



Barnboughle's triple threat

Boughle Run short course rises from the ashes

Fortress goes hybrid

Hallowed turf of Eden Park has a new-look HERO

Resilience and recovery

Flood-impacted turf farms, facilities fight their way back

A Classic fortnight

Moonah Links goes back-to-back



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COVER STORY TRIPLE THREAT: BOUGLE RUN JOINS THE FAMILY 16

Good things often come about by accident and so it was the case for Barnbougles latest impressive golf offering – the 14-hole Bougale Run short course. Barnbougles course superintendent Phil Hill tracks the development of the newest member of the Barnbougles stable, from the initial vegetation burn-off that got out of control which exposed the spectacular new site, its construction during a global pandemic and the challenges that created, through to its much-anticipated opening this past March.

Cover: The 79m par three 12th hole at Bougale Run, Barnbougles, Tasmania.

Photo: William Watt, Caddie Productions.



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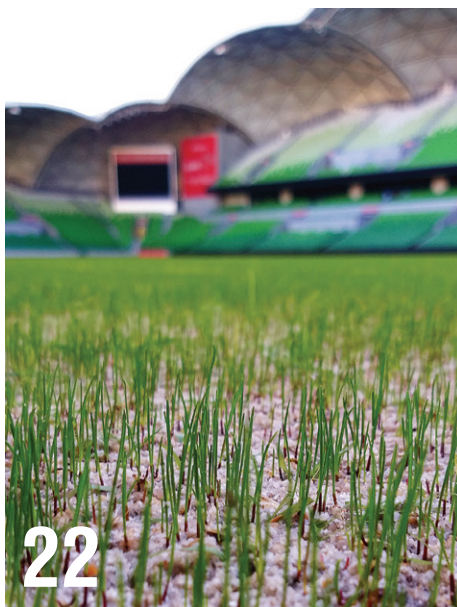
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Fond memories of the 'Fortress'

I must apologise, but this edition's lead story is a tad indulgent. Eden Park, in my home town of Auckland, NZ is my hallowed turf. Sorry MCG. It is where I came to develop a love for the games of rugby union and cricket and just as it has provided a bank of incredible memories for New Zealand's collective sporting psyche, so too was it the scene of many of my fondest childhood memories (think 1987 Rugby World Cup) as well as later being an integral part of my working career.

I was a week shy of turning 13 when I made the trek to Eden Park to watch my very first rugby Test. It was New Zealand v Wales on 11 June 1988 and I went with my mate Michael who lived next door and his dad Greg. We sat up the top of the old West Stand exactly behind the left-hand upright. The arena was heaving, with a sell-out crowd of 45,000 jammed in to watch an All Blacks side that boasted my childhood heroes, among them New Zealand rugby royalty Sean Fitzpatrick, Wayne Shelford, John Kirwan, Michael Jones, Smokin' Joe Stanley and super boot Grant Fox.

Led by Shelford, the ABs had humiliated the Welsh the previous fortnight in Christchurch and there wasn't much hope of that being reversed come the second Test. Sure enough, come the end of the match the ABs had crossed the tryline eight times on the way to a 54-9 win, Fox nailing a perfect 10 from 10 with the boot. However, it wasn't the final scoreline or one of those eight tries that elicited the biggest cheer of the day.

Rugby is as much a religion to the Welsh as it is to New Zealanders and even with four minutes left in the game and trailing 48-3, they weren't about to give up. I remember the moment vividly. The All Blacks coughed up the ball inside the Welsh 22 and, with nothing to lose, the tourists chanced their arm. The Welsh were captained that day by one of their greats, masterful fly-half Jonathan Davies, and it was his one bit of brilliance that made me fall in love with the game of rugby union.

Taking the ball for the second time just outside his own 22, Davies evaded a diving tackle from Stanley on the 10-metre line and then it was on – a foot race to the line with lanky All Black speedster Terry Wright who was closing in quickly from his right. Davies jetted over the half way line, pinned the ears back and we all started rising to our feet cheering. It was almost like slow motion. About five metres from the line, Wright, with a despairing dive, managed to knock Davies off balance, but his momentum was enough to enable him to reach out with one arm and plant the brown and black Adidas over the line, right next to the left-hand upright I was sitting behind. Maybe it was my young ears, but I have never heard a crowd roar like that in my life and, what is more, it came from a 99 per cent parochial Kiwi crowd.

It's a moment etched into my memory and in later years Eden Park would throw up many more, some of which I was fortunate enough to witness from the media box in my capacity as a sports journalist. Even though I departed NZ shores many moons ago now, still to this day I get very excited when I watch a game at Eden Park and fondly recall that visceral moment when Davies had the crowd on their feet.

Over the next few years Eden Park is set to be front and centre as it plays host to some major events – the 2021 Women's Rugby World Cup, the 2021 Women's Cricket World Cup (both to be played in 2022 due to COVID) and the 2023 FIFA Women's World Cup. To prepare for the arrival of these events and to maintain its status as New Zealand's pre-eminent sporting arena, Eden Park underwent a major resurfacing for the first time in nearly 20 years this past summer. A new hybrid pitch was installed and in our lead story HG Turf Group's Erik Kinlon and Eden Park turf manager Blair Christiansen look at the project and some of the challenges to bring it to fruition.

Elsewhere in this edition we also look at AAMI Park's extreme renovation undertaken last spring, chart the development of the incredible new Bougles Run short course at Barnbougles and recap the impact that the devastating floods along the Eastern Seaboard has had on many sectors of the turf industry. Enjoy the read...



Brett Robinson, Editor



Strong support as industry looks forward to Gold Coast return

It seems as though each Foreword Thinking note that I've written in recent memory has commenced with a sombre tone, reflecting on subjects that have impacted our industry – droughts, bushfires, COVID-19 and now, in recent weeks, the devastating floods that have ravaged large areas of southeast Queensland and New South Wales. Images just seem not to do justice to the impacts these floods have had on golf courses, sports fields, turf farms and many other facilities, some having only recently recovered from flooding 12 months ago.

The AGCSATech team of senior agronomist **Bruce Macphee** and **Tim Fankhauser** have been working through assistance calls and advice for members and also published information to assist flood-affected facilities and turf managers get their surfaces back into play. As an industry, our thoughts are with each of the teams undertaking the recovery efforts and I continue to encourage clubs or sports turf managers in need of assistance or advice relating to available support measures to contact us.

On a more positive note, the 2021 Australian Sports Turf Management Conference and Trade Exhibition will be held in Broadbeach, Queensland for the first time since 2014. The Gold Coast Convention and Exhibition Centre will play host again from 21-24 June with registration currently open through the ASTMA website. Sentiment from industry has been overwhelmingly positive, with record registrations received for the event through February and March.

The strong registration activity to date is reflective of the feedback we've received from many turf managers in wanting to take advantage of the opportunity to get together in June after last year's absence. It will be great for delegates to catch up with peers, network and continue their education and discuss the latest product and service developments for the industry at the trade exhibition. Such a response is shared by our wonderful trade partners, with exhibition space now over 90 per cent sold and a host of new exhibitors looking to join the event.

Looking at a little more detail for the conference programme, Tuesday's Plenary sessions will focus largely on the areas of leadership, management and communication, being the top three items requested by attendees from previous conference surveys. We have developed a great line-up of speakers across the day, which will provide valuable



Australian Sports Turf Managers Association

insights into leading teams from experts in both business and sporting worlds, in addition to industry updates from NSOs and governing bodies.

In recent weeks we have been thrilled to announce the following presenters who will join us on the Gold Coast;

- Former Australian cricket coach **John Buchanan**;
- Ex-pro basketballer turned motivational speaker **Eric Bailey**;
- Business and marketing professional **Carmen Sederino**;
- Resilience and well-being doyen **Murray Altham**;
- Agronomy expert **Dr Brett Morris**.

As is customary, the programme for Wednesday and Thursday will see more detailed sessions across different streams – agronomy, sports fields, golf, workshops as well as hands-on programmes for turf equipment technicians. Throughout these tailored two-day sessions, a host of local industry experts, researchers, turf practitioners and keynote speakers will present the latest research, information and practices related to sports turf management. Details of the

education sessions and programme, industry awards and networking events are available on the association website at www.agcsa.com.au.

Elsewhere, we are preparing to move into the second phase of the Environment and Sustainability Program in conjunction with the GEO and The R&A, which will deliver a series of in-depth case studies of the sustainability programmes employed on various golf courses right across the country. As was mentioned in the last edition of ATM, a steering committee formed from representatives of the ASTMA and each state association has met to start the development of a sustainability framework and development of Golf Course 2030 in conjunction with Golf Australia and The R&A. Further information on this will be made available at the conference in June.

Also, over the coming month members will also see more information circulated relating to an employment initiative we are undertaking in conjunction with State and Territory governments on addressing one of the most important short- and long-term issues for the industry – attracting future talent into sports turf management and programmes to train, develop and keep staff in the industry. Members will receive further communications on this throughout May, along with details related to a participation and engagement survey which will form an initial component of the initiative.

With a lot happening over the coming months, the ASTMA continues to actively work towards supporting and strengthening the industry. If there is anything you would like to discuss, please do not hesitate to get in touch with the team at the association. 🌱

Business and marketing professional Carmen Sederino is among a great group of speakers who will present at the Gold Coast conference



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Thoughts? Not a fan. (Lakelands Country Club in WA takes a novel approach to placing their rakes)

Picture perfect posts

ATM features some of the best social media photos recently snapped by our many talented turf managers and industry professionals.



MATTHEW OLIVER

Ryegrass oversow at QSAC has come up well. All ready for the Queensland Maroons women's Origin team for the next seven weeks (12 sessions).



in CAMERON SMITH (BONNIE DOON GC)

What a week! Hats off to you boys! (Bonnie Doon hosted the second event in The Players Series in the first week of March)



in GRAEME HIBBERD

Above left: First month at Tamborine Mt GC was certainly a test. 700ml of rain in the first three days, no sprayer. Starting to take shape now.

in CRICKET ACT

Above: The end of an era today (24 April) as Brad van Dam brings to a close his 30-year career in the turf industry and 13 years as head curator of Manuka Oval. All the best for the future Brad. (Photo: Getty Images)

f NAMBUCCA HEADS ISLAND GC

Left: Thank you to Coffs Harbour Golf Club super Justin and team for coming down to help with the flood clean up! Great to have local industry/business support and volunteers helping.

Fortress welcomes a new HERO

Eden Park is tightly bound to New Zealand's sport psyche and has been the scene for many of the country's most memorable sporting moments. HG Turf Group's Erik Kinlon, together with Eden Park turf manager Blair Christiansen, look back at last summer's project to reinvigorate the playing surface for what is set to be a massive few years of major international sporting events for the venue.



Sport in New Zealand is currently riding the crest of a very exciting wave and Auckland's Eden Park, as the country's national stadium, will be front and centre of all that is to come. Having previously secured the 2021 Women's Cricket World Cup and the 2021 Women's Rugby World Cup (both of which have been shifted to 2022), the recent announcement of Auckland as a host city and Eden Park as a host venue for the 2023 FIFA Women's World Cup brings about an incredible three-peat of global events for the nation.

Steeped in history, Eden Park is globally recognised as one of the most iconic multifunctional stadia venues in the world. It is a formidable fortress, not only for the All Blacks who have a consecutive winning streak of over 40 Test matches at the venue, but for every team that calls it home. The scene of epic



Eden Park turf manager Blair Christiansen (right) with Black Caps captain Kane Williamson

encounters between the titans of rugby and cricket, Eden Park needs no introduction.

In order to remain at the forefront of the international stadia scene and in preparation for the world's focus to be on Eden Park over the coming years, the decision was made to upgrade the entire playing surface and surrounds. Planning for the resurfacing stretches back over two years, when it was first decided to replace the old Motz stabilised turf system installed by HG Turf Group back in 2003. Having researched extensively, it was decided that a replacement hybrid carpet type system would best suit the multi-functional usage requirement that Eden Park now has. This selection has been franked even further with the announcement in January that Eden Park had been granted resource consent to host up to six concerts per year.

As part of the selection process for the hybrid technology to be used, two carpet type



With a heavy international events schedule in the coming years, during January and February Auckland's Eden Park switched to a new hybrid surface, installing HG Turf's HERO Hybrid Grass system



Prior to the resurfacing, 4000m² of the existing Eden Park surface was stripped and sold off to the public, with a roll of the hallowed turf going for \$NZ49 per square metre

hybrid products were installed on the ground at Eden Park. Following a period of evaluation and testing, HG's HERO Hybrid Grass Eden Park Edition turf was chosen. Further to upgrading the turf surface, it was also an opportunity to carry out some upgrades on irrigation and the inclusion of a synthetic grass perimeter as part of the works.

"The decision to retire the previous surface was proactive," explains Eden Park turf manager Blair Christiansen. "We knew the old surface wouldn't be able to handle our aspirations for Eden Park as a truly multipurpose venue due to an aged profile, that when combined with weather would heighten the risk of a less desirable surface. The new hybrid surface can cope with a packed schedule of varied content, from Super Rugby and international cricket to concerts.

"In 2018, we went to Europe and the UK to view the latest sports turf technology and check out products we knew we needed to consider. We were really impressed with some of them, which led to an in-situ trial of two shortlisted products at Eden Park. In the end, we chose HG's HERO 'Eden Park Edition' turf because of its year-round performance in our environment, longevity and durability.

"With the frequency and variety of content Eden Park experiences, we needed the extra assurance and stability the HERO hybrid variety offers to meet our hirers' requirements and users' expectations. The fibres in the hybrid product increase stability in ways a non-stabilised profile simply can't."

The HERO system uses artificial grass, which comprises around five per cent of the playing surface, which is anchored to an

underlying grid via a knitting process. The open foundation promotes enhanced drainage and root development, with the artificial grass protecting the natural grass and increasing the durability of the turf. The artificial grass provides vertical stability and the open grid provides horizontal stability.

DOWN AT THE FARM

Any resurfacing of such a magnitude starts down at the turf farm. Unlike other stadium venues, Eden Park is in the unique position of having its own turf farm based at Karaka, about an hour south of Auckland. Having chosen to go with the HERO system in mid-2019 and with some redevelopment works to be completed at the turf farm, it was envisaged to have the works completed ready for planting in late 2019/early 2020.



HG Turf Group engaged a number of NZ-based contractors to assist in delivering the Eden Park resurfacing project. Among them was Wellington-based Mexted Sports Turf which had the principal responsibility for civil and earthworks as well as turf installation

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HG Turf Group set about manufacturing and mobilising the 14,175m² of hybrid carpet along with sending two containers of specialised equipment for the installation. With the pad extension and irrigation upgrades at the turf farm completed, the HG team arrived in New Zealand from Australia and set about laying, stitching and infilling the new HERO turf in March 2020.

With COVID-19 rapidly taking a stranglehold around the world, the HG crew managed to get the works 90 per cent completed in order to catch the last flight out of Auckland back to Australia before borders were closed. Having their own turf farm meant that the seeding process and grow-in could be completed by the Eden Park team and dedicated turf farm manager Aaron O'Connell. The turf variety chosen was a blend of Spartacus and Colosseum ryegrasses from PGG Wrightson Turf.

The new turf would have around 12 months to establish and mature at the turf farm

before works were due to start on the stadium. Together, HG and Eden Park turf managers set the programmes for the successful production of the turf including nutrition, chemical treatments, irrigation and specific maintenance regimes pertaining to the hybrid system.

PLANNING, PLANNING AND MORE PLANNING

In the months following the planting at the farm, HG worked closely with Christiansen, Eden Park chief executive Nick Sautner and project consultants NZSTI, led by Alex Glasgow, to finalise the project design, scope and methodology. With a great deal of uncertainty gripping the world due to the rapidly escalating COVID-19 situation, a number of different contingency plans in relation to the delivery of the project had to be considered and developed in the expectancy that they would be required.

In a normal situation HG would send a complete project team that would include

14,000m² of HERO turf was harvested in 10m long x 1m wide rolls from Eden Park's dedicated Karaka-based turf farm and transported the one-hour journey to the stadium

the rehabilitation works to prepare the field of play for resurfacing. A crew of 14 staff from HG, supplemented with local support, would generally be responsible for the earthworks and civil works followed by the harvesting and installation works.

As the possibility of this became further and further away due to the restrictions on travel and the need to quarantine on both sides of the 'Ditch', it was decided to instigate the primary contingency plan which involved bringing together of a number of NZ-based contractor partners that HG had worked with in the past.

It may have been 'Plan B' but it did involve an 'A-Team' of local contractors. Wellington-based firm Mexted Sports Turf were engaged to lead on the final design development, along with having the principal responsibility for civil and earthworks and turf installation. Christchurch-based ReadyLawn NZ were engaged to assist with the harvesting, transport and installation of the new surface, while Polytan would take care of the synthetic perimeter works, with their Liga Turf product meeting all the required FIFA and World Rugby specifications. The final contractor involved was Auckland-based FDS which provided local labour and machinery support both for works at the turf farm during production and also as part of the main project works.

As the end of 2020 neared and with all the planning and coordination in place, the final piece in the puzzle was to lock in the exact project dates. The sporting landscape for all codes was up in the air at this time with fixtures and schedules changing day to day. Eden Park and the project team understood the need to have a fluid approach regarding the project timeline to also meet the needs of the sporting tenants that call Eden Park home.

Although Australia and New Zealand had a good handle on managing the suppression of COVID-19 locally, challenges still remained, but come the start of 2021 it was all systems go.

GROUND ZERO

With the project dates locked in and the team to deliver the project mobilised to Auckland, ground works started in early January 2021. Following detailed consideration, it was agreed that the best methodology to remove the 17-year-old Motz surface was by stripping it off using excavators and low ground pressure

Due to COVID restrictions limiting travel, it fell to HG Turf Group managing director Hamish Sutherland and project manager Luke Allen to head over from Australia to manage the harvesting at the farm and installation at the stadium respectively



dumpers. The depth of removal varied across the ground and on average allowed for removal to a depth of 120mm. The arising spoil material was carted to the outside carpark and removed off site back to the Eden Park farm where it could be processed and repurposed.

"We needed to remove all of the old Motz turf but also minimise removing clean sand beneath the cut depth," says Cameron Mexted, managing director of Mexted Sports Turf. "This was a massive consideration throughout the planning and execution of the works with precise cut/fill modelling of the field of play conducted."

With the existing surface removed, the underlying sand was 3D-levelled to mimic the final finished surface design levels. A further 800 tonnes of Perrys sand was imported, spread, incorporated and consolidated to complete the profile construction works. As part of the project team's quality assurance processes, the sand was tested every 100 tonnes to ensure it met the NZSTI spec and was compatible with the original construction sand. Amendments and pre-plant nutrition were also added to the sand prior to turfing and this was also based on requirements following testing.

Concurrent with the works on the main field of play, Polytan got to work installing a new synthetic ring road around the perimeter. These works also meant that irrigation changes would be required including some upgrades on fittings, sprinkler heads and a new ring main on one side of the field. To ensure everything was to spec, Alex Glasgow (NZSTI) was available to sign off on all witness and hold points and final as-built surveys as they were completed.

"As with any project of this size, scale and nature there is always going to be challenges



Around 2000m² of HERO turf was installed each day with the resurfacing completed in seven days

and unforeseen circumstances, but thankfully for the earthworks and civil portion all works were completed on time and on track with the project programme," comments Mexted.

ROLLING OUT

With the civil and earthworks complete, the final piece of the resurfacing puzzle was the installation of the new surface. In normal circumstances HG would manage all aspects of these critical works, however, COVID-19 meant a 'new normal' that the team had to adapt to.

With a number of other major projects on at the same time in Australia, it fell to HG Turf Group's managing director Hamish Sutherland and project manager Luke Allen to manage the

harvesting at the farm and installation at the stadium respectively. This was not before both had to undertake quarantine for two weeks in a local Auckland hotel due to COVID-19 restrictions.

"Under these restrictions we were limited to having one harvest manager and one installation manager from Australia," explains Sutherland. "Never before have we resurfaced a stadium with only two HG staff. However, we were so well supported and after completing managed isolation we had some time to upskill the local crews to operate our specialised equipment and transfer our know-how via on-the-job training."

With the local crews trained up, the 14,000m² of HERO turf was harvested in 10m long x 1m wide rolls and transported the one-hour journey to Eden Park. HG built contingency into the programme knowing that the resurface would be with a relatively inexperienced team, allowing for a quantity of 2000m² per day to be harvested and installed over a seven-day period. Following the completion of each day's installation the new turf was consolidated and watered until completion and handed over to Christiansen and his team.

"COVID-related border measures were perhaps our biggest challenges during the works," reflects Christiansen. "Several members of HG Turf's workforce couldn't get into the country, but we were fortunate to have Hamish and Luke here to harvest and install the new turf in early February 2021. Having a fully functioning No.2 ground, with televised domestic cricket matches throughout the project, added further complexity in managing access, deliveries and other logistical considerations around the event days and broadcasts."

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The new HERO Hybrid Grass 'Eden Park Edition' turf surface had a four-week consolidation period before hosting its first Super Rugby clash on 14 March

HERO OF THE SHOW

The new-look Eden Park surface was due to get its maiden outing on 5 March with a Black Caps v Australia T20 match, however, with Auckland going into Covid-19 Alert Level 3 restrictions a few days beforehand, the match had to be moved. Eden Park would soon return to the spotlight, hosting two Super Rugby matches on 14 and 21 March, with the Blues entertaining the Highlanders and Crusaders respectively.

On 1 April New Zealand's national stadium hosted a Black Caps T20 International against Bangladesh and White Ferns v Australia double-header, before Christiansen and his team quickly turned the ground around for the 3 April Super Rugby match-up between the Blues and Hurricanes. Further Super Rugby fixtures are to come in May and June.

The first real test for the new surface, however, came on 24 April when Eden Park hosted its first ever concert. Popular Kiwi band Six60 had the honour of making history that night, with more than 50,000 fans packing the stadium for the occasion. Despite Auckland's fickle weather trying to put a dampener on the event, it was a huge success and the ground passed the test with flying colours.

"The field has performed extremely well with minimal damage throughout the first two months since resurfacing," says Christiansen, a 30-year industry veteran who has been at

Eden Park for the past 18 years. "We've had nothing but positive feedback from users across our Super Rugby and international cricket matches held to date.

"The Six60 concert brought new learnings for us. A lot of advanced planning went into getting the field ready for the concert and, equally, remediating it afterwards. We ordered 13,500m² square metres of special turf protection flooring which arrived just days before the show. Prior to installing this, our team undertook a rigorous programme of preventative fungicides, growth regulators and strategic seeding in certain areas to ensure once the floor was lifted the field would be improving in turf density rather than declining.

"With just six days between the concert and a Super Rugby double-header, the flooring and 70-metre-wide stage were removed and while some turf replacement was required in the stage area most of it was out of play for Super Rugby.

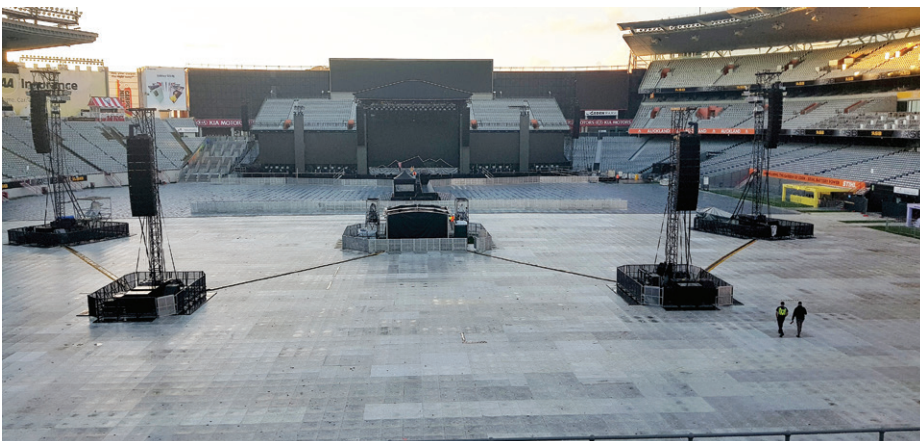
"Now that we are a truly multipurpose venue, Eden Park can host up to six concerts a summer around our usual sporting fixtures. We'll continue adapting and innovating our turf structures and systems to meet the needs of a very demanding event schedule. We're fortunate to have our own turf farm off-site with a full-time turf manager, whose focus is on developing contingency turf to meet the stadium's needs."

With the new surface surviving its initial months well, the next step for Christiansen and his crew will be getting a handle on and fine-tuning a new maintenance regime which comes with managing a new hybrid surface.

"The new hybrid turf product means our previous renovation practices are now redundant," adds Christiansen. "We've adapted the majority of machinery and our management techniques to ensure the longevity and continued quality that these fibre-based products offer. As an example, we're now using hybrid-specific equipment, such as the Koro universal reel, large-volume drop spreaders and the Campey UniRake.

