



Welcome to Melbourne

2022 Australian Sports Turf Management
Conference (20-23 June)

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North Course back in the limelight

Huntingdale tees up
2022 ASTMA Golf Championship

Future aces
FTMI Class of 2021

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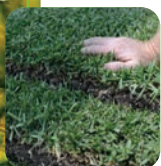
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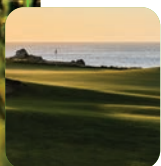
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COVER STORY STAYING IN THE HUNT

It may have been out of the tournament spotlight for a number of years now, but behind the scenes Huntingdale Golf Club is still pushing its claim as one of Melbourne’s premier Sandbelt facilities. Host venue of the 2022 ASTMA Golf Championship for the first time in the event’s history this June, ATM editor Brett Robinson catches up with long-serving Huntingdale superintendent Michael Freeman to look at some of the recent course projects undertaken and the exciting OCM masterplan works in the pipeline.

Cover: 2022 ASTMA Golf Championship host venue Huntingdale Golf Club. Pictured is the 8th.
Photo: Gary Lisbon (www.golfphotos.com.au)

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PHOTO: STUART HOCKING

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The long wet

The first half of 2022 has without question been one of the most challenging periods for turf managers along Australia's eastern seaboard. Persistent rain, widespread flooding and significantly reduced sunlight hours have turned the art and science of turf management into an absolute slog. Many golf courses have been closed for weeks on end – some for months – while maintenance crews have literally watched on as the grass has grown beneath their feet (and past their knees in some cases).

Outgoing Eastlake Golf Club superintendent Nathan Bradbury posted on Facebook on 28 April that his course, in Sydney's eastern suburbs, had recorded 1463mm of rain year-to-date. Out of the 118 days to that point, 66 had rain. Totals ranged from less than a millimetre through to one dump of 175mm. In March alone, rain fell 22 days out of 31.

Many golf courses and sports fields have been that sodden that maintenance equipment simply can't go out for fear of becoming bogged or causing damage to turf surfaces. It got to the point at one council ground in Sydney's Sutherland Shire where parents from the local junior rugby league club brought their lawn mowers from home to cut the field so their kids could play!

To put the challenging conditions into perspective, as I was putting this conference edition to bed, I received an email from John Nelson (CSTM), long-serving course superintendent at Grafton District Golf Club in northern NSW. Nelson has been at Grafton for an incredible 41 years. He joined the club as a 16-year-old apprentice in 1981 and three years on was promoted to assistant. Leaving the club for a few months in 1988, he returned in 1989 as superintendent and has been in that role ever since. This year marks his 33rd year in charge, a remarkable achievement.

Given the length of his tenure, Nelson has pretty much experienced it all. He's seen the club battle through times of financial hardship and, toughest of all, had to watch on helplessly as his course was ravaged by prolonged periods of drought. Nothing, however, has quite prepared him for the events of the past few months and the situation the club has had to endure.

Sent on 1 June, Nelson's email read...

"Dear Brett,

Hope you are well. Just thought I would give you a bit of information on the very unique situation we are in at the moment with the prolonged wet weather. Our course has effectively been closed since late February. From 24 February through until 14 March we were closed, before reopening for 11 days. We then closed again from 26 March. We were closed all of April, except for five days in the middle of the month when we were able to open nine holes to walkers only. We were then closed for all of May. As of today we are still closed and will be all this week, at least. In this time we have only had golfers on the course for one weekend.

We have had some substantial rain events in this time, particularly with the flooding in early March and late April. But it has not been so much the amount of rain but the fact nothing is getting a chance to dry out before we get more rain. Being a clay-based course that is totally saturated, it doesn't take much to wet it up again.

In the 40-odd years that I have worked here, I have never experienced anything like this for such a prolonged period. To get to the greens to maintain them, as best we can through all this, we have to tow the greens mower and Multi Pro around with our bunker rake machine (see photo).... I know a lot of other courses are in a similar predicament to ours and it's just another example of the many variables that we as superintendents have to deal with."



With the 2022 Australian Sports Turf Management Conference and Trade Exhibition in Melbourne just around the corner, I'm sure the event can't come soon enough for some. Given the widespread impact of the weather conditions in recent times, there will be plenty of similar stories to Nelson's no doubt shared and relayed throughout the week. I look forward to hearing some of those as well as catching up with all delegates and trade exhibition visitors at the Melbourne Convention and Exhibition Centre. It's all set for a great week. Enjoy the read...



Brett Robinson, Editor



Major initiatives set for launch at Melbourne 2022 conference

Always a highlight on the industry calendar is the Australian Sports Turf Management Conference and Trade Exhibition which this year promises to be a truly outstanding event in Melbourne. From 20-23 June, the Australian Sports Turf Managers Association (ASTMA) will partner with Golf Management Australia (GMA) to bring together two leading events and combine education offerings and networking events into one blockbuster conference and trade exhibition. With a forecasted 2000 people set to attend over the four days, it presents sports turf managers with the ideal opportunity to further their education, network with peers and make new industry connections.

Combining with Paul Vardy and his team at GMA, we have brought together a number of inspiring keynote speakers to share their experiences and learnings. They will complement the traditional golf, sportsfields and management streams and together will comprise over 180 hours of dedicated education relating to agronomy, leadership and management. It is very pleasing to see registrations at record levels and myself and the ASTMA and GMA teams look forward to welcoming everyone to the Melbourne Convention and Exhibition Centre. More information on the conference is included in this edition of ATM (see pages 28-43).

A feature of the annual conference is also the National Turf Industry Awards, where outstanding achievement in the profession is recognised at the awards dinner on Monday evening. This year the nominations received in each category have been of an extremely high calibre and has made the resultant judging a challenging prospect.



Australian Sports Turf Managers Association

There has been some truly exceptional performances and achievements by sports turf managers and their teams in recent times and we look forward to recognising the best of the best. Acknowledging those who have excelled in their profession, as well as highlighting the next generation through the Graduate of the Year Award, the awards night promises to be a memorable event and a great way to kick off the week in Melbourne.

PRODUCTIVE TIMES

The previous few months have seen the ASTMA team return to more 'normal' operations. The AGCSATech team, in particular, has been busy combining a large volume of consultancy assessments, workshops and presentations, along with managing existing and setting up various new research trials ahead of winter. We have also been visiting the flood impacted areas of New South Wales and Queensland and supporting several turf managers still undertaking remediation activities at their facilities several months on.

Among the ongoing research work is the vegetative couchgrass trial at Sorrento Golf Club on Victoria's Mornington Peninsula. The

trial plots have come through summer well and regular assessments have continued. Wear will be applied to all plots over the next 12 months to assess wear tolerance and recovery. The trial will go into a dry down next summer with no supplemental irrigation for several months to gauge drought tolerance and recovery potential. AGCSATech's **Tim Fankhauser** will be presenting an update on this trial work at the Melbourne conference.

Elsewhere, we have also been engaged in supporting a number of state associations as they return to hosting a series of education and trade days over the past few months. This is a very positive sign for the industry as these events are critical to the ongoing education of turf managers and networking opportunities.

At both a national and state level, memberships continue to experience strong growth over the past year. With the return of in-person events, I would strongly encourage all turf managers and the broader industry to support their state associations and make an effort to attend as many of the education days and networking opportunities as possible.

EXCITING INITIATIVES

In conjunction with planning for the Melbourne conference, the ASTMA team has also been focussed on continuing work to deliver our Strategic Plan. We are in the process of finalising some significant announcements that will be launched at the upcoming conference. Work has been underway for some time on delivering several of the initiatives outlined in the association's five-year Strategic Plan and we are truly excited about what lies ahead for members over the next 12-18 months.

As mentioned previously in our communications to the industry, we are prioritising initiatives that promote education and development, address labour challenges that the industry is currently experiencing and continue delivering environmental management and sustainability programs.

The conference will see the ASTMA announce the launch of two significant initiatives relating to these priority areas, following work we have completed with State and Territory governments over the past 12 months. Of particular focus in these areas, we will be launching several multi-year programs combining a range of short-term initiatives and continuous initiatives to drive outcomes relating to the level of support for attracting and retaining talent to the industry and delivery of education opportunities in the years ahead.

For those unable to make the conference, we will be outlining these initiatives in more detail in the next edition of ATM. For those that can, I look forward to catching up with you. 🌱



Among AGCSATech's ongoing research work is the vegetative couchgrass trial at Sorrento Golf Club



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**AUSTRALIAN SPORTS TURF MANAGEMENT
CONFERENCE & TRADE EXHIBITION**

MELBOURNE 2022



Best on ground

ATM showcases some of the best social media images from around the industry in recent months.

ANTHONY MILLS

"172mm of rain fell after renovations, causing a lot of sand movement on greens. Staff spent all day, with drag mats, level lawns and blowers getting the greens ready for golf. A great effort by the guys." (The horror run of wet weather in NSW hampered all manner of course maintenance operations, among them greens renovations at The Lakes Golf Club in Sydney pictured above.)



LINCOLN COOMBES

"Why would you go electric when hydraulic is available?!" (Royal Pines superintendent Lincoln Coombes bemoans one of those days...)

HAYDEN GARN

"What about these legend dads!? We wouldn't have been able to play at Scylla Bay Oval as council haven't been able to mow it for months due to sodden grounds." (Parents from the Como-Jannali Junior Rugby League Club in Sydney take matters into their own hands to get their local ground cut.)



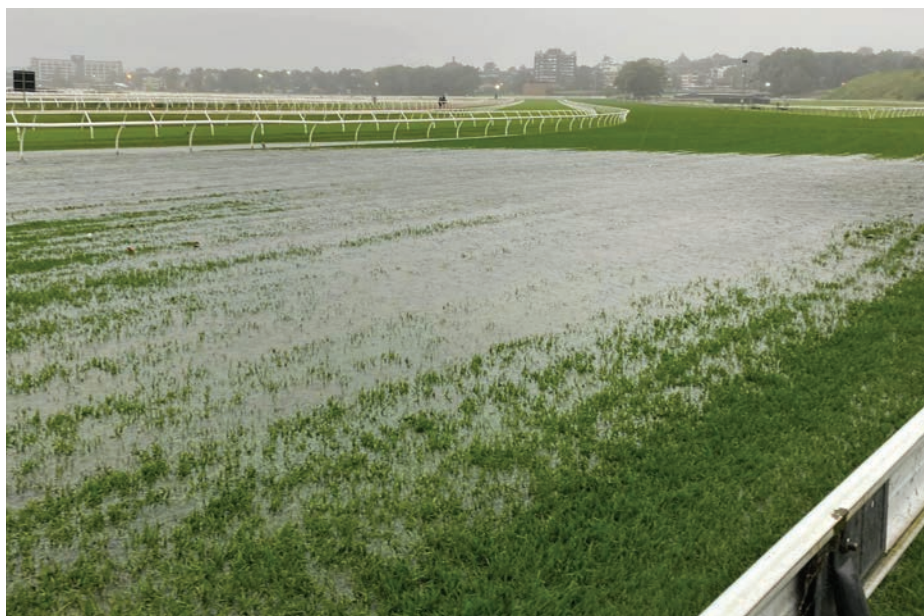
DARRYL JEFFREY

"What an art sports field curation is. From post Easter Show battle scars to AFL elite level surface in three weeks. A credit to the amazing grounds team at GIANTS Stadium." (Sydney Showgrounds GM Darryl Jeffrey pays tribute to head curator Steven King and his team for getting the ground back to AFL level ahead of Leon Cameron's last game in charge of the GWS Giants.)



CAMERON SMITH

"Happy Easter from The Doon!" (Sydney's Bonnie Doon GC in its autumnal splendour.)



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				9	9.5							
2			26	175								
3		13	51.5									
4			9									
5		6	9.5									
6	21	3	5									
7	2	7.5	46	140								
8	36.5	15	67.5	34								
9	1.5	6.5	77	22.5								
10	2			3.5								
11		4.5										
12		3										
13	3.5	8	5	9								
14	10			12.5								
15				5								
16	2			8.5								
17				1.2								
18		2	4.5									
19	6	1	1									
20	7.5			13								
21		2										
22	1.5	12.0		9								
23		54		5								
24		28	19.5	1								
25		21	19	6								
26	5			2.5								
27		6.8	6.5	19								
28				47.5								
29				45.5								
30				19								
Total Rain	130	36.5	526									
118 Days	130	43.5	1077.6									
118 Days	98.5	43.5	166									

NATHAN BRADBURY

"19mm rain overnight, 1463mm year to date, 66 days out of 118 possible we have had rain. Groundhog Day!" (The rainfall chart at Eastlake Golf Club in Sydney has been getting a workout so far in 2022.)

MICHAEL WOOD

"It has been some of the most difficult weather conditions in recent history but I'm so proud of the staff at Randwick and their abilities. Racing wouldn't have been possible without their efforts, with over 32 million litres of rain falling on the track over the past two weeks alone." (Royal Randwick track manager Michael Wood and his team did a remarkable job to host The Star Championships across two weekends in early April – 20 races including eight Group 1s, track ratings Heavy 9 and 10!)



Staying in the Hunt

Kevin Bartlett and Cameron Smith did it. So too did the likes of Michael Tuck, Brent Harvey, Darren Lockyer and Paul Gallen. Staying at the one club throughout your entire professional career is quite an achievement and definitely a badge of honour. While not in the same realm as professional AFL or rugby league, remaining at the one club in the golf course management profession is also a serious accomplishment, especially given the fickle beast that clubs can be even in the most prosperous of times.

It may have been out of the tournament spotlight for a number of years now, but behind the scenes Huntingdale Golf Club is still pushing its claim as one of Melbourne's premier Sandbelt facilities. ATM editor Brett Robinson catches up with long-serving course superintendent Michael Freeman who is set to notch up a major milestone later this year.

This December, Michael Freeman, course superintendent of Huntingdale Golf Club on the Melbourne Sandbelt, is set to reach a milestone that not many in the industry can lay claim to. This summer will see him tick over 40 years at the club, including the past 22 in charge. It was the start of the 1982/83 summer when a 17-year-old Freeman peddled his bike through the gates of Huntingdale for the very first time to start his apprenticeship. In doing so he followed in the footsteps of his father Lawrence who for 23 years worked at Yarra Yarra Golf Club, including 19 as

superintendent. Between them, the Freemans have notched up an incredible 65 years' service to the Australian golf course industry.

In the ensuing four decades at Huntingdale, Freeman has pretty much seen it all, both the highs and the lows. He was involved in 27 of the 31 Australian Masters that Huntingdale became synonymous with hosting, including being in charge of eight. He still clearly recalls his first Masters in 1983 and watching Greg Norman collect the second of his six Gold Jackets. He has seen, and overseen, numerous course construction and



Lawrence Freeman (left) and Michael Freeman – a combined 65 years of service to the golf industry

improvement works, dealt with the uncertainty which comes with talks of possible mergers with other clubs and more recently has had to navigate his crew and the course through a global pandemic.

For some, spending such a long time at the one club could be seen as a negative. Some may label Freeman simply as a survivor, but he bristles at the mere suggestion of it. Bestowed VGCSA life membership in 2019, Freeman is still very much fully invested in his job and over the journey has made a point of continually reinventing himself. It has certainly worked and this December's milestone is a testament to the hard work and dedication he has put in to make sure he has remained at the top of his profession.

"It has gone extremely fast," reflects Freeman (56) of his tenure at Huntingdale. "It's a fair achievement I guess and I'm pretty proud of what I have been able to do here during that time. The passion is definitely still there and every day I get up and am still enthusiastic about going to work. I love working for the club and being outdoors in the environment we are lucky enough to work with. I guess having a crew of young guys who are keen and willing to learn, who you can pass your knowledge and experience on to, helps to keep me going and making sure we are still producing the best we can for the club."

"You do reflect on the past sometimes, but I'm not really one to dwell on it too much. I'm not one of those types who bangs on to the young guys about how hard it was back in the day and sound like an old flog. Sure, some of the guys will ask about past tournaments given we hosted the Masters, but I prefer to look forward and focus on what's ahead."

"For me it has been all about reinventing myself. You have to in order to stay relevant. The important thing for me has been listening to the members and remembering that this course is not about me and the way I want it presented. The club has been progressive over the years and with the OCM masterplan works hopefully coming up, it all helps to keep you fresh and motivated."

SAVVY SOLUTION

Freeman oversees a crew of 15 at Huntingdale, a far cry from the peak of 25 during the halcyon days when the club hosted the Masters. At a time when the industry is experiencing significant challenges attracting and retaining staff, Freeman has had to think outside of the box to ensure he can deliver the level of conditioning that Huntingdale's membership have come to expect.

The current crew comprises assistant Damien McCartan, second assistant Shane Tarr, three qualified greenkeepers, a mechanic, a gardener, four apprentices and, interestingly, four university students. Over the past 4-5 years Freeman has successfully utilised local students to fill gaps in his crew, training them up in all aspects of general golf course maintenance. While the more specialised tasks, such as chemical application and hand-watering, are left to the qualified staff, the students undertake all cutting duties, rake bunkers and help out with other labour-intensive work and projects.

"It's a win-win situation," explains Freeman. "They're young, intelligent, hard-working guys who are at university and in most cases have

The Huntingdale layout has remained relatively untouched since the 1990s. That could all change, however, with an OCM course masterplan in the pipeline. Pictured is the existing bunker complex between the 8th (right) and 10th (left) greens. The club will host the ASTMA Golf Championship on 20 June

PHOTO: GARY LISBON/GOLFPHOTOS.COM.AU

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With a course reconstruction likely forthcoming, in 2015 Huntingdale decided to let the Poa annua run its course on the Crenshaw/1020 greens. Pictured is the 4th

PHOTO: GARY LISBONGOLPHOTOS.COM.AU

moved out of home so are looking to earn some extra money. We have one guy on the crew currently studying engineering who can speak three languages fluently and scored a 97 in VCE! Staffing is a real challenge for everyone at the moment so we had to think outside the square. We tapped into the local universities and now some of the guys come to us simply through word of mouth. The solution has worked really well for us."

Assistant McCartan is another interesting story as well. Originally from Ireland, where he competed as a junior alongside Rory McIlroy, McCartan came to Huntingdale as a seasonal greenkeeper in 2013. Recognising his talent and skills straight off the bat, Freeman was keen to keep him on staff and convinced the club to sponsor him so he could stay in the country. Settling down and now with a young family of his own, McCartan has worked his way up the ranks and 18 months ago took over as Freeman's assistant following the departure of Justin Crowe to Rich River Golf Club.

In Freeman the crew have one of the most experienced heads in the business to learn from and who makes a point of cultivating a working environment that is not only enjoyable but is also very professional. It is very much a philosophy that his father employed during his time at Yarra Yarra and it has held Freeman in good stead during his time at Huntingdale.

"I spent a lot of my time as a kid at Yarra Yarra and saw the way dad conducted himself and how he managed staff," explains Freeman. "A lot of my man management training has

come from him I guess. We try and have a pretty relaxed atmosphere within the place, but at the same time put in the hard work and carry ourselves professionally. I want the guys to come to work, be happy and enjoy what they do. That is super important to me.

"Dad would always instil in me two things – be true to yourself and don't forget where you've come from. It wasn't that long ago I was an apprentice and trying to climb through the ranks. So now I make sure to try and relate to the younger staff as much as I can and find a connection with them."

STAYING RELEVANT

Just as Freeman has made it a priority to reinvent himself throughout his turf management journey, Huntingdale itself could be set to take a leaf out of its superintendent's book in the coming years. As this edition was going to print, the Huntingdale membership was about to vote on an OCM masterplan which, if approved, would see a major course overhaul starting from November 2023.

Despite undertaking a major revegetation program over the past 15 years, installing a new irrigation system and making a few



One of the real rewarding projects Freeman has overseen during his time as superintendent is the reinstatement of the course's out-of-play areas, in particular the carries

hole adjustments under previous course architect Martin Hawtree, Huntingdale has remained relatively unchanged since the major construction works of the late 1990s. By contrast, a number of Huntingdale's venerable counterparts have recently undertaken or are currently undertaking significant projects to improve their facilities.

Going back a few years, there was the major and much-lauded Peninsula Kingswood redevelopment, while Victoria Golf Club, host of this year's Australian Open, bit the bullet and restored all its greens and surrounds back to their former glory. Yarra Yarra is currently in the throes of a major Tom Doak restoration and Kingston Heath has just started grassing its highly anticipated Short Course. Works are also in the pipeline for the likes of Commonwealth and The National's Long Island course.

Although one to stay well out of the politics of it all, Freeman knows that for Huntingdale to remain relevant in the ever-competitive Sandbelt market, it too has to provide a more modern product that can match its contemporaries. On paper, the OCM masterplan certainly looks like delivering that and what they are proposing has Freeman excited on many levels.

"Some of the work that Mike Cocking and OCM are doing at the moment is off the charts," states Freeman. "What they did at Peninsula Kingswood is absolutely amazing. And it's not just the work they've done here on the Sandbelt either, but down at Lonsdale, Bonnie Doon and now Medinah in the US.

"They have some serious runs on the board and that is why we felt that they were the right fit. Mike is a world-class architect and to have someone of his calibre, a local boy too, is fantastic. They did our chipping green a few years ago and from that were invited to come up with a course masterplan. To be put in the same conversation as some of our Sandbelt counterparts we need to be reinventing ourselves and I think what Mike and OCM have come up with will do that."

A MAMMOTH PROJECT

While the majority of the routing largely remains the same, OCM's masterplan entertains some significant and very notable differences. The first major change being mooted, and one sure to win the hearts of members old enough to remember it, is reinstating the 5th as a short par four.

Back in 2000, under the Spencer-Newton-Grant era, the club made the controversial call



With no tournaments to trash the out-of-play areas since 2015, Huntingdale's vegetation is thriving

to convert what was one of its better par fours into a par three. As a long par three with a three-tiered green, the 5th struggled to win over the members or pundits, so it was a pretty easy decision for OCM to banish it and reinstate it as a 280m par four in their reworkings.

david golf
1956

Golf Course Tee Signs

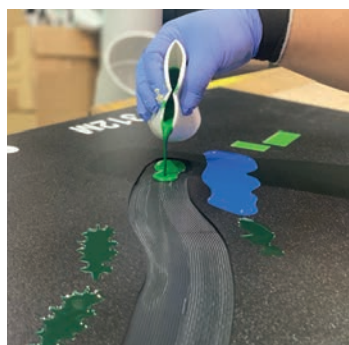
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The back-to-back par fives of 6 and 7 remain (the major difference being that their fairways will link up in two locations), before a brand new hole – the 8th – is added to the layout. A downhill par three measuring just 130m, the hole will play east-west through a current parcel of no man's land behind the 7th green and current 8th tee complex. With its addition to the layout, the current stretch of holes 8-13 would then become 9-14.

The other significant change comes on the back nine. The new 15th (current 14) will remain as a 555m par five and will have a huge sandy waste area along the boundary side of the hole. The current par three 15 and par four 16th will go, with the new 16th coming back towards the clubhouse on land currently taken up by the practice range. The new 16th will share a green with the 18th which will have a lot of its man-made mounding removed.

The 17th follows largely the same direction with a change in green location, but most significantly the dam currently on the left-hand side of the hole will be completely filled in. A new dam will be constructed in the far northwest corner of the property, effectively where the current 15th hole and 16th tees are. The current 16th would then be turned into the club's new practice fairway, moving it out of sight from the clubhouse and addressing safety issues that dog its current location.

Should the reconstruction works get the tick of approval from the members, the plan is to stage it over a two year period, one nine each year. As Freeman states it is "a mammoth project" and one that will involve a significant amount of earthworks. As well as incorporating a lot of sandy wastes, enhancing vegetation, altering bunkers and linking holes together, the most significant part of the project will be the reconstruction of the greens and reinstating a more traditional Sandbelt rootzone profile.

Should the masterplan works get approval, the most significant part of the project will be the reconstruction of the greens and reinstating a more traditional Sandbelt rootzone profile. Pictured is the par three 3rd

When the greens were reconstructed back in the 1990s, all of the native sand was stripped out and a USGA-spec sand brought in, as was the trend of the time. Over the years those profiles have become increasingly difficult to manage due to their high infiltration rates (some are as much as 380mm/hr). That has made the greens difficult to dry down and get that level of compaction and firmness which is the hallmark characteristic of Sandbelt greens.

With the members wanting a return to firmer and faster surfaces, the plan is to go back to a profile that mimics the characteristics of the native sands as much as possible, along with employing a California style of greens construction methodology. To that end the club has engaged agronomist John Neylan who is working in with Cocking to source a new profile sand, similar in many respects to the work he did with Peninsula Kingswood.

Also dovetailing nicely into the potential course works is the recent announcement that Huntingdale will be one of the primary benefactors of a new Class A recycled water pipeline set to come online by 2025. The \$72 million Dingley Recycled Water Scheme will see the construction of a 42 kilometre pipeline that will deliver recycled water to 46 sites, including golf courses, sports fields and parks, in the Kingston, Monash and Bayside local government areas.



PHOTO: GARY LISBON/GOLFPHOTOS.COM.AU

After undertaking Huntingdale's new chipping green complex a few years ago, OCM were invited to come up with a whole course masterplan

Such a pipeline has been mooted for as long as Freeman has been at Huntingdale, so to see it finally coming to fruition is a huge win for the club. Freeman says that having a continual supply of good quality recycled water will help futureproof the course and ensure that any new works undertaken will get the best possible chance to thrive.

"I can't wait," says Freeman of the masterplan works. "What I'm most excited about is the changing of angles. We are a very north-south course, so the par three 8th, which will play east to west, will be a fantastic addition. You'll be heading back west, so when a westerly wind blows it will be tricky little hole. Then when you get down to the northern end and likes of the new 11th and 12th, they're slightly changing the angles so you're not just hitting straight down the fairways.

"The other aspect is that with a lot of the greens currently you have to carry a lot of sand. The changes will see those areas opened up to encourage more of a bump and run style of play which will make them friendlier for the higher handicappers.

"It all looks very impressive on paper. The double green on 16-18 will be superb and by removing some of the mounding it'll get the place back to what it was like originally. OCM have loved the reveg work we have done already, so it will be all about enhancing those areas and blending them in with the layout they are planning. That sort of stuff excites me, along with all the sandy waste areas that they will be introducing and the linking of holes.

