf nerds can shamelessly congregate to discuss everything to do with the game.

Considered one of original and best, The State of the Game podcast has been running since 2012 and is now up to 111 episodes. Morri is joined by fellow hosts Mike Clayton and Geoff Shackelford in a "golf podcast that talks about stuff that matters." The Thing About Golf features Morri on his own interviewing a fascinating range of people in the golf industry, from players and administrators, to general managers and course architects.

BEHIND THE TURF

Produced by Nadeem Zreikat from Colin Campbell (Chemicals), Behind the Turf is a podcast for turf and landscape managers. It brings various topics from around the turf world with interviews from leading university professors, current thoughts on topics effecting the industry as well as various interviews with prominent turf managers in Australia.

THE GOLFING GREENKEEPER

This is the home-grown creation of former Katoomba superintendent Steve Smith. His podcast has a great local flavour and is about promoting golf courses, greenkeeping and architecture along with all the facets that make up the wonderful game of golf.

THE ERIK ANDERS LANG SHOW

This is a further string to Erik's impressive bow that includes his very popular YouTube series 'Adventures in Golf' that has featured golf courses right around the world, including my own track here in New Zealand. Erik is great at getting to know the person that sits behind the story.

DIRT ON TURF

The 'Dirt on Turf' gets its hands filthy interviewing turf professionals weekly right across the industry. They cover off the history of their career, the adversity faced in today's turf industry, highs and lows, cultural practices they live by, the importance of continuing education and much more. They interview sports turf managers and turf product and equipment representatives and are well worth a listen.

THE SHACK SHOW

Whenever golf is in the news or just when he feels like getting something off his chest, Geoff Shackelford covers the big issues in golf, talks to the smartest voices and offers insights into the sport's more fascinating stories via his 'Shack Show' podcast. Seeking to offer shorter but more frequent podcasts in contrast to the traditional 90-minute back-and-forth, The Shack Show channels Shackelford's passion for both big picture topics and fun insider fodder to inject your podcast with just enough foresight to spice up your lunchroom debates.

THE TALKING GREENKEEPER

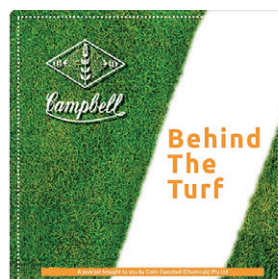
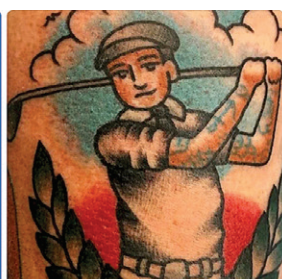
Produced by US superintendent and Golfdom contributor Joe Gulotti, The Talking Greenkeeper is a greenkeeper's take on everything that is happening in golf. He conducts long form discussions with any person that has an interesting or valid take pertaining to the oldest game in the world – greenkeepers, golf professionals, players, general managers, consultants, bag room attendants, caddies, professors, agronomists, even chefs!

PLUG IN

So, once you have selected your podcast from the list above, Bluetooth connection allows you to play it through your car radio, which is perfect for the drive into or out of work, or through headphones when you are out walking and 'getting back to nature', or, depending on your club's policy, you could also play them through your ear protectors on a machine as you are working.

Unfortunately, my drive to and from work is no more than three minutes and, being largely desk bound in my dual role here at Paraparamu Beach, the listening while I work option also presents limitations, hence it takes me a little longer to get through an episode. I have, however, found them a perfect accompaniment to a walk or a great way to unwind before some sleep, so whatever life allows for your own personal circumstances these are well worth a dabble if you aren't listening already.

Hopefully the above suggestions help you cast your thirst for knowledge a little wider and provide a helpful guide for easing you into the rapidly developing and evolving world of podcasts. 📻



PEOPLE FIRST: DEVELOPING AN ENGAGED SAFETY CULTURE THROUGH EFFECTIVE LEADERSHIP

Author: Ben Gibson

Pages: 245

Publisher: The Toolbox Team

RRP: \$25.95 + postage (incl. audiobook)

Leadership in the sports turf industry is challenging given its dynamic nature and often stressful environment. With so much happening at any point in time, and with so many variables beyond a turf manager's control, the people in their teams ultimately determine their success or otherwise. A turf manager's ability to lead, influence and engage their team is essential to building a thriving, safe and high-performing culture.