"With the new and improved clean profile and combination of ryegrass cultivars, the use of wetting agents throughout summer is more prevalent and fertility programmes are more closely monitored. This is just the beginning. The exact system and methodology of how we manage the new surface will be developed and refined over the next 12 months.

"We're committed to working with HG to further develop the product for use here and overseas – it's an opportunity to diversify revenue streams for Eden Park and utilise idle capacity. As New Zealand's national stadium, and the leader in turf innovation and technology, we regularly work with industry partners here and in Australia to share developments, best practice and advice."



Left: Around 13,500m² of protective flooring was laid on the Eden Park surface ahead of its inaugural concert

Below: On 24 April Eden Park hosted the first concert in its history, with local band Six60 playing to a sold-out crowd of more than 50,000





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The Bill Coore-designed Bougle Run, opened on 31 March, comprises 12 par threes and two par fours. Pictured is the stretch of holes 5-8 with the 6th green to the left and 7th top right

An aerial photograph of a lush green golf course, likely at Barnbougle, showing various holes, sand traps, and clusters of trees. The lighting suggests late afternoon or early morning, with long shadows and warm tones. A winding path or road is visible on the right side of the course. In the background, there are rolling hills and a distant shoreline.

Welcome to the family

Good things often come about by accident and so it was the case for Barnbougle's impressive new offering – the 14-hole Bougle Run short course. Superintendent Phil Hill tracks the development of the latest addition to the famed Barnbougle family, from the initial out-of-control burn-off which exposed the spectacular site, its construction during a global pandemic, through to its much-anticipated opening this March.

Ten of Bougle Run's holes are perched on top of a large sand dune that runs between holes 8, 9, 10 and 11 of the Lost Farm layout (green bottom left is Lost Farm 11)



The Sattler family name, and the game of golf in Tasmania, will go down in sporting history with what has been created just outside of the sleepy little seaside town of Bridport on the state's north east coast. Barnbougles Dunes hit the world golfing market with great fanfare in 2004 and was followed six years later by Barnbougles Lost Farm, both courses quickly becoming firmly entrenched in Golf Digest's World Top 100 Golf Courses (Barnbougles Dunes currently resides 11th and Lost Farm 23rd).

Barnbougles owner Richard Sattler is never one to sit on his hands and call the job complete and is always looking for continual improvement and a more exciting experience that will keep people coming back to the

property. It may only be subtle improvements to the golf courses or even the restaurant and accommodation, but rest assured there is always something going on at Barnbougles. And so it proved the case in 2020, even during the height of a global pandemic.

FROM THE ASHES

The Barnbougles property is a sprawling one. Barnbougles Dunes, designed by Tom Doak and Mike Clayton, resides closer to the township of Bridport, while Lost Farm is further along the coastline, separated from its older sibling by the Great Forester River which flows into the adjacent Bass Strait. The Coore-Crenshaw designed Lost Farm resides on an area of land that is around 10 hectares larger than Barnbougles Dunes.

Managing the extensive out of play areas on both courses is a significant part of our operations and one of the techniques used is controlled burn-offs. These have been a regular part of our maintenance regime since Barnbougles Dunes was first constructed and we undertake on average around 12 a year in isolated pockets across both courses. Obviously these are meticulously planned and managed, with particular consideration given to the conditions, such as wind and moisture of the surrounding vegetation, and always done at a time when no fire restrictions are in place. As we all know, however, accidents can and do happen...

On a cool spring morning in early September 2019, course staff were undertaking a controlled burn-off on the right



All up the shaping, irrigation installation and hydroseeding took 16 weeks from start to finish



Greens were hydroseeded with a 50/50 mix of Chewings and slender creeping red fescues. No bentgrass was included in the mix this time. Pictured is the 12th green with 3rd green in the distance

hand side of Lost Farm's 543m par five 10th. For those that know the Lost Farm layout, the area is up and around holes 8, 9, 10 and 11. With a light breeze and some very dry surrounding marram grass, the burn-off suddenly became out of control and raced up and over a large sand dune looking very angry. Course staff called for the water tanker and firefighter pumps to assist in getting it under control, but by the time they arrived it had fizzled out due to the moisture levels in the surrounding vegetation. The fire lasted just 20 minutes, but managed to rip through three hectares.

Richard was made aware of the situation and was quickly on site to assess the damage. In his eyes all he could see was more great golfing landscape. "What a great site for a short course" were his exact words as he climbed higher onto the dunescape to survey the situation. The area where the fire took hold is the highest point across both the properties and affords magnificent 360-degree views over the courses and to the coastline beyond. The land had been available for Bill Coore to utilise when he was designing Lost Farm, however, it did not fit into the much acclaimed 20-hole routing that he would go on to create.

A short course had always been in Richard's thoughts long before the fire. Back in 2012 he and I were fortunate to visit Bandon Dunes where we played Bandon Preserve, the complex's 13-hole par three course. Returning with a vision for something similar at Barnbogle, the only issue that had prevented Richard from making it a reality was where exactly to put it. That was until now.

Without wasting any time, Richard was on the phone to Bill in the US to engage him into looking at the site via Google Earth. Bill could see some real merit in constructing a short course on the elevated dune overlooking Lost Farm and had little hesitation in arranging a site visit in mid-December to start the process of routing.

Bill would end up drafting a neat and challenging, but at the same time fair, 14-hole short course comprising 12 par threes and two par fours. It would cater for all golfing abilities and be as easy or as testing as the golfer would like, with four teeing options on each hole. In fact, the forward tees were positioned as such to allow golfers to putt their way around should they feel the urge to.

The longest of the par fours (hole 8) is 303 metres long, while the par three 3rd measures in as the shortest at just 72m. All up the course has a par of 44 and measures 1179m. Why 14 holes? Well, the area on which 10 of the holes were constructed was that which was impacted by the fire. The other four holes were constructed on part of the Lost Farm practice area which served the purpose of connecting the Lost Farm clubhouse to the outer holes.



All Bougle Run holes were routed using the natural contours of the land where possible, with minimal disruption to the dunescape a principal philosophy of Coore's design. Pictured are the 7th (bottom) and 5th (top) greens

Not being one to wait, Richard had two staff from his farming operations start clearing some golf hole lines for Bill with some of the earthmoving equipment which is already part of the Barnbogle machinery fleet. Upon his arrival on site, Bill could not believe the amount of preliminary works that had already been carried out.

SOMETHING SPECIAL

With the design finalised, the Coore-Crenshaw construction team had a small window of opportunity to construct the course prior to their next major project which was across the Tasman at Tara Iti. Heading up the construction team were shapers Riley Johns and John Hawker, with Bill planning to visit twice during the project before completion.

Riley arrived in late February and John a couple of days later and they quickly went to work on the dunescape and transforming it into a modern masterpiece. The brief from Richard was quite clear... "Build me something special and don't stuff it up!" Having just completed the Sheep Ranch layout, the sixth course at Bandon Dunes, Riley and John continued their creativity and very quickly the new course started to take shape.

While they started to work their magic on the machinery, behind the scenes Barnbogle

staff were preparing and installing mainline irrigation and control wire to complement the Toro Lynx control system and Infinity sprinklers. The new course has a separate standalone pump set and pipe network for 10 of the 14 holes on the top section of the dune. The bottom four holes are plumbed into Lost Farm's hydraulics and control system because of their closer proximity and ease of installation without having to cross existing infrastructure. We were very fortunate to have enough spare stations and hydraulic capacity for this to happen, which saved a lot of money without compromising quality. The flexibility of the Lynx system and allowing those four Bougle Run holes to be managed separately was also a win for the budget.

Just a few weeks into the project we were thrown a massive curveball. Major uncertainty as to whether the project could continue was thrust upon us due to the rapidly escalating COVID-19 pandemic. It threw our plans into disarray as Riley had to quickly depart, making a 2am dash for the airport in order to get on a plane back to his wife and young child in Canada before Australia's borders were slammed shut. That left John as the sole shaper for the project.

With Australia heading into a four-week lockdown, Richard contacted Bill to discuss

The 1179m par 44 Bougle Run is the perfect accompaniment to Barnbogle's existing world-class championship courses. Pictured is the 84m 9th hole





options. Richard was eager for the project to continue and asked Bill if he was happy to have John pull it together on his own, with Bill and Riley assisting remotely. John originally hails from Victoria and completed his greenkeeping qualifications at Barwon Heads Golf Club before deciding to travel the world and branch into golf course construction. Being an Australian citizen, and with his wife and child already residing in Bridport at the time (they were staying in my house), it was a no-brainer for John to stay on and see the project through.

It was a huge challenge but John was more than up for it with everyone's support. With the use of drone photographs, Facetime video calls, Zoom meetings and many other forms of digital and social media correspondence, the now 'global' project continued to run seamlessly. As the project progressed everyone could see the great work that John was doing, with his design and shaping skills that he has honed over the past six years with the Coore-Crenshaw team really coming to the fore.

ALL HANDS ON DECK

After being in the midst of the pandemic for a couple of weeks and with Tasmania effectively shut off from the rest of the world, in late March it was decided to cease golf on the Barnbougale Dunes and Lost Farm courses so we could direct all of our energy and resources into Bougle Run. The two championship courses were kept ticking over with minimal maintenance which wasn't a concern given we were heading into the cooler months. (They would re-open in late June.)

While we did have to stand down three casual staff members, the rest of the crew were not impacted in any way and together with the assistance of 10 staff from other departments, including the pro shop, bar and housekeeping, we had a veritable small army working on bringing the new course to life. The pro shop guys assisted with surface preparation

prior to hydroseeding and also during the hydroseeding process, while the housekeeping staff did an amazing job planting marram and quickly became known as 'Charlie's Angels'. The majority of the earthmoving and shaping equipment used – a Cat skid steer, Case skid steer, Cat 311 and 315 excavators, Cat D5 dozer, Moxy dump truck and modified Toro SandPro for finishing off – were already part of the Barnbougale fleet of machinery.

Minimal disruption to the existing dunescape was a principal component of Coore's design philosophy. All holes were routed using the natural contours of the land where possible, with little impact on the environment. All surfaces utilised the existing dune sand with the greens being straight push-ups. All playing surfaces had a light application of a seaweed extract pellet and Rapid Raiser poultry pellets lightly raked into the surface prior to hydroseeding, a minimalist approach which had been used successfully during the construction of both Barnbougale Dunes and Lost Farm.

Communication was a critical component throughout the construction phase, especially given we had Bill and Riley advising remotely. There was continual daily feedback between John, Bill and Riley in relation to shaping, greens contouring, angles and mowing lines. The lines of communication were open and transparent between all parties including Richard, myself and Bougle Run assistant Anthony Toogood. Not once did anything get completed before everyone was happy with what the end result would look like. Looking back now it is quite amazing how it all worked out and while there are a couple of little things that we will tweak over time – mainly relating to golfer traffic and machinery movement around the course – it was incredible how smoothly and efficiently everything ran.

SOWING THE SEEDS

Hydroseeding of the new course started on 21 April 2020. By this stage we had a full

At 303m long, Bougle Run's 8th is the longest hole. The fairways are a 50/25/25 mix of Chewings, creeping red and slender creeping red fescues

head of steam up, with the irrigation crew well advanced and always keeping a couple of holes ahead of construction with mainline installation. The construction phase didn't throw up too many challenges, with the only slight concern we had being the wind due to the site's elevation and exposure. Thankfully we managed to finish construction well and truly before early spring which is when we tend to get our strongest winds.

A fescue blend was once again chosen as the turf species of choice because of the climate and their tried and tested performance in this part of the world. A 50/50 mix of Chewings and slender creeping red fescues were used for the greens and a 50/25/25 mix of Chewings, creeping red and slender creeping red used across all other surfaces. Seeding rates were 25g/m² across all the surfaces.

While the seed varieties are almost identical to those used on Barnbougale Dunes and Lost Farm, this time we did not include any bentgrass in the Bougle Run blend. That was one of the learnings from our previous experiences with the other two courses. The fescue simply outcompetes the bentgrass and it is also much easier to control *Poa* with no bentgrass to contend with.

All up the shaping, irrigation installation and hydroseeding took just 16 weeks from start to finish, which was a real credit to John, his skills and work ethic to pull this project off in such uncertain times. The course staff did an exceptional job also in getting the project done over the winter months and in sometimes very trying conditions. Anthony was very instrumental in the day-to-day operations and seamless transition from start to finish and also the growing-in process.

As we all know fescue is notoriously slow to germinate and establish and even more so over the winter months with temperatures governing germination time. There is no hurrying it up either, especially in winter, and it is very much an exercise in patience and ensuring nutrition and moisture levels are up. As soon as spring and early summer arrived and we got some warmth, the surfaces tightened up dramatically and started coming into their own.

Nutrient and irrigation requirements compared to Lost Farm are obviously still quite different at this stage. As the fescue continues to mature and the surfaces harden up a bit and develop a little bit of organic matter, they will soon be on the same minimalist, low input approach to turfgrass management that prevails across all our courses.

Bogle Run's 4th hole, one of just two par fours, photographed from the forward tee. Four tees on each hole offer varying levels of challenge

PERFECT ACCOMPANIMENT

We did have an opening date set for mid-January 2021 but unfortunately some seed supply quality control issues with the last four greens hydroseeded put that back to a late March opening. We are still dealing with four of the contaminated greens that are not up to our standard, but in due course they will come to match the quality expected here at Barnbogle.

The new course was christened Bogle Run and opened officially on 31 March. The name 'Bogle Run' is derived from a large agricultural area within the Barnbogle Farm which is also a recognisable area of the farm itself.

The course has now been open for just over a month and mowing practices are really starting to come into line with the other two courses. The surfaces are still very fragile, being so young and with the dune sand being slightly unstable at this stage, so we are managing golfer numbers so as not to cause too much wear and tear. At the time of writing we have had about 600 golfers through the course with numbers limited to 30 per day.



With the course now open we do have a separate crew on Bogle Run based out of the Lost Farm maintenance facility headed by Anthony and comprising three others. We have also had to bolster our machinery inventory to cater for the extra mowing that is now required on a daily basis. We managed to get away with sharing resources at first, but now that we are open we are needing a separate fleet to keep Bogle Run in the same top condition as its bigger siblings.

Since opening we have been thrilled with the response and coverage that the new course has received. Bogle Run adds another really fun and enjoyable experience here at Barnbogle. It takes just 90 minutes for a round and is the perfect accompaniment to the existing championship courses and their traditional golf offerings. The big question now is what Richard Sattler has planned next... perhaps another 18 or 20 holes? Only he knows...🏌️



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AAMI Park stripped bare

While COVID-19 decimated the events and sporting calendar for Melbourne's major arenas, for AAMI Park it afforded head curator Justin Lang and his team a unique opportunity to undertake the most intensive renovation of the surface in its 11-year history.

Since opening in May 2010, AAMI Park has entrenched itself as Melbourne's premier rectangular stadium. It is home base for four tenant clubs across NRL, A-League, W-League and Super Rugby, while its multipurpose nature also sees it host numerous rock concerts and once-a-year events such as Monster Jam. For the surface to meet the demands of these events, AAMI Park boasts a dual-product stabilising system which incorporates a strong, healthy cool-season perennial ryegrass sward.

The fact we have events 12 months of the year does not leave us with any renovation period and therefore any works of this nature

are built into our general maintenance programme. Turf replacement is our biggest undertaking in relation to the pitch and this is generally done after a non-sporting event, like a concert, with a short turnaround time of about 5-6 days before our next sporting event.

Since its opening we have conducted a couple of major surface renovations over the years. In late 2014 we stripped the top off and re-laid a brand new pitch and sprinkler system in time for the 2015 Asian Cup. In February 2017 we removed the top 100mm of the surface, brought in 60mm of fresh sand and laid a new product, Eclipse stabilised turf. In both instances ready-to-play turf was used, thus reducing establishment time.

UNIQUE OPPORTUNITY

Heading into 2020, we again had another busy schedule ahead of us. A-League fixtures had dominated most of our spring and summer schedule, with the 2019/2020 season having started back in late October. We had hosted 15 A-League games by the time Super Rugby started up in mid-February, with NRL due to kick off in late March.

Our last A-League match for the season (and last with a crowd for the year) would end up being the Round 23 clash between Melbourne City and Western Sydney Wanderers on 14 March. Shortly after, the A-League suspended the season as Australia went into a four-week COVID-19 lockdown,



PHOTOS: JUSTIN LANG/AAMI PARK

with all major sporting competitions and events consequently also impacted.

Initially, there was much uncertainty about what events would still go ahead and what events would be either cancelled or postponed. Like most industries we were literally operating on a day-to-day basis for those first couple of months of the pandemic. Despite that, our facility, department and the pitch were constantly in a ready state to host any re-fixture games or relocated events from other states if required.

During this time we scaled back maintenance practices on AAMI Park and rotated staff as per COVID-19 restrictions. As we waited for confirmation of games and events, it gave us the perfect opportunity to upskill all our staff while working from home, doing both sports turf industry and Melbourne Park internal courses online. Staff also participated in online forums with some of our suppliers and stadium peers both locally and internationally. As it transpired the only games we would host were two Melbourne Storm games in late May and early June. Those games were played behind closed doors and held under strict government protocols.

Although the Storm relocated to the Sunshine Coast in early June, there was still a chance they could finish off their 2020 campaign in Melbourne. But as the season went on interstate, it was finally decided they would finish their season away from AAMI Park. With no concerts or Monster truck events



Above: A Koro field topmaker was used to initially strip back the AAMI Park surface to expose the artificial fibres

Left: With COVID-19 wiping out its events schedule in 2020, last spring AAMI Park undertook a major renovation of its surface, stripping it back to sand, rejuvenating the artificial fibres and reseeded

coming up and the A-League postponing the start of its new season until late December 2020, the idea was born to give the AAMI Park surface a genuine renovation.

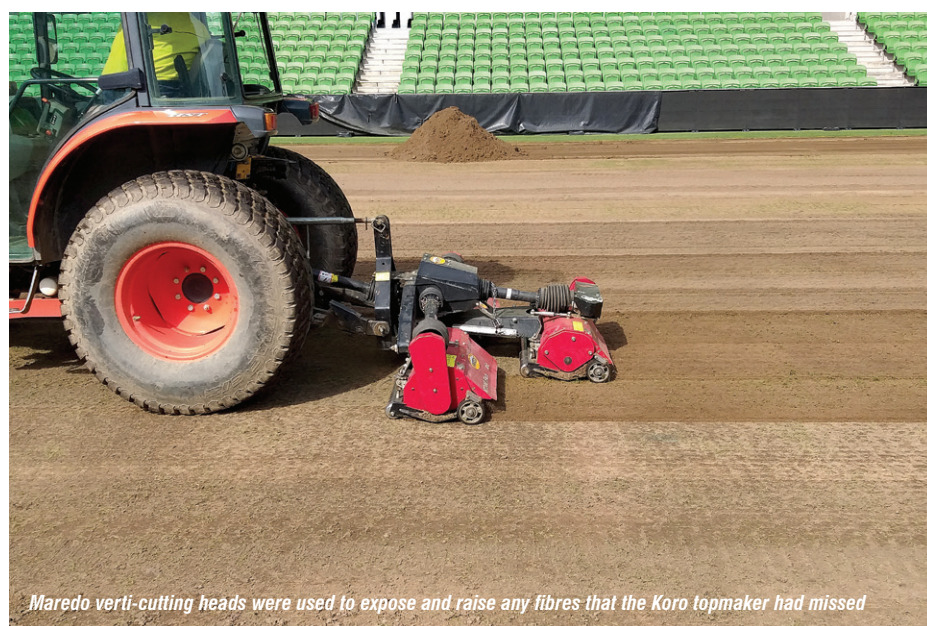
It would essentially involve stripping the surface right back to sand, removing all organic material and rejuvenating the artificial fibres, something that we never had the luxury of being able to do before. To undertake such a renovation, ideally you need 7-9 weeks' establishment time, or longer if it is done during the cooler months. Now that we had no games or events for an extended period, it was the perfect opportunity to carry out such an intensive renovation.

Although it would be something of a first for us, such a renovation is conducted on a yearly basis with stitched or vertical fibre pitches overseas. European venues, in particular the English Premier League pitches

and training facilities, have the process down to a fine art. We were certainly not going into the process blind and with our contacts in Europe and knowledge of the process, our venue and management had a good understanding of what was required. The process for us would start in late September and we had a 13-week window until our first game back which was an A-League match on 2 January 2021.

STRIPPED BACK

Stitched or reinforced pitches with erect synthetic fibres are used to help with surface stability and quality of performance. With four tenant clubs playing out of AAMI Park, mostly at the same time of the year, going hybrid was the obvious choice. Although a hybrid pitch brings stability and good playability, they are also high maintenance.



Maredo verti-cutting heads were used to expose and raise any fibres that the Koro topmaker had missed



Soprano perennial ryegrass was seeded at 500kg

If not maintained correctly, hybrid pitches build up an organic layer quickly. This can create a black layer on the surface, in turn making it greasy and slippery. This can also turn the surface anaerobic and potentially create a shear plane. In a worst-case scenario, the pitch becomes unstable and the fibres ineffective if they are buried too deep.

The renovation of the AAMI Park surface comprised a number of different stages. To make the initial process cleaner and reduce the amount of material taken off site, the existing ryegrass surface was first sprayed out then cut at a low height prior to removal. Surface moisture was then maintained at a certain level to enable a Koro field topmaker to strip the surface cleanly.

To make things a little more interesting, we had different aged Eclipse product in the pitch due to past turf replacements having been done at different times and in different areas. With testing, observation and an independent score play evaluation, it was decided that most of the pitch would have about 20mm taken off, although it was a bit of a trial-and-error process.



The AAMI Park surface received two topdressing applications of 4mm each prior to and after seeding

The key was to topmake the pitch first and clean out as much thatch as possible. The idea was to expose as many of the fibres as possible without getting hold of the product and ripping it out. With the different aged product we had dual issues of there being different levels of thatch and some areas being more degraded than others.

Once the topmaking had taken place, we introduced a Maredo verticutter to expose and help raise any fibres that the topmaker had missed. The Maredo is a more delicate tool than a scarifier, teases the fibres up better, contours to the landscape more and does less damage. Venues that usually do this sort of renovation on an annual basis do not have to use a topmaker. With less thatch, the Maredo is usually the first step.

After putting the verticutting units across the surface, the next step was to then use a solid tine spring-loaded dethatching rake. This was to get right into the fibres almost to the backing, shake up any stubborn thatch and loosen any fibres still buried.

The next phase was to remove any fine thatch particles and broom up the remaining

fibres that the first three steps had not. A rotating power broom attached to a small tractor was used for this process. The more erect you can get the fibres and the more you can get them protruding above the surface, the better the product performs. After several passes, we had removed all debris and were happy with fibre placement and surface levels.

We then topdressed with 4mm of sand using a drop spreader. Once the first round of topdressing had been completed, we then went back over with the dethatching rake to incorporate the sand into the product and stand up all the fibres before seeding.

When seeding into sand and fibres with no existing ryegrass, it is crucial to get your rates and spacings correct. Using a Blec Multi-seeder we went out with 500kg of Soprano ryegrass from PGG Wrightson Turf which was carried out in four different directions to make sure we had an even coverage, minimise any gaps and help disguise any seeding lines. We went out with the higher rate knowing that if it was too thick we could thin it out at any time.

The last stage in the rejuvenation process was to give it a final topdress with another

Right: All mowing and fertilising was done by hand for the first month after germination

Below: The first seed cracked after four days with the first hand mow coming 21-days post-seeding.



4mm of sand. This helped protect the seed, keep it in place and retain moisture. Removing 20-25mm of thatch and returning only 8mm of sand, the fibres were more prevalent and effective than ever.

Soprano has been used at AAMI Park for the past five years and has produced what we have required for a high profile, high usage and highly shaded stadium surface. We have only used cool-season grasses with this particular turf stabilising product as well. We have found ryegrass by itself far outperforms in a hybrid than with a couchgrass base. Melbourne's climate and reducing establishing times on the farm is another factor why we only use cool-season grasses.

BALANCING ACT

By renovating AAMI Park and taking it back to pure sand, the big consideration for us was always going to be managing nutrient retention. Knowing that hybrids can build up a black layer quite quickly, we had to find a good balance of amendments and nutrition for the young ryegrass. To get the seed out of the ground and established relatively quickly, we needed good nutrient levels as sand is very hungry. To overcome this we applied nutrients both pre- and post-seeding.

The first step after seeding was maintaining adequate moisture levels as well as trying to stop some pesky pigeons eating large areas of seed. Apart from the usual bird deterrents, we also had someone on pigeon duty 10 hours a day for the first seven days. The first seed cracked after four days with our first hand mow of the pitch coming 17 days later. All mowing and fertilising was done by hand for the first month after germination. Once the ryegrass



The first event for AAMI Park post-renovation was a 2 January A-League clash 12 weeks post-germination

was mature enough to take vehicle traffic we applied our first fungicide.