"The work that Michael and OCM do is outstanding and what they have proposed to the club I'm super excited about, not only for the members but also the younger guys on the crew. Many of them have never experienced a major construction project before. This will be the opportunity of a lifetime for them and hopefully another exciting chapter in the club's history." 🌱

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Incorporating expansive sandy waste areas on the back nine of Rosebud Country Club's North Course has helped to dramatically transform the look and the feel of the property





Rejuvenating **Rosebud**

Since arriving at Rosebud Country Club five years ago, superintendent Ian Todd has helped to transform the 36-hole facility and realise a potential that lay hidden for many years. ATM editor Brett Robinson looks at the impressive body of work that the club has achieved which is helping put Rosebud back on the map.

PHOTOS: DAMIEN WINSOR AND BRETT ROBINSON



The Rosebud crew (Ian Todd centre) during The Player Series event held there in early February

Being in the conversation. Up until a few years ago Rosebud Country Club, on Victoria's Mornington Peninsula, wasn't part of many. Although one of the region's more established clubs, having been developed back in the mid-1960s, the 36-hole facility comprising the North and South courses barely rated a mention when compared to the other world-class layouts that the area has become renowned for.

Tucked away off Boneo Rd just at the end of the Mornington Peninsula freeway, up until a few years ago Rosebud was on a downward trajectory. Membership was declining, resources were waning and that was reflected in the presentation of the course. Conditioning had suffered a number of setbacks, while the course environs made what was an expansive and undulating property feel tight, constrained and visually unappealing.

Slowly, however, things have changed. The arrival of course superintendent Ian Todd five years ago and his vast experience from working on the Melbourne Sandbelt, has set the course on a new path. Charged with the task of turning Rosebud around, with the backing and support of a proactive management team Todd and his crew have done just that. In doing so they have instilled a renewed level of confidence throughout the membership and management and given them impetus to keep moving forward.

It has taken a lot of hard work, but ask any Rosebud member and they will tell you the transformation has been dramatic. Turf health has improved, fine turf areas have been expanded, while a raft of work in the out-of-play areas has opened up the natural beauty of the site and uncovered just how good a track of land the club has. OCM masterplan works have also begun, with the first few holes on the North Course recently tweaked and providing a taste of what is to come.

Elsewhere, the club has had a number of other significant wins. In securing one of The Players Series events in 2020 and again in 2022, Rosebud has fallen under the PGA Tour of Australasia spotlight and with it invaluable television coverage. In a few months' time it will also break new ground by becoming the first Australian course to be part of the DP World Tour's (formerly European Tour) Qualifying School.

And to top it off, in the latest top 100 rankings lists issued by the country's two big golfing publications – Golf Australia Magazine and Australian Golf Digest – Rosebud's North Course debuted for the first time in 69th and 84th places respectively. As Todd says, there's "a good vibe" permeating throughout Rosebud at the moment and they are now very much back in the conversation.

A PERFECT MATCH

Moving on from a job that you have devoted 22 years of your life to is no small undertaking, especially when it's being a superintendent in the elite environment of the Melbourne Sandbelt. In his mid-50s, in 2016 Ian Todd did just that, calling time on his tenure at Victoria Golf Club. With no spectacular plans as to what he was going to do next, he toyed with the idea of starting up his own consultancy,

before eventually picking up some work with irrigation firm Superior Green, operated by one of his former assistants Luke Marsh.

Although not harbouring a great desire to get back into a superintendent role, he then spied the vacant Rosebud Country Club ad on the ASTMA website. After mulling it over and visiting the course, Todd could see the immense potential the place had and knew his skill set could help the club achieve its goals. Whether it was the fact that two members on the interview panel were Melbourne Demons supporters – in another life Todd played half a dozen self-described "unbelievable" games for the red and blue – or that his experience was just what they needed, Todd quickly found himself back in the game and heading down to the peninsula.

Hitting the ground running in August 2017, Todd is now fast approaching five years in charge and the changes have come thick and fast and are continuing to. As Todd says "it has been a hectic period, but a very enjoyable one", one that has also rekindled his passion for the industry. And just as it has given Todd renewed enthusiasm, he is helping repay the club by giving their greatest asset a new lease of life also.

"I think initially I was very thankful for the club to give me another opportunity to work at the late stage of my career," reflects Todd, now 61. "I know I don't have a lot of working years left in me, so to change courses in my mid-50s was certainly a risk and I am very appreciative of the chance they have given me. I'm happy to give them as much as I can and use my experience and knowledge to repay the favour.

"It has been a great few years and the management and members have been very supportive. Once I could show them that I knew what I was doing with getting turf health back and providing consistency and good playing surfaces day in day out, it led to a bit of confidence coming back. Then once we



One of the first sandy waste areas created was in front of the tee complex on the par three 13th

started on the improvement works it was like a snowball effect and the club to their credit have kept that momentum going.

"Once we started trimming the trees back and opening up the views, you could see all the beautiful undulation in the land and everyone was blown away. It was like unwrapping a Christmas present. It showed them how much potential there was in the property which is something they probably never thought about. But now they can see what's out there and that has given the members and the management confidence that they are doing the right thing."

TURNING A CORNER

Rosebud Country Club sprawls across 115 hectares and comprises two contrasting courses. Opened in the mid-1960s, the higher-regarded North Course wends its way through an old pine forest plantation on sandy, gently undulating terrain. The South Course, by contrast, is on the heavier soils of a flat former market garden site which the club acquired to turn it into a 36-hole facility in the early 1970s.

The majority of greens are push-ups comprising of bentgrass and *Poa annua*, with a few reconstructed profiles conforming to USGA spec. The fairways across both courses



In addition to improving turf quality, one of Todd's major remits was to incorporate more short grass and fine turf areas around greens and link them in with tee complexes. Pictured is the 17th

are predominantly couchgrass (Santa Ana and common) with a bit of *Poa*. The surrounds and tees are a mix of couch, bent, *Poa* and fescue, with a few pure couch tees.

When he threw his hat in the ring for the job, Todd knew exactly what he was getting himself into. Arriving for his first look at the course ahead of his interview, he could see the areas which were holding the club back,

but also the bones of something very good. His immediate priority, though, was improving turf quality.

While the bent/*Poa* greens were fine, large areas of fairway turf and a few tees, mostly on the North Course, had sustained significant damage from repeated applications of Roundup and pre-emergent herbicides. In some of the worst areas, Todd had to apply

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The beautiful sweeping sandy waste area that has been incorporated on the 17th. This area was previously overgrown with numerous weed species and invasive trees and was a haven for lost balls

Rosebud's crew will get further tournament exposure in late August when the club hosts a DP World Tour Qualifying School event



activated carbon to try and neutralise the chemical effects. Some areas simply had to be returfed while other areas were oversown with *Poa trivialis* just to get a surface. Todd was fortunate to have a 1ha couchgrass nursery at his disposal and within six months had gone through the lot. He even had a member donate a truckload of turf for the cause.

Combined with plenty of fertilising, some proper grooming to promote new growth and a lot of tree pruning to get some more sunlight onto the ground, slowly but surely those areas started returning. Aided too by favourable growing conditions, by the end of his first summer Todd and his crew were able to get full coverage back on the fairways and present a consistent (and green) playing surface.

With turf quality taken care of, Todd's next remit was to incorporate more short grass and fine turf areas. When he arrived, mowing consisted of a greens cut, a collar cut and then a rough cut, with a lot of separation between each hole. Taking a leaf from his years on the Sandbelt and with a conversation he had with Mike Clayton still ringing in his ears from decades earlier – 'short grass is a hazard' – Todd set about cutting down the areas around the greens and linking them into adjacent tee complexes. Such work transformed the place immediately, providing a crisper, cleaner feel. Fairways were also reshaped and the definition between the rough improved, while in some areas fairways were linked together simply by cutting the rough down.

OPENING UP

To that point the majority of improvements had been all about the playing surfaces, but where Todd saw the most potential was the club's substantial out-of-play areas. Although almost double the size of his previous course, the Rosebud property was made to look very small and tight. The fairways were reasonably narrow and, as mentioned, there was no real distinction between fairway and rough. Most problematic, however, were the trees. Many were badly overgrown, with a lot of the pine

trees having their limbs hanging down on the ground, providing a perfect environment for knee-high kikuyu to flourish.

Although no longer on the crew, shortly after Todd started at Rosebud he was joined by former Victoria staff member Darren Allisey. A qualified arborist, Allisey had played a major role in the tree and revegetation work undertaken at Victoria, and Todd knew his skills would be a perfect fit for Rosebud. Effectively flat out on the chainsaw from the moment he walked through the gates, Allisey, along with a couple of other crew members, achieved a mountain of work. As well as opening up views between fairways and enabling rough areas underneath to be cut down and sprayed out, Allisey was able to also address issues higher up in the tree canopies and improve overall tree health.



Assistant Damien Winsor played a leading role in preparations for Rosebud's two TPS tournaments

Just like the fine turf areas, the transformation has been dramatic. As Todd describes it, "a barrier has been lifted". The course now feels a lot bigger and bolder and there is a more quality feel about it because of the views that have been opened up throughout the course. Although not indigenous to the area, the pines trees add an element of uniqueness to the course, especially compared to others down on the peninsula, and have benefited significantly from receiving some overdue attention.

"We wanted a consistency of feel through the whole property," explains Todd of the philosophy behind the tree works. "The first place we started was the 1st and 2nd holes which run adjacent to the long driveway leading up to the clubhouse. These two holes are the first thing you see when driving in and the last you see when leaving. For me, golf is 80 per cent visual and 20 per cent play. I would never play a golf course that I didn't like the look of. Impressions are very important and for me that was one area that was letting us down.

"With the work that we've done there, it has opened the place up. As soon as you come through the gates you can now see the undulations of the course. It was all about creating a level of anticipation when you enter the property, that feeling of 'Gee, I'm looking forward to playing here'. And combined with the masterplan works and new bunkering around the 2nd green, we are achieving that."

WONDERFUL WASTES

As much as the course was on the improve through the various works undertaken, as Todd explains it still lacked "a bit of wow factor". One of Todd's enduring legacies from his time at Victoria was the enhancement of the out-of-play areas, in particular the creation of sandy wastes and revegetation work. Such work has become a template for many others to follow and it is no surprise that Todd has brought those ideas with him to Rosebud.

With a small crew and one rough cutter that was literally working around the clock, the



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COURSES

obvious way to reduce that was incorporating sandy waste areas around the course. Having gotten the process down to a fine art while at Victoria, and with Allisey also vastly experienced in such work, Todd put a proposal forward to the Rosebud management who gave it the green light. The club purchased an excavator and off they went. Works to date have concentrated primarily on the back nine of the North Course, in particular holes 12-18, which are routed on a stretch of undulating terrain that lends itself nicely to such features.

The first (and most obvious) area to be transformed was the 169m par three 13th. Previously the area in front of the tee was just mown down kikuyu. It was sprayed out and a vast expanse of sand was exposed with the excavator and islands of vegetation created. It was tied into the left-hand side of the 12th fairway and then a few months later linked in behind the 12th green.

Keeping that theme going, more sandy waste areas have been incorporated on the right-hand side of the 13th, the 15th carry, between the fairways of 10 North and 18 South and in a triangular section of land between the 14th, 15th and 16th holes. That latter area used to be an unsightly dump site which housed a copse of pine trees. By pruning and raising them up, along with levelling the area and seeding it, for the first time members can now see from the clubhouse, through the trees and onto the 15th fairway on the westernmost edge of the property.

The jewel in the crown of these works, however, has been a 1.5 hectare area on the right-hand side of the 17th. As Todd describes it, when he arrived it was a “dark and dingy” pocket which masked a nature reserve on the other side of the boundary fence that boasted lovely manna gums, grass trees and expanses of bracken. The golf course side by contrast had “every weed known to man” and was choked by thickets of blackberry and invasive unkempt sweet pittosporums.



Improved conditioning along with the vast amount of work in the out-of-play areas saw the North Course break into the biennial top 100 course rankings for the first time earlier this year

Ripping all the weed species out, the area was left for 12 months to see what would regenerate. Although no indigenous plants came back, the bracken thrived and once it was mature enough Todd and his team went in and started transplanting it around and exposing a heap of sand. The end result is a beautiful sweeping waste that links in with similar work undertaken up near the 17th green and 18th tee complex.

“That area has been one of the real highlights of the work we’ve achieved,” reflects Todd. “It was a three year process, but it was well worth the time and effort because of the dramatic change that has happened. That area now mirrors the quality of the nature reserve across the fence and is something that the members and club can be proud of.”

BACK IN THE CONVERSATION

Helping to showcase the transformation that the North Course has undergone in recent times, in 2020 and 2022 Rosebud played host to The Players Series (TPS). The televised PGA Tour of Australasia event, which features both men and women competing alongside each other, gave some great exposure for the course to an Australian wide audience, while also giving Todd’s crew their first taste in the tournament spotlight.

That exposure will go global in late August and early September when the North Course becomes the first Australian venue to host a leg of the DP World Tour’s Qualifying School. Originally announced in 2020 but put on hold due to COVID, it is the first time that the DP World Tour is taking its Q-School outside of Europe. Claiming a significant feather in the cap, Rosebud is one of six new venues that have been added to the schedule.

Although not the greatest time of year to be presenting a course for tournament golf, Todd says it will provide another fillip for his crew. Assistant superintendent Damien Winsor, who has been at the club 30 years, will take a leading role with preparations, just as he did with the TPS events. Todd cannot speak more highly of Winsor’s skills and has recommended to the club that he be his successor when it’s time for him to hang up the hole-cutter.

Despite having already ticked off a heap of work, by no means is Rosebud finished yet. OCM masterplan works have recently begun and will continue to be rolled out in the coming years. Much of that work revolves around bunkering, vegetation work, tee positionings and tweaking some greens and holes. Such work will further build on what has already been a defining period in the club’s history.

“The vibe around the club is really upbeat at the moment,” notes Todd. “The appreciation from the members with the work that has been done has been overwhelming. I suppose it has taken that to show them that it can be among the best courses down here on the peninsula. It has taken a few years to get that through, but we are heading in the right direction. I think the club has a much better focus on where they are going and what they want to get to.

“Up until recently nobody really knew about Rosebud. Everyone would just drive straight past the entrance. Obviously there are a lot of great courses down here, but Rosebud was a forgotten place in many ways. But what we are finding now is that more people have heard what’s happening down here and they are coming down specifically to play Rosebud. We are back in the conversation and that’s got to be good for the future of the club.” 🏌️



OCM masterplan works to date have included tweaking bunker shapes and locations. Pictured are the new bunkers on 2 North

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*The Future Turf Managers Initiative Class of 2021
pictured at Royal South Yarra Lawn Tennis Club*

WORDS AND PHOTOS: BRETT ROBINSON

Future aces

*Royal South Yarra Lawn Tennis Club
was a fitting location for the finale of
the latest instalment of Jacobsen's
Future Turf Managers Initiative.*



This was the sixth year that the FTMI has been conducted

The 2021 Future Turf Managers Initiative (FTMI), sponsored by ASTMA Gold Partner Jacobsen, wrapped up in early March with delegates converging on the famous Royal South Yarra Lawn Tennis Club in Melbourne. Usually delivered over a three-day on-site program, COVID meant the initial part of this year's program was delivered online, before delegates and mentors were finally able to meet for a revised face-to-face gathering.

The online component of the FTMI kicked off in mid-October 2021 with a series of Zoom seminars and presentations. Among the sessions covered online included career planning, preparing resumes and job applications, presentation skills, building a professional profile, understanding, building and managing budgets, working with sales representatives and team culture.

With COVID restrictions easing early in 2022, it enabled the ASTMA and Jacobsen to organise a final session face-to-face over two days at Royal South Yarra, home to head curator Ant Lewis and general manager Stewart Fenton. FTMI delegates were taken on a tour of Royal South Yarra before sitting in on a range of presentations.

Among those to speak were Lewis and Fenton who combined to talk about the importance of the relationship between turf manager and general manager. Other presentations, conducted by ASTMA chief executive Mark Unwin and leadership expert Mark Carter, focused on subjects such as leadership and management, negotiating and influencing decisions and personality profiling.

"After being forced to deliver the majority of the program via Zoom, it was great to get the Australian contingent together in Melbourne," says ASTMA events and education manager Simone Staples. "The energy in the room was fabulous and certainly capped off a productive few months. A big thanks to Ant Lewis and Royal South Yarra and also the tremendous input and support of Jacobsen without whom such a program would not be possible."

This was the sixth year that the FTMI has been conducted, with 18 up and coming turf managers from Australia and two from New Zealand forming the Class of 2021. They included: **Andrew Anderson** (Metropolitan GC); **Peter Bell** (Glenelg GC); **Matthew Broad** (Royal Sydney GC); **Luke Diserens** (Roseville GC); **Michael Ervin** (Kooindah Waters GC); **Peter Foreman** (Adelaide Oval); **Brett Hardeman** (Koorlingal GC); **Marlon Johnston** (The Australian GC); **Joshua Lacey** (Maryborough GC); **Matthew Manevski** (Muirfield GC); **Kasee Marxsen** (Pacific Harbour G&CC); **Richard May** (Cottesloe GC); **Kenneth McNamee** (Royal Sydney GC); **Daniel Nichols** (Latrobe CC); **Dermott O'Connor** (Thirteenth Beach); **Shaun Reardon** (Wagga Wagga CC); **Sam Rose** (Royal Canberra GC); **Nik Smith** (Maleny GC); **Hayden Stuthridge** (North Shore GC, NZ) and **Hayden Williams** (Pukekohe GC, NZ).

Since the FTMI's inception, numerous alumni have utilised the skills taught to go on and take the next step in their careers. From the 2020 cohort, Nicholas Douglas recently took on his first superintendent posting at Cranbourne GC and within weeks of starting



Royal South Yarra is steeped in history and boasts a range of world-class facilities, among them 10 superbly-maintained lawn tennis courts



Dermott O'Connor (Thirteenth Beach Golf Links) was one of 20 students in this year's FTMI intake



Roseville Golf Club's Luke Diserens provides feedback during the leadership and management session



Adelaide Oval's Peter Foreman listens on during the personality profiling group activity



Royal South Yarra head curator Ant Lewis (left) and general manager Stewart Fenton combined to talk about the importance of the relationship between turf manager and general manager

was hosting the Australian Amateur. Samantha Butler assumed the mantle of assistant at Blundstone Arena in Hobart, starting her role in the weeks before January's historic Ashes Test. Shaun Bowden made the move from assistant at Pennant Hills to superintendent of Royal Hobart GC last year, while Brendan Dooley, who features in this edition's Regional Profile, is now superintendent at Lakes Entrance GC.

This year's FTMI saw 2017 graduate Brenton Clarke (now superintendent at Warrnambool GC) return as one of four mentors to support and guide the delegates through the program. He joined with 2016 graduate Stuart Campbell (Maroochy River GC) who has been a mentor for the past two FTMIs. Also present was Textron's regional sales manager for Australia and New Zealand, Peter Schumacher, who was very impressed with the calibre of this year's delegates.

"From Jacobsen's perspective, we believe that the FTMI is a program of significant benefit for the turf industry and a valuable

professional learning program for participants," says Schumacher. "We are delighted to have been instrumental in its development and its ongoing success. This year we had a very strong group of students and it is clear to me that the future of our industry is indeed bright with this FTMI program and the quality of the participants coming through year after year."

Feedback from this year's cohort was again highly positive, with Daniel Nichols (Latrobe City Council) summing up the thoughts of many on the program: "The FTMI covered such a broad range of topics, from encouraging me to think about my own career outside of what I thought was likely, to identifying my own personality traits and how they interact with others. I took so much away from the face-to-face sessions which have already begun to assist with my development as a leader. Spending time with the rest of participants, mentors and speakers was fantastic. Jacobsen and the ASTMA have delivered an exceptional program" 🙌



TORO Toro Turf Tour

COURSE: SANCTUARY COVE G&CC, QLD **SUPERINTENDENT:** PAUL MCLEAN



Paul McLean has been course superintendent at Sanctuary Cove G&CC coming up eight years and oversees a full-time maintenance crew of 26

Since first opening in 1987, Sanctuary Cove Golf and Country Club has become one of Queensland's premier golfing establishments. Boasting two top-100 championship layouts in **The Pines** and **The Palms**, the property sprawls across 160 hectares with each course offering a unique golfing experience. The club has more than 930 equity members on its books and between them the two courses pump through in excess of 65,000 member and member guest rounds each year.

The Pines is Australia's only Arnold Palmer 'signature' course and, as the name suggests, is carved through significant stands of towering pine trees. The course features corridor approaches to several holes, with 14 holes contoured around six man-made lakes. Recently, The Pines underwent a huge \$5 million transformation which saw all greens fully reconstructed to USGA-spec and turf converted from 328 to TifEagle. The Pines now boasts 1.3ha of greens along with 0.2ha of zoysia collars. Combined with some bunker

works, the rebuilding of teeing grounds and a brand new irrigation system (more on that later), the course-wide restoration (opened in August last year) has ensured The Pines remains as one of Australia's most esteemed private golf course destinations.

Complementing The Pines is The Palms course which was redesigned by Ross Watson to the tune of \$8.8 million and reopened in 2011. Shorter than its sibling, its rustic bunkering and boldly contoured greens require creative shot making. Like The Pines, its greens (1.5ha) are TifEagle, with around 20ha of Greenlees Park couchgrass fairways. The Pines by comparison has 15ha of fairways, while both courses have around a hectare of tees and aprons and 40ha of rough.

Sanctuary Cove has been home to course superintendent **Paul McLean** coming up eight years this August, the latest stop in a turf management journey that began back in Orange, NSW in the late 1980s. In 1995 McLean headed to the Gold Coast for the first time to work at Lakelands Golf Club during its construction,



The Pines is Australia's only Arnold Palmer 'signature' course, with 14 of its holes contoured around six man-made lakes

before spending time on the road as a sales rep with Simplot. Between 2007 and 2011 he was superintendent at Royal Pines Resort, hosting a number of Australian Ladies Masters events, before having a second stint in the trade, this time with Nuturf. He took over at Sanctuary Cove in 2014 and for the past seven years has also held the presidency of the Golf Course Superintendents Association of Queensland.

McLean oversees a crew of 26-full time staff, including assistants **Trevor Ridge** (The Pines) and **Andrew Lothian** (The Palms) and two foremen. Turf technician **Robert 'Radar' Fraser**, who has been at the club for 30 years, heads the workshop where he is assisted by **Gary Hodgkinson**. Irrigation technician **Michael Toloa** (who is responsible for both courses), five qualified greenkeepers, two apprentices, one horticulturist and 11 groundstaff make up the remainder of McLean's maintenance crew.

CUTTING EDGE

Sanctuary Cove has had a long-standing relationship with Toro over the years. The club currently leases all their Toro equipment – everything from mowers, renovation equipment through to grinders – with a machinery replacement program rolling over every few years. Greens, fairway and rough mowers which are out on course every day are rolled over every three-and-a-half years, while the bigger items which don't get as much use, such as the Rake-O-Vac® and the MH400 topdresser, are on a seven-year rotation.

Being on the Gold Coast, where grass essentially grows all the time, both courses require ongoing maintenance pretty much around the clock. As McLean quips, "There's a lot of grass to cut here!" and he therefore needs to have quality and reliable machinery to do the job. Greens on both courses are cut every day, while tees, fairways and aprons get cut twice a week. Roughs get mown once a week and are that big that by the time they've been completed it's time to start over, the only respite coming in the middle of winter when grow rates slow.

For the greens, McLean uses both triplexes and walk-behinds – four Greensmaster® eTriFlex™ 3370s, four Greensmaster® TriFlex™ 3400s (also used on tees), four Greensmaster® Flex™ 2120s and two Greensmaster® eFlex™ 2120s. The fairways are maintained by four Reelmaster® 5010-H hybrid units, with the roughs kept in check by two Groundsmaster® 4700-Ds and a Groundsmaster® 7200 zero turn.

Embracing the electric phenomenon, McLean switched two of his walk-behind greens mowers to the lithium-ion powered

Sanctuary Cove has four Reelmaster® 5010-H hybrid units to take care of the Greenlees Park couchgrass fairways



In 2020, Sanctuary Cove installed a new Toro Lynx® Smart Hub irrigation system with Infinity sprinklers and Lynx Smart Modules

Greensmaster® eFlex 2120s to help negate noise issues when out cutting greens early in the morning. Sanctuary Cove also recently took delivery of four brand new fully electric triplex greens mowers – the Greensmaster® eTriFlex™ 3370 – which McLean has unashamedly fallen in love with.

The eTriFlex™ 3370 is the 'next gen' when it comes to riding greens mowers. Powered by eight lithium-ion Samsung SDI batteries, the eTriFlex™ 3370 carries no hydraulic fluid and utilises all-electric components for traction, steering, lifting and cutting. McLean can rest easy knowing that the risk of hydraulic leaks are now a thing of the past.

The eTriFlex™ 3370 runs at an amazingly quiet noise level of 66.5dBA which minimises early morning disturbances, important for a resort course like Sanctuary Cove which is surrounded on most sides by residences. The Radius Dependent Speed systems (RDS™) control both the speed of the reels as well as the wheels to provide a consistent even clip-rate across the cutting heads and minimise scuffing

from the wheels during clean-up passes.

Furthermore, when the operator is raising or lowering the cutting units while in motion, the onboard computer system calculates the exact timing to raise/lower the rear cutting unit in order to match the cut line of the front two cutting units. This allows for consistent and precise cutting manoeuvres from green to green.

"The Greensmaster® eTriFlex™ 3370 is definitely my favourite piece of kit at the moment," says McLean. "It has all the mod cons. It has an onboard computer which tells you everything. You don't have to guess anything because it's all there programmed. When they do a diagnostic test on it, they can just plug it in and tell you within seconds what's wrong with it. The diagnostics are very modern. They're also very smooth and comfortable for the operators to use and provide a great finish."

Over the past two years McLean has also tweaked his fairway mower fleet. Previously, Sanctuary Cove had three of Toro's largest units – the Reelmaster® 7000-Ds. While a superbly

Sanctuary Cove has four GTX Workman® utilities



Operator comfort is of huge importance, especially when it comes to cutting rough. Toro's Groundsmaster® 4700-D leads the industry in this department, along with its tried and tested reliability and quality of cut

productive and quality machine, rising fuel costs forced McLean into a rethink and he opted to switch across to four Reelmaster® 5010-H diesel hybrids. The result has been a halving of fuel costs without any loss in productivity or quality of cut.

The Reelmaster® 5010-H is the industry's first and only fairway unit with a true hybrid drive system. The Reelmaster® 5010-H utilises a Kubota 24.8hp diesel engine in concert with an in-line motor generator and a self-recharging 48-volt battery pack to provide seamless power to the vehicle and cutting units. The combination of these two power sources comprises Toro's patented hybrid power delivery system called PowerMatch™.

