CELEBRATING THE EFFORTS OF AUSTRALIA'S TURF MANAGEMENT PROFESSIONALS

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# Peninsula Kingswood The story behind the surfaces

In September 2013, Peninsula CGC and Kingswood GC made the courageous decision to merge and form Peninsula Kingswood Country Golf Club. Exactly six years on, with the final green opened for play, one of the biggest course redevelopment projects in Australian history has come to fruition. And the end result is, well, stunning...

Following significant growth in membership from all areas of turf management, including 'non-golf' facilities, and the considerable work undertaken in assistance, advocacy, support and education for the entire turf industry, it was felt that the brand of the 'Australian Golf Course Superintendents' Association' (AGCSA) was no longer fully representative of all of our members, nor did it reflect the scope of activities we continually undertake to support the industry.

As a result, we are excited to announce that the AGCSA will be changing its brand to the Australian Sports Turf Managers Association.

This change is to be more inclusive of all current and future members and accurately reflect the association's activities in supporting the industry and its practitioners who play a critical role in the management of sport and recreation facilities in this country.

For over 12 months, we have been undertaking a tremendous amount of work to try and align all associations to work together for the benefit of the turf industry. With 27 individual associations currently operating in the industry, not only does this structure significantly diminish our ability as a profession to advocate effectively for change and improvements, it also continues to duplicate effort, resources and activities undertaken across the industry regularly.

Through the updating of our brand to the **Australian Sports Turf Managers Association**, it is hoped that it will provide further incentive for all associations to discuss the significant benefits and range of opportunities that working together can deliver to all Australian Sports Turf Managers.



# Australian **Sports Turf Managers** Association

DEDICATED TO PROMOTING THE INDUSTRY, EDUCATION AND RECOGNITION OF SPORTS TURF MANAGEMENT PROFESSIONALS



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# COVER STORY PENINSULA KINGSWOOD – THE STORY BEHIND THE SURFACES

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In September 2013, Peninsula CGC and Kingswood GC became the first private golf clubs in Australia to merge. It was bold move on many fronts and the resultant course redevelopment of the Peninsula site's North and South courses was even more so. Across a series of five feature articles, ATM takes an in-depth look behind the redevelopment and birth of the new Peninsula Kingswood Country Golf Club. OCCM lead architect Mike Cocking looks at the design philosophy, John Neylan delves into the science behind the greens profile and bentgrass variety selection, Kate Torgersen looks at the significant revegetation works, while ATM editor Brett Robinson talks with director of courses Glenn Stuart about what it has meant to be involved in perhaps the biggest course redevelopment project in Australian golf history.

**Cover:** Aerial shot of Peninsula Kingswood's 5 South green with 6 South in the background. **Photo:** Gary Lisbon/Peninsula Kingswood.

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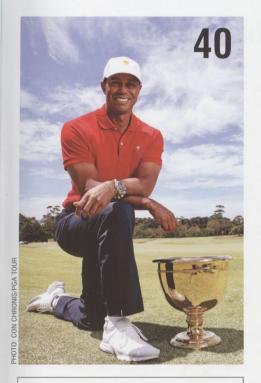




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# Labour of love

s the saying goes, good things come to those who wait. Over the past six years, the golf industry has watched on with intense interest the birth of Peninsula Kingswood Country Golf Club and the merger of two significant private golfing establishments. At times it has been an emotionally-charged environment down in that little pocket of southeast Melbourne, but at the new club's official launch in May, it was pretty evident that the more than 800 members and guests in attendance were pinching themselves at what they could see in front of them.

I recall clearly sitting in Glenn Stuart's office when he was course superintendent at Metropolitan Golf Club as the 2014 Australian Masters was underway. Interviewing him at the time about the tournament for ATM, we started discussing what the future had in store. He spoke passionately about the works that were in the pipeline – course improvement plans and a new architect appointment, new irrigation system and maintenance facility. It seemed pretty clear he wasn't going anywhere in a hurry.

Then, just five months later, came the announcement that he had been appointed the new 'director of courses' at Peninsula Kingswood. There are jobs in life that you simply cannot overlook and for Stuart this was 'the one' and as you will read later in this edition it has been career-defining. The rest, as they say, is history and together he and his team, course architects OCCM and the myriad people involved in the redevelopment have created something special.

Put simply, the depth and breadth of what has been achieved at Peninsula Kingswood could never be told in just one article. There are so many facets to this project that make for fascinating reading and in this edition we have dedicated 32 pages – comprising five main articles and numerous breakouts – recounting what is one of the biggest golf course redevelopment projects in this country's history.

Where do you start? From a design perspective, what began as a simple discussion about improving conditioning turned into a full blown 36-hole redevelopment where every green, bunker and tee has been redesigned or rebuilt, fairways reshaped and re-grassed, creeks and water bodies added, a state-of-the-art irrigation system installed, cart paths, drainage and vegetation works... the list is endless.

From an agronomic perspective there are multiple components – the decision to challenge the concept of USGA greens construction methodology and the science behind engineering a growing medium to mimic the much-lauded native sands of the Melbourne Sandbelt. And to complement that, the research that went into selecting a new generation bentgrass. From an environmental management perspective, the substantial works that have gone into reinvigorating some of the best stands of remnant vegetation in Victoria. And then you have the staff management aspect – from the challenges of merging two clubs, the bringing together of a new team and managing multiple sites in varying stages of maintenance and construction. It has challenged all those involved on so many levels, but the end result has been worth it.

Some may scoff and think that what we have presented in this edition is a little over the top, but if you read all the components of what has gone into this project, I think you will agree that the scope of works undertaken more than warrants such coverage. The Peninsula Kingswood project has certainly set a benchmark as far as golf course redevelopments go. Yes, they had the resources to do it to such a high level, resources which are well out of the reach of many clubs, but there are so many valuable lessons, principles and techniques that can be taken out of this project and applied to any course redevelopment.

To put together a series of articles like this, much like the redevelopment itself, has been a labour of love and I sincerely thank Glenn, his deputies Ben Payne and Shane Stuart, Mike Cocking and regular ATM columnists John Neylan and Kate Torgersen for their diligence and input. I'm off to Bali to recuperate, so enjoy the read...



Bo

Brett Robinson, Editor



### Rebrand to better reflect association membership, activities

y saying the weeks since my update in the previous issue of Australian Turfgrass Management Journal have been busy would be, well, a considerable understatement.

In a tremendous change, we communicated to members and trade partners in early September that the Australian Golf Course Superintendents' Association was changing its brand name to become the Australian Sports Turf Managers Association. This was by no means a spur of the moment decision. Discussions around the association's name have occurred for several months with the Board and were brought about due to significant growth in memberships from all areas of turf management, including 'nongolf' facilities, and feedback to improve representation of all members.

In addition to this, with the level of assistance, advocacy, support and education that has been undertaken by the association in recent years for the whole of the turf management industry, it was felt that the Australian Golf Course Superintendents' Association brand was no longer fully representative of all of our members, nor did it fully reflect the scope of activities we continue to undertake to support the industry.

By changing our brand to become the Australian Sports Turf Managers Association we will be more inclusive of all current and future members and accurately reflect the association's activities in supporting the industry and all professionals who play a critical role in managing our fantastic sports and recreation facilities.



#### Australian Sports Turf Managers Association

Feedback from the industry on the change has been overwhelmingly positive. Many members, non-members and trade partners have taken the time to provide their feedback on the change, with most stating that our name change and desire to unite the industry has been extremely well received, well supported, long overdue and certainly needed for our industry to progress.

Acknowledging there are some people that have questions and concerns on the change and what it means for the future, we steadfastly maintain our desire to continue discussions with all parties to resolve any queries and work to unify the turf management industry.

Over the last 12-18 months, we have been undertaking a tremendous amount of work to try and align all associations to work together for the benefit of all members. With some 27 individual associations currently operating in the turf management industry, I feel this current structure of so many associations significantly diminishes our ability as a

profession to advocate effectively for change and improvements. It also continues to duplicate effort, resources and activities undertaken across the industry regularly.

I hear on a regular basis of the array of challenges facing turf managers and believe that many of these challenges are better addressed if working together as a united industry. Prominent among these challenges is employment and ensuring we maintain a focus on advocacy into the future development of employment programmes and opportunities to drive increased levels of participation into turf management apprenticeships and education.

Given the critical shortfall of qualified turf managers forecasted by the Labour Force Survey, Department of Employment, Skills, Small and Family Business and Australian Industry Skills Committee (AISC) by 2023, this must be seen as a priority for a trade already experiencing difficulties in attracting workers.

We have similarly embarked on work in conjunction with various national sporting organisations relating to investment into facilities management and development programmes led by their teams on behalf of the turf industry. We also continue discussions with Departments of Agriculture and Environment in lobbying for increased investment into the amenity horticulture sector for localised research and development into turfgrass, environmental awareness campaigns, water management and support for biodiversity.

#### **EDUCATION EXPANSION**

The next six months will see a considerable extension of the Australian Sports Turf Managers Association education programme for turf managers, launching with a series of Environmental and Vegetation Management Seminars throughout Australia in October, further enhancing the efforts of turf managers leading the way in environmental stewardship. Details of these sessions are available through our website and social media platforms.

In a significant announcement, the Australian Sports Turf Managers Association will also be launching a pilot programme relating to professional skills development in November. Recent feedback from members and attendees at the 2019 Asia Pacific Turfgrass Conference in Brisbane found that nearly 75 per cent of leaders in



the turf industry indicated that their role is rapidly changing, and the development of 'professional skills' are more important than ever before in carrying out their role.

Professional skills refer to the range of management and administration skills critical to the role of a leader. These include areas such as the ability to work effectively, create and deliver presentations through to computer literacy and collaborations skills. Over the course of the next six months, the Australian Sports Turf Managers Association will be facilitating a series of face-to-face workshops and training modules designed to develop core skills needed by turf managers in the modern workforce.

These pilot seminars will be conducted in various states which will allow us to determine the areas of interest and required skills development that will form an expanded Turf Management Skills Development Programme in 2020.

While on the topic of education, we were very pleased to receive news from the Australian Industry and Skills Commission (AISC) that the revised sports turf management qualifications were fully endorsed as part of version four of the

Agriculture, Horticulture and Conservation and Land Management Training Package. This is certainly great news for the future of our industry and later in this edition we take a closer look at the new qualifications and rationale behind them (see page 66-67 for National Turf Education Working Group co-chair Albert Sherry's summary).

In recent months, we have also undertaken work with Golf Management Australia in starting research into a revised Wages and Salaries Report. We hope to have this work completed within the next quarter and will keep members updated of the progress of the most comprehensive review into wages and salaries in the industry.

#### 2020 FTMI

September saw the official launch of the 2020 Future Turf Managers' Initiative, presented in conjunction with Gold Partner Jacobsen. This will be the fifth year we have partnered with Jacobsen to deliver this cutting edge initiative, one which has played a vital role in many of our aspiring superintendents and turf managers take the next step in their careers.

Since the first programme was conducted at the Melbourne conference in 2016, more

than 10 past attendees have gone on course superintendent roles, with Class of 2018 member Blaine Knox the most recent after moving from his assistant's role at Palm Meadows to superintendent at Beenleigh RSL. In this edition, the Regional Profile (pages 70-75) focuses on Cairns Golf Club which is home to Class of 2017 member Tim Hoskinson who is now two years into his tenure as superintendent.

By giving tomorrow's turf professionals access to industry experts, leading facilitators and trainers, the FTMI is designed to leave candidates with a clear understanding of what will be required of them as a manager and the skills to help them achieve their career goals. If you are a senior turf manager or assistant, then we encourage you to apply. All details can be found on our website.

Finally, I will leave you with one last thought as we prepare for the season ahead. Coming off the back of challenges and extended periods of drought in many areas of the country, I encourage each of you to ensure that you are looking out for the health, both mentally and physically, of your teams, yourself and each other over the forecasted hot and dry summer ahead. W

### AGCSA Board Director – Dave Thomson

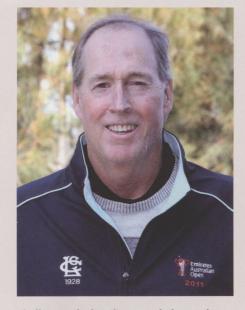
t the 2019 AGCSA AGM held in Brisbane, Bermagui Country Club's Dave Thomson was elected to the Board. ATM fires a few questions at the longserving superintendent about his decision to seek election to the Board...

What prompted you to put your hat in the ring to be on the Board? It was really a thing about giving back to an association that has done so much to promote us as professionals and be supportive in times of

What qualities do you think you'll bring to the Board? I'm no better than the next bloke, but I'm brutally honest. Just ask my comrades. I hope I can offer some integrity and be a communication channel for regional superintendents.

What do you hope to achieve during your time on the AGCSA Board? If I can be professional and be supportive to the other Board members and CEO Mark Unwin, I think I will have done my job.

What do you see as some of the



challenges facing the association and industry as a whole at present? We can't have a situation where our member numbers are dropping off. The way a lot of golf clubs are struggling financially at the moment could add to this downfall.

Mark Unwin pointed out that our industry has 27 associations. That can only be 27 weak associations to what they could be if we combined and reduced that number to even 10 associations. I believe the recent rebranding initiative is vital to get turfgrass professionals outside of the golf course industry on board and may be one of the ways to increase membership to the level required for a strong association. A strong association means more benefits to its members

What would you like to see the association focus its efforts on in the next five years? As above, we need to focus on membership numbers. We need representation alongside all the golfing bodies - Golf Australia, The R&A, Society of Australian Golf Course Architects, SportAus. state golf associations and the like. We need to be heard and to lift our professional profile among these groups. We have already made inroads in this area as indicated by the representation of the above groups at this year's Brisbane conference.







In September 2013, Peninsula CGC and Kingswood GC became the first private golf clubs in Australia to merge. It was a bold move on many fronts and the resultant redevelopment of the Peninsula site's North and South courses even more so. Across five articles and numerous breakouts, ATM takes an in-depth look at the redevelopment and the many facets which have gone into the rise of Peninsula Kingswood Country Golf Club.

lenn Stuart can clearly recall when he 'knew'. He was eight-years-old, divotting tees during the school holidays at Leongatha Golf Club in Gippsland, Victoria. He was hooked. He was intrigued and fascinated by the golf course and its surrounds – the turf, the vegetation and everything that went into presenting it.

Fast forward four years and Stuart's family had relocated to Kingston Beach just south of Hobart, Tasmania. Stuart's passion had only continued to grow and even in his early teenage years he was cutting the greens at Kingston Beach Golf Club with triplex mowers and doing other course maintenance tasks that a lad his age probably shouldn't be doing – spreading fertiliser, renovating greens, cutting roughs. He did it for nix and loved it.

A few more years passed, by which time the family had returned to Melbourne. It was the start of 1984 and Stuart, now 17 and itching for a golf course apprenticeship, took on a six-month role at Kingswood Golf Club offered by then superintendent John Sloan moving fairway sprinklers and support for greens night-watering. He rode his bike to and from work in Dingley every day from Glen Waverley and would pull hoses and sprinklers around the course from 7pm to 3am.

Then one day came the moment he had waited for – he was called in by then superintendent Nick Rennison and offered an apprenticeship. Rennison proved an amazing mentor for the young Stuart who would go on to spend five-and-a-half-years at Kingswood, which at the time had some of the best conditioned playing surfaces in Melbourne. It was one of the first courses to start the



PKCGC director of courses Glenn Stuart says his involvement with the project has been career-defining

process of converting cool-season mix fairways across to warm-season couchgrass and Stuart fondly recalls sitting atop the sprigging machine watching on enthralled. The course was also leading a charge to manage pure bentgrass greens as well.

A few more years on and Stuart struck gold – his first superintendent role. Only 22 at the time, he was initially offered the assistant's role at Long Island Country Club, with the plan to take over from retiring superintendent Bill Lunney after 12 months. That turned in to just two weeks after Lunney had a blazing row with the committee and his retirement was, well, fast-tracked. As superintendent,

Stuart would reconnect with the club's turf consultant John Sloan who he credits with taking his skills to the next level.

All of a sudden Stuart's career started to fly. Eight years in charge at Long Island was followed by 14 very successful years at Woodlands. Then, in 2009, when Richard Forsyth was announced as the new superintendent of Royal Melbourne, vacating a long and storied tenure at Metropolitan, Stuart headed an elite field and got the nod as Forsyth's successor.

Metro was a dream job and one Stuart could see himself in for a long time. It was an extremely professional and progressive club that supported their employees and Stuart would help play a role in strategic planning for future course improvement plan works as well as hosting the 2014 Australian Masters to great acclaim. But after seven years there, while on a boat cruise with the family in Noumea shortly after that tournament, a role would materialise that would change everything again.

#### **HOMECOMING OF SORTS**

In September 2013 Peninsula Country Golf Club and Kingswood Golf Club bit the bullet and announced they would become the first two private golf clubs in Australia to merge. It was huge news for the industry and raised a multitude of questions about how it would actually transpire. The plan was to sell off the Kingswood site for residential development, which would be used to fund the redevelopment of Peninsula's 36-hole facility. The big question mark was how do you marry two clubs, their cultures and their people?



The redevelopment was relentless, with constant construction deadlines and an ever-evolving scope. Works on the North Course (pictured) started in October 2016

It was in early 2015 that the newly created 'Peninsula Kingswood Country Golf Club' (PKCGC) placed an ad for a 'director of courses' on the AGCSA website. Knowing what was happening with the merger and intrigued by the opportunities that it afforded, Stuart found himself entertaining the thought of 'what if' after an approach was made. While extremely happy at Metropolitan, the more he did his due diligence on the PKCGC role, the more he saw it as a real career-defining superintendent role. And he took it.

Given his background as an apprentice at Kingswood and his time spent over the fence at Long Island, Stuart's arrival at PKCGC in July 2015 was a homecoming of sorts. Yet when he walked through the gates, not even he could have ever envisaged what would eventually unfold over the next four years.

What was initially a project to improve playing conditions, upgrade an antiquated irrigation system and essentially complete a masterplan the club started 12 years earlier, turned into perhaps the biggest golf course redevelopment project in Australia's history. Every green, bunker and tee across the North and South courses would be redesigned or rebuilt, fairways reshaped and re-grassed, creeks and water bodies added, a state-of-the-art irrigation system installed, cart paths built, drainage installed, extensive revegetation carried out and a new maintenance facility... the list runs to pages.

At times it has been overwhelming, relentless and challenging, but after four years, Stuart's dream and that of all at the club and those involved in the project, has finally been realised. In the first week of September 2019, almost six years after the merger decision was announced, the very last PKCGC green – 10 South – was opened for play, signalling the end of a mammoth construction phase. It was a watershed moment for Stuart and his team (see more on the crew, page 18) and the whole club, and it signalled the start of a new chapter in PKCGC's short but already lively history.

"I knew it was going to be a big project, but I don't think anyone quite realised how big it would turn out," reflects Stuart. "If people saw what I walked into here, a lot would have walked straight back out. The project was three months along at that point and a lot of work had been done on drainage, rough shaping and vegetation. The site was raw, it was wet, the soil not what you expect on a Sandbelt site and the magnitude of the job just smacked you in the face straight away.

"And it only got bigger as we went along. It was such a multi-faceted project. There was one deadline after another and it was allencompassing for everyone involved. Many

#### PENINSULA KINGSWOOD BY THE NUMBERS

2: Number of kilometres of creeks created throughout the North and South courses.
2.25: Cost (in millions) of the PKCGC links maintenance facility.

**3.5:** Total size (in hectares) of the new Pure Distinction bentgrass greens.

11: The number of different ecological vegetation classes discovered at PKCGC, making it one of the more diverse properties anywhere on the Melbourne Sandbelt.

12: Amount (in millions) the North and South course redevelopment component cost. Delivered on budget by OCCM & PK. 50: Total size (in hectares) of all couchgrass areas (tees and fairways). 58: Amount (in millions) the entire PKCGC redevelopment has cost. This includes course, clubhouse and perimeter landscaping, pool and gymnasium, accommodation, teaching facilities, course structures, bowling green, tennis court, front entry, car parking, practice facilities, maintenance shed etc.

**100:** Approximate number of staff from the various contractors and consultants that have worked on different aspects of the project, in addition to the 8-10 members from golf course architects Ogilvy Clayton Cocking Mead and 50-60 maintenance staff from PKCGC.

Among the contractors and suppliers were; Irrigation (Superior Green), hydroseeding (JB Hydroseeding), sprigging (Turf Renovations Australia), drainage and bulk earthworks (SJM), concreting (Creteprint), additional earthmoving (DWE), tree contractors (The Tree Men), nurseries (Australian Ecosystems among others), stonemasons (Peninsula Stonemasons and Brad Bannon Stonemasonary), agronomy (John Neylan), sand (Rocla - who later became Hanson) and rock (Hillview Quarries). 144: Overall size (in hectares) of the PKCGC site, of which almost half is now maintained.

**176:** Approximate number of bunkers across the property plus many more, less formal sandy wastes.

800: Amount of stonework (in tonnes) used to create the creeks and bridges.
40,000: Amount of sand (in tonnes) that was imported for the construction of greens, bunkers and some tees.
500,000: Approximate number of grasses, trees and shrubs that have been purchased, grown from seed and cuttings collected from site.

things challenged us along the way – staff, equipment, ground conditions, the everchanging nature and evolution of the project – but I look at what is out there now and what we have achieved and I think how fortunate am I to have been involved in such a project.

"From a young age I had always dreamed or wanted to be superintendent of Royal Melbourne Golf Club. That was my dream job, but I reckon this project has arguably given me more than what a Royal Melbourne could have offered. It has been the opportunity of a lifetime."

### BOLD DECISIONS, HARD DECISIONS

The decision taken by Peninsula and Kingswood to merge was extremely bold. The process was by no means seamless and it required some very hard decisions to be made. As anyone who has been intimately involved with the project will tell you, it has been an emotionally-charged atmosphere at times and Stuart has been one of those who has had to make some very hard but necessary calls. It has also required a lot of thinking outside the box, taking some calculated risks and challenging conventions.

Perhaps the boldest decision of many that Stuart has made as part of the project, came within the first few months of him arriving. In addition to the not so insignificant tasks of getting his head around managing two sites, formulating a team and redesigning a maintenance facility (see more on these aspects, page 18), grassing strategies for the new North and South courses had to be determined. The project was already three months in and greens were soon to be shaped.

The existing greens were a mix of A4 bentgrass and *Poa annua*. The fairways on the South were 70 per cent Wintergreen and 30 per cent a mix of Santa Ana and common couch, while the North Course was Legend or common couchgrass. The fairways were a relatively straightforward decision – Wintergreen couchgrass (see page 12) – but with the greens there was a mindset of persisting with A4. Given that it hadn't lived up to expectations in the past, Stuart was quick to question the strategy.

"I thought to myself, the club has been really bold to merge and bold to select the architects quickly to get the project underway, is there an opportunity here to be bold in how we grass the property as well," explains Stuart. "We sat down as a collective and came up with what we thought would be the best way forward – Wintergreen couchgrass across all fairways and go to another level of bentgrass on the greens. Everyone agreed so we started to pursue other options."



#### PENINSULA KINGSWOOD'S ONE-GRASS POLICY

he decision to use Wintergreen couchgrass across all fairways, tees and greens surrounds was perhaps one of the easier decisions made during the Peninsula Kingswood redevelopment, but by no means the easiest to implement.

The South Course boasted some of the country's original Wintergreen stock from when Victorian clubs started converting fairways to couchgrass back in the 1980s. Nearly 40 years on, it was still head and shoulders above the Santa Ana and Legend elsewhere on the property. It was also a firm favourite of PKCGC director of courses Glenn Stuart who had managed it in his previous role at Metropolitan where it had produced incredible surfaces for the 2014 Australian Masters.

There was debate early on in the redevelopment as to whether the two courses should be grassed differently, but when construction started it was quickly realised there were some amazing Composite Course hole arrangements that could be entertained for tournaments, so it was decided to stick with Wintergreen across both.

The South Course was a relatively straightforward process. Areas of Santa Ana and common couch were sprayed out and Wintergreen from those original areas were used to sprig fairway patches and solid turf tees and surrounds.

The North Course wasn't quite so easy. Converted to Legend about 12 years earlier, a lot of South African couch had come in with it and infused itself throughout the course. In order to prepare the new fairways for turfing, they had to be sprayed anywhere between six and eight times prior to planting.

The issue then became where to source the new Wintergreen stock from. The South Course had just opened and couldn't be ripped up again, so Wintergreen from a turf farm in Sydney was sourced and lineplanted into the first six holes (10-16 North). While it looked amazing in Sydney, it has struggled a little to reach the same level once in the ground across the border. As Stuart quips, it is "still trying to acclimatise to Melbourne."

For the remaining North Course holes, turf was either harvested as scarifyings from the South Course – with the best then broadcast planted and incorporated with a Lely power harrow – or from the Kingswood site. Kingswood boasted two hectares of excellent Wintergreen across two-and-a-half fairways and these were harvested a total of four times to provide material for the new courses. Likewise, the fairway on 10 South was lifted upwards of seven times to either solid turf tees and green surrounds or use for sprigging, which is why the hole was last to fully open.

One of the first lessons Stuart learned regarding managing Pure Distinction was that it didn't need to be pushed hard. It is aggressive enough in its own right

At that time, two new bentgrasses had caught the attention of Stuart - Pure Distinction (Tee-2-Green) and Tyee (Seed Research of Oregon). In April 2014, consultant John Neylan had embarked on some trials funded by Heritage Seeds at Keysborough Golf Club, looking at the performance of some of their newer varieties, among them Pure Distinction. Through discussions with Stuart, Neylan was asked to provide a report on Pure Distinction as a potential option for PKCGC. Referencing both independent (AGCSA) and commercial trials, in addition to researching NTEP data and anecdotal evidence from US superintendents, Neylan presented his report in August 2015. The verdict... it ticked a lot of boxes, but it was untried in Australia.

Stuart too did his own investigations. He visited the Keysborough site and pulled plugs to examine parameters such as organic matter accumulation, density and susceptibility to *Poa annua* and fungal pathogen diseases. Some of the other plots had *Poa* through them, but not Pure Distinction. He also took a trip to Royal Canberra Golf Club which at that time was midway through its redevelopment and had chosen Pure Distinction for its greens. Jumping off the plane in Canberra in the middle of winter, it was -7°C degrees and Royal Canberra was covered in frost.

Despite that, upon inspecting the onsite Pure Distinction nursery he was blown away by the quality. More boxes ticked.

From that visit Stuart had a square metre of Pure Distinction nursery turf transported to Melbourne and together with Tyee, which was still in the discussion at this stage, put plugs of each on the best and worst areas of the North Course greens (1 and 17) and beside some of the best examples of the existing A4 to see how they'd perform and compare. The Pure Distinction stood out in all situations and Stuart started telling himself "it seemed the perfect solution".

Once confident in his own mind that it was something that could handle all sorts of conditions, Stuart was back on a plane up to Royal Canberra to look at the grass, which by this time had been maturing well across their greens. It looked impressive. He revisited the nursery green again, in the ground since 2013, and it too had only gotten better.

Stuart continued to pour over data from the US-based NTEP trials, in particular those sites that had similar climatic conditions to Melbourne. He also spoke with multiple US superintendents that had been managing Pure Distinction. Despite trying to find faults, it was at the top of the chart for just about everything he desired – wear tolerance, recovery, winter growth, leaf fineness, density and drought tolerance. The only thing that was concerning was its susceptibility to dollar spot, but it was the only negative in a long list of positives. He also learned of an

incident at the Keysborough trial site where the irrigation had failed for two nights and the plots had dried out substantially; the first grass to bounce back after a lick of water... Pure Distinction.

With his mind effectively made up, Stuart took the plugs out of the North greens, put them in a box and took them with him to a committee meeting in August. At that meeting Stuart made his recommendation to move away from A4 and go with Pure Distinction and backed that up with the mountain of evidence he had accumulated and that was available to him at the time. But before he asked the committee to make their decision, he recommended that the club's CEO and committee visit Royal Canberra with him and the course architects to see it for themselves. They did and they were sold too.

"All the jigsaw pieces just came together," says Stuart. "I couldn't find enough fault not to go with Pure Distinction. It's lime green colour can divide some people and I did 'um and ah' a bit early, but it has worked in our favour and provides a great contrast with the Wintergreen fairways.

"The final piece that got me over the line was speaking to the US breeders about its parentage and US superintendents who had had it in the ground for more than five years. One of the things they had experienced was its performance with minimal inputs, improvement with age and ability to tolerate herbicide applications. It had everything we were looking for.

"The only thing we risked was what it would do once it had been in the ground under our maintenance and in Melbourne's climate and how it would perform under traffic. But it came back to being bold – the club was bold to merge, bold with its design intent, bold with its overall improvement approach. If you really look at it, given that it ticked all the boxes, it was quite a conservative decision in the end."

#### IN THE GROUND

At the same time as the discussion around bentgrass varieties was happening, a lot of work was also being conducted on the best greens profile. Between Stuart, Neylan and OCCM lead architect Mike Cocking, there was a desire to move away from USGA-spec greens and have a profile that would mimic the qualities of the native push-up sands famed on the Melbourne Sandbelt. Extensive research and investigation were undertaken (see page 34) and ultimately a modified Californian profile using a manufactured sand was used with the Pure Distinction on top.