Everything that goes with having a reduced or no organic layer affected our previous maintenance programme. Hybrids tend to dry quicker than normal sand profiles and in combination with no organic layer and juvenile ryegrass our irrigating increased dramatically. With high amounts of irrigation and little nutrient holding capacity, our fertiliser applications, both liquid and granular, also increased. Being a fresh new profile, our verti-draining and coring has been reduced, but will still be needed to open the surface up and let it breath, such is the tight compact nature of hybrids.

BACK IN THE GAME

Our first event post-renovation was the 2 January (12 weeks post-germination) A-League match between Melbourne Victory and Brisbane Roar.

One of our key indicators for how well the pitch is performing is the amount of divots we have, or lack thereof. With four tenant clubs including two rugby teams – Melbourne Storm and Melbourne Rebels – playing at the moment, this has certainly been a good test. At the start of April we had a four-day event weekend – Thursday night A-League, Friday night NRL, Saturday night Super Rugby and Sunday night A-League – and the wear and recovery of the pitch was very pleasing. The feedback and performance of the pitch has been very positive and the evenness, ball roll and stability has certainly been to standard.

With early postponement of fixtures because of COVID 19 and our naturally compact event schedule this time of year, we are set to have a very busy April, May and June. With back-dated fixtures, cooler temperatures and extra shade, the AAMI Park surface will certainly get the ultimate test over the coming months. 🌱

PUPIL BECOMES MASTER AS FAHEY TAKES REINS AT MANUKA OVAL

Tom Fahey has replaced Brad van Dam as the new head curator of Manuka Oval and EPC Solar Park. Cricket ACT made the announcement the week prior to van Dam's final day on 24 April, with Fahey starting his new role on Tuesday 27 April.

After 13 years at Manuka and nearly three decades in the industry, van Dam has provided guidance and leadership to some of the best emerging curators in the country. One of the notable standouts was Fahey, who worked alongside van Dam for two years between 2016-2018 as Manuka Oval's second in charge before moving to take on a similar role at the Sydney Cricket Ground.

With more than 11 years' experience in the turf management industry, Fahey beat a strong field of applicants to replace van Dam. Fahey began his career as an apprenticeship at Melbourne's Green Acres Golf Club in 2009 and over the journey has worked at likes of the All England Lawn Tennis Club,



Brad van Dam (left) and Tom Fahey

where he was a groundsman during the 2013 Wimbledon tournament.

"Everything I have done in my career to date has been in preparation to hopefully become a head curator," says Fahey, on his return to Manuka Oval. "I'm looking forward to leading a young team and showcasing our skills to produce great playing surfaces. Brad has taught me so much over the years and is always just a phone call away ready to

give me advice. I plan to ensure we continue to keep these world class standards in place and look forward to putting my own spin on things alongside the amazing foundation he gave me."

Van Dam says he is extremely proud and honoured to see his former 2IC take the next step in his career and is confident Fahey will more than rise to the challenge. "Tom was here for two years and during that time he really developed his skills as a curator and manager, which led to him moving on to the SCG," says van Dam.

"Since leaving Cricket ACT and moving to the SCG, his development as a turf manager has flourished and he has gained valuable experience. As assistant curator Tom has been exposed to many different sports and the associated pressures when leading a team of 10 to deliver the SCG surface week in week out, and this will no doubt give him the confidence in taking over the reins here."

Moonah Links hosted the Victorian PGA and reprised Moonah Links PGA Classic in consecutive weeks in early February. Pictured is the 6th hole of the Open course which hosted the final two rounds of the PGA and all four rounds of the Classic

Moonah Links goes back-to-back

Tournament golf returned to Victoria's Mornington Peninsula in early February with Moonah Links hosting the Victorian PGA Championship and PGA Classic back-to-back as part of a three-event swing. Superintendent

Kyle Wilson looks back on a hectic fortnight for his crew.

After a 2020 which was marked by long-term course closures due to COVID-19, the start to 2021 couldn't be farther removed for the 36-hole Moonah Links on Victoria's Mornington Peninsula. It has been a whirlwind start for the crew after the club offered up its two championship layouts – the Legends and Open courses – in early February to host both the Victorian PGA Championship and the Moonah Links PGA Classic in consecutive weeks.

The Victorian PGA Championship was looking for a new home late last year after nearby RACV Cape Schanck became

unavailable. With the new Players Series event being hosted at Rosebud Country Club (superintendent Ian Todd) in late January, the PGA of Australia was hoping to secure another peninsula venue to offer Tour players a few events close by. Following a year of limited to no local tournament golf due to COVID-19 for Tour players, Moonah Links was asked if we would also host and revamp the old Moonah Classic that was formerly part of the USPGA. Com Tour. Moonah Links had previously hosted the Classic over a three-year period between 2008 and 2010.

The following is a snapshot of what our 10 full-time staff (including myself as

superintendent, assistant Rick Lee, Legends foreman Craig Christie, Open foreman Nathan Brown and full-time mechanic Stephan Schmitter), plus two casuals and two estate staff were trying to achieve both in the lead up and during the tournaments. The Legends is the easier of the two courses, with a par of 72 and measuring 6315 metres from the back tees, while the acclaimed Open course, which hosted the 2003 and 2005 Australian Opens, measures in at a whopping 6829m.

These tournaments were held over consecutive weeks – the Victorian PGA from Thursday 4-7 February and Classic from 9-11 February – across both courses, with minimal to no break in between. The opening two rounds of the Victorian PGA were held on the Legends course before switching to the Open course for the final two rounds. The PGA Classic would be played solely on the Open course.

The Victorian PGA Championship also comprises an amateur/pro pairing as a separate event within the main tournament. A field of roughly 72 amateurs is cut down to 25 for the third round and then to eight for the

The par five 9th on the Legends Course. The Legends hosted the first two rounds of the Victorian PGA Championship, with players enjoying the difference in design to the Open course and the scoring opportunities it presented



PHOTOS: MOONAH LINKS CREW



final round. As such, this required additional mowing of the ladies and spare men's tees that during normal tournament preparations may be missed or reduced. In addition to all this, the course not being used for tournament golf for the week was still open for play to members and the public, meaning we were required to have greens on both courses ready for play each day.

From a staffing perspective we gained one staff member from Rosebud Country Club for each week of the tournaments as we had sent two staff down to assist Ian and his crew for The Players Series event the week prior. Cory Budden (Sandhurst Resort) also kindly offered two staff members, however, I felt as the events were not televised the bulk of the work could be achieved with the personnel on hand; best to save the offer for additional staff to assist for bigger events.

TEERING OFF

The fortnight of tournament golf kicked off with an early start on the Legends course on Monday 4 February with the final qualifying round for players needing to gain a start in the

Victorian PGA Championship. The Legends course was then prepped up for the start of the tournament over the following two days, with staff working around the players during their practice rounds. On the Tuesday (5 February) we also had to prep the Open course for final qualifying for the PGA Classic. As you can imagine staff were kept on their toes working both sides of Peter Thomson Drive which separates the two courses.

From that Wednesday to Friday (3-5 February) we had the Open course available for members competition days and public play, while work was still required to be performed preparing for the closing rounds of the PGA on the Saturday and Sunday and the following week's PGA Classic. All of this was performed

while undertaking our tournament prep work for the opening two rounds of the Victorian PGA on the Legends course, with a two-tee start adding a little complexity to how we managed things.

The 10th hole of the Legends course (a par three) is located right in the furthest corner of the property, so it was decided to use the 495m par five 9th for the two-tee starts. Even still, the 9th tee is located a five-minute drive by club bus to the drop off point. As you can imagine the logistics to not only have the players ferried out there but also with the course crew to ensure we were well on top of our preparations before play started at this point was challenging. As we all know within our industry, we always seem to find a way to

With the Victorian PGA Championship also comprising an amateur/pro pairing, additional mowing of the ladies and spare men's tees was required that would otherwise be missed or reduced during normal tournament preparations. Pictured is the Legends 3rd





get things done and reach, in most cases, the deadlines placed before us.

Just when we thought all was going well, the weather turned on us for the second day of the PGA with a couple of rain delays meaning the last group weren't able to start their second round until 4.30pm. They did well to complete 12 holes, but it meant we were back out on the Legends course early on Saturday morning mowing for not only the players to complete their final round, but also our club members who were hitting off the 1st tee at 7.20am! The crew also needed to prep the Open course for the third and fourth rounds once the final halfway cut was completed.

Fortunately the last two rounds went well with the usual later start time. Eventual winner Chris Wood from Queensland closed out the back nine with a birdie blitz, finishing at 20-under to take the title by a single shot.

CLASSIC FINISH

The fortunate part of having the final two rounds of the previous week's tournament on the Open course, which was the venue for all four rounds of the Moonah Classic, was that most of the hard work had been done. Or so we thought...

Monday was practice day with the tournament kicking off with a 7.30am two-

tee start on the Tuesday. This was a snack compared to the previous week's work and all went according to plan for the first two rounds with everyone in good spirits and the course in great condition. That was also reflected in the scoring, with Sydney's John Lyras posting a 66 and 67 for his opening two rounds to be three shots clear at 11-under after 36-holes.

From a course set-up perspective, the only hiccup we had were some pesky birds (three galahs to be precise) that had taken residence in the pine trees beside the 18th green only a week prior. I say hiccup as they felt the green and area immediately around the hole was an ideal location to peck away, either looking for food or sharpening their beaks on the cup.

They were so brazen that for the second round I deliberately changed the hole last and left the green when the first group were on the tee. The 18th is a 582m par five behemoth, but by the time I went up to the clubhouse and the players were hitting their third shots into the green, I was called back by officials to repair more damage and relocate the hole as close as possible to the original location.

With two rounds of the Classic completed, everything was looking in good shape and we were thinking we were in a pretty good spot for the later starts associated with the reduced fields for the final two rounds. However, as



Above: Greens weren't cut in between the third and fourth rounds on the final day of the Classic. Staff followed behind the final groups in the third round filling divots, raking bunkers and changing holes

Left: Weather hampered preparations and play on the second day of the Victorian PGA, with a couple of rain delays meaning the last groups didn't start their second round until 4.30pm

we were going about our afternoon finishing touches after the completion of the second round, things took another turn.

Earlier on the Wednesday, the Victorian Government confirmed that eight COVID-19 cases had been linked to a growing outbreak at Melbourne Airport's Holiday Inn, with two new infections identified that afternoon. With talk of border closures (South Australia and NSW) escalating, the PGA of Australia had no choice but to organise to play the final two rounds of the Classic on Thursday. With the next leg of PGA events heading into NSW (The Players Series at Bonnie Doon), it became a scramble for players and the Tour to organise travel arrangements and get out of Melbourne which at midnight on the Friday was heading into a five-day lockdown.

Needless to say it was an extremely busy Thursday for all and a major rush as everyone pitched in to make sure that the tournament could be completed in time. Full credit must be given to everyone involved in how the situation was handled and organised.

For the final day, players were grouped in pairs and used carts to expedite play due to the rolling expanse of the Open course. The third round teed off at 7.15am and the final round at 11.45am, with no draw made following the completion of the third round. Players only had 30 minutes to get a bite to eat before teeing it up for the final round.

From a course maintenance perspective we were able to perform and complete all tournament duties as normal prior to the third round, even with the 15-minute earlier start time and the use of carts. The difficult part was the work prior to the fourth round.

The PGA was pleased with both the condition and speed of the greens, so there was no mowing or cutting between rounds

The final two rounds of the Classic had to be played in one day after a COVID-19 outbreak in Melbourne and threats of border closures threw the end of the tournament into chaos



three and four. Instead, we had a team of staff on each nine following the last group of the morning field who filled divots on tees and fairways, emptied rubbish bins and raked bunkers that had been played out of. Myself and assistant Rick Lee changed nine holes each with one of the tournament directors accompanying us.

As soon as the last group walked off each tee, an official would move the markers for the last round and likewise when players had putted out and walked off the green Rick and I were there ready to change the holes. By the time we reached the 8th and 17th holes the first groups that had started their final rounds were close to catching the group completing their third rounds, but the timing worked out by the PGA ended up being perfect, almost down to the minute.

Again, the scoring was excellent and the tournament finished in dramatic style. Bryden Macpherson, the 2011 British Amateur champion who originally hails from the Mornington Peninsula, fired an eagle and four birdies over his final six holes to rocket him to 18-under and the clubhouse lead. Sydney's Justin Warren headed to the last needing an eagle to force a playoff, but after his flop shot over a greenside bunker finished four feet from the hole, Macpherson had his maiden ISPS HANDA PGA Tour of Australasia title.



To perform all the work across both courses for the two tournaments, Moonah Links had a crew of just 10 full-time staff, two casuals and two estate staff, with nearby Rosebud CC also sending a staff member each week

TEAM EFFORT

Feedback regarding the courses for both events was extremely pleasing, especially with comments from professionals who had never played the Legends course before. They enjoyed the difference in course design and the scoring opportunities the shorter, but still challenging, course had to offer.

It was a huge team effort all around and everyone played their part to ensure both events were a success – from the hotel team, golf operations, all players (who were very respectful of our requirements performing our work during practice rounds) and to the entire PGA of Australia team on site for the two weeks. We have worked through many events

with most of them and their communication and understanding of our course maintenance work is second to none, working together to be adaptable and achieving the end results.

My course team also deserves special mention. Consecutive professional events are very uncommon at the same venue, especially with two golf courses in use at the same time. They all had to be flexible, which comes with tournament golf and our industry in general, especially when dealing with weather conditions. As much as nobody wanted a lockdown for five days, it did offer the staff, including yours truly, a well-deserved break after notching up 130 hours over the previous fortnight. The golf courses also enjoyed some much-needed recovery time. 🌱

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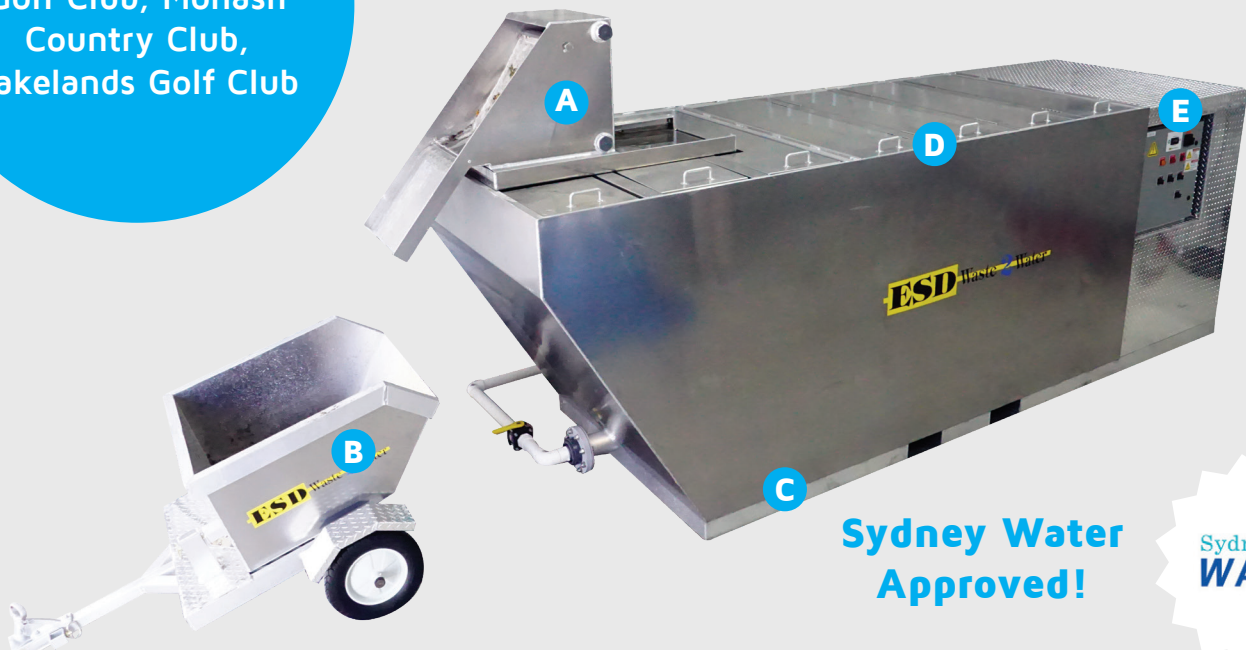
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Recovery and resilience



Twenty of Meadowbrook's 27 holes were completely submerged after Slacks Creek, a tributary of the Logan River, flooded. Pictured is Meadowbrook's new 9th green receiving its first cut after being cleaned off

PHOTO: LUKE HELM

The floods along Australia's Eastern Seaboard in March devastated many communities and had a widespread impact on sports turf facilities and the turf production industry. ATM looks at how the industry has again demonstrated its resilience and comradeship in challenging times.

Nambucca Heads Island Golf Club superintendent Greg Jager could never have predicted that after taking over as superintendent in the latter half of 2020 that he would be impacted by two severe floods just four months apart. Arriving from RACV Royal Pines Resort where he had been assistant for the previous eight years, Jager was looking forward to the challenge of taking on his first superintendent role at what rates as one of the most idyllic golf course settings in the country.

As the name suggests, Nambucca literally resides on its own island. Accessed by a causeway from the main Nambucca township, the 18-hole course takes up the entirety of Stuart Island and is surrounded on all sides by the Nambucca River. The reality is, however, that the course sits just one metre above sea level and as Jager would soon discover such an idyllic location can have a few pitfalls.

Just prior to last Christmas, 500mm of rain fell in a six day period which, combined with a king tide, resulted in widespread flooding of the course. It was the first time in six years that a flood event of that nature had impacted the course, but sadly it was just a warm-up for the main event to come in March. Over an eight-day period, Nambucca recorded a staggering 1080mm of rain, 350mm of that coming in one day. The course was quickly inundated again and it would take almost a week before waters receded enough to allow Jager and his team access back across the causeway to inspect the damage.

What they found was heartbreaking. While the December flood had been clean and the clean-up quick, March's flood was anything but. Widespread areas of the course, in particular the back nine, were covered in thick silt, with deposits six inches or more deep in places (see photo of Jager on the 10th hole opposite). Rallying the troops, including

members of the local community, they set about the arduous task of cleaning off the playing surfaces, prioritising the greens first.

Despite their best efforts a number of greens simply couldn't survive the level of inundation and silt and ultimately had to be reseeded. Remarkably, the front nine holes were reopened for play within a couple of weeks of the flood, however, the back nine took a lot longer.

At the time of this edition going to print, a full 18 was opened in the last weekend in April (two temporary greens were in play), while the bunkers were still out of play and waiting on the arrival of fresh sand.

"It has been quite an initiation," reflects Jager on the two major flood events he has had to endure. "I've dealt with floods before, but they were clean. This is the first time where I have had to contend with major silt deposits. After we finally got access back onto the course, it was all about pushing mud off and

getting the surfaces cleaned off as quickly as possible. We lost three greens – 12, 15 and 16 – which simply couldn't handle being under water and silt for the best part of seven days.

"We had some great support from the local community as well as local clubs. We had Justin (Sheehan) and his guys from Coffs Harbour down helping to remove silt out of the bunkers and clean up a few fairways. One of the local guys who owns a civil firm did a great job on the fairways. He brought in a skid steer to help move the silt off and ended up bringing in a different implement, almost like a snowplough which had a 3m wide bucket and 1m wings on it (see photo top of p34). It made the process of clearing the fairways so much quicker and was a tremendous help. Everyone pitched in and the club have been really supportive too with all our efforts."

Nambucca Heads Island Golf Club was just one of many turf facilities stretching from southeast Queensland to the south coast of NSW that were impacted by severe weather between 17 and 26 March 2021. Record high rainfall and flooding was the result of a blocking high-pressure system in the Tasman Sea and a low-pressure system off north-west Australia feeding a large volume of moist tropical air into eastern Australia.

In a Special Climate Statement summarising the extreme weather, the Bureau of Meteorology highlighted some pretty sobering statistics from that period, including;

- Coastal NSW, including Sydney, experienced multiple days of heavy rainfall, with the week ending 24 March 2021 the wettest week for the region since records began in 1900.
- NSW had its second-wettest day, third-wettest week and second-wettest March on record since 1900.



The depth of some of the silt deposits at Nambucca Heads Island Golf Club

PHOTO: GREG JAGER

- Highest daily totals of the event were on the NSW Mid North Coast on 19 and 20 March when numerous BOM sites exceeded 200mm one or both days. The most extreme sub-daily totals were on 19 March, including 125mm in one hour at Bowraville (inland from Nambucca).
- One of the most significant aspects of the event, for coastal NSW in particular, was its persistence. Many locations received several days of heavy rain, particularly on the Mid North Coast where many locations had four consecutive days with 100mm or more from 19 to 22 March.
- Numerous Mid North Coast locations had four-day totals exceeding 600mm. Comboyne, in the hills south-west of Port Macquarie, had a four-day total of 853mm.

- In southeast Queensland, daily totals exceeding 200mm occurred on 22 and 23 March. Brisbane's 125mm on 22 March was its wettest March day in 20 years.
- Flooding reached record heights on the Hastings and Manning Rivers. The Hawkesbury-Nepean catchment in Sydney experienced its most significant flooding for more than 30 years, with peaks at Windsor (12.7m) and Sackville Ferry (9.8m) the highest since 1990 and North Richmond (14m) the highest since 1998.

PRODUCERS PULL TOGETHER

While many individual facilities were left reeling in the wake of the floods, from a broader industry perspective the biggest impact came in the turf production sector. The Windsor/Richmond area out west of Sydney has been prime turf growing country for the past three decades, with numerous farms on the banks of the Hawkesbury River. Many had only just got their facilities back into full production after flooding 12 months earlier, but that event was minimal compared to what transpired in March.

In the weeks following the 2021 floods, Turf Australia and Turf NSW conservatively estimated that with over 2800 hectares of turf production flood impacted, the damage bill (farm gate value) was upwards of \$170 million. Once damage to equipment and machinery is eventually factored in, that figure is expected to increase significantly. Such damage is likely to have wide-ranging implications, with major shortages of turf forecast over the coming 12 months.

"The storms and floods have been devastating for our industry after a very difficult couple of years recovering from bushfires, drought and the COVID-19 pandemic," says Turf NSW industry development officer Matt

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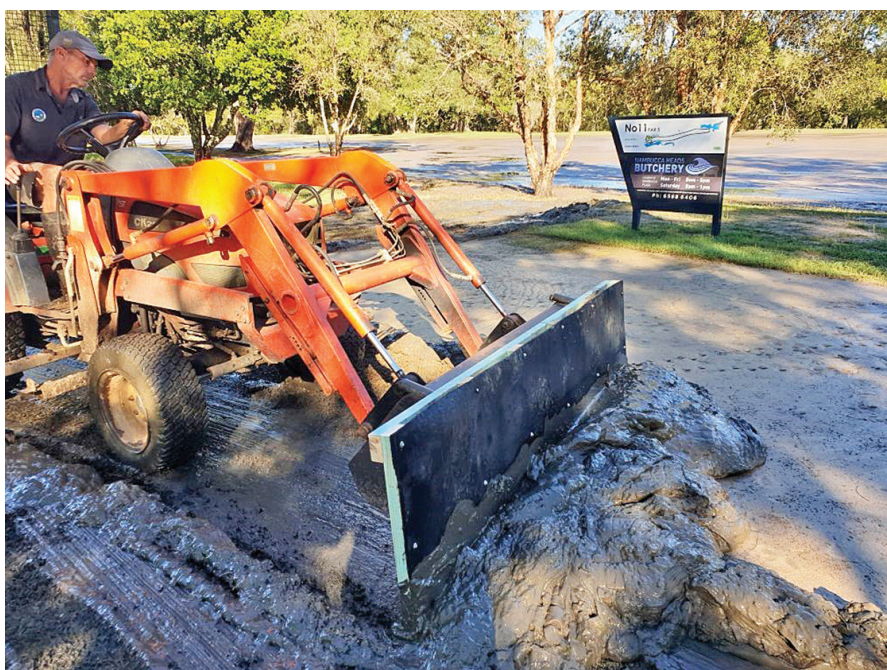


PHOTO: GREG JAGER

Superintendent Greg Jager (left) and volunteers (right) begin the arduous task of clearing silt off the Nambucca playing surfaces

Plunkett. "It will be some months before the full extent of the damage is known. Some grower members in the Hawkesbury Valley have not recovered from the February 2020 flooding and require a lot of assistance to get back on their feet. Despite that, it has been amazing to see our industry pull together in a crisis and support one another in times of need."