PowerMatch™ enables the Reelmaster® 5010-H to match the power generated to the power required for all cutting conditions. The result is the availability of over 40 horsepower,

but only when cutting conditions require it, which saves on average 20 per cent fuel usage, improving operating costs and the vehicle's carbon footprint.

SIZE MATTERS

With such a large site to maintain, there are a couple of pieces of Sanctuary Cove kit that are the real workhorses of McLean's fleet. While there is plenty of fine turf to maintain, the rough areas are enormous and with the couchgrass growing flat stick from December through to May they are in constant need of attention.

As mentioned, McLean has two Groundsmaster® 4700-Ds to tackle that job and without putting too finer point on it, they get an absolute flogging. In a perfect week, McLean is able to get all rough areas cut in five days – two-and-a-half days each side – but there only needs to be a spell of bad

weather and humid conditions and it can be difficult to keep in front. To that end, when he next rolls over his fleet, McLean is going to add a third Groundsmaster® rough mower to the fleet because of their robustness and level of productivity.

The Groundsmaster® 4700-D has an impressive 12.5' (381cm) width of cut and is powered by a 48hp (36kW) Yanmar® engine that can cut up to 4.3 hectares/hour. It boasts seven floating Contour™ Plus cutting units, full-time bi-directional 4-wheel drive and the innovative Smart Cool™ system for productivity and performance no other rough mower can touch. Of most importance for McLean though is the level of operator comfort the 4700-D provides. When you're parked on a rough mower all day, comfort is paramount and the 4700-D delivers that with deluxe air ride seats and multiple amenity features.

Also barely remaining idle are Sanctuary Cove's two Multi Pro® 5800 sprayers. Whether its spraying pre-emergent on roughs or Primo on greens, they are out on the course every week. Every aspect of the Multi Pro® 5800 has been engineered to deliver unsurpassed spray accuracy, aggressive agitation and faster response time. "They're excellent to operate, easy to calibrate, very safe and very accurate," says McLean. "Most of all, for such a big machine carrying so much weight, they don't leave any wheel marks. The wheel base is really good and their spraying footprint (6.25m boom width) means we can cover large areas in as quick a time as possible."



Powered by eight lithium-ion Samsung SDI batteries, the Greensmaster® eTriFlex™ 3370 carries no hydraulic fluid and utilises all-electric components for traction, steering, lifting and cutting

A SMART DECISION

It isn't just Toro's impressive mowing and maintenance equipment that McLean relies upon to keep Sanctuary Cove in the pristine condition which members expect. One of the biggest changes in recent times has been the installation of a new irrigation system on The Pines course. The previous system dated back to the course's formative years and the club was burning through \$8000 a month just in irrigation repairs. The maths was pretty simple and in 2020 Sanctuary Cove pulled the trigger and installed a brand new Toro irrigation system to the tune of \$1.2 million. Since coming on line, the new system has resulted in water savings of 25 per cent in addition to huge improvements in efficiency.

The system is a Toro Lynx® Smart Hub with Infinity™ sprinklers and Lynx Smart Modules. The system was designed by Dave Hanby, with Nutrien Water and Mark Lawson installing it. There are two Smart Hubs out on the course – one for each nine – which can run up to 1000 sprinklers or Lynx® Smart Modules off each hub. Sprinklers for the greens are Infinity™ 55 full and part circle in one and are back-to-back around greens. Fairways have Infinity™ 54 full circle sprinklers, while the tees have Infinity 35 sprinklers (full and part circle). The key benefit of the new Infinity™ rotors is the innovative Smart Access™ feature that allows irrigation techs quick and easy access to internal components, including solenoids, pilot valves, 2-wire control modules and wire splices, all without needing to dig them up.

Sanctuary Cove's Red Shed

- 4 x Greensmaster® Flex™ 2120
- 2 x Greensmaster® eFlex™ 2120
- 4 x Greensmaster® eTriFlex™ 3370
- 4 x Greensmaster® TriFlex™ 3400
- Reelmaster® 3100-D Sidewinder®
- 4 x Reelmaster® 5010-H
- Groundsmaster® 7200
- 2 x Groundsmaster® 4700-D
- 2 x Multi Pro® 5800-D
- 2 x Pro Force® Blower
- 2 x Sand Pro® 2040Z
- Sand Pro® 5040
- MH-400 wireless topdresser
- Rake-O-Vac®
- 2 x ProCore® 648
- 4 x Workman® GTX
- Workman® MDX

"It is such a sophisticated system," remarks McLean. "Whether it's the diagnostics, the serviceability and adjustability of the sprinklers or the ability to have everything backed-up, the technology behind it all is very impressive. We now have the ability to water in millimetres rather than percentages of time, meaning we can water products in with more precise volumes, which means we are using water much more efficiently. What I also really like is that each night the system backs up to the Toro server. If we ever have a problem, Toro can ship a new computer overnight which is already loaded with your programs. All you

have to do is plug it in. As a superintendent that gives me huge peace of mind."

LEADERS NOT FOLLOWERS

Quality and reliability. McLean has come to know those two words are synonymous with Toro over his many years in the industry. They are the non-negotiables for a course superintendent when it comes to maintenance equipment and irrigation systems. Toro has always ticked those boxes effortlessly, but in McLean's eyes there are a couple of other crucial areas where the company has the edge well and truly over its competitors.

"It's their after sales support and back-up," sums up McLean on what makes Toro the perfect fit for his operations at Sanctuary Cove. "That has always set Toro apart in my view. I'm lucky I guess that their Banyo service department is literally just up the highway in Brisbane and I can have a technician at my place within an hour. When we are busy in summer, that's when it really counts for me and gives you the peace of mind knowing that you won't have a machine out of action for long."

McLean is also impressed with the way Toro continually innovates and comes up with solutions to make golf course maintenance practices easier and more efficient. "They don't follow the market, they lead the market," says McLean. "They're not content to rest on their laurels. They are constantly innovating and trying to make their equipment better for us, the end user. And you can see the results out on our courses here at Sanctuary Cove." 🏌️



The Pines underwent a huge \$5 million transformation in 2021, with all greens fully reconstructed to USGA specifications and turf converted from 328 to TifEagle



Welcome to Melbourne!

In what is set to be one of the largest gatherings seen for many years, the ASTMA and Golf Management Australia join forces for the 2022 Australian Sports Turf Management Conference and Trade Exhibition in Melbourne.



The Australian Sports Turf Managers Association (ASTMA), together with Golf Management Australia (GMA) and key sponsors, welcome all delegates to Melbourne for the 2022 Australian Sports Turf Management Conference and Trade Exhibition (20-23 June). Featuring more than 180 hours of education across a variety of streams, in addition to the trade exhibition and social functions, the conference returns to Melbourne for the first time since 2016. Here is a snapshot of some of the fantastic presenters you'll see...

CRAIG BELLAMY

When it comes to talking culture and mastering leadership, Bellamy is one of the most sought after conference speakers on uncovering talent and bringing out the very best in performance. As head coach of the Melbourne Storm for an incredible 20 NRL seasons, Bellamy has



DR JESSICA GALLAGHER

Gallagher was just 17 when she was diagnosed with a rare, degenerative eye disease. Despite her diagnosis, Gallagher never lost sight of her dream to fulfill her sporting and academic potential and to represent her country. Neither did it stop her from becoming the first Australian athlete to medal at a Summer and Winter Games. Living by her mantra 'Trust – Mindset – Courage', Gallagher shares the challenges she has faced, overcoming fear and taking risks.

consistently demonstrated his ability to achieve outstanding team results. Delegates will be inspired by Bellamy's insights into hard work, accountability and handling pressure to achieve elite performance.

CHRIS GRAY

Gray is The R&A's head of sustainability and agronomy for Asia-Pacific. Hailing from Victoria, Gray has over 30 years of knowledge and experience having worked extensively as an agronomic consultant, golf course superintendent and golf course project manager in the Asia-Pacific, Central Asia and Middle East regions.

Most recently Gray held the position of director of agronomy and golf redevelopment at The Singapore Island Country Club and has been an agronomic consultant on a number of PGA Tour, European Tour and LPGA tournaments in the region. Gray's role at The R&A primarily focuses on sustainability practices and providing agronomic assistance to The R&A's championships in the region, working closely with The R&A's sustainability and agronomic teams at the Home of Golf, St Andrews, Scotland.



FROM THE PRESIDENT...

It is with great pleasure that I welcome delegates to the 2022 Australian Sports Turf Management Conference and Trade Exhibition in the sport

mad city of Melbourne. It is an historic event as we partner with Golf Management Australia (GMA) to combine our education sessions and trade shows, making it the biggest golf and sports turf management conference to be held in Australia.

For many years the ASTMA Board has explored the idea of partnering with GMA

in an attempt to foster a closer relationship between our two bodies. We are delighted that this has now come to fruition.

We are expecting more than 2000 people to come through the doors over the four days and as always turf managers will be presented with an excellent array of sessions covering topics as diverse as personal wellbeing to bird and wildlife management. There will also be a panel session with representatives from GMA and ASTMA and we are hoping to further cement the relationship between general managers and superintendents for the good of all.

A feature of the annual conference is the National Turf Industry Awards, where

outstanding achievement in the profession is recognised at the Syngenta President's Dinner. It has been a difficult year for the judges due to the high calibre of nominations and it will be a great evening recognising those turf managers who have excelled, as well as highlighting the next generation with the Graduate of the Year Award.

Of course we couldn't run this event without the support of our trade partners and I would like to sincerely thank principal partner Toro and conference sponsors Syngenta, Jacobsen, John Deere Golf and Davey Water Products. Enjoy the week!

Peter Lonergan, ASTMA President
Coolangatta & Tweed Heads GC

DR LOUISE MAHLER

Dr Mahler is the foremost expert in the psychology of face-to-face engagement. She is a global thought leader in confident leadership communication. Passionate about staying human in a virtual world, Mahler helps leaders and teams bring their best through body-language, voice and divulges the algorithms of engagement in high-stakes encounters.

MICHAEL MCQUEEN

McQueen is a multi-award winning speaker, trend forecaster and bestselling author of nine books. With clients including KPMG, Pepsi and Cisco, he has helped some of the world's most successful brands navigate disruption and maintain momentum. Michael will be presenting on 'Mastering the art of momentum' and the secret to achieving enduring growth.

JAMES CRONK

Hailing from Canada, Cronk is president at Golf Industry Guru and Cronk Group Inc. For the past 25 years he has been passionately committed to helping organisations get their people and their customers 'powered on'. His

company uses a unique blend of creativity, experience and proven systems to help organisations achieve their goals.



CURTIS MCGRATH

A true story of triumph over tragedy, in 2012 McGrath was hit by a mine blast two months into a tour of Afghanistan and subsequently lost both his legs. In those traumatic

moments as he was being stretched from the bomb site, McGrath was already thinking about pursuing a career as an amputee athlete. McGrath has since become one of the country's most successful Paralympic athletes and is now a 10-time world champion gold medallist. McGrath's life is an inspiring lesson in not just how to face setbacks, but to triumph over them.

ALSO PRESENTING...

In addition to our conference keynotes and plenary addresses, make sure you check out some of these sessions...

- **Drainage workshop:** Featuring John Neylan, Bruce Macphree, Jarrod Hill and Peter Manning, this comprehensive workshop will delve into one of the most important aspects of any turf construction.
- **Kingston Heath Short Course:** Hayden Mead will talk about the club's highly anticipated OCM-designed short course.
- **Turf management at Blundstone Arena:** Head curator Marcus Pamplin provides an insight into his operations as well as the historical Ashes Test held last summer.
- **2021 ASTMA Award winners:** Craig Molloy (Oaks Cypress Lakes Resort) and Matthew Cairns (Blacktown International Sports Park) give presentations on their operations which won them their respective ASTMA Awards in 2021.
- **Workforce challenges:** Jeff Blunden looks at the outcomes from the recent ASTMA labour and resourcing survey.
- **Training and managing apprentices:** ASTMA Board member Dave Thomson (Bermagui CC, NSW) talks about the keys to nurturing the next generation of aspiring turf managers. 🌱



2022 AUSTRALIAN SPORTS TURF MANAGEMENT CONFERENCE PROGRAM

MONDAY 21 JUNE

9am: ASTMA Golf Championships (presented by Toro Australia). Buses depart MCEC 7.15am. *Huntingdale Golf Club*

11am-4pm: Registration Desk open

6.30pm-10pm: Syngenta President's Dinner and National Turf Industry Awards *Sovereign Room, Melbourne Convention and Exhibition Centre*

TUESDAY 21 JUNE

7.30am-4pm: Registration Desk open

PLENARY

Combined ASTMA/GMA Session
Sovereign Room

8.30am-8.50am: Welcome to Country and Official Opening *ASTMA and GMA*

8.50am-9.40am: The power of 'On' *James Cronk*
9.40am-10.30am: Trust, mindset, courage *Dr Jess Gallagher*

10.30am-11.15am: Morning Tea

11.15am-11.45am: Understanding the Australian Golf Strategy *James Sutherland, Gavin Kirkman and Karen Lunn*

11.45am-12.35pm: Mastering the art of momentum *Michael McQueen*

12.35pm-1pm: R&A Golf Course 2030 *Chris Gray*

1pm-2pm: Lunch

2pm-3pm: The currency of trust *Dr Louise Mahler*
3pm-4pm: Keynote presentation *Craig Bellamy*

TECHNICIANS

8.30am-3pm: Herrod Motor Sport workshop tour (am), Toro factory tour (pm)

TRADE EXHIBITION

5pm-6.30pm: VIP Trade Session *Exhibition Hall*
(Please note this is for fully registered and Tuesday day delegates only)

WEDNESDAY 22 JUNE

8am-4pm: Registration Desk open

GOLF STREAM

Eureka Room 1

8.30am-9am: Kingston Heath Short Course *Hayden Mead*

9am-9.50am: 2022 TPS in review *Panel*

9.50am-10.30am: Bird and wildlife management *Ian Temby*

10.30am-11am: Morning Tea

11am-11.40am: Operation Pollinator *Dr Brett Morris and Kate Torgersen*

11.40am-12.10pm: Turf management at Oaks Cypress Lakes Resort *Craig Molloy*

12.10pm-12.40pm: The R&A sustainable agronomy *Chris Gray*

12.40pm-1pm: Clubs and facilities support *David Gallichio*

1pm-2pm: Lunch and Trade Exhibition

SPORTSFIELDS STREAM

Eureka Room 2

8.30am-9.15am: Blundstone Arena *Marcus Pamplin*

9.15am-10am: Racing Victoria Turf Strategy *Paul O'Callahan and James Cataldo*

10am-10.30am: Drones to improve turf performance *Bruce Macphee*

10.30am-11am: Morning Tea

11am-11.40am: Managing local government facilities *Mark Doyle*

11.40am-12.20pm: NZ Cricket innovations *Ian McKendrie*

12.20pm-12.40pm: Turf management at Blacktown International Sports Park *Matthew Cairns*

12.40pm-1pm: Casey Fields redevelopment *Eric Kinlon*

1pm-2pm: Lunch and Trade Exhibition

WORKSHOPS

Courtyard Room 2

9am-10.30am: Managing your 2IC's *James Cronk*

Eureka Room 3

9am-1pm: Drainage workshop *Bruce Macphee, John Neylan, Jarrod Hill, Peter Manning*

1pm-2pm: Lunch and Trade Exhibition

PLENARY

Combined ASTMA/GMA Session - Eureka Room 1

2pm-3pm: ASTMA/GMA Panel Session – Finding common ground

3pm-3.30pm: Afternoon Tea

3.30pm-4.30pm: Collaborative management and personal leadership *Steve Herzberg*

TECHNICIANS

Courtyard Room 1

8.30am-9am: New technologies *Greg Lawrence*

9am-9.30am: Electric vehicle maintenance *Husqvarna*

9.30am-10am: B-ACT cutting technology

10.30am-11am: Morning Tea

11am-11.30am: Future battery technology for turf machinery

11.30am-12pm: The Eclipse and beyond *Ray Grech*

12pm-12.30pm: Small electrical engine maintenance

12.30pm-1pm: GPS technology *Dave Anderson*

1pm-2pm: Lunch and Trade Exhibition

2pm-3pm: Irrigation pump maintenance *Narv Thiana*

ASSOCIATION

Eureka Room 1

5pm-6pm: 2022 Australian Sports Turf Managers Association Annual General Meeting



THURSDAY 23 JUNE

8am-2.30pm: Registration Desk open

PLENARY

Eureka Room 1

8.30am-10am: Program Launch – ASTMA Strategic Initiative

WORKSHOPS

Eureka Room 3

8.30am-10am: Communication and presentation skills *Carmen Sederino*

Courtyard Room 1

11am-1pm: Effective leadership *Mark Carter*

10am-11am: Morning Tea and Trade Exhibition

AGRONOMY STREAM

Eureka Room 1

11am-11.50am: The one tried and true agronomic tip or practice *Tim Warren, Dr Phil Ford, Jyri Kaapro, John Shannon and Bruce Macphee*

11.50am-12.25pm: Healthy soil, healthy turf *Dr Gregg Munshaw*

12.25pm-1pm: The future is almost here *Greg Lawrence*

MANAGEMENT STREAM

Eureka Room 2

11am-11.40am: The workforce challenge *Jeff Blunden*

11.40am-12.20pm: New protocols for outdoor workers *Ally Hamer*

12.20pm-1pm: Workplace resilience *Craig Semple*

MIXED STREAM

Eureka Room 3

11am-11.30am: ASTMA Couchgrass Trial update *Tim Fankhauser*

11.30am-12pm: Training and managing apprentices *Dave Thomson*

12pm-1pm: Management and leadership *Ben Gibson*

1pm-2.30pm: Lunch and Trade Exhibition

PLENARY

Combined ASTMA/GMA End of Conference Session - Sovereign Room

2.30pm-3.30pm: Keynote *Curtis McGrath*

TECHNICIANS

8.30am-3pm: Peninsula Kingswood CGC - Workshop and maintenance shed tour/talk (am), GPS guidance demonstration (pm)

SOCIAL

6pm-8pm: Farewell Bash, presented by Greenway Turf Solutions *Melbourne Public, South Wharf*

FRIDAY 24 JUNE

TOUR

8.30am-4pm: Davey Discovery Tour

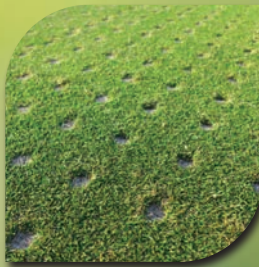
Please Note: Times, topics and speakers listed were correct at the time of this edition going to print. Please refer to the conference app and or the boards inside the MCEC for any updates or changes to the program. See you there!



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Jack Parker, pictured here volunteering at the 2019 Emirates Australian Open at The Australian Golf Club, is one of seven state finalists in this year's ASTMA Graduate of the Year Award

Rising stars

The country's leading apprentice turf managers will come together in Melbourne for the announcement of the respective ASTMA and STA Graduate of the Year Awards, presented by Toro Australia. ATM profiles what is a very strong field of finalists.



The return of the conference last year on the Gold Coast, following a year's hiatus due to the COVID-19 pandemic, meant the industry was again able to recognise its future stars through the ASTMA and STA Graduate of the Year Awards. Ballarat Golf Club and VGCSA representative Tom Lyon was anointed the ASTMA award, while Kennedy Sorrell from Scotch College in Western Australia was adjudged the STA winner.

This year's awards will be handed out during the opening night of the Melbourne conference, with judging having taken place in the weeks leading up to it. Always two of the most anticipated awards, the ASTMA and STA Australia, together with awards sponsor Toro, congratulate the following finalists...

ASTMA GRADUATE OF THE YEAR

DECLAN BAYLY

Mount Osmond GC | SAGCSA



Bayly (22) started an apprenticeship at Mount Osmond Golf Club in September 2018 and after finishing it last September was offered a full-time role. Bayly first knew the turf industry was for him when in Year 11 he completed a week's work experience at Mount Osmond. This led him to apply for an apprenticeship at the club when it was advertised. Given his love for the outdoors and golf (he is a single-figure handicapper) it was a

perfect marriage and since starting at Mount Osmond has gone from strength to strength.

During his time at Mount Osmond, Bayly has helped prepare the course for two South Australian Amateurs as well as an Australian Junior Interstate teams match event. He also volunteered at a Women's Australian Open at Royal Adelaide Golf Club. The part of the job that Bayly loves the most is the instant satisfaction he gets when knowing he has done a good job and is able to see the results. In the future he is looking to continue work in the turf industry and is hoping to one day move into a leadership position on a golf course.

MACK BLAZELY

Launceston GC | TSTMA



Blazely (21) is currently the assistant superintendent at Launceston Golf Club in Tasmania where he started his apprenticeship back in 2017.

Similar to fellow finalists Jack Parker and Nick McClymont, a career in greenkeeping was effectively predestined for Blazely as his father was also a greenkeeper. In 2021, Blazely was promoted to the assistant role by Launceston superintendent Scott Reid. As assistant, it has given Blazely a wonderful opportunity to hone his course management and leadership skills, particularly when taking the reins during times when Reid has been away.

Since starting at Launceston, Blazely has enjoyed learning about all aspects of

the trade, in particular course renovations, irrigation upgrades and course preparation for major tournaments. Blazely has helped prepare the course for the Australian Taxi Championships, Australian Police Day, Thyne Trophy and the Claremont Shield. This October the club will also host the Australian Men's and Women's Senior Amateur Championship and is also home of the Tasmanian Open for the next two years.

JON CHRISTMASS

Lakelands CC | GCSAWA



Christmass started a four-year apprenticeship in 2018 at Lakelands Country Club, an 18-hole private golf club situated 30 minutes north of Perth. He attended South Metro TAFE Murdoch to complete his academic studies. His love for sports, an active lifestyle and the environment naturally led Christmass to pursue a career in sports turf management and considers it a privilege and honour to be a part of the industry.

Christmass says that working on a golf course and being a member of the sports turf industry has been an extremely rewarding and fulfilling experience. He relishes the physical nature of the many course maintenance tasks,

problem solving and waking up each day not knowing what it might bring. During his time at Lakelands, Christmass has been involved in the complete redesign and rebuild of the golf course, including every green, tee and over 50 new bunkers, all done in-house. Upon completion, he has then assisted preparing the new-look course for a number of events, highlighted by the 2021 WA State Amateur Championship.

CALEB JOHNSON

Commonwealth GC | VGCSA

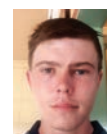


Johnson (22) completed his VCE at Rowville Secondary College in Melbourne's south east where he was fortunate enough to be a part of their Golf Academy. Playing in several junior tournaments during his final year at high school, he was exposed to a number of highly ranked golf courses, including a number on Melbourne's Sandbelt, which sparked his interest in golf course design and maintenance. Upon completing his VCE studies, he immediately applied for an apprenticeship at Commonwealth Golf Club and over the past three years was mentored by superintendent John Mann and assistant Hamish Buckingham.

In addition to winning the VGCSA Apprentice of the Year Award, Johnson was also recently adjudged Melbourne Polytechnic's 2022 Outstanding Apprentice/Trainee of the Year. Not surprisingly Johnson ranks this as one of his greatest achievements and feels extremely humbled to be recognised at such an early stage in his career. In 2019, Johnson was also fortunate enough to volunteer at the President's Cup at Royal Melbourne and following the devastating bushfires in January 2020 was part of a team organised by the VGCSA to assist with restoration works at Mallacoota Golf Course.

ANGUS LINGARD

Bermagui CC | ACTSTMA



Twenty-five-year-old Lingard started working at Bermagui Country Club on the NSW South Coast in 2017 and started his apprenticeship the following year. The first year of his apprenticeship was on-site practical, which meant he started attending Canberra Institute of TAFE in 2019, finishing his studies last year. Always into sports, in his late teens Lingard developed an interest for horticulture. His first job when leaving school was at a nursery before moving into golf.

YOU CAN COUNT ON US

We are open for business. All our service centres remain open, to continue doing everything we can to keep your business on the move.

Toro provides an extensive network of dedicated equipment staff and irrigation dealers, a knowledgeable and friendly Customer Service team and Toro trained technicians who are on hand with expert advice and professional care.

If you need assistance, but want to limit your time out and about, please feel free to give any of our service centres a call on 1800 867 637 or call your local Sales Representative. They'd love to assist in any way they can.

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- Maintaining social distancing

As we do this, protecting the health and wellbeing of all our customers, team members, and the communities we operate in, remains paramount. We will continue to do our best to serve our communities' needs during this difficult time.



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TORO

Lingard says he is really glad he decided to take on the apprenticeship and is looking forward to the different opportunities that are out there in the industry as he progresses his career. Some of the highlights during his apprenticeship include being involved in preparing Bermagui for three Legends Pro-Am events and visiting some high profile venues such as the SCG and The Australian Golf Club on a TAFE excursion last year.

NICHOLAS MCCLYMONT

Twin Waters GC | GCSAQ



McClymont (25) is currently a qualified greenkeeper/irrigation technician at Twin Waters Golf Club on the Sunshine Coast, a role he has held since June last year. Prior to that he completed his apprenticeship under Ben Tilley at Headland Golf Club. McClymont can thank his dad Garry for helping to nurture a passion for sports turf management. Garry has been in the industry for the past 29 years and just so happens to now be his boss, as course superintendent of Twin Waters. McClymont fondly recalls from a young age going into work with his dad, however, it was his love and passion for all things played on turf, whether cricket, golf, rugby league or AFL, that really ignited his interest in a career in sports turf management.

McClymont pinpoints the technical challenges associated with the job as one of his favourite aspects, whether it's troubleshooting a certain issue or completing course improvement projects. During his time at Headland, McClymont was exposed to numerous course works, leading and managing small construction projects like green, tee and bunker reconstructions as well as irrigation installations. Since moving to Twin Waters, McClymont now manages the course's state-of-the-art irrigation injection system to achieve efficient and precise dispersal of additives into the recycled water used for irrigation.

JACK PARKER

Oatlands GC | NSWGCSA



Parker started his apprenticeship at just 16 and in this time has worked at Riverside Oaks, Pennant Hills and currently Oatlands Golf Club. After completing his apprenticeship Parker was appointed to the role of 3IC at Oatlands and is now undertaking his Diploma of Sports Turf Management. The sports turf industry is very much in Parker's blood thanks to his dad, former SCG curator for many years Tom Parker. Growing up, the young Parker played cricket from the age of six and lawn bowls from the age of 10, making it to representative level in both sports up until the age of 17 when work and studies became his focus.