In November 2015, the first greens on the South Course – 11, 16 and 17 were seeded with Pure Distinction at 1kg/100m². A pre-seeder was added in with the seed and within 5-6 days the first shoots of germination started to appear. With a three-month window to get them into play, Stuart and his team pushed them hard, applying organic and synthetic-based fertilisers to help grow that grass as it started to mature. On day 19 the



North Course holes (from left) 3, 4 and 5. Due to its more undulating terrain, the North Course was always intended to be a pure Sandbelt experience

#### DROUGHT-PROOFING PENINSULA KINGSWOOD



A new \$4 million Toro irrigation system was one of the key drivers behind the Peninsula Kingswood redevelopment. Pictured is the par three 14 North

ater is the lifeblood of any golf course and even before ground was broken on the first hole of the South Course, a lot of work had already been done in regards to securing Peninsula Kingswood's water source.

Prior to the redevelopment there were multiple challenges in regards to water use and management. The whole property was irrigated with treated effluent piped across from the South East Water Treatment Plant. Originally Class C and upgraded to Class A over the years, the supply was plentiful but it wasn't ideal for the greens and created management headaches in trying to maintain firm and fast (and *Poa*-free) surfaces. A cleaner water source was needed.

Compounding that was an antiquated irrigation system. The North and South courses had separate systems, with a vast array of old pipework and mainlines causing regular pressure issues and failures. Distribution uniformity (DU) was also poor, with a lot of water being thrown into out of play areas. Previous Peninsula superintendents Steven Hughes and Martin Greenwood had earmarked the irrigation system as one of the most pressing issues that the club needed to address and ultimately it was one of the key drivers behind redevelopment plans.

A key moment in securing the club's future water source came in 2014 when it embarked on a stormwater harvesting project.

This saw the construction of a 24-megalitre holding dam wedged between the 7 South fairway and Skye Rd boundary. Taking stormwater from the extensive residential area to the south of the course, the system was designed specifically so that it could be used to irrigate greens and their immediate surrounds.

To that end, the system has built-in sensors that can check the quality of the water before it is collected. For instance, when there is a rainfall event after an extended dry period, the initial stormwater runoff can be very harsh and contain a lot of impurities. The PKCGC stormwater system can let that initial flush through and start harvesting once water quality reaches acceptable levels.

Throughout all this, the Kingswood site had earlier been one of the first golf clubs in Victoria to explore and install an aquifer storage and recharge (ASR) scheme through the efforts of former Kingswood superintendent Terry Ford and club member Norm Seaton. The system worked very well and as a result of that PKCGC management invested \$150,000 into a study to determine the Peninsula site's ASR potential.

A test bore was sunk along with multiple inspection holes and water injected back down into the bore to determine whether there was a confined aquifer under the course (in other words, the water remains within that aquifer and can be recharged and redrawn

rather than move off site). From that study it was determined that ASR would be feasible and some infrastructure was put in place to enable its future use.

"To fully integrate the ASR scheme would require further significant financial investment and work, but we now know we can build on the infrastructure we have installed should we need it," explains PKCGC director of courses Glenn Stuart. "It will be our next high priority project as our long-term view is to ultimately drought-proof the courses and have multiple water options available to us. We've got a long-term arrangement with South East Water, so we will continue to use the Class A supply for fairways and tees and stormwater on greens for now, but securing our water source is certainly high on the agenda."

The new \$4 million irrigation system that has been installed across both courses is a state-of-the-art Toro Lynx system with full NSN support. Installed by Superior Green, it is a hard-edged system and means Stuart and his staff can apply water to the desired turf areas when and where they want.

The system features both separate stormwater and effluent water lines that run throughout both courses and there are two dedicated pump systems, meaning that the courses can be irrigated at the same time, thus reducing the watering window. Greens have moisture sensors, while the latest Toro Infinity Series sprinklers mean that DU has improved significantly.

Wintergreen couchgrass has been used across all fairways, tees and greens surrounds. Pictured is 13 South with 15 South to the left

greens received their first mow and with favourable weather conditions persisting, they could have been in play within eight weeks according to Stuart, such was the growth rate.

Because they had been pushed hard to meet a deadline, they became quite puffy, so Stuart had to start a pretty heavy topdressing programme. First lesson learnt - the grass doesn't need to be pushed that hard, it's aggressive enough in its own right. From there they dropped all the synthetic type fertilisers and transferred across to natural products like fish emulsions, seaweed extract and compost teas, which have continued to be staples of the nutrition programme. (As an aside, Stuart has forged close relationships with some key plant pathologists and soil biologists over the past decade and was keen to incorporate soil biological and biodynamic inputs into the PKCGC green profiles as part of an environmentally sustainable approach).

"Quite often with these grasses you think they are too aggressive and get too thatchy," comments Stuart. "As time has gone on, we have been able to manipulate our way through that and got to the point now where



those things aren't a concern at all. In fact, those concerns have been turned into a positive for us.

"We were dusting every green at about week three just to make sure that we began immediate dilution of any organic matter accumulation if it was to occur and that really helped the surface firmness as well. We found ourselves not really growing that much OM at

all. We didn't touch growth regulators at this point and just let the greens tick over on their own as we had to move on to other areas of the redevelopment.

"One thing we didn't know was how they were going to cope. I mean, they just looked so different from the older style bents due to that lime green colour and you questioned yourself, 'Are they healthy?' One thing that



we did like right from the get go was that you could manage them being quite dry. If the greens did dry out that bit more, you could put a splash of water on them and they responded really quickly. We learnt very quickly that you can back right off on the inputs and the more they mature the better they are becoming.

"Nearly four years on now there's a minimal level of water or nutrition that goes on the greens which is an amazing result. We wanted greens that were hard and fast and symbolic of the Melbourne Sandbelt. We've got a bentgrass that has minimal inputs with an amazing surface, that recovers really well from wear and tear and has good heat and cold tolerance. Everything we looked at in those trials has come to fruition. It suits the environment and our management style well.

"The response from the members has been incredible too, but what is exciting for us as a team is now we can start to really finetune them. I'm looking forward to a regular dusting and growth regulator programme to see what level we can get the Pure Distinction to. We regularly test for soil deficiencies, moisture, speed and firmness as well as check clippings levels after every cut. These facts and extracted detail will form part of our approach to future maintenance regimes. It's been an amazing grass so far and one of the better decisions we've made."

#### **DELIVERING A VISION**

The grassing is just one of many aspects which makes the PKCGC project so fascinating. Certainly from a golf course construction, management and agronomic perspective, it has been intensely watched on by the industry and has created widespread discussion. Stuart acknowledges the level of interest has been high and that many question whether what has been created at PKCGC can be sustained into the future.



A lot of people have been involved in the PKCGC redevelopment and gained terrific industry experience as a result

His counter to that is simple – come down and have a look. Look at what has gone on at PKCGC, understand the rigorous processes that have been undertaken and the many lessons that have been learned along the way. Stuart is under no illusions that time will tell whether it all pans out, but he is extremely confident he knows what will happen.

"It will be an amazing facility for years to come," assures Stuart. "It's a very unique project and I'm sure it has opened up a lot of eyes to the possibilities that come with doing things a little differently. It shows what can be done if you are bold and embrace change.

"I have been involved in so many new things during this project that I had limited experience in. And the areas that I did have experience with, I've been able to use that to make an impact. A lot of people have been involved in this project and what has been really satisfying to see is the amazing experience and skills they have got out of it. I think our industry will only be wealthier for the experience these guys have had here.

"It has been a real pleasure to have worked so closely with the whole OCCM team who have done an outstanding job. Their intimate knowledge of Sandbelt golf history, visionary course design and understanding the many intricate details that encompass the true beauty of the Sandbelt courses shines through in the results they have achieved for PKCGC. It was intriguing to watch them apply their craft and watch holes materialise out of the ground throughout the project. While at times we challenged each other's teams, we have always had an eye on doing the very best collectively for the club.

"I feel so privileged to have been chosen for my role here. I clearly recall the initial meeting with the club's employment consultant and thereafter with the then two general managers Heath Wilson and Gary Richardson. 'We have a little redevelopment project down the road that we would like you to consider assisting us with' was their wording at the time. I'm not sure where they ever thought it was a 'little' project. Then a meeting with the presidents Peter Sweeney and Gerry Ryan whose continued support throughout this very challenging project has been nothing short of exceptional. All those gentlemen have been so instrumental in the success of this 'large, not small' project.

"Current CEO Heath and I share a strong relationship and often shake our heads as to the many tough challenges we faced during the project. Above all though, the greatest satisfaction is now seeing the enjoyment of the members. Some were very torn and emotionally challenged by the merger and there was a lot of heartache in coming together. Now they can proudly say they're a member of 'Peninsula Kingswood'. We promised them a lot and we had to deliver a vision the club had. And I think what we have delivered has exceeded that in our members' eyes which makes you feel very proud."



The aim at PKCGC was to deliver greens that were hard and fast and symbolic of the Melbourne Sandbelt

#### **KEY MILESTONES – THE RISE OF PENINSULA KINGSWOOD COUNTRY GOLF CLUB**

#### 2013

September: Peninsula CCGC and Kingswood GC announce that they will be merging to form the Peninsula Kingswood Country Golf Club (PKCGC). The merger will see the Kingswood site sold off to developers, with the money used to help fund the redevelopment of the North and South courses. Property fund giant ISPT purchases Kingswood's former 53-hectare site in 2014.

#### 2014

April: PKCGC engages Ogilvy Clayton Cocking Mead (OCCM) as course architects. July: Construction begins on a new 24ML dam on an old dump site adjacent to the 7 South fairway. Dam will harvest stormwater to be used solely for irrigating the new Pure Distinction greens and immediate surrounds. November: OCCM masterplan endorsed.

#### 2015

**March:** Redevelopment of the South Course starts.

April: PKCGC announces appointment of Glenn Stuart as director of courses.

July: After seven years at Metropolitan, Stuart departs to begin tenure at PKCGC.

**September:** Decision made to go with Pure Distinction bentgrass on new greens.

October: PKCGC announces appointments of key senior course staff – Shane Stuart (superintendent/grow-in manager South Course), Ben Payne (superintendent/grow-in manager North Course), Mark Harkness (assistant superintendent South Course), Jacob Burridge (foreman South Course) and Marcus Harber (elevated from assistant to course manager at Kingswood site).

**November:** First three greens (11, 16 and 17) on South Course seeded on 4 November. They are followed by greens 13, 14 and 15 (10 November).

**December:** Three groups of South Course greens seeded – 1, 8, 9 and 12 (on 11 December); 2, 3 and 7 (on 21 December); and 4, 5 and 6 (on 31 December).

#### 2016

**January:** Kingswood site hosts 2016 Australian Amateur Championships along with Metropolitan GC.

**April:** Construction starts on the new 2800m<sup>2</sup> links maintenance facility on a new site adjacent to Skye Rd.

May: The first of the newly renovated holes (11 to 17) on the South Course are officially open for member play.

**October:** Redevelopment of the North Course begins.

**November:** South Course holes 1, 2, 8 and 9 officially open for member play.

**December:** Demolition of the old Peninsula Country Golf Club clubhouse and site preparation for the new clubhouse starts. North Course greens 11, 12, 13, 14, 15 and nursery seeded (6 December). North Course fairways 11-15 line-planted (7-8 December).

#### 2017

January 2017: Kingswood site hosts 2017 Australian Amateur Championships along with Yarra Yarra GC. South Course holes 3, 6 and 7 officially open for member play.

**February:** Redevelopment of the South Course completed with the exception of the temporary greens on 10 and 18 which would be left to coincide with the clubhouse completion. Line planting of North Course fairways 9, 10 and 16 (8 February).

**March:** South Course holes 4 and 5 officially opened to member play. New maintenance facility construction complete and demolition of old facility commences.

**April:** Euan Muir appointed head turf equipment technician.

**September:** North Course greens seeded – 7, 8 and 10 (7 September) and 9, 16 and 17 (18 September).

**October:** North Course greens 2, 3 and 6 seeded (20 October).

**November:** South Course's Wintergreen fairways scarified. Scarifyings broadcast and planted on the remaining 12 hectares of North Course fairways 1, 3, 4, 5, 6, 8, 17 and 18 (23-26 November).

#### 2018

**February:** First six holes of the North Course (10-15) open for member preview play. **June:** Jacob Burridge resigns as North

Course assistant superintendent to move to Victoria GC. Jeremy Clarke elevated to North Course assistant.

**September:** Following the opening of the new PKCGC clubhouse, construction of four new putting greens and landscaping around the clubhouse is completed.

October: Kingswood site hosts its last round of golf with a big and successful members celebration. Last two greens on the South Course – 10 and 18 – seeded on 11 October. November: North Course opens to full play. December: On 1 December, the Kingswood site officially closes, signalling an end to golf played there since 1937. Fairway turf is continued to be harvested and used on the North and South courses where required or sold to other clubs for their project work (e.g.: Victoria GC redevelopment).

#### 2019

**January:** Settlement on Kingswood site is completed.

**February:** Construction begins on synthetic bowling green and tennis court.

April: With the completion of the entry road and practice facilities, all design and construction work by OCCM is completed, 49 months after starting.

May: On Sunday 26 May 2019, the clubhouse and courses are officially opened by Victorian Premier, the Hon. Daniel Andrews. More than 800 people/members attend.

September: Final green of the entire redevelopment – 10 South – is open for play, meaning for the first time since the redevelopment started in 2015, members have full access to the two new courses. Bowling green and tennis court grand opening.

**November:** Short game practice facility to be open for play, meaning all works completed and facility fully open.

From initial merger announcement to opening of the very last green (10 South), the birth of PKCGC has been six years in the making





collectively bought into a vision of delivering two elite level golf courses.

# Team PKCGC

s any course superintendent or turf manager will tell you, in order to produce the standards a club or organisation aspires to, vou need an expert team behind you. No more has that been truer than at Peninsula Kingswood Country Golf Club (PKCGC). With a redevelopment of this magnitude, investing in the right people has been of paramount importance and gone a long way to ensuring its ultimate success.

At the official opening of PKCGC in May, president Robert Dowling made the interesting observation that over the duration of the project, more than 150 people had been involved at some point in bringing it to fruition. Central to that was the PKCGC crew put together by director of courses Glenn Stuart, who along with the more than 100-strong personnel from course architects through to consultants and suppliers, delivered what can be seen today.

Bringing a crew together was by no means easy and arguably one of the hardest aspects that Stuart had to grapple with, especially early on. When he arrived at PKCGC, Stuart essentially inherited two separate teams - a crew of 17 at the Peninsula site and 11 at Kingswood. The two clubs merging had made for quite an uncertain environment in regards to staff. The previous superintendents - Martin Greenwood (Peninsula) and the long-serving Terry Ford (Kingswood) - had left and the remaining staff were unsure of how the future looked. It was especially heightened for those at the

Kingswood site which, as part of the merger, would eventually close.

Stuart's first task was to assess the relative skill levels of both teams and the requirements of both sites. Kingswood was in a high-level maintenance phase, whereas the Peninsula site was a mix of both. Construction on the South Course was already underway. while the North Course would continue to be open for play before it too would be closed for reconstruction once the South had reopened. (PKCGC had given an undertaking to members that 36 holes would be playable across both sites at all times throughout the redevelopment. That would eventually become a series of composite holes across both North and South courses to ensure an 18-hole layout as promised when the North Course work started.)

Due to the demands of what was happening at the Peninsula site, Stuart started to slowly change the rostering around and shifted staff between the two sites. He was able to place staff at the Kingswood site that were physically challenged by the construction works, which helped the club and those selected individuals. Ultimately, many who were on the original crews would move on as the project progressed, but, as Stuart affirms, they all had a positive impact on the redevelopment and the club was grateful for their efforts.

It was a hard time for everyone and very emotional for those who would ultimately leave. A lot of difficult decisions had and were made, but Stuart had to look at the bigger

picture and structure up a team, initially across two sites and eventually one, that would be able to help him deliver what the club had employed him to do.

#### **KEY APPOINTMENTS**

As well as assessing the abilities of the inherited crew. Stuart also knew very early on that he needed some key personnel with specific skill sets at each of the three courses. At Kingswood, he elevated long-serving quality assistant superintendent Marcus Harber to course manager. Under Ford's guidance over a 22-year period, Kingswood always had a reputation for excellent conditioning and Stuart challenged Harber to not only meet those levels but exceed them. Indeed he did and while in charge successfully prepared the courses for back-toback Australian Amateur Championships.

At the Peninsula site, it was a little bit different. With construction underway. Stuart needed someone with experience and knowledge of the land to oversee the South Course works. He didn't need to look far.

For 27 years, across the boundary fence at Long Island Country Club, Stuart's younger brother Shane had unassumingly gone about his own career, eventually rising to the top role which he held for 18 years. Ironically, it was Stuart who had put his younger sibling on as an apprentice when he was superintendent at Long Island in 1989 and history was about to repeat.

First, however, he had to sell the idea. Stuart knew what it looked like from the



The PK crew (from left): Damian Conway, Ben Durnin, Daniel Price, Joshua Hunter, Lachlan Hinde, Andrew Brabner, Jake Leary, Rhys Hensel, Mark Harkness, Ryan Thompson, Thomas Burridge, Harry Battersby, Matt McClintock, Chris Riley, Brett Wilkinson, Euan Muir, Nathan Ambler, Murray Williams, Peter Starpins, Jeremy Clarke, Shaun Blake, Jake Needs, Tim Vegt, Chris Campbell, Matt Mitchell, James MacKechnie, Jay Yates, Leon Reihana. Absent: Leigh Woods, David Hastings, Steve Hadjiloukas, Thomas Brooking

#### SETTING THE ON-COURSE STANDARDS – THE PKCGC MAINTENANCE FACILITY

assignments director of courses Glenn Stuart was charged with even before and upon arriving at PKCGC, was reviewing and overseeing the redesign and construction of the new maintenance facility. A new compound had already been designed and approved by council, but with the scope of the North and South course redevelopment evolving, Stuart knew from the get-go that changes were needed.

ne of the very first

A working group was formed and after lots of investigation into current and future needs the club resubmitted plans, the end result being a facility 40 per cent bigger than what was originally planned. Stuart and the club's maintenance manager Jamie Svennson, plus experienced course staff member David Hastings, successfully project managed the facility in conjunction with the working group. Construction began in April 2016 and was completed in March 2017.

Five concepts were central to the new facility's design – adequate equipment storage space, safe goods storage, operational safety, creating mass efficiencies and staff comfort. Drawing on his 30 years in the industry, Stuart set about designing a shed at a scale that could cater for the redevelopment and future maintenance needs. Machinery traffic flow plans were mapped, the latest technology investigated and ideas and inspiration from visits to other maintenance facilities in Australia and overseas were incorporated.

"This was the one opportunity to get it right for the club," explains Stuart. "To take the things that frustrated me, didn't work or had never got quite got right at past facilities I had worked in and improve on

them. We wanted a building that the guys could operate in efficiently and safely, that would provide them a level of comfort and something they would be proud to call their home base.

"We wanted to ensure the team could easily move equipment onto the course and put all their energy into performing their tasks, because at the end of the day that's where the team's best work is performed and what we are judged on daily. It was all about maximising efficiencies and safety in and around the facility so we could collectively spend maximum time working on the courses."

Features of the new facility include;

- A tilt concrete panel construction, with double side doors and full perimeter access. Forty staff car parking spaces.
- Designated machinery spaces and traffic flow plan so staff can get machinery in and out quickly and not have to move machinery to get access.
- A lunchroom that can cater for up to 50 staff. Stuart knew at the start of the project that the crew would eventually number around 40, so the lunchroom was designed to comfortably fit a large crew. In addition to that, the lunchroom is fitted out with two or more of everything at each end of the room – fridges, dishwashers' bench and cupboard space, hot water billies, 80-inch TV screens, umpteen toasters, sandwich presses and microwaves etc...
- Separate offices for each of the key senior staff (which they designed themselves). Maintenance facility also has a reception and work station area.
- Staff amenity areas and workshop area fully climate-controlled.

- Two sets of locker rooms normal locker room and a hazardous goods/ fertiliser locker room, each with separate showers and built on opposite sides of the compound so there is no risk of cross contamination.
- Machinery washdown facility and filling station that can handle multiple machines. Up to eight mowers or items of plant can be washed down at any one time, or four sprayers filled at once. Fitted out with retractable air and hose reels and electronic water delivery gauges so staff can pre-set amounts.
- Large fertiliser and chemical store with plenty of air movement that is well away from staff amenities.
- Three fuel tanks five staff can fill up plant items at any one time.
- Four sand/soil storage bays.
- Task Tracker staff management system.
   Large 80-inch TV screens in the lunchroom display daily assignments for each staff member and machinery allocation (connected to the workshop as well). In the future Stuart is also hoping to introduce paperless product application sheets, with touchscreen technology for staff to view and sign off.
- Two large mezzanine floors to maximise air space for storage and double as an additional staff amenities area.

In total, the PKCGC shed cost \$2.25 million. And there's more to come. The club has already undertaken preliminary investigation with council to install a new entry road into the facility from nearby Skye Rd. Plans will also incorporate a greens research nursery and vegetation plant house facilities and storage within the adjoining areas.





The PKCGC brains trust and Glenn Stuart's right hand men - from left Ben Payne (North Course superintendent), Jeremy Clarke (North Course assistant), Mark Harkness (South Course assistant) and Shane Stuart (South Course superintendent)

outside – 'Has he just put his brother on because it was easy?'. The club questioned him as well, but more to do with whether they could work alongside each other. They had and they could and more importantly they knew the boundaries – when the sibling stuff stopped and the work stuff started. At the end of the day, his brother had the experience and very broad skill set he was looking for, in particular his exemplary work ethic which would be displayed at numerous points further on in the project.

The third part of the equation was appointing a North Course superintendent. In Shane and Marcus, Stuart had two experienced professionals. He now needed someone who he thought could help elevate the maintenance standards to a level that he was wanting to implement. New Zealand-born Ben Payne would be that person, coming across from Metropolitan where he had worked previously under Stuart as foreman.

Employed initially as the superintendent charged with maintaining the in-play holes on the North Course before moving to the growin role during its redevelopment, Payne had all the qualities to instil the industry-leading standards Stuart wanted the crew to buy into. He was well organised, extremely polished and had a real eye for detail and presentation, together with a passion for Sandbelt golf history and producing firm and fast greens. As well as possessing a different skill set, Payne also had a completely different personality to that of his South Course counterpart. As the

saying goes 'opposites attract' and the two have, since starting together in October 2015, become a dream team in the eyes of Stuart.

With that key trio in place, Stuart's focus was then on the next tier down. Mark Harkness (ex-Kingston Heath and Victoria) joined as assistant on the South Course, mirroring the qualities of Payne from his years on the Sandbelt and his involvement with numerous tournaments. Also joining the South Course team was foreman Jacob Burridge who came across from one of



Stuart has regularly added talented young up and coming greenkeepers into the PKCGC crew

Adelaide's great Sandbelt courses Kooyonga. Burridge would eventually rise to be North Course assistant, before departing in 2018 to become assistant superintendent at Victoria Golf Club. Jeremy Clarke, another Kiwi with past construction and grow-in skills, is now the current day North Course assistant.

"All these key staff members have exemplary character and are building their talent and experience to one day realise their dream of becoming a superintendent," says Stuart. "The PK experience has certainly accelerated their learning and broadened their already impressive skill set."

#### **QUALITY PEOPLE**

Presently, the PKCGC crew sits at 35 (increasing to just shy of 40 in the coming months) and throughout the redevelopment Stuart has continued to mould and shape his team and develop a structure that works. Other key staff and departments include;

The workshop team comprises head turf equipment technician Euan Muir and assistant Leon Reihana. Muir worked with Stuart previously at Metropolitan and joined PKCGC in April 2017. Previous technicians Stephen Hall, Chris Hyde and Rowan Cakebread also made some significant contributions to the current success of the workshop operation. As Stuart notes: "In the heart of building where the equipment turf technicians operate from, we saw that as more than just a mechanics workshop. We

#### THE RIGHT EQUIPMENT FOR THE RIGHT JOB

n order to maintain the redeveloped North and South courses to their peak, it's no surprise that the Peninsula Kingswood maintenance facility is extremely well-equipped.

When Stuart first started looking at machinery, he told the Board that given what was trying to be achieved and the exemplary standards that would ultimately be demanded, specific items of plant suited to specific tasks would be required. That was particularly true considering some of the quirky shapes and contours created by the course architects.

The other main challenge and strategy was to operate with old and existing equipment across both sites and to introduce a staged approach to update and include new plant that would ultimately be best suited to producing the desired surfaces and presentation standards. Very often equipment would be transferred between the two sites to perform the specific task required at hand based on necessity.

PKCGC's equipment technicians had a hell of a time maintaining old equipment in the early days of the redevelopment. Construction is brutal on equipment, with machinery longevity often compromised and life span severely reduced.

Early on, Stuart recommended to the PKCGC Board a four-year, \$4 million equipment update and replacement plan during the construction phase, as well as a future strategic approach to equipment replacement once construction had finished. The initial four-year plan was set up as follows:

 Year 1: Purchase of equipment required to assist with construction.

- Year 2: Purchase and introduce plant items to commence the polish work on the completed South Course.
- Year 3: Purchase and introduce plant items to commence the polish work on the completed North Course.
- Year 4: Replace items of heavy earthmoving type gear that operated throughout the project and was in need of replacement after the project was complete.

The future strategic recommendation included a 10-year equipment replacement plan that the finance committee could include in their business operational plan.

As far as the actual equipment on the ground, rather than aligning with one manufacturer, Stuart deliberately chose the best machine for each job. As such, you'll find almost every major equipment brand under the PKCGC maintenance facility roofline and the club has worked extremely hard on developing and maintaining strong relations with all equipment suppliers.

"We are a rainbow-coloured shed one might say," quips Stuart. "The priority for me was getting machinery, regardless of their colour or manufacturer, that was perfect for the specific job and would produce the best possible result or surface. The club strongly supported that approach which was pleasing.

"An example of that is with the greens mowers. The Pure Distinction greens grass variety we chose can be aggressive in its growth habit and we wanted to present the best possible surface and manage it aggressively with a site-specific mower as well. We only walk-mow the greens, so we ended up going for a fleet of Jacobsen

Eclipse 2 walk-behind mowers. They are battery operated and we ended up putting a four-battery system on them so we could get increased run-time (12-plus greens) out of them. They are fitted with 15-blade reels – the highest blade count on a greens mower – and you can dial and change your speed and clip rate as needed.

"That level of tech and the quality of cut was really important to us and it was the only mower on the market that I felt could do what we needed it to do on that surface. We trialled every manufacturer's mower for this purpose before ultimately choosing the Jacobsen Eclipse 2. So, we made them a high priority, given they were for the greens, and the results have been outstanding.

"As it has turned out we have a real mix of equipment. We have Jacobsen as our main cutting equipment units supported with some powerful and quality Toro 7000 fairways units. We have Toro items that support our renovation programmes (four Pro Cores), boom sprayers (four) and material handling/topdressers (two). We have a strong fleet of 30-odd John Deere Gator utility vehicles that have stood up to the challenge and robust work involved in construction.

"We have also, where possible, bought equipment that has industry-leading technology, is comfortable, easy, efficient and safe for staff to use. For example, all our hose reels are automated, so staff are not having to drag hoses around manually. Spray tanks all have automated hose reel retraction and so on. Most equipment items have multiple units to ensure that there is minimal interference with members out in the field."



The priority for Stuart was getting machinery, regardless of manufacturer, that was perfect for the specific job and would produce the best possible result or surface

OTO. DIVOO

wanted something that resembled a V8 Supercar workshop – something clean, sharp, professional and efficient, an area where there's not grease, oil and the like everywhere and that sets the new standard of our operation and vision for the main operational hub of the facility. Euan spent a lot of time setting the workshop up and together with Leon have not only maximised their efficiencies within their operation, but really setting the standard for equipment care and understanding for the staff to perform a high level of course presentation.

- A dedicated vegetation crew of five headed by Andrew Brabner with support from consultant Kate Torgersen. Brabner started the vegetation role on his own and has played a significant role in the many successes that have been achieved in the out of play areas. Peter Starpins fills the clubhouse gardener's role and entry detail manager.
- With \$4 million worth of new irrigation system across both courses, there are soon to be two dedicated irrigation technicians.
- Stuart also has an inside (GB&S Robert Halsall) and outside agronomy support team to provide technical assistance when required.

 PKCGC also manages the maintenance contract at the old Kingswood course site for developers ISPT, led by experienced course team operator David Hastings.

Stuart has also made sure that over time there has been a regular influx of talented young greenkeepers into the crew who could keep pace with the rigorous demands of the project. Among them are past NSWGCSA Graduate of the Year Jake Needs and current AGCSA Graduate of the Year Thomas Burridge, who has followed in the footsteps of his older brother and moved across from Kooyonga. Tim Vegt has also been recently employed as course foreman on the North Course, coming over from Heidelberg.

"The combination of all these people and their skills as individuals has helped to create the level of success we have had to date and enabled us to proactively position ourselves at the forefront of all agronomic challenges," says Stuart. "As a collective they are a wonderful group of quality people continuously improving and stepping up to help PKCGC deliver on its vision.

"They have all been pivotal, but especially our superintendents Ben and Shane who have been nothing short of amazing and allowed me to focus on the bigger picture. Despite being such different people, they hit it off from the get go and have helped

to drive a cultural change within the whole crew. They have involved themselves in that change since the start and have ensured that the crew works as a single unit to deliver the best results under the club's motto of 'Pure Excellence. No Compromise'."