On 27 March, Turf Australia market development manager Jenny Zadro met with local State Member for Hawkesbury Robyn Preston in Richmond, which turned into a meeting with Prime Minister Scott Morrison. This provided an opportunity to explain the impact of the floods on the turf industry and from that the Prime Minister requested further information be provided on the industry's plight. Two days later, on 29 March, a meeting was convened for growers impacted by the floods, with around 80 attending the Pitt Town Sports Club to provide Turf Australia and Turf NSW with a better understanding of the support they needed.

"We were overwhelmed by the attendance," says Zadro. "It was clear that the growers were stressed, emotional and deeply worried about the fragility of their businesses, their staff, their families and their fellow industry workers. They were also very frustrated as the impact of this flood is not just due to heavy rain but infrastructure issues and poor management and maintenance of drains and creek systems that did not let the water drain off the farms quickly."

"The growers were fantastic in providing information on resources and support needed now, in the short-term and in the long-term. We have collated this information and with Turf NSW will develop a plan to work closely with growers and authorities to ensure this isn't just a short-term fix, but a crisis that then sees a change for the industry in the years to come."

Further to the meeting with the Prime Minister, an entourage of Federal Government representatives visited some farms in the Freeman's Reach area including Southern

Cross Turf and Green Life Turf. David Littleproud MP, Minister of Environment, Drought and Emergency Management attended, as well as Susan Templeman, Federal Member for Macquarie (Hawkesbury area). They saw first-hand the devastation to farms, river embankments and roads and spoke with growers to try to understand the challenges they are facing and what support they needed to recover.

In the subsequent briefing letter sent to the Prime Minister, Turf Australia outlined a number of areas where urgent action was required. Among those included;

- Financial support due to loss of income;
- Assistance with staff retention;
- Issues pertaining to riverbank erosion, drain and creek management;
- Access to water;
- Road and infrastructure repairs; and
- Reducing the amount of red tape preventing growers from repairing and protecting their properties.



PHOTOS: NEARMAP

Aerial images of the Windsor and Pitt Town Bottoms area and Hawkesbury River before (24 January 2021) and during (25 March 2021) the March floods. The area is one of the major turf production regions in NSW. Lynwood Country Club can be seen to the right of the photo on the left

After cleaning off and renovating, 12 of Windsor's bentgrass greens would need to be reseeded

"The briefing letter contained a number of things that growers need now to keep their businesses operating, to keep staff employed and to get their farms back up and running," says Zadro. "From an industry perspective, we are continuing to work with the NSW government to undertake the necessary work to prevent future floods, such as repairs to the riverbank and clearing of drains and floodgates. There are concerns with a predicted wet winter and what that might mean for an already full Warragamba dam and riverbank system that is significantly damaged.

"Another main focus now is ensuring that golf course superintendents, sports turf managers, landscapers etc continue to work with their regular turf supplier and support the NSW growers during this tough time. Many of the growers are back up and running and utilising the stock that they do have available. Others are still working to recover their farms ready for planting of new turf crops."

LONG ROAD BACK

For three golf clubs near to the many turf production farms in the Hawkesbury district, the floods were equally as devastating.



PHOTO: JEFF MCMANUS

Lynwood Country Club (superintendent Nathan Ball), Windsor Country Club (superintendent Jeff McManus) and the nine-hole Rum Corps Barracks Golf Course (superintendent Tyler Willoughby) all suffered massive inundation and as this edition was going to print all three were still in varying stages of getting their playing surfaces repaired and back into play.

At Windsor, which had only just recovered from flooding the previous February, all but five greens went under, with water very slow to recede. Six of the worst greens were under for 11 days, a couple were under for 10, while the least amount of time spent under was seven days. All surfaces had 3-4 inches of silt across them and a damaged pump set hampered

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FROM FLIGHTS TO FLOODS

It has certainly been a 12 months to remember for Meadowbrook Golf Club superintendent Luke Helm. Last March he found himself making a mad dash back from Florida to Australia following the calling off of The Players Championship due to the COVID-19 pandemic. Then, this past March, he and his crew had to contend with devastating floods which inundated 20 holes of the 27-hole layout just south of Brisbane.

Helm was one of four ASTMA and NZGCSA members that were part of the inaugural John Deere-sponsored TPC Volunteer Program for last March's tournament at TPC Sawgrass. Arriving in the USA a week before the tournament, they were involved in preparations during lead-in week, but after just one round the USPGA Tour announced the tournament was being called off due to the pandemic. Within 24 hours John Deere had organised flights and Helm was winging his way back Down Under just before the Australian borders were slammed shut.

Fast forward 12 months and Helm has had to endure what he describes as the worst flooding he has seen in his three-and-a-half years at the club. With Slacks Creek, a tributary of the nearby Logan River, snaking its way along much of the club's eastern boundary, Helm could do little but watch on helplessly as 20 holes and 18 greens were completely submerged. Meadowbrook was one of a number of courses affected in southeast Queensland, with the likes of The Glades (superintendent Glenn Gibson-Smith) and Palmer Colonial (superintendent Mark Hauff) also suffering badly.

"The course took a huge hit which was really heartbreaking to see," says Helm. "We managed to get 18 holes open by 1 April which was a mega effort from the guys. We got some heavy rain the following week which put us back under; we seemed to keep going from one extreme to the next. The playing surfaces are recovering now which is great, but there are still a lot of areas we will need to resurface in front of greens. We have oversown our couch greens with *Poa trivialis* this year which is just starting to strike and we are looking to oversow the tees as well which will put us in good stead for winter."



PHOTOS: NATHAN BALL

Recovery timeline of Lynwood's 4th green. Pictured top left is the green immediately after flood waters receded (2 April). Top right, 8 April green cleaned up and ready for seeding on 12 April. Bottom left (20 April) and bottom right (26 April) showing excellent strike

clean-up efforts for the first few weeks. Despite the seemingly insurmountable task ahead of them, in the weeks following McManus and his team, like his counterparts at Lynwood and Rum Corps, have gotten through an incredible amount of back-breaking work to get their course back up, knocking off little milestones each day along the way.

"We are finally getting there," says McManus, five weeks after the floods. "We managed to salvage one green but we needed to re-seed 12. We used a mix of Mackenzie and Tyee 007 bentgrass at 600g/100m² and we got a good strike on all of them and they continue to improve every day. We have re-turfed about 1200m² of Santa Ana couch on tees and have around 5000m² left to lay around greens.

"At the start I wondered how we were going to get through this, but the boys have been huge in the way they have gone about their work. They busted a gut each day and have done an incredible job to get to where we are. The support from others in the industry has been superb as well. Daniel Studders and Marc Goldsbrough from Ground Solutions Australia come out to assist with renovating our greens prior to reseeding them. We also Daryl Davidson, head curator at Sydney Uni, donate a full day helping out laying all new turf on one of our tees. It was a wonderful gesture especially considering he was on holidays."

Also in great admiration of the way his crew have rallied over the past month has been Lynwood's Nathan Ball. At Lynwood, the clubhouse, pro shop and maintenance facility were spared, but the cart shed went under as

did pretty much the entire course, up to 8m in parts. The clubhouse and maintenance facility became a staging ground for nearby turf producers, including Dad and Dave's Turf and Evergreen Turf, who hastily transported their machinery and equipment to higher ground as their farms were quickly submerged.

As this edition was going to print, a welcome tinge of green was replacing the brown that had prevailed for much of the previous month at Lynwood. In the second week of April greens were reseeded and three weeks on the course is slowly coming back.

"My staff have been amazing," explains Ball. "They've put in some long hours and their attitude towards this disaster has been really top notch. The course has really improved over the last four weeks and we have had great weather conditions which has enabled the course to respond very well."

"We finished re-seeding 16 of our greens on 13 April. On day 10 after seeding we applied a granular fertiliser at half rate to our greens and we have seen a great response. We will go out on day 17 at half rates again and then hopefully look at giving them a first cut around day 21/22 after seeding. We have also applied a liquid fertiliser to our fairways and a granular fertiliser to our tees to try and get the best recovery on all playing surfaces before we head into winter."

Editor's Note: To view more photos and read the ASTMA's rolling coverage of the floods and subsequent recovery efforts, view past editions of The Cut e-newsletter (19 March to 30 April) through the ASTMA website www.agcsa.com.au/publications/the-cut.

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JOHN NEYLAN

Surviving inundation

John Neylan takes an agronomic look at the impact of the recent floods in NSW and southeast Queensland and the short- and long-term implications for turf health.

The recent floods on the Australian Eastern Seaboard brought back memories of the floods in Brisbane in 2011 and in particular the agronomic impacts. During that time I was with the AGCSA and along with then Board member Pat Pauli we visited many golf courses that had been affected by the floods both in Brisbane and further afield. It was an interesting time to observe the effects of inundation and silt deposits on turfgrasses as well as the human element of persistence and resilience of getting turf surfaces playable again.

Later that same year I also inspected several golf courses in the Bangkok region that had been flooded between October and December. The purpose was to share the Australian experience and, in particular, how to get the playing surfaces back into play.

Given the recent experiences in NSW and southeast Queensland, it was timely to review not only the impacts of inundation on turf but also the effects of the associated weather conditions on turfgrass health and surface preparation. High rainfall, low light conditions and high humidity are all conditions that

appeared to be adversely affecting both cool- and warm-season grasses.

TURF AND FLOODING

The effects of flooding are multifaceted with several factors contributing to turf damage and recovery. These include:

- Silt deposits;
- Depth of water;
- Time the turf is inundated;
- Turfgrass species;
- The age of the turf; and
- Surface topography.

Floods are either 'dirty' or 'clean'. 'Dirty' floods are associated with silt deposits and considered to be the most damaging. In Australia, silt deposits appear to have had the greatest effects on turf condition, particularly if circumstances restricted the ability to remove it from the turf layer. Wherever there was a lack of clean water or power to pressure clean the silt from the thatch/turf layer of putting surfaces, a silt layer can persist within the profile. This layer of silt has an ongoing effect on restricting water infiltration and root growth. All flooded greens or sand-based profiles usually require renovation following flooding

including hollow coring, scarifying and sanding to break up this layer.

On fairways, the successful removal of the silt depends on the amount of silt deposited and the level of resources available to remove it. Where the silt layers remain on fairways, this continues to impede water infiltration and it takes only a small rainfall event to make the surface muddy and soft. Some form of ongoing cultivation (e.g. slicing, coring or vertidrainage) is required to improve soil permeability. In situations where the silt cannot be cleaned off quickly, it tends to bake in the sun, forming a hard layer that increases the amount of turf loss.

In the Thailand experience, damage was mainly as a result of the depth of water and the length of time the turf was under water rather than extensive silt deposits. The Thailand floods provided a good insight into the tolerance of turfgrasses to prolonged flooding, irrespective of the other factors associated with floods. Zoysiagrass (*Zoysia* sp.) was the worst affected and the Bermudagrass hybrids (*Cynodon dactylon* x *Cynodon transvaalensis*) the least affected. Seashore paspalum (*Paspalum vaginatum*) is another prominent



Floods obviously create short-term problems, however, after the recovery there is the long-term health and management of the turf to consider. Pictured is Meadowbrook Golf Club in southeast Queensland in March

PHOTO: LUKE HELM (MEADOWBROOK GC)

species used in Thailand and depending on the depth of the flood waters was also severely damaged.

Zoysiagrass is a strong, resilient grass that has excellent drought tolerance, it is hard-wearing and can be a challenge to mow. The research of Fry (1991) indicated that zoysia had intermediate tolerance to submersion and would survive 55 days of submersion with minimal damage. In the field, however, zoysia proved to have little resistance to flooding and most of the zoysia observed in Thailand was dead with no signs of recovery. The possible key aspect affecting the grass compared to the research data is the depth of the flooding. In the work of Fry (1991), the turf species were subjected to about 130mm submersion depth compared to at least 1000mm on the flooded golf courses.

Seashore paspalum is a popular grass on golf courses in Thailand because of its striking appearance and the ability to stripe it up like cool-season grass fairways. The references on the tolerance of this species to inundation are a little contradictory and confusing. Seashore paspalum prefers moist to saturated sites and can withstand brief inundations (including by



PHOTO: JEFF MCMAHON (WINDSOR CC)

Depending on the type of flood and how much silt is deposited on the turf surface, there can be ongoing issues with reduced infiltration rates and increased surface moisture due to layers of silt within the profile. Pictured is a fairway at Windsor CC shortly after flood waters had receded

seawater), however, prolonged flooding is detrimental.

Other references quoted by Duncan and Carrow (1999) suggest that seashore paspalum is most tolerant of waterlogged conditions on poorly drained sites. There has been a misconception that while seashore paspalum can withstand short periods of inundation it cannot tolerate long-term flooding. On the flooded golf courses, seashore paspalum was severely damaged depending on the depth of the water. On one particular tee that was under water for eight weeks, but where the water depth was about 300mm, the damage was minimal and complete turf recovery was expected. It is assumed that where there is some light penetration the plant has some improved ability to survive.

Tifdwarf on greens and Tifton 419 on fairways were the least affected by flooding in Thailand and close to complete recovery was achieved. Fry (1991) ranked native Bermudagrass as one of the most submersion-tolerant species and this is consistent with Beard's (1973) observation that it has excellent submersion tolerance. The field assessments in Australia and Thailand are consistent with these observations and given the damage to the other turfgrass species it is substantially superior in this respect. Wherever there was severe turf damage and no recovery, the roots, rhizomes and stolons were rotten and there was no living tissue.

The other interesting aspect of the floods was the effects of the depth of the water and the time the course remained flooded. Where the water was less than 0.5m, irrespective

of the time the turf was under water, the turf in many cases (other than zoysia) was relatively unaffected. As the depth of the water increased, the greater the turf damage, irrespective of the turf type. There was one golf course that was under water for about four weeks though the depth of water was less than 0.5m and consequently there was very little damage on the Bermudagrass anywhere on the golf course.

It was noticeable on most golf courses that the lower sections of greens and fairways were the worst areas affected. Most of these lower areas were typically points for surface drainage and were therefore subjected to longer periods of saturated soils. It is also likely that there was some scorching due to increasing water temperatures as the water became very shallow.

The final factor that killed grass on greens, tees and fairways was moisture stress. While there were areas of turf that survived, the root systems were compromised with very few live, healthy roots. Consequently with the return of warm and dry weather the turfgrasses would quickly go under moisture stress.

The research on cool-season grasses is very limited and there are no hard numbers describing how many days cool-season grasses can survive under water. Instead, species have been assigned relative submersion tolerance ratings;

- Creeping bentgrass – excellent;
- Kentucky bluegrass – medium;
- *Poa annua* and perennial ryegrass – fair.

As with the warm-season grasses, when the submergence depth increases, the potential for injury increases. If the leaf tissue



is above the water line the turf will probably survive. The other factors affecting turf survival are water temperature and light intensity. Beard (1973) also noted that as the temperature of the water increased the greater the damage to creeping bentgrass.

In my experience, where the flooding is relatively short-lived and the water and silt is removed quickly, the bentgrass will survive relatively well. However, in discussions around the most recent floods, it would appear that bentgrass will not survive more than 4-5 days under water, the thought being that the damage is primarily due to the lack of oxygen in the rootzone.

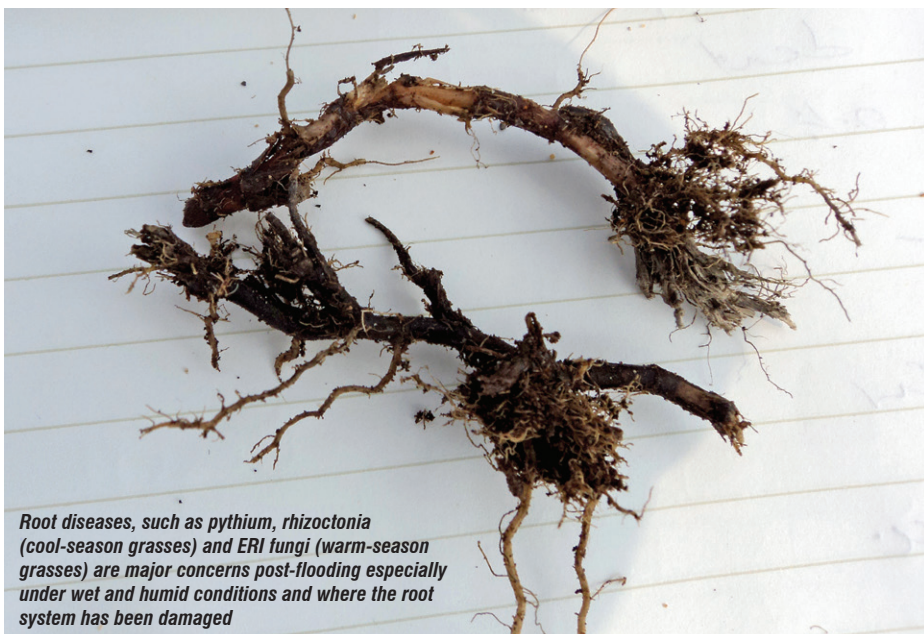
ONGOING ISSUES POST-FLOOD

Floods obviously create short-term problems, however, after the recovery there is the long-term health and management of the turf to consider. From previous observations, bermudagrass in greens, tees and fairways will recover even where the turf is under water

for several weeks. While the recovery may be very good, the turf on greens in particular will exhibit shortening of the root system and an increased incidence of root diseases.

Oxygen depletion, rotting of roots, lack of light and the depletion of carbohydrate reserves are all factors contributing to the deterioration of the root system. Because of the stress that the turf has suffered, it is likely that there will be an increased incidence of disease and reduced wear tolerance during the cooler months.

The root diseases of most concern include pythium and rhizoctonia in creeping bentgrass and ERI fungi in warm-season grasses. All these diseases are most prevalent under wet and humid conditions and where the root system has been damaged. With the warm-season grasses beginning to move into slow growth and dormancy, it is important that they are protected as they go into dormancy and most importantly during the period of spring green up.



Root diseases, such as pythium, rhizoctonia (cool-season grasses) and ERI fungi (warm-season grasses) are major concerns post-flooding especially under wet and humid conditions and where the root system has been damaged

Where flooding is relatively short-lived and water and silt is removed quickly, bentgrass will survive relatively well. However, with the most recent floods, it appears that bentgrass will not survive more than 4-5 days under water

The ERI fungi are very difficult to control once an outbreak occurs, however, when it does the following strategy has provided some success;

- **Immediately:** Apply a tank mix of propiconazole and chlorothalonil. Other fungicides that appear to be effective include strobilurins (e.g. azoxystrobin) and the sterol inhibitors (e.g. propiconazole and iprodione).
- **In 2-3 days:** Apply a contact fungicide such as mancozeb and leave it on the leaf to clean up any leaf disease if present.
- **In 1-2 weeks:** Apply a high potassium fertiliser at 1.5kg/100m² and manganese at label rates.
- Cease use of growth regulators until disease is under control.
- Make sure that the thatch is kept under control.
- Apply a fungicide such as azoxystrobin as a preventative treatment about six weeks before the disease is likely to appear. Also, apply in late summer/early autumn while there is good growth.

Wherever turf has been flooded there will be ongoing concerns with weed seeds and their germination. It has been noted previously that on some golf courses there was an influx of weeds very quickly after flood waters had receded. This is due to the turf being thin and less vigorous and weeds being opportunistic plants quickly germinate and invade the spaces.

It would also be expected that over the next 12 months there will be a progression of germinations depending on the weed type and time of year. Most affected golf courses will need to maintain a regular programme of applying pre-emergent herbicides (to kill the germinating seed) or post-emergent herbicide to kill the established plant.

Depending on the type of flood and how much silt is deposited on the turf surface, there can be ongoing issues with reduced infiltration rates and increased surface moisture due to the layers of silt. Any layers of silt that form need to be broken up and removed to allow water to infiltrate and drain through the profile. Breaking up these layers will improve soil aeration and stimulate the growth of new roots.

SUCCESSFUL FLOOD RECOVERY

The key to a complete and successful recovery is patience. The turf is going to be weak and forcing growth with nitrogen and lowering cutting heights too early will further weaken the turf and slow the recovery rate. Some maintenance factors to consider are:

On fairways, the successful removal of silt depends on the amount deposited and the level of resources that can be deployed to remove it

- Coring, verticutting and sanding to stimulate growth and to break up layers;
- Lifting cutting heights;
- Light applications of fertiliser – moderate nitrogen, high potassium and phosphorus (slow release fertiliser);
- Use liquid organics (e.g. seaweed extract) for root health;
- Disease and weed management;
- Check what is in the soil and the condition of the rhizomes/stolons;
- Manage root health and keep checking roots;
- Do not lower cutting heights too soon – during recovery keep cutting heights greater than 6mm;
- Overplanting and plugging bare areas;
- Coring or spiking fairways – keep spiking whenever infiltration rate drops.
- Soil testing – salinity, nutrients and organic matter.

RESEARCH

If we accept that we are subjected to a changing climate with more extreme rainfall and damaging flooding events, there is an



PHOTO: JEFF MCMAHON (WINDSOR CC)

obvious need to invest in ongoing research into the short- and long-term effects of inundation and silt deposits. Golf in particular needs to invest in monitoring the initial damage to turf, the recovery potential and how long the damage will impact on surface preparation.

I hope that the sport, rather than those that manage it, can put its hand in its pocket and invest in the future.

REFERENCES

Beard, J. 1973. *Turfgrass Science and Culture*, pp 297 – 300. Prentice Hall

Fry, J. D. 1991. Submersion tolerance of warm-season turfgrasses. *Hortscience* 26(7):927. 1991.

Carrow, R.N. and R.R. Duncan. 1998. *Salt-Affected Turfgrass Sites: Assessment and Management*. Ann Arbor Press, Chelsea, MI. ۞

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JOHN NEYLAN

No light relief

The recent wet weather has seen increased cloud cover which has added to the challenging management conditions for sports turf managers writes John Neylan.

Bureau of Meteorology data for the months of January through to March/early April 2021 has highlighted the effects of cloudy weather on photosynthetic irradiance and what this may mean for healthy turf growth

The wet start to 2021 has undoubtedly had a dramatic effect throughout NSW and southeast Queensland through the direct effects of flooding and silt deposits. The other effect of the wet weather has been more widespread through the increase in soil moisture, increased humidity and low light due to the heavy cloud cover. During recent visits to NSW it was noticeable that there were turf surfaces affected by the lack of sunlight, resulting in turf thinning.

A review of the Bureau of Meteorology (BOM) data for the months of January through to March/early April 2021 has highlighted the effects of cloudy weather on photosynthetic irradiance and what this may mean for healthy turf growth. Turfgrass does best when it receives ample sunlight and each day it rains the turf is unlikely to receive the necessary quantity of sunlight for sufficient photosynthesis. Even cloudy days can severely restrict turfgrass growth (Daniels, 2019).

Daniels (2019) suggests that one or two consecutive days of cloud is of no concern, but a week or more of cloudy conditions is likely to cause a decline in turf health and density. This is especially true for warm-season turf species that have high sunlight requirements. It is useful to count the number of rainy days, the amount of precipitation and the number of sunny days to see whether these conditions are impacting turf health. A lack of sunlight may explain why some areas of the golf course have struggled as of late. The weather data for the first part of the year for Sydney and southeast Queensland are summarised in Tables 1-3.

BOM data for the daily global solar exposure was also reviewed to determine the impact of cloudy weather on the solar radiation and the impact on photosynthetic active radiation (PAR). The Daily Light Integral (DLI) is the total light load for the day and is an important criteria for comparing against the minimum requirements for particular turfgrass species. In reviewing the data the following notes are made:

IN SYDNEY...

- For 35 days out of 90 days there was less than four hours of sunlight/day. It is noted by Woods (pers. Comm. 2016) that a

minimum of five hours a day is required for creeping bentgrass. Research at Avondale Golf Club (presented in ATM Volume 20.2) noted that under these conditions turf thinning and the presence of algae was a likely occurrence.

- About half of the days were subject to heavy cloud cover.
- About half of the days had some rainfall which maintained elevated moisture levels in the turf canopy leading to algae, turf thinning (under traffic) and the presence of pythium.
- The DLI was reduced for all months and substantially less than the minimum required for creeping bentgrass.

The conclusions that can be drawn are that the weather conditions over the first three months of the year would be deleterious to the health and growth of creeping bentgrass. As a result, some turf thinning and a greater incidence of disease would be expected.

IN SOUTHEAST QUEENSLAND...

- Over half of the days had some rainfall which maintained elevated moisture levels in the turf canopy leading to algae, turf thinning (under traffic) and the presence of disease.
- About 30-50 per cent of the days were subject to heavy cloud cover.

- March 2021 had the most days where there was less than the preferred minimum of eight hours of sunlight per day. It is stated in Stier and Gardner (2008) that TifEagle can tolerate as little as eight hours of sunlight per day and still provide turf of acceptable quality. Bermudagrass grown with four hours of sunlight could only maintain acceptable turf quality at a height of cut of 4.7mm and treated with trinexapac-ethyl.
- The DLI was reduced substantially for March and early April 2021 and less than the minimum required for hybrid bermudagrass.