Along his turf journey to date Parker has volunteered at two Australian Opens at The Lakes in 2018 and The Australian in 2019. Both tournaments were eye-opening experiences and he got to work under the likes of industry-leading superintendents Anthony Mills and Phil Beal and witness how they went about preparing for a major event. Parker loves the outdoor nature of the work and one day hopes to become a sports turf manager that the younger generation of apprentices coming through can look to for advice and mentoring, just as he was lucky enough to have during his apprenticeship.

STA AUSTRALIA SPORTS TURF GRADUATE OF THE YEAR

ZACH EVANS

Parliament House | ACTSTMA



Twenty-two-year-old Evans is currently a permanent member of the turf crew at Parliament House in Canberra, where he started his apprenticeship in January 2019. He also attended CIT in Canberra for his studies. Evans got into the turf industry initially as a casual worker at Royal Canberra Golf Club after finishing Year 12. This opportunity led to an apprenticeship offer which Evans at the time declined as he was still unsure on what career path he wanted to take.

After a year of working in sports admin at his local footy club, Evans came to the realisation that working an office job wasn't for him and how much he missed working outdoors. He returned to Royal Canberra as a casual in late 2018 before attaining an apprenticeship at Parliament House. Going forward, Evans is keen to move into a leadership position and is also hoping to gain some experience preparing surfaces at venues that host elite sports events.

COEN MARWICK

City of Albany | STA WA



Marwick becomes the second STA WA representative to hail from the City of Albany in the past three years. Four years ago he was working on a farm before coming across an advert for his current role with the City of Albany. With a passion for cricket and sport, along with the finer things that go into preparing a wicket and playing surface, Marwick joined the crew under Brett Wolfe, the father of Matt Wolfe who won the STA WA graduate nomination in 2019 and national award the following year.

Since starting, Marwick has been involved in numerous projects and events for the City of Albany, among them establishing three new five-wicket cricket blocks, major redevelopments of two parks and the building

of a state-of-the-art youth pump track in Albany. Marwick has also helped prepare surfaces for major sporting events including The Southern Smash T20 competition, two WAFL games and a Perth Glory game.

SCOTT NICOLSON

Warrnambool Racing Club | STA Victoria



Before entering the turf industry, Nicolson was a plumber for over 12 years. Deciding he wanted a change, Nicolson travelled through Europe for a few months where he was lucky enough to visit some famous sports fields, stadiums and racecourses. Not long after returning home Warrnambool Racing Club advertised for an apprentice and after doing some research and having several conversations with track manager Daniel Lumsden, applied for the job.

With a keen interest in the racing industry as well as maintaining a nice-looking lawn at home, the chance to work at the club was too good an opportunity to miss. On the crew now for the past four years, Nicolson has learnt all aspects of racecourse track management, whether it be preparing the track for racing/training, setting up infrastructure for carnivals or major events and even calling on some of his old plumbing skills when it comes to drainage and irrigation jobs.

DOM PELUSI

The Gabba | STA Queensland



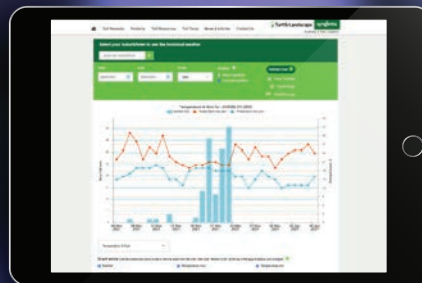
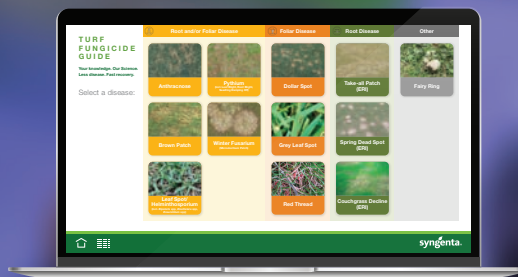
Pelusi started as a casual groundsman at the Brisbane Metropolitan Touch Association before being offered an apprenticeship in 2017. He then applied for a full-time position at The Gabba in 2019 with employment for 14 months, before being offered a full-time role late in 2020. Since landing at The Gabba, Pelusi has been part of many memorable events, including the first ever AFL night time grand final during the COVID-impacted 2020 season. For their efforts, The Gabba won the inaugural ASTMA Sports Turf Management Team of the Year Award.

During his apprenticeship Pelusi also volunteered at Coorparoo Cricket Club assisting with pitch and outfield preparation. Pelusi enjoys the challenges of preparing wickets and the different turf practices that come with managing wicket blocks. He also likes being faced with new tasks and different challenges that require thinking about solutions and steps to overcome them.

Editor's Note: At the time of publication, STA NSW and STA SA had only just completed their judging. NSW will be represented by **Sue Wise** (Landscape Solutions/Macquarie Uni Sports Fields), while **Pat Dewhurst** (SACA) will fly the flag for South Australia. 🏏

NEW Syngenta Turf App and MORE Turf Rewards

During the 2022 ASTMA Conference, we're looking forward to demonstrating our digital tools including the updated Syngenta Turf App. The next season of Turf Rewards will start on 1 July so come chat to us about this great program.



Visit our stand at the Trade Show to find out more and to hear about the
ACELEPRYN® DOUBLE POINTS OFFER

syngenta®

Show stoppers

This year's two-day trade exhibition in Melbourne will cover some 5000m² of floorspace, making it the largest and most diverse golf and sports turf management industry exhibition staged in Australia in the last 15 years. ATM looks at some of the new products, services and promotions set to feature.



The new gold standard in greens aeration – the Toro ProCore 648s

PRINCIPAL PARTNER

TORO AUSTRALIA

Stand 47

At the 2022 Australian Sports Turf Management Conference Trade Exhibition in Melbourne, Toro Australia will introduce its new commercial-grade 4-wheel drive utility vehicle – the **Workman UTX**. With true commercial-grade components, the highest payload in its class and a heavy-duty frame, the ability to regulate speed and sound in sensitive areas and designed for the extreme rigours of a long work week, the UTX is built to stand up to the toughest tests without compromising performance. To raise the standard further, every Workman UTX comes standard with power steering, LED headlights, turn signals, brake lights and a spray-on bed liner.

The **ProCore 648s**, the new gold standard in greens aeration, will also be on display at the Toro stand. The ProCore 648s builds on the tremendous legacy of the ProCore 648 by incorporating even more innovative features while preserving the time-tested design elements that changed the way you aerate. Revised controls and improved ergonomics allow single handed operation. The TrueCore sensing system automatically maintains

tine depth on the fly to match the ground undulations, providing consistent coring depth of up to four inches (10.2cm).

Hole spacing and true tine depth are now set and saved in the InfoCenter. The onboard controller is continuously monitoring key operating parameters to improve after aeration turf condition and allow the operator to easily target coring head drop and raise. A tighter turning radius with reduced wheel scrubbing and the ability to easily increase speed during turns increases productivity.

CONFERENCE SPONSORS

SYNGENTA TURF & LANDSCAPE

Stand 31

At Syngenta Turf & Landscape, we continuously strive to develop and improve specialist turf management solutions and services, that assist turf managers to achieve



consistently high levels of turf quality. During the conference, Syngenta will demonstrate their latest digital tools including the updated Syngenta Turf App.

The stand will feature **Acelepryn** turf insecticide which since its introduction to the turfgrass market over a decade ago has become known for its exceptional performance in managing a wide range of pests in a variety of turf situations. During the conference, you can earn double points when you purchase 10 x 750mL Acelepryn – 1000 Turf Rewards points can get you a Fire Pit or two jackets or two pairs of sunglasses.

Syngenta continues to sponsor the ASTMA Claude Crockford Sustainability and Environment Award as part of their ongoing commitment to environmental stewardship and this year we are piloting **Operation Pollinator** with three Australian golf clubs. You can find out about this initiative during the conference.

JACOBSEN/E-Z-GO

Stand 22

The new **Eclipse 360 ELITE** from Jacobsen will feature prominently on the Jacobsen/E-Z-GO stand in Melbourne. ELITE batteries have powered Textron's E-Z-GO vehicles for over 15 million hours, and the Eclipse 360 ELITE has adopted that technology to make a mower that can cut 50-plus large greens on a single charge.

Every day for the last six months, the lithium-ion powered greens mower has been in use at the home of the Arnold Palmer Invitational – Bay Hill Club & Lodge – and has impressed every operator that has cut with it for different reasons. This latest advancement with battery technology is likely to shape the greenkeeping legacy for years to come, as director of grounds, Chris Flynn, explains.

"For us, this mower could not have performed any better; and we have used it every day since it's been here. The operators love it. The ease of operation and the timing of how the reels go up and down is great. The cut quality is certainly what Jacobsen



The Eclipse 360 ELITE has been designed to combine the next generation of ELITE lithium-ion batteries with Jacobsen's signature cut quality

has been known for a long, long time. In terms of its footprint on the green, we haven't seen any issues at all. The mechanics have been very pleased with it." Legacy building is a daily task at Bay Hill Golf Club & Lodge, and the Jacobsen Eclipse 360 ELITE is the latest part of that journey. View the YouTube video here <https://www.youtube.com/watch?v=FDn0WH7Jq2l&t=15s>

ASTMA GOLD PARTNER

BAYER ENVIRONMENTAL SCIENCE Stand 38

Bayer understands that *Poa annua* management is a key issue for the southern states of Australia. The increasing occurrence of *Poa annua* that is resistant to multiple herbicide modes of action brings significant complexity to management decisions, such as the use of cultural practices, herbicide selection, tank mixing, application timing and product placement.

From a global and local perspective, Bayer aims to continue to provide industry leadership in the area of *Poa annua* management and support the turf industry in making significant advances through targeted research and education. At this year's conference, Bayer's conference stand will take you 'virtually' to our latest trial work looking at *Poa annua* control. Pop on a virtual reality headset and go on a virtual tour of our trial site!

Since our successful launch of **Tetrino** insecticide last year, we have received very favourable customer feedback. Learn more about its proven success on scarab larvae, billbug, stem weevil or armyworm and obtain the latest technical information at the Bayer stand. Our Turf team, including James Royal, Jyri Kaapro, Craig Burleigh, Wayne Ryder and Grant Thomas, look forward to seeing you and answering any questions you may have.

ASTMA SILVER PARTNERS

COUNTRY CLUB INTERNATIONAL Stand 46

Sick and tired of your facility's old worn Teeline system? Well the solution is here! The **Turfhound** synthetic tee system, direct from the USA, is a patented system using interchangeable tiles made up of rough and fairway height grass. With incredible feel and a far more forgiving surface, Turfhound is leading the way when it comes to Teeline strip installations. Currently installed at The Australian, Huntingdale, Metropolitan and Royal Auckland & Grange golf clubs. Visit the Country Club International stand to discuss how Turfhound can improve your members' experience and to request a free quote.



LIVING TURF

Stand 45

Let **My-Apply** assist you with planning, executing and recording all your on-site spraying and spreading applications – and it's all paperless and secure! My-Apply is the latest offering from the Turf Forensics Digital Turf Management platform, exclusively available from Living Turf. Plan, allocate, execute and securely store all your spray/spread records within your My-Results platform. My-Apply offers complete traceability of applications

with compliant and informative spray record generation and secure cloud-based storage. With My-Apply you can:

- Plan and schedule applications in advance through the dashboard (up to 12 months);
- Allocate approved applications to spray techs for in-field completion;
- Verify information, approve and save spray records;
- Access a secure and searchable log of digital historic spray records, 24/7;
- Is mobile device friendly; and
- Manage all site details and product information seamlessly in one place.

Visit the Living Turf stand or ask a Living Turf technical sales representative for a demonstration or more info.

ASTMA BRONZE PARTNERS

ADAMA

Stand 56

Following on from the launch last year of Quali-Pro Twister insecticide, Adama is proud to announce the official launch of **Quali-Pro Nutmeg** herbicide – a new way to control troublesome nutgrass, Mullumbimby couch and various broadleaf weeds in all turf species. Quali-Pro Nutmeg contains the active ingredient bentazone (Group C) at 480g/L. Some may have previous experience with this active, as it is one of three in the popular 3-D herbicide (the others being MCPA and Dicamba). Having bentazone as a stand-alone means it can be safely used across all cool- and warm-season turf species, plus it makes for a handy rotational partner to commonly used Group B herbicides.

At Adama, we are all about innovative, quality products that you can use to produce a quality turf surface. In line with that thought, come and see us at Stand 56 and enter our promo to win some great quality RM Williams gear. No-one will go home empty-handed either – every entry receives a handy drum spanner!



DRASLOVKA

Stand 55

EDN, Draslovka's proprietary flagship agricultural product, is a broad-spectrum fumigant that is highly effective on a comprehensive range of weeds, pathogens, plant-parasitic nematodes and insect pests. EDN limits the risks of pests and diseases spreading within the soil and export forestry sectors. EDN focuses on the phytosanitary treatment of export timber and logs as well as a range of soil treatment markets such as bowling greens, golf courses, sports fields, turf farms, strawberry fields, watermelons and cut flowers. EDN provides a great opportunity



for sporting facilities which are looking to conduct renovation, refurbishment and reconstruction projects.

EDN is providing a clean slate solution for the sports turf industry. It has excellent penetration characteristics, high efficacy and short application time. It is emerging as a viable non-ozone-depleting alternative to the now commonly banned methyl bromide. Unlike its counterparts, EDN breaks down rapidly and it does not accumulate in the body or have any lasting residual effects. Our technical sales specialists will be on hand during the trade exhibition in Melbourne to answer all your questions, or reach out to us at info@draslovka-services.com or visit www.draslovka-services.com.

GREEN TURF

Stand 17

Green Turf was established in 2009 and was born with over 15 years' industry experience at its helm. Since inception, the company has thrived, establishing itself as a market leader in their field with a vast array of skills, experience and equipment. Green Turf collectively brings together experience in the construction of turf wickets, hard courts, sports fields and reserves, combined with knowledge of horticulture and the agricultural sector.

During this time, we've been able to expand our services to include turf wicket soil supply. Our turf wicket soil is responsibly mined through the Earth Resources Regulation of Victoria. During harvesting, soil testing is completed at constant intervals by NATA accredited laboratory Ground Science to continue the high standard of production. We can provide cricket wicket soil for construction and annual topdressing of turf wickets right across Victoria. Visit Stand 17 to discuss your needs and how Green Turf can assist.

GREENWAY TURF SOLUTIONS

Stand 94

Come to the Greenway Turf Solutions (GTS) stand for your chance to win \$1000 and an iPad! We will be setting up a golf simulator on our stand for a nearest-to-the-pin competition. The \$1000 can be redeemed in product with GTS or a voucher that will benefit the club, while the iPad will be a valuable asset given their prevalence of use in turf nowadays.

GTS is once again proud to be associated with the end-of-conference Farewell Bash which will be held at Melbourne Public on Thursday 23 June from 6pm for all fully registered delegates. With canapés and refreshments being served throughout the evening, this event will, as always, be a lot of fun and the perfect way to relax and reflect on a great week in Melbourne.

ICL

Stand 34

ICL is a leading global specialty minerals and chemicals company that creates impactful solutions for humanity's sustainability challenges in global food, agriculture and industrial markets. ICL leverages its unique bromine, potash and phosphate resources, its professional employees and its strong focus on R&D and technological innovation to drive growth across its end markets. ICL Turf and Landscape will be showcasing a great example of ICL's innovation, commitment to sustainability and market leadership with **Sierrablen Plus Pearl Technology**.



Pearl Technology is a unique, recycled, slow-release phosphorus recovered from wastewater utilising a unique process which allows recovery of a pure struvite granule. The unique mode-of-action when applied to turfgrass and as a turf establishment

product releases phosphorus, nitrogen and magnesium, only in response to organic acids produced by growing roots. As the roots produce organic acids the granules release phosphorus, fertilising the plant on demand, all-season long. As plant demand increases, phosphorus demand increases. This reduces the environmental impact caused by excessive leaching and run-off of nutrients into adjacent waterways.

The Pearl Technology is blended with ICL's premium controlled-release fertiliser Poly-S and unique multi-mineral Polyhalite. Research has proven that Pearl Technology provides significantly increased rooting and faster turf establishment times with more efficient nutrient use by the turfgrass plant over traditional phosphorus sources. Stop by the ICL stand to realise the difference you can make to your turf with the range from ICL that has been rigorously trialled, tested and proven.

JT TURF

Stand 14

JT Turf is the Australian distributor for Lastec mowers, Dennis mowers and SISIS turf management equipment, as well as the Jacobsen, Redexim and Ryan dealer for NSW and the ACT. Lastec mowers are synonymous with value and quality of cut and, given the rising costs of rough mowers, provide economically and efficient options from tow behind, zero turn or out-front mowers.

SISIS and Dennis mowers are manufactured in the UK and there is a robustness and enduring quality in their products. SISIS provides equipment to aid in the management of your turf, while Dennis provides a world-class finish with its range of electric, petrol and diesel mowers. For more information and contact details, please visit our stand or website www.jtturf.com.au.



LAWN SOLUTIONS AUSTRALIA

Stand 51

Lawn Solutions Australia (LSA) is partnered with the world's leading turf breeders developing new and improved turfgrasses. In January 2022 the latest selection of turfgrasses under trial arrived in Australia. These grasses will go through rigorous testing in many regions across Australia before potential

TRADE EXHIBITION – HOURS AND REGISTRATION

The Trade Exhibition will be open from **9am-5pm Wednesday 22 June** and **9am-2.30pm Thursday 23 June**. It is a ticketed event with all those in attendance needing to register before entering onto the trade show floor. To save time on the day, we encourage you to pre-register via the ASTMA website (www.agcsa.com.au/conference/trade-show-visitor-registration/) so that a QR code can be sent to your 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.

candidates for release are identified. These partnerships with international turf breeders have already led to the release of some incredible new turf varieties in recent years. LSA will be showcasing these products at the 2022 conference and include:

TifTuf Hybrid Bermuda: TifTuf Hybrid Bermuda is the product of 25-years of research and development by one of the world's leading turfgrass breeders, the University of Georgia. TifTuf is a sterile hybrid warm-season Bermudagrass that has experienced considerable expansion in Australia in recent years and is a great option for sports fields, fairways and tees.

Sir Grange Zoysia: Sir Grange was developed by Bladerunner Farms in Texas. Bladerunner Farms has the largest privately owned zoysia grass research facility in the world. Sir Grange is a fine-bladed premium zoysia *matrella* turf variety, which has high shade tolerance and very low nutrient requirements. Sir Grange was bred for golf with its versatility at a range of heights making it the ideal grass for fairways, roughs and surrounds. If you would like to hear more about our turfgrasses, come and see us at the trade exhibition in June or email info@lawnsolutionsaustralia.com.au.

SUNDEW SOLUTIONS

Stand 32

Sundew Solutions is a leading Australian pesticides solutions research and development company established in February 2009. Initially Sundew's focus was the pest control segment where it is a national supplier to pest management professionals. Since 2009 Sundew has expanded into many other local and overseas market segments including Professional Turf Care Solutions.

At this year's conference the team at Sundew will be showcasing **TaserPRO 800 WP pesticide** for the treatment of nuisance earthworms in turf situations. To learn more, be sure to visit the Sundew team. Other Sundew products available include:

- **ANTagonistPRO:** Suspension concentrate, broad spectrum insecticide with polymer enhanced bifenthrin technology (approved for red imported fire and yellow crazy ants).
- **BeetleBETA:** Betacyfluthrin suspension concentrate broad spectrum insecticide (over 35 pest claims including armyworm, crickets, stem weevil etc).
- **SAS PRO:** Granular fipronil insecticide for ants and stem weevil (approved for red imported fire and yellow crazy ants).
- **TaserPRO:** Bendiocarb insecticide

for African black beetle and nuisance earthworm control.

Sundew Solutions is a family-owned 100 per cent Australian business, employing local families and manufacturing facilities in Australia and New Zealand to produce all of its products. Sundew utilises the services of local research companies, registration professionals and chemical laboratories. Sundew products can be ordered through Ace Ohlsson, Fernland, Greenway Turf Solutions, Indigo Specialty Products, K&B Adams, Living Turf, Nuturf, Oasis Turf and Simplot.



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SPORTS TURF MANAGEMENT CONFERENCE - JUNE 20

SEE US AT STAND 13

ALSO EXHIBITING...

ALLETT

Stand 11

Allett, the UK manufacturer of specialist reel mowers, will be displaying machines for both professional and homeowner use and powers into the new age of electric mowers with two new products – the **C27E** and **Stirling 51**.

The C27E is powered by three 82v lithium-ion batteries, which has the power to run a series of interchangeable cartridges to scarify, rake, aerate, brush and verti-cut as well as mowing with 6- or 8-blade reels. Quiet operation, no petrol requirement, less than one hour to recharge batteries and much reduced hand/arm vibration add up to a more comfortable and environmentally sensitive product with no emissions.

Designed for the home lawn enthusiast with medium to large lawns, the Stirling mower offers our most exact and robust mowing to date, with the Allett cartridge system giving professional level cultivation and clean-up for lawn-thatch control, autumn renovations and weed control. The Stirling drives a range of cartridges to cultivate your lawn deeper, faster and with greater precision with unprecedented control and new levels of comfort. Cartridges can be changed in less than 15 seconds! Also on display will be the **C24**, **Uplift 86** and **Liberty 43**. Allett products are distributed by ADE Turf Equipment in Victoria.

AERATORS AUSTRALIA

Stand 54

Ponds becoming stagnant is an issue on many golf courses, with operators generally spending tens of thousands of dollars on solutions which are ineffective, unreliable and expensive. Visit the Aerators Australia stand to see how we are out to change this with our new surface aerator systems.

Made in Australia, these aerators are over-engineered to ensure good longevity, high efficiency, while maintaining an aesthetically pleasing design. Our aeration system features an effective flow pattern which has been designed to maximise oxygen transfer in ponds, while maintaining the highest efficiency. Thus minimising the effects low dissolved oxygen in the water can cause, such as foul odour, dead grass around ponds and unwanted plant life.



UK manufacturer of specialist reel mowers, Allett will be displaying machines for both professional and homeowner use

BROWN BROTHERS ENGINEERS

Stand 57

The Lowara Smart Pump

The 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.

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 operating 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.



saving as compared to traditional carburetted engines. The Cyclone KB5 comes with the ability to start/stop the engine from the wireless transmitter, with annual fuel savings up to 20 per cent. The Cyclone KB5 offers features such as a Kohler ECH 749 EFI gasoline engine with start/stop function, instant idle, 360-degree nozzle rotation, nozzle options for specific applications and heavy-duty frame construction. It can easily be converted into a skid-mount. Comes with a 10-year manufacturer warranty and three-year Kohler engine warranty.



K&B ADAMS

Stand 35

K&B Adams has been servicing the Australian turf industry since 1969. In this time we have been responsible for establishing many new popular products into the turf market. We have built strong, trusting relationships with our clientele and will continue to support the market with product and service.

K&B Adams has been a proud distribution partner of ICL for over 50 years in Victoria. Twenty years ago, they expanded to South Australia and Northern Territory. The focus of K&B Adams is about providing the products that make a real difference for the turf professional, rather than just chasing a sale.

At this year's ASTMA conference K&B Adams will be formally launching their extended distribution partnership with ICL. From 1 July 2022, K&B Adams will be the main dealer partner for ICL in Queensland, New South Wales and ACT. K&B Adams

BUFFALO TURBINE

Stand 12

The **Buffalo Turbine Cyclone KB5** is the industry's first electronically fuel injected debris blower which allows for instant fuel

were appointed distributor for ICL products as they are eager to work with the full range of ICL products and will be using **iTurf**, a program of integrated applications of turf products to improve outcomes for turfgrass. These programs are scientifically tested. K&B Adams are appointing staff to work for them in Queensland and NSW, and opening warehousing in Sydney and Brisbane, in addition to existing Melbourne and Adelaide warehousing. Stop by the stand to meet the team from K&B Adams.

ORGANIC CROP PROTECTANTS

Stand 24

OCP has been servicing the Australian turf market for over 30 years. Last year we were very excited to announce the launch of our new biological nematicide, **eco-nemguard** liquid and granules. We will again feature this product at this year's show along with our improved flowable formulations of **eco-flo** gypsum, lime and dolomite, soluble **OCP High K 43%**, **FoliaStim** Calcium 30% and many other biological and IPM solutions for turf management. Lots to talk about so drop into Stand 24 for a chat!



MCMAHONS

Stand 2

Whether it be constructing a new championship golf course, sports fields or a thoroughbred racing facility, McMahon's is an experienced company delivering unrivalled professionalism in all projects undertaken. From the smallest to the largest works typically including earthworks, drainage, irrigation and turf, our specialist team are well equipped and experienced to work with you to ensure your project is completed on time and within budget.

Some of the iconic major golf projects we've undertaken in the past 10 years have been Minnippi Golf Course (Qld), Links Kennedy Bay Golf Course (WA), Eastern Golf

Club (Vic), Ocean Dunes Golf Course (Tas), Maroochy River Golf Club (Qld), Bingara Gorge (NSW), RACV Torquay Resort (Vic) and many more minor projects in between.

Our drainage solutions provide sub-surface drainage, sand slitting and sand grooving. Using state-of-the-art machinery, these popular methods have proven to be cost effective with minimum impact to the turf leading to quicker recovery times. Visit our stand in Melbourne to see how our team's attention to detail, coupled with experienced personnel, will ensure that your next project is undertaken with a degree of confidence matched by no other.

R&J BATTERIES

Stand 13

R&J Batteries is one of the fastest growing battery distributors with 27 company-owned branches and a vast network of over 8000 stockists across Australia and New Zealand. Throughout our 26 years of operation, R&J Batteries has built a strong reputation for offering our customers the very best in battery technology backed by expert advice.

Our comprehensive brand portfolio consists of world-class batteries, lubricants and accessories. The extensive product range covers batteries for any application. We continually work with our global supply partners to improve and refine our product range to offer innovative and technology advanced products to customers. Our current product range for golf applications includes batteries from leading brands such as **Predator**, **Fullriver**, **RELiON** and **US Battery** in 6v, 8v and 12v options, as well as battery watering systems from **Flow-Rite** and battery chargers from **Lester Electrical**.

One of the latest additions to our product range, **Predator GC Series** batteries, have quickly become a popular choice among golf course management companies, clubs and resorts throughout Australia. These deep cycle golf cart batteries are specially designed to provide reliable, long-lasting and cost-efficient power. Some of the key features and benefits of the GC Series batteries include

thick plates for dimensional stability, unique cap design to minimise water loss, high conductivity terminals and proprietary alloy and paste composition. For more information on Predator, Fullriver, RELiON and US Battery ranges, please visit our stand in Melbourne, visit rjbatt.com.au or call 1300 769 282.