#### HARD YARDS

For both Shane Stuart and Ben Payne, like their boss, their involvement in the project has been almost career-defining. It has tested their mental and physical skills daily and challenged them to develop on multiple levels. While unrelenting at times, both agree that it's been the best thing they could have ever done and are now looking forward to seeing how good PKCGC can become.

Since reuniting with his older brother, Stuart has literally lived and breathed the redevelopment. When he was appointed, he moved into one of the on-site houses, playing the South Course superintendent, grow-in and caretaker role all in one. He literally had to hit the ground sprinting as construction was already six months progressed.

There were many challenges along the way, but one in particular stands out. As the new irrigation system was progressively being installed and holes completed, the mainline would be capped at each point then recommenced when the architects had



completed each hole. Late on Christmas Eve 2015, the mainline on 3 South blew. At that stage 13 greens were at varying stages of establishment – some had literally been seeded a few days earlier, while others were about eight weeks old.

For 11 hours on Christmas Day, Stuart drove around those 13 greens with a 2000-litre spray tank in tow and hand-watered greens to keep them alive. He was back in again on Boxing Day doing the same until the pipework could be repaired. It was a critical moment during the early part of the redevelopment and demonstrated the work ethic and commitment that had been forefront in the mind of his older brother when he had recommended him for the job.

"I have learnt so many things about myself being part of this project," says the younger Stuart. "I have learnt many new technical skills across a range of areas that you think as you get older you may never achieve or never thought existed. It's really driven home how important it is to continue to evolve and reinvent yourself. Above all, it has reminded me of how great an industry we work in and the immense satisfaction that comes from what we do."

For Payne, who prior to joining PKCGC had been employed at Metropolitan since 2011, rising to be foreman, the roles were reversed slightly. With the North Course redevelopment a year from starting, he had the initial challenge of teaching and training the staff on the new elite standards of course maintenance and presentation that had been the new vision for PKCGC. Payne admits it

wasn't easy to alter the existing standards and creating new levels were a big challenge for the staff to not only understand but maintain and deliver on.

To aid that, in 2016 all PKCGC staff were taken across to Kingston Heath to take in the 2016 World Cup of Golf. Superintendent Hayden Mead kindly spoke to the team and explained how they prepared the course at the elite levels for that event. It proved very helpful for the team to get a handle on what they were trying to achieve back at PKCGC.

"The project has been relentless, but I am so fortunate to have been involved," explains Payne. "In the four years here I have learnt so many different ways of construction techniques, grassing programmes, grass types, grow-in methods and challenges, product usage, irrigation and drainage installation and too many more to list.

"I know that I have much more to learn as the facility matures and I'm particularly looking forward to playing a key role in implementing the course presentation aspects which we are now entering into. More importantly I'm really excited about furthering the great culture we have here. Not only do we want to create a team that has elite skills, but also a team that enjoys each other's company, enjoys coming to work and that is proud of what they present.

#### **DEMAND THE BEST**

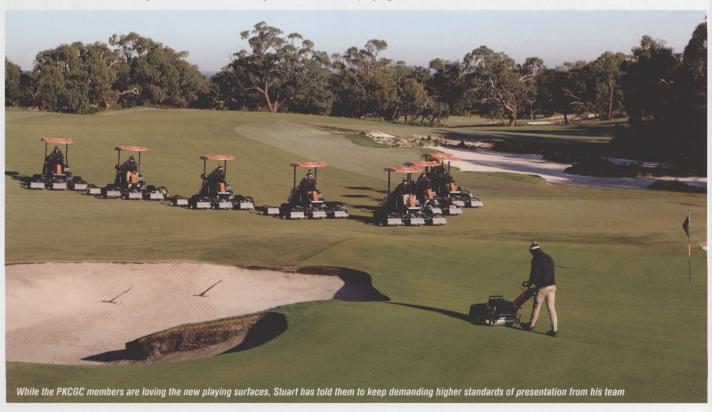
And that's the next challenge for Stuart, his deputies and crew. With the construction phase now officially behind them, they can really start to dial in the playing surfaces

and take them to that next level they so passionately talk about. Due to the many demands of the redevelopment they haven't had the opportunity to focus on that, but they are now ready to pull that trigger.

"When we opened up the last green (10 South) in September, it was so satisfying," says Stuart. "It was great to get to that point, not that we could celebrate it much. But for us it signified that the construction phase had come to an end and we are now into official fine-tune and detail mode which is where the real strength of this crew lies.

"The members love what they are seeing which is great. But I keep saying to them, don't accept what you are seeing now. If we want to have aspirations of being the best in the industry, then you should demand nothing less than perfection. If you want the best out of me and the crew, you need to keep demanding high. The more pressure you put on us, the better we will perform.

"I have grand aspirations for this place and as a team we are driven towards that. We think that with the group we have and what has been done, we can achieve those industry-leading standards. I recall saying to CEO Heath Wilson, then president Peter Sweeney and Board members before we started, that my vision was that if we could have the bunkers and green design of Kingston Heath, the greens design and firmness and vegetation quality of Royal Melbourne and the conditioning of Metropolitan, we would be well positioned to be in the conversation with the best clubs in the Sandbelt." W





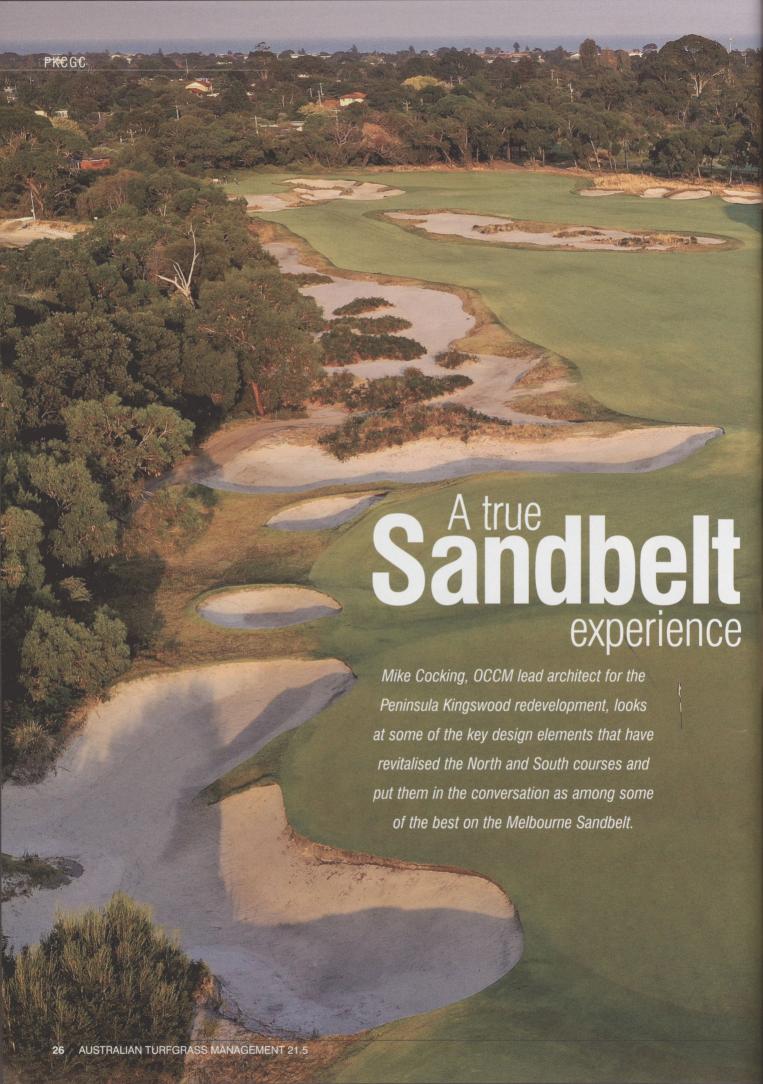
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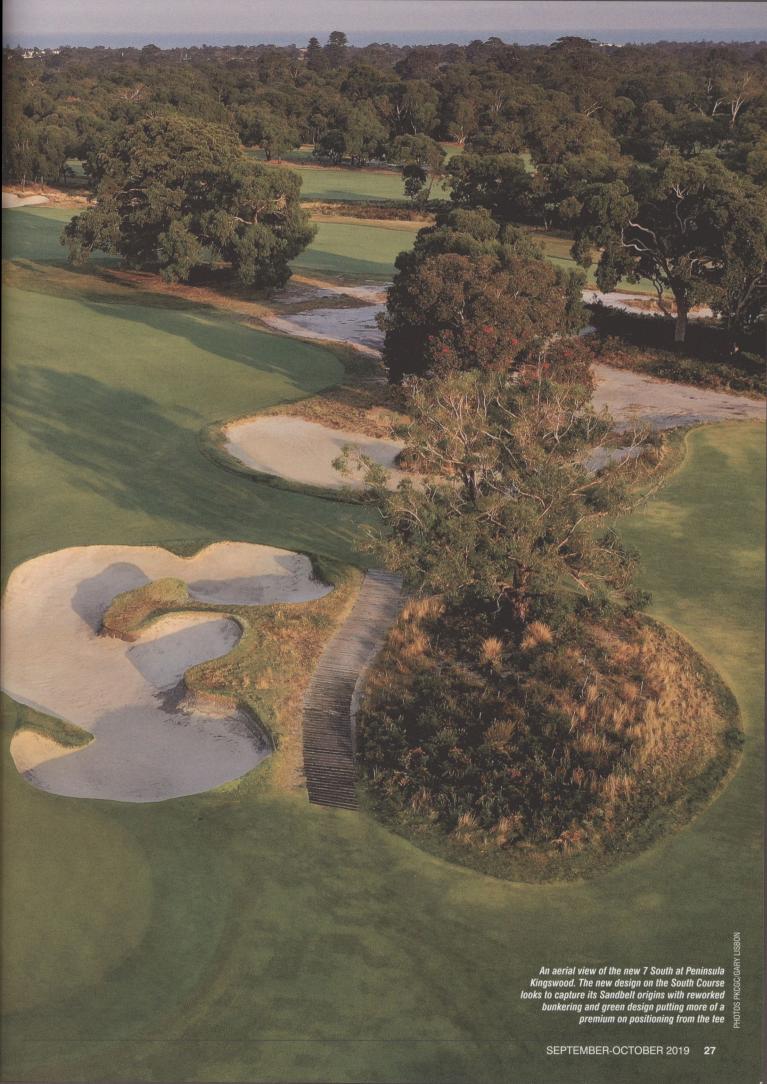
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The Melbourne Sandbelt hasn't seen a project of PKCGC's scale since the 1920s, the club putting into four years what many other clubs can take decades to implement and refine. Pictured is 8 North



ew cities in the world can boast a greater concentration of world-class golf than Melbourne. More specifically, the little pocket of land in the southeast we know as the Sandbelt. This gently undulating sandy strip of ground is the perfect environment for great golf and at the southern tip of this region lies Peninsula Kingswood (PKCGC).

Peninsula Kingswood is the first of its kind in Australia – the merger of two proud, established golf clubs, Peninsula Country Golf Club and Kingswood Golf Club, each a century old. The two clubs started discussions around a possible merger a few years prior to formally announcing it in September 2013.

Cleverly, both clubs were able to recognise the pattern moving forward – slowly dwindling memberships, increasing maintenance costs and, in the case of Kingswood, several boundary problems. All of this in a highly competitive environment where other Sandbelt clubs had significantly higher operational costs which allowed for better course conditions. As difficult as the decision was, the two clubs felt a secure future lay in a merger.

My first meeting with the club and talks around a possible redevelopment started back in 2013 with a coffee and Peter Sweeney, Kingswood's then president. At that point the works were really only focusing on a

An aerial view of the 13 and 14 South holes. OCCM championed the use of short grass to link tees into the previous fairway or green surrounds to create a seamless link between holes new irrigation system and possibly a handful of tees, but the more often we met and talked, the more we realised this wasn't really going to get the job done. After a few more months discussing and refining a potential brief, OCCM were engaged as the club's architect and we immediately started work on producing a masterplan for the site.

While both North and South courses were very good, neither had quite lived up to their potential. The land the courses are laid out over rivals the best on the Sandbelt, so why couldn't the courses be in the same conversation too? There was also an issue in that Kingswood was consistently in better condition than the Peninsula courses, so when the concept of members from both clubs coming to Peninsula was mooted, it meant conditioning needed to improve.

#### WHILE THE HOOD'S UP...

The primary aim at PKCGC was to create a true Sandbelt experience. Tight firm fairway turf and, most importantly, firm and fast greens and this became the main focus of the early phase of the redevelopment. Of course, as we worked through the process it became clear there were other areas requiring improvement and by this stage the merger had been approved and a good budget was available for the development. From there the scope continued to morph and rather than just focusing on improving conditioning, as we moved into construction the club had less attachment to what had existed and instead started to ponder what was possible.

I clearly remember a Board inspection we had about six months into the project to look at progress on holes 11 to 17 on the South,



which were tackled first. To that point we'd been pretty faithful to the masterplan. But the second the group saw the new greens and bunkers, the more open landscape and, in particular, the putting surfaces, the gloves came off. Their comment was, "Just make it as good as it can be... we're not coming back!" So from that point onwards each hole was looked at with fresh eyes and the question asked if there was anything we could do to improve it? In most cases there was.

This wasn't to say we were trying to change the style of the courses. Instead, it was about making the very best version of PKCGC. We wanted the courses to be in the same conversation as Royal Melbourne, Kingston Heath, Victoria and Metropolitan. Not necessarily unique, so much as taking the best parts of all those courses and adapting them to the Peninsula site.

Sandbelt golf is known for its fabulous bunkering, the quality of the greens and the timeless strategy of the holes. Fairways are wide and easy to hit, but greens are well bunkered and angled to favour play from a specific part of the fairway. Usually right where you need to play from there is a bunker, so to gain the best angle you need to play close to trouble. Play away from the hazard and the shot in becomes more difficult.



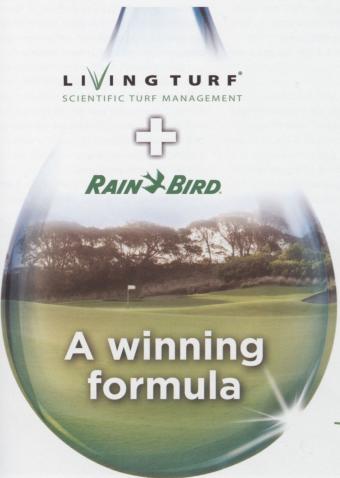
From the start of the redevelopment, vegetation management and revegetation were critical components of the works. A significant budget was devoted to vegetation removal and then the follow up planting of 500,000 trees, shrubs, grasses etc. Pictured is the reveg area on 3 North

When the greens are firm and fast, the rewards for being in the right position (and the penalty for being in the wrong position) are amplified. This simple strategy is at the heart of most of our best holes around Melbourne and is clearly evident on the new North and South courses.

#### THE GREENS

The greens on the Peninsula courses had never quite performed to the same standard as those closer to Melbourne, or, even next door for that matter at Long Island, who week-in week-out had some of the best putting surfaces going around. (Ironically, we were lucky enough to attract the man largely responsible for those surfaces – Shane Stuart – across about six months into construction as South Course superintendent).

The Peninsula greens had been constructed using a mixture of techniques and were of varying ages... old push ups, new push ups, old USGA style greens and 10-15-year-old USGA greens. Despite several attempts to create a pure bentgrass surface, all had become a mixture of *Poa annua* 



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The North Course, playing over sandier and more undulating ground, has some of the best examples of heathland vegetation of any course in Melbourne. Pictured is 1 North

and bentgrass and generally incapable of providing the firm, lightening quick surfaces we were hoping for.

An old antiquated irrigation system and use of treated effluent water had also hindered the greens performance. So as part of the redevelopment, a new state-of-theart irrigation system was installed on both courses along with a separate, cleaner water supply to the greens (see more, page 14).

As the project was gaining momentum and construction was looming, Glenn Stuart joined the team as director of courses and we started to explore options for grasses. He was particularly impressed by Pure Distinction which we had used a few years prior at Royal Canberra and we also liked how it played and how it looked, with the lighter colour and fine texture a nice contrast to the Wintergreen fairways. It has been an impressive grass and for most first-time visitors it's the main talking point, but few understand that it's the combination of the grass and construction technique which is proving so successful.

Around this time, we also started working closely with agronomist John Neylan, exploring different construction techniques to that which had been used around Melbourne as a way of getting a firmer surface (read more, page 34). For many years, some in the industry, ourselves and Glenn included, had become disillusioned by the USGA construction method and wanted to get back to something more resembling a push-up green and the use of finer native type soils.

When greens are firm and fast, the rewards for being in the right position (and the penalty for being in the wrong position) are amplified. This simple strategy is clearly evident on the new North and South courses.

Pictured is 8 North

While the process was complex and required importing sand due to the quantities required, we essentially created a modified California method, which worked on attaining at least one-metre of sand under each green – 500mm native and 500mm imported. While unlikely to regularly run water, we also installed sub-surface drainage as a precautionary measure. The result has been greens capable of providing surfaces as firm as any course in the country, creating that wooden-like thud when the ball hits the green.

#### THE TEES

While the original plan didn't include a complete rework of tees, it's a great example of extra works being added 'while the hood's up'. The original plan had just a few extra tees built here and there to add some variety, but once the project was in full swing we quickly realised that it would be easier and ensure a better product if every tee was reconstructed.

We have always liked free-form style tees, with Kingston Heath having some of the best examples, so this meant we had a chance to create a consistent look across the two courses. We have also often championed the use of short grass to link tees into the previous fairway or green surround to create a seamless link between holes and rebuilding the tees meant we could achieve this.

#### THE BUNKERS

While there was a mixture of bunker styles across the property and a few fundamental issues such as not enough sand, poor drainage and accessibility difficulties, one of the biggest issues was their scale. My design partner at OCCM, Ashley Mead, and I had looked closely at the size and shape of the bunkers and compared them to the best examples of bunkers on the Sandbelt – Kingston Heath, Royal Melbourne, Victoria, Metropolitan and Woodlands. Not only were they inferior from a shaping point of view, but the scale was all wrong.

One of the great illusions at Royal Melbourne is the relationship between the greens and bunkers. Most (incorrectly) think that Royal Melbourne has enormous greens, but they're actually all pretty standard in size. The illusion comes with the expansive surrounds, particularly the bunkering which helps give the greens their incredible scale. This was something we were keen to replicate with the redesign, to the point where we filled our construction office with aerials from all the best green complexes around Melbourne.

As mentioned earlier, once the project was underway and holes were closed, the Board were less fussed about retaining them in their current state and simply wanted the best possible result. This meant we were able to review not just the size or shape of bunkers, but their strategic influence and where they were positioned.

So basically, we could start with a blank canvas and build the best version of each



hole that we could. Whether it changed a lot from what was previously there didn't matter anymore. This was a key moment in the project which gave us, as designers, total freedom and ultimately has led to a far more successful outcome than if we'd been hamstrung by what the plan indicated.

#### CREEKS AND STONEWORK

An old plan of the original South Course showed a number of creek lines running through the property. Almost every hollow or low point was at some point a stream, but over the proceeding 80 years they had almost all been piped and filled. While there were a few creeks running through the South, they weren't in great condition and had become difficult to maintain, impossible to play out of and some resembled more of a drain.

How the creeks evolved and helped give the South Course its look and feel is another good example of how the creative process worked with the club and the license they gave us to expand on the original concept.

We were talking with a local stonemason about an idea we had to make the creeks look like they were older, more rugged, almost like an old ruin and at the same time help structurally retain their sides. All this came from a photo of the 13th at Augusta National, where rockwork helps retain the

banks just in front of the green. It's a view that no-one ever sees on the TV broadcast, but an obscure photo became the basis for the creek concept at PKCGC.

The first section of rockwork was used on the 12th South tee complex, one of the first holes to be built. The steep ground suggested a retaining wall of sorts would help maximise tee space and the beautiful stonework was an instant hit with the Board. The stonemasons loved the work too as the rugged character we were after was totally different to their work in the residential market where straight lines were more important.

From this sprang the idea of a new creek just in front of the tee, uncovering one of the original creeks and this too became a hit with the club. As the project grew, more and more opportunities presented themselves to expand on the creek concept beyond what we had originally designed – 1, 2, 3, 4, 5, 6, 9 and 10 South and even a touch on 17 North.

#### **VEGETATION**

The Peninsula site is a big property. At almost 350 acres, it's two-and-a-half times the size of Kingston Heath, yet for many years was maintained with roughly the same number of staff. Over the years the areas off the fairways became neglected and while there are some fantastic examples of remnant vegetation,

they didn't have the time or resources to manage anything not directly in the line of play. As a result, weeds and introduced plants had taken over in many places.

As a general rule we try and stay faithful to the indigenous vegetation on the site. Not only do the plants and trees tend to do their best in an environment they've adapted to over thousands of years, but by remaining faithful to local flora it helps give a golf course a better sense of place and ensures they have a unique look and feel.

Early on we were keen to try and return as much of the site to its original state as possible, almost taking the vegetation back to the way it must have looked prior to the course being built. This meant removing a lot of the non-indigenous trees and shrubs plus some large-scale slashing and burning of weed-infested areas. To offset the removal, we also planned some fairly significant revegetation – particularly on the South Course where we wanted to create more of a Sandbelt experience than a parkland one. This meant propagating and planting many hundreds of thousands of indigenous grasses and heathland plants.

After completing our overall vegetation plan, we engaged the services of Jeff Yugovic who is one of the most knowledgeable ecologists in the country when it comes





to Sandbelt vegetation. With the use of geological and historical vegetation mapping and many hours in the field, we established the original 11 EVCs (Ecological Vegetation Classes) which exist on the site. This became the blueprint for our revegetation and by overlaying our plans on his we could establish exactly what should be planted where and to what densities (read more, page 38).

## NORTH AND SOUTH... MAYBE A COMPOSITE

While the intention was never to create two distinctly different designs, the nature of the site suggested that the North would always feel a little different to the South. The North, playing over sandier and more undulating ground, with perhaps the best examples of heathland vegetation of any course in Melbourne, was always intended to be a pure Sandbelt experience. Firm and fast, with tilted greens, expansive bunkers, wide fairways and roughs featuring that distinctive combination of sand, native grasses and heathland vegetation that the region is known for.

Since the original Peninsula course was developed into a 36-hole facility in the late 1960s, the South Course was always regarded as the longer, more difficult test. Built over flatter ground than the North, its open, more manicured look often had it labelled (incorrectly) as a parkland.

The new design looks to capture its Sandbelt origins. Greens and bunkers were built in a style and scale which closer matched its more famous neighbours, reworked bunkering and green design putting more of a premium on positioning from the tee. Vegetation was removed to open up views across the course and many thousands of plants and grasses added to complement bunkers and tee carries. Perhaps the most unique characteristic of the new design, has been opening up of the original creek lines, which proliferated the site and now form a key part of the design on at least six holes.

We're often asked about the opportunities for a Composite Course and there are some really good possibilities. Perhaps, though, there are too many, with up to 20 different routings at last count! My favourite includes a finish around the clubhouse with the 18S, 1S, 17N and 18N as the finish. The difficulty of course is that you can't cherry pick the best holes on the property and turn them into a cohesive 18-hole layout so there are always some compromises.

#### **EXCITING FUTURE**

The Melbourne Sandbelt hasn't seen a project of this scale since the 1920s and, quite probably, we're unlikely to ever again. In some ways we've put into four years what many other clubs have had decades to implement and refine.

Like any project of this kind, there are a great many people who contributed to the outcome. Given the scale of the works, we ended up with a very large team involved with the project including OCCM staff, plus contractors and ground staff. This included my design partners Ashley Mead and Mike Clayton, our own shapers (Jason McCarthy and Nick Henry), project manager (Rob

Swift) and up to seven PKCGC groundstaff who worked under OCCM to assist with construction.

It is essential to have a great relationship with the course management and staff and we were fortunate not only to have an incredible team at PKCGC, but we had the benefit knowing most the guys for a long time, having worked elsewhere together and even travelling away on various study tours overseas. We're very fortunate to report that after four years we're all still friends!

At the very start of the project we discussed what the goal should be for the redevelopment. Everyone had their own idea of what success would look like – is it a high ranking, financial success, member desirability? I guess I thought that rather than focusing on specific numbers, long-term success would come if, at the end of the day, the two courses were in the same conversation as the best on the Sandbelt. Whether one is better than the other is almost irrelevant. Everyone will have their favourite, but at least if you're in the conversation I thought everything else should fall into place. So far that seems to be the case.

While the results thus far have been very satisfying, there are still improvements to be made. It's important to always be looking to improve the product and we're part of the long-term plan to continually refine and improve the courses. This is perhaps the most exciting part for us. While it's lovely to hear the compliments now, we're excited to think just how good the product could be with a few growing seasons under the belt. While it's lovely to hear the growing seasons under the belt.

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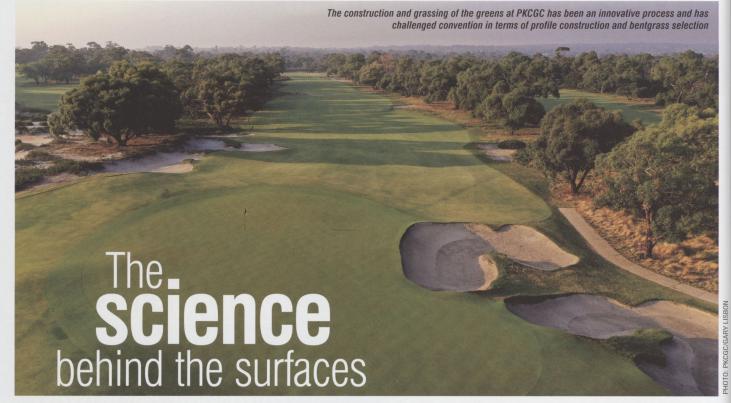
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he putting surfaces at the redeveloped Peninsula Kingswood Country Golf Club (PKCGC) are setting a very high standard and it is doubtful that any golfer that plays the courses even thinks about how they were achieved, let alone understand the numerous elements involved. They may associate the excellent surfaces with the new bentgrass variety chosen or the excellent greenkeeping practices of director of courses Glenn Stuart and his team, but are unlikely to understand the detail behind the greens construction process.

The finished product the golfer experiences involves numerous basic elements including surface contouring, profile design, sand selection and bentgrass selection. While these elements are critical, there is also the maintenance practices including machinery, manpower, the skill of the greenkeeping staff and understanding the performance characteristics of the profile and turf. If any aspect is deficient it is unlikely that the playing surfaces will achieve the expected high standard.

From my perspective, the greens at PKCGC are a product of detailed research including the selection of the rootzone mix, designing the profile and selecting the bentgrass. It wasn't a result of guess work or popular opinion, but a lot of work put into understanding the desired outcomes and then using the available science to make the most informed decisions.

The overall objective at PKCGC was to develop greens that had the characteristics

ATM expert columnist John
Neylan, who played a key role
as an agronomic consultant
for the Peninsula Kingswood
redevelopment, outlines the
lengthy and detailed research
and investigation that went into
ensuring the new greens provide an
optimum playing surface.

of the best of the Melbourne Sandbelt golf course greens. That is, they were to be firm, dry and fast and not to be perched water table profiles. It also meant that the greens were going to challenge convention with several innovations. This article reflects two components of the project and the detailed analysis and data collection associated with selecting the rootzone sand and deciding on the most appropriate creeping bentgrass cultivar.

### SAND SELECTION AND THE PUTTING GREEN PROFILE

The requirement of putting surfaces has always been about being firm and reasonably fast. In the AGCSA's 2012 benchmarking study, it was determined that the elite level clubs provided greens that were firmer, drier and smoother and were considered to be superior putting surfaces.

The issue of surface firmness and how to achieve it has become a frequent discussion point in recent years. With the focus on surface hardness, the way greens are being constructed has been questioned and whether there should be a return to the finer sands and loamy sands that are the basis of the Sandbelt greens. The AGCSA study mentioned demonstrated that a sandbelt green constructed using a fine loamy sand soil with a profile depth of several metres, consistently provided firmer surfaces throughout the year.

#### SAND RESEARCH PROJECT

Based on my observations over many years, it was apparent that there was much that was not known regarding sand type, moisture retention and its relationship to stability and hardness. For this reason I commenced a research project that examined the influence of proportion of silt and clay, moisture retention, moisture release, particle shape and particle size distribution and their effects on surface hardness (reported in ATM 16.5). This research had been well underway at the time the PKCGC project was in the planning phase and the results of the research became a key source of information in deciding on the sand selection.

The research involved selecting eight different sands representing manufactured sands commonly used in greens construction, coastal dune sands and a loamy sand that

is typical of the Melbourne sandbelt. The sands varied in particle size distribution and the proportion of fines. The testing regime involved saturating each of the profiles and then once drainage had ceased a series of measurements was undertaken as the profile dried out, including;

- Volumetric water content:
- Surface hardness using the 0.5kg Clegg Impact Soil Tester (CIST). The hardness readings were taken at regular increments that related to the rate of reduction in soil moisture.

The conclusions were that sands that have about 3-4 per cent by weight of silt and clay tend to produce a harder surface and even as the sand dries the firmness is maintained at higher levels than the sands with very few fines. With the finer sands, it is the frictional forces produced by the smaller particles fitting within the voids of the larger particles that maintain the harder surface.