Again, the conclusions that can be drawn are that the weather conditions in March and early April would be deleterious to the health and growth of hybrid bermudagrass. As a result some turf thinning and a greater incidence of disease would be expected.

REFERENCES

- Daniels, John (2019).** "Numerous rainy and cloudy days have hindered turf quality...". *Northern Ohio Turfgrass News*. June. 61(4): p. 17-18.
- Stier, J. C. and Gardner, D. S. (2008).** *Shade stress and management pp. 452 - 453. In: Turfgrass Management and Physiology. Edited by M. Pessarakli. CRC Press.*

TABLE 1: WEATHER CONDITIONS - SYDNEY

Month	Rain days	Rainfall (mm)		Hours of sunlight	Days of heavy cloud cover
		Coast*	Inland**		
Jan 2021	14	98	140 - 180	13 days <4 hrs Several days with 0 sunlight	15
Feb 2021	17	121	82 - 120	9 days <4 hrs	14
Mar 2021	21	417	442 - 464	13 days <4 hrs 8 consecutive days with <1hr of sunlight	19

*BOM station 066214 **BOM site 66059

TABLE 2: WEATHER CONDITIONS – SEQ*

Month	Rain days	Rainfall (mm)*	Sunlight hours** (≤ 4hrs/day)	Sunlight hours (≤ 8hrs/day)	Days heavy cloud cover
Jan 2021	22	116	4 days	9 days 13	
Feb 2021	15	193	4 days	7 days	12
Mar 2021	25	547	13 days (nine consecutive days of low sunlight hours)	13 days	15
Apr 2021	8	195	5 (of 12 days)	7 days	8 (of 12 days)

*BOM station 040717 and **BOM station 040842

TABLE 3: DAYS LESS THAN MINIMUM DLI REQUIREMENTS

	Sydney - Bentgrass		SE Queensland – Hybrid couch	
	Days less than min. DLI	% of minimum DLI	Days less than min. DLI	% of minimum DLI
Jan 2021	12	39	2	6
Feb 2021	8	29	1	4
Mar 2021	14	45	8	26
Apr 2021	3 (14 days)	21	4 (14 days)	29



PETER McMAUGH AM

Seeing the bigger picture

Funding for turfgrass research in Australia has long been on the decline. While research can be a costly business, as Peter McMaugh AM writes the industry needs to look beyond the dollar signs and realise the price it is paying by not having a robust research culture.

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Real research can be a costly business, but without it how can an industry progress, improve and innovate?

Forty-odd years ago I asked eminent plant breeder Dr Reed Funk, of Rutgers University, a question about the need for better transitional qualities in ryegrasses used for oversowing. The reply to this question was quite illuminating in its great clarity of thought. "I breed grasses to live, not die. If you use them for oversowing and they persist too long, that is not my problem. I am employed to breed grasses for New Jersey and that is what I do. An annual rye is not a need in New Jersey."

At this time Reed was not thinking about retirement. His legendary status in the industry is reflected that in one year royalties from his varieties brought in US\$1.5million to Rutgers, \$500,000 of it from one firm alone, Lofts, which no longer exists.

Reed was not a big man nor was he in any way boastful. He was a quiet, gentle man with a self-deprecating sense of humour. When standing in a luncheon queue, one smartarse asked him what cocktail he was going to have with his lunch. His immediate reply was 'I'll have a Manhattan' (the name of his original top ryegrass release). Reed was in fact a Mormon and a teetotaler.

Reed stayed on at Rutgers for some years after he reached retirement age and told me that he would not retire until he got the successor of his choice to take his place. The man designated was Dr Bill Meyer. Bill had a top job in Oregon and he also loved the lifestyle there and it took Reed a lot of persuasion to get Bill to head cross country. Bill said to me about Reed, 'No matter how hard you work to try to catch up with him, the old devil has a way of keeping one step in front'. Indeed, the large number of varieties of whatever species of cool-season turf that he worked on was a tribute to his industry as well as his ingenuity.

So dominant did Reed become in producing germplasm lines for his grasses that many of the big players, such as Scott's, shut down their programmes and bought their germplasm lines from Rutgers. When the various seed companies from Oregon came to Reed to seek his germplasm lines to put into their production fields, he would send them down to his plots to select what they liked. They would then come back to Reed who would work out a commercial agreement with the university before they were allowed to take their choices home.

If you asked Reed how many truly distinct genetic lines of Kentucky bluegrass there were, he would say probably three or maybe six. Ryegrasses? Two. Fescues? Two. His genius was his ability to shake out great diversity from very narrow gene pools and not only were the numbers high but the consistency of flow was incredible.

In many ways such freakish output is only possible in the university systems, where the apprentices are the many students hooking their future careers to the coattails of the master. I've never had the privilege of that system being part of my working life. I had to eat and live and the pittance that graduate students live on are in many ways disgraceful. Not only is this benighted system still alive, but the universities are being more and more forced back to relying on it to survive.

As I have said earlier the seed production industry in the USA and in Europe is consistently being more and more consolidated to the point where big conglomerates now have considerable power over the smaller plant breeder. This is something about which any aspiring plant breeder needs to keep fully informed. While I have always believed superior varieties exert themselves in the long run, unfortunately it can be after their patents have run out that their best years happen.

"When I watched Sam Snead take on Jack Nicklaus at Pebble Beach in the late 1960s, it was, by today's standards, a cow paddock. The standards of today have largely been achieved by the USGA and The R&A putting their hands in their pockets for research."

- Peter McMaugh AM

Good varieties will always be good varieties even when their peak is past. When you look at the variety 'Tifway' (Tifton 419), you will see that it is used as a benchmark variety in the NTEP trials in the USA. That is great for the USA, but it's when a USA reviewer of papers claims it as the world standard for Bermudagrass that you realise how totally the Americans have lost the plot. That is exactly what Reed Funk never did. He kept his eye on the prize and it was firmly for him grounded in New Jersey.

When I was employed by the Australian Turf Research Institute (ATRI) I was employed to look after NSW – not Victoria, not Queensland, South or Western Australia. It was NSW alone and that is reflected in my early track record. In many ways that made life very much easier and it wasn't until I left ATRI in 1978 and turned my main interests to the production side of turf that I had to take into account other states and countries.

I had shaken up the industry in Australia by introducing a succession of the best minds in turf from the USA to stimulate the industry here. Unfortunately Reed Funk was not one of those. The only person I ever brought from Rutgers was Dr Henry Indyk who was their extension specialist. Henry was also

the founding chief executive of the American Sod Producers Association which in turn became Turf Producers International. TPI has studentships it sponsors in Henry's name, honour and memory.

VISION NEEDED

Why, you might be wondering, have I spent so much space talking about the achievements of Dr Reed Funk? It is because Reed saw the picture with the big horizons. He saw things that were achievable that other people did not see and when he left Rutgers he went on to turn the walnut industry on its head with his breeding programmes. You don't come across many men like Reed in your life. If you do, value them greatly. Today Dr Bill Meyer is carrying Reed's mantle and doing it extremely well.

As well as recently re-reading an article I wrote 30 years ago about the future of breeding grasses which referenced the work of Reed, I also re-read the Presidential Address

that I gave in the Great Hall of the University of Sydney in 1997 at the 8th International Turfgrass Research Conference (ITRC). This was 24 years after my first contact with the International Turfgrass Society (ITS) at the second ITRC in Blacksburg, Virginia in 1973. It is also now 24 years since I gave that address and it's interesting to note that I am still repeating a lot of the same messages now as I was saying then.

Why haven't things changed for the better? Why have they rather much stood still for 24 years? It comes down to two things mostly;

- The vision of a big picture is sadly lacking not just in the Australian turfgrass industry but worldwide; and
- Greed. By and large the sports turf industry is prepared to pay ridiculous prize money for 'events' and ridiculous salaries for players, but want to take the venues for granted and not invest a miserable cent on research to ensure that the players have the best of surfaces on which to safely explore and display their skills.

To say that this is a disgrace is to put it mildly. To call it a scandal would not be inappropriate. So is there any answer?

If you look at the size of the Racecourse Managers Association compared with



The Australian turf industry could be a world powerhouse of knowledge if it adequately invested in and made turf research a priority

other sports turf managers in Australia, it is miniscule. Yet its concerns about improving its knowledge base and solving some of its key problems has seen it invest more money in research than any other similar group in Australia. Does its industry higher up the chain do anything similar? No way. The grab from gambling doesn't extend its largesse to research on tracks. But oh the weeping and gnashing of teeth when a track failure stops the gambling grab in its tracks or a horse breaks down.

Does Cricket Australia even recognise that the wickets that are underperforming might need some money spent on research to solve the problem? The IPL pays players squillions to play on terrible substandard pitches as if the conditions of play don't matter.

This isn't new. When I watched Sam Snead in a match play with Jack Nicklaus at Pebble Beach back in the late 1960s, it was, by today's standards, a cow paddock. The standards of today have largely been achieved by the USGA and the Royal and Ancient putting their hands in their pockets for research.

Looking in overview at the history of turfgrass research in Australia, the eventual demise of every research institution has been all about money. When the backbone of financial stability is lacking, either from poor initial understanding of what a commitment to research dollars means, or whether it is reluctance to keep funding poorly performing

institutes, the dispute and disruption comes down to dollars.

Real research is a costly business. Whether it is geared to problem-solving or whether it is geared to longer term projects such as breeding new grasses, it gives no guarantees at the start-up of notable future successes.

When the mindset of the bean-counters is that research must be self-sustaining financially, then oil has been poured on slippery slopes. Once the staff has to spend more than 15 per cent of their time looking at finding funding, then the death knell bell has been rung. It might take a few years to grind to a halt, but that inevitably happens.

When overseas interests see vacuums in Australia they quickly move in to take advantage of the gaps left behind by research closures. "We have all the answers that you need..." Well, I am still waiting.

So it comes back eventually to each industry sector being left like a shag on a rock. The once all powerful bowls sector is a shadow of its former self and is concentrating on whether it can even survive as a meaningful sport in Australia. Golf screams that it has no money. Racing and cricket can't spell research let alone understand the need for it.

Looking seriously at research funding for turf in Australia the only industry sector that puts in is the turf production industry. However, the downside of that is that is only a token amount. It represents just 0.2 per cent of the

average sale price of a roll of turf. It would need a tenfold rise to reach two per cent which is generally regarded by economists as a minimum reinvestment in R&D by any company to ensure its long-term viability.

Despite these funds being too little, there is also a major problem with the way they are handled for the benefit of industry. Unless there is a glaring crisis, the funds are all too often misspent. It is very easy for anyone with open eyes to see a huge number of ways by which research funding could be easily and painlessly improved. The very biggest hurdle is finding anyone who has the will to try to make it happen.

The rather gutless 'It's all too hard' attitude doesn't cut the mustard. Whenever you try to bring the subject to the attention of the bodies involved the answer almost always is quiet (in fact, super quiet) and total indifference. This is not just from any one individual player, it is right across the board. I have tried to engage many times with several of these organisations and never receive the courtesy of a reply.

There is another side to the coin. For a real demand pressure for research to build up, you have to recognise that you have a problem. In my experience unless you have a fully blown crisis then you get nowhere. Recognising that there are real problems in the turf industry is not one of its strengths. Maybe we can still hope for someone charismatic to see the light and turn us around into a world powerhouse of knowledge. 🙏

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A vibrant, positive delivery environment within TAFE is critical to ensuring those undertaking education get the learning outcomes they need to succeed in their careers



Succession and support

After many years of cutbacks, in 2020 most state and territory governments announced much-needed increases in TAFE funding. As John Forrest writes, while that increased investment is welcome, it must be channelled into greater support for those at the coalface delivering the education.

Governments are pushing for a resurgence in Technical and Further Education (TAFE) and after years of funding cutbacks it was pleasing to see many state governments announce funding increases as part of their budgets last year. Reinvesting in TAFE is very important for the sports turf management industry and coming from an industry background (golf course greenkeeping apprenticeship), 24 years as a sports turf management lecturer and more recently as a Board member of a golf club which employs greenkeeping staff, including apprentices, I have a real interest in the outcome of that investment.

It is also positive that the latest Sports Turf Management Training Package release has seen an increase in nominal hours here in Western Australia, making it more comparable to the rest of Australia. It has been baffling

for many years why one state delivering a 'national' training package has had less hours for the same units of competency. For example, one of those units – AHCTRF Establish Turf – was previously 30 hours (it is now 55), whereas in Victoria it was 60.

Getting into a discussion with those who allocate the hours is very taxing and unrewarding. It is not the hours of delivery but the supervised hours for course accreditation. What the student is charged is based on the nominal hours as the registered training organisation (RTO) will be paid on those hours. It is interesting to look at the nominal hours and then look at hours of delivery, especially for a student or employer. If the full allocation of hours are not delivered and the student fails, a legitimate question would be 'Did the student receive enough training?' A more transparent look at how this equation is made is a reasonable request.

A STRESSED SYSTEM

Some years ago, I attended my first National Turf Education Working Group meeting at Richmond TAFE, NSW where I was pleasantly surprised with the number of trade people teaching turf management throughout Australia. They were a dedicated, passionate group of lecturers trying to put the students first.

Sadly, funding cuts – to the tune of \$6 billion across the whole TAFE system since 2013 – took their toll over the coming years. It was difficult to watch a group of loyal people slowly lose enthusiasm simply by being put in a situation where management was saving money through reducing staff levels, thus making it very difficult for turf management departments to meet industry expectations and needs. Staying focused on the standard of delivery was a credit to many who were starting to feel like their jobs were not safe.

From a Western Australian point of view, getting to the national meetings was getting difficult, with the local industry bodies (STA WA and GCSAWA) stepping in to cover the airfares. In later years accommodation was coming out of the lecturer's pocket. Making the case to travel was getting more and more difficult even though the TAFE had a requirement to work with industry and keep up to date with the development of the training packages. Minimum standards were developed by industry, but when audited the auditors were not interested in viewing them.

Competency based training (CBT) had been around for a while and all lecturers had to have their Certificate IV in Training and Assessment. CBT put the focus on assessment of practical skills, thus introducing a huge amount of paper work for lecturers to deal with and often with limited support. Terms such as pre- and post-assessment validation were introduced, as well as checklists and numerous forms for lecturers and students to sign. No additional hours were allocated to it – it all had to be done within the 37.5 hours per week. Lecturers had to show currency and be involved with industry and demonstrate this by producing more paperwork to confirm they had the qualifications to teach the new units of competency.

With these extra requirements and continual updating, experienced industry people were driven away from part-time lecturing, discouraging the investment of one's time imparting their accumulated knowledge from many years of working in the industry. The biggest losers were the students.

A good business model always involves succession planning, improving staff skills,



TAFE is an excellent environment for student learning and development, with sports turf management students often involved in assisting with trials

knowledge and currency. When planning is done on short-term financial outcomes, poor decisions are made.

Erica Smith's paper 'A review of twenty years of competency-based training in the Australian vocational education and training system' in the International Journal of Training and Development in 2010 gave an overview of where CBT training was after 20 years. In her paper she stated...

"Training packages are constantly evolving and assessment has been the focus of much national attention throughout the two decades of CBT. Assessment practices in the early days were often fragmented and based on observation of work performance (often known as 'tick and flick' assessment), but there has been an effort to encourage practitioners to assess more holistically and to ensure that underpinning knowledge is adequately addressed. However, it is generally agreed that there remains room for improvement."

While she makes a valid point, the truth of the matter is that today's TAFE lecturers struggle to keep up with their workload, so assessing more holistically is very difficult.

Attending training days on training packages, the emphasis is centred around assessment and validation which is fine if the students have been taught that important underpinning knowledge that makes an assessment valuable in the overall learning process.

It was suggested to us at a training day that TAFE students had to be 100 per cent competent, while at university they only had to be 50 per cent competent. The reality is if a mechanic who has been adjusting mowers for 20 years sets up a mower, it is likely that he or she is 100 per cent competent. If a student who has had two opportunities in his or her class to adjust a mower and has little opportunity in the workplace to complete the task, then what is the likelihood of them being 100 per cent competent? Does the standard of the outcome have to be reduced for the learner to be deemed competent? Most likely.

It may be better to give the student the underpinning knowledge on how to determine the mower is adjusted correctly rather than judging them at their skill level when only limited opportunity is given to practice. Focusing on practical assessment may do what was suggested by Smith (2010), the tick and flick assessment.

A submission (73) by the Australian Education Union (AEU) in May 2013 to the Federal Government's 'Inquiry into the role of Technical and Further Education system and its operation' outlined "Whilst there is an emerging consensus amongst policy makers in Australia of the critical significance of a high quality and well-resourced vocational education sector to the future prosperity of equitable Australian society, the TAFE system is under sustained attack".



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Funding had been directed away from TAFE giving opportunity for private RTOs, many of which are untested in their capabilities and capacity to deliver training packages. One of the major impacts that is not often considered is staff morale and any good business owner will tell you that to get good results you need an empowered workforce. People are key – treat them well, show respect and assist in their professional and personal development and well-being and maybe, something outrageous, listen to them!

The TAFE inquiry found that while there were high levels of public support, there was also a strong sense that TAFE was poised at a tipping point due to a number of reasons;

- No systems or support for lecturers to work with industry.
- Lecturers are facing greater complexity in their work, including counselling and welfare, liaising across TAFE and industry, developing relationships with partner organisations, marketing, recruiting and overseeing student tracking.
- Lecturers investing their own time and money in maintaining current industry knowledge and experience, often with little support from their institutions.
- More and more lecturers shouldering the responsibility for frontline employment and human resources tasks, including employing and mentoring casual staff.

Increased compliance is not properly funded with lecturers asked to do extra when they already have a full work load. Curriculum development requires money for support and not to be loaded onto an already stressed work force. Continual changes in training packages and changes in performance criteria requires alteration and updates.

As if to back everything up, in July 2020 the AEU conducted a 'State of the TAFEs'

survey which revealed its members had major issues concerning workload, resourcing and lack of staff support. The survey found:

- Seventy-six per cent of respondents said that they had considered leaving the sector in the last three years. Ninety-four per cent of those were currently working in the job that they had considered leaving.
- Less than a third expected to spend their entire career working in TAFE.
- Workload and excessive hours, management approach to, and lack of support for, staff and arduous compliance requirements were the most commonly cited reasons for wanting to leave.
- Ninety-six per cent said administration had increased as a proportion of total work time in the last three years and of these 84 per cent said it had increased 'significantly'.

INVESTING IN PEOPLE

As mentioned at the start of this article, a number of state governments have committed to increasing TAFE funding as part of their 2020 budgets. For example, NSW announced funding to the tune of \$2.9 billion and Victoria \$1 billion. When looking through the various capital expenditure investments to be made it makes for impressive reading, but equipment and technology are only part of the equation when it comes to improving the delivery of education through the TAFE system. The largest investment required is in the people at the coalface. To teach students the valuable knowledge they require, new buildings and technology are not the most important part – the lecturers and experienced industry people are.

Having been a part of the TAFE system for a number of years and talking with numerous counterparts, in addition to listening to the

The industry is fortunate to have a dedicated and passionate group of sports turf management lecturers that put the students' development first

needs of the industry, the following areas need to be focussed on;

- Managers need to meet the same strict qualification requirements that have been put in place for lecturers and have industry experience and qualifications in management.
- Develop further education pathways, hire required staff.
- Where resource fees are set for each unit, that is where the money should be spent. If the money is not used in resources then it should be returned.
- Reduce compliance paperwork for lecturers. Develop minimum requirements.
- Support lecturers allowing time to go into industry and develop connections.
- Support new lecturers, inductions and support on systems.
- Team teaching – allow new lecturers to get a feel for the job. It is unreasonable to expect a person to complete a Certificate IV in Training and Assessment without experiencing being in front of a class.
- Introduce mentoring systems.
- Improve communication with industry on training enquiries. Ensure that those likely to answer the phone or emails are fully versed on what training is available.
- Recognised prior learning avenues available if needed.
- Enough technicians to order resources.
- Use lecturers who have the required skills and knowledge to teach the units.
- Improve the morale within TAFE.

TAFE needs to empower employees, not overwork and stress them out. Managers need empathy while having forward-thinking skills to enable staff to improve the learning outcomes. In Western Australia there was a push for centres of excellence, but what has been achieved in sports turf management is an actual reduction in training options. There is currently no Diploma in WA, therefore once a student has completed Certificate III they have to go interstate or change fields.

RTOs should be able to recognise and understand the industries that are their clients. It will not fall in their lap. It takes forward thinking management run by those with the skills and know how to supply technical and further education to the vocational sector.

While it is important to have vocational education and training (VET) quality framework to ensure standards for RTOs, VET regulators such as ASQA and TAC in Western Australia need to work with RTOs and industry in developing standards that allow for a vibrant, positive delivery environment with minimum requirements to meet those standards. 🌱

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The leadership team at Moore Park Golf Course in Sydney (from left) Brendan Williams, Mal Durkin and Cameron Butt



Making work a safe space

Want a happy and productive team? Looking for confident staff with new ideas that show initiative? As Ben Gibson writes, building a culture of psychological safety at your workplace will work wonders.

Brad came into work on Monday to the usual barrage of criticism. He had been dreading it all weekend. Nothing that he or the other staff came up with was ever good enough – the idea had to come from the boss or otherwise it wasn't happening. "It is too risky to try something new here – why stick my neck out?" thought Brad. "But if we keep just doing the same thing over and over again, how are we ever going to improve?"

Does this sound familiar? The notion of psychological safety was first introduced in the early 1960s and 1970s but gained international prominence with the work of US organisational behavioural scientist Amy Edmondson. She defined psychological safety as "A shared belief held by members of a team that the team is safe for interpersonal risk-taking. Psychological safety is a belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes. It describes a team climate characterised by interpersonal trust and mutual respect in which people are comfortable being themselves."

A psychologically safe environment provides a platform for innovation, confidence, trust and connection. A psychologically safe environment is also a physically safe one due to the strong communication, respect and feeling of belonging and ownership among the team.

Google spent over two years studying more than 180 teams across its operations on a mission to find out what makes a great team. They found all the highest-performing teams had one thing in common – they felt psychologically safe. When staff feel mentally and emotionally safe to be themselves in the workplace, they take more risks (considered, of course), pursue opportunities and make quicker decisions. From the study, Google developed their five key dynamics that make teams successful – psychological safety, dependability, structure and clarity, meaning and impact.

COMMON CHARACTERISTICS

Psychologically safe workplaces and teams have a number of common characteristics:

How your team 'shows up' at work: In psychologically safe teams, people feel comfortable to be themselves and try new tasks. Individuals do not feel they have to pretend to be perfect and know everything. Instead, they can show up at work without feeling that they have to hide their challenges or struggles. They are comfortable reaching out to their team for help.

Near-misses, incidents, mistakes, everyday problems and fails: These are reported and recorded honestly and openly. They are reviewed thoroughly for opportunity for improvement, additional training if required and implementation of controls to prevent recurrence. No one is afraid to raise an issue or of the potential repercussions of mistakes.

Over the last decade I have had the privilege of spending time with the leadership team at Moore Park Golf Course in Sydney, made up of course superintendent Mal Durkin, assistant superintendent Cameron Butt and senior greenkeeper Brendan Williams. They have shown the development of a culture that supports, develops and empowers all within

the team. The Moore Park leadership team has a clear investment in the physical and psychological well-being of everyone that sets foot in their facility and on the course.

"To help stability within our team, I try and give feedback to all staff on their performance and offer praise when deserved and encouragement when they make mistakes," says Butt. "I regularly make them aware that they are a valued member of our team."

Adds Williams: "Honesty is the number-one thing when dealing with staff and reassuring them that nothing is off limits regarding expressing an opinion on a work-related matter or even a personal issue. The old saying 'the office door is always open' is something our superintendent Mal Durkin always follows and is the reason he is so highly respected among the staff. Not just at the golf course but across NSW Centennial Parklands."

What your staff say about each other: In psychologically safe teams, staff express mutual respect, trust and interest in each other as people. There is no finger-pointing, short-sighted blaming, judgment or stereotyping. Debate and argument are separated from personalities and individuals, but rather had for the purpose of improving the team.

What your staff say about the team/culture:

Do the team speak proudly of working at your club? In psychologically safe teams, people speak openly and passionately about the culture in the group. They promote the team and others within it and will defend its reputation and standing.

"Leadership is a journey and something that isn't easy – it needs to be worked on," notes Simon Harrison, manager of open space maintenance for Blacktown City Council, NSW. "The success of a leader is determined by ensuring your team members feel safe in a positive space and have balance in their work/personal lives."