SCUD AG

Stand 60

When choosing a chemical/fertiliser handling system it is important to cover all bases, while at the same time be cost effective and allow you to buy the products that work best for you whether they are liquid, granules or powder. The **SCUD Groundsman** has all these features and most importantly introduces a chemical handling system that you can build into your workplace. By introducing a clean, neat, organised environment, operators will naturally take to a system where they can see the benefit of improved efficiency and safety. Some of these features are:

- Introducing camlocks and dry break couplings which leave the floor dry after filling;
- Closed chemical transfer;
- Transfer of liquid products from IBCs at speeds of 200L/min (no more lifting IBCs above sprayers);
- The SCUD uses a unique 'waterfold' mixing action which gives it massive granule mixing capacity;
- A built-in drum washer that lets you clean out drums as you go, transferring all rinse water into the sprayer which is also good for the environment.

The feedback we get from those using our systems, notably The Australian and Royal Sydney golf clubs, is the SCUD introduces a system that gets everyone on the same page about how the job is done.

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Mike Baker never intended to found an internationally successful premium golf supplies company. In fact, he simply started out in the industry as the owner of a golf driving range he built in 1987.

Having come from the world of business and media, the golf industry was an exciting new landscape for Mike, and one that he took to quickly. But when it came to fitting out his driving range, he found the equipment available in Australia didn't hit the mark. So, in 1992, he decided to go further afield to find suitable equipment himself.

"I heard about these products overseas so I headed off to America. I started going to the PGA Show in Orlando (and have barely missed one since!) and I got some equipment for myself and brought it back," explains Mike.

In 1996, in addition to owning his driving range, Mike liked the idea of forming an association with other ranges, and would host meetings and social nights. This led to some of the other owners seeing his equipment and products and asking him where he got them. He told them they were from America and that, if they liked, he could source some for them too. And that was the embryo for Country Club International (CCI).

"I remember one day, someone from Yarra Yarra (one of Melbourne's well-known golf clubs) asked me if I could get them the full turf golf mats to put in their practice hit-up bays and I said 'yes, of course'. Then they asked if I could replace their nets so I agreed. Of course, I didn't know how or what I was doing but I had met some netting people in America, and that was the start of what is now the biggest part of our business."

The netting technology in America far outstripped what the Australian industry was using at the time, due to cyclones, snowstorms and stricter height requirements given more urbanised areas. Mike describes the Australian counterparts as "strung up fishing nets on timber poles and chain mesh frames that everyone thought were good". While many Aussies doubted that Mike's netting would ever have uptake in a local market due to its significantly higher cost, he stuck by his guns. It also helped that Mike's main income stream was still the golf driving range, so he had the luxury of only supplying the best quality products, without having to worry about making the business a commercial success.

It was at this time that Mike also brought on a business partner, Ken Robinson, based in Queensland. While Ken ran the Queensland brand of CCI for some time, eventually they made the decision to split the business into two, and have remained firm friends ever since. Mike credits Ken as a very important part of getting the commercial side of the business going initially.

In 2006, Mike's driving range was demolished as part of major roadworks, which led to him deciding to turn CCI into something more economically viable. While the business had already grown substantially it wasn't yet profitable. He was dominating the golf driving range market thanks to his connections; the netting was growing, but he was determined to grow his top-end product ranges faster, which is when Range Servant came on board. Fortunately, the netting side of the business was still going strong and in 2007, CCI won a big job being run by golf course architect, Tony Cashmore, at Ringwood Golf Course. This was next to where the new Eastlink tollway was being built, so a large fence design and build was required to protect the road. Mike describes this as "forever the greatest advertisement" for CCI, as it's seen by everyone who uses the tollway, which has had an incredible snowball effect.

Today, CCI has four main business areas: driving range equipment, golf course equipment, netting and wash down water treatment systems. While they dominate the golf netting market and provide golf nets for more than 90% of clubs in Australia, the recycled water treatment systems also really took off in the late 90s, due to the drought and the government subsidies offered to clubs that installed them.

Eight years ago, Mike made the decision to offer equal partnership to his then New South Wales Manager, John McCafferty.

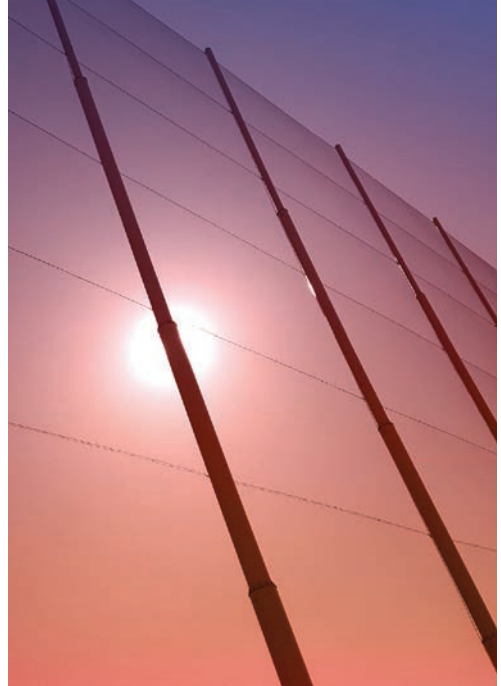
"I decided I needed some sort of succession plan so I brought John on as an equal partner and that was one of the smartest things I ever did. John's expertise on a management level has really added a lot to the business," says Mike.

...the next major milestone for CCI is a proposed multi-million dollar golf driving range fitout in Bangladesh.

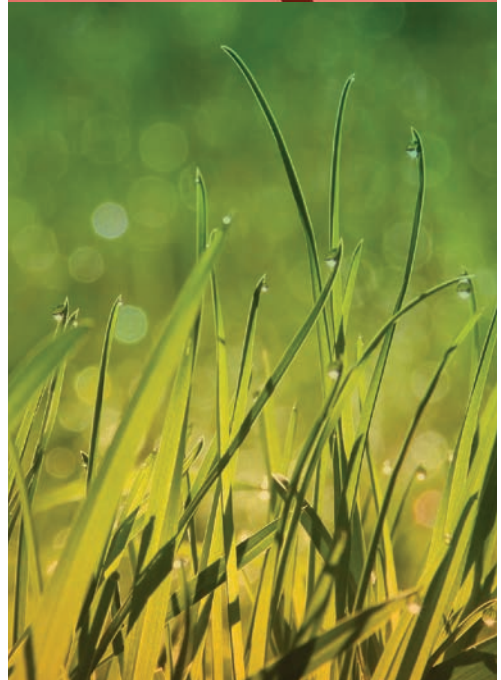
Having previously won big jobs in Hong Kong, Singapore and New Zealand the next major milestone for CCI is a proposed multi-million dollar golf driving range facilities fitout in Bangladesh. Having recently returned from there, Mike says they are hopeful they will be able to supply both nets and Range Servant equipment on the job.

But looking back over the past 30 years of business, it's not only about the big milestones for Mike. Forever humble, he puts a lot of it down to "luck" on his part but mostly cites his success as "a giant achievement between all his staff" of whom there are 15 nationally.

"I'm proud of the business, and while I can't take all the credit for it, I am very happy to be part of it."



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*The organic herbicides trial was undertaken during 2021 to see whether they have a place within turf maintenance programs to eliminate *Poa annua* from couchgrass*

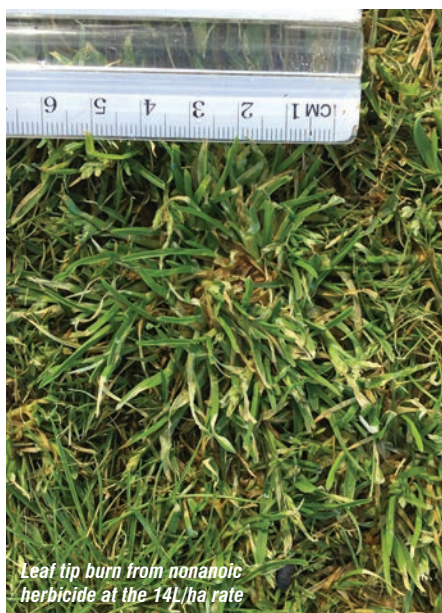
*Agronomic expert John Neylan looks at a couple of research projects he has recently been involved with relating to the use of organic herbicides to control *Poa annua* in couchgrass and the use of recycled glass as an alternative rootzone medium.*

The control of herbicide tolerant/resistant *Poa annua* in couchgrass fairways continues to be an ongoing challenge with no definitive solution. The use of glyphosate has become an accepted method of control where herbicides such as the sulfonylureas and propyzamide are failing. However, with the recent concerns about the use of glyphosate within the agriculture sector and the associated publicity, there has been an interest to see if there may be more acceptable alternatives.

There are two organic weed killers that are based on plant extracts, available as non-selective total kill herbicides that are used in the production of organic certified crops. These weed killers have appeal because they are used in organic crops and potentially don't necessarily have any of the negative impacts of more traditional herbicides.

ORGANIC WEED KILLERS

The primary source of organic herbicides is produced by plants (Webber et. al. 2012). Certain weeds and crops can release chemicals by exudation, leaching, volatilisation and from plant tissue decomposition (leaves, stems, roots, flowers) into the environment.



Leaf tip burn from nonanoic herbicide at the 14L/ha rate

When these biochemicals (allelochemicals) come into contact with other plants they can influence (inhibit or stimulate) the growth of another species.

The organic post-emergent herbicides are all non-selective, non-translocated, contact

herbicides. In general, these contact herbicides control broadleaf weeds better than grasses, smaller weeds better than larger weeds and annual weeds better than perennial weeds. These herbicides destroy the plant's waxy cuticle and cell walls causing desiccation and rapid wilting, which is further improved with the uniform application of the material.

In trials undertaken by the Victorian Golf Course Superintendents Association (VGCSA) in 2021, two organic weed killers were selected. The organic herbicides selected are commercially available products used in the home garden and for organic certified crop production. They are both plant extracts and include a nonanoic acid (pelargonic acid) and a pine oil extract. Nonanoic acid can be found in pelargoniums in large quantities and is also produced in other plants when stressed.

The trials undertaken during 2021 were based around the use of these products as an initial 'look-see' trial to see whether they have a place within turf maintenance programs.

METHODOLOGY

The trial was conducted in the winter of 2021 using non-selective herbicides to provide 'selective' control of *Poa annua*

TABLE 1: HERBICIDE TREATMENTS – GC SITES

	Treatments	Application rate	Application dates
T1	Roundup Glyphosate (a.i. 360g/L)	0.3L/ha	Late July
T2	Roundup Glyphosate (a.i. 360g/L)	0.75L/ha	Late July
T3	Nonanoic acid (525g/L)	3.5L/ha 17.5L/ha	Late July
T4	Pine oil (680g/L)	10L/ha 50L/ha	Late July Mid-August
T5	UTC	-	-

while minimising damage to the couch. The trials included the use of glyphosate as the reference herbicide when evaluating the organic herbicides.

The treatments and dates of application are detailed in Tables 1 and 2. Because both products are labelled for spot spraying, a per hectare rate was estimated. Because the initial rate was ineffective, the second trial applied the organic herbicides at 4-5 times the original rate. A rate trial and a spot treatment trial were also undertaken with the nonanoic acid to gain a better understanding of the optimum rate that would provide a complete kill of the *Poa annua* plants.

There were three replicates of each treatment including an untreated control (UTC)

giving a total of 15 plots. Each plot was 2m x 2m (4m²) with the herbicides applied using the BA Greenkeeper sprayer with yellow air inject nozzles from Teejet and a water volume of 450L/ha. On the 'Santa Ana' lawn, the herbicides were applied using a pressured plot sprayer using a yellow Teejet nozzle and a water rate of 450L/ha.

The spot treatments with the nonanoic acid used the label rate for home garden use which is 70mL per litre of water. When the quantity of active was determined it was about 40L/ha which is considerably higher than the highest application rate used in the trials. The trials were assessed for per cent *Poa annua* control, visual turfgrass injury and Normalised Difference Vegetation Index (NDVI).

TABLE 2: HERBICIDE TREATMENTS – 'SANTA ANA' LAWN

	Treatments	Application rate (late July)
T1	Roundup Glyphosate (a.i. 360g/L)	0.3L/ha
T2	Nonanoic acid (525g/L)	3.5L/ha
T3	Nonanoic acid (525g/L)	7L/ha
T4	Nonanoic acid (525g/L)	10.5L/ha
T5	Nonanoic acid (525g/L)	14L/ha
T6	UTC	-

RESULTS

Results are detailed in Tables 3 and 4 and the following observations are made.

At the golf course trial sites:

- There was no significant effect of the bio-weedicides on *Poa annua* control even at the higher rates.
- At the GC1 site, glyphosate at the 0.75L/ha rate provided a significant reduction in *Poa*



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TABLE 3: % POA ANNUA CONTROL (GC1 - TRIAL 2)¹

Treatment	15DAT*
Glyphosate (360g/L) 0.75L/ha	-22.8
Glyphosate (360g/L) 0.3L/ha	-69.4
Pine oil (680g/L) 40L/ha	-161.1
Nonanoic acid (525g/L) 14L/ha	-177.8
UTC	-244.4
LSD (P<0.05)	117

¹ 30/8/21 *A negative value indicates an increase in the *Poa annua* population

TABLE 4: SANTA ANA LAWN RATE TRIAL¹

Treatment	% <i>Poa annua</i> control 42DAT*
Nonanoic acid (525g/L) 3.5L/ha	-13
Nonanoic acid (525g/L) 7L/ha	-21
Nonanoic acid (525g/L) 10.5L/ha	19
Nonanoic acid (525g/L) 14L/ha	7
Glyphosate (360g/L) 0.3L/ha	100
UTC	-38
LSD (P<0.05)	55

¹ 13/8/21 *A negative value indicates an increase in the *Poa annua* population



annua compared to the UTC, nonanoic acid and pine oil treatments (Table 3).

- At the GC1 site, glyphosate at the 0.3L/ha rate provided a significant reduction in *Poa annua* compared to the UTC.

- While there was a significant effect of glyphosate at the GC1 site, it is noted that there was actually an increase in the *Poa annua* population. At this site, glyphosate resistance has been noted previously and the glyphosate application in this trial provided more of a suppression rather than an elimination.
- At the GC2 and GC3 sites there was no significant effect of the organic herbicides on the reduction of *Poa annua*. At both sites there was high variability in the data and while there were trends there was no significant difference.

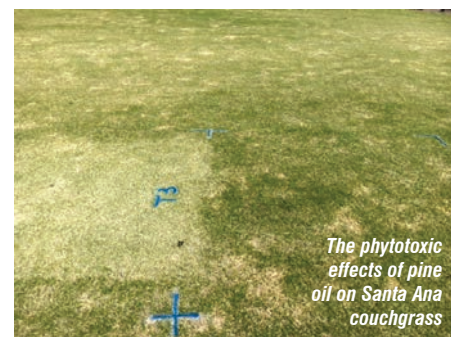
In the Santa Ana lawn rate trial:

- At 7 and 25 days after treatment (DAT) there was no significant difference between the treatments.
- At 42DAT the nonanoic acid at the 10.5L/ha provided a significant reduction in *Poa annua* compared to the UTC (Table 4).
- There was no significant difference between the four application rates of the nonanoic acid.
- Glyphosate at 0.3L/ha provided 100 per cent control and was significantly better than all other treatments.
- There was no significant effect on turf colour (NDVI readings) caused by any of the treatments.

In the spot treatment trial:

- Severe damage to the target plant occurred within 24 hours.
- The treatment had a phytotoxic effect on the non-target species (i.e. 'Santa Ana').
- 'Death' (no green tissue) of the target plant occurred at about 3DAT.

Spot treatment with nonanoic herbicide 2DAT (left) and 16DAT (right). Note leaves and stems growing from under affected foliage 16DAT



- Some recovery of the target plant occurred at about 10DAT. The recovery was mainly via stems that had been protected by the upper leaves and stems.
- Some target plants recovered completely while others continued to deteriorate and die out completely.
- At about 10-15DAT the 'Santa Ana' had recovered from the phytotoxicity.

CONCLUSIONS

The following conclusions are made:

- At the rates of application used in the replicated trials, the organic weedicides were generally ineffective.
- Compared to the spot treatments, the effective rate of application needs to be about 3-4 times the highest broadcast application. This is uneconomic and the potential phytotoxic effects unacceptable.
- Even where glyphosate was used, there was still a highly variable result. This was most apparent at one site where there has been demonstrated resistance to it.
- There was some natural decline in the *Poa annua* during the trial period.
- Glyphosate still remains the most effective method of *Poa annua* control on difficult-to-kill plants.
- Spot treatments with organic weed killer may be an effective method of treatment, but a second application is required.
- Organic herbicides need to make contact with the entire plant for effective control.

ACKNOWLEDGEMENTS

The VGCSA has sponsored several herbicide trials over the past six years to evaluate the efficacy of the available turf registered herbicides and new actives. Thanks to the VGCSA for supporting this project and to the superintendents and staff involved.

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RECYCLED GLASS AS A ROOTZONE MEDIUM

The supply of sands and gravel for sports turf construction have been under stress for some time with increasing demand from numerous infrastructure projects being undertaken around Australia. This demand has siphoned much of the available sands for concrete and other construction materials. The implications for the turf industry are that a consistent source of sand is not always available and compromises are often required.

Providing sands for the turf industry is a specialist process with specific requirements for particle size distribution, capillary porosity and drainage rate. Sand is potentially the single greatest cost in a construction project and accounts for about 20-25 per cent of the total cost. Over the past five years the cost of sports field construction has increased by about 20 per cent across the entirety of the project (SportEng, 2021), with sand being a significant component.

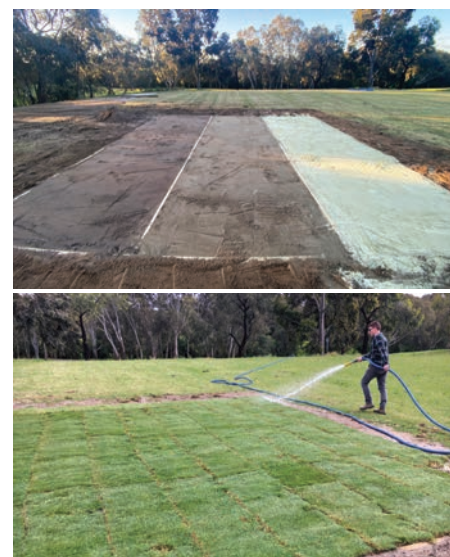
With the pressure on natural sand supplies, the use of recycled materials that can be used as sand and gravel alternatives becomes a possibility. Recycled glass is one material that could well be a viable alternative to natural sand deposits. Research projects

in the UK (Baker et.al., 2005) and at the NZ Sports Turf Institute (2012) have demonstrated that recycled glass is a viable rootzone medium. Trafalgar Park in Nelson, NZ was a venue for the 2011 Rugby World Cup and to bring it up to tournament standard the existing soil pitch was replaced with a slit drain/sand carpet surface comprising recycled glass sand (Glasgow, 2011).

In November 2021, field of play company SportEng established a recycled glass trial as a natural rootzone sand substitute in conjunction with the City of Boroondara at Freeway Golf Course. The trial was set up on Freeway's couch turf nursery and consisted of:

- A formed subgrade;
- Subsoil drainage;
- 100mm gravel drainage blanket;
- 300mm deep rootzone profile consisting of either 100 per cent recycled glass, 100 per cent natural sand and a 50/50 mix of recycled glass/natural sand. The recycled glass was provided by Enviroglass (<https://www.enviroindustries.com.au/enviro-glass>).

Particle size analysis was conducted on each of the sands in a laboratory. The three sand/recycled glass profiles were then amended depending on the soil pH and the capillary porosity as follows:



Top: The three rootzone medium trial plots at Freeway Golf Course – all natural sand profile (left), 50:50 mix of natural sand and recycled glass (middle) and all recycled glass (right)

Above: The trial area was grassed with washed Tahoma 31 couchgrass

- The natural sand profile had processed poultry manure incorporated at 10 tonne/ha to improve moisture retention.



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TABLE 5: TEST DATA – DEC 2021

Test*	Natural Sand	50/50	Recycled Glass
NDVI	0.697	0.715	0.722
Soil moisture (v/v%)	26.5	24.1	24.9
Maximum root depth (mm)	303	312	255
Depth of main root mass (mm)	232	143	137

* Average of 6 readings

TABLE 6: TEST DATA – MAR 2022

Test	Natural Sand	50/50	Recycled Glass
NDVI	0.692	0.719	0.746
Soil moisture (v/v%)	4.3	5.5	5.0
Maximum root depth (mm)	300	300	300
Depth of main root mass (mm)	172	185	125
Clegg (gravities)	31	32	41
Surface traction (Nm)	30	27	28

* Average of 6 readings

- A 50/50 mix of agricultural lime and dolomite lime was applied at 4T/ha to the natural sand to raise the pH.
- Gypsum was applied at 2T/ha to the recycled glass and the 50/50 recycled glass/natural sand plot to increase soil Ca. The trial area was grassed with washed Tahoma 31 couchgrass provided by Evergreen Turf. Tahoma 31 is a new *Cynodon dactylon* x *C. transvaalensis* hybrid couch bred in the USA and is reported to have exhibited exceptional winter survivability, a high level of drought resistance and wide climatic adaptation.

The trial is being assessed for the following performance characteristics – turf establishment and health, moisture content, root depth, thatch depth, infiltration rate, traction and stability and hardness (Clegg readings).

RESULTS

The trial was grassed in mid-November 2021 and assessments undertaken in late December 2021 and late March 2022. Each plot was divided into three sections with multiple samples and readings taken in each. To date, the data can be summarised as follows:

December 2021 (Table 5):

- Excellent root depth and turf health in all sand and recycled glass plots.
- The depth of the main root mass was less in the 100 per cent recycled glass plot.
- The soil moisture content was similar across all sand and recycled glass plots.

March 2022 (Table 6):

- Excellent root depth in all sand and recycled glass plots.
- The depth of the main root mass was less in the 100 per cent recycled glass plot.

- In the lead-up to the March 2022 assessment the irrigation had been turned off to assess whether there were any differences between the sand and recycled glass plots during dry down. Consequently, soil moisture was low but similar across all the plots.
- Excellent turf health across all plots despite the low soil moisture. The deep root system and the perched water table was preventing the turf from going into wilt.
- Surface firmness and traction was similar across all rootzone types.

CONCLUSIONS

At this early stage of the trial, it appears that the recycled glass can provide a viable rootzone medium, particularly where it is blended with a natural sand. These results are consistent with the UK and NZ trials.

Owen et.al. (2005) concluded that glass-derived sands or blends of natural sand and glass-derived sand can be used to produce rootzone mixes that conform to performance requirements for hydraulic conductivity, total porosity, air-filled porosity and capillary porosity used in the sports turf industry.

Baker et. al. (2005) examined the performance of cool-season turf on rootzones constructed with recycled glass-derived sand compared to conventional sands. They found that rooting depth was lower in the glass-derived sand compared to conventional sand, however, rooting depths were still acceptable. This is similar to our observations, however, there is no explanation as to why this is so.

Glasgow (2011) also concluded that the recycled glass sand would be suitable for



Natural sand (top) and recycled glass (bottom)



Root depth measurements from the natural sand profile (left) and recycled glass profile (right). Although excellent root depth and turf health in all plots, the depth of the main root mass was less in the 100 per cent recycled glass plot

construction of a sand carpet winter sports pitch, with the Trafalgar Park pitch a proof-of-concept model for what could be achieved with recycled glass.

ACKNOWLEDGEMENTS

City of Boroondara – Heath Crawford (coordinator of turf management); Freeway Golf Course – Paul Locke (superintendent); Evergreen Turf – Peter Manning; and Enviro Industries. This report was authored by John Neylan, Jarrod Hill and Amy Dingle (SportEng).

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Research is the cornerstone of any healthy, progressive industry and turf should be no different

A crisis in science

The need for more robust, independent and scientifically-backed turfgrass research in Australia has never been greater writes Australian turf industry icon Peter McMaugh AM.

Recently in the general scientific literature that I read alongside of turfgrass articles of interest, there has been a big argument about the publication of results which have not been able to stand the test of repeatability at venues other than the original reporter. This is a very serious issue for scientific reporting not just in scientific literature but also in the much wider area of distribution of knowledge to the general public.

There is a perception among scientists that the broad community is not only ignorant of science but that they also don't greatly care. This could not be more wrong. When they are presented with real science which impacts their lives, they quickly respond. The problem is they are increasingly facing a problem of what is real and true in science reporting.

For me, the problem begins in the design of trials. Too many trials have no definitive statement of what the trial is all about before starting. This leads to confusion and living in the hope that something will turn up. This is especially true when the trial is about a product that someone wants to sell. The owner of the product wants a 'good' result. You will often see in these sorts of trials an early finish while some good data shows. In the reporting,

selective presentation of part of the trial where the desired product is looking good will be published, but the later data which doesn't cover it in glory doesn't get a run.

There are several important things that science reporting needs to present because they are at the heart of what science is all about. The first is seeing a distinct difference. Sam Sutton, who was a former director of the Biological and Chemical Research Institute (BCRI) at Rydalmere in NSW, used to say if you need statistics to show you that one fungicide is better than another, then in practice you are wasting your time choosing it. Essentially that is right. There may be other advantages of the new product such as easier to use formulations, less clean-up work after application or better water solubility. Any of these may give you a legitimate excuse for changing over brands and above the efficacy of the chemical.

This equally applies to products such as grass varieties. When trying to improve grasses, you are always conscious that unless the grass you want to put out offers big advantages that are easily noticeable, then no turf producer in their right mind will change over a profitable paddock to a new unknown variety.

Another thing that you also have to be aware of is how a trial is designed, so that it is comparing apples with apples. A few years back a new grass was trumpeted as being wildly successful when compared with other grasses. When you looked carefully at the comparators they were not similar in their characteristics. The wildly successful grass had rhizomes which the comparators did not. So it was not a like comparison, just names being compared with names.

I have sat and watched grasses come and go over the nearly 60 years I have been watching. One example – CT₂ couchgrass – really stands out in my mind. Bred by Hu Whiting, it was given great wraps in the advertising and promotion, but it had never been tested for herbicide tolerance and it failed badly. It was a poor harvester and required a lot of fertiliser to keep it looking good. It only exists now really as GN1 after a certain golfer wanted a grass of his own.