The sands with no fines had maximum surface hardness when the moisture content was near field capacity and this firmness diminished relatively quickly as the sand dried out. The influence of moisture on the sands with a low silt and clay content most probably assists in 'holding' the particles together or, more accurately, when the voids are filled with water there is less opportunity for particle displacement. This characteristic of the sands with a low silt and clay content makes them difficult to manage as a consistently firm surface. The 'ideal' sand had the characteristics detailed in Table 1.

Based on this research, there were 11 sands tested to determine what sands were commercially available and whether the selected sand could be produced in sufficient

quantities to construct 36 greens and practice putters at PKCGC. Of the sands tested, a sand based on the fine topdressing sand from Rocla (now Hanson) was selected.

While the sand had the desirable characteristics for producing a firm surface due to the fine soil particles present, it was also important that all of the other physical characteristics were considered such as capillary porosity, aeration porosity and hydraulic conductivity. The other aspect was whether a consistent sand could be produced over the project's duration.

### SAND SELECTION AND QUALITY CONTROL

Once the preferred sand was identified, discussions were undertaken with Rocla regarding the practicality of producing the sand over the potential life of the project. It was important for the consistency of the profiles that each green was constructed using a sand that was similar to the selected material regardless of whether it was in year one or year four.

The sand was based on the fine topdressing sand and there were several samples tested before establishing the benchmark sample and the acceptable range for future testing (Table 2). The skill of Rocla's Langwarrin quarry manager Jack Jaskolowski was critical in coming up with a blend that was expected to be achievable long-term. Jack's knowledge of the raw materials and how to blend them was a key factor in being able to achieve such an ambitious process. It was decided to test every 700-tonne stockpile for approval and before it was delivered to site. From July 2015 through to January 2019 there were about 60 samples tested.

### TABLE 1: REFERENCE SAND SAMPLE FROM SAND RESEARCH PROJECT

Sieve size (mm)	Reference
	sand
2.000	0
1.000	0.3
0.500	5.4
0.250	36
0.150	45.3
0.053	11
Pan	2
Total fines (<0.250mm)	58.3
Fineness modulus	0.87
Total Porosity (%v/v)	35
Air-filled porosity (%v/v)	11.5
Capillary Porosity (%v/v)	23.5
Saturated Conductivity	
16 drops (mm/hr)	280
Saturated Conductivity	
32 drops (mm/hr)	190

### TABLE 2: BENCHMARK SAMPLE AND THE ACCEPTABLE RANGE

Sieve size (mm)	Acceptable range
2.000	0.1
1.000	0.1
0.500	3.4 – 4.0
0.250	32 – 41
0.150	39 – 53
0.053	8 – 14
Pan	1.4 – 2.4

The primary objective was to create a profile based on the 'best of the Sandbelt' greens. The key elements were the physical characteristics of the sand, the depth of the profile and surface shape and drainage. Pictured is the 18 North green complex





To realise the vision for the PKCGC greens, a lot went into understanding the desired outcomes and then using the available science to make the most informed decisions

The greatest challenge in producing a consistent blend was maintaining the proportion of silt and clay. In particular, it takes only a relatively small change in this fraction to reduce the drainage rate to an unacceptable level. Over the period of the project there was a relatively small number of stockpiles rejected and highlighted the quality of the production process.

### **GREENS PROFILE**

The profile of the Peninsula Kingswood greens was discussed in considerable detail involving Ogilvy Clayton Cocking Mead lead golf course architect Michael Cocking, Glenn Stuart and myself. The primary objective we agreed was to create a profile based on the 'best of the Sandbelt' greens. The key elements were the physical characteristics of the sand, the depth of the profile and the attention to the surface shape and surface drainage.

Based on the characteristics of the selected rootzone sand, the general profile specification was 400mm of rootzone sand over at least one metre of native site sand. The depth of the greens profile was considered to be important in providing the

'draw down' of moisture that we typically observe on deep, native sand profiles.

The PKCGC site does not have a consistent soil type, with areas of the course having a relatively shallow sand layer over a clay subsoil. In areas where greens were to be constructed on such soils, the profile was over excavated, subsoil drainage installed, at least a metre of site sand placed over the drains and then the selected rootzone sand. As added insurance, there was some additional subsoil drains installed at the interface of the imported rootzone sand and the underlying site sand.



Pure Distinction (right) showing far less susceptibility to Poa annua than Penn G2 (left) during the Heritage Seedsfunded trial conducted at Keysborough Golf Club



The putting surfaces at PKCGC are setting a very high standard for the members

### **BENTGRASS SELECTION**

From a science perspective, selecting the creeping bentgrass (*Agrostis stolonifera*) cultivar was an involved process that examined all of the available data and practical installations. At the time of the project planning, Penn A1 and Penn A4 were the industry benchmark grasses with MacKenzie also being introduced into Australian golf greens.

PKCGC had selected Penn A4 for the resurfacing of greens some years earlier and based on an assessment of the greens in 2014 the Penn A4 was still considered to have the general characteristics required to form a high quality putting surface.

Around the same time, I was involved in establishing a bentgrass trial in conjunction with Matt Merrick of Heritage Seeds. The replicated trial was funded by Heritage Seeds and established on a sand profile at the Keysborough Golf Club in April 2014. The trial was primarily set up to assess the characteristics of several new creeping bentgrass cultivars imported by Heritage Seeds and not previously seen in Australia.

Amongst the grasses in the trial were Pure Distinction, Pure Select and Crystal Blue Links which were an unknown entity under southern Australian conditions. These new cultivars were compared against the industry standards at that time including Penn A4 and Penn G2.

The trial was assessed for the parameters detailed below and where practical the NTEP Turfgrass Evaluation Guidelines (http://www.ntep.org) were used to rate the trial;

- Germination and establishment;
- Visual turf quality;
- Visual turf density;

- Visual turf colour:
- Pest and disease (0 = nil, 5 = 100 per cent plot infected).
- Poa annua invasion.

In the first eight months of the trial there was not a lot of difference between the cultivars, though the Pure Distinction was starting to demonstrate significantly greater turf density than most of the other cultivars. At that time the Pure Distinction was not particularly remarkable but it was showing promise.

The trial area was subjected to moisture stress in February 2015 due to an irrigation failure, with Pure Distinction being the least affected and had significantly better turf quality than Penn A4, Penn G2, MacKenzie and Crystal Blue Links (Table 3). From my perspective this was a turning point in terms of what Pure Distinction had to offer. Interestingly, a trial being undertaken in Sydney also had a similar issue with moisture stress and the Pure Distinction was again the least affected cultivar.

Over the two years of the trial, Pure Distinction continued to be the standout variety with significantly better turfgrass quality 10 out of 12 assessment dates (part of the data is detailed in Table 4). The results

TABLE 3: TURFGRASS QUALITY FOLLOWING MOISTURE STRESS

Variety	Turfgrass Quality (4/2/15)	
Penn A4	4.7	
Penn G2	5.0	
MacKenzie	4.3	
Crystal Blue Links	5.0	
Pure Distinction	7.3	
Pure Select	6.7	
LSD (P<0.05)	2.1	

TABLE 4: VISUAL TURFGRASS QUALITY FOR BENTGRASS CULTIVARS

Variety	Turfgrass Quality			
	19/6/15	15/7/15	7/8/15	23/10/15
Penn A4	7.0	6.8	6.2	6.3
Penn G2	6.7	6.2	6.0	6.2
MacKenzie	6.3	6.5	6.2	6.2
Crystal Blue Links	6.5	6.5	6.2	6.2
Pure Distinction	8.2	8.0	7.7	7.5
Pure Select	7.3	7.0	6.7	7.0
LSD (P<0.05)	0.8	0.7	0.6	0.7

TABLE 5: % POA ANNUA (VISUAL RATING)

Variety	27/10/16			
	Turf Quality	Turf Density	% Poa annua	
Penn A4	6.0	6.0	5.0	
Penn G2	5.3	5.7	13.3	
MacKenzie	5.5	6.0	15.0	
Crystal Blue Links	5.7	5.8	15.0	
Pure Distinction	7.7	7.7	1.7	
Pure Select	7.8	7.5	2.0	
LSD (P<0.05)	0.7	0.7	6.2	

indicated that the new cultivars were as good as the industry standard cultivars, with Pure Distinction being a denser cultivar that was exhibiting better turfgrass quality compared to Penn A4, Penn G2, MacKenzie and Crystal Blue Links.

The trial area continued to be maintained after the official assessment period was completed with an assessment undertaken six months after the trial was completed (Table 5). The most notable aspect on this occasion was that Pure Select and Pure Distinction had significantly less *Poa annua* compared to all other cultivars except for Penn A4.

When a bentgrass had to be selected for PKCGC, there was a large amount of NTEP data reviewed in addition to the data from the trial plots at Keysborough Golf Club. Based on the NTEP data, Pure Distinction had similar or better turf quality and density than Penn A1, Authority and T1. The only negative was the susceptibility to dollar spot (sclerotinia homoeocarpa).

Colleagues in the US were also consulted in order to gain their impressions of Pure Distinction versus Penn A1 and Penn A4 and if there were any obvious weaknesses. The feedback from colleagues was on balance very positive. From my perspective at the time, based on the available information, Pure Distinction was considered to be a good choice.

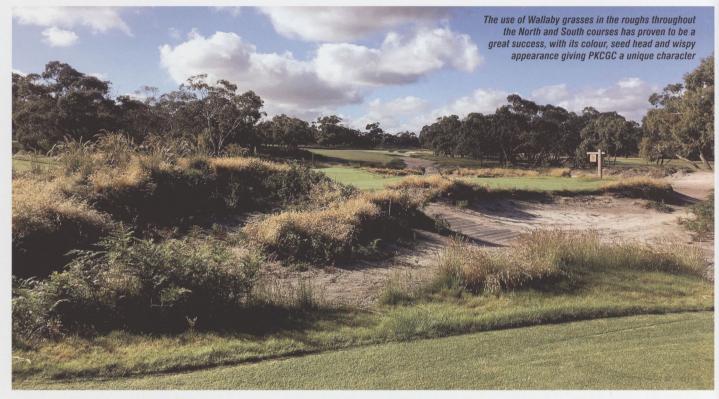
In addition to my agronomic review of the available grasses, Glenn Stuart was making his own independent assessment of Pure Distinction. As mentioned earlier in this edition, he visited Royal Canberra Golf Club, which had used it as part of their redevelopment, and made his own enquiries as to the suitability of the grass.

### CONCLUSION

From my perspective, the construction and grassing of the greens at PKCGC has been a challenging and innovative project. It has challenged convention in terms of profile construction and bentgrass selection, but it was tackled in a methodical and scientific manner. Using the available research information provided a sound basis for the decision-making process.

This project emphasises the importance of research and the need for ongoing investment in turf research projects in Australia. The sand research project was funded by me and the information collected provided the best guide as to the selection of the most appropriate sand type and the expected performance characteristics. The bentgrass trial was funded by Heritage Seeds and while there was a commercial interest, the trials were properly conducted and the data was invaluable in the decision-making process.





### PK's remnant. **reviva**

While the playing surfaces of the new Peninsula Kingswood Country Golf Club are a level above, as Kate Torgersen writes it's the out of play areas where some of the most significant transformations have taken place.

eninsula Kingswood Country
Golf Club (PKCGC) is a special
place for me as it was here
that my passion for golf and its
interaction with the environment
began 15 years ago. I am still in awe of the
beautiful natural surroundings there and feel
privileged to have found my way back there
to be involved with the course vegetation
management as part of the redevelopment.

The story about the transformation of the out of play areas started long before my involvement. As part of the redesign, architects Ogilvy Clayton Cocking Mead (OCCM) had the management of the existing vegetation and incorporation of new areas of revegetation as a major component, given how the areas off the fairway contribute so much to look and feel of the golf course. This is especially true at PKCGC as even though there were many degraded areas, there were also some fantastic remnant patches, particularly on the North Course.

Once the masterplan had been approved, OCCM started working on more detailed plans including a vegetation removal plan and, most importantly, a landscape plan for the site, along with ensuring appropriate budgets for all removal, slashing, burning, mulching, seed collection and propagation of new stock. To assist OCCM, highly-regarded ecologist Jeff Yugovic, who has a great deal of experience and passion for the Sandbelt vegetation communities, was engaged.

He identified the various EVCs (Ecological Vegetation Classes) across the site both through the study of plans but also field work. In one instance he even brought a geologist to the site who dug some observation holes as he wasn't confident that some of the plans were correct. Through Jeff's work on the EVCs, OCCM developed a palette of plants for each area of the golf course and then started interviewing a number of nurseries to find a suitable partner to collect and propagate stock.

The revegetation of the course was overseen and implemented by the construction team working under OCCM. It was around this time that, together with director of courses Glenn Stuart, thoughts started turning to employing a dedicated team to oversee the vegetation moving forward – looking after what had been planted but also progressing the vegetation across the site.

Glenn has always been a strong believer in managing out of play areas and right from the start his vision was to have the vegetation mirror the quality of the course design and playing surafces. To that end he now has a full-time horticulture team of five, well led by Andrew Brabner, and a specialised consultant (myself) managing the many hectares of vegetation. Included in their remit is the management of the creek system that runs through the South Course through several wetlands, as well as indigenous gardens surrounding the luxury accommodation, bowling green and tennis courts.



Throughout the construction process, there have been countless examples of indigenous species, such as Wedding bush (pictured), germinating after site disturbance and burns

### **UNIQUE SITE**

The PKCGC site would have to have some of the best areas of remnant vegetation on any golf course in Victoria. Throughout the site you will see a variety of heathland species, wildflowers and orchids, with some rarer species of significance being found. Among those include Red beaks (Pyrorchis nigricans), Rabbit ears (Thelymitra antennifera), Tiger orchids (Diuris sulphurea), Early Nancy (Wurmbea dioica), Blue stars (Chamaescilla corymbose), Cranberry heath (Astroloma humifusum), Clustered bushpea (Pultenaea dentata), Showy parrot-pea (Dillwynia sericea) and the Twining fringe lily (Thysanotus patersonii). An abundance of local fauna also calls the site home.

As mentioned, before construction began, a total of 11 EVCs were identified, which shows just how diverse the site is. Many sites of this size may only have one or two EVCs, so it gives a very clear indication as to its ecological significance and the importance of managing, preserving and enhancing it.

There were many challenges throughout the construction phase, grow-in period and once the courses were open for play. There had been many areas that were weed infested, but through the construction process many of these areas were turned into revegetation sites which are now providing a vital habitat for local fauna.

One challenge prior to and at the beginning of the project was the excess water being thrown into the native areas to grow in the playing surfaces. This saw an influx of weeds and fescue that outcompeted and smothered many natives, making it difficult to manage. Through many herbicide applications, hand weeding and prescribed burns, these areas were brought back to how OCCM envisaged them to be.

One management technique that has and will continue to be frequently used is fire. Regular prescribed burns are used as a management technique and have proven to be very successful, with an abundance of native indigenous species thriving.

As there have been so many areas untouched for so long, this has allowed the seedbank to build and throughout the construction process there have been countless examples of species germinating after some disturbance and burns. Among these are species that local nurseries have trouble germinating, such as Wedding bush (*Ricinocarpos filiformis*). There are many out of play areas throughout the course that are also providing the club with an abundance of species germinating naturally, which is allowing staff to transplant these into other areas around the course.

Since construction began, about 500,000 indigenous trees, grasses, shrubs and wildflowers have been grown and/or planted. The club supported local nurseries by engaging them to contract grow all the stock that has been planted thus far. In the next few years about 50,000 indigenous plants per year will be planted to replenish areas.

One species that has been used widely throughout the roughs is Wallaby grass (*Rytidosperma geniculatum*). As OCCM's Mike Cocking notes, the best Sandbelt roughs are typically a mixture of wispy grasses, sand and heathland plants. When it came to PKCGC, especially on the sandier soils of the North Course, OCCM saw a perfect opportunity to use Wallaby grass extensively. So far it has proven a great success and its colour, seed head and wispy appearance gives the course a unique character.

### ONE TO WATCH

Critically, throughout the project the club has worked very closely with Frankston Council consultant ecologists to develop an agreed Land Management Plan (LMP). This LMP will provide guidelines with responsibilities attached to all future maintenance









Some of the rarer species on the PKCGC site include (from top down) Donkey orchids, Blue stars, Tiger orchids and Rabbits ears

and management of all the vegetation communities across the site.

The horticulture team has played a huge role in the redevelopment and what is now on show at PKCGC. It has been extremely rewarding, but more exciting is the prospect of what lies ahead. PKCGC is a club to watch in terms of the management of the out of play areas and Glenn, Andrew and their dedicated teams have so far done an amazing job. And the benefits will not be just for the golfers, but for the community, local flora and fauna and future generations to come. Jul.





### Presidential

Royal Melbourne Golf Club's director of courses Richard Forsyth provides an update on preparations for this December's return of the highlyanticipated Presidents Cup.



### PRESIDENTS CUP TOURNAMENT **WEEK SCHEDULE**

The 2019 Presidents Cup (12-15 December) will feature a total of 30 matches, in addition to the Junior Presidents Cup (8-9 December) and other events. Here's how tournament week is shaping up...

- Fri 6 and Sat 7 Dec: Junior Presidents Cup practice days.
- Sun 8 Dec: Junior Presidents Cup six matches (am and pm).
- Mon 9 Dec: Junior Presidents Cup 12 singles matches.
- Tue 10 Dec: Presidents Cup practice day; Junior Presidents Cup Am-Am.
- Wed 11 Dec: Presidents Cup practice
- Thu 12 Dec: Presidents Cup five foursomes or four-ball matches; Celebrity tournament: Commissioner's Reception.
- Fri 13 Dec: Presidents Cup five foursomes or four-ball matches: ISPS Handa Disabled Golf Cup.
- Sat 14 Dec: Presidents Cup eight foursomes or four-balls (four am, four
- Sun 15 Dec: Presidents Cup 12 singles matches.
- Mon 16 and Tue 17 Dec: Am-Am tournaments.

elbourne was announced as the location for the 2019 Presidents Cup back in 2015, but the identity of the host club was not confirmed until 2017. We knew Royal Melbourne was in the conversation as a potential venue, having hosted it previously in 2011 and 1998, but it was not until it was confirmed that we could seriously start planning to prepare for the tournament.

As soon as it was announced in the media, we started to receive expressions of interest from volunteers to come along to assist during tournament week. We had two of our staff put their hand up to go to Liberty National for two weeks to volunteer for the 2017 Presidents Cup. Our initial visit from the PGA Tour Agronomy team came in 2017 when Paul Vermeulen made his first trip to Melbourne to inspect the course and discuss preparations with us.

I also had the opportunity to attend Liberty National and spent some time out on the course with Paul and the Liberty National team taking in their approach to preparing the course and reacquainting myself with the Tour's expectations. The thing that struck me most was the size of the set up for the Presidents Cup which had certainly grown from the two previous events at Royal Melbourne. There was greater emphasis

on data collection to guide the preparation decisions for superintendent Greg James and his team in conjunction with Paul and Tour

Since then, the Tour has switched our agronomist to Cal Roth, retiring Director of Agronomy for the PGA Tour after 35 years. Cal has made two visits to Royal Melbourne, including during his time at the 2018 World Cup of Golf held at Metropolitan Golf Club.

### **CAPTAINS VISITS**

Traditionally the two team captains will visit the host club 12 months from the tournament to promote the Presidents Cup. Part of their visit is to meet with the superintendent, tour the course and discuss preparation. The 'home' captain has some influence over the course preparation philosophy and so there has been discussion with International team captain Ernie Els and assistant Geoff Ogilvy about the way the Composite Course will

During the visit there was on course discussion with Cal and rules officials. The consensus is to have the course play the way it traditionally does, subject to the weather, with firm surfaces and natural wispy rough. There is no direction to change any fairway widths, rough density or anything else for that matter. There will be some fine-tuning in the lead up week, but it is unlikely we will



do much different to what we always do in preparing the course for RMGC members.

There is always the debate about speed of greens, but that is secondary to firmness and smoothness. The balancing act is the weather and not letting things get away from us if there are dry conditions and strong winds on any of the competition days. The Tour has asked for a maximum green speed of 13 feet so our preparation will work with that number in mind.

### JUNIOR PRESIDENTS CUP

Adding a different dimension to our preparations this year is the inclusion of the Junior Presidents Cup leading up to the main event. It will be exciting to see some of

the best young US and International players tackle the course, with two locals – Western Australia's Karl Vilips and Joshua Greer – bookending the International team.

Practice rounds for the Junior Presidents
Cup will be held on Friday 6 and Saturday 7
December with competition days on Sunday
8 and Monday 9 December. This means the
course will need to be in tournament strip for
10 days. Managing rolling and moisture will
be critical to make sure we have optimum
conditions for the tournament competition
days the following week. The main focus is
the four competition days of the Presidents
Cup, so the set up will be more conservative
so not to unduly stress the turf during the
Junior event.

Forsyth with International Team captain Ernie Els during his course visit last year. As 'home' captain, Els has some influence over the course preparation philosophy

### STAFF AND VOLUNTEERS

There has been tremendous support for the volunteer programme and we have needed to cap this at 50 people. In the end we could have filled the positions twice over without ever advertising the call for volunteers. At this stage we have volunteers coming from as far afield as the UK, USA, Japan and New Zealand.

The nature of the team format gives much more flexibility to the work schedule, with the limited number of players and often later tee times. There is much less time pressure on the morning course preparation in comparison to a 72-hole stroke event. It will, however, be helpful to have the extra hands to assist with some of the finer detail of preparation and share the load through 10 days of play on the course. All volunteers will start on Thursday 5 December.

Our own team of 48 will come together to work with the volunteers and focus on the Composite Course holes and practice areas for the 10 days. We will still need to keep an eye on the holes out of play and the Sandringham Course (more on this below) over the duration of the event.

We have been very fortunate to secure some industry support with assistance with catering for the crew through Toro, Greenway Turf Solutions, Bayer, Oasis and Syngenta. This is an important part of any event and the



The impressive 4200m<sup>2</sup> Royal Melbourne maintenance facility, completed in 2016, was specifically designed with hosting major tournaments such as the Presidents Cup in mind. It will house up to 100 staff – 50 volunteers and 48 RMGC crew – for the tournament

assistance offered by some of our partners is very much appreciated. Toro have also provided support for tournament uniforms and loan equipment which is also integral to our operation and again valued and appreciated by the club and Presidents Cup management.

Earlier this year we fully integrated the maintenance of the Sandringham Public Course into our Royal Melbourne operation. Paul Thomas is our superintendent for the West Course, Craig Anthony is superintendent for the East Course and Nicholas Staff is the construction superintendent for the Sandringham Course, now referred to internally as the 'North Course'.

All operations are managed from the Royal Melbourne maintenance facility and staff are rotated through the courses depending what is required each day. This has been working very successfully to date and provides some variety for the staff. Personnel and equipment are selected and allocated to each course by the superintendents and tracked using the 'Task Tracker' system.

### COURSE CONFIGURATION. BUILD AND LOGISTICS

The layout of holes for the 2019 Presidents Cup will be the same as 2011, substituting 4 East for 16 East from the traditional Composite Course holes. Some minor adjustments were made last summer to build new tees at tournament holes 1 (3 West), 14 (16 East) and 16 (18 East) which have added around 40 metres in length and assist with location of stands and crowd movement.

In both the 1998 and 2011 tournaments, a practice area on the Sandringham Course was set up and used. This time the normal Royal Melbourne practice range will be in action. This has required a study of the trajectory of ball flight of US players such as Dustin Johnson and Brooks Koepka to determine the height of barrier fence required at the end of the fairway. It has been determined our fence at the end of the range needs to be extended from 18 metres high to 26 metres, with this work to be carried out in October, well in advance of the tournament.

Planning for the build of on course structures, including corporate hospitality, stands, catering and media, has been well underway for 18 months. Some of the locations will be similar to 2011, but others have been added and the size of much of the build has increased by around 30 per cent in comparison to 2011. As an example, the grandstand around the 1st tee (see computer



A computer generated image of the 1st tee grandstand for the 2019 Presidents Cup which will house 1800 spectators

generated image above) will be able to hold a total of 1800 spectators alone. Structures of this magnitude will create challenges for us in protecting the turf and getting areas back in play quickly after the tournament leaves town. On course construction commenced in the first week of October.

We are working through a programme of vegetation pruning on all Composite Course holes to accommodate the structures. Movement of crowd is also a consideration with good space required between the rope lines and vegetation to manage movement of up to 35,000 spectators each day. Ticket sales have been very strong to date and are well ahead of the 2011 edition when there were 25,000 per day on the course.

The number of golf carts on the course is also up from 2011 to 300 carts which will also challenge movement and wear on the course outside the ropes. Club Car will supply the vehicles, all imported new for the Presidents Cup. We will be providing space for the carts to be delivered in shipping containers and

assembled on site before being housed in a marguee. The vehicles are due to start arriving in early October.

Security is another consideration that has escalated since the 2011 version. This will impact on our operations during the lead-up and tournament week. It may be further complicated by the nature of potential dignitaries and celebrities visiting the event.

Our maintenance facility, designed with tournaments in mind, will come to the fore in handling the additional staff, equipment and intensity in the lead-up and tournament week. We expect to be able to accommodate all personnel and equipment in the existing spaces without the need for temporary facilities. The new facility, which was built in between April and December 2016, is 4200m<sup>2</sup> with a separate 850m<sup>2</sup> workshop area (see ATM Volume 19.2 - March April 2017 - 'A shed fit for Royal', pgs 54-56).

### TURF MANAGEMENT

Our programme over the winter months has included focussing on Poa annua control in our unique Suttons Mix greens, fescue surrounds and Legend couchgrass fairways. The majority of effort has been around spot spraying plants to minimise any damage to the health of the turf. There has been some work done to bunkers in consolidating edges, rebuilding access points and filling eroded sand faces

In early autumn we started a programme of liming fairways to raise pH which is continuing through spring. Fairways have been Verti-drained in early September. In December and January last season all



In early autumn, Forsyth started a programme of liming the Royal Melbourne fairways to raise pH which is continuing through spring



fairways were verti-cut and scalped down and then Verti-drained with hollow tines. This process brought sand to the surface which was rubbed in as topdressing.

Greens and fescue surrounds will continue to receive hydrojecting leading up to competition days with no other cultivation of greens scheduled. A strong plant protection programme is planned for greens and fescue leading in to make sure we have our potential stress-related diseases covered. Nutrition for greens will be as normal with nothing applied between April and October, followed by some light sulphate of ammonia-based monthly applications leading in. Fairways will receive a higher nutrient regime aiming to grow in all divots and winter thinning well before December. We may implement one or two light sand topdressings for greens and

approaches, depending on growth, during October and November, but nothing much different to normal maintenance at this stage.

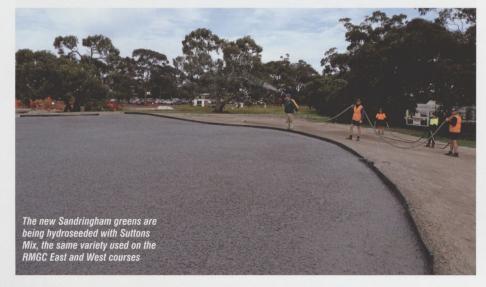
### SANDRINGHAM COURSE UPGRADE

In addition to preparation for the Presidents Cup, we have started a major revamp of the Sandringham Public Course. A driving range will be developed on the site as part of the upgrade which has required adjustment to retain 18 holes. Ogilvy Clayton Cocking Mead are the course architects and shapers for the project. The design is very 'Melbourne sandbelt' in appearance with its bunkering and green configurations. The sand on the site is variable so pockets have been mined out to provide sand for green, tee and bunker construction.

Superior Green won the tender for the new irrigation system. Contractors 2Construct are extending the water storage and harvesting system to increase capacity from 16 megalitres to 30. Our team are responsible for tree removal, drainage and grassing.

We started work on the first nine holes in May with tree removal. Construction kicked off in June and good progress is being made. Timing is designed around the Presidents Cup with the first nine holes to be completed by the end of November so grow-in can continue through until the end of January 2020 when the new nine will open and reconstruction of the second nine will commence.

Grass selections are Suttons Mix for greens, fine fescue for surrounds and Wintergreen for tees. The existing kikuyu, couch and *Poa annua* on fairways will be retained for the moment. This project has certainly added to our workload, but we are very excited about the outcome and how this will add to the experience of public access golf on the Melbourne sandbelt.





Among the works to have started at Sandringham include the expansion of the storage dam from 16 to 30 megalitres

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Five years ago Todd Darrington was mowing centre verges down the main street of Leeton, NSW.

Over the past six months he has helped prepare some of the world's most hallowed sporting surfaces,

among them Wimbledon and Lords.



Darrington (seated middle, bottom row) was one of 12 summer casuals for the 2019 season that complemented the usual AELTC crew of 15

guess you could say that I was born into the turf industry. My dad Craig was a greenkeeper at Leeton Soldiers Club and the Leeton and District Bowling Club, and as a young kid I would go with him to work and sit on his lap while he rolled the greens. I also grew up working on the family's turf farm (Darrington Turf), so I guess from a young age greenkeeping and turf maintenance was always in my blood.

I first started working at Leeton
Golf Club before and after school as a
greenkeeping labourer before I was offered
an apprenticeship with the Leeton Shire
Council's parks and gardens department in
2013. I worked there for two-and-a-half years,
during which time I learned a lot thanks to my
bosses Josh Clyne and Justin Davidson.