"Work is just a part of their lives and a leader needs to provide direction, support and a positive and inclusive environment that team members feel welcomed, have a sense of belonging and a place where they can freely discuss matters and implement new ideas."

"Good leaders encourage individuals to challenge themselves and learn from their mistakes. They also recognise they do not know everything and believe that each individual has something to contribute. With a combination of all of these factors, great things can be achieved."

PSYCHOLOGICAL DANGER

A work environment with psychological danger is one filled with blame, uncertainty and a strong fear of making mistakes (see Figure 1). Often communication and clarity is poor

and responsibilities are not well defined. Staff are reluctant to voice their opinion for fear of reprisal and criticism and leadership can be direct and authoritative.

'Yes men' flourish in a psychologically unsafe work environment and staff are expected to simply tow the line. Leaders are often threatened by proposed new methods and take these suggestions as personal criticism or a judgement of their capability.

A work environment with psychological danger can have a significant impact on not only our productivity and willingness to contribute, but also our mental and physical health. Work-related anxiety and stress can increase, often leading to detachment, withdrawal, reduced communication and a negative impact on our personal relationships, diet, sleep and exercise patterns.

DEVELOPING A SAFE SPACE

The following are some simple steps you can take to develop psychological safety in your team:

- **Break the 'Golden Rule':** We have often been told, 'Treat people the way you would like to be treated'. When it comes to psychological safety, the opposite is true. Treat people as they would like to be treated.



Figure 1. The key differences between psychologically safe and unsafe workplaces

- **Welcome curiosity:** Be open to new ideas and suggestions and publicly acknowledge and thank those who contribute. Show that people are not punished for failure or for suggesting ideas (even if they are unsuccessful). Every suggestion from your team is a step toward innovation and improvement.
- **Promote respectful discussion and healthy conflict:** Within a trusted and supportive environment, healthy conflict can be productive and often lead to an improved result. Different opinions, ideas and experience can be a valuable asset to a turf maintenance team.
- **Give staff a voice:** Always provide opportunity for the team to contribute and provide their thoughts. Effective consultation is one of the most powerful (and cheapest) leadership skills in developing a high-performing, psychologically safe team and culture. Effective consultation leads to solid staff ownership and accountability for results.
- **Earn and extend trust:** Consistency, leadership, discipline and effective communication build trust among your team. Extend that trust to your team and give them the confidence to try new tasks, succeed and occasionally fail.
- **Always offer the benefit of the doubt:** When you trust someone, you are offering the benefit of the doubt to them. When you are in a psychologically safe environment, you are receiving the benefit of the doubt from the entire team.
- **Promote effectiveness, not just efficiency:** Promote a culture of doing things properly, not just quickly. Satisfaction, impact and ownership stem from being given the opportunity to work to the best of your ability. Let your team be the best they can be and complete tasks to a high standard. This will provide them with the opportunity to flourish. This has a significant impact on safety and quality in your work environment.

So let's be the leader who creates a happy, healthy, supportive and psychologically safe place to work! We have the opportunity to reduce stress, frustration and anxiety across our team. This is the type of leadership your team will talk about for years to come.

"Leadership can make or break a team," sums up Travis Scott, course superintendent of Melbourne-based Riversdale Golf Club. "I believe leadership is built on trust, firstly showing the team that you are willing to support, assist and listen and then by further developing relationships with individuals to ensure that there is trust in one another to achieve the common goal which will ultimately bring that success to the team." ﷻ



PHOTO: RNL/ADOBESTOCK.COM

Making the journey

Superintendents who proactively manage their EHS responsibilities are the ones winning the sustainability race writes compliance expert Terry Muir.

We all know the environment, health and safety challenges facing golf course superintendents and sports turf managers are growing year by year. The new General Environment Duty in Victoria and the push for national industrial manslaughter laws are recent examples of that.

It is now well accepted that superintendents and sports turf managers are required to satisfy the legislation, prevent environment, health and safety incidents and detect and deal with risks so that harm to their people and the planet does not eventuate. Many have risen to the challenge of an ever-changing compliance environment and have made significant changes to the way their facilities operate.

Superintendents across the country firmly believe the environment should not be harmed and that no one should be hurt, become sick or die at work. These innovators are changing the way they do things for the better. Rather than just crossing their fingers and hoping for the best, they have invested in risk averse EHS sustainability as their focus.

They have considered their people, their current workplace structures and processes

and leveraged a digital solution to help make these processes more efficient and deliver operational EHS success. There are many standouts in golf's sustainability pack applying equal weighting for economic, ecological and social stability. They have much more than a collection of EHS paperwork and policies kept in a binder. Each has their own playbook for how, when, where and why their people work.

Having a set of essential rules and guidelines for environmental protection, staying safe and protecting everyone, including the business, is a lot easier said than done of course. It takes money and time to develop a successful EHS programme, implement it, train your employees on it and ensure people are buying into it. But it could cost a lot more not to. It is an investment every superintendent must make.

In addition to sustainability participation activities, they are engaging in continuous monitoring activities. As risks are identified, they are logged and risk controls are entered and communicated. Many superintendents are also digitally setting and communicating EHS tasks to their course maintenance team. At any time, the superintendent knows the number of tasks set, those that have been completed and those still in progress or overdue.

Many sports turf managers have risen to the challenge of an ever-changing compliance environment and embarked on a journey to improve their EHS credentials

Importantly, these superintendents track the EHS documents that their team is required to understand, acknowledge and follow.

The exchange of hazards information with staff provides evidence of best practice EHS information exchange. A number of course maintenance teams have amassed over 2000 best practice communications. Each is automatically logged and instantly reportable. In total, this superintendent group is responsible for over 780,000 EHS tips being communicated across the sector.

This approach to sustainability participation is an important component of EHS and helps protect staff and the environment and reduce losses. Such an approach is more preventive and cost effective rather than reactive. With more awareness and understanding of hazards, risk and incidents, the approach of these superintendents is not just about reducing incidents. It is also about improving productivity, enhancing EHS performance and business reputation.

These superintendents are realists. They have all set ambitious moonshot EHS goals. Perfection is not the goal of their EHS programme, but striving for excellence is. They set out on their sustainability journeys trying to do less bad and as the turf world has pivoted towards expecting more from them, they have used digital technology to help them further transform and innovate their operations.

Digitisation of sustainability information has transformed the EHS processes at many clubs with one superintendent commenting, "EHS management is not expensive, it's priceless." Reassuringly, many superintendents and sports turf managers share this view and understand sustainability is a necessary megatrend that simply isn't going away.

Their 'innovate to win' strategy has disrupted the status quo. Remember, in 10 years' time there are only going to be sustainable businesses. The African proverb, "If you want to go quickly, go alone. If you want to go far, go together" is very applicable. The industry has to go far – and quickly. And that means together we have to find a way to raise the sector's consciousness about sustainability. The group of superintendents I mention above is doing their bit. The question is, are you? 🌱

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REGIONAL PROFILE

An aerial view of Atherton Golf Club which is located in the Tablelands region inland from Cairns

Atherton GC, QLD

At the 2020 Queensland Golf Industry Awards, Atherton Golf Club won the Club of the Year Award (less than 400 members). Playing a major role in helping to raise the bar at the Far North Queensland club for the past three years has been course superintendent Brendan Clark.

Superintendent: Brendan Clark (43).

Nickname: Several – Moose, BJ, GK.

Family: Wife Kylie, four children – Ryan (22) Kobe (17), Jackson (14) and Hannah (12).

Social media: On LinkedIn, Facebook.

Years as a superintendent: 15.

Association involvement: ASTMA, GCSAQ.

Career: Narromine Bowling Club (apprentice, five years), The Lakes Golf Club (senior greenkeeper, five years), Port Macquarie Golf Club (18 months), Cairns Golf Club (superintendent, four years), epar (area manager, four years) and Atherton Golf Club (superintendent, three years to present day).

Qualifications: Certificate III in Land and

Conservation Management, Diploma

Turf Management, Certificate IV in Turf

Management, Certificate IV WHS, Certificate IV Training and Assessment.

Major hobbies/past-times: Brisbane Broncos' No.1 fan! I am not happy when things go pear-shaped. Love a hit of golf and a few beers with mates. Known in Atherton as the 'super coach' – have coached three junior rugby league premierships in a row!

Where in Australia is Atherton GC and what is the club/township famous/known for? Atherton is about 80km southwest of Cairns in the Tablelands region. Due to its

moderate climate (cooler and less humid than the tropical coast) and its booming agricultural industries, Atherton has a busy and prosperous community and a vibrant social and cultural life. Atherton is very attractive to retirees and 'tree changers' due to the cooler climate, fertile garden soils, housing prices significantly lower than Cairns and a vibrant cultural life.

Tell us a bit about your background in the turf industry. I started at Narromine Bowling Club in the central west of NSW under the great Stephen Buttsworth who, as I write this, is still on the tools there after 47 years. Just



remarkable! He was an outstanding mentor when it came to agronomy and why plants use different minerals. Still to this day, I use some of his techniques.

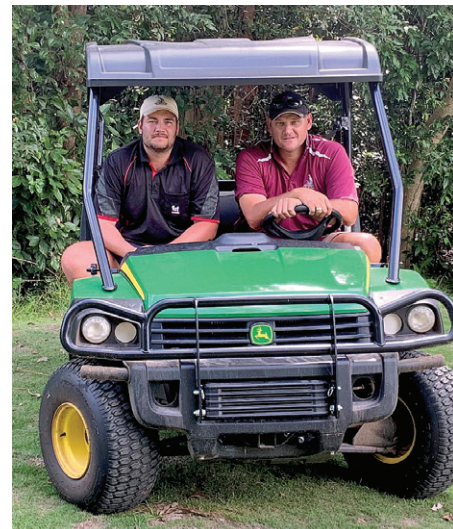
Being a golf nut when I was young, I always aspired to get back to golf and to one day become a golf course superintendent. After finishing my apprenticeship at Narrawmine, a greenkeeper role became available at The Lakes Golf Club in Sydney. I still remember the interview with Peter Brown – it was on a Saturday morning at his place on the northern beaches of Sydney. Working at The Lakes was the best five years of my greenkeeping life. I had the pleasure of setting up the course for two Greg Norman Internationals and an ANZ Championship. To this day I still have some great industry mates who were at The Lakes during my time there, among them Dean Hardman and Marty Formosa whom I still keep in close contact.

Who were some of your early mentors and what did they teach you? The best advice I received and still use today was from Steve Buttsworth who introduced me to the 'KISS' theory. As well, Peter Brown at The Lakes, was a person who could manage people and I greatly enjoyed working under him.

Your first superintendent posting came at Cairns Golf Club. How did you go taking that step up into that role and adapting to the subtropical climate? My real challenge was to put in place a structure to manage the three 'M's (manpower, machinery, materials) within the constraints of a fourth 'M' (money). Operational management included health and safety, environmental management, power, water and irrigation to present a golf course that provides customer satisfaction. That's a lot of balls to hold in the air, but I found I had the management skills to put in place the structures, systems and controls that allowed me to make full use of my agronomic knowledge.

Between Cairns and prior to your current role at Atherton you spent a period 'off the tools' working with epar. Why the change and how did you find such a role? Working for epar was great. I really enjoyed meeting a lot of industry people, getting to know a lot of general managers and superintendents that I might not have met. The role was flexible and rewarding and Terry Muir virtually let you run your own ship in Queensland.

How did the Atherton job come up and why the decision to go back on the tools? I was talking to Dave Morrison (Board member) at Atherton Golf Club who indicated that the role as course superintendent was available and I was very keen to relocate back to FNQ as my



Atherton Golf Club superintendent Brendan Clark (right) and apprentice Paul Nasser

wife's parents have moved to Port Douglas. My passion for presenting a golf course was starting to eat away at me I guess. When we moved here, my wife Kylie also took on the role as the club's general manager. It was a real easy dynamic to be honest. She knew nothing about grass so I could tell her anything and she would believe me! Kylie is a really good business manager and the working relationship was quite smooth. She had full control of the clubhouse and I had full control of the course which was a set-up that worked really well. I think we set a tone for the club that is still working today even though she left two years ago. We had regular meetings with our president at the time (Mark Johnson) so any problems arising were dealt with quickly and with the right process.

Give us an overview of Atherton GC. Is it an easy/hard facility to manage? The course is a great facility to manage. We have a great volunteer group that I'm more than



Water management is one of Clark's biggest challenges at Atherton



Clark has incorporated a monthly application of wetting agent on greens and runs a preventative fungicide programme which have improved turf quality. The Atherton greens are mostly Novatek couch with two greens 328



happy to say are the best in Australia. All have their own individual jobs such as mowing tees, mowing fairways etc which takes huge pressure off myself. We have a relatively new irrigation system (only 10 years old) so this helps us to keep our course in good condition. When I started, our repairs and maintenance budget was through the roof, so I sat down with Dave Morrison and the board of directors and proposed that we go down the leasing machinery path. We did it and in our first year saved the club \$30K.

Obviously working in FNQ and its tropical climate requires a very different skill set and approach. Talk through some of the unique challenges you face, from a turf management perspective. Unlike the guys on the coast, here in Atherton we have a

quite cold winter and our grass does have a dormant period which, as a superintendent, gives us a few months to catch our breath. This is when we look at completing projects before the drier months (September to December) really ramp up. Water management is the biggest challenge for me here in the tropics. At Atherton GC we have incorporated a monthly application of wetting agent and have found this to be very beneficial to our green's maintenance. We now run a preventative fungicide programme as well which has improved our turf quality.

You have now been at Atherton for just over three years. What changes have you made during that time and what are you hoping to implement in the future? We have developed a strategic plan which gives us a clear direction



and identifies a few big-ticket items the club needs to address. A new shed/workshop is in the pipeline at present. We have also just employed a new apprentice which is the first in the club's 95-year history. Over the next 10 years we plan to convert all greens to TifEagle, starting with a couple of greens in October. We also have a very active Juniors programme which helps keep our focus forward-looking.

Did COVID-19 impact your operations at Atherton GC? To begin with it was the 'unknown' that had everyone in our club a little worried, but like most golf facilities, in hindsight, ours was not greatly affected with good numbers still playing. For staff, however, our wages were cut to the Jobkeeper payment, but as a superintendent you generally you go above and beyond to make sure your course still presents well to the members and visitors. The board at Atherton were very approachable and flexible during this time.

You won the 2019 GCSAQ Environment and Safety Award. What environmental considerations do you incorporate into the management of the course? Every environment and safety action at Atherton Golf Club considers the 'people and planet' side of things – we invest in environment and safety so workers and the environment are not harmed. From this we receive instant return on investment – increased productivity, improved reputation, money savings from fewer injuries and improved water, energy and waste management. Our policies in place here at Atherton Golf Club support environmental and safety best practice. We have energy, water and waste management initiatives, with environmental and safety committees and working groups within the club.

Much of the work involved in creating an environment and safety culture in our club is linked to everyday behaviours. As the superintendent, I set the tone and have the power and responsibility to establish behaviours, set expectations and promote EHS accountability.

What are some of the major challenges facing Atherton GC from a turf management and general club management perspective? We had a serious issue with an aging membership which we have been able to turn around by presenting a first-rate course and a welcoming environment. Attention to this is ongoing as this job is never done. Presently our course has only limited intersection with the urban environment, but adjacent

development could see major housing development along some boundaries. This will inevitably present difficulties in course management as mowing and other noise-generating operations will need to start later in the day. Along with most clubs, our members and visitors are increasingly using motorised carts on the course. This increases wear on specific parts of the course which means increased costs for path maintenance and other areas where carts converge.

Outline any major course improvement works recently completed or in the pipeline.

We have a plan for a major renovation on our 13th hole. It involves crossing water for your second shot to the par four green and is currently index 3 on our card. This \$50k project would see us lift the front of the green after rebuilding the rock retaining wall and expanding the green. This has the potential to become the signature hole on the course.

Water is obviously a critical issue for any golf course. How is Atherton GC faring in the water management stakes? We are in a good position with the club able to access treated water on request from the council. This water is fed into a 15ML storage dam on the course from which we can pump to our greens or fairways. We have a further two containment dams to prevent contaminated water from leaving our leases.

The weather and climate are always a great leveller for a course superintendent. How has Mother Nature treated the course in recent times? Two thirds of our course is



Toro 835 sprinklers are being installed around all Atherton's greens

located on unconsolidated clay which in turn was derived from runoff from nearby ranges. Drainage is a difficult issue to manage as springs during the wet season can erupt from unpredictable places on the course.

The one product I couldn't manage my course without is... Wetting agents. They are a must in the tropics. Also, I have had some great talks with Tim Hoskinson from Cairns Golf Club about how good Heritage fungicide is as a preventative.

What are some pros and cons of being a regional superintendent? Some of the cons are not being able to attend information and trade seminars, but for me it is the flexibility with my role in a regional town being able to drive two minutes to pick the kids up after school. Going down the street you always bump into someone from the club to stop

and have a chat to. The trade reps in FNQ are fantastic, always on the phone and generally come around every 4-6 weeks which is great for new products and information.

Are expectations of course presentation and conditioning any less than that placed on your metropolitan counterparts? Not at all. We have lifted the standard at Atherton Golf Club and myself and the members expect the course kept in that condition now. I like to think we have lifted the regional profile of our course and people from all over FNQ are coming to experience it.

Do you use volunteers to assist with the management of the course and how important are they in your operations? If we didn't have volunteers we wouldn't have a course. They are so passionate about their course and love seeing it move forward which

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Looking back up the 2nd fairway at Atherton

has happened in the last three years that's for sure. Each has their own specific role and they take the utmost care of their machine as well. I have one guy, Ross Milevsky, who mows our fairways twice a week and has done so for three years – he never misses a day which is remarkable.

If you could change one thing about your job as a regional superintendent what would it be and why? I love my role at Atherton Golf Club but the one thing I wanted to change was getting the club to employ an apprentice. This has happened this year – the first in the club's 95-year history – and since Paul's arrival it has been a breath of fresh air for myself and the club.

How important are the relationships you have with other course supers/trade reps as well as the local community? All the guys up here have a fantastic relationship. We are all on WhatsApp and talk almost daily about course management. We also catch up 3-4 times a year which I think is a must in all areas.

What have you got in your shed? Mostly Toro – two 3400 greens mowers, 5610 fairway unit, 4300 rough mower, ProCore 648, 1750 Multi Pro, MDX Workman, John Deere Gator, John Deere 997 zero turn, two Kubota tractors, Turfco topdresser and a Tru-Turf roller. The Multi Pro 1750 is a great machine for the ability to apply product quickly and efficiently. Our next major investment and priority in the coming 12 months will be a new shed/workshop.

Do you think regional/country superintendents have a better work-life balance? Maybe. Certainly accessing spare parts and picking up kids are only minutes away. However, we have high expectations and attention to detail is imperative. If we had another 200 members we would not be able to get away with the small workforce and volunteers to maintain the condition of our course.

What do you think is the most challenging aspect of a superintendent's role today? How you communicate to a board or committee. If, as a superintendent, you can get these right, things run a lot smoother. Communication to my members and board



"We have lifted the standard at Atherton Golf Club and myself and the members expect the course kept in that condition now." – Brendan Clark, superintendent

of directors is something that I have really worked in in recent times. I have a Facebook page – Atherton Turf Management – which has become a tool for me to educate what we are trying to achieve on the course.

Best advice you have received about turf management and who gave it to you? Don't expect your staff to do a job you wouldn't. I once had a beer with John Odell at the Cairns conference and he said to me being a golf course superintendent is an emotional game of snakes and ladders... how true is that is!

What gives you the most job satisfaction? Working at a club that backs your decisions and helps you achieve these goals.

Most pleasing/rewarding moment during your time at Atherton to date? Two things – winning the 2020 Club of the Year Award (under 400 members) at the Queensland Golf Industry Awards and the GCSAQ's Environment and Safety Excellence Award. Both great achievements for the club. 🏆

AT A GLANCE – ATHERTON GC, QLD

Course specs: Par 70, 5567m (men's) and par 72, 5103m (ladies). 31 hectares of maintained turf consisting of mostly blue couch, narrow leaf carpet grass and some Bahia grass. Greens are mostly Novatek couch variety with two greens 328.

Members/rounds: 200/15,000 with 27 per cent social non-members.

Major tournaments/events: Atherton Open, home of the King/Queen of the North Matchplay final. Hosted the FNQ Championship in 2019.

Annual course budget: \$170,000.

Staff: Brendan Clark (superintendent) and Paul Nasser (apprentice).

Climate/rainfall: Subtropical (750m elevation), occasional light frost. 1400mm with 1200mm received between November and April.

Terrain/soil types: Gently undulating. Not a long course but with some challenges across water, sharp doglegs and narrow corridors to contemplate. Soil types red basaltic and acid volcanic clay.

Water sources: Potable water spaced around course for drinking and occasionally watering gardens. The club receives 60ML of tertiary treated council water annually for greens and fairway irrigation.

Irrigation system: Toro GDC 200 decoder system greens, tees and single row irrigation to all fairways.

Cutting heights/regimes: Greens 4mm all year round (4-5 times a week), tees and collars 10mm (twice weekly), fairways 12mm (twice weekly) and roughs 50mm.

Renovations: Major renovations happen in late September which consists of a heavy

scarification in two different directions followed by a blow off, then a hollow core with 8mm tines and another blow off. After that we give the greens a clean-up cut before adding sand and amendments which usually consist of a greens grade dolomite and TX10. This combination has worked well for us in the last three years.

Major disease pressures: Usually dollar spot in the autumn/winter and pythium/curvularia in the hot humid months.

Nutrition: We run a very basic four-week plan at Atherton GC;

- Week 1: Wetting agent/root spray;
- Week 2: Foliar application;
- Week 3: Preventative fungicide;
- Week 4: Foliar application.

We also add 400kg of dolomite/gypsum depending on soil tests 2-3 times a year.

ASTMA CERTIFICATION PROGRAM

Formally recognising the professionalism of sports turf managers and encouraging their investment in continual education and professional development

The ASTMA congratulates the following sports turf managers who have achieved certification and can proudly use the **‘Certified Sports Turf Manager’ (CSTM)** designation after their names...