The commercial world of grass production is a very rough one where there is plenty of exaggerated claims made with very little to back them up. Unfortunately many of the so-called trials are nothing more than a visual beauty contest observed in a very short window of opportunity. They give you no clue

to the probable cost of production or likely durability in the market. One very notable variety that I saw being heavily marketed in the USA a few years ago was Northbridge. You never see it mentioned now. It had absolutely no rhizomes and was the first grass to bow out when I put real water stress on it.

This is part of the reason why you cannot rely on data that you see advertising grasses in the USA. If you don't believe me, then look at the quote of Joe Rogers, commercial manager from Lawn Solutions Australia, in his article titled 'From lab to lawn' in the latest edition of Turf Australia's quarterly magazine – "We cannot only rely on US data at all."

What we lack in Australia is an industry-backed set of grass trials which are independently conducted in a properly designed format and conducted over an extended period. These need to be done at more than one nutrient level and they need to be done so that they demonstrate what happens in drought and under wear.

There are huge differences in how grasses perform in stadiums where there is a high level of care and a level of supervision that can spot a problem and deal with it quickly, compared with the performance on a community playing field with suboptimal inputs and a much lower level of quality supervision and care.

If you look at just one attribute of grasses, winter colour and winter growth, you will understand what I am driving at. In a stadium situation, oversowing a couchgrass with rye is a fairly standard practice in most places south of the Tropic of Capricorn. The biggest problem for the management then becomes how the couch survives the shade competition of the rye and how it comes back in spring.

On a community field without oversowing and without high levels of nutrient, the winter colour and winter growth to repair is much more important, and that is why Santa Ana is so popular in many parts of the country. But not Queensland, because up there the heavy thatch is highly susceptible to rotting out underneath in the wet weather.

In just the last couple of paragraphs I have identified just some of the variables of the data collection we need to be looking at when we start planning, or projecting the needs for trials. With the recent announcement that the 2026 Commonwealth Games will be going largely to regional Victoria, towns like Bendigo and Ballarat will become centres of excellence. The selection of grasses for fitness for purpose need to be developed there.

Unfortunately none of this type of work can be done without serious dollar investment over time. This is very difficult to guarantee. In the last three years the production turf industry, which has been the main source of funds for research, has suffered flood damage losses in NSW and Queensland in excess of \$300million.

The industry is also under pressure in Western Australia where due to the overall market shrinkage a number of farms have closed their doors and the survivors have shrunk their production to current demand levels.

It is these things that hold the industry back. For the last 10 years we have seen very little spare money for the indulgence of turf in the domestic market. We have seen an almost total lack of development of new golf facilities and the limited upgrading of old facilities. Yet COVID has increased the interest in the domestic lawn and there has also been an unexpected spike in activity on golf courses, only for them to be hit by bush fires and floods. Many golf clubs in NSW haven't been open for play for in excess of four months. Yes, the weather will return to something resembling normal in the next year or so, but until we see a drop off in these extremes the industry will continue to be pressured.

Unfortunately these extreme conditions have been a big fillip for the synthetic turf industry and some of the blatant misinformation that surrounds such products which lies at the heart of the crisis in scientific

Then when you put the whole of life costs and replacement costs, synthetics cost about 15 times more than natural turf to build, maintain and replace. There is also the myth that you can cut your maintenance costs. This is simply not true and the promises of lowering costs from \$250,000 to \$20,000 are an unsubstantiated myth.

If you aren't convinced by now of how their costs do not justify their use, then look at the injury statistics and ask professional players whether they like playing on synthetics. You won't get a positive reply. There are places in sport where synthetics can justify their use and hockey is one sport where they provide the surface condition needed for the best execution of the game. But at what cost on the physical stress on the players. It is huge.

This same remark can be made about professional tennis where the extreme punishment of players in summer heat would not be tolerated on a building site for instance. The health and safety issues and the duty of care that the various associations have to their players will one day likely explode, especially if we see a heat stroke related death.

“What we lack in Australia is an industry-backed set of grass trials which are independently conducted in a properly designed format and conducted over an extended period.”

-Peter McMaugh AM

reporting. There is not one facet of the areas that they claim to excel in that can be justified when you look closely into their data.

They claim that natural turf can only carry 15 hours of heavy wear per week. This is just not factual. Natural turf on a properly constructed and appropriately maintained community field is easily capable of 45 hours plus of heavy use (**see Dr Mick Battam's report on Sydney Basin sports ground usage, pages 58 and 59 - Ed**). There is no way that economically they can make a sound case for their installation. They concentrate their pitch to councils and venues saying that by installing synthetic surfaces they can substantially increase their income through fees, well above natural use fields. When you put it under the microscope, the hours that they claim are simply not there.

Then when you add in the facts that much of the extended hours have to be at night under lights, the case further crashes. When you can't use the grounds in the middle of the summer day because it is environmentally unsafe to do so, you further see how they are stretching the truth. Most community playing fields in Australia are designed for dual use for summer and winter sports. You simply can't play cricket on synthetic fields in summer. It isn't safe.

There is a further question that needs to be asked – 'Are we using community funds in a fiscally responsible way?' The answer is 'no'. Inevitably councils do not have the funds to meet the capital needs of these installations. They go cap in hand to State Governments and funds get doled out under various 'grant' schemes which have an obvious target.

Over the past five years in NSW there have been 45 of these installations at an estimated cost of \$135m. One council alone in the electorate of a former Premier has had at least \$13m in grants. Has natural turf in NSW ever received such largess for research? Never!

If all this is not enough, researchers at Macquarie University are finding large amounts of microplastics in the run off from these installations, in the drain effluent and ultimately in the ocean. The purveyors of synthetics will say 'Oh, we can fix that with filters'. The type of filter and their costs would be prohibitive let alone any guarantees about their upkeep.

These practical problems begin with the misrepresentative reports of both pseudo-science and poorly conducted and reported science, and this has to be brought to brook. Science is a bit like politics – you end up with what you deserve when you make your choices. Be wise and be informed. 🙏



PHOTOS: JOHN FORREST

A team effort

Managing wear on community sports fields is critical and the key is cooperation and collaboration between those who maintain them and the sporting clubs that use them

Juggling the demands of turf playing surfaces and end users is always difficult. John Forrest looks at measures put in place at Rosalie Park in Perth to improve its management and performance ahead of this winter season.

Weather variability plays a big part in the presentation of active sports playing fields and as all turf managers know any well-laid plans can go awry especially when rain falls on days of high use.

Rosalie Park in the City of Subiaco in Perth, is a ground that has many sports played on it and in recent years has had several upgrades to assist with the management of heavy use. Among these include a new irrigation system and the addition of new floodlights which have helped in managing the quality and use of the grounds. Rosalie has nine active playing surfaces, equating to 57,368m² of playing surface, with the majority of use being soccer along with AFL, touch rugby and lacrosse.

Over the last three years Rosalie Park has been monitored to ascertain if any improvements had been occurring through annual management practices. This has included soil, tissue and water analysis, infiltration rates (mm/hr) and thatch and mat depth. Sampling takes place at the end of summer (late February/early March) and at the end of the winter sports season in September.

Data collected supplies information on the influence of the water quality on the soil and plant health. One sample is taken at the start of the irrigation season and hopefully after some flushing winter rainfall has occurred.

The second sampling is conducted after the irrigation season when salt accumulation and bicarbonate influence is at their highest, in particular sodium and chloride which can impact not only turf but other vegetation, such as garden beds, that are irrigated. These results can assist with determining appropriate plantings for the future.

Water pH is generally neutral to alkaline which affects the availability of some micronutrients and once again impacts both

grass species and vegetation. Yellowing of new leaves have been observed on turf and other species of plants including tree species such as the iconic Western Australian Jarrah (*Eucalyptus marginata*).

Soil testing also gives insight to organic matter accumulation and sodium levels that can impact on surface quality and recovery. Information collected on a biannual program assists in making decisions on renovation programs and how they are working.



Like many local government curators, Rosalie Park's Tony Kelly and Nel Hughes have the challenging task of maintaining their playing surfaces at optimum condition while dealing with the demands of increased ground usage

Rosalie Park Soccer Site 1 photographed at the end of the 2021 winter season. A cold and wet winter, combined with high usage, meant the ground suffered considerably



TABLE 1: ROSALIE PARK - INFILTRATION RATES

Monitoring Dates	Infiltration Rate (mm/hr) 0-100mm surface depth	
	Rosalie Soccer Test Site 1	Rosalie Soccer Test Site 3
March 2019	66 (below 100mm – 250)	35
September 2019	288	60
February 2020	161	60
September 2020	29	371
February 2021	70	345
September 2021	40	55
March 2022	66	239

Phosphorus is monitored and managed by looking at soil and tissue levels and whether any additions are occurring from irrigation water. Phosphorus retention index (PRI) is also used because of the predominantly sandy soils and the possibility of leaching if phosphorus is over applied. The PRI was developed by two WA soil scientists D. Allen and R. Jeffery and is a tool to help determine how much phosphorus can be safely applied to a soil without leaching. Such data enables turf managers to make better decisions for the environment while also taking care of the plant's requirements.

If the soil has a low PRI but the plant needs phosphorus, then a lesser amount in two or more applications may be required. At the City of Subiaco, there are many areas that do not require phosphorus and have not had any applied for many years as a result of the monitoring process.

The active surfaces at Rosalie have sufficient phosphorus, although several are

borderline and in general small amounts of potassium may be required along with nitrogen. Low phosphorus can occur at the end of summer after there has been recovery from the cool winter conditions. Small amounts, such as 5kgs of phosphorus per hectare, can bring back the balance.

Thatch and mat measurements are taken in the same locations twice per year. Three grounds are sampled with three samples taken from each location to replicate the results.

Infiltration rate measurements (mm/hour) from 2019-2022 are presented in Table 1 for two of the Rosalie Park soccer fields that have been monitored. Test Site 1 is located right outside the clubhouse and changing rooms, while Test Site 3 is located further away.

As the numbers indicate, improvements were gradually made at Test Site 1 in relation to infiltration rate leading up to the 2020 winter sports season, before high use over the winter period set the ground back (infiltration rate in September 2020 was just 29mm). After

renovations, the February 2021 results showed the infiltration rate had more than doubled.

The winter of 2021, however, was cold and wet. Rain and low temperatures combined with high usage resulted in a significant drop in infiltration rate and deterioration of the playing surface. Renovations the following summer increased those rates but came in well below the minimum acceptable rate of 250mm/hour.



Rosalie Park Soccer Site 1 photographed in March 2022 showing excellent turf coverage ahead of the approaching winter sports season

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Having the right machinery and equipment on hand to perform necessary remediation work or cultural practices is important

At Test Site 3, the results show a vast improvement up until the winter of 2021. Organics came to the surface as play on many occasions continued despite the surface being saturated. Because Site 3 was not used as much as Site 1, the improvement after the end of the season was more noticeable. End of winter renovations involved 19mm hollow tines and 10mm of sand topdressing.

CHANGE NEEDED

At the end of the 2021 winter sports season, all concerned with the management of Rosalie Park put their heads together to plan on how to make changes for the better. Curators Tony Kelly and Nel Hughes could see that without some alterations to programming and planning then the grounds would go backwards. Relentless use was a major problem, not just because of the numbers but because clubs would continually train in the same location.

While major works are still undertaken by contractors, City management has supported moves to purchase specialist equipment for the Rosalie Park groundstaff to allow them to treat sections of the ground when the time is right. When a dry week occurs during winter, Tony and Nel now have the ability to solidify high wear areas such as goal mouths, centre corridors or wherever water lays. They can also dust or apply nutrition in those small areas that need extra. Last summer, a Peruzzo 1800 Panther did a great job of keeping thatch under control and thickening the turf sward.

While quality machinery, correct nutrition and appropriate chemical applications have helped in presenting an excellent surface heading into the 2022 winter season, there is still the elephant in the room. Managing wear is critical and the key ingredient for a more sustainable future for local government sports fields is cooperation and collaboration between those who maintain them and the end users.

Those who manage the turf can clearly see the issues as they are looking at the same area every day they are at work. They know the weak and the strong areas of turf, but those who train are focusing on something entirely different. Turfies would say why can't they see that an area is worn and move over to the area where there is a nice healthy section of turf.



Local governments are in a very difficult position, especially those like the City of Subiaco which is an inner city area with a lot of infill housing. Participation is increasing, but there is no more land to expand existing facilities or develop new ones. Expectations are high too as those who play sport often watch it on TV and see excellent turf surfaces and wonder why they can't have the same.

COLLABORATION

It is time that sporting clubs are part of the plan for sustainability. As I'm writing this the rain is pelting down, with over 65mm in the last two days. Tomorrow and the next day are mostly

Training plans should be implemented to take into account grounds not being available. It may mean training at the beach or running on paths in a local passive park once a fortnight or monthly just so the ground can have a chance to recover, with training returning when conditions are drier. A plan for each of the likely scenarios and instilling that in the participants so they take ownership in looking after the active play surfaces is critical so these grounds can continue to service community needs.

In managing Rosalie Parks in recent weeks, Tony and Nel have roped off high wear areas from game days to stop clubs training

New floodlights are assisting with wear management at Rosalie Park. They can simply be turned off in areas where there is higher wear, forcing teams to train in other less worn areas



fine and no doubt sports teams will want to get back out and train. In an ideal world, to protect a ground it may need to be closed for several days until the surface isn't saturated any more. If it is trained on while still in a saturated state it will significantly compromise the surface and will be unlikely to recover as the season progresses and wear continues.

Communication and understanding is required and there needs to be plans to manage, monitor and protect turf surfaces as much as possible so they can be at their best. Clubs need to work with their local government. The person to make the final decision as to whether a ground can or can't be used should be the turf manager.

on them, preventing them from being further worn out before the real cold weather hits. As mentioned, the recent installation of new floodlights will also assist in ground wear management as the lights can simply be turned off in areas where there is higher wear, forcing teams to train in other less worn areas.

Clubs and active sports ground users have to become a team. Education nights and a combined plan where clubs have input as well is the future. Often the question asked is how many hours can a ground handle which is a very difficult question to answer. Some can handle more than others and it depends on many factors, but to work towards sustainable use true usage numbers are needed. 🏏



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Photo: Sir Grange at Teven Valley Golf Course



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Sydney Basin grounds usage

Dr Mick Battam writes about a turf industry project looking at winter usage, wear and carrying capacity of sports fields in the Sydney Basin.

Sports fields play a vital role in any community, often serving as a focal point for socialisation and helping to improve the physical and mental health. Given such an important role, it is surprising that very limited information exists on typical usage hours, wear levels and carrying capacity limits. In particular, there has been considerable confusion on usage levels within the Sydney Basin, with some groups ascertaining that many fields are receiving more than 60 hours per week of use.

In order to provide some clear data, Turf Australia, Turf NSW and STA New South Wales commissioned a project which evaluated usage data for 1157 sporting fields located across 24 local government areas in Sydney.

METHODOLOGY

Winter sport field usage data was assembled based on booking information provided by councils and/or sporting clubs within the Sydney Basin. To ensure the data was not biased by COVID lockdowns, booking data was obtained for the May-June 2021 period (prior to lockdown) and/or 2019 winter sport season. Additional usage data was obtained from council publications, competition draws and/or information provided by sporting clubs.

The councils in the Sydney Basin were divided into two distinct zones – Eastern and Western Local Government Areas (LGAs):

- **Eastern LGAs:** Sutherland, Bayside, Georges River, Canterbury Bankstown,

Randwick, Waverley, Woollahra, Sydney, Inner West, Burwood, Strathfield, Canada Bay, Cumberland, Parramatta, Ryde, Hunters Hill, Lane Cove, North Sydney, Mosman, Willoughby, Northern Beaches, Ku-Ring-Gai and Hornsby; and

- **Western LGAs:** Campbelltown, Camden, Liverpool, Fairfield, Penrith, Blacktown, Hills and Hawkesbury.

RESULTS

When looking at the findings of this study, it is important that two fundamentals be kept in mind. First, sport field usage hours are limited by timeslots around life commitments (sleep, work and school), winter daylight hours and weather. Some councils also place limits on usage. Second, clubs often 'blanket book' fields so they are reserved for longer times than actual use.

Based on analysis of the booking hours and player numbers provided, median winter sport usage levels were estimated as follows:

- **Eastern LGAs:** 22 hours/week of formal sport and 2hr/week of school use. Due to blanket bookings, council booking data was about five hours per week higher; and
- **Western LGAs:** 12 hours/week of formal sport, with minimal data on school use. Vast amounts of blanket booking were observed in the western LGAs, with booked hours on average about 2-3 times more than actual usage. Several councils have between one and three fields that are 'booked' for more

Since being reconstructed according to best practice, this Eastern LGA soccer ground has not needed turf patching for six years

than 60 hours per week. In almost all cases, these sites have been blanket booked, with actual usage usually much lower. Over the entire Sydney Basin during the winter season:

- Five out of the 1157 fields involved in this study are likely receiving more than 60hr/week of formal sport and/or school use;
- 99 per cent of fields receive less than 46hr/week of formal sport and/or school use. These findings are entirely consistent with the limitations that work, school and sleep place on when formal sport can be played, which is typically confined to 4pm to 9.30pm on weeknights and 8am to 5pm on weekends (45.5 hours total).

NUMBERS, CARRYING CAPACITY

Booking logistics limit the number of players that can use a field, with these arising because most clubs want to use fields for less than 46hr/week. To host games over the weekend (8am to 5pm) and on Friday (5pm to 10pm), a full-sized soccer field has all timeslots filled by:

- ~ 400 players if the club consisted solely of senior players; or
- ~ 650 players if the club has about 66 per cent of players less than 13 years of age.

In practice, sporting clubs are unlikely to be able to fully utilise every game timeslot, with the capacity of most sites limited to about 600 players each week for a full-sized field.

Carrying capacity refers to the amount of wear (as distinct from usage hours) that a sporting field can handle while maintaining an acceptable playing surface. In Sydney, a well-constructed and maintained natural turf surface will provide acceptable turf cover, require minimal patching and recover year after year for at least 25 years. Most natural turf fields could be amended so they could handle 600 players per week for winter sport, but for district fields (which host rep teams) that would reduce to about 400 as there is a greater expectation for surface aesthetics.

With regards to synthetic fields, no information could be found on the cumulative number of games these surfaces will handle before needing to be replaced. However, the lifespan of a field that has been appropriately maintained is likely to be about 8-10 years for those receiving 40 hours per week of use (Football NSW) and five years for fields receiving 60-plus hours per week of use (pers. comm. synthetic turf consultant), with no published lifespan information available for these usage levels. In one LGA, a synthetic field constructed in 2012 was patched in 2017, with the council receiving a grant and replacing the surface and shock pad for \$1.2 million in 2021 (a nine-year lifespan).

Many natural turf fields struggle as they have been poorly constructed and/or maintained. Lack of funds is often a major impediment to natural turf, with one of the most intensively used fields in Sydney not even having a pop-up irrigation system (~\$150,000) even though this council has spent more than \$10 million dollars installing synthetic fields.

Excluding the replacement costs, the annual maintenance costs for synthetics (grooming, chemicals, infill replacement etc...) are typically higher than the cost needed for a council to maintain natural turf fields.

WEATHER LIMITATIONS

Weather obviously places limits on ground usage. Natural turf fields with soil issues and/or poor surface water management can remain wet for long periods after rain. More than 25mm falls on average about 11 days per year in Sydney and seven days per year in Penrith. Well-constructed natural turf fields drain rapidly after rain, with hundreds of examples in the Sydney Basin of fields that can be played on within an hour after significant rain.

Heat and surface temperature are the big issues with synthetic fields. Surface temperatures of 88°C have been recorded when ambient temperatures were just 28°C. Football NSW's synthetic guide suggests not playing when temperatures exceed 30°C. This occurs about 24 days per year in Sydney and around 71 days per year in Penrith.

IMPLICATIONS FOR PLANNING

The results of this study clearly show that booked hours should not be used in sports strategies for assessing the extent to which fields are over or under capacity because:

- Booked hours substantially overestimate actual hours of sport use, with enormous differences for fields in the western LGAs;
- Fields with similar amounts of booked hours showing a five-fold variation in wear. Unfortunately, sports and/or facility



This is the same ground pictured in the main photo opposite, prior to being reconstructed. It received higher usage than most and historically struggled

strategies are generally based entirely on booked hours. As a result, the carrying capacity of many fields has been grossly misrepresented, leading to the sub-optimal allocation of sports field funding, particularly if the intent is to increase carrying capacity.

IMPROVING FIELDS

A comparison of the wear levels (as distinct from usage hours) on 152 sporting fields from the Eastern LGAs found these exceeded the current carrying capacity of 67 per cent of fields. However, most of these fields were receiving low to moderate levels of wear and were struggling as they had been poorly constructed and/or maintained. If all 152 fields were constructed/maintained according to best practice, then the collective carrying capacity of these sites could be increased by 59 per cent. This would result in:

- A major improvement in the condition of the 67 per cent of fields where the current carrying capacity is exceeded, with modest improvements on the other fields; and
- More sport able to be played on about 74 per cent of fields (those that have timeslots still available for booking), with collective carrying capacity increased by 45 per cent.

There are many examples of fields that historically performed poorly, but once amended and maintained correctly can handle high levels of use. By addressing the factors limiting natural turf performance over a five-

year period, a council in southern Sydney reduced their annual spend on turf patching from \$280,000 to just \$5000. This council also reduced the number of fields in poor condition at the end of winter from 54 to just nine.

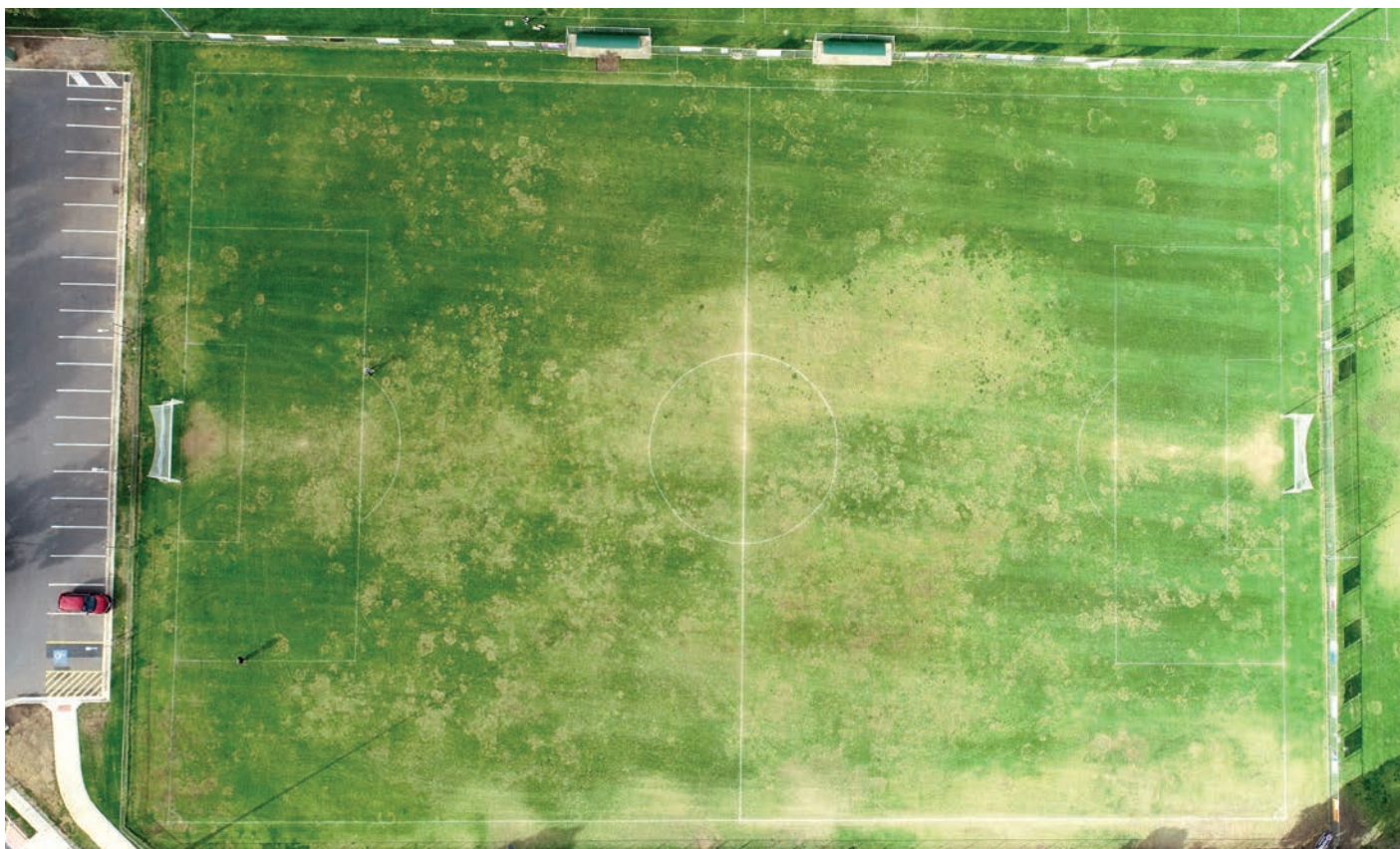
Clubs using a North Shore field requested it be converted to synthetic as it struggled each year. The move was blocked by residents and the field reconstructed according to best practice. It has since made it through three seasons without the need for turf replacement.

CONCLUSION

This study identified that council booking data exaggerates the hours sporting fields are used due to blanket bookings. To better ensure sporting fields meet community requirements it is recommended that councils;

- Collect data on actual hours of use to get a better understanding of what is occurring.
- Rely on qualified natural turf specialists to assess wear levels and carrying capacities.
- Educate staff on the capabilities of well-constructed and maintained natural turf fields which can handle >46hr/week use.
- Assign appropriate budgets that allow turf fields to be constructed and maintained optimally, so user groups are less likely to request expensive alternative surfaces that are less environmentally friendly. 🌱





Aerial advantage

AGCSATech senior agronomist Bruce Macphee reports on some recent work utilising drone technology to assist in identifying issues on sportsfields.

With an increase in sports participation and demands placed on natural turf sporting facilities, many established cities within Australia are running out of space for additional facilities to accommodate such rising demand. In many cases, existing facilities are at maximum capacity in terms of use and surfaces are at risk of significant deterioration and becoming unsafe due to a loss of turf coverage and excessive hardness.

In 2020, the ASTMA was engaged by the South Australian Office for Recreation, Sport and Racing (ORSR) to undertake research into the potential for drone-mounted multispectral technology to assist in reducing the inputs required to maintain turf facilities through early detection of issues and thus increasing hours of use those surveyed fields currently support.