In 2015 I decided to make the move to Canberra to finish my apprenticeship at Cricket ACT (Manuka Oval). Apart from my parents and Leeton Shire Council, a lot of credit for the development of my career must go to Brad Van Dam, head curator of Manuka Oval. One of the industry's best, Brad took me under his wing as a 19-year-old and has taught me how to prepare quality surfaces.

### FROM MANUKA TO WIMBLEDON

2019 has certainly turned out to be quite the ride and it all started in February when Manuka Oval hosted its very first Test match between Australia and Sri Lanka. I had been lucky enough to be a part of One Day Internationals, Big Bash, PMs XI and Australian Women's Ashes Series cricket in 2017, but to do a Test match was always a dream.

Brad did an awesome job and we all played a part in preparing Canberra's first ever Test match wicket (see Brad van Dam's article in ATM Volume 20.6 – Nov-Dec 2018 – 'Manuka set for ultimate Test' pgs 24-26). What made the experience even more special was having my dad come down to volunteer for the Test and work by my side. I remember thinking how times change... dad was no longer telling me what to do and the roles were somewhat reversed from our days together on the Leeton golf course or family turf farm. My older brother also joined us at one stage during the Test to lend a hand during the lunch break.

I was also working alongside one of my best high school mates, Jonte Schmetzer, who had joined the Manuka Oval crew in



AELTC head of courts and horticulture Neil Stubley

January 2018 as an apprentice. Another highlight was seeing a lot of Brad's former 2ICs come back and assist, among them Michael Sangston, Logan Booby and Tom Fahey who over the previous years had put in a lot of hard yards to get Manuka to the level it is.

It was about a month after the Test, during a casual conversation with Tom (who now works at the Sydney Cricket Ground), that I was alerted to the opportunity of working at Wimbledon. Tom knew that the All England Lawn Tennis Club (AELTC) took a number of summer casuals in each year and encouraged me to apply. I did and to my huge surprise within a week I was being interviewed over the phone by AELTC head of courts and horticulture Neil Stubley. The feeling was pretty unbelievable when he told me I had been successful and I knew then that I was going to be a part of something pretty special.

It was crazy to think that just three-anda-half years ago I was mowing the centre verges along Pine Ave, Leeton's main street, and Leeton Golf Course. Now, having just been involved in Manuka Oval's international Test debut, I was off to help prepare some of the most hallowed turf in world sport.

### **CENTRE STAGE**

Arriving at Wimbledon in late April, my role at the AELTC was as a six-month summer casual. Twelve such positions are offered each year and I was fortunate enough to do it alongside another Australian – Eddie O'Sullivan from Scotch College, Melbourne – as well as a few Kiwis and Poms.



Going through the main gates each day and walking past the famed Centre Court and the iconic matches it has hosted over many years, I had to constantly pinch myself knowing that in a few months' time all the eyes of the tennis world be watching on for the 2019 Championships. At the end of day it's just grass that just has a lot of history to it and I told myself to just stick to what I know and rely on the solid turf management foundations that had been instilled in me from my previous roles.

My role as a summer seasonal encompassed all aspects of operations – mowing and marking up of the Championship courts, setting nets up and all other turf management practices from fertilising, spraying chemicals and rolling. The 12 seasonal staff complement Neil's full-time staff of 15, with deputies Leighton Ward and Will Brierley working closely alongside him. They

all help guide the crew and set up the daily work schedules. They are very knowledgeable people and I tried to learn as much from them as I could as they are world class at their jobs.

The final lead up to The Championships every year starts a week beforehand with all the players arriving for the final week of practice on the Championship courts. On the outside courts we monitored the grass surface and set up nets for the players who are allowed a 30-minute window to practice. When that time was nearly up, we gave the coaching staff or the player a five-minute warning – it was crazy having to talk to some of the biggest names in world tennis to tell them that their practice time was up, but they were so respectful.

The Championships began on 1 July and we all had a designated court to look after, so we would work in teams of three mowing



Steam sterilisation is a relatively new part of the AELTC renovation programme and was first used in 2017. It effectively kills everything in the top 200mm of the profile, providing a clean slate prior to renovating the surface

and string-lining/marking – playing season mowing height, including the Championships, is 8mm (in winter 13mm). We would arrive at the AELTC at 7.30am each day and head straight to Centre Court to uncover it. We then all went our separate ways to undertake our routine jobs on our allocated court. We had to have our court ready for play by 11am.

We were very lucky this year with the weather being on our side for most of the event, which meant we were able to take in a fair bit of tennis. In the evening, we would head over to the Aorangi practice courts to mow and mark them depending on the use they received. There were some very late nights when Centre Court matches went well into the evening, as it was our job to water and cover Centre Court after play finished. We'd then come back in the next day and do it all over again.

The undoubted highlight for me came on the penultimate day of the tournament and being part of the trophy presentation for the Ladies' Singles Final between Simona Halep and Serena Williams. Halep stunned everyone by downing the seven-time Wimbledon champion in straight sets 6-2 6-2. To stand behind the net alongside the other members of Neil's crew in the middle of Centre Court only seconds after the match had finished and watching Halep looking around and soaking in her victory was unbelievable.

I was thinking how amazing it was to be standing right in front of members of The Royal Family – the Duke of Kent, the Duchesses of Cambridge and Sussex – and knowing all eyes around the world where watching. And then to have a member of The Royal Family shake our hands and thank us was an experience I will never forget.

The following day I was lucky enough to be able to watch the Gentlemen's Singles Final between Roger Federer and Novak Djokovic, which will go down in history as one of the greatest Wimbledon finals ever. Djokovic triumphed in an absolute epic encounter – 13-12 in the fifth set – and after the final point had been played he got down on his haunches, picked a few blades of turf and ate them, much to the delight of the groundstaff! Unforgettable!

Following the steaming process the match courts are fraise mowed before being reseded with ryegrass

### STEAMING AHEAD

The immaculate surfaces that are presented each year at The Championships have their origins literally 12 months prior. No sooner had Djokovic's name been etched on the trophy, we were back in the next day straight into renovating the courts for next year's event. On Centre Court, we started with a heavy scarify then ran over it with the cylinder mower. The court was then seeded and fertilised, growth mats put down and then after a few weeks topdressed.

Court 1 and courts 3, 4, 6 and 7 underwent a wholly different renovation process this year – steam sterilisation – which is something I have never witnessed before. The sterilisation process is a relatively new part of the AELTC renovation programme and effectively provides a clean slate prior to renovating. Courts 5, 11, 16 and 17 were the first to undergo the treatment in 2017 and were followed by Centre Court and courts 8, 9, 10, 12 and 18 in 2018. Courts 2, 14 and 15 will be done after the 2020 Championships, thus completing all of the 18 match courts, after which the practice courts will be done.

The process is carried out by a team from The Netherlands and involves covering sections of the court with large poly tarps



Darrington's role as a summer seasonal encompassed all aspects of court preparation

that stretch the length of the court weighed down at the edges by heavy chains (see photo opposite page). Steam is then pumped underneath the surface for 24 hours, killing off anything and everything down to 200mm in the profile – *Poa annua* grass and seedheads, other weeds and potential diseases in the soil. Temperatures reach 70°C.



Millimetre perfect – line marking for the Championships is a precision sport in itself

After the first 24-hour cycle is up, the covers are moved along and the process repeated for another 24-hour cycle until the whole surface has been steamed. Once sterilised, the surface is then fraise mowed with a Koro field topmaker and tillered up, before being lute levelled, reseeded with ryegrass, fed, covered and watered.



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Darrington (left) with fellow Aussie Harry Furlong at Lords in the lead-up to one of the venue's five Cricket World Cup matches

The whole process on Court 1, from initial steaming to covering, took less than 48 hours.

According to Neil and the crew, the success rate of the steam sterilisation process has been excellent. Courts previously sterilised have had 0 to 0.1 per cent *Poa annua* content, no fairy ring return and initial germination has been near 100 per cent. The added benefit is that it also eliminates the need for any pesticides.

### FROM SW19 TO LORDS

During my time at AELTC I was also fortunate to spend some time working on the crew at Lords. Prior to heading to the UK, I contacted Cricket Australia CEO Kevin Roberts and told him I was heading over to work at Wimbledon and that I was also interested in gaining experience with cricket wickets, especially seeing that England was hosting the Cricket World Cup (CWC) and Ashes Series at the same time.

He put me in touch with England cricket pitch consultant Chris Wood who then put me on to Lords/MCC head groundsman Karl McDermott. I ended up working a couple of CWC matches and the Ashes Test and to say it was a mind-blowing experience would

be an understatement. Walking out onto the famous turf of Lords for the first time was amazing. I was just looking around and soaking it all in and thinking to myself, "Wow, this is the home of cricket! How good is this!" To be out in the middle, working alongside Karl and his team during the CWC and Ashes Test was just incredible and I am so grateful that I was lucky enough to experience it.

The first game was all about soaking it in and seeing how Karl and his team operated. It was Karl's first summer in charge at Lords, having taken over from the legendary Mick Hunt who retired last year after 33 years in charge and a total of 49 on the crew. Needless to say, with five CWC matches, including what would turn out to be one of the most incredible finals the game has witnessed, as well as an Ashes Test, it was a huge first summer for Karl.

Getting an insight into how their systems work was so interesting and showed up the vast differences in pitch preparation between England and Australia due to the weather and growing conditions. For example, in the UK they apply less water to the pitch and use totally different rolling methods because the soil content is so different. During the Ashes

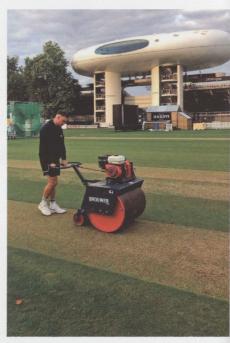
Test it was also interesting observing how they filled the batsmen/bowlers foot marks in every evening after play, and as there were numerous delays due to rain it was fascinating seeing the hover covers used to cover the wickets.

### CHASING THE DREAM

By the time this edition of ATM is out I will have returned home and be back working with Brad and the team at Manuka Oval. Reflecting back on my time over the past six months, the best thing I gained from the journey were the many friends and contacts I made throughout the turf industry. From not knowing anyone before coming over, I now have lifelong friends and colleagues who I can network with as my career progresses.

On a personal level, you learn a lot about yourself when you travel and work abroad. As scary as it was leaving Australia to live in London in order to help further my career, it was probably the best decision I have ever made. I learnt so much thanks to the respective crews at AELTC and Lords which makes it one of the most unforgettable experiences I have had.

I can't thank Brad Van Dam and Cricket ACT enough for letting me take six months' leave to go and chase a dream in the UK while holding my job open for when I got back. My future ambitions now are just to take whatever opportunities come my way. I enjoy working at Manuka Oval and so my plan is to work hard, learn as much as I can and the rest will fall into place.



Darrington also had the opportunity to work at Lords during the Cricket World Cup and Ashes Series



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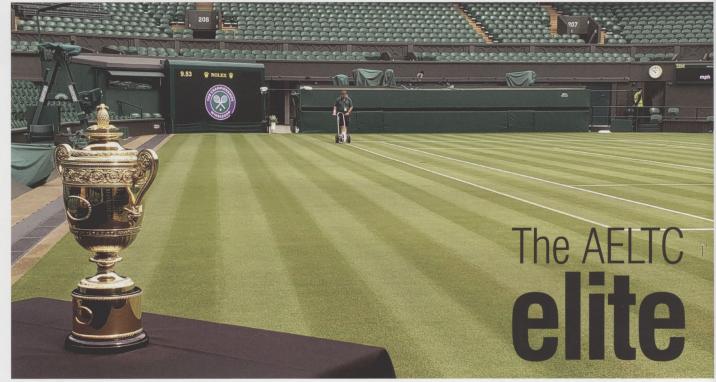
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hile preparing an article for Australian Turfgrass Management Journal last year ('Pace and perfection', ATM Vol

20.3), I was fortunate enough to get expert opinion from Neil Stubley, head of courts and horticulture at Wimbledon. The conversation continued and eventually the offer to come over and visit The Championships one year. This instigated a trip of a lifetime, a visit to the hallowed grounds of the All England Lawn Tennis & Croquet Club.

The plan was to spend three weeks leading into and a few days of the 2019 Championships. Not obtaining a working visa turned out to be a blessing as I was able to shadow Neil and his crew and get a rounded appreciation of the duties involved to manage an event on such a scale. There were around 30 greenskeepers from across the globe, all with impressive stories like Todd Darrington, that were more than willing to share their knowledge and passion.

The activities during my stay at Wimbledon could be broken up into three stages. The first week was crawling with action and contractors during the build out, where temporary shops and corporate areas were installed. The site, although almost one kilometre long, operates as a private members club for the rest of the year, and the extra space is required, thus the temporary buildings. This week was also used for any fine-tuning specific to the courts and infrastructure, like court covers and Hawkeye.

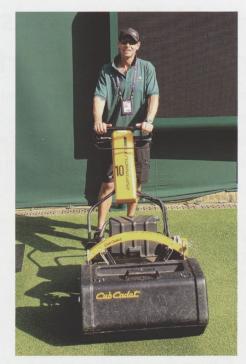
Swan Hill Lawn Tennis Club curator

Dan Gardner also got the chance

to get an 'inside the ropes' look

at preparations for this year's

Wimbledon Grand Slam.



Dan Gardner spent three weeks leading into and a few days of the 2019 Championships getting an insight into Grand Slam preparations

The second week, titled 'International Week', was where the players started to roll in and use the Aorangi practice courts and the Championship courts for official practice. This week had a nice relaxed atmosphere as the players and their teams had the grounds to themselves and the ground staff team settled into their daily routines which would continue on for The Championships.

This consisted of getting courts lined and mown and then dressing the court (getting nets and seats into position) ready for play when required. Courts were generally covered each night as the numbers for the Clegg readings started to be dialled in. Court covers were managed by court covering teams brought in for the tournament and lead in, except for Centre Court which was maintained by the ground staff. By now the work hours were extended due to the play on the courts, where the 18 match courts were prepped in mornings and the Aorangi practice courts were prepped from 6pm onwards for the next day. Odd jobs carried on throughout the day.

The third week was tournament mode. Each day the team met on Centre Court to remove the cover and then dispersed to prepare their regular courts with a mow, line and dress prior to play. The day requires all staff to be available in the event of covering for rain, rosters for dressing courts and other urgent issues. Night was prepping the Aorangi courts, finishing around 9pm, in good time to make sure all is good in the local establishments at Wimbledon Village.

The club prides itself on perfection and the grounds are immaculate. It is reported that around 20,000 plants are brought in for the tournament to total 50,000 on site. Boxus, petunia, hydrangea and foxgloves, managed by the horticulture team, combine with the ryegrass courts to create their 'Tennis in an English garden' theme. It struck me how well everything grows there, different to our harsher Australian environment.

Progress is constant at Wimbledon, with the recent addition of a roof on Court 1, a 16-court \$25 million redevelopment of the evacuation site up the road and purchase of the golf course across the road which will allow court numbers to double and qualifying to be held on site (still in planning stage).

The ryegrass courts were very different than our couchgrass surfaces in Australia, perhaps more fragile, but they were able to do so much more with them so close to the event. Thatch is taken out of the equation each year with a fraise mow, leaving the profile as mainly soil and leaf. A range of cultural options were exercised with mowing, grooming, brushing, 'razor' cuts, rolling and moisture control close to the event to correct minor differences with micro-environments and hit the targeted 200 gravities on the Clegg.

A bit of sunshine and the courts would really glow, with the weeks prior where the iron levels were upped and nitrogen levels dropped to obtain required colour as conditions were dried out. The attention to detail was obvious and when a job was done it was expected to be done perfectly rather than quickly. This is professional tennis and this is what was demanded!





The available resources at hand are able to shape the way they do things at Wimbledon that we may never be able to replicate, but then again, personally, I don't have the eyes of the world on me and the highest expectations I have are my own. With those resources comes that pressure and expectation that they manage really well. That being said, we all deal with a living surface that doesn't always behave nicely.

Neil and his team are leading the way with advances in turf, pushing the envelope and dealing with the risk and reward that that may bring. Metrics, fraise mowing, ryegrass and now steaming to deal with *Poa annua* all come to mind, with more in the pipeline.

With Wimbledon so ingrained in retaining and enhancing the grass court game, it gives us confidence and relevance. Looking back recently on footage of Rod Lavers' 50th anniversary of his US Open Grand Slam win on a substandard grass court, it is understandable why different surfaces

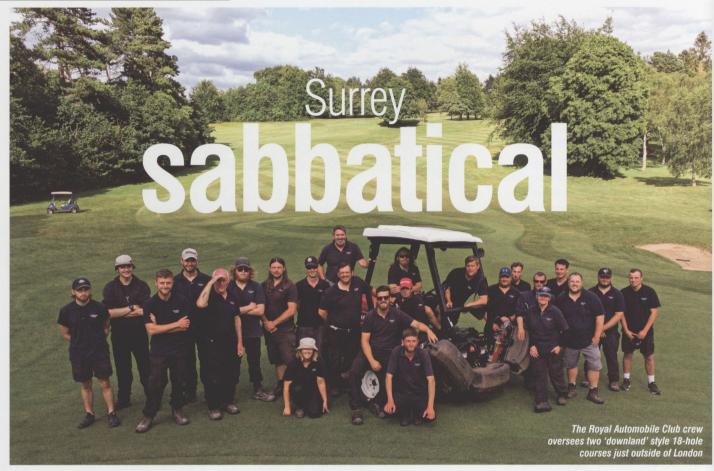
became popular. Neil and his team have raised the quality of the surfaces to a level where they now complement and enhance the game and continue to make Wimbledon the most prestigious and anticipated tournament in the world.

Editor's Note: You can follow Dan Gardner on Twitter @GreatManDan. Also, check out AELTC deputy head groundsman Will Brierley's Twitter account @AELTCGroundsman.



The AELTC prides itself on perfection and it's not just the courts that are in immaculate condition





y name is Brenton Clarke and I'm an assistant superintendent working at Blackwood Golf Club in the Adelaide Hills. I have had a real passion for sports turf management from my early days as an apprentice here at Blackwood and have always strived to better myself and continually learn, something which is vital in our ever-changing industry.

After I completed my Certificate III in Sports Turf Management, I ventured into landscape gardening and design before working for the family business where I further developed leadership, staff management and mentoring skills. But golf was where my heart lay, so in early 2015 I decided to venture across the border to Victoria where I secured the foreman's position at Box Hill Golf Club.

My time at Box Hill, working under superintendent Josh Leyland, was invigorating and I was immersed in a range of course improvement projects, among them three new greens in the space of 14 months. I lived over the fence from the course and took every opportunity to take on extra work and provide assistance over the summer period. During my time in Melbourne I also completed my Diploma in Sports Turf Management and volunteered at the 2016 ISPS Handa World Cup of Golf at Kingston Heath.

The turf industry can afford practitioners of all levels multiple opportunities to broaden their skill set as they climb the career ladder. For Brenton Clarke it took him to the UK for six months and a placement at one of the world's most exclusive clubs.

After nearly three years in Melbourne, I decided it was time to head back to Croweater state and it just so happened the Blackwood assistant's role was available. I realised I was somewhat going to lose the advantages and opportunities that I had in Melbourne education-wise, especially as tertiary study options in Adelaide are limited and the job market is much smaller. However, I'm the sort of person that likes to think outside the box a little and I soon had a few ideas on how to expand my horizons.

Prior to leaving Box Hill, in 2017 I was fortunate enough to be part of the Future

Turf Managers' Initiative (FTMI) held during the Australian Turfgrass Conference at Twin Waters. Conducted by the Australian Sports Turf Managers Association (then AGCSA) in conjunction with its Gold Partner Jacobsen, it was during the FTMI that I met Lee Strutt from the Royal Automobile Club in the UK. As well as being a keynote presenter during the conference, Lee was also one of the expert speakers brought in to conduct sessions for the FTMI.

Those who attended the 2017 conference will know Lee and his credentials. Needless to say he is possibly the most educated horticulturalist in golf in all of the UK and throughout a storied career has developed an incredible list of friends and industry connections the world over. He has presented at numerous conferences and seminars and on top of his agronomic expertise is just a really good bloke.

Through our conversations he informed me there was a junior greenkeeper position available at his course. I was originally trying to get one of the other staff on our crew to apply to help him further his own career. When he decided it wasn't for him, I questioned him "Why not?" He turned the question around on me and asked, "Why don't you do it?" I soon found myself answering that very question and this past

April I journeved to the Surrey-based course to spend the English summer working at one of the most unique clubs in the UK.

### **INVALUABLE INSIGHT**

The history of the Royal Automobile Club (RAC) is the history of motoring in society. which is charted through the club's impressive heritage collections. Established by Frederick Simms in 1897 as the Automobile Club of Great Britain and Ireland. it is the oldest motoring institution in the UK and the second oldest in the world, receiving the Royal Charter from King Edward VII in 1907.

With 17,000 members, the club boasts two clubhouses and two golf courses - the Old Course and the Coronation Course. While they are not the longest by today's standards, they are still enjoyable at 6250m and 5760m long respectively. Both courses have a 'downland' identity and fit into the Surrey Downs landscape beautifully. Both have predominantly Poa annua/bentgrass push up greens, fescue/Poa/ryegrass tees and fescue fairways. There are 26 greens staff and five full-time gardeners. It is one of the most prestigious clubs in the world with very high standards of presentation across all areas, with some magnificent motoring events held all year round.

Understanding that working under Lee was a huge drawcard to take on the position, nevertheless what I've noticed within our industry over the past 10 years is that it isn't what you know or what qualifications you have, it's where you have worked, especially in the private sector. I'm certainly not saying that is the case for superintendents, but other people on committees, boards or club management seem to place a lot of weight on the status of the courses you have worked at in the past. Having the opportunity to work at a 'Royal' establishment and a 36-hole estate, will go further for me at this point in my career than adding a degree onto my CV, which I plan on doing in the future anyway.

Also, I was very fortunate that my superintendent at Blackwood - Stephen Pellet – understood my passion and drive to become more than a 2IC and allowed me to take the time off to undertake the placement while keeping my job open. Knowing I had a job to come back to and having a superintendent with that progressive mindset,

Brenton Clark (far right) with RAC superintendent Lee Strutt (third from left) and fellow international interns (from left) Scott Powers (Canada), Nik Stepanovic (Victoria), Renee Laucirica (South Australia) and Rylie Henderson (Victoria)



Each year The RAC offers a number of seasonal internships to international greenkeepers

who was willing to guarantee my position when I completed my internship, was a huge factor in pursuing the opportunity.

I know it is not within the realms of possibility for some, but I'm a big believer that clubs all over the world would benefit with such programmes, holding jobs open for staff members to take six-month sabbaticals to allow them to further their careers and bring back better skill sets. In this ever-evolving industry, it is important to keep pace with new practices and techniques and being exposed to new ideas and ways of doing things.

In stepping down from my duties as an assistant to what was effectively a junior role, I did have a lot of people question me as to what I would gain from doing so. My response to them was always that I firmly believe you can learn from anyone, whether it's an apprentice or a general manger, and

that everyone has a different perspective and a different way of thinking.

The RAC runs with two distinguished deputy managers, one for each course, who report to Lee who oversees both courses and budgets. Then each course has two more senior managers, effectively a 2IC and 3IC. For me it was fascinating to observe how a bigger team worked, with more managers, more jobs and plenty more machinery to deal with.

In addition, it was great to get an insight into their practices and the reasonings behind them, such as the use of no pesticides or contact fungicides, vibration recording, training programmes for every machine for every staff member, no fairway irrigation and the challenges of working with all cool-season grasses. So, when people question why you're stepping down and what is there to





gain, I simply tell them you can learn from all scenarios – you just need to be openminded in your vision.

### **BIG STAGE**

Tournament work is also another great way of progressing in our industry. As Lee mentioned during his talks at the 2017 conference and FTMI, taking the opportunity to volunteer at major events – in his case the likes of the 2012, 2014 and 2016 Ryder Cups – is a fantastic experience not just for the ability to see turf management at the top level, but also for networking with other industry colleagues from the world over.

While I was at RAC, Lee put me in contact with Walton Heath Golf Club course manager Michael Mann. Host of the 2018 British Masters, Walton Heath is a stunning 36-hole heathland establishment and it just so happened that while I was in the UK it was also hosting sectional qualifying for the 2019 US Open at Pebble Beach. I was able to join Michael's team for a brief stint prepping for the morning of the qualifier, which again gave me an opportunity to witness another operation and different golf setting.

In July I was also extremely lucky, again through Lee's connections, to work at The Renaissance Golf Club for the 2019 Scottish Open under course manager Paul Seago. Paul has been at the North Berwick course, designed by the renowned Tom Doak, since the grow-in in 2005. This was my first coastal links course experience as well as operating a

Clarke was also part of the team at The Renaissance Golf Club which hosted the 2019 Scottish Open whole new brand of equipment which I hadn't worked with before. Correspondingly, it also gave me an insight into course requirements for a European Tour event and the challenges that presented for Paul, as well as seeing how a privately-owned course is operated. All the above again provided me with a different perspective and how adaptable we must be in this industry when going from club to club.

Then, finally, as my internship at RAC was coming to an end, I was gifted a volunteer spot at the Albatross Golf Resort for the European Tour's Czech Masters in Prague. I had never worked on a resort course before and had never worked alongside a crew that spoke very little English. The superintendent, Ben Lovett, was a very relaxed Englishman who has worked all over the world, including Melbourne where he was an integral part of the build at the Greg Norman-designed Settlers Run in Melbourne's south east.

Speaking to Ben over the week was fascinating and I could see the influences of his time in Australia and the UK in the way he managed the course and his staff. He was very much a father figure to his crew and showed plenty of care towards them. I was one of three from RAC to work the tournament

Clarke (right) got the opportunity to work at the Czech Masters in Prague. Pictured left is UK-based senior greenkeeper Vince Demarzo who volunteered at the 2018 Emirates Australian Open at The Lakes

and as I was the oldest I took it upon myself to support them through the early part of the week as it was a big shock to the system stepping up again in that environment. However, by the end of the week they were shining through the rest of the home crew and you could see their own passion and pride growing.

### **MOVING FORWARD**

It is easy for people in the turf industry to become complacent, bitter, stuck in a rut or just worn out being in the same surroundings. If we utilised our skills and knowledge, there are no limits where we can go on this planet. I would strongly suggest, if the circumstances are right, to take a path that makes you grow as a person and also in this industry.

There are plenty of opportunities out there and the RAC path is just one of many. The RAC was a great fit for me, with onsite accommodation, meals provided and plenty of tangible benefits both professionally and personally. It has helped to bolster my CV significantly and given me further impetus for the next stage of my career.

And on the flipside, I'm sure that a lot of clubs in Australia could benefit from offering similar positions to the one that I had at RAC to UK or overseas based greenkeepers. Some clubs are already proactive in this regard and can see the many benefits it affords. Not only do you having the extra hands on deck during the busiest time of year, it also helps your staff to broaden their knowledge as well as inject some enthusiasm into the workplace.

Editor's Note: As this edition was going to print, Brenton Clarke had just resigned from Blackwood and accepted a 3IC role at Kooyonga Golf Club. Applications for the 2020 Future Turf Managers' Initiative, presented in conjunction with Jacobsen, are now open. Visit www.agcsa.com.au/education/future-turf-managers-initiative-ftmi/for more details on thow to apply.





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Glenn Stuart, Director of Courses - Peninsula Kingswood



POA invasion in typical bentgrass





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# Back In play

As USGA agronomists Addison
Barden and Jim Skorulski write,
success is measured as much by
how one responds to a crisis as
one's ability to avoid it.

Damaged greens, whether caused by major weather events, disease or vandalism (as in the recent case pictured here on a course in Sydney) can be a traumatic time for a superintendent, with pressure to return the surface back to normal as quickly as possible

utting greens are living systems. Like all living systems they are impacted by biological factors and a variety of stresses. Despite even the greatest efforts from superintendents, putting green turf occasionally does die.

Every superintendent who has been in the business long enough will have dealt with the trauma of experiencing putting green damage. The pressure to restore damaged greens can be immense; after all, putting greens are the lifeblood of any golf course.

Successful recovery programmes do not happen by chance. The recovery process requires a well-thought-out plan of action that is appropriate for the level of damage, but the plan must also be successfully executed. This article will take a closer look at different levels of putting green damage and the processes used to formulate and implement a successful recovery plan.

### SEVERITY OF DAMAGE

Estimating the severity of damage can be challenging, but it is an important part of formulating a recovery plan. The level of damage will determine the appropriate recovery strategies. For the purpose of this article, putting green damage has been categorised into three levels. Appropriate recovery strategies for each level also are recommended.

### LEVEL ONE

- Size of damage: Small areas (i.e., no larger than a foot in diameter) of turf decline and loss. The damage does not directly impact putting quality near hole locations. Several areas may be damaged, but each area is small.
- Potential causes of damage: Animal foraging, fallen tree or limb, equipment, golfer divot, aggressive scalping of the turf canopy, etc.
- Recovery options: Various forms of plugging, sodding with a manual sod cutter, spiking and seeding, or natural regrowth if the damaged area is small enough.
- Closure and traffic management: Likely not needed because the damage is small and repairable with relatively nondisruptive recovery methods. However, seeded areas will require special care prior to mowing.