Written by The Toolbox Team principal Ben Gibson, **'People First: Developing an engaged safety culture through effective leadership'** is designed to be a short, sharp, practical reference book to a range of research, industry examples, leadership and safety management concepts for professional sports turf managers. Featuring expert commentary from more than 40 Australian and New Zealand sports turf managers and a range of practical tools for the reader to implement today in life and work, *People First* is 'hands on' leadership with real examples of success, failure, learning and vulnerability.

Gibson has utilised the many interactions he and his Toolbox Team have had with sports turf managers through their workshops and leadership seminars over the years to craft a fabulous, and very affordable, resource for modern day sports turf managers. The idea for the book came about a few years ago after receiving a number of enquiries about his leadership forums from turf managers who were unable to attend. That got Gibson to thinking that if he started writing down some of the ideas discussed at the forums and invite contribution from those turf managers he had met, he might have something of interest.

After four months in the planning, Gibson typed his first word on Christmas Eve 2020 and over the next 35 days smashed out what is the first such book of its kind for the Australasian sports turf industry. Put simply, it is a must-read for those who want to develop the best culture possible and engender a positive working environment through effective leadership techniques.

To help him espouse such principles, the list of people that Gibson has drawn upon for the book is nothing short of impressive. In the opening pages he lists those who have contributed to the book and it is very much a 'who's who' of the industry Down Under. From experienced industry veterans who have notched up decades in the game and who have had to experience many of the ups and downs that come with being a leader, through to those just starting out on

their superintendent and leadership journey, each chapter contains some really honest and enlightening quotes by these practitioners to back up the concepts that Gibson presents.

The book is presented in two distinct parts – 'Leadership' and 'Build Your Safety Culture' – with those then broken down into specific chapters. The Leadership section looks at the topics of what is leadership, communication, resilience and psychological safety, leading generations, the courage and confidence to lead, the paradox of failure and leadership models. The 'Build Your Safety Culture' section looks at the concepts of commitment, consultation, ownership, culture and data.

One of the endearing qualities of the book is the manner in which Gibson intertwines stories and experiences from his personal life and relating those back to the concepts he presents. Indeed, his opening salvo outlining his experiences surfing the big breaks on

Hawaii's famous North Shore is a fantastic way to kick off the book and throughout the following pages there are further instances where his exploits with the long board crop up. Gibson's personal stories and concepts are backed up, as mentioned, by his panel of experts, while at the end of each chapter there are handy summaries of the key points.

"People First should be in every turf facility across the country," comments Phil Beal, course superintendent at The Australian Golf Club in Sydney. "Great research, real-world examples and a unique insight into the challenges of our industry."

People First is available through www.thetoolboxteam.com.au/book. For \$25.95 + postage, purchase also includes access to the audiobook version. In another great initiative, Gibson is donating 100 per cent of the profit from the sale of *People First* to charity; even more reason to grab yourself a copy. 📖





LIVING TURF

SCIENTIFIC TURF MANAGEMENT

Better turf performance with
less environmental impact.
Every step of the way.

Seek first to understand



TURF
FORENSICS*



MY - RESULTS*



MY - CLIMATE*



See how your turf is feeling

POGO Pro+



Soil biology and nutrition

MATCHplay
QUALITY TURF



The business of turf management

 **TurfKeeper.com**
Measure Better, Manage Better

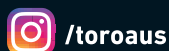
For more information contact your Living Turf Representative
1300 556 116 | www.livingturf.com

THE STRONG, SILENT TYPE: GREENMASTER® eTriFlex SERIES MOWERS



The all-new Greensmaster eTriFlex Series riding greensmowers provide all the innovative features of the original TriFlex and more. The eTriFlex line-up includes a Lithium-Ion powered and an Engine Generator model, with no onboard hydraulic fluid. The new Radius Dependent Speed (RDS™) System, in combination with the Lift-In-Turn cutting unit leveling feature virtually eliminates the effect known as "Triplex-Ring". This along with many new features provide added versatility, simplified service, and ultimately, more productivity.

For more information call 1800 356 372
www.toro.com.au



TORO