Ensuring sports turf facilities are maintained to provide optimum conditions for turf growth and recovery could allow many facilities to continue to be utilised at current levels or greater without deterioration of the surface or risking safety. Identifying areas which are at risk of deterioration, prior to any significant turf loss, and targeting those areas for remedial works to restore optimal growing conditions can reduce inputs and maintenance costs by potentially removing the need for major works and turf replacement.

Early identification of poor performing irrigation systems, excessive wear, compaction or pest and disease outbreaks can reduce the inputs required to address these problems. The surveying of agricultural crops with multispectral cameras to identify plant stress is widely used, however, remains underutilised in Australia, particularly within sports turf.

PROJECT SCOPE

A range of sports turf surfaces were selected throughout Adelaide for assessment using drone technology and multispectral analysis (including NDVI, NDRE, NIR and RGB). These evaluations were supported by traditional assessment methods including TDR soil moisture probe, Clegg hammer (surface hardness) and thatch depth. This helped to validate results and corroborate data collected from the drone-mounted technology.

Locations were selected to provide a broad cross section of facilities with varying levels of use and maintenance. Pre-COVID, the research program was to survey each venue throughout the seasons to observe changes in the surface quality and various pressures throughout the year including wear, traffic and irrigation performance. Unfortunately, assessments were heavily disrupted throughout 2020 and 2021 due to facility impacts, border closures and travel restrictions, with the ideal volume of assessments not possible at all venues.

While sufficient data was collected, additional data throughout the year, coupled with implementation of remediation works, would have assisted in quantifying the expected levels of surface improvement and increased hours of use within the parameters of the present site conditions.

Use of the drone-mounted multispectral sensor was successful in identifying numerous areas within each playing surface which were impacting agronomic conditions, recovery

potential and surface performance. Ground proofing, using traditional assessment tools, confirmed those issues identified by the drone.

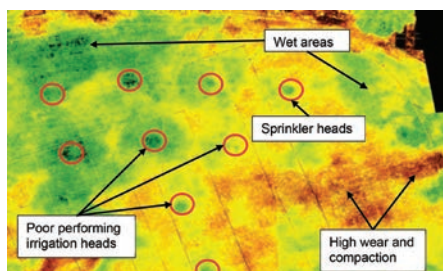
The survey of sports fields in particular highlighted some significant issues with irrigation uniformity, excessive wear, soil compaction and weed and disease infestation. Many of these issues are interconnected and identifying the primary cause affecting turf performance is often the most efficient and cost-effective method of improving overall surface quality and turf recovery potential.

Issues such as poor irrigation uniformity over summer or excessive wear can lead to a loss of turf cover and conditions which are more prone to soil compaction. This can lead to further issues during winter where low-lying compacted areas will tend to hold water, potentially becoming unstable and leading to further deterioration of the surface.

Early identification of affected areas within a sports turf surface will assist in targeted maintenance practices to provide suitable conditions to support turf coverage year-round and reduce the need for costly replacement works. Increased usage can be achieved by balancing inputs with wear to create an approach where areas of high use receive a greater level of maintenance in order to achieve and maintain a uniform surface.

More efficient use of water resources can be achieved by identifying areas of poor irrigation performance, such as poor distribution uniformity (DU), as well as ensuring agronomic conditions are such as to maximise the effectiveness of any irrigation or rainfall. Soils with good aeration and low soil compaction will be more receptive to irrigation and rainfall, avoiding puddling or runoff.

A full irrigation audit can often improve irrigation efficiency by 10-15 per cent and in some cases even greater improvements can be observed. This research categorised some facilities where NDVI imagery highlighted issues with distribution uniformity that were not visible to the human eye during observations and standard testing. Addressing these issues will not only provide these facilities with improved playing surfaces, but can also translate into significant cost savings of up to \$8000 per hectare in annual water costs alone.



NDVI image showing areas of high wear, compaction as well as issues of irrigation performance

BETTER FERTILISER EFFICIENCY

Mapping of high wear areas can assist in identifying areas which should be targeted with additional aeration and nutrition to assist with wear tolerance and increase growth and recovery. Tailoring fertiliser applications using computer-controlled equipment can reduce wastage by only applying fertiliser to those areas which need it. There is an added saving in not producing unwanted growth which requires regular mowing. Applying this across multiple locations in a local government area could lead to significant cost savings.

The research showed that NDVI technology and analysis provided the ability to deliver a more targeted approach to fertiliser applications. Data collected and converted into imagery (and data points) were identified to locate areas of concern with the turf, which can then be uploaded into computer-controlled equipment for application of pesticides or fertilisers to target specific areas rather than blanket treatments of the surface.

Excessive wear or damage to a playing surface often coincides with periods of heavy play during wet conditions. Surveying before and after these events can highlight where damage has occurred and can demonstrate to user groups where damage and excessive wear is occurring, particularly during training.

An additional element found during the research was that singular NDVI and NIR surveys, while providing a significant amount of information, only provide a partial picture of wear and traffic. Regular assessments throughout a 12-month cycle will provide substantive data relating to wear, traffic, areas of use and wear patterns throughout the various sporting seasons.

It was noted that an increase in the frequency of NDVI and NIR surveys is needed in order to provide an accurate assessment of wear patterns on playing surfaces throughout the year. A program of regular drone surveys would also detect deterioration of growing conditions before they become a critical issue.

INCREASED USAGE

Regular monitoring of sports turf surfaces with a drone will provide up to date data on the condition of the surface and identify locations which require remedial maintenance, allowing a more uniform surface to be presented. NIR imagery collected during the research showed areas of emerging wear – areas where damage was not immediately visible – through training activities at several AFL locations.

Regularly targeting high traffic areas with practices to maintain optimum growing conditions will allow additional use without significant deterioration of the playing surface. This process will also identify venues and specific areas within venues which may need additional works such as turf renovation, drainage installation, irrigation replacement or complete reconstruction. Over time, regular assessments of community facilities will provide benchmark data on playing surfaces which will allow key performance factors and suitable construction profiles to be identified.

CONCLUSION

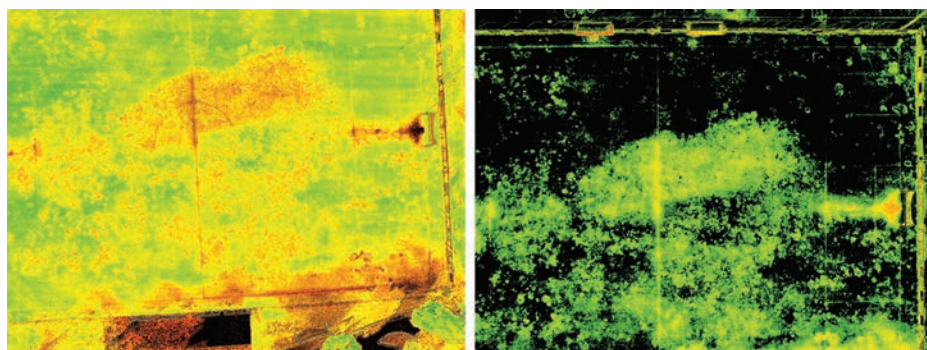
Aerial surveys of sports turf surfaces using drone and multispectral technology allows the turf manager to understand a range of elements not visible to the human eye and as a result align resources more effectively. Understanding which areas require greater inputs allows a targeted approach to managing turf surfaces. Areas which are experiencing high levels of stress through excessive use, poor irrigation uniformity, weeds, pests, diseases or other abiotic stresses can be quickly identified and investigated.

Detection of these areas using NDVI technology can prevent problem areas developing and targeted treatment can be implemented, thus preventing deterioration of turf surfaces, costly repairs and potentially saving thousands in water and maintenance costs. The early detection and treatment of issues will improve playing conditions and the ability of turf to cope with greater levels of utilisation and wear.

ACKNOWLEDGEMENTS

The ASTMA thanks the SA ORSR for their support in undertaking this research. ﷻ

NDVI images of the same soccer field pictured in the main photo opposite. The NDVI image on the right shows extensive disease throughout the surface (shown as green), while the image on the left shows isolated wear in the goals and along the boundary (red and brown)





The power of data

Ben Gibson writes about the importance of data collection and how to effectively analyse it in order to assist with management planning and decision making.



Data has become a hotly debated topic over the last two decades. After the Internet exploded onto the scene, the world saw a meteoric rise in the number of Internet-connected devices. At the end of 2020, there were an estimated 22 billion connected devices on the 'Internet of Things (IoT)', and this is forecast to rise to a mindboggling 125 billion by the end of 2030!

Whether through our phones or home and work computers, we have instant access to an unprecedented volume of data and information that guides our decisions, actions and planning. All these devices are collecting data, running algorithms and making predictions about user behaviour and consumption patterns.

Have you ever been reading a news website and all of a sudden started seeing banner advertisements specifically for, say, Stihl tools, and subconsciously your brain thinks, "Wow, I love Stihl tools, and what a coincidence, I only just bought one!"? The advert is cleverly offering you the carry bag/extra battery/upgrade to complement your purchase from two weeks ago. Unbeknownst to you, all driven by 30 minutes of research you did three weeks ago in the same Internet browser!

A number of apps and platforms have been identified as capturing data while your phone is active but also, and this is scary, inactive (asleep). When you download an app and provide permission, the ability to access, share and sell your data varies between platforms and its always buried within a mountain of fine print!

Forbes recently reported that a team of computer scientists at Northeastern University in the US, conducted research with 17,000 of the most popular apps on Android and iOS and many were found to be "recording the phone's screen and sending that information out to third parties."

Without diverting too much, I read an alarming statement about the power of data many years ago – "If you are not paying for the product, you are the product." Its origins stem back as early as the 1970s when free-to-air television was identified as the strongest form of marketing at the time for many sectors. Marketers had access to billions of consumers gorging themselves on the programs.

More recently though, the concept has been applied to the so-called "free" use of social media platforms and the associated data collection and targeted advertising toward market niches. This was recently highlighted in the popular Netflix documentary 'The Social

Effective use of data is a very powerful way of planning and presenting information to support a project or initiative you may be proposing. Investing the time in collating and organising data can have a significant impact on your operations

Dilemma', which provides an eye-opening look at the power and impact of social media and data on humanity.

Countless organisations have been fined, charged and even shut down over their mishandling or appropriation of consumer data. Our data is so valuable to consumer organisations that they will pay billions of dollars for it and at times willingly break the law to access it.

Data analyst and researcher Clive Humby famously stated as early as 2006 that: "Data is the new oil – it's valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, etc... to create a valuable entity that drives profitable activity. Data must be broken down, analysed for it to have value."

Okay. So we are understanding the power of data. From a turf management perspective, you undoubtedly already understand the value and benefits of 'knowing the numbers' and using data to forecast future practices and planning. The more accurately we can forecast

resource consumption, labour requirements, growth and pre-empt the inevitable challenges turf management brings, the greater our ability to be prepared, agile and ensure the best outcome for our team and property.

Jake Gibbs, director of grounds at Elanora Country Club in Sydney, highlights the important role data has played in his turf leadership career: "As a steward of the golf course, with so much riding on so many decisions, it was critical it was never perceived as 'Jake's opinion', but rather an educated, informed decision made by the Board. This has opened the gates to the full backing of membership and a great feeling around the club."

Conversations with Gibbs highlighted how passionately he wanted to organise and present the data so that the Board could make an informed decision, greatly increasing the likelihood of support and resources if the project experienced challenges along the way. They would feel greater ownership of the club's decisions.

Data provides certainty where there may be doubt, while at times it can provide others with less industry knowledge a way of quantifying an issue. Data can reduce the number of questions directed your way and levels of uncertainty in your leadership. With a well communicated plan backed by data, there are fewer 'gaps' and opportunities for others to wonder about your plan of attack.

TYPES OF DATA

So, what sort of data should we be looking for in our journey of developing an engaged and safe culture? What sort of data are we required by legislation to keep? And what sort of data from our safety performance, hours, incidents,

injuries and hazards can we keep and analyse to reduce the likelihood of further injury?

Having big blocks of data and long lists of information means very little if it is of poor quality or we do not know how to organise or analyse it. To understand the power of data a little more it is important to consider the type of data we might capture, the outcomes we would like to achieve by collecting and analysing the data and, most importantly, how to analyse it.

Types of data can be broken down into two distinct categories – quantitative and qualitative. Often referred to as numeric data, quantitative data deals with things that you can measure objectively and are black-and-white. It includes things like rainfall, temperature, height, time and length. Quantitative data is what it is and is not affected by attributes or characteristics.

Qualitative data is often referred to as attribute or categorical data and can be further broken down into the following categories:

Binary data: Data that can only have one of two results. Did it happen or did it not? Yes or no? Binary data is very difficult to be questioned or interpreted differently. It is clear and distinct. For example, so many organisations proudly promote their number of days without a Lost Time Injury (LTI). It is not uncommon to see this statistic displayed in a common work area or lunchroom. It is difficult to misinterpret. Did we have an injury today or not? The simple qualification, "Did the worker have time off due to the injury or not?" is black-and-white.

The power of this factual, evidence-based statement holds distinction against generalisations such as, "We are very safe

here" or "We never really have injuries" as they are opinions and must rely on trust and relationships for believability and credibility. Data and facts are king. Keep this in mind when considering your compliance/injury/incident and pesticide records.

Nominal data: This data is useful when we need a greater range of categories to group or organise data. We create attributes for each group (which result the data needs to be to fall into that category) to help us manage and obtain the data's benefit. Placing data into sets based on different attributes is nominal, qualitative data. For instance, we might have five categories of turf coverage based on the percentage of growth across the sample size. These may be:

- Category 1: 0-20% coverage
- Category 2: 21-40% coverage
- Category 3: 41-60% coverage
- Category 4: 61-80% coverage
- Category 5: 81-100% coverage

Remember, our opinion of turf quality is perceived very differently to presenting an organised data set to the Board or management. Consider this statement... "Yep, the Southside always gets patchy this time of year" as opposed to "Over October, November and December last year, we observed x-number of Category 3 days, x-number of Category 4 days and x-number of Category 5 days. This has changed significantly in the prior 12 months, with a 25 per cent increase in turf coverage and quality. This demonstrates the impact of 'y' and the value of proceeding with 'z'."

Effective use of data is a very powerful way of planning and presenting information to support a project or initiative you may be



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Data analysis is the process of reviewing, cleaning, transforming and modelling data with the goal of discovering useful information to draw informed, educated conclusions and, most importantly, support and influence current and future decision-making

proposing. Investing the time in collating and organising data can have a significant impact on your operations.

TYPES OF ANALYSIS

Our first step is capturing the data, but equally important is what we do with it and how we analyse it. We can have a great data set, but if we don't really know what to do with it we have stripped it of its power. Data analysis is the process of reviewing, cleaning, transforming and modelling data with the goal of discovering useful information, using the data to draw informed, educated conclusions based on fact and, most importantly, support and influence current and future decision-making. There are three main forms of data analysis.

Descriptive analytics: This is the review and interpretation of historical data to better understand changes that have occurred at your facility. Looking at what has happened in the past, descriptive analytics describes the use of a range of historic data to draw comparisons between conditions (such as weather, staffing numbers, financial climate) at the time the data was collected to identify relationships between occurrences.

When we review when our injuries or incidents occur at work, can we determine if they were all over the summer (when we are often busy and rushing, staff are tired and working conditions are hot)? Where can we draw some commonality between the conditions when each injury or incident occurred. Is there any pattern or connection?

Diagnostic analytics: Understanding diagnostic analysis is essential in the effective use and interpretation of data. Diagnostic analytics should provide direct and actionable answers to specific questions. It is one of the most commonly used forms of data analysis across all industries.

A valuable form of data discovery, diagnostic data analytics empowers leaders by helping them gain a firm contextual understanding of why something happened. If you know why something happened as well as how it happened, you will be able

to pinpoint the exact ways of tackling the problem. To gain a practical understanding, it's vital that you gain a foundational knowledge of descriptive and diagnostic analytics. This is all about understanding the 'how' and 'why' something has happened to drill down specifically on the triggers that lead to the occurrence.

Let's say we identified that on every day we had an injury last year it was over 32°C. We then held a consultation session with our team to discuss the challenges of working outdoors when temperatures were above 30°C. We started to get feedback from the team that their equipment became uncomfortable – people stopped wearing glasses due to fogging or gloves due to becoming slippery.

We are now beginning to diagnose the how and why of our injuries and the associated behaviours. You can see how we are going to be able to use this data to influence our decisions (and implement risk controls) to remove or reduce the opportunity for and likelihood of recurrence.

Predictive analytics: If we have cleaned up, received and diagnosed our data so that we understand the how and why, we can begin to use it to make educated, informed decisions. Using predictive analytics, we can use our data to influence purchase, staffing, turf management, pesticide and other decisions.

This is where we truly begin to enjoy taking out the guesswork and making calculated decisions, plans and strategies in the best interest of the team and organisation. We can make predictions and implement plans to minimise the impact of any disruptions or hurdles. With a good understanding of data and solid planning, we give ourselves the gift of reducing the stress and anxiety associated with the unknown or things outside our locus of control.

DATA CAN SAVE LIVES

Data in safety management is paramount to identifying incident and risk trends, significant hazards and common attributes of near-misses and injuries. Understanding where incidents occurred, who was involved, what equipment, time of day, if the public or members were involved, or what the communication was like leading up to the event, is essential to understanding the situation.

It is important to make it easy for staff to identify issues, raise hazards or submit incident reports. Remove all possible barriers in this process and remember... their main responsibility is to get the data to you and then your main responsibility is to investigate the data, identify hazards and risk and take action to eliminate or reduce the risk of recurrence.

When staff make the effort to raise a hazard or let you know of something they are concerned about onsite, it is vital to not only take action, but to show them that their effort was worthwhile and has triggered an investigation and/or improvement.

It is so deflating for someone to make the effort to raise an issue and then turn up at the next meeting to find nothing has been done and it has just been lost in the 'busyness' of the workplace. Do you seriously think they will bother to raise more issues and future meetings?

Data helps identify patterns and trends and can be used to guide training and consultation efforts. Well-captured and analysed data does not lie, it can save time, money and our staff. Opinions can be questioned, but well-presented data can make a strong case for improvements and change to benefit the wider team and organisation.

Editor's Note: Ben Gibson and the crew from The Toolbox Team will be exhibiting at the Australian Sports Turf Management Conference in Melbourne - visit Stand 8. 📍



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Moore Park in Sydney is one of three golf courses selected to be part of an Operation Pollinator pilot program in Australia

Kate Torgersen writes about the Operation Pollinator pilot program that has recently been set up at three golf courses in Sydney and Brisbane, a first in Australia.

A very exciting environmentally beneficial project has started here in Australia in conjunction with Syngenta. For more than 15 years, Syngenta has run Operation Pollinator, a research-based program which uses specially selected wildflowers to attract various pollinators and increase biodiversity. Although in full swing throughout the US and the UK, Australia, up until now, hadn't been involved in the program.

When presenting at the ASTMA Environmental and Vegetation Management Seminars across the country in 2019, I spoke with Syngenta technical manager Michael De Luca about the program and the potential to get it started here in Australia. During these seminars, participants were asked if they would be interested in learning more about Operation Pollinator – the response was overwhelming!

Like many things during the COVID-19 pandemic, discussions about the program went quiet, however, in late 2021 I received an email from Syngenta Turf & Landscape business manager Paul Jackson about

assisting a launch in Australia. I knew it was the time. We had to act as the industry was becoming more aware of the need to improve its environmental stewardship and many were keen to participate in programs such as this.

Earlier this year expressions of interest to be involved in the pilot project were called for. Following a fantastic response, three facilities were selected to undertake the first Operation Pollinator program in Australia – Bonnie Doon GC, Moore Park GC (both Sydney) and Indooroopilly GC (Brisbane). It is hoped that more facilities will become involved as the program progresses.

I am excited to be partnering with Syngenta to run the program, along with universities and pollinator researchers. Working with the three golf courses, I will advise on appropriate methods to establish and manage the program. All clubs will be educated on the correct site preparation, site selection and species selection for their area.

In early April, Syngenta marketing manager Nicole Tyzack and I visited the two Sydney courses and met with Cameron Smith (golf course manager, Bonnie Doon GC) and Mal Durkin (superintendent, Moore Park GC). It was also encouraging to see both clubs inviting volunteers and management to be educated and involved with the project.

Although Bonnie Doon and Moore Park are less than 10 kilometres away from each other in Sydney's eastern suburbs, the courses differ in so many ways. This will allow the delivery of different methods of site preparation and management techniques, providing unique

plots for research and setting up a corridor for pollinators within the region.

After the recent floods in southeast Queensland, we finally managed to visit Ben Grylewicz (superintendent, Indooroopilly GC) to select the most appropriate site for its 500m² pollinator plot. Given the increase in floods through this area, selecting the correct site was crucial to ensure it was safe from future floods.

WHAT IS OPERATION POLLINATOR?

Operation Pollinator provides golf course managers with the tools and information to successfully establish and manage attractive wildflower resources that are crucial for bees and other pollinating insects. In addition, it aims to enhance the visual appearance of the course and the overall playing experience.

Pollinating insects are crucial to the production of many food crops, therefore the health of pollinators is important. In recent



Native habitats on golf courses can provide nectar and floral resources to support many insects and provide nesting sites for bees

PHOTO: MONINA GILBEY

years, pollinators have been threatened by habitat loss and fragmentation, agricultural intensification, non-sustainable use of crop protection products, environmental pollution, pathogens and climate change.

The golf and sports turf industry is uniquely placed to help address the decline of pollinators. Native habitats on golf courses and other turf facilities can provide nectar and floral resources to support many insects and provide nesting sites for bees. Through Operation Pollinator, the aim is to promote the health and wellbeing of bees and other pollinators by creating specific habitats tailored to local conditions and insect populations.

GOLF COURSE BENEFITS

The establishment of a biodiverse pocket of land on a golf course not only enhances its visual appearance and the golfer experience, but also provides an ideal opportunity to preserve and enhance essential habitats for pollinators. Operation Pollinator can also lead to positive interactions between golf courses and their communities. Building awareness of environmental stewardship efforts can promote the course in a positive light and engender a sense of pride among the members that their course is doing its bit for the environment.

OPERATION POLLINATOR SITES

Regarding plant species, the use of indigenous species (i.e. from the local area) is important, but there are situations where native species (i.e. Australian) will be added to the list of recommended plant species to add more flowering variety.

Indigenous plants are ideal as they adapt to the local climatic conditions and can persist for longer without needing to be re-established. However, access to a year-round supply of high-quality nectar and pollen resources is vital for pollinators, hence the need to add native species from outside the local area.

The aim is to get a variety of colours, structures, grasses and bare ground in the pollinator plot. It is also vital to provide nest sites for the pollinators, which could be in the form of bee hotels, dead wood, leaf litter patches and small areas of bare sandy ground.

When mentioning pollinators, people often think of the European honeybee and are apprehensive about encouraging bee activity due to potential safety issues. However, Australia has more than 1700 native bee species and of those only two per cent can sting. Most are too small to deliver an effective sting and Australian native bees are not aggressive. However, if one of the larger native

Bees are not the only pollinators. Butterflies, moths, beetles, flies and native insects also contribute to pollination

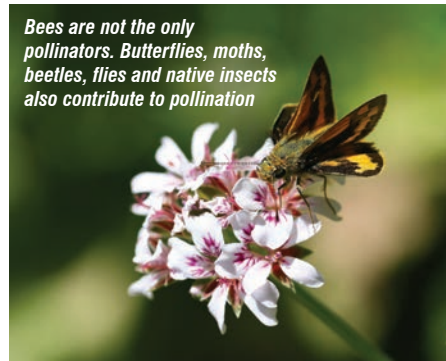


PHOTO: STUART HOCKING

bees is picked up or trodden on, it could be quite capable of stinging. (Source: aussiebee.com.au)

It is important to remember bees are not the only pollinators. Many other pollinators, including butterflies, moths, beetles, flies and native insects, also contribute to pollination. Beneficial insects are a key part of the natural food chain and often feed on pest insects.

As Operation Pollinator progresses at the three selected sites, we look forward to updating the industry on the project and how each pollinator plot is going. If you would like to participate in future programs, please keep an eye out through social media and the ASTMA's regular communication channels. There will also be a presentation about it at the upcoming conference in Melbourne. 🌱

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Lakes Entrance Golf Club is a Vern Morcom design consisting of two quite different nines. Pictured are the 16th green (foreground) and 8th green



Lakes Entrance GC, Vic

For the past year Brendan Dooley has been cutting his teeth in his first superintendent posting at Lakes Entrance Golf Club in Gippsland, Victoria.

Superintendent: Brendan Dooley (31).

Family: Wife Breanna and son Spenser (18 months).

Social media: Instagram @brendan_d13.

Period as a superintendent: Eleven months.

Years in the industry: Fourteen.

Association involvement: VGCSA.

Qualifications: Cert 3 in Turf Management (NMIT), Diploma of Turf Management (Holmesglen), ASTMA/Jacobsen Future Turf Managers Initiative (2020).

Where in Australia is Lakes Entrance GC?

Lakes Entrance is a small coastal town at the eastern end of Victoria. Located on the Gippsland Lakes, Lakes Entrance offers access to both the lakes system and the famous 90-mile beach. While Lakes Entrance is known for being a major Victorian fishing port, through the warmer months the region

experiences a large influx of tourists who come to experience the coastal lifestyle. Despite boasting a great layout, the Lakes Entrance Golf Club remains somewhat of a hidden gem. Hopefully this will change in the near future.

Tell us a bit about your background and how you came to be in the turf industry.

As a teenager I had dreams of playing professional golf but soon discovered, due to a lack of golfing talent, that wasn't going to happen. I felt the turf industry was a way that I could spend most of my time out on the golf course while paying the bills. Since starting my apprenticeship in 2008 I haven't looked back.

Talk us through your respective roles prior to arriving at Lakes Entrance. In 2008 I moved from Maffra in East Gippsland to Melbourne to start my apprenticeship at Yarra

GC. I spent four years working under superintendent Paul Holmes before finishing my apprenticeship and moving across to Keysborough GC under superintendent Chris Allan. After a few months at Keysborough I was lucky enough to be promoted to course foreman (3IC). Chris was a fantastic person to learn from, providing me countless opportunities to not only learn the turf components of the industry but also develop my skills as a leader and mentor to the younger members of staff.

After nearly five years at Keysborough, I was given the opportunity to relocate down the highway to Torquay where I took on the role as assistant superintendent under Keegan Powell at The Sands Torquay. This is where I felt the real learning started. Being the assistant superintendent gave me the chance to learn skills such as staff management, budgeting and irrigation maintenance and scheduling.