Badly damaged greens will likely need to be closed for major recovery work using seed or sod Special considerations: Depending on the turf species, areas that are plugged might be visible for several months. Repair tools such as manual sod cutters. spikers and small-diameter pluggers should be on hand for quick repair. Plugs can be taken from a nursery green or the perimeter of a putting green to maintain turf uniformity.

### **LEVEL TWO**

- Size of damage: Areas larger than a foot in diameter or width and impacting less than 50 per cent of hole location areas. Also includes small areas of turf damage that are widespread across a putting
- Potential causes of damage: Disease. insect injury, abiotic stresses, coldtemperature injury, vandalism etc.
- Recovery options: Sodding, large-scale plugging, spiking and seeding.
- Closure and traffic management: Anticipate some disruption to play. Avoid placing hole locations in damaged areas and treat them as Ground Under Repair (Rule 16) until fully healed. Minimise traffic in the damaged areas for as long as possible. Divert traffic with rope lines or provide a plywood walkway in heavily trafficked areas such as entry and exit points. In some cases, placing ball retrievers near recovering areas can help golfers retrieve their balls without stepping on newly sodded or seeded turf.
- Special considerations: Source enough sod to patch all damaged and thinned areas to achieve surface consistency. Large areas that have been repaired from seed or sod will be visible and more susceptible to stress until they fully

mature. If Level Two damage occurs, the entire putting green should be treated with care until the recovering areas are fully established.

### LEVEL THREE

- Size of damage: Large areas of turf loss or damage to more than 50 per cent of available hole locations.
- Potential causes of damage: Flood/fire damage, summer decline, etc.
- Recovery options: Sod, seeding or sprigaina.
- Closure and traffic management: Putting greens with Level Three damage will likely require complete closure because of a lack of useable hole locations. Even in situations where half of the hole locations are still useable, increased traffic in areas that have not been damaged will likely lead to additional turf decline or loss. For proper recovery, temporary greens are recommended for this level of damage.

### **DEVELOPING A PLAN**

Once damage levels and recovery options are defined, a recovery plan that addresses common turf loss situations should be developed. Include recovery plans in standard operating procedure documents so procedures and expectations are clearly communicated and understood across all levels of staff and management.

The formulation of a recovery plan will depend largely on the degree of the surface damage and the time needed to bring the greens back in play. It is critical to estimate the extent of the damage as early and as accurately as possible. This may require early sampling in some areas where turf has not yet broken dormancy.





The recovery process requires a well-thought-out plan of action that is appropriate for the level of damage, execution of the plan and regular communication with course officials and golfers

Recovery plans for Level 2 and Level 3 damage usually involve seeding programmes or the use of sod or sprigs. Each option has its pros and cons, so it is important to determine which is best suited for your situation as early as possible.

### PLANNING A SEED RECOVERY PROGRAMME

Seed germination and establishment are mostly driven by temperature. Include methods that promote favourable soil temperatures – i.e., 15 degrees Celsius or higher – in recovery plans. Methods to raise soil temperature could involve the use of clear plastic drop cloths, permeable agricultural or turf covers or darkening agents.

Plan ahead to ensure that you will have access to enough cover material should damage occur. Check to see if covers can be borrowed from other golf facilities or consider purchasing some covers as an insurance plan. Also, check with your topdressing suppliers to see if they provide darkening agents such as black topdressing sand. If you decide to use a darkening agent, determine how and when it will be used.

Seed placement is also critical to achieve good germination. Recovery plans should provide the steps used to prepare a seedbed and outline seeding procedures. Include the equipment and personnel that will be used in the plan. If seeding cannot be accomplished with the equipment you have available, check in advance to see if it be borrowed. You may also be able to identify contractors in your area that provide seeding services.

Often, more than one seeding event is required to achieve complete recovery, so recovery plans should account for multiple seedings. Plan to use less disruptive spike or drill seeding equipment, or hand spiking tools to minimise damage to establishing plants.

### PLANNING A SOD RECOVERY PROGRAMME

Sod offers the fastest route to recovery and is usually the most practical choice for greens with Level 2 and 3 damage that need to be put back into play quickly. However, using sod can be difficult. Complications of using sod include difficulty maintaining surface uniformity and potential for soil-layering issues. Whether patching isolated weak areas or repairing extensive damage, using sod requires considerable planning.

The first and most important consideration when using sod is its source. Sod can be sourced from a putting green nursery, existing greens or a commercial grower. Using sod from a well-maintained nursery is desirable for patching or plugging work. An effective recovery plan should reflect the amount of sod available from on-site nurseries. It should also include contingencies for sourcing sod from other greens or commercial growers in the event of extensive damage.

Commercial sod may be the only viable option when widespread damage occurs. Selecting sod is a critical component of any such recovery plan. Factors to consider include the availability of sod and the grass species and cultivars that are offered. It is also important to consider the parent rootzone

material of any available sod. If the sod's rootzone is incompatible with that of your playing surfaces it may need to be washed. Ideally, sod should not have an excessively thick thatch layer. Quality sod can be in high demand, so it is advantageous to establish relationships with sod growers before you experience severe damage.

Plans for recovering from Level 3 damage may involve re-grassing entire putting greens. Such extensive work provides an opportunity to address other deficiencies in a green complex, so consider including drainage projects, green expansions, surface restorations, regrading work or even complete green reconstruction in recovery plans.

At the very least, remember to plan adequate time and resources for sod removal, surface preparation and sod installation should Level 3 damage occur. Also, make sure to establish in your plan an appropriate timeline for plugging and patching work that identifies who will be responsible for completing the work.

Plans for large-scale re-grassing projects should also consider the potential scope of any work that may need to be done. The plan should provide guidelines for determining what can be accomplished in-house and what is best achieved using a contractor.

### PUTTING GREEN CLOSURE AND TRAFFIC MANAGEMENT

Deciding to close a putting green or control traffic can cause controversy, but these decisions are important components of any recovery plan. Ultimately, the level of damage and the recovery method employed will help dictate decisions about putting green closures and traffic management measures.

Unfortunately, unpredictable weather conditions make it difficult to define recovery periods. Anticipate a minimum of 60 to 80 days before a severely damaged surface is mature enough to tolerate traffic when seeding. Although variable, expect about four to five weeks before sod repairs can be subjected to normal traffic.

Pressure will mount to reopen putting greens as they begin to show signs of recovery. In your recovery plan, provide some basic guidelines that establish when damaged greens can be reopened and how traffic should be managed over newly sodded or seeded surfaces to minimise the risk of further injury.

Consider the number of rounds to allow on recovering greens and establish plans to proactively close putting greens if the



Sod harvested from an on-course nursery or another putting green is preferable for patching and repair work in areas where surface uniformity is important

recovering turf shows signs of decline or stressful weather occurs. Traffic problems associated with prematurely opening recovering putting greens are common causes of delays and failures. Clearly identify who will be given the authority to make decisions about opening and closing putting greens in your recovery plan.

### COMMUNICATION

Arguably, the most important component of a successful recovery is communicating before and during the recovery process. Putting green closures are never desired, but clearly defining the purpose behind closures will help facility managers communicate their occasional need to golfers.

During the recovery process, weekly memos to golfers can help update them on the recovery progress and when to expect recovering greens to be reopened. Remember, there will always be pressure to open greens as early as possible. However, stay strong and focused on completing the recovery programme. Avoid prematurely opening greens to ensure the best-quality and most durable playing surfaces going forward. Recovery is one time when patience truly is a virtue.

### CONCLUSION

Unfortunately, putting green turf loss is something that can happen despite your best efforts. Remember, successful recovery programmes do not happen by chance. The

Growth cloths, permeable covers and darkening agents may need to be included in a recovery programme to elevate soil temperatures and promote seed germination in cool climates recovery process requires a well-thought-out plan of action that is appropriate for the level of damage, execution of the plan and regular communication with officials and golfers.

Take advantage of the opportunity and stay positive. Repairing damaged putting greens provides you with an opportunity to demonstrate your expertise and value at a golf facility.

### **ACKNOWLEDGEMENTS**

ATM wishes to thank the authors and the USGA for allowing this article to be printed. The original article, titled 'Bringing a putting green back to life', appeared in the Green Section Record, Vol 57 (3), 1 February 2019. Jim Skorulski is an agronomist working with golf courses across New England and Eastern Canada. Addison Barden is an agronomist working with golf courses in the Southeast Region.

### TIPS FOR RECOVERY SUCCESS

- **1.** Evaluate and categorise the level of damage on each putting green as early as possible.
- **2.** Determine which recovery methods are most practical for each putting green.
- **3.** Secure seed, sod, covers, seeding and cultivation equipment or other materials as early as possible.
- **4.** Work some level of flexibility into the recovery plan for poor weather and other unforeseeable events.
- **5.** Try to establish quality temporary greens and establish guidelines to determine when and how to reopen putting greens.
- **6.** Include post-establishment management procedures for juvenile turf established from seed or sod in the recovery plan.
- **7.** Provide regular updates on the recovery progress.
- **8.** Try to make a positive out of a negative situation by using the recovery process to address other issues that contribute to poor putting green performance. Doing so will provide long-lasting benefits.





## purpose Purpose

ATM expert columnist Peter McMaugh looks at the concept of fit for purpose varieties and the characteristics that make for exceptional grasses.

ome time ago, a landscape architect in Perth made a plea like this for the grasses of the future... "We need grasses which use less water, grow in extreme heat, can tolerate salty water, take heavy wear and repair well and require less mowing than current varieties". He could have added 'looks green in winter and doesn't require lots of fertiliser to grow'!

What he was asking of the plant breeder is environmentally responsible and sustainable grasses that are fit for purpose. It is interesting to note that in May, TurfBreed recently invited Dr Dave Kopec from Arizona State University to their annual conference. Dave's constant theme about breeding is 'fit for purpose' grasses.

When you look at the criteria outlined by the landscape architect, the first thing that hits you in the eye is that a lot of what both he and Dave Kopec want to see in their grasses is the ability to thrive and survive on low water inputs. Not only is Australia the land of droughts, but we are also going to be faced in the future with having to use a water quality for our grasses which is far less than potable level. For example, over the next two years two shires around Perth are going to have their water allocations cut by five per cent and, to make matters worse, recycled water is going to be an increasing proportion of what is available to grow grass.

It is very important to get recycled water into perspective. Cleaning up water from the waste water stream using current technology is an expensive business. So, the output products are generally offered at different grade levels. To go from Grade 2 (grey water) to Grade 1 (potable) is very expensive and why do it for grasses when they can clean it up themselves far more cheaply.

There is of course a sting in the tail with recycled water and it is called salt. Perth happens to be built on sands with not too much clay around, so it is almost the perfect place to be able to deal with salt by flushing it through. Where does that salt go? Into the ground water.

Perth relies heavily on ancient ground water lenses of fresh water for much of its supply, especially for gardens and lawns. So there is going to be a creep factor in play for increasing salt leaching down into

these layers with the use of recycled grey water. This is also why their Department of Environment is also very strong on cutting fertiliser use, especially for turf.

The major naughty ingredient for Perth and indeed the whole of WA is excessive phosphorus because the native ecosystem has evolved to do without it. Too much phosphorus then becomes a plant poison. This is why turf research programmes in WA have concentrated a lot on finding additives to sand to not only hold more water in the profile but also to capture phosphorus. This is a great example of seeing 'the big picture'. Far too much research fails to reap practical benefits because it doesn't look at 'the big picture'.

One of the major pieces of the jigsaw which makes up 'the big picture' about the water relations of grasses, has been provided right here in Australia by Dr Chris Lambrides of the University of Queensland, in his ground-breaking study of drought tolerance and survival in couchgrasses (Cynodon sp) where over 1000 accessions were evaluated for drought tolerance. The answer was a very simple conclusion – the more and bigger rhizomes you have, the more drought tolerant you are. And where did his most drought tolerant types come from? Western Australia – no coincidence there.

### **WATER USE**

Let's look at the next bit of the jigsaw puzzle about couchgrasses – water use rate. If you compare the physiology and anatomy of most couchgrass varieties in their leaves, you will not see a great deal of difference between them. So the water use rate becomes an exercise in how much leaf surface area there



The more and bigger rhizomes you have, the more drought tolerant you are. A highly rhizomatous couchgrass (left) compared to Wintergreen (right)

is per unit ground area.

It is very evident that some couchgrasses are much denser than others in their canopy. In a sward which is unmown or cut high, the denser the sward the closer the stems and leaves are, trapping a high humidity in the canopy. This creates a barrier to quick water loss. But in a closely mown sward, this disappears and the greater the leaf area that is exposed to the atmosphere the quicker the water loss. This may vary slightly from variety to variety, but in general most couchgrasses behave in the same way. This means, in general, that a closely mown sward closely resembles an open water surface.

When we measure the surface of a sward for leaf area to try to create a figure for Leaf Area Index (LAI) it is quite difficult to achieve, but the basic principle of the more leaf area the greater the rate of water loss holds true. This is why when you compare varieties, grasses such as Santa Ana use more water than less dense varieties. What's more, grasses like kikuyu use 10 per cent more water than couchgrasses.

Why are rhizomes so important? Rhizomes are stems – but underground not aboveground. When water stress hits and the surface temperatures climb, the parts of the plant that take the greatest hit are those that are directly exposed to the sun. So the aboveground stems and leaves get desiccated relatively quickly. The underground stems are insulated from the fiercest part of this assault by the thermal blanket called the soil.

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Obviously then, in a straight-out survival exercise the trick is to go deep. And in absolute terms it works. But does it work for turf? When Dr Lambrides came to evaluate his very strong rhizome types for turf production, he found that rolls of the very deep ones shattered at harvest because there were not enough rhizomes in the close-to-surface layers to hold the turf together.

Fortunately, I have been following up Dr Lambrides work, looking for similar grass types but with the rhizomes near the surface. I have found two strong *Cynodon dactylon* types with one in particular being a standout. They are known as SR3 and SR6 and both are now lodged with IP Australia for plant breeder's rights (PBR) purposes.

I have also developed two other clones of Santa Ana from mutation breeding. Both of these were off the same node and that was the only node of over 2000 that produced a mutation. What is exciting about these is that they have rhizomes which are very scant on the parent. Also they only grow to about one quarter of the vertical height of the parent. That saved energy goes into quick lateral spread.

One USA sod grower said to me recently, 'I just want a Bermuda that will wrap up on a consistent basis'. This is where Australian varieties are astoundingly successful, especially when they have strong rhizomes. It is these rhizomes that also give these grasses the enormous recovery potential that they have. Wear them to the ground and they bounce back. Cut them out for sod and you can harvest again in 10-12 weeks. Take divots out and you will be filled in before you know it. The additional advantage that prostrate growth patterns gives is that these grasses can be safely mown with a rotary mower and even if they do scalp you'll see recovery within 10 days.

There is another aspect of rhizomes that needs to be taken into account. If a grass has strong apical dominance, that will be expressed in the rhizomes as well as the stolons. SR3 couch has low apical dominance



Peter McMaugh has found two strong Cynodon dactylon types with rhizomes near the surface which have both been lodged for PBR purposes

so its stolons and rhizomes branch very early and generously. This makes for a hugely strong turf. Grand Prix, DT1 and Oztuff all have high apical dominance which slows down lateral spread.

### MOWING FREQUENCY, CLIPPING VOLUME AND THATCH

That brings us to another very important factor for fitting into the sustainable 'fit for purpose' mould – mowing frequency, clipping volume and thatch accumulation. Let us look at this latter characteristic first.

I will always remember sitting in the courtyard of the Papal Palace at Avignon, France after returning from a visit to a magnificent horse training centre nearby, sipping a well-earned glass of red. Dr Jack Hall III, a lecturer at Virginia Polytechnic University said to our group, 'You know I learned something today. I have always taught my students that thatch is bad. Today I learned that thatch is good'. For once he had the blindfold of golf lifted and saw the big picture.

Yes, if you have heavy wear you need some thatch. Thatch helps to protect the crowns and surface stolons of grasses from damage, at least in the short-term. But you can have too much thatch and that means lots of work renovating. It also generally means that the grass requires a lot of mowing.

The classic case is probably Santa Ana. Because it is so upright in its growth pattern, it requires a lot of mowing or a lot of Primo and it produces lots of thatch. This is an inherent characteristic of every interspecific hybrid using *C. transvaalensis* as a parent. The very upright character of this grass gets transmitted to the progeny producing unacceptable levels of verdure which requires excessive mowing and dethatching.

The reason that USA breeders have gone down this track is the very poor quality of their *C. dactylon* population for turf. On the other hand, Australia has *C. dactylon* types which are low growing and produce great surfaces without having to resort to hybridisation. This was proven very comprehensively by the late Dr Arden Baltensperger who used Wintergreen very largely in his production of the improved seeded type Princess 77.

Not only do these USA types produce excessive thatch, they also take a lot of fertiliser to keep them looking good. It is a given that *Cynodons* by their very nature require more nitrogen than some over other turf species to look good, but there is big variation from variety to variety in this characteristic.

This topic of what makes a grass look good is one that really needs to be dealt with in a far deeper investigation than this. The basic point I am trying to make is that all grasses are not equal in this respect and that breeders are trying to improve on this all the time. DT1 is probably the best effort yet from USA breeders regarding this 'prettiness vs cost' debate.

Mowing characteristics have to be a part of this discussion also. The interspecific hybrids, by the nature of their very upright growth, don't take well to rotary mowers. Scalping usually means many weeks of slow recovery. This is partly because of a lack of rhizomes which means there are no food reserves there for quick recovery. They also in general lack strong lateral growth.

Another attribute about sward density is that a grass needs to be dense enough to take wear but open enough to be easy to oversow with ryegrass for increased winter wear. This is where the concept of adequate density needs to replace maximum density in our thinking.

The final criterion for an exceptional grass has to be how it goes into winter and how it comes out. These are all late to bed and early to rise. So, in short, we have now just what the landscape architect who began this conversation wants.

We don't have to wait, they are here. W

Because it is so upright in its growth pattern, Santa Ana couchgrass requires a lot of mowing (or a lot of Primo) and it produces lots of thatch





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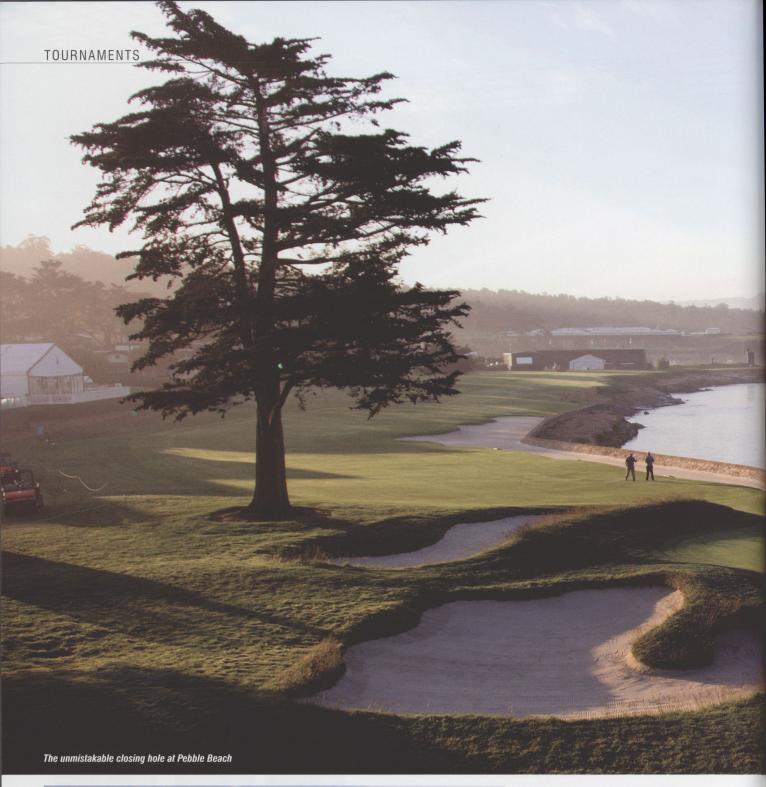


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The view from the stands of the immaculate approach and 17th green

n June I was fortunate enough to work at the 2019 US Open held at the iconic Pebble Beach. This was my third time volunteering for the Open maintenance team, having previously attended the 2015 edition at Chambers Bay and then Erin Hills in 2017. I was looking forward to comparing those courses to Pebble Beach and let's just say California's finest didn't disappoint.

I travelled from Australia with fellow Open volunteers Justin Bradbury (Camden Golf Club, NSW), Adam Strachan (Rain Bird, WA) and Dennis Grounds (Catalina Country Club, NSW). We flew into Los Angeles and spent

PHOTOS: IDRIS EVANS

### Picture perfect Pebble

Western Australian Golf Club superintendent
Idris Evans got to indulge his passion for
photography while volunteering at the 119th
US Open held at Pebble Beach in June.

five days driving up the Californian coast to Pebble Beach, taking in the sights and visiting some golf courses on the way.

We played a couple of rounds in Los Angeles, including Virginia Country Club which is a members' only facility. The course was exceptional with outstanding conditioning. We were lucky enough to have a tour of the famed Riviera Country Club in the company of the superintendent. A truly amazing facility boasting 40 ground staff on an 18-hole golf course.

During the week of the tournament we also visited Cypress Point which was absolutely breathtaking. After the tournament



The uniquely shaped tee at 18. The Pebble Beach tees are a Poa/ryegrass mix





The 2019 US Open brought to you by these guys...

hosted at the Cal Club. Once again our golf games didn't match the facility, with the exception of Adam (unfortunately we are still hearing about his day out).

we travelled to San Francisco and were

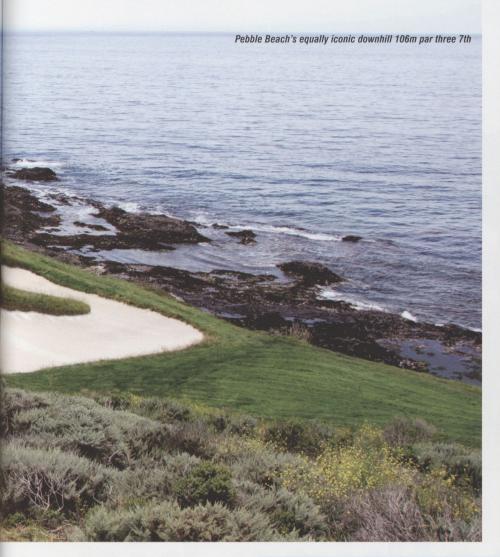
At Pebble, I worked with a crew raking

Pebble Beach boasts 100 per cent Poa annua greens



bunkers on the back nine for the week of the tournament. This was perfect as it afforded me the opportunity to indulge my other passion, photography. Pebble Beach is one of the most highly credentialed golf courses in the world with spectacular scenery and I was able to capture many great photos to form a lasting record of the experience.

The significant difference I noticed with this US Open compared with the two previous I have attended was that superintendent Chris Dalhamer and 2IC Jack Holt were given autonomy in setting the course and green complexes. At previous US Opens I had attended, the USGA had total control.



### PEBBLE BEACH -**2019 US OPEN**

Superintendent: Chris Dalhamer (19 years at Pebble Beach). Oversees Pebble Beach, Spyglass Hill, The Links at Spanish Bay and Del Monte golf courses. Total staff of 86.

Annual rounds: 65,000. Par: 71, 7075 yards (6469m).

Stimpmeter: 12.

Greens: Poa annua (HOC .110"/2.8mm down from 3.2mm for 2019 AT&T Pro-Am; average green size 325m2).

Tees: Poa annua/ryegrass (HOC .350"/9mm; average tee size 185m2).

Fairways: Poa annua/ryegrass (HOC .425"/11mm; 8.5 hectares of fairways).

Rough: Ryegrass (HOC 3-5" - up from 2" at the 2019 AT&T Pro-Am; 26ha of rough).

Bunkers: 118. Soils: Sandy loam.

Water sources: 100% reclaimed. Tournament volunteers: 85-100.

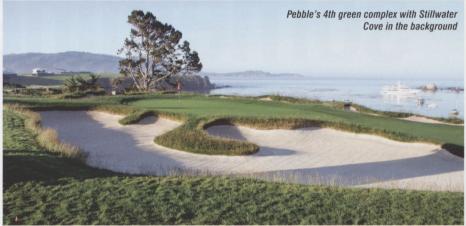
Did you know... The 2019 US Open was the last of six high profile events Pebble Beach hosted in an 11-month period. Others included the 2018 US Amateur, the TaylorMade Pebble Beach Invitational and the PGA Tour's AT&T Pebble Beach

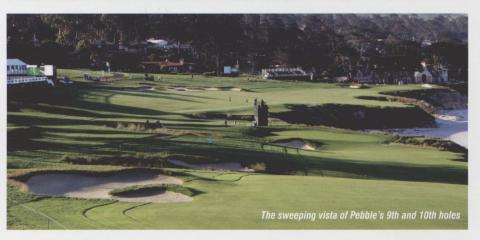
National Pro-Am.

The facilities afforded to the tournament volunteers were exceptional. We had three quality meals per day and endless snacks and drinks served in the catering tent throughout the day. We were also able to go out on the course and watch some fantastic golf during the day between our early morning and evening shifts.

As always there was great opportunity to network with the other volunteers and to share knowledge. Universally throughout the world golf course maintenance practices are very similar and it is just performed on a huge scale for major events. The industry is filled with great like-minded people and it is a truly fantastic experience to be part of such a great tournament. I highly recommend anyone to volunteer if the opportunity presents as you are guaranteed a priceless experience doing what we all love. W









# Start of Start of Something big

or the second time in as many years, history was created when the AGCSA Graduate of the Year Award was handed out at the recent Asia Pacific Turfgrass Conference in Brisbane. Twelve months earlier in New Zealand, for the first time in the award's history, Daniel Hendrie and Bryce Walsh were announced as dual winners of the Toro-sponsored award.

Fast forward a year and in Brisbane it would be South Australian Thomas Burridge carving his own little slice of history. The former Kooyonga Golf Club apprentice, who is now part of the crack course management team assembled by Glenn Stuart at Peninsula Kingswood Country Golf Club in Melbourne, became SA's very first AGCSA Graduate of the Year Award recipient in 24 years of the award being presented. Burridge headed a strong field of state finalists that included Jack Schmidt (Cardwell GC/GCSAQ), Jax Battye

Thomas Burridge and Nathan

Andrews became the latest up and
coming sports turf managers to win

Graduate of the Year Award honours
at the recent Asia Pacific Turfgrass

Conference.



(Meadow Springs G&CC/GCSAWA), Jordan Phillips (Newcastle GC/NSWGCSA), Jordan Thompson (Royal Canberra GC/STA ACT) and Nicholas Fiddelaers (Huntingdale GC/VGCSA).

In the STA Sports Turf Graduate of the Year Award, Victorian Nathan Andrews collected the honour, making it two out of the past three years that an STA Victoria graduate winner has topped the national award. The Citywide Service Solutions leading turf hand headed an equally talented field that comprised Mitchell McKenzie (Canberra Racing Club/STA ACT), Jake de Marigny (Sydney University/STA NSW), Jacob Moon (SACA/STA SA) and Micah Mathewson (Toowoomba Grammar School/STA Qld).

Toro senior sales manager Mark Johnson, who has been a member of the Graduate of the Year Award judging panel for a number of years, was again impressed with and buoyed by the calibre of this year's crop of up and coming turf managers.

"I love being able to spend time with these guys and watch their passion and professionalism which over the years only continues to get better and better which is extremely pleasing," says Johnson. "It's an extremely difficult process to separate them each year and pick a winner, which was evident last year when we had dual winners; it is literally that close.

"I think what was most pleasing this year sitting and listening to them was the respect and admiration they had for their superintendents and turf managers. You could really tell the respect they had for their mentors and the important role they had played in getting them to this level. And those superintendents and turf managers should be congratulated - they have done a wonderful job in moulding these fine young gentlemen. If this is the future of our industry, which it is, then we are in very good hands."

Following the conference, ATM caught up with both Thomas and Nathan to gauge their reaction about receiving their respective awards, reflect upon their careers to date and what the future has in store...

Congratulations to you both on winning the Graduate of the Year Award. What was your reaction when your name was read out? Thomas Burridge: "Shock was my initial reaction. I was so proud and honoured to stand alongside the other graduates and winning the award on top of that seemed unbelievable. On reflecting, it still seems somewhat surreal. I am very thrilled and honoured to have achieved the milestone of being the first Graduate of the Year winner from SA, however, at the end of the day I was happy enough to represent my home state and golf club. Of course, we all wanted to win, but standing up on stage with all the other graduates I thought that was an achievement in itself and didn't worry about the end result too much."

Nathan Andrews: "There was a great photo taken by ATM editor Brett Robinson of the moment my name was called and you can see the smile on my face (see page 72). I felt incredibly fortunate and a little bit shocked to be selected ahead of the other lads. I absolutely love this photo because you can see the other finalists look genuinely happy for me, as I would have been for them. This photo really sums up the week I had in Brisbane and the friendships I made, as well as the joy on my face when my name was called."

What does winning the award mean for you and your future in the sports turf industry? TB: "Winning this award will give me the opportunity to visit well renowned courses



AGCSA Graduate of the Year Thomas Burridge



STA Sports Turf Graduate of the Year Nathan Andrews

in America, enabling me to broaden my knowledge and gain an insight into the differences in turf management in a different country. This opportunity also signifies that hard work pays off. I'm extremely committed to my work and this opportunity motivates me even more to achieve my future goals." NA: Winning this award has inspired me to dream big about my future and I hope to one day play a significant role in the turf industry. I'm extremely grateful for the opportunities that winning this award may bring."