Tim Allen The National Golf, Belgium	Peter Fraser Hervey Bay G&CC, Qld	Braydan Millar Rows Bay GC, Qld
Dean Bailey Rosanna GC, Vic	Adam Fry Kooyonga GC, SA	Ben Mills Hawks Nest GC, NSW
Shane Baker Mosman Park GC, WA	Ryan Fury Killara GC, NSW	Craig Molloy Cypress Lakes Resort, NSW
Brett Balloch Anglesea GC, Vic	Jake Gibbs Royal Canberra GC, ACT	Colin Morrison Flinders GC, Vic
Ed Barraclough Cardinia Beacons Hills GC, Vic	Danny Hack Wellington Shire, Vic	Damien Murrell Easts Leisure & GC, NSW
Mark Bateman Koorringal GC, Vic	Cameron Hall Kew GC, Vic	John Nelson Grafton District GC, NSW
Tim Bayard Evergreen Turf, Vic	Gareth Hammond Terrey Hills GC, NSW	Kelvin Nicholson Palmer Cooloom Resort, Qld
Duncan Begley Horizons Golf Resort, NSW	Brendan Hansard Kew CC, NSW	Matthew Oliver QSAC, Qld
Nathan Bennett The Royal Adelaide GC, SA	Mitch Hayes Brisbane GC, Qld	Shaun Page Southern GC, Vic
Paul Bevan GTS, Qld	Luke Helm Meadowbrook GC, Qld	Luke Partridge Manly GC, NSW
Shane Bisseker Whitsunday Council, Qld	Tony Hemming Optus Stadium, WA	Mick Pascoe Sports Turf Solutions, Vietnam
Andrew Boyle GTS, Vic	Kirsty Herring Katherine CC, NT	Ben Payne Peninsula-Kingswood CGC, Vic
Justin Bradbury Camden GC, NSW	Tim Hoskinson Cairns GC, Qld	Michael Pearce RACV Torquay GC, Vic
Nathan Bradbury Eastlake GC, NSW	Ian Howell , Bonnie Doon GC, NSW	Keegan Powell The Sands Torquay, Vic
Harry Brennan Dubbo City Council, NSW	Jay Infanti Eastern GC, Vic	Shaun Pritchard PEGS, Vic
Mark Brooks Riversdale GC, Vic	Nick Jeffrey Racing Queensland, Qld	Justin Rankin Kooindah Waters GC, NSW
Fraser Brown Lake Karrinyup CC, WA	Steven Johnson Al Mouj Golf, Oman	Marc Raymond Patterson River GC, Vic
Ben Bruzgulis Cronulla GC, NSW	Jason Kelly Royal Fremantle GC, WA	Scott Reid Launceston GC, Tas
Chris Burgess Yarrowonga Mulwala GC, Vic	Nick Kinley Hartfield CC, WA	Brett Saggus BRG Legend Hill, Vietnam
Greg Burgess Northern GC, Vic	Dylan Knight Axedale GC, Vic	Wesley Saunders Dunblane New GC, UK
Jacob Burrridge Victoria GC, Vic	Blaine Knox Beenleigh RSL & GC, Qld	Robert Savedra Wesley College, Vic
Jason Bushell Rows Bay GC, Qld	Lance Knox Busselton GC, WA	Travis Scott Riversdale GC, Vic
Aaron Cachia Bayer, NSW	Steve Lalor Natadola Bay GC, Fiji	Bill Shuck Evergreen Turf, Vic
Patrick Casey Kalgoorlie GC, WA	Kane Latham Elanora CC, NSW	Cameron Smith Bonnie Doon GC, NSW
David Cassidy The Cut, WA	Nick Launer Metropolitan GC, Vic	Gary Smith Commercial Albury GC, NSW
Brian Cattell Wagga Wagga CC, NSW	Ben Lavender Newington College, NSW	Thomas Smith Waterford Valley GC, Vic
Peter Cawsey Eastwood GC, Vic	Jason Lavender Riverlakes GC, Qld	Mathew Soles The Australian GC, NSW
Paul Chalmers St Aloysius College, NSW	Dean Lenertz St Michael's GC, NSW	Clinton Southorn Abu Dhabi GC, UAE
Brenton Clarke Kooyonga GC, SA	Dean Lewis Thurgoona CC, NSW	John Spraggs Royal Wellington GC, NZ
Dan Cook Elanora CC, NSW	Josh Leyland Box Hill GC, Vic	Daniel Stack Windaroo Lakes GC, Qld
Lincoln Coombes RACV Royal Pines, Qld	Nathan Lindsay Hamilton Island GC, Qld	Lee Strutt Les Bordes International, France
Phillip Cooper GTS, NSW	Peter Lonergan Coolangatta-Tweed Heads GC, NSW	Lee Sutherland St Michael's GC, NSW
Dion Cope Redland Bay GC, Qld	Ben Lucas Tocumwal GC, NSW	Shay Tasker Carnarvon GC, NSW
Joshua Cunningham All Outside, NSW	Toby Lumsden ICC Academy, UAE	Aaron Taylor The Lakes GC, NSW
Bruce Davies CIT, ACT	Bruce Macphee ASTMA, Vic	Nigel Taylor Sports Turf Solutions, Malaysia
Kevin Davis St Margaret's-Berwick GS, Vic	Dave Mason Metropolitan GC, Vic	Shaun Taylor Southern GC, Vic
Nicholas Douglas Spring Valley GC, Vic	Garry McClymont Twin Waters GC, Qld	David Thomson Bermagui CC, NSW
Cameron Dunn Woollooware GC, NSW	Tony McFadyean Nedlands GC, WA	Ben Tilley Headland GC, Qld
Peter Dunn Federal GC, ACT	Paul McLean Sanctuary Cove G&CC, Qld	Steve Tuckett ASTMA, Vic
Ben Evans Ryde TAFE, NSW	Michael McMahon GTS, Qld	Lee Veal Mt Derrimut G&CC, Vic
Tim Fankhauser ASTMA, Vic	Peter McNamara Brisbane GC, Qld	Earl Warmington Newcastle GC, NSW
Peter Fitzgerald Toronto CC, NSW	Ryan McNamara Rosanna GC, Vic	Rob Weiks Hoiana Shores GC, Vietnam
Aaron Fluke NSWGC, NSW	Keith McPhee Maitland City Council, NSW	Shannon White Baileys Fertilisers, WA
Jason Foster Riverway Stadium, Qld	Brett Merrell Ras Al Hamra GC, Oman	George Widdowson Geelong GC, Vic
Jason Foulis StrathAyr Group, Vic	Jack Micans Manly GC, NSW	Darren Wilson Wembley GC, WA
Patrick Fraser Landscape Solutions, NSW		Tim Wright K&B Adams, Vic

"Earning and retaining the CSTM designation proves to my employer and the rest of the industry a high level of commitment to our profession. I am honoured to share this designation with my fellow colleagues."

– Luke Partridge, CSTM (Manly Golf Club, NSW)

For more information on the ASTMA Certification Program visit www.agcsa.com.au

TORO ADDS SPARK TO ITS ELECTRIC WALK-BEHIND GREENSMaster FLEET



A STMA Platinum Partner Toro Australia has recently added two new Greensmaster walk-behind mowers to its lithium-ion electric range – the Greensmaster e1021 and Greensmaster eFLEX 1021.

Designed for minimal maintenance and a long service life, the all-electric fixed-head Greensmaster e1021 helps courses get the after-cut appearance they want while saving labour and operational costs. Brian Goodridge, Toro's equipment product marketing manager, says the mower will take electrical efficiency to a new level.

"Operators are able to mow 3000m² of turf on a single charge," says Goodridge. "As the e1021 is so quiet, it is just right for mowing near homes, resorts and anywhere where noise restrictions or regulations are in place. All electric Greensmaster mowers are also ideal for mowing in environmentally sensitive areas or locations with fuel storage limitations. With no engine exhaust emissions it will help golf courses meet environmental and sustainability goals."

The Greensmaster e1021 comes equipped with Toro's proven DPA cutting units and a 21-inch (53.34 cm) cutting width. A convenient LCD screen gives the operator an instant view of the ongoing battery charge status and can also indicate diagnostics, machine hours, overall battery health and initiate backlapping.

Like all Greensmaster walk mowers, the e1021 is built for operator comfort and ease of use. The telescopic handle adjusts easily to any operator, while the rubber isolated handle assembly reduces motion from walking. Controls are easy to access and use and the machine is compact and well balanced for excellent tracking and manoeuvrability.

Another new release is the Greensmaster eFLEX 1021. The cutting heads on the Greensmaster eFLEX1021 follow contours on the greens, even those with extreme undulations. All of the Greensmaster FLEX models deliver plenty of power and control, with the eFLEX1021 utilising a Samsung battery for quiet, long-term operation on a single charge. The bail design combines safety and operational control. Along with reducing the distance between the cutting unit and the traction drum, control and balance of the mower have been improved for significantly more precise handling, especially in turns.

From a modular design for easy repair and replacement of key components, to the elimination of all grease points, the entire maintenance process is streamlined to maximise uptime without sacrificing performance. For example, the quick-release cutting units make removal a snap for maintenance or to swap between cutting units and the greased-for-life gear-drive transmission also reduces maintenance needs.

In addition to the release of the new Greensmaster mowers, Toro has also unveiled its new TransPro 200 trailer. The TransPro 200 safely and securely transports up to two walk-behind greens mowers at once, giving them a secure ride so that precision settings don't change during transport.

The TransPro 200 secures mowers by combining a front roller pocket, rubber mats and wheel/donut retainers. Once the ramp or rails are raised, the mowers are locked in place so they retain their height-of-cut adjustments during transport. Adjustable roller pockets make it easy to configure the TransPro 200 to ensure a perfect fit for fixed units and flex units, with or without groomers.



Above: Toro's new TransPro 200 trailer

Left: The new additions to Toro's Greensmaster walk-behind range – the e1021 (left) and eFLEX1021 (right)

The hitch height is adjustable, allowing 2.5" (6.4cm) of adjustment for level trailering regardless of the tow vehicle. A hitch pin release is incorporated into the lift handle, making it quick and easy to hitch and unhitch the trailer. Another big timesaver is the rail ramp module. It takes away the need to use mower transport wheels, reducing loading and unloading time by up to 50 per cent. The trailer can be configured for 18" (45.7cm) and 21" (53.3cm) mowers without the need for additional kits.

For further information on the above additions to the Toro range, visit www.toro.com.au or contact your local Toro representative.

BAYER SET TO DIVEST ITS ENVIRONMENTAL SCIENCE ARM

In an announcement made in late February, Bayer flagged that it will be divesting its Environmental Science Professional business in order to focus on its Crop Science division. A global leader in offering environmental solutions to control pests, disease and weeds in non-agricultural areas such as turf and ornamentals, Bayer's Environmental Science Professional business had sales of 600 million Euros in 2019.

"The planned divestment of the Environmental Science business will open new avenues for growth, innovation, new product development, knowledge sharing and stewardship," says Martin Ball, general manager of Environmental Science at Bayer.

"At present, it's business as usual and our turf team are looking forward to this year's Australian Sports Turf Management Conference and Trade Exhibition where we will be launching two new products."

NUTURF, PGG INK PARTNERSHIP

PGG Wrightson Turf



ASTMA Silver Partner Nuturf Australia and ASTMA Bronze Partner PGG Wrightson Turf (NZ) have formalised their long-term partnership with the signing of an exclusive distribution and product innovation agreement in March. Having enjoyed a highly productive strategic partnership over the past two years, the agreement sees PGG Wrightson Turf continue to distribute a selection of Australian made Nuturf brands in the New Zealand market.

PGG Wrightson Turf is New Zealand's market leader in turfgrass breeding and turf research and evaluation. They are distributors of products and agronomic solutions to the professional turf sector and have been marketing and distributing FoliMAX liquid fertilisers and biostimulants, Stamina soil surfactants and AmendMAX soil amendments for the past two years.

"We are excited to solidify our partnership with Nuturf," says PGG Wrightson Turf's national sales and marketing manager Jason Weller. "With many parallels in the culture and agronomic philosophy of both organisations, this is a great opportunity to continue delivering real outcomes and solutions for turf managers, which remains our top priority."

Adds Nuturf's national sales manager Andrew Melville: "The signing of this

agreement marks a milestone not only in the form of a commercial arrangement between our two organisations, but by extension as a commitment to continue our product development efforts across both companies".

With Nuturf having recently received approval for several product registrations through the New Zealand regulator, the ACVM and the New Zealand EPA, collaboration between Dr Mark Walker (Nuturf technical manager) and Guilherme Barcellos (PGG product development manager) is expected to yield a number of novel product innovations and solutions specifically designed for the New Zealand market over the coming 18 months.

Nuturf and PGG Wrightson Turf will also continue to work together on a number of trans-Tasman initiatives that aim to collaboratively address key issues in the professional turf sector effecting both regions, including the challenge of talent attraction and retention and personnel development within the industry.

LIVING TURF LANDS IN NEW ZEALAND



ASTMA Silver Partner Living Turf has acquired New Zealand-based Turfgrass Specialists (TGS) effective from 1 April 2021. Based in Auckland, TGS purchased

Evans Turf in 2018, further consolidating it as an asset to the NZ turf industry. In 2019 TGS licensed Living Turf's My-Results analytical platform and also won the NZ agency for MATCHplay products. Part of the 2019 deal included a license for local manufacture of Superior Turf Liquids.

"We have a long-standing relationship with TGS and its principal Peter Garvey, who has built a great team," says Living Turf chief executive Rob Cooper. "We see an exciting opportunity to grow their contribution to the NZ market and are pleased to announce that Tony Evans will lead the new entity, as general manager of Living Turf NZ."

Other TGS operatives that will transfer to Living Turf include Joe Butler (senior territory manager – North Island), Oliver Tong (consulting agronomist), Troy Harold (territory manager – Auckland), Joe Hollier (territory manager – Waikato/Bay of Plenty), Trevor Jackson (territory manager – Wellington/lower North Island) and Mike Logan (customer service).

For more information on the NZ venture visit www.livingturf.com.au or www.turfgrass.nz.

ICL RESEARCH INCLUDED IN ETS PROCEEDINGS

The proceedings of the 2020 European Turfgrass Society Conference were recently published, with three collaborative research projects between ASTMA Bronze Partner ICL Specialty Fertilizers and their partners selected for inclusion.

Among the papers selected included was 'Seaweed (*Ascophyllum nodosum*) extraction method produces chemically

CONTINUED PAGE 65

INDUSTRY APPOINTMENTS NANOBUBBLES NABS WARWICK



Sydney-based Nano Bubble Technologies has appointed former Avondale Golf Club superintendent **David Warwick** to a business development role, with a primary focus on

sports turf, agriculture and horticulture.

Warwick joins the company after spending the past 25 years as superintendent at Avondale, during which time he won both the ASTMA's Excellence in Golf Course Management Award and Claude Crockford Environmental Award. Prior to that Warwick was course superintendent at Arundel Hills Golf Club in southeast Queensland for six-and-a-half years. "David brings a wealth of experience in a broad range of areas across

the turf management industry," says Nano Bubble Technologies chief executive officer Andrew Pride.

"He joins us as we pioneer our patented technology which has completed over 200 successful trials and verified results from major universities and laboratories.

"Developed initially for the meat industry, over a 14-year period our patented nano bubble technology has evolved and recently moved into other industries. Nano bubble storage of oxygen and its benefits for sports turf is not widely understood, however, with David's assistance we hope to make it more common knowledge." Warwick started his new role in early April and can be contacted on 0419 429 229 or email david@nanobubble.com.au.

NEW OASIS FOR LEWIS



Melbourne-based Oasis Turf has appointed former Royal Hobart Golf Club superintendent **Stephen Lewis** as permanent part-time warehouse manager for its

Tasmanian branch. Lewis, who retired after a remarkable 42 years at the club on 5 April, including the past 35 as superintendent, will be supporting branch manager Daniel Marriott with operation of the warehouse and deliveries, as well as providing advice to customers if they have turf-related issues. The role sees a well-respected practitioner continue to be involved in the industry in Tasmania. Lewis started his role on 19 April and can be contacted on 0457 006 199.

COLIN CAMPBELL (CHEMICALS) NOTCHES MAJOR MILESTONE

In 2020 ASTMA Trade Partner Colin Campbell (Chemicals) (CCC) celebrated its 80th anniversary. Still a wholly-owned and run Australian company, CCC is a leading supplier of innovative, reliable, high-quality and 'niche' crop protection products for the pre- and post-harvest agricultural sector, specialising in horticulture and recreational turf.

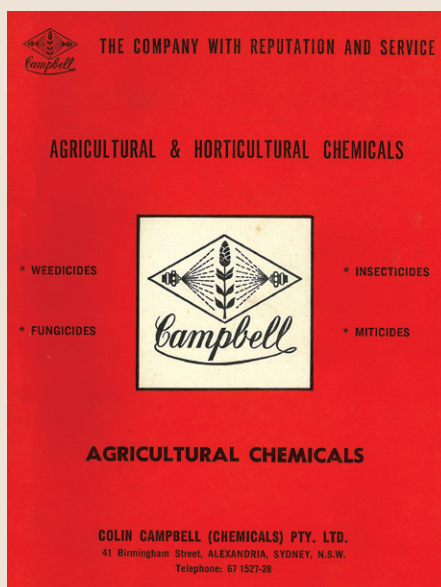
CCC was founded in 1940 by Colin Campbell Snr after he recognised a market opportunity for manufacturing chemicals. He established the company in Alexandria, Sydney and two decades later passed the company down to his sons, Colin and Neil. It was during the 1960s that the brothers began increasing their presence in agricultural and turf chemicals.

CCC's growth and product range has been made possible by long-term supplier relationships and by active and ongoing research and development. The end result is the supply of innovative, speciality products which fulfil various needs in agriculture, including pre- and post-harvest horticulture and turf, as well as the introduction of novel products such as chlorothalonil, apple wax and microencapsulation formulations.

INNOVATION AND EXPANSION

Contributing to the high product quality is CCC's progressive and rigorous R&D, either inhouse or via reputable organisations. CCC's business plan was always to work with overseas companies that had viable and unique products, but did not want to set up their own office in Australia. Were it not for CCC, these solutions may not have been developed and reached Australian shores. Products are always stringently evaluated and nothing is introduced without the necessary efficient field and lab testing conducted under Australian conditions.

In 1971, Nabih Zreikat joined CCC and played a pivotal role in growing the company's product range. He also recognised the importance of building strong relationships with suppliers to achieve this and would later become one of the company's directors, a position he held until his passing in 2018 at the age of 82. In 1976, when more technical knowledge and R&D support were required,



Colin Campbell (Chemicals) has been supplying to the Australian turf industry since the 1960s

current day owner and director Geoffrey Derrick was hired as a technical agronomist. Geoff and Nabih held a shared vision for CCC, extending it to an innovative product range and introducing a number of new technologies.

In 1971, CCC was one of two companies given exclusive Australian rights to chlorothalonil. CCC marketed chlorothalonil under the trade name Daconil for use on turf and ornamentals. In 2003, the product name changed to Campbell Dacogreen. However, the high-quality formulation has remained the same and continues to be sourced from its original supplier in Japan. Today this molecule is highly popular in Australia and the CCC brand Dacogreen WeatherShield in the turf market is recognised as the highest-quality brand in the market.

Together, Geoff and Nabih also recognised that with technology changes there was an increasing demand from turf managers and stakeholders for more sustainable products with reduced toxicity. One of the earliest examples of these was the introduction of microencapsulation technology.

Microencapsulation in the form of Pennside, developed in the USA during the early 1980s, was first brought to Australia by CCC. Microencapsulation formulations reduce the toxicity of products by encasing them in a microscopic polymer coating and, as a result, products that were classified as Schedule 7 poisons were able to be classified to a lower schedule due to the reduced user toxicity.

Other innovative brands as part of the CCC range include Blazon, Flowable TMTD, Methar Tri kombi, Terrazole, Monstar, Proplant and Protak. The most recent innovation has been the introduction of PoaCure in 2020 which has revolutionised the way Poa is controlled in turfgrass.

PROUDLY AUSTRALIAN

The CCC legacy continues today with Nabih's sons Ramsay and Nadeem joining the business in 1996 and 1999 respectively. Together with their father (up until his passing) and Geoff, they have overseen significant growth in sales and product range over the last 20 years. They share a vision of continuing to innovate and provide service to Australian turf managers for another 80 plus years.

"CCC has always been proud to be 100 per cent Australian," says Nadeem Zreikat, CCC's marketing development manager. "We source the highest quality and most effective products due to our long-standing



CCC's Nadeem Zreikat (far right) with (from left) Chris Hand (K&B Adams) ASTMA CEO Mark Unwin, superintendents Ben Grylewicz and Richard Forsyth and John Kaminski (Penn State University) during the latter's 2019 Australian visit

relationships with reputable and trusted suppliers both locally and globally.

"Turf and horticulture have become a CCC speciality. Customers remain with CCC for decades because they know the products work well and will be delivered quickly and they trust the staff's expertise. We are known for our reliability and flexibility. We can handle anything; we are small enough to be nimble and responsive, yet big enough to manage any size client. Having our own office and warehouse in Sydney, as well as stock locations in southern Sydney and Brisbane, ensures we are able to respond efficiently to any customer request."

Among those long-term customers have been Melbourne-based company K&B Adams and former NSW Golf Club superintendent Gary Dempsey. Comments K&B Adams owner Mark Eardley: "Throughout our 52 years of trading, K&B Adams has been a distributor of Colin Campbell Chemicals. Our close working relationship continues strongly to this day and is one of which we are very proud. Campbell's quality product range, excellent follow-up service and relationships with our staff and end users is second-to-none."

Adds Dempsey: "I was first introduced to Campbells Chemicals when I was an apprentice greenkeeper in 1974. I continued to use them as a major source of my turf care products throughout my entire career. Good people, good products and good service with a dedication to the turf industry. Congratulations to all at Campbells Chemicals for reaching this milestone."

CONTINUED FROM PAGE 63

different formulations with contrasting effects on turfgrass rooting', submitted by Dr Andy Owen, ICL's international technical manager. The research illustrates how various seaweed extraction methods have different effects on turfgrass rooting. Other research projects selected for publication included 'Ascophyllum nodosum extract use in plant parasitic nematode abundance and diversity on a golf green' and a third titled 'Applying surfactants decrease turf water use under high evaporative demands in glasshouse conditions'.

"We are serious about research at ICL and to publish with the ETS is a great outcome for these projects," says Dr Owen. "The research projects have some really exciting data to share with the industry and we look forward to publishing that to help inform and support best practice for turf managers."

For more information on this research, visit <https://icl-sf.com/global-en/news/>.

ADVANCED SEED WELL ESTABLISHED

ASTMA Bronze Partner Advanced Seed notched up its 20th anniversary last December. Founded by Brian Hinman at Newlands Rd in the Melbourne suburb of Reservoir, Advanced Seed set up as a wholesale supplier to the retail and professional seed market in December 2000.

The company has had successful long-standing customer relationships with the likes of Brunnings, Globe, GTS, Anco and many others over the 20-year journey. While forming important partnerships with industry leaders,

Advanced Seed has also gained exclusive distribution rights to leading suppliers including Seed Research of Oregon, DLF, Earthway and Evergreen Turf Covers.

"We are thrilled to reach such a major milestone in our business," says Mick Ahearn, who took over as Advanced Seed managing director from Hinman upon his retirement late last year. "We are thankful to our past and present customers, plus our other valued industry partners as we take time to celebrate the success we have had as a team over 20 years. We look forward to many more years ahead serving this wonderful industry."

For more information on Advanced Seed and its product range visit www.adseed.com.au.



Advanced Seed managing director Mick Ahearn (left) with company founder Brian Hinman



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GCSAWA

It has been a busy past month and coming up association-wise for the GCSAWA – the WA Golf Industry Awards, visiting 1st and 2nd year apprentices at TAFE, a fertiliser training day, our annual Trade Challenge Golf (set for 11 May) and a lot of planning for this year's Margaret River Conference in August.

On 26 March almost 500 guests from across the GCSAWA, PGA, GMA and Golf WA attended the WA Golf Industry Awards night. The main highlight from our perspective was GCSAWA life member **Geoff Osborne** receiving the Recognition Award for his services to golf in WA. Responsible for the construction of a number of world-class golf courses including Sun City, Joondalup, Araluen and The Cut, Geoff's work as an innovator, creator and inventor has left an indelible mark on our industry. He joins former Lake Karrinyup superintendent and fellow GCSAWA life member **Trevor Strachan** who was anointed the same award in 2014.

Mandurah Country Club's **Neil Graham** won the Superintendent of the Year (sponsored by Afgri), beating home a quality field of finalists that included 2020 winner **Ash Watson** (Joondalup), **Rod Tatt** (Mt Lawley GC), **Jason Kelly** (Royal Fremantle GC), **Oliver Bell** (Dunsborough Lakes), **Craig Hamilton** (Hamersley GC), **David Cassidy** (The Cut GC) and **Peter Fleming** (Kwinana GC). Neil is one of the most respected and selfless superintendents in WA and has been superintendent at Mandurah for just over five years now. During that time he has trained two Apprentice of the Year winners and been an integral reason the club has had huge success on and off the course.

In a tough year impacted by COVID-19, Neil stepped up his already strong work ethic to prepare the course for the 1600 weekly rounds, almost single-handedly at times. He has reduced Poa in Mandurah's greens by 95 per cent using a strict, consistent and very hands-on management programme. Over the past 12 months Neil has overseen the construction of the 4th green and approach, projects on the 6th and 12th greens, the construction of the 7th tee and bunker work on the 4th fairway.

After picking up the same award as Neil at the previous year's awards, Wanneroo Golf Club superintendent **Jon Carter** was on hand to witness **Adam D'Evelynes** win the Afgri Apprentice of the Year Award. D'Evelynes edged out **Jaxon Thorne** (Secret Harbour Golf Links), **Fraser Healey** (Collie GC) and **Tyler**



GCSAWA life members and now both Industry Recognition Award recipients Geoff Osborne (left) and Trevor Strachan (right) at the 2021 WA Golf Industry Awards

Robertson (Golf Oracle) to win the award and will now go on to represent the GCSAWA in the national final of the ASTMA Graduate of the Year Award which will be announced at the Gold Coast conference.

D'Evelynes began working at Wanneroo as a 17-year-old and in the four years since has been heavily involved in some key projects at the club, including the lake redevelopment, construction of tees and greens, new pump installation and finish of the clubhouse extension and landscape surrounds. He gained tournament experience when Wanneroo hosted both the Australian and Western Australian Amateur Championships in the last few years. He has recently taken on the role of irrigation technician and is looking forward to the next couple of years when the irrigation masterplan is completed.

Mt Lawley Golf Club, home to superintendent **Rod Tatt**, collected the WA Environmental Award. Rod, together with his crew and club general manager **Troy**



GCSAWA Superintendent of the Year Neil Graham (right) with Afgri's Matt Utley

O'Hern, have focused on the protection and reintroduction of native wildlife at the course, including bandicoots and numerous bird species. To help with this, volunteers have built hatches and started fox and pest control. The club has also planted 4200 tubestock, with another 3000 planned for this year. Mt Lawley also recently installed solar panels which has significantly reduced the club's energy expenses, as well as starting an upgrade to LED lights. A new fleet of machinery includes hybrid mowers and electric utility vehicles which were purchased during the last year.