Unfortunately, the COVID pandemic came along and after a few years at The Sands we relocated back to Melbourne where I



took on the role of course foreman at Green Acres GC. I only spent 12 months working under superintendent Mat Poultney, but as far as learning the agronomy side of being a superintendent I couldn't have asked for a better place to learn. I always felt I was ready for a superintendent role, however, I now look back on those 12 months at Green Acres and am glad I spent some time there to prepare for the position I'm now in.

How did the Lakes Entrance role come about? Both myself and my wife Breanna are originally from Sale in East Gippsland. After the arrival of our first child Spenser in October 2020, we wanted to get back to a coastal lifestyle. When the opportunity to not only get back to coastal living but return to where we both grew up came along, we bit the bullet, packed up and haven't looked back.

How have you found the step up to the role of superintendent, especially at a regional course? I have found the transition not only challenging but rewarding. Until taking on the

The front nine of Lakes Entrance GC is more of a coastal links style with large dunes, tidal waterways and mature native banksias. Pictured is the view from the 4th tee



The Lakes Entrance crew comprises (from left) Brad Docking, superintendent Brendan Dooley and Mark Klijnsma

role at Lakes Entrance I have had experience at much larger courses with larger budgets, staff and expectations. This has allowed me to bring the knowledge and skills I have learnt to a club that hadn't seen many of the 'new age' methods before and has ultimately allowed me to raise the standards of the golf course, much to the satisfaction of the membership. On the other hand, our small staff and budgets have been an adjustment.

What has been the most challenging aspect in making the move up to a superintendent role. Managing my own expectations and struggling to switch off when I'm not at work. I have naturally high expectations of everything, especially having worked at larger golf clubs, so it has been a challenge getting these expectations to fit in with the resources that I have available. Switching off at night and on weekends has been difficult because, as all superintendents would know, the course can

be like your other child. I have often found myself thinking about work on weekends or while lying awake at night.

Give us a quick overview of the Lakes Entrance course and some of its unique characteristics. Lakes Entrance is a Vern Morcom design consisting of two quite different nines. Our front nine is coastal links style with large sand dunes, tidal waterways and mature native banksias. It is much more open to the elements, with strong east and west winds affecting the way the holes can play. By contrast, the back nine meanders its way through the native inland woodlands with a mix of towering eucalypts and native shrubs. The tee shots are much tighter, however, the holes are much more protected from the elements. The green complexes are also quite different across both nines, with the front nine having much larger, more undulating greens. Wildlife is a key feature of the course and





The majority of the Lakes Entrance back nine (pictured is the par three 15th) meanders its way through native inland woodlands with a mix of eucalypts and native shrubs

it's not uncommon to see fish jumping in the lakes, black cockatoos, rosellas, seals and the occasional sambar deer on the course.

Is it an easy or hard facility to manage?

I'm sure all superintendents feel their course is hard to manage given that everywhere has individual challenges. I guess I didn't really know the extent of the challenges ahead of me until I arrived here. Our irrigation system had all but failed and meant the only way we could get water out was manually which is a challenge with only three staff. Our only water source is from the local treatment plant next door, meaning I have battled with high salt content in the irrigation water and on occasions the sudden shut off of water (always when we need it the most).

Another challenge that all small country courses would experience is that sometimes members want their course to be like a Royal Melbourne and rightfully so. It's a good thing when people want their course to shine, but sometimes the saying 'Champagne on a beer

budget' rings true. It's always a challenge to manage these expectations against what we, as a small staff of three and with a small budget, can achieve.

What changes have you made to the way the course is managed since taking over?

Upon being offered the job at Lakes Entrance I had two requests from the board – firmer and faster greens, which I guess was a simple way of saying improve the turf quality, and reshape the fairways to create more flow. In order to tackle the first request, I began to play around with the nutrition plan for greens. I have put out next to no nitrogen and applied growth regulator on a monthly basis. Greens mowing heights were lowered to 3mm, which combined with regular rolling and verti-draining has led to an improvement in the speed and firmness of the putting surfaces. The club does not own a topdresser, so in the coming years I would like to find a way to incorporate a dusting program to take the greens to the next level.



Running adjacent to the 90-mile beach, a number of front nine holes, such as the 7th (pictured), are exposed to the elements, with strong east and west winds affecting the way the holes can play

As soon as we entered the spring period and the kikuyu started growing, I began to reshape the fairways. This will be an ongoing task, but I have used old course flyovers, natural topography and the availability of irrigation to change the fairway shapes which, from all reports, has been a vast improvement.

Outline any major/significant projects that you have undertaken or are coming up.

The irrigation system was an absolute pain in my first summer. It is an old hydraulic control system with asbestos concrete mainlines and rural grade poly lateral lines. In February, the club approved an irrigation system upgrade to be completed in a staged approach. Stage 1, which consists of the old hydraulic control system being replaced with a Rain Bird IC system, is currently being completed, with the mainlines, lateral lines and sprinklers being upgraded in the coming years when finances and time allow. The installation of the new irrigation system will be the biggest project the club has undertaken in a few decades and will be critical to the continuing improvement of the course. Rebuilding tees is also in the pipeline.

Any special environmental considerations that you have to incorporate into the management of the course?

The golf club is situated along the Gippsland Lakes which is a major ecosystem that is home to countless species of flora and fauna. Our use of recycled water needs to be closely managed to prevent contamination or damage to the lakes system. The sand profile causes a high level of leaching, so along with the irrigation water our chemical and fertiliser applications have to be carefully monitored and managed.

You arrived at Lakes Entrance in the middle of the COVID-19 pandemic. How has it impacted your operations and the club?

Not long after taking on the role at Lakes Entrance we experienced a number of small lockdowns which prevented members from accessing the course for a short period. The biggest impact on the club has been the interruptions and restrictions on functions (e.g. weddings and funerals). As a club that relies quite heavily on functions and tourism, the lockdowns and inability to travel certainly had an impact. Couple that with bushfires that affected the region, it has been a long few years for the club. Overall, however, the club has moved forward and continued to strengthen from a financial and course perspective.

Were there any positives to come out of the COVID lockdowns?

Hopefully we never see another pandemic or lockdowns again, but from my perspective giving the course a break every few months was a bonus. I'm sure our members hated having the course

closed, but it gave us the opportunity to get our spring renovations completed during a period of no play. Luckily we were permitted a few volunteers to come in and assist. The turf surfaces were able to have a good break from foot and cart traffic which I feel was beneficial leading into the summer period.

What key lessons have you taken out of the COVID experience? Always have products (i.e. chemicals and sand) ready to go in advance. If a lockdown was to get sprung upon us, it's good to be able to move up our schedule and knock off some major jobs while the course is closed and minimise the impact on the golfers when they return.

How is Lakes Entrance faring in the water management stakes? As previously stated, water is a challenge down here at Lakes Entrance. The first part to this is the irrigation water. High salts and bicarbonates in the recycled water is a challenge to manage from a nutrition side of things. In addition to the quality of water being supplied, the treatment plant can cease supply at the drop of a hat without notice if they experience any issues. An interruption to supply has occurred twice this past summer with the longest period without



Wildlife is a key feature of the course and it's not uncommon to see fish jumping in the lakes, pelicans, black cockatoos, rosellas, seals and the occasional sambar deer getting around the course

water being nine days. The club is moving to install a number of water storage tanks to give us an emergency water source when needed.

The second part of the water management challenge is flooding from the lakes system. Strong westerly winds cause the water in the

lakes to move past the entrance to the ocean and back up in the eastern end of the lakes where the course is located. This flood water is salt water and we have experienced some damage mainly to fairways and small sections of surrounds.

How has Mother Nature treated the course in recent times? She has been kind yet unkind to the golf course since I have taken on the role. We are experiencing considerably higher than average rainfall due to the east coast weather systems finding their way down from Queensland and NSW. It has meant that we haven't needed to water fairways over the recent summer, but on the flip side we've had a number of closures due to flooding. Cart usage has also been limited which has impacted the members' ability to play.

The one product/piece of equipment I couldn't manage my course without is... the Toro Multi Pro sprayer. When I arrived at the club we didn't have a boom spray unit resulting in spraying being solely carried out with a handheld hose. The addition of the boom sprayer has cut down the time that it takes to spray greens and allowed me to spray fairways and tees when required.

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Do you use volunteers to assist with jobs around the course? Small regional courses can't function without a crew of volunteers. We have a small yet dedicated crew of volunteers that come in weekly to assist with rough mowing, whipper-snipping and rubbish collection. The course wouldn't be in the great shape it is without the hours they put in.

What have you got in your shed? John Deere 2500B greens mower, Toro 3100D tees/surrounds mower, Jacobsen LF570 fairway mower, Tru-Turf RE50 roller, Toro ProCore, a pair of Kubota rough mowers, Toro Multi Pro sprayer. My favourite machine is our old Toro Sand Pro. There is nothing better than shaping up an area, whether it be a new tee or just relevelling a bunker base. Recently we have purchased a few new additions to our fleet including a Jacobsen fairway unit, Toro Workman and the Multi Pro. In the future we will continue upgrading our aging fleet.

Best advice you have received about being a superintendent... I had a few people tell me I will need to experience all four seasons down here in Gippsland before I start to get a handle on things and it couldn't be truer. It's certainly been a fast-learning curve.

What do you think is the most challenging aspect of a superintendent's role today? Dealing with expectations. As I previously



stated, 'champagne on a beer budget'. Costs are rising everywhere, from products, fuel and wages. It is getting increasingly harder to find good staff for the wage that a lot of clubs can afford. These factors are making it harder to produce the results that club members and visitors would ideally like to see.

What have you worked on personally to improve your skills as a superintendent in recent times? Over the past two years I have really made an effort to learn my active ingredients in herbicides, insecticides etc. This has allowed me to gain a greater knowledge of how chemicals work and find alternatives when required to achieve the best results.

What has been the most pleasing/rewarding moment during your time at Lakes Entrance?

I have found the positive comments from the members to be most rewarding. Hearing some of the old boys who have been members of the club for 20-plus years say how much the course condition has improved since I took over the role last July has certainly made all the hard work worth it.

Being a superintendent can be an unforgiving role but one that is ultimately rewarding. What keeps you coming back every day? I just enjoy being outdoors and being on a golf course. Ultimately, it's a pretty good office to have every day. 🌳

AT A GLANCE – LAKES ENTRANCE GC, VIC

Course specs: Par 72, 6104m (men) and 5107m (ladies). One hectare of bent/*Poa* greens and collars (various species of bentgrass present due to years of over seeding), 13ha of kikuyu tees and fairways and too much kikuyu rough.

Members/rounds: 367 members, 20,000 rounds (members and visitors).

Major events: Club championships and the Gippsland Senior Classic.

Staff structure: We have three full time staff (superintendent and two groundsman) and a small crew of very valuable course volunteers. A small group of our lady members volunteer their time to maintain the clubhouse gardens as often as they can.

Climate/rainfall: Average rainfall is 713mm. While I grew up in East Gippsland, it has taken some time to get used to the weather patterns in Lakes Entrance. The weather systems we experience typically come from the north from the east coast of the country. We generally miss all the weather that Melbourne gets as it tends to move out to sea before reaching us.

Terrain: The first 11 holes run along the sand dunes of the 90-mile beach creating a classic coastal links feel. Holes 12 through 18

then turn inland and weave through a native woodland area. While the course is mostly flat, players are required to climb a number of sand dunes to play an elevated tee shot, creating an undulating layout.

Soil types: Our greens are all classic country push ups, however, I am very lucky to have a wall-to-wall sand profile. I am yet to find any clay on the golf course which makes digging and drainage a breeze.

Water sources/irrigation system: The course is supplied with Class C water from our neighbouring water treatment facility. We are currently in the process of installing a new Rain Bird IC system as part of a major staged irrigation upgrade.

Cutting heights: Greens 3mm, tees/surrounds 10mm, fairways 12mm and rough 50mm.

Renovations: Leading into this growing season we carried out a 12mm hollow core on the greens and surrounds. This past month we were only able to complete an autumn renovation with 8mm solid tines on the greens due to key events on our golfing calendar. Throughout the year verti-draining is carried out every two months. The club only has a tow-behind spreader which is

only capable of putting out quite thick layers of sand, so therefore we can only topdress once or twice a year.

Major disease pressures: In my first 11 months in the role, Lakes Entrance received 997mm of rain and higher than normal humidity leading to excessive disease pressure. I have experienced all the classics (*fusarium*, dollar spot and fairy ring). Combatting this disease pressure has been a combination of keeping the nitrogen inputs to a minimum, managing moisture as best we can and regular fungicide applications. Applications have needed to be every 14 days through this high-pressure period.

Nutrition: Nutrition has been a challenge, especially through the irrigation period. Water testing revealed that our water source is high in sodium and nitrogen as most recycled water is. High sodium has led to regular inputs of potassium and gypsum being required just to keep our greens ticking over. Since starting at Lakes Entrance I have moved away from the traditional sulphates in favour of organic based liquid fertilisers. The addition of a growth regulator program on our kikuyu surfaces has taken the mowing pressure off our small staff.

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VGCSA

Here we are in June and having already reached the midway mark of 2022 we are hitting the ground running – so far, so good in terms of the VGCSA calendar of events and educational activities.

At the recent VGCSA AGM held at Peninsula Kingswood Country Golf Club, we farewelled Kingston Heath superintendent **Hayden Mead** who served on the committee for five terms. Hayden was a great asset to the association with a wealth of knowledge, ideas and motivation towards new initiatives along the way. We are grateful for his contribution and wish him well in his future pursuits.

At the AGM we were very pleased to welcome long-serving Ballarat Golf Club superintendent **Jeff Powell** onto the committee. We are looking forward to his expertise and input, both as a regional representative and superintendent with an extensive career in the industry. The full committee for the 2022-23 term is:

- **President:** Shane Greenhill (Sorrento GC)
- **Vice president:** Simon Muller (The Dunes)
- **Secretary:** Travis Scott (Riversdale GC)
- **Treasurer:** Adam Lamb (Barwon Heads GC)
- **Committee:** Jeff Powell (Ballarat GC), Clint Raven (Yarra Yarra GC) and Tay Wilson (Koorlingal GC).

In early June, the VGCSA Course Staff

Education meeting will take place at Rosebud Country Club. Concentrating on the topic of 'career transitioning', a mix of speaker presentations and panel will be exploring both preparation and process of moving towards and into a senior role. Thanks to all our guest speakers involved including **Guy Chapple** (WellPlayed Golf Business Consultancy), course superintendents **Nicholas Douglas** (Cranbourne GC), **Sam Langford** (Heidelberg GC), **Nick Launer** (Keysborough GC) and **Geraldine O'Callaghan** (Sandringham GC) and Rosebud Country Club host superintendent **Ian Todd**.

Back in March and April, the VGCSA ran a series of training days in both irrigation and turf equipment management which were previously scheduled for 2021. We received both positive and productive feedback on each training day which will assist our forward planning for future sessions. In the meantime, a final irrigation training day will take place in the coming month for those previously enrolled who could not attend the March dates.



The 2022/23 VGCSA committee comprises (from left) Jeff Powell, Tay Wilson, Clint Raven, vice president Simon Muller, president Shane Greenhill, treasurer Adam Lamb and secretary Travis Scott

On 1-2 August we are looking forward to the long-awaited (third time lucky) VGCSA Country Meeting. After unfortunately needing to cancel two years in a row, we finally get to visit Murray Downs Golf & Country Club. We very much appreciate the club's patience throughout. Alongside the main program, which includes guest speakers **Richard Forsyth, Tim Warren, John Neylan and Mark Matehaere**, we will be also running

educational sessions for turf equipment technicians on day two.

LIFE MEMBERSHIP

At the recent AGM it was the committee's privilege to bestow life membership upon Thirteenth Beach Golf Links superintendent **Steven Hewitt**. Steve began his turf career as an apprentice at Warracknabeal Golf Club in Victoria's west in 1990.

Promoted to superintendent the day he was qualified, he eventually landed a 12-month placement at Barwon Heads Golf Club under Peter Frewin, filling in for one of the crew. He ended up staying on for six years before being appointed superintendent at the neighbouring Thirteenth Beach Golf Links in November 2000. Since then Steve has overseen the rise in prominence of the 36-hole Bellarine Peninsula facility which has become home of the world-acclaimed Vic Open.

His life membership also acknowledged many years of involvement with the VGCSA. A member since 1994, Steve was on the committee between 2009 and 2018, including vice president for three years (2009-2011) and then president for another three years from 2011-2014. Speaking at the AGM Steve noted: "Receiving life

membership is both an honour and privilege. I set out to volunteer without the expectation of receiving such recognition, so I am quite humbled by this gesture from the committee.

"I initially committed to do a couple of years on the VGCSA committee to 'do my part', but it turned out to be many more, including being president, which was extremely rewarding. I always felt that I owed more to the VGCSA, as being on the committee actually improved who I am and how I manage the golf courses at Thirteenth Beach Golf Links.

"The rewarding aspect for me is being part of a vibrant, financially successful association that provides education, networking opportunities and the ability to reach out to others. My time as a member of the association has provided those opportunities and continues to do so."

Steve was one of four VGCSA members to be acknowledged at the AGM. Commonwealth Golf Club's **Caleb Johnson** was confirmed as the VGCSA's Apprentice of the Year for 2021-22 and will now go on to contest the final of the ASTMA Graduate of the Year Award. Former VGCSA president **Barry Proctor** (Woodlands GC) collected the VGCSA Superintendent Recognition Award, while Turfcare Australia's **Mark Dougherty** was bestowed the VGCSA Trade Recognition Award.

Prior to the awards presentation and AGM, a strong field lined up to tackle Peninsula Kingswood's North Course, with Woodlands Golf Club assistant superintendent **Scott McKinnon** taking home the Toro

Cup, while Axedale Golf Club superintendent **Chris Neville** won the Bayer-sponsored Powell Trophy. McMaho's **Theo Maroulakos** won the VGCSA Presidents Shield.

SHANE GREENHILL PRESIDENT, VGCSA

2022 VGCSA Toro Cup winner Scott McKinnon (right)



GCSAQ

Golf Course Superintendents Association of Queensland

It has been an extremely challenging start to 2022 for many Queensland sports turf managers. Numerous golf courses experienced multiple flood events, with superintendents and their teams facing the manual task of getting in, getting dirty and cleaning up.

One of many was **Chris Mitchell**, superintendent at Emerald Lakes Golf Course on the Gold Coast. In the job for just 15 weeks, he had to contend with two major floods during his short period with the club. The first flood hit in early March following a deluge of almost 600mm of rain in just four days. While the water was rising quickly, staff and management raced to save buggies which included parking some inside the clubhouse! On this occasion, the course was closed for 10 days while the team of eight greenkeepers worked hard to get the course back. Just three days after being fully operational, the course flooded again! This time it received over 300mm in four days and was closed for a further nine days.



Emerald Lakes crew members clean up in the wake of flooding back in March

Although the floods devastated many, it was fantastic to hear all the great news stories of both locals and golf club members coming to support golf course maintenance teams with the clean-up effort. Rain has continued to fall at a rate of over 200 per cent of average rainfall year to date, with many superintendents battling disease which is rampant along the east coast of Australia.

Given all the challenges experienced, GCSAQ members will be looking forward to our upcoming winter event at Suncorp Stadium and XXXX Brewery. This will include a 'walk 'n' talk' at the stadium followed by an ever-popular XXXX Brewery tour. Bookings can be made via the GCSAQ website.

The 2022 National Turf Industry Awards will be held in Melbourne during the upcoming conference. Queensland has two strong nominations off the back of industry acknowledgement in 2021. Maroochy River Golf Club superintendent **Stuart Campbell** will contest the ASTMA Excellence in Golf Course Management Award, while **Nicholas McClymont** will represent the GCSAQ in the ASTMA Graduate of the Year Award. On behalf of all GCSAQ members, I would like to wish both Stuart and Nicholas all the best for the awards night.

PAUL MCLEAN
PRESIDENT, GCSAQ

STA VIC



The STA Victoria Sports Turf Seminar can't come soon enough! The much anticipated event will go ahead on Thursday 14 July at the MCG with Bayer as the major sponsor. The program will be bursting with great informative speakers and STA Victoria sponsor exhibitions.

A Project Panel consisting of client, designer and contractor will discuss the complexity and challenges of reconstructing Gosch's Paddock. This year we will also have two guest speakers – **Jane Bunn** (meteorologist and Channel 7 weather presenter), while **Tony Jones** will be MC. A registration form for the seminar can be downloaded from the STA Victoria website.

Elsewhere, we were honoured to receive three nominations for the STA Sports Turf Graduate of the Year Award. We are delighted to announce that **Scott Nicolson** will be the Victorian representative.

Scott studied at The Gordon and has been working at Warrnambool Racing Club for the past four years. Scott is involved in all aspects of racecourse track management, preparing the track for racing/training and setting up infrastructure for carnivals and major events. Scott is proud to be part of a team that holds the biggest country racing carnival in Australia. We wish Scott all the best for the final judging.

COMMITTEE, STA VICTORIA

ON THE MOVE...

NATHAN BRADBURY: The immediate past president of the NSWGCSA announced in April that after 12 years at Eastlake Golf Club in Sydney he was leaving to take on a role as NSW territory manager for Nuturf.

JUSTIN GROVES: Appointed as racecourse manager at Morphettville Racecourse, SA.

ADAM LAMB: From superintendent Barwon Heads GC, Vic to superintendent Commonwealth GC, Vic.

JORDAN SHERRATT: From superintendent Thaxted Park GC, SA to superintendent South Lakes GC, SA.

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GCSAWA

It has been good to have autumn here in the west and appreciating the small things like having to wear a jumper in the morning and dew on the course. After the summer we had, the change has been most welcome. Perth received 61mm of rain in April and as I'm writing this article it has been raining all morning which gives everyone a chance to catch up on some much-needed shed work.

I was lucky enough to spend five days in Kalgoorlie volunteering at the recent WA PGA Championship. I recommend to everyone to help out at a tournament like this, or to send one of their staff members along. As with a number of other recent tournaments it was great to watch it on TV. Hopefully you all had a chance to see some vision of this spectacular course. Royal Fremantle also hosted the WA Open in late April.

With the recent COVID restrictions and uncertainty as to whether the tournaments were even going to go ahead, course superintendents **Pat Casey** and **Jason Kelly** and their respective crews should be congratulated for the condition and presentation of their courses. They only had a month to prepare not just the course but get all the tournament logistics in place (signage, parking etc), so hats off to them for doing so in such a short amount of time.



Kalgoorlie Golf Course successfully hosted the WA PGA Championship in April.

PHOTO: SHANE BAKER

Attracting and keeping staff has always been some concern in WA, but recently that has grown into a big one. This time last year I had 49 applicants for an apprentice position, yet when I advertised recently I had less than 10. A number of clubs are actively looking for qualified staff, spray and irrigation techs, foremen and assistants and in some instances there isn't a single applicant. Regular chats to TAFE lecturers and to the 4th year apprentices encouraging them to get out of their comfort zones and chase opportunities isn't working.

Golf courses have never been busier and the workload falls back onto an already overworked staff. Losing staff to the mines is always a threat over here, but losing staff to contractors, councils and sales is a worry, not to mention losing staff to outside the industry. Trying to replace them with apprentices or even finding casual staff is something all clubs, from the superintendent to the GM and committee, need to work together on.

The TAFE Awards Night was held in late May where all the final year apprentices were given their certificates. Over 100 students, supers and trade reps were in attendance for the dinner. Superintendent **Matt Soles** gave a great presentation on his journey to get to Royal Perth GC. Congratulations to the following award winners:

- **Jon Christmass** (Lakelands CC) – Best Student in Certificate of Trade Studies, sponsored by Bayer;
- **Coen Marwick** (City of Albany) – Best Student Technical and Further Education, sponsored by Baileys Fertiliser;
- **Will Brennan** (Wembley GC) and **Ashley Miragliotta** (Hamersley GC) – Lecturer's Choice Awards.

I look forward to seeing many of you in Melbourne for the national conference.

SHANE BAKER
PRESIDENT, GCSAWA

SAGCSA

While the SAGCSA hasn't had an event for some time, behind the scenes there has been a significant amount of work going on. We are a small association compared to some of the other states, with membership limited and a small pool of sponsors that we share with STA South Australia.

Over the years the two associations have held joint education days that have been well attended, so following on from that the committee felt it time to investigate the viability of the two associations coming together under the one banner.

After a lot of discussion and workshoping, I can confirm that the SAGCSA is in the process of merging with STA South Australia. After many meetings, the SAGCSA held an EGM in December 2021 with a unanimous decision in favour of merging. Following from that, in April, STA SA held their EGM with another unanimous outcome.

We are now working on the process to dissolve both associations, creating a new entity with a new constitution and new logo. The new name will be **Turf Management South Australia (TMSA)**.

The process and decision hasn't been taken lightly. There was a lot to work through from both sides, however, both committees unanimously agreed that this is the right approach for the SA industry. A joint committee has been formed and comprises:

- **Nathan Bennett** (Royal Adelaide GC – SAGCSA president)
- **Gerry Charlton** (IPOS Consulting – STA SA president)
- **Stuart Gillespie** (West Lakes GC – vice president)
- **Damian Hough** (Adelaide Oval – vice president)
- **Richard James** (Kooyonga GC – secretary/treasurer)
- **Tom Plant** (SA Water – secretary)
- **Committee:** Tim Warren (Glenelg GC), Sam Smith (Willunga GC), Jordan Sharrett (South Lakes GC), Peter Foreman (Adelaide Oval), Simon Sczesny (Coopers Stadium) and Daimon Jones (Prince Alfred College).

I look forward to providing a further update on the merger in the coming months.

NATHAN BENNETT
PRESIDENT, SAGCSA

TSTMA

On behalf of the TSTMA I would like to say huge congratulations to Tasmania's recent nominations for the National Turf Industry Awards. It is fantastic to see Tasmanian turf managers achieving great things within the industry. The finalists include:

- **Mack Blazely** (Launceston Golf Club) – ASTMA Graduate of the Year Award;
- **Craig Walker** (superintendent Devonport Country Club) – ASTMA Excellence in Golf Course Management Award; and
- **Marcus Pamplin** (Blundstone Arena): ASTMA Excellence in Sportsfield Management Award.

The TSTMA held its annual conference at Devonport Country Club on 24-25 May. Many thanks to everyone who contributed to make it a successful event.

After much deliberation, in early May I announced that I will be finishing up at UTAS Stadium in early July. As such I will be stepping down as TSTMA president and wish to thank everyone for their support and guidance since taking on the role last year.

ADAM SPARGO
PRESIDENT, TSTMA

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