What are your career plans now that you have the award in your pocket?

TB: "In the short-term I hope to finish my

Diploma and will continue further study which will guide me in my future career aspirations. My next goal is to step up into a 3IC management role and eventually one day become a course superintendent."

NA: "Before winning the award, I began undertaking the Diploma of Sports Turf Management and was also promoted to leading turf hand at Citywide, so for now I'll continue with those. I'm also obviously pretty excited about the trip to the USA with Toro next year. An incredible prize as part of winning the award and a once-in-a-lifetime experience that I'm very grateful for."

Being an apprentice can be a pretty thankless task at times. What were some of the highlights during your apprenticeship?

TB: "I thoroughly enjoyed my time at Kooyonga Golf Club and am privileged to have undertaken my apprenticeship there. One of the biggest highlights of my career was preparing for the Women's Australian Open held there in 2018. Having it at my home course made it that bit more special. It was great to be a part of a team that put great effort and dedication in over the course of a successful week.

I am now working at Peninsula Kingswood Country Gold Club where I've certainly had many highlights in my time there so far. Having the opportunity to do major reconstruction work and seeing and being a part of the progress has created some very memorable days. Working as a team to prepare for the grand opening was a great achievement that I was grateful to be a part of."

NA: "As a third-year apprentice I was given the opportunity to take over as curator at the Epping Soccer Stadium and spent seven months preparing it for weekly NPL and Women's A-League fixtures. The biggest highlight though, would be receiving a promotion. On 1 April this year I began my role as leading turf hand. Here I was signed off from my apprenticeship nine months early, as well as receiving a company car and phone as part of my 2IC package."

What has been the biggest thing you have learnt about the industry during your apprenticeship?

TB: "The biggest thing that I have learnt in this industry is to prepare for anything. There are many obstacles to overcome and each day presents differently. It keeps things interesting but can be tough at the same time."



NA: "The turf industry is tight knit and there's a sense of brotherhood among fellow turfies, curators, greenkeepers etc. I've also learnt that there are many pathways that this trade can provide for someone who's willing to work hard and continue to learn."

### What do you like most about being involved in the sports turf management industry?

TB: "I strongly believe it is a very rewarding industry, overcoming challenges and the obstacles the job presents is worthwhile when you see smiles on members and guests faces. It can be very demanding at times, but seeing progress throughout the course and eventually the final product gives me a great sense of pride and achievement and is what I enjoy most about it."

**NA:** "I enjoy the sense of satisfaction that turf management brings. I enjoy the art of preparing sports surfaces for major events."

### How important a role have your current and past superintendents/sports turf managers played in your career development?

**TB:** "I don't think I would have been able to represent my state let alone win the award without the help and guidance of my past superintendents. Working at another club has shown me how crucial it is to listen and follow the direction of your superintendent and assistant. Working with two leading industry superintendents – Steven Newell and Richard James – through my apprenticeship,

I knew moving to another club wouldn't be a problem knowing they had passed on a wealth of knowledge and skills that I now use every day."

NA: "I consider myself very fortunate to have been surrounded by the people I have throughout my apprenticeship. They were extremely knowledgeable and always gave their time when teaching and showing me turf management practices. I wouldn't be where I am today if it wasn't for Wayne Draper, Leigh Stewart and Steve Torney.

### How was the conference for you and what did you take away from the week?

TB: "The conference was a great experience and I thoroughly enjoyed my time there. I mostly enjoyed interacting with the other graduates and turf managers. It was very interesting hearing from fellow peers and various superintendents across the states about the way they run/operate their courses and the obstacles they face. The experience was certainly very insightful and I'm very grateful for the opportunity."

NA: "It was a great experience being around industry leaders and getting the opportunity to listen and learn to guest speakers. However, my favourite part of the week was the people I met and the friendships I made. From a professional point of view, meeting successful people that started as humble apprentices really inspired me and showed me that if you work hard and continue to develop you can go almost anywhere in this industry. It was

awesome to have blokes give you the time of day and spend hours chatting about turf, life, footy and whose shout it was next!

Without a doubt though, the thing I look back on the most fondly from the week was the time I spent with the other graduate finalists. For a group of lads from all over Australia and from different sectors of the industry to come together and click the way we did was awesome."

### And finally, any people you'd like to thank?

TB: "I would firstly like to thank Toro and the AGCSA for making this all happen. Thank you to Kooyonga GC and Peninsula Kingswood CGC for allowing me to work at two great clubs. Lastly, I would like to give a big thank you to Steven Newell, Richard James, Jacob Burridge, Adam Fry, Glenn Stuart, Shane Stuart and Ben Payne. All of these people have played a big part in my career and have gone out of their way to help me develop and further my knowledge and skills."

NA: "The STA and AGCSA for the graduate programme and for making my week in Brisbane so enjoyable; Toro for sponsoring the graduate programme and for my trip to the USA next year; my employer, Citywide Service Solutions, for their ongoing support; my team leaders Wayne Draper, Leigh Stewart and Steve Torney and operations managers Brett Francescutti and Paul Wellington; and finally Mark Burchell and Doug Agnew from Melbourne Polytechnic for nominating me for the award."

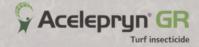
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National Turf Education Working Group co-chair Albert Sherry updates the industry on the recent sports turf management training package endorsement by the Australian Industry and Skills Commission.

t is with much satisfaction that I report the finalisation and government endorsement of the new sports turf management training package. At the 27th meeting of the Australian Industry and Skills Commission held on 13 August 2019, the revised sports turf management qualifications were fully endorsed as part of Version Four of the Agriculture, Horticulture and Conservation and Land Management (AHC) Training Package.

This follows several frustrated attempts by industry over a decade to get Agrifoods to develop the qualification to meet their requirements, including lifting the number of units above 16, in order to reflect real industry roles and work functions.

Skills forecasts for the AHC Training Package identified the following skills and knowledge to be addressed by the project, which was the starting place for a review of the AHC sports turf management units of competency:

 Use of advancing technology in monitoring of turf surface health and usability (e.g. portable soil moisture/ salinity and temp sensors; weed and disease predicting software incorporating weather stations; GPS technology for marking out turf areas, weed/disease locating and mapping, etc.);

- Use of growth regulators as an integral part of surface maintenance; and
- Use of GPS, hydraulics, hybrid/battery machines (e.g. GPS driven equipment.)

### **WORKFORCE ANALYSIS**

A workforce functional analysis (WFA) was undertaken with industry subject matter experts (SMEs) at the beginning of the project. SMEs were drawn from most states, with representation from education institutions, sports fields, bowls, cricket and golf. The WFA established the nature of the work functions required for each qualification.

In the initial meeting, four key roles were identified in the sports turf management industry for the workforce analysis. It became evident that the titles for these job roles vary slightly within different parts of the industry

and across various states and territories. The key roles were restated as follows:

- Grounds person (pre trade) aligned to Australian Qualifications Framework (AQF)
   Level 2:
- Sports turf tradesperson aligned to AQF Level 3;
- Assistant turf manager/assistant golf course manager – aligned to AQF Level 4;
- Sports turf manager aligned to AQF Level 5.

### REVIEW OF UNITS AND QUALIFICATIONS

The SME group reviewed a total of 16 turf specific units of competency and one soil unit all relating to sports turf management training packages. A review was then undertaken of the qualifications, with the outcome being;

TABLE 1. 2017 ENROLMENTS BY STATE AND TERRITORY<sup>1</sup>

	NSW	VIC	QLD	SA	WA	TAS	ACT	Total
AHC20910 Certificate II	2	4	3	0	2	9	0	20
AHC20916 Certificate II	0	0	5	0	27	1	0	33
AHC31310 Certificate III	213	209	86	46	72	18	1	647
AHC31316 Certificate III	181	122	85	21	9	7	42	468
AHC40812 Certificate IV	9	0	7	0	6	0	0	22
AHC40816 Certificate IV	16	0	0	0	10	0	0	26
AHC51010 Diploma	4	36	7	0	0	3	0	50
AHC51016 Diploma	12	62	0	0	0	0	0	74

<sup>&</sup>lt;sup>1</sup> AHC enrolment figures taken from the National Centre for Vocational Education Research's Vocstats

- AHC20916 Certificate II in Sports Turf Management was revamped to act as either a pre-apprenticeship or a taster to engage participants in our industry. It is believed this will aid in uptake, provide a vital feeder and help retention of student numbers in the trade qualification.
- The SME group recommended significant changes to AHC31316 Certificate III in Sports Turf Management to meet industry requirements given this qualification is the lifeblood for industry (see enrolment statistics Table 1). Notably, the increase in units of competence required for the qualification based on a detailed workforce job and task analysis. The Certificate III in Sports Turf Management has increased in size from the 16 units required in the existing qualification to 23 units (comprising 18 core units and five elective units - see Table 2) and in the redesigned Certificate III, an increase of 40 per cent.
- AHC40816 Certificate IV in Sports Turf Management to be deleted due to it not meeting a designated job outcome and having poor enrolment numbers in the states that offer it (see Table 1).
- To meet industry needs, the units of competencies required for AHC51016 **Diploma of Sports Turf Management** have increased. This was due to the detailed workforce job and task analysis conducted by the SME group.

### SKILL SETS

It was also identified that some workers within our industry require specific training in an area but cannot always enrol in or complete



a full qualification, while others require additional specialist skills. For this reason three skillsets were proposed to cater for different seaments of the industry:

- Skill set for sports turf volunteers based on providing volunteers with a basic understanding of sports turf management practices.
- Technical skill set for sports turf management - developed to fill the gap between the Certificate III and Diploma courses and will provide credits in the Diploma qualification;
- Business skill set for sports turf management - pitched at turf mangers who need to further develop skills in budget preparation and management and will provide credits in the Diploma qualification.

The group also recognised that skills sets for specialist areas of the industry could be developed with wider consultation. To this end there are also moves toward implementing skills sets to cover:

Preparation of ovals and cricket wickets - this would provide a range of skills appropriate for volunteer and casual workers engaged in the management of sports turf ovals and wickets.

- Business skills set for managers of sports turf facilities - this provides a range of business management skills required for management functions in the sports turf industry.
- Proposed turf production statement of attainment - this skill set provides a range of skills appropriate for workers engaged in the turf production sector.

### CONCLUSION

Over the coming months the National Turf Education Working Group will meet to start work on ensuring a national approach in the implementation of these changes. The group and industry associations will lobby for increased funding and hours to ensure the new qualifications can be delivered to minimum industry standards.

TAFE colleges delivering sports turf management qualifications will start to transition students to the new qualification. This is a substantial generational change for the Australian sports turf industry and something that has been achieved by the industry working together.

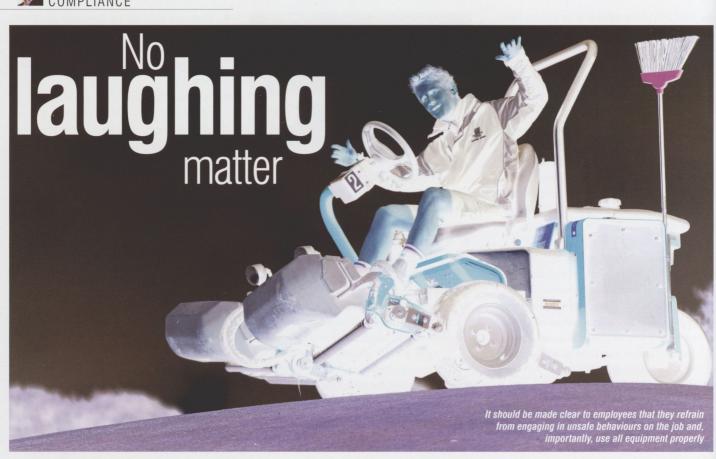
I would like to formally acknowledge the amazing support of Tom Vassallo (project manager, Skills Impact), Ron Barrow (Nestor Consulting), the members of the SME group, the management of our industry associations and the interest of all who contributed during workshops and feedback stages of the project.

Full information on the AHC sports turf qualifications are available in the education area of the Australian Sports Turf Managers Association website (www.agcsa.com.au/ education). W

### TABLE 2. CERTIFICATE III IN SPORTS TURF MANAGEMENT

Core Competency Units (18)	Elective Units (total of five from below)				
Transport and store chemicals	Implement a tree maintenance programme				
Prepare and apply chemicals to control pest, weeds and diseases	Communicate effectively with clients and team members				
Install drainage systems	Operate tractors				
Install pressurised irrigation systems	Operate and maintain chainsaws				
Operate pressurised irrigation systems	Identify plant specimens				
Maintain pressurised irrigation systems	Coordinate work site activities				
Operate machinery and equipment	Sample soils and interpret results				
Implement a plant nutrition programme	Plant trees and shrubs				
Control weeds	Prune shrubs and small trees				
Control plant pests, diseases and disorders	Coordinate machinery and equipment maintenance and repair				
Implement soil improvements for garden and turf areas	Operate land-forming machinery and equipment				
Prepare sports turf surfaces for play	Assist in collecting basic spatial data				
Construct turf playing surfaces	Conduct skid steer loader operations without attachments				
Establish turf	Estimate, measure and calculate measurements for work				
Monitor turf health	Read and respond to basic workplace instructions				
Renovate sports turf					
Contribute to work health and safety processes					
Apply environmentally sustainable work practices					





We all love a prank and to skylark from time to time, but doing it in the workplace can have serious consequences writes EHS expert Terry Muir.

ractical jokes and horseplay are undoubtedly an iconic aspect of Australia, given our global recognition as humorous 'larrikins'. These practical jokes are often brought into the workplace where employees prank, tease and trick each other. These workplace pranks aren't intended to maliciously hurt or bully other colleagues, but are intended to provoke something all Australians love – a good laugh.

Almost every sports turf management workplace has a company prankster, the one person always pulling practical jokes on others and being the fun guy. Every workplace has banter and it makes our jobs easier and brings people together. Harmless stuff, right? In some cases, maybe, but when horseplay or skylarking cause harm, it's no laughing matter.

Even if horseplay doesn't result in a physical injury, it can lead to humiliation, embarrassment, anger, hurt feelings, distrust and this can be perceived as workplace bullying and harassment for those on the receiving end. New legislation and recent court cases shown below demonstrate that workplace pranks do go wrong, people can get hurt, the environment can be polluted and people can be prosecuted.

### **CASE STUDY 1**

A worker was killed when he was crushed between a forklift and a pole. The forklift was being driven by a certified driver at the time, however, the worker climbed onto the forklift and placed his hand on the driver's head and neck and his other hand under the driver's leg. The reverse pedal was accidentally engaged and the forklift reversed, crushing and killing the worker. He died at the scene. The Court found that the worker had not been given instructions on the prohibition of 'horseplay' in the workplace.

### **CASE STUDY 2**

Four workers were found guilty of WHS offences for 'egging' one of their colleagues because he was getting married the next day. The victim was seized, his hands and feet were strapped to a panel of steel mesh, his clothes (except for his underwear) were cut off with a knife and he was pelted with raw eggs.

Then the employee in charge of this prank poured a half-circle of petrol around the victim and lit it. The victim struggled and as a result he and the steel mesh fell into the flames. He was rescued and offered a spare set of clothes, but not first aid, by his colleagues. He suffered burns requiring skin

grafts and psychological injuries. His wedding and honeymoon were ruined and he lost his job because of incapacity to work.

The supervisor was sacked, prosecuted in the criminal court, fined and had to pay \$16,000 to the workers compensation insurer, plus Workcover's costs. Another participant was fined \$1800 plus costs. The Court did find that an employee seeing something dangerous has a duty to intervene.

### **CASE STUDY 3**

An apprentice mechanic was placed in a bin, locked in a cage, put in a car boot, hosed down with water and given 'dead legs' by colleagues during separate incidents. He subsequently took his own life. It was during the inquest that it was reported his work colleagues didn't actually think that they had done anything wrong. His manager stated that it was just "banter" and "horseplay." He added, "I was in the workshop when a prank was played and he was set on fire. It did not go too far. We knew where to draw the line. It was not bullying."

### CASE STUDY 4

A truck driver was making deliveries and parked his truck at a delivery depot. While at the depot, the driver used a pallet jack like a scooter by placing one foot onto each of the tyres of the pallet jack while holding onto the handle with both hands. He pushed the pallet jack with his foot and began to slowly roll.

While he was crossing the floor, another employee used his foot to push one of the tyres of the pallet jack. This push caused the driver to fall backwards off the pallet jack, causing his back and head to strike the concrete floor. He sustained compression fractures to his spine. The court ultimately ruled that the driver was to be compensated over \$800,000 as a result of his injuries.

The above cases clearly demonstrate the impact of horseplay. They also demonstrate how seriously the courts view the actions of those who participate in it and of those who simply 'look on' while it is occurring.

### PREVENTING HORSEPLAY

Supervisors and managers have a responsibility to keep their employees' work environment safe and free of harassment and to monitor behaviour and prevent horseplay from occurring. It should be made clear to employees that they are to refrain from engaging in unsafe behaviours on the job and that they must follow all workplace rules and regulations, and importantly, they must use all equipment properly.

Throughout September, epar and the Australian Sports Turf Managers Association conducted six training workshops to train superintendents and supervisors in how to verify the competence of a staff member using plant and equipment. As you start verifying your staff competency, it is important to record that you have communicated to them how important it is they operate the equipment in accordance with the operator's manual and your safe work procedure – no horseplay when using equipment.

Outline policies against workplace horseplay in your EHS induction by including and communicating information to staff that;

- They are not to initiate horseplay;
- Do not encourage horseplay by laughing or goading;
- Don't fall into the peer pressure of participating in horseplay; and, importantly...
- Don't ignore horseplay when you see it happening – report it.

It is equally important to discuss with your staff the many reasons why your workplace isn't the place for this sort of behaviour. For example, explain what starts as harmless fun could end up having disastrous consequences. A person who is the target of practical jokes and pranks can suffer both physically and emotionally (see the case study mentioned above).

Additionally, frequent horseplay at work makes everyone distracted. Instead of



While it is important to have fun in the workplace, it's just as important to know where to drawn the line at what is acceptable and what is not

focusing on their job, employees are more concentrated on discovering the next prank and protecting themselves from it. Here are a few potential hazards of workplace horseplay to discuss with your team:

- Running, chasing others, pushing can lead to slips, falls, trips and other accidents.
- Throwing tools to/at others are one of the most common injuries of goofing around.
- You could expose yourself or another employee to harmful chemicals at the workplace.
- Speeding or racing around with heavy machinery can cause you to hit other people and objects, injuring both the driver and bystanders.
- Climbing on heavy machinery could lead you to get crushed or pushed under, leading to fatal injuries and even death.
- Other practical jokes like switching off lights, hiding someone's safety gear are not funny – indeed they're dangerous.

### A SIMPLE MESSAGE TO ALL EMPLOYEES...

Before you attempt a prank or a practical joke at work, make sure to remember the following:

 Ask yourself, 'Is the prank likely to hurt anybody, be it physically or emotionally?' Look past the humour and consider the dangers involved. If it even presents a minimal chance of hurting others, don't do it.

- Don't prank a newcomer to the workplace. Before you spring a practical joke on a person, make sure that you know the person well. You must be able to judge his/her response. Don't fall into the habit of cornering a new employee. Also, don't choose a person just because he/she is an easy target. When you do so, your pranks become bullying.
- Avoid over-the-top pranks. It's become sort of a ritual at some workplaces to overdo the last prank. This leads to employees crossing the line, leading to dangerous practices.
- Don't be the person to initiate or even suggest the horseplay. Also, don't let peer pressure persuade you to participate in the prank. Above all, when you notice a potential danger, make sure to report it to your manager.

### A SIMPLE MESSAGE FOR ALL EMPLOYERS...

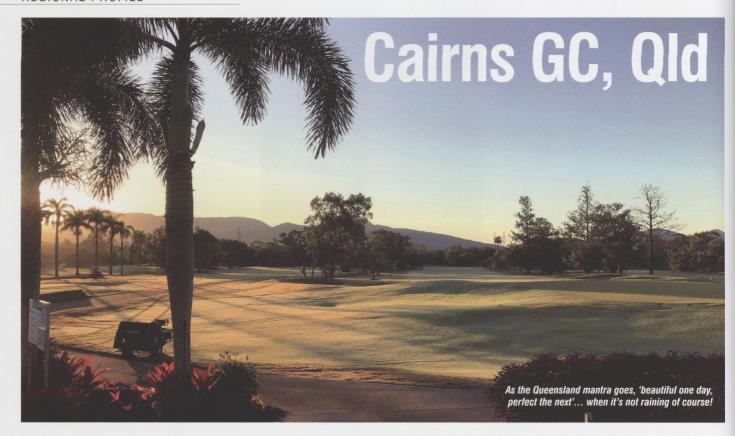
Outline policies against workplace horseplay in your employee manual – the best way to avoid practical jokes and horseplay at work is by enforcing strict rules. If it's against the company policy, then employees aren't likely to attempt it. Other measures include;

- Ensure that employees who break your 'no horseplay' rules are subjected to appropriate disciplinary action. Make sure that you're consistent with this disciplinary action so that employees are aware of the consequences.
- Train employees. Another effective way
  to prevent workplace injuries due to
  horseplay is by providing your employees
  with appropriate environment and safety
  legislation awareness training. When
  they are aware of the laws and the
  consequences, they are not likely to
  indulge in it.

### **NO EXCUSES**

Workplace culture plays an important role in influencing what specific behaviours are regarded as acceptable and unacceptable. Education of employees in appropriate workplace behaviours and the development and implementation of specific workplace policies are critical in reducing the incidents of horseplay.

Sports turf managers, as safety leaders, must teach employees how to have fun at work in a safe and controlled manner. With all of the hazards that already exist in sports turf work environments, there is no excuse for adding unnecessary risks. We want employees to be happy and productive but not at the expense of safety, so setting relative boundaries for horseplay behaviours at your workplace can keep your people safe and motivated. W



Managing turf surfaces in Far North Queensland is a far cry from the northern suburbs of Sydney. Just ask

Cairns Golf Club superintendent Tim Hoskinson...

Superintendent: Tim Hoskinson (38).

Nickname: Timmy, Timbo, Slinky.

Family: Wife Natalie, son Dylan (10 months).

Years as superintendent: Two.

**Association involvement:** Australian Sports Turf Managers Association.

Career: Manly GC (apprentice 2001-2006); Ohio State Program 2006/07 (Robert Trent Jones GC, Virginia; Scioto CC, Ohio; Congressional CC, Maryland); Manly GC 2007-2012 (3IC); Royal Sydney GC (foreman 2015); Paradise Palms (assistant superintendent 2015-2017); Cairns GC (superintendent 2017-present).

**Qualifications:** Dip Sports Turf Mgmt, Dip Project Mgmt, Cert III Landscape Construction, 2017 AGCSA Future Turf Managers Initiative.

Tell us a bit about your background and how you got into the industry.

Before commencing my greenkeeping apprenticeship I had completed a retail traineeship at Coles supermarkets. I had worked my way up to a position of Grocery Manager, however, while the money was

The Cairns Golf Club crew with superintendent Tim Hoskinson (left) great (particularly still living at home) I was searching for something I was more passionate about. I loved golf and was playing twice a week at this stage and have always loved being outdoors. It seemed like a logical progression.

Who were some of your early mentors?

I was fortunate enough to work for Mick

Bradbery at Manly Golf Club as a young

apprentice. Still to this day he is one of the

most knowledgeable turf managers I have had the pleasure to know and he combined this well with a calm management head. He taught me how to be professional and how to deliver excellent playing surfaces.

Mick would always send the younger guys off to education days, events and seminars which was great. This taught me how great an industry it is to be involved in. It also gave me some great connections and made me realise how open everyone is to



share information. I try to remember all these good things and incorporate them into my people management as much as possible.

You headed overseas and spent time on The Ohio Program. What did you take away from that experience? As a young single guy coming out of my apprenticeship, I was looking to travel somewhere. Once I found out about The Ohio Program I immediately applied. I was pre-warned that the days were going to be long and with minimal time off, but nothing really prepares you for when it happens. I walked in to a '12 days on, two days off' roster at Robert Trent Jones GC and mid-summer most of those days were 12 hours. It was a fantastic experience but I definitely wouldn't want to do those kinds of hours long-term!

The Ohio Program taught me a huge amount about managing turfgrass on the edge. Working in the North East of the US and growing full courses of cool-season grasses when it's 30-plus degrees every day and humidity through the roof is tough. Ironically, I now grow exclusively warmseason turf, but my time in the US was incredible. Working in the US opened my eyes to what is possible (even if you don't have 50 staff). It made me strive to deliver top-class playing surfaces at whatever course I was at. It also taught me a huge amount about myself and what I wanted in life.

I particularly loved my time at Congressional Country Club, where I was lucky enough to change the back nine holes for Tiger Wood's AT&T National tournament, as well as hand watering these greens in the evening (pre-TDR's). This was definitely a significant challenge but also very exciting at the same time.

After you came back to Australia you re-joined Manly and then had a career break before eventually landing at Paradise Palms - what took you to Cairns? Following my time in the US, I returned to Manly in 2007 and was part of the full course reconstruction. That was an exciting time with plenty of weather setbacks and it was incredible to see the transformation of the place. I was around for the opening of the course before my wife Natalie and I headed to London on a working holiday visa in 2012. We started in Europe by spending four months in a campervan. After the summer ended and it was too cold to live in the van, we spent 18 months living in London before another five months in a campervan for the European summer. Once



It can get fairly wet in Cairns... the course recorded a mere 3588mm in 2018 and is 2500mm year-to-date in 2019

we sold the van, we backpacked through South America for seven months before returning to Australia.

After nearly three years out of the industry I was keen to get back into it again and landed a job at Royal Sydney. Nat and I had reassessed what we wanted in life while we were away and had decided that Cairns seemed like the logical choice to live, given she grew up there and still had plenty of family friends in town. I was loving my job at Royal Sydney with plenty of possibilities for progression, but I had always flagged that my stay in Sydney was going to be temporary. I made the choice to put family and lifestyle first and as it happened the assistant's job came up at Paradise Palms and I got it.

At the time Paradise had just been purchased and was coming out of administration. They were investing money back into the course and it was an excellent time to be involved. During my time there I was involved in the daily operations as well as the construction of a spare green, new nursery green and was able to troubleshoot a lot of the irrigation issues, making life easier for both superintendent Malcolm 'Olly' Ollard and myself. Sadly. Paradise Palms officially closed in March this year. It was a real shame to see it shut as there is no doubt it was the best course in Far North Queensland. Having said that, I feel very fortunate to have landed on my feet here at Cairns Golf Club.

While you were at Paradise Palms you attended the Jacobsen-sponsored Future Turf Managers' Initiative. What did you take out of that programme? The FTMI was definitely another feather in my cap to

help me grab the top job here at Cairns. I particularly enjoyed the budget topics through the FTMI as that was something I hadn't been exposed to a lot up until that point. It's a great programme to help bridge the gap when taking that leap into the top job. It's also great to meet a lot of other guys who are in similar positions and hear about what steps they are taking to try and secure a superintendent role.

How did the job at Cairns GC come about and what do you like most about being the superintendent there? I was fortunate enough for the job not to be advertised. I had been put in touch with general manager Matt Bolton directly. We had a long discussion about what we were both looking for and decided that I would be a good fit for the business. The thing I enjoy the most about working at Cairns is the changes I have been able to implement. There were (and still are) plenty of opportunities for improvement and I have already been able to implement a significant amount of them. My main aim is to look to the future and make our maintenance practices simpler and more efficient, while consistently improving the standards across the course.

How did you make the transition from being an assistant superintendent to superintendent? I felt like I adapted relatively easily. The hardest part for me was learning to switch off outside of work. Even now there are still a lot of things I would like to implement to help Cairns GC live up to its potential, but when I first started there was so much I wanted to do. I ended up buying myself a second notebook so I could write down



The Cairns GC fairways are a mix of Greenlees Park and Queensland blue couch

everything I wanted to achieve and come back to it as time allowed. I guess when you are the boss the buck stops with you, so it's hard not to think about work out of hours. I just needed to set some clear boundaries which has definitely helped me enjoy work more, as well as my time out of hours.

What would be one piece of advice you'd give an assistant about to step up into a superintendent role? Once you get the top job, take some time to work into the role. Create a solid plan and gradually begin to implement things. And take lots of photos – a picture paints a thousand words and there is nothing like befores and afters!

Give us an overview of Cairns GC and some of its unique characteristics from a course and turf management perspective? I always tell people that Cairns has great bones. It's a solid layout with plenty of room for improvement. It has a good mix of turf, landscaped gardens, naturalised areas and aquatic life. We are lucky enough to have a full-size driving range, which draws in golfers and has a positive impact on the club's bottom line.

The weather is a huge factor for us, with the distinct wet and dry seasons. Having a metre of rain in a month is not too out of the ordinary. We drain reasonably well once the rain stops and the sun pops its head out. When it's not raining, we can get extremely dry too. So, you basically go from praying for it to stop raining to praying for a drop of rain. Give me the dry any day though as we can still get jobs done and the money keeps coming through the door.

Is it an easy/hard facility to manage? It's hard to answer that, as there are always unique aspects to every operation. I feel like Cairns has an excellent layout so there is a lot to build on. I really struggle with the poor irrigation system as that really holds us back from the quality of turf we could produce. Overall though, I have a great team with a reasonable budget and we are moving forwards.