Des Russell, who was only officially appointed superintendent at Cottesloe Golf Club a fortnight before the awards after a long interim role, guided the club to the Metropolitan Golf Course of the Year Award after the replacement of greens and an irrigation system. It was a close fought contest with fellow clubs finalists Lake Karrinyup CC and Western Australian GC. **Oliver Bell**, who has been a finalist for the Superintendent of the Year for the last couple of years, led Dunsborough Lakes to the Regional Course of the Year Award. Other regional course finalists included Bunbury, Capel and Kalgoorlie. The GCSAWA congratulates all winners and finalists.

Elsewhere, we had a brief tease of an early end to summer in early March with some showers and cooler weather. High humidity quickly followed, however, which kept supers on their toes with extra growth and disease susceptibility. From mid-May to late June is a busy time for courses in WA with many hosting Pro-Ams. Players travel the length of the state with courses across Perth, the South West, Geraldton, Karratha, Port Hedland and Broome all hosting tournaments.

We hope to beat last year's Trade Challenge numbers of 19 teams when we play this year's event at Araluen Golf Resort. The event is consistently well supported by the trades and there are always some sneaky recruitment of players.

It has been a rare time for courses in Perth with two clubs doing a full redevelopment at the same time. Fremantle Public Course is close to reopening after the widening of High St forced its closure and reduced the course's total area, but architect **Richard Chamberlain** still had the task of lengthening it. A new irrigation system, cart paths, clubhouse and all new greens and tees are part of the project.

Just recently Port Kennedy closed nine holes to make way for housing. A new nine holes will be built by **Graham Marsh** on land at the northern end of the existing course. In total 14 holes will be redone over the next few years. A new clubhouse is almost complete, the first permanent clubhouse they have had since the course first opened more than 20 years ago.

And finally, the Margaret River Conference (8-11 August) itinerary is locked away after a last minute hurdle when our usual hotel was recently sold and closed down. **Leigh Yanner** (The National GC) and **Leo Barber** (Paraparaumu Beach GC, NZ) will be our main

guest speakers giving two presentations each. Fingers crossed the borders remain open and all interstate guests have no concerns travelling to WA. We have 16 presentations over a day and a half covering many subjects.

The rest of the conference includes the Living Turf/Rain Bird Golf Championships and a Sunday afternoon welcome drinks and brewery visit. We charge a one-off fee that includes three nights' accommodation, all meals, drinks, golf and bus trip to the brewery. Everyone is welcome.

SHANE BAKER
PRESIDENT, GCSAWA

TURF NSW

The storm and floods experienced on the Eastern Seaboard in March have been devastating for our industry after a very difficult couple of years recovering from bushfires, drought and the COVID-19 pandemic. The hardest hit areas have been in the Hawkesbury Valley of north western Sydney and on the Mid-North Coast region. Other areas such as the Central Coast, Far North Coast and the Hunter Valley have also been affected, but not as severely.

In the Hawkesbury Valley, it is estimated that there is 2800 hectares of turf with an estimated value of \$168 million per year, 90 per cent of which has been affected by this major flood event. It will be some months before the full extent of the damage is known. Fortunately, the South Coast, Central Tablelands and the western regions were not heavily impacted, with some areas receiving further welcome rain into major storages going into winter.

Turf NSW is working closely with Turf Australia to determine the impact of the floods and report the extent of the loss and damage to all levels of government. Turf NSW encourages all NSW growers to check the assistance available on their local government website and keep up to date with email and text messages from Turf Australia.

Turf Australia has been managing the crisis with our support and on behalf of the Turf NSW Board, I would like to thank Bec Sellick and the TA Board, Jenny Zadro and Nadene Conasch for their leadership and ongoing support. The Turf Crisis Forum organised by Turf Australia at Pitt Town on 29 March was very timely to give the growers a voice and hear how government and the industry can assist with a range of issues. A second meeting was also convened



The Hon. David Littleproud MP, Federal Minister of Environment, Drought and Emergency Management, and Susan Templeman, Federal Member for Macquarie, meet with Hawkesbury turf farmers to survey flood damage

with growers able to talk with a range of service providers who could help, such as the network of rural financial counsellors, the NSW Rural Assistance Authority and Service NSW.

It is a very difficult time for many of our members and their employees, but at the same time it is amazing to see our industry pull together in a crisis and support one another in times of need. Some grower members in the Hawkesbury Valley have not recovered from the February 2020 flooding and require a lot of assistance to get back on their feet.

The Australian and NSW governments have announced a range of assistance measures. A summary of these measures can be found on the NSW DPI website www.dpi.nsw.gov.au. Of particular interest is likely to be the Special Disaster Primary Industries Grants of up to \$75K per farm business. Please note there is eligibility criteria for these grants, so please read the guidelines carefully. For further information, please contact the NSW Rural

Assistance Authority on 1800 678 593 or email info@turfnsw.com.au.

One of the major issues that needs resolving is the management of the floodgates in the Hawkesbury Valley and ensuring that the water can drain off the floodplain quicker in future flood events. Turf NSW will also be advocating for better grower representation on these committees and work with Turf Australia, local government and Water NSW to ensure this issue is addressed.

If you have been affected by this crisis or know someone who has, please reach out to them and ask if they are okay. If not, please take advantage of the mental health support services or speak with your local GP to seek assistance. For further information from Turf NSW, please contact Matt Plunkett on 0434 147 988 or info@turfnsw.com.au.

MATT PLUNKETT
IDO, TURF NSW

SAGCSA



Early February saw Kooyonga Golf Club host the Australian Amateur Championships to great acclaim. Superintendent **Richard James** and his team set the course up beautifully, with the weather enabling them to present a traditional hard and fast Kooyonga. Louis Dobbelaar and Grace Kim were the victors, with many accolades being heaped onto the condition of the course.

Kooyonga was supposed to be hosting the 2021 Women's Australian Open that same week, but thanks to COVID it was cancelled like many of Australia's premier golf tournaments last summer. Last November, however, Golf Australia announced that in its place Kooyonga would play host to the Australian Amateur in that week, moving the tournament across from Melbourne.

Regardless of which tournament they were hosting, it didn't change the manner in which Richard and his team went about their preparations. All involved were in awe of Kooyonga's conditioning with tournament



PHOTO: GOLF AUSTRALIA
Kooyonga GC hosted the 2021 Australian Amateur Championship in early February

director **Trevor Herden** commenting ahead of the tournament that "the quality of presentation of the golf course is among the best I've ever seen." The SA Classic was also held in March at Royal Adelaide. Again the weather was perfect for the event which was well attended by players from all over the country.

The 2021-2022 SAGCSA events programme has now been finalised and we look forward to seeing members at the following events over the coming 12 months;

- South East Country Trip – 24-26 May;
- SAGCSA AGM – 20 July (Kooyonga GC);
- Education Day – 17 August (Grange GC);
- Superintendents' Forum – 12 October (The Vines of Reynella GC);

- Walk 'n' Talk – March 2022 (Flagstaff Hill GC);

The date for the SA Golf Industry Awards will be confirmed soon.

As mentioned in the previous edition's report, **Ivan Swinstead** has been a stalwart of the SA turf industry for many years. For those of us who have been lucky enough to know or work with Ivan, he will be sorely missed as he steps down as superintendent at Tea Tree Gully Golf Club. It would be difficult to find a more honest, approachable and giving person, let alone course superintendent.

To acknowledge Ivan's retirement and his 44-year contribution to the turf industry, a farewell event was held on 30 April at the Strathmore Hotel. It was a fantastic send off to a very much-respected and admired figure who has served his club with the utmost of integrity.

NATHAN BENNETT
PRESIDENT, SAGCSA

ON THE MOVE...

CHRIS ALLEN: From superintendent Keysborough GC, Vic to assistant superintendent Yarra Yarra GC, Vic.

CHRIS GILLIES: Appointed assistant superintendent Lakelands CC, WA.

CRAIG HAMILTON: From superintendent Hamersley GC, WA to superintendent Sun City GC, WA.

ROB KERR: Resigned as superintendent at Mt Coolom GC, Qld.

KARL KRAUSS: From Cairns GC, Qld to assistant superintendent Mirage CC, Qld.

BRYCE PICKERSGILL: Appointed superintendent Margaret River GC, WA replacing Mark Lewis.

MARC RAYMOND: From assistant superintendent Patterson River GC, Vic to assistant superintendent Heidelberg GC, Vic.

NIALL ROGAN: From The Cut, WA to assistant superintendent Kalgoorlie GC, WA.

DES RUSSELL: From assistant to superintendent Cottesloe GC, WA.

ROB SORENSEN: From assistant to superintendent Lakelands CC, WA replacing Eric Dennis.

DAVID WARWICK: Resigned as superintendent of Avondale Golf Club, NSW after nearly 25 years in the role (see Around the Trade p63 for more on Warwick's new appointment).

TSTMA



The turf industry in Tasmania has seen the end of an era with **Steve 'Lewie' Lewis**, one of the state's finest turf practitioners, deciding to hang up his old boots after 42 years at Royal Hobart Golf Club. Lewie has been inspirational in the industry, sharing his wisdom among his peers over many years.

During his time at Royal Hobart, Lewie has prepared the course for many Tasmanian Open and Amateur events, always keeping the bar at the highest level. Lewie has had many a stint on the TGCSA board and committee over the years and more recently on the Board of the ASTMA. For those who do not know Lewie personally, I am sure you would have seen him at industry functions as he is always getting into the spirit of the evening and loves a good time! We wish Lewie many more good times in his retirement with his wife Tina and wish him all the best.

The TSTMA Annual Conference has been organised for 25-26 May at Elwick Racecourse in Hobart. With the support of the racing industry, now that we have incorporated all areas of turfgrass management, we have taken the conference south and look forward to an entertaining couple of days. We have a great line up of keynote speakers including;

- **Dave Mason** (Metropolitan Golf Club);
- **Dave Sandurski** (The Gabba);

- **Jason Kerr** (Caulfield racetrack); and
- **Peter Anderson** (turfgrass consultant).

We also have a full complement of sponsors who will give short, informative presentations. A tradeshow on both days and conference dinner on the Tuesday evening will allow everyone to network and enjoy the festivities of the annual event.

Congratulations to UTAS Stadium head curator **Adam Spargo** and his team for the way in which the stadium was presented for the return of A-League soccer to the state for the first time in eight years. Melbourne's newest A-League franchise Western United played two games in a week in April as part of a new partnership with the Tasmanian Government and Football Tasmania. The pitch received great reviews from both teams and officials.

It was a busy week for Adam and his team as they only had a day-and-a-half to turn the ground around for their ANZAC Day AFL game between Hawthorn and Adelaide.

In closing, I would also like to congratulate **Shaun Bowden** on his appointment at Royal Hobart as incoming course superintendent. Please let yourselves be known to Shaun as we welcome him here to the Apple Isle.

PHIL HILL
PRESIDENT, TSTMA

VGCSA

It has been a long time coming for the VGCSA to be able to bring members together face to face. Finally on Tuesday 2 March, we got that chance at our first education meeting for 2021 at Portarlington Golf Club and Lonsdale Links on Victoria's Bellarine Peninsula.

Once again the first meeting of the year was very well attended, with over 80 delegates enjoying a tour of both courses which were in superb condition. Special thanks must go to the host clubs for their great hospitality, in particular superintendents **Steve Burchett** and **Heath D'Altera** for passing on valuable knowledge and insights into their operations. A big thanks also to trade sponsors Glenmac Sales & Service (John Deere) and The Toolbox Team (**Ben Gibson**) for their informative presentations.

Steve outlined some of the recent works to the Portarlington clubhouse which required adjustments to the adjacent 1st hole, as well as some of the plans the club has for



VGCSA members inspect the unique greens at the recently redeveloped Lonsdale Links at the association's March education meeting

further course works. He also discussed his greens management practices. At Lonsdale, Heath took the group around the recently redeveloped links which has been dramatically transformed by course architects Ogilvy Cocking Mead (OCM). Using the works of classic US architects C.B. Macdonald and Seth Raynor as inspiration for their green, bunker and hole designs, OCM have created a very unique course that differs from all others on the peninsula.

Planning is well underway for VGCSA meetings this year, with all returning to 'COVID normal'. Where required, meeting numbers will be capped and social distancing measures

implemented to ensure compliance to all government regulations. At the time of writing the VGCSA Annual Report was in the process of being finalised and was to be sent out to A-Class members in mid-April in preparation for the AGM to be held at Woodlands Golf Club on 11th May. Our special guest speaker for the AGM is professional golfer **Nick O'Hern** who in 2016 authored the book 'Tour Mentality – Inside the Mind of a Tour Pro'.

The VGCSA Superintendent/2IC Country Meeting will be held at the Murray Downs Golf & Country Club from 2-4 August. For the first time in the event's history, a turf technicians education stream will be offered in parallel with the superintendents' education stream. The details are still being finalised, but we encourage all superintendents to bring their mechanic along for what will be a great couple of days.

SHANE GREENHILL
PRESIDENT, VGCSA

GCSAQ

The weather has certainly not been great in Queensland over the past few months with courses receiving up to 900mm of rain. Many courses had just completed flood recovery following the high rainfall two weeks earlier only to receive a further 10-day drenching and flooding again.

It was with huge disappointment that the association had to cancel our first post-COVID-19 event at Teven Valley Golf Course due to the rain and flooding. Member interest and bookings for this 'walk 'n' talk' were extremely high and we will be holding the event in coming months. We are also looking forward to the return of the Australian Sports

PHOTOS: MARK HAUFF



The 18th hole at Gold Coast's Palmer Colonial before (inset) and during flood inundation in March following 335mm of rain across a few days

Turf Management Conference and Trade exhibition on the Gold Coast in June. During this event, all GCSAQ members will be invited to a social catch-up with the GCSAQ committee (details TBC).

The Queensland Golf Industry Awards are just around the corner and the GCSAQ is calling for nominations in all categories.

Visit our website <https://gcsaq.com.au> for full details.

We are also pleased to welcome several new committee members:

- **Colin Caulfield** (Caboolture GC)
 - **Keith Johnstone** (Keperra CGC)
 - **Lincoln Coombes** (RACV Royal Pines)
- Brendan Clark**, our Far North Queensland representative, will be organising an event for the area during winter. If this is something that is of interest to you, please contact Brendan via email brendanclark1978@outlook.com.

PAUL MCLEAN
PRESIDENT, GCSAQ

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Murray Cockroft was head greenkeeper at Brisbane's Roma Street Parkland up until his sudden death in February

It's not weak to speak

Losing a loved one in any instance is hard to comprehend. But as Leo Barber writes, when that loss is as a result of suicide it leaves you asking many questions...

Recently I had a friend take his own life. Murray Cockroft was assistant during my time as superintendent at Mount Maunganui Golf Club in New Zealand in the mid-2000s, and while even up to his death he still called me 'boss' I was lucky to have him first and foremost as a mate. We shared so many amazing memories both on course and off and right up until a few weeks before his death we were messaging and laughing about those good times. He was a real character – a fun guy, loyal, hardworking, honest, interesting and memorable to all who had the pleasure of meeting him.

His career straddled both sides of the Tasman, shifting to Australia for family reasons where he first took up a position on the groundstaff at Brisbane's Carbrook Golf Club before a shift to the fairways and greens of Royal Queensland Golf Club.

Following four years' service there he accepted the role as head greenkeeper at Brisbane's Roma Street Parkland (see photo opposite page) where, just like all the positions Murray had held, his workmates encountered the same affable guy, the life and soul of any smoko room he frequented.

As someone whose experience of death has largely been in the context of celebrating a long life well lived and having very little direct experience with suicide, I have felt such a mixture of emotions since Murray's untimely passing. I write this article not out of seeking sympathy for myself, rather to further share awareness of this often unspoken about abrupt end to life and it is with hope that as a society and indeed an industry, we can continue to wrap the necessary help around those most vulnerable. Sometimes, however, even this is not enough.

I'm a fixer. I love solving things and finding solutions for problems. But this appears to be a silent killer, a taboo subject, a complex problem and most times others simply don't get the chance to help let alone fix. I wish I'd had that chance, as I'm sure so many others did that knew Murray as well. But that's the sadness and helplessness of the situation I guess and none more so than for my mate 'Muzz' as he no doubt grappled with his situation unbeknown to most of us.

I am not educated enough to talk about the why's or to offer advice to those that might be going through similar, apart from strongly encouraging seeking good professional help. Looking at the statistics, it's pretty sobering to read just how prevalent suicide is in our society. According to Lifeline, nine Australians die every day by suicide, which is more than double the road toll. Suicide is the leading cause of death for Australians between the ages of 15 and 44 and of those who take their own life, 75 per cent are male. In 2019, a total of 3318 Australians took their own life, while Lifeline estimates that over 65,000 Australians make a suicide attempt each year.

One moment that still resonates from Murray's funeral were the words of one of his young work colleagues at Roma Street Parkland who delivered the simple yet powerful message – "It's not weak to speak". For me, it has been the speaking that has been the most therapeutic as I am sure it has been for others grappling with trying to understand all the complex aspects surrounding his departure. Maybe we will never understand, which is difficult, but through talking we can remember Murray and perhaps lighten our grief and provide comfort for those who were closest to him. We can also break the silence surrounding this killer and create vital awareness of an alternative pathway.

Murray was a unique and fun character. He made us all smile, he made our days more enjoyable and with a passion for greenkeeping he improved the turf he tended to and the people he worked alongside. I have no doubt that even as we mourn his sudden departure, he would have found a smoko room up in the sky and is currently holding court, making everyone laugh. As we say this side of the 'Ditch' – 'Kia kaha'... be strong. 🌱

GETTING HELP

Lifeline (13 11 14) is a national charity providing all Australians experiencing emotional distress with access to 24 hour crisis support and suicide prevention services. Lifeline provides short-term support for people who are feeling overwhelmed or having difficulty coping or staying safe. The Lifeline website www.lifeline.org.au also has a library of resources for those in distress and those who are concerned about someone in their life.

The Australian Sports Turf Managers Association also has a range of mental health resources available including contact details for a number of organisations such as Lifeline, Black Dog Institute, Beyond Blue, Headspace, Men's Line Australia, Sane Australia and Carers Australia. You can access these at www.agcsa.com.au/services/mental-health/ along with various templates on self-care planning, wellbeing and developing resilience.

THE GOLF COURSES OF VERN MORCOM

Author: Toby Cumming (2020)

Publisher: Ryan Publishing

RRP: \$44.95

'The golf courses of Vern Morcom', released in late 2020, sheds considerable new insight into one of Australia's early greenkeeping and course architect pioneers, Vern Morcom. Published by Ryan Publishing, written by Toby Cumming and available in both soft and hard back versions, the book documents the significant influence he had on the Australian golf landscape and the incredible legacy that the Morcom family left behind.

The son of former Royal Melbourne Golf Club head greenkeeper Mick Morcom (1905-1937), Vern was in his mid-twenties when Dr Alister MacKenzie, the world's most celebrated golf course architect, came to Black Rock to lay out Royal Melbourne West. What followed was a remarkable life in golf with Vern going on to be head greenkeeper at Kingston Heath Golf Club between 1928 and 1967. Vern began his four decades at Kingston Heath by building its spectacular bunkers and famous 15th hole.

In his spare time, Vern roamed the country designing and remodelling golf courses and spreading Golden Age course architecture philosophies. By the time he had finished in the 1960s, no fewer than 90 courses across Australia had his unique imprint and this book documents, for the first time, the story of these courses and the legacy of one of Australia's most influential golf course architects.

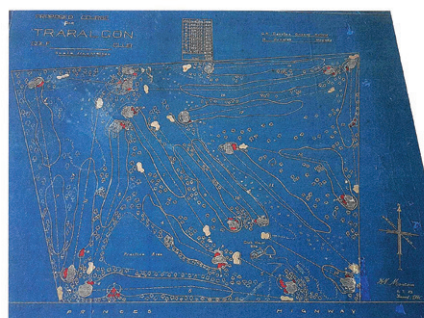
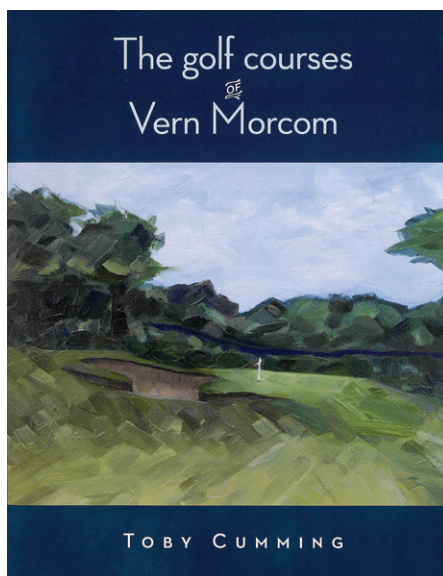


Figure 14.3. Vern's Traralgon layout, dated 6 July 1928, complete with winter sun bearing on the compass (Traralgon GC).

The book (345 pages) begins by tracking Vern's early life, the influence of his famous father Mick and that of Dr Alister MacKenzie whom he got the opportunity to watch first-hand during his famous visit to Melbourne in the spring of 1926. The book traces the development of Vern's philosophies before embarking on a tour around the country looking at the hand he played in the design and/or redesign of many courses.

Cumming starts off in Vern's back yard of the famed Melbourne 'Sandbelt' and his influence at the likes of Sandringham, Brighton, Kingswood, Spring Valley, Metropolitan, Yarra Yarra and Woodlands. He then ventures to other courses around Melbourne, the Bellarine and Mornington peninsulas, up to the Murray River, Gippsland and Western Districts regions, before looking further afield to the likes of Adelaide, Perth, Tasmania, NSW and Queensland. Many of the courses that Cumming discusses include fantastic original photos and layout schematics, as well as some of Vern's original hole and green sketches (like that of Traralgon Golf Club, pictured left).

The Golf Courses of Vern Morcom provides another wonderful historical expose on one of the Australian golf industry's pioneering forebears. For anyone with an appreciation for the history of the game in this country and how some of our much-lauded courses came about, then this book is a must-add to the collection.

A SEASON LIKE NO OTHER: AFL 2020

Author: Ashley Browne (2021)

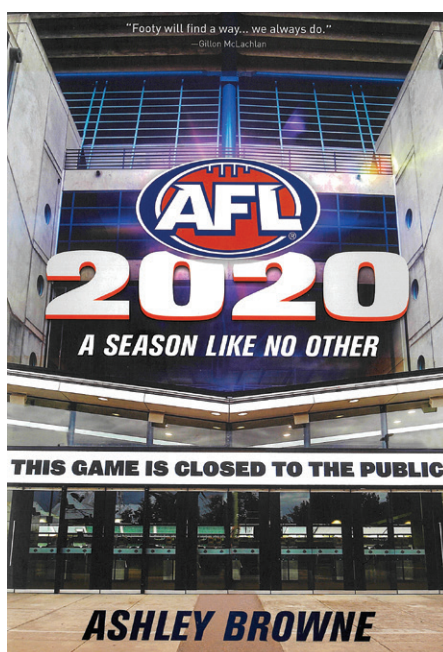
Publisher: Hardie Grant Books

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The 2020 AFL Premiership season was indeed a season like no other. Football has experienced disruptions and delays before, with world wars, storms and the Spanish Flu pandemic of 1918-19 causing interruptions to clubs and the game, but nothing quite like the sudden interference and commotion that COVID-19 brought last year.

'A Season Like No Other: AFL 2020', written by acclaimed Melbourne sports journalist Ashley Browne, explores how the AFL navigated a season that changed day-by-day for fans, for the clubs and for the players and coaches, not to mention the sports management teams at the various grounds who also had their seasons turned upside down.

As coronavirus struck down Australia during round one in March 2020, the AFL was forced to take unprecedented steps to keep its season alive. The season was postponed at the end of round one, a round without crowds, and resumed on 11 June, a hiatus of 84 days. During that period speculation was rife as to



whether the season could proceed and where. 'Hubs' became the key word and the fixture was rebuilt to allow for 17 matches, with clubs playing each other once.

By July, as COVID-19 ravaged the country and economy, teams were quarantined, under strict protocols, in NSW and Queensland. By the end of July, the WA teams and SA teams were back in their home states playing before reduced crowds, but all Victorian teams had relocated to NSW, Queensland and WA. There would be no more games at the 'home of footy', the MCG, for the rest of the season, including the Grand Final which for the first time would be played interstate.

In 'A Season Like No Other: AFL 2020', Browne takes us through a fascinating behind-the-scenes look at this whole story, step by step – how the AFL, clubs, players, coaches, administrations, venues and the fans coped with history in the making. One of the chapters 'Life at the G' features comments from MCG executive manager of turf Michael Salvatore, as well as kudos for the crew at Metricon Stadium on the Gold Coast which ended up having the lion's share of the revised fixtures.

In the end the AFL found a way through to the other side of an existential crisis, just as it had through two world wars, floods and other disruptors, both real and perceived. And now they have made it through two pandemics! 🐼

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