What changes have you implemented since arriving? Since I have started, I have made a lot of sacrifices in the day-to-day operations of the course for the longer-term benefit. I have placed a lot of emphasis on getting our greens clean from foreign grass and where we are looking to, rather than just maintaining contaminated surfaces. I'm excited about processes such as these – once the greens are complete we won't need to do them again. From here, we can then dial in our maintenance and agronomic practices to where I would like them to be on a daily and weekly basis.

Looking further afield, I have plenty of things that I'd like to see happen, two of which are a vegetation management plan and a strategic bunker plan. There are plenty of areas on the course that could be revegetated that would not only reduce our maintenance, but have a positive environmental and aesthetic impact. In regards to bunkers, when you have 60 bunkers and you cop unbelievable amounts of rain, we really need to consider where we are going long-term. From my point of view, we need to lose about 20 (many of which offer minimal aesthetic or functional value) and reshape most of

what's left. These couple of 'big ticket' items will improve the course, as well as our maintenance programmes.

Outline any major course improvement works recently completed, ongoing or coming up. One of the largest projects I was involved in was the construction of our new nursery green. This was the first step in reclaiming many of the greens from foreign grasses. We completed these works in-house and I am happy with the end result. Longterm, there are four greens that are too far contaminated with other strains of couch and will need to be rebuilt. For the time being we are just working on getting what we can clean and we will take it from there. There are several tees that need to be rebuilt as well as additional teeing areas constructed to handle the volume of play we receive.

How does Cairns GC fare in the water management stakes? We have plenty of water but just don't have the irrigation system to put it out. Future works involve the relocation of the irrigation dam which will be increased in size. With the significant wets we receive plus the effluent, we should be in a good place in terms of both availability and quality going forward.

How has Mother Nature treated the course in recent times? Cairns is very unique in terms of rainfall events. Even within Cairns, the golf club is situated between two mountain ranges so we cop more rainfall than the 2m Cairns Airport long-term average suggests. There has been three months since I have been here where we have received in excess of 1m of rain. In December 2018 and January 2019 we had 1m in each of these months back-to-back. At one stage this wet season we didn't mow greens for 12 days!

The one product I couldn't manage my course without is... Primo Maxx. We'd be mowing non-stop and our fuel bill would be through the roof. We'd also be adjusting heights every other week during the wet season depending on course access.

Do you use volunteers to assist with the management of the course? We have three volunteers – Gary Werder, Colin Johanssen and Ian Tindell. They all help out by collecting range balls once a week for us. Colin also helps with some line-marking, hazard pegs and other general jobs. This is a big help for us and I really appreciate their time.

### AT A GLANCE - CAIRNS GOLF CLUB, QLD

**Course specs:** 6159m par 72. Novatek/328 greens. Greenlees Park/Queensland blue couch fairways. 75-hectare site with approximately 60ha maintained turf.

Members/rounds: 700/45,000. Staff structure: Tim Hoskinson

(superintendent), Marcus Mcgregor-Cassady (assistant), Karl Krauss (greenkeeper), Ray Smith (mechanic), Michelle Musgrave (horticulturalist), Trevor 'Tricky' Braund (groundsman/irrigation tech), Bobby Backman (groundsman) and Tanner Ward (apprentice).

Climate/annual rainfall: Lots! About 2m averaged annually, however, we have had 2500mm this calendar year so far and 3588mm in 2018. Tropical climate ranging from daytime temps of 25 during the dry to a steady 33-34 during the wet.

**Soil types:** Clay and alluvial soil deposits. **Water sources:** Treated effluent.

Irrigation system: Being diplomatic, it's our biggest opportunity for improvement. It's a real struggle. The course is in dire need of a new system, but thankfully we are working on the design stage of a new system at the moment. The system is a mix of add-ons, but is mostly manually controlled, with the exception of five holes which are hydraulic. The greens are all block systems, which makes it difficult to apply water accurately. Given our climate, we spend a fair bit of time hand watering greens.

There are many shortfalls on the fairways, which are a mix of manual sprinklers and some QCV's, and during the dry season we just don't have the ability to get the water out as needed. At this time of year we can easily dedicate 70-plus hours



a week to irrigation, which is a lot given our team of eight. I'm excited about the potential for a new system as I know how much it will lift the standard at Cairns GC.

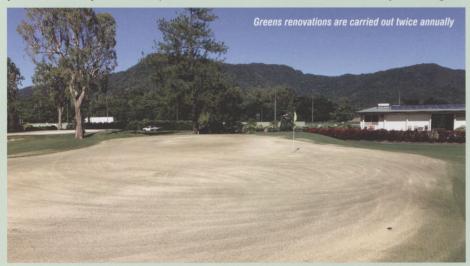
Cutting heights/regimes: Greens are cut at 3-3.5mm year-round. If we get exceptionally wet during the rainy season, we may go up to 4-4.5mm temporarily. We mow greens four days a week, roll twice and leave them on Mondays. Fairways are cut twice a week at 11mm during peak season and once outside of this. Same with tees and collars which are mown at 8mm. Rough and surrounds are cut at least weekly during the wet season and as necessary during the dry.

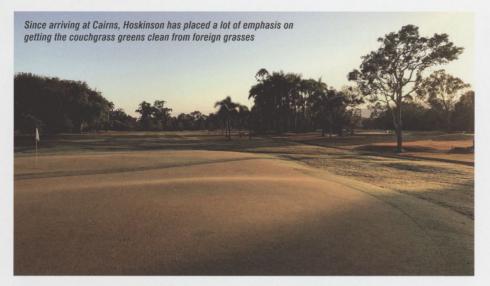
Renovations: We renovate the greens twice annually. Typically this is completed with half inch hollow tines to a depth of 3-4" with the Pro Core. We topdress to fill all the holes at this time plus some residual left on top. I haven't done much in the way of dusting

since I have been here, mainly due to the poor availability of good particle size sand (we have a lot of coarse material in ours). Following our next renovation in October, I aim to religiously needle tine the greens with 6-8mm tines every 4-6 weeks. I'll also make sure we squeeze in a few light dusts after verticutting or needle tining. We groom 1-4 days a week depending on growth at bench height to assist with thatch management. Major disease pressures: Pythium is our major obstacle up here, particularly when we get prolonged periods of wet. I run a tight fungicide programme which consists of alternating leaf and root fungicides. This can be as tight as seven days during peak wet season, but closer to every 14-21

peak wet season, but closer to every 14-21 days depending on the weather. We do experience some mite damage during the dry and a couple of the greens with large thatch levels have copped some ERI.

In addition to the chemical approach, our additional cultural practices are making a big difference, particularly with the ERI. At our next renovation I plan to core at a closer spacing on my two worst greens for ERI to remove as much thatch as possible. Nutrition management: We spoon feed the greens weekly with low rates of N, K, Fe, Mg and Mn. Once a month we apply Hydrolink Profile, a larger dose of fert, plus UMX liquid and Noculate. We use Primo Maxx yearround to regulate growth. We Primo and fert tees and fairways on a monthly programme depending on growth. I really try to watch our applications of nitrogen, particularly during our wet season.





What have you got in your shed, what's your favourite piece of plant and what's on the wish list? Two Toro 3250's (greens and tees), two Toro 5610's (fairways), Toro Sidewinder (surrounds), Toro 4000D (roughs), John Deere 1580 (treeline rough), Toro Multi Pro 1250, two Toro Workman utilities. We couldn't live without the Multi Pro 1250 purpose-built sprayer up here. We are currently discussing our next fleet of equipment and our 1250 is actually due for replacement. I'd love to get my hands on a Multi Pro 5800 sprayer as this would be a game-changer for us. We could spray all of our fairways in two tanks instead of four and it gives us the flexibility to apply those highvolume water applications to greens in one tank instead of two.

What are some pros and cons of being a regional superintendent? I definitely feel like it's more relaxed up here than in metropolitan areas. You can run into trouble if you don't plan ahead though, as things aren't quite as accessible up here.

Do you think regional superintendents have a better work-life balance? In general terms, yes. I love my job, but I'm also very passionate about a good work/life balance. I see a lot of guys doing relentless hours in metropolitan areas and while I know that sometimes it is unavoidable, I personally don't feel it's sustainable. I try to remember why I joined the industry in the first place and that my family is the most important part of my life.

Are expectations of course presentation and conditioning any less than that placed on your metropolitan counterparts? I think the members are generally quite understanding at Cairns. They realise we battle with the weather and do the best we can. There are still reasonable expectations from the members, but I generally don't hear as much nit-picking as I have experienced at other clubs. I am very fortunate to work for an understanding board and general manager. They are all aware of the major hurdles for the course and have been very supportive of my vision for the future.

If you could change one thing about your job what would it be? I'd like a new irrigation system please:)

Best advice you have received about being a course superintendent/greenkeeper and who gave it to you. Two pieces. Firstly, Mick Bradbery – 'No-one ever complains about a golf course being too easy'. I received this advice right after I pushed the limits on where I should put a pin for a weekend comp as an apprentice (I still use this quote today).

Secondly, from Mike Guiffre when I was at Congressional – 'You can do more damage to turf from over-watering than under-watering'. I love things on the drier side.

What have you worked on personally in recent years to improve your skills as a superintendent? I love to read and absorb new information. I still believe I learn something new in this job every day even after 15-plus years in the industry. I work hard on being a good people manager and making sure my team are happy with what they do. I'm not perfect, but feel like things are tracking nicely in this regard.

### Most pleasing/rewarding moment during your time as Cairns GC superintendent?

The construction of our 600m² turf nursery was definitely a highlight, as there was previously only a 50m² contaminated plot for turfing or plugging. I inherited a significant amount of foreign couch in my dwarf surfaces and this is something we are continually chipping away at. It's extremely satisfying.

And finally, you became a dad last year... a future superintendent in the making? I have brought Dylan (10 months) out onto the course a couple of times and he loves it. Becoming a dad is definitely a new challenge. If I'm honest, I struggled a bit at first; it's definitely a life-changer and took a while to adapt. I wouldn't say I'm a natural, but once he was a few months old and I could start to take him on a few adventures I settled right in. Wednesday is 'daddy day care' and we tend to go to the beach with the dog or on a hike. We love it!

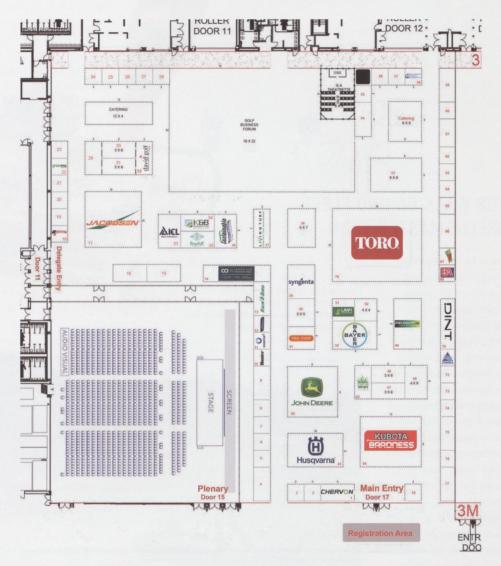




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# D FLEET O21 The new Toro 21-inch Greensmaster 1021 walk-behind greens mower is designed to bring every operator and greens mower into perfect harmony with one another

### TORO EXPANDS WALK-BEHIND FLEET WITH NEW GREENSMASTER 1021

oro Australia has added to its walk-behind greens mower fleet with the launch of the all-new 21-inch Greensmaster 1021.

Designed to bring every operator and greens mower into perfect harmony with one another, this mower with 'fixed-head' features is specifically designed to eliminate any variability in the walk-mowing process.

"Operators of all sizes and skill levels are able to work in harmony with this machine because of the innovative telescoping loop handle that accommodates operators of different heights and skill levels," says Brian Goodridge, Toro Australia's equipment product marketing manager.

The easy adjustment (to five distinct handle positions) simultaneously helps to deliver a more consistent cut, but also reduces operator fatigue. Handle isolation mounts give the cutting units consistent contact with the ground throughout the mowing process, eliminating even the slightest variability in the height-of-cut that can occur because of variations in handle pressure or differing operator strides.

"Ultimately, the desired result is to improve the user's experience and deliver the most consistent quality of cut and playability for golfers on each and every green," says Goodridge.

The new bail design combines safety and operational control. New operator controls, in conjunction with a shorter distance between the roller and drum, deliver significantly more precise handling in turns as well as more consistent performance on greens with modest undulations. Other features



include the new EdgeSeries reels for a crisp, close, precise cut, an easy-to-reach knob for adjusting the clip rate and flexibility to choose between 8, 11 and 14 blade cutting units. The Greensmaster 1021 is powered by a Honda GX120 engine and has a cutting width of 21 inches (53.3 cm).

Another key focus during the development of the new Greensmaster 1021 is to save time and money by minimising and simplifying maintenance. Several features contribute to a lower overall cost of ownership. It now takes only minutes to replace an entire cutting unit or engine assembly. From the modular design

for easy repair and replacement of key components, to the ability of each unit to backlap directly using transport wheels, the entire maintenance process is streamlined to maximise uptime without sacrificing performance.

"This new walk greens mower really takes cutting performance to an all-new level," says Goodridge. "Toro started from the ground up in the development of this machine and we are excited that this solution helps courses deliver the best playing experience available." For more information on the Greensmaster 1021, contact your local Toro rep or visit www.toro.com.au.

### BERNHARD COMPANY NAMES **NEW QLD DISTRIBUTOR**

ernhard Company is joining forces with another partner in Australia, with Greenway Turf Solutions (GTS) to develop the company's brand in the Queensland market. The news follows the recent announcement of GTS acquiring the business assets of Simplot Partners.

"We are excited to be partnering with Bernhard at this time," says GTS general manager Chris Chapman. "We will be increasing awareness and support for Bernhard products in Queensland which include sharpening systems, Turfbreeze fans and the golf lighting rig."

Adds Steven Wilson, PAC Asia business development manager for Bernhard: "Greenway Turf Solutions is joining us at a turning point for Bernhard as we have just launched several new products. Andrew Kolbee (technical field agent for GTS) will be leading demonstrations showing the benefits of sharpening, air movement and light for better turf health."

### **PGG WRIGHTSON TURF** RELEASES CHARLES BROWNTOP

GG Wrightson Turf has unveiled its latest turf cultivar to the New Zealand and Australian markets - Charles browntop. Proudly named after legendary New Zealander golfer Sir Bob Charles, the first left-hander to win a Major and to be inducted into the World Golf Hall of Fame. Charles browntop is the result of more than 12 years of selection and research.

PGG Wrightson Turf enlisted the help of many superintendents to collect patches of browntop that stood out from the rest and use the natural variations in plant type to select the best for this latest release.

Charles is a very fine-leaved browntop, highly suitable for close mown surfaces such as golf greens, tees and elite amenity areas. It is of medium-green colour with excellent yearround visual quality.

Charles is a four-parent synthetic selected from colonising patches of browntop found on four different golf courses between Christchurch and Wanaka in New Zealand's

South Island. The parents were chosen for very fine and dense tillers under close mowing conditions. They were also chosen for a moderately aggressive growth pattern to assist in recovery after wear.

Taking at least 12 years from making original selections to produce this new cultivar, Charles browntop features excellent shoot density, is extremely fine-leaved and was a top performer in STRI (BSPB) trials. For more information visit www. pggwrightsonturf.com.au or www. pggwrightsonturf.co.nz.



Charles browntop (middle left) pictured next to Arrowtown browntop (middle right) in a greens condition trial in Canterbury, New Zealand

### TURF INDUSTRY APPOINTMENTS



### SCOTT ADVANCES INTO NEW ROLE

Long-time trade partner of the Australian Sports Turf Managers Association, Advanced Seeds,

has appointed Matt Scott (pictured) as a new territory manager. Scott has over 30 years' experience in the professional turf industry, beginning as a greenkeeper at various bowls and golf clubs before spending the past 17 years as general manager of Simplot Partners.

Scott, who finished with Simplot on 30 August after it was acquired by Greenway Turf Solutions, started his new role with Advanced Seed in the first week of September. He is working with existing customers and developing new business in all facets of professional seed and associated products. Scott can be contacted on 0413 749 004 or email matt@adseed. com.au.

### WALKER APPOINTED NUTURF NATIONAL TECHNICAL MANAGER

Nuturf Australia has appointed Dr Mark Walker to the role of national technical manager. Walker started his career as a turf practitioner before undertaking a Bachelor's

degree in Horticultural Science through the University of Western Sydney, later progressing to a PhD in Plant Breeding and Genetics with the University of Sydney. He has held several senior positions within the fields of product development and technical management, including with Syngenta and most recently FMC. Walker began his new role in mid-August and can be contacted on 0417 600 697 or email mark.walker@nuturf. com.au.



### **WESTALL ASSUMES** NATIONAL ROLE WITH **GLOBE GROWING** SOLUTIONS

Globe Growing Solutions

announced at the start of September it had appointed David Westall (pictured) to the newly created position of national technical and commercial manager. Westall brings a substantial level of industry knowledge to the role, with over 30 years of experience in both technical and commercial positions.

"We are extremely pleased to have David on board and look forward to working with him," says Globe Growing Solutions national sales and operations manager Jeff Bowtell. "David's experience and knowledge will

be a significant resource and support not only to our client managers but also to our customers and supply partners."

During his career Westall has acquired a vast amount of experience, having worked for the Australian Turfgrass Research Institute (ATRI), the Royal Botanic Gardens (Sydney) and as the senior technical officer for turf and amenity (Aus, NZ and Asia) for Scott's Australia.

### JT TURF APPOINTS PODGER AS GM

Following a review of the company, its performance and the current market climate. JT Turf, the NSW and ACT distributor for the likes of Jacobsen, Tru-Turf and Redexim, has appointed Dean Podger as its new GM.

"Dean brings with him passion and his focus will be a continuation of the evolution of JT Turf's offering to its customers," says JT Turf executive chairman John Woodham. "Dean will still support our customer base with both sales and support, but JT Turf will also advertise a newly created position for a sales person to improve our visibility not only in the golf market but also the municipal and contractor markets." Podger can be contacted on 0428 114 281.

### **GCSAWA**

t has been an up and down winter for the Perth area weather wise, with close to 550mm of rain falling so far this year up to the start of September, but still plenty of warmer nights and days. The kikuyu courses have been kept busy, with a few extra mows needed to keep up with the ideal growing conditions.

Our main event over the last few months was the biennial Margaret River Conference in mid-August. It was a great success with 70 attendees for the three-day gathering. It was a big three days and nights, with many hours spent on the social aspect of the conference where a range of topics were raised and spoken about and new contacts made.

A big thanks to the 15 who flew in from the east coast to be a part of it, including Dave Mason (Metropolitan Golf Club) and Gary Dempsey (ex-NSW Golf Club) who gave two presentations each, while Nadeem Zreikat, Richard Chamberlain, Mark Unwin, Dean Mosch and Jyri Kaapro also made presentations.

Locally we had **Dave Cassidy** (The Cut Golf Course) speak on his journey in the industry so far, which has included stops in Barbados, Scotland and Doha as well as a number of states around Australia. **Grant Shortland** (general manager of Mandurah Country Club) spoke on the superintendent/ general manager working relationship and I hope listeners took some good points away from it. A special thanks to **Rod Hinwood** (Ellerston) who made the trip west and to **Adam Lamb** (Barwon Heads) who represented the VGCSA.

An important part of the Monday afternoon was two representatives from the Department of Water updating us on the incoming water restrictions we will be facing. By 2028 all bore license holders will have a 10 per cent reduction in their allocations. The GCSAWA has recently received some funding to get all golf courses 'waterwise accredited' which will be managed by **John Forrest**.

As an aside, we surprised John by awarding him life membership to the GCSAWA at the conference. Some of his family flew in from New Zealand for the previous weekend's Bledisloe Cup game at Optus Stadium and we managed to sneak them in to witness John receiving his award.

The last few conferences have been well

Winners from the Margaret River conference golf championships



John Forrest, pictured with wife Jen, received GCSAWA life membership at the recent Margaret River state conference for his many years of dedication to the industry

remembered for the pouring rain which has hindered the golf championships and this year looked no different with rain coming down while eating lunch on the Margaret River Golf Club balcony. But it fined up perfectly in time for the shotgun start with **Tony McFadyean** (Nedlands Golf Club) again taking out the title. **Mark Johnson** (Toro) won the trade trophy and **Liam Somers** (foreman, Mt Lawley GC) collected the stableford.

Around the state there is a bit of major work happening...

- Both the Wanneroo and Western
   Australian golf clubs have recently installed new pump stations. Hamersley
   Golf Course is also nine holes into its new irrigation install.
- Mandurah Country Club is redoing its putting green to coincide with a clubhouse renovation and the start of new masterplan for the course.

- Meadow Springs is re-wiring the irrigation and installing a new central control.
- Kalgoorlie Golf Course looks like finally starting work on the \$25m hotel after many delays and is set to host the WA PGA in mid-October.
- Cottesloe have a massive few months ahead, first hosting the WA Open then constructing four new greens and also installing a new irrigation system.
- Royal Fremantle is constructing three new green complexes and driving range tee. In early September, the GCSAWA held its annual Trade Challenge. Eleven trades compiled a team for the four-ball Ambrose event at The Cut Golf Course, with Total Eden winning for the second year in a row. Thanks to the trades that supported the day.

### SHANE BAKER SECRETARY, GCSAWA



### NSWGCSA •

n 6 August the NSWGCSA held its first Assistant Superintendents Golf and Education Day at New South Wales Golf Club. The day was generously sponsored by David Golf hardware, Turfcare Australia and Colin Campbell Chemicals. Forty-four attendees registered for breakfast and a nine-hole stableford event followed by a total of 58 for lunch and the education talks. Winner of the golf challenge was **Shane O'Brien** from Windsor Golf Club.

We had a variety of speakers presenting, including;

- Mark Parker (superintendent NSW GC) who spoke on future plans at NSW;
- Ben Gibson (The Toolbox Team) who gave a talk on 'The Future of Leadership and Work':
- Luke Partridge (superintendent Manly GC and NSWGCSA Board member) gave a presentation on 'Position Progression'.
- Scott Armstrong (Turfcare Australia)
   looked back on his career and the
   services Turfcare Australia have to offer
   the industry; and
- Nadeem Zreikat (Colin Campbell Chemicals) gave a presentation on 'Choosing the right product'.

The NSWGCSA has had some very positive feedback on the day and will be looking to host another one in 2020.

A walk 'n' talk was also held at NSWGCSA Board member **David Stone**'s Bayview Golf Club on Sydney's Northern Beaches. Over 50 attendees were treated to a classic Globe Growing Solutions sponsored and cooked breakfast. David then gave an in-depth presentation on the history and future of Bayview Golf Club. Attendees were then treated to a course walk with none other than Australian professional golfer **Craig** 





Parry who talked about his golf and course design philosophies.

After a successful first year, the NSW Golf Industry Awards are on again in 2019, to be held at Curzon Hall on Monday 21 October. This year the NSWGCSA will be bestowing four awards:

- Superintendent of the Year, sponsored by Australian Turf Projects;
- Outstanding Achievement Award, sponsored by Living Turf;
- Outstanding Performance and Dedication Award, sponsored by Waterwise Consultancy; and
- Graduate of the Year, sponsored by JT Turf.

The NSWGCSA's attention now turns to the Elite Sand and Soil Rube Walkerden Golf Day and AGM to be held on Monday



New South Wales Golf Club successfully hosted the NSWGCSA's first Assistant Superintendent Education and Golf Day in early August

18 November at the recently reconstructed Concord Golf Club (host superintendent **Chris Howe**). The committee looks forward to seeing all members at Concord.

NATHAN BRADBURY PRESIDENT, NSWGCSA



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### GCSAQ



he 2019 GCSAQ Annual General Meeting was held at Victoria Park Golf Club on Monday 19 August. The day started with an 8.30am tee off followed by lunch, presentation and finally the AGM. The committee was elected as follows:

- President: Paul McLean (Sanctuary Cove)
- Vice-president: Shaun Cross (Byron Bay)
- Treasurer: Stuart Campbell (Maroochy River GC)
- Secretary: Garry McClymont (Twin Waters)
- Committee: Phil Soegaard (Lakelands GC), John Halter (City GC), Brendan Clarke (Atherton GC) and Matt Holmes (industry representative).

During the AGM, recently retired Twin Waters Golf Club superintendent **Gary Topp** was presented with life membership of the GCSAQ for his services to the industry. A special thank you to Toro for supporting this event with prizes for the day.

The GCSAQ is so grateful for the support of all our sponsors and we welcome our new sponsors and thank those who have committed again. We are thrilled to have the following sponsors onboard with us for the next 12 months:

- Gold Sponsors: Greenway Turf Solutions, Nuturf, Toro and Jimboomba Turf;
- Primary Sponsors: Grundfos Hydro Pumping and Control, Jacobsen, KC Equipment, Living Turf, Rain Bird, Riversands, Syngenta, Total Eden and Twin View Turf; and
- Supporter Sponsors: Australian Sports
   Turf Consultants, Chesterfield Australia,
   David Golf, epar, Globe Growing
   Solutions, Southern Pacific Sands and
   Ventrac Australia.

The GCSAQ hosted its Northern Rivers Golf Day at Teven Valley Golf Course on 16 August. Superintendent **Paul Gumbleton** hosted 64 members and guests for the day, with 13 clubs represented along with trade representatives and GCSAQ life member and former Ocean Shores Country Club superintendent of 20 years **Barry Cox**.

Prior to tee off, Kustom Bind bunker system company directors did a demonstration of the application of their permeable polymer treated gravel layer into a bunker and an infiltration test on the gravel layer and the sand which generated a lot of interest. Ventrac supplied and cooked a BBQ lunch with beverages supplied by Lawn Solutions.





Twelve club teams contested the Northern Rivers Supers Cup in a four-man Ambrose competition. The win was taken by Ballina Golf Club led by superintendent **Brent Robinson**, with numerous prizes donated by generous sponsors.

Teven Valley, situated between Ballina and Byron Bay, is currently well progressed through a course redevelopment, with four holes expected to be completed before Christmas as per the new **Craig Parry** design.

The redevelopment works are being completed all in-house by Paul and his small three-man team. During the golf day, participants got to play three of the new holes which have been planted with Sir Grange zoysia on fairways, tees and surrounds. The new greens are TifEagle. The GCSAQ wishes to thank both Paul and his wife Nikki for hosting and organising the day.

Finally, be sure to enter our latest digital competition with Chesterfield Australia. Email us your golf course renovation pictures for your chance to win \$100 BWS voucher.

PAUL MCLEAN PRESIDENT, GCSAQ





Teven Valley Golf Course, which is midway through a major redevelopment, hosted the GCSAQ's Northern Rivers Golf Day in mid-August. The course, home to course superintendent Paul Gumbleton, is using Sir Grange zoysia on fairways, tees and surrounds

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### STA VIC



ur third successful Pitch Preparation
Day was held on Tuesday 10
September with 100 enthusiastic
attendees making the journey to Flack Park,
Port Melbourne. Thank you to our joint
sponsors Mentay and Cub Cadet for their
support. The brightly coloured machinery
shone on the beautifully maintained green
oval as occasional rays of sunshine burst
through.

Once again we were lucky enough to have the expertise and organisation of **John Shannon** and his team from Melbourne Grammar School lead the delegates through the extensive and valuable programme. We were also delighted to have **Matthew Page**, head curator at the MCG, to assist. Matt looks after the pitches at the MCG and was a wealth of knowledge for participants to learn from.

The delegates broke into two groups over two ovals/wicket tables – one group for the more experienced curators, while the other group was for the new and inexperienced curators to learn how to use equipment and the basic fundamentals of pitch preparation. Also on the day, **Ernie Gmehling** from Ground Science took measurements with



the nuclear gauge to monitor moisture and density at different times over the day following rolling.

Thank you also to Lilydale Instant Lawn for donating Tif Tuf washed turf to lay on the whole pitch. There was definitely something for everyone attending to learn. You can check out more photos of the day on the STA





Around 100 attended STA Victoria's third Pitch Preparation Day in early September

Victoria Facebook page www.facebook.com/ sportsturfassociationvic.

Finally, the STA Vic committee is currently considering a list of suggestions for future research project topics, but it is not too late to send in your suggestions. Please email **Jan Fenton** vic@sportsturf.asn.au.

### **COMMITTEE, STA VIC**

### VGCSA 🗢

t's been a bit wild and woolly here in Victoria with Mother Nature keeping us on our toes. Most have experienced a wetter winter than last, which is great for some but frustrating for others. Never happy are we?! Which takes me to this week where we have experienced two consecutive nights nudging 20 degrees Celsius. Fingers crossed this isn't a sign of things to come this summer.

We have just wrapped up our September Education Meeting hosted at Rosanna Golf Club (host superintendent **Dean Bailey**) which focused on the topic of workplace mental health. Although a tough and at times taboo topic for discussion, this is a matter that is becoming increasingly relevant in our industry as more and more course managers and superintendents face growing levels of expectation with reduced resources.

The day featured guest speaker

Catherine Doherty (workplace engagement manager for Beyond Blue) who was later joined by panel members Mark Unwin (Australian Sports Turf Managers Association) and epar area manager Nathan Tovey.

During the discussion, it was prevalent just how many are managing employees with

mental health challenges. Again, the role of a course manager is ever-evolving and it now seems we need to add psychiatry to our skill set in order to achieve the desired outcome that our boards and stakeholders require. In all seriousness though, we are in an era where managers need to be aware and engage along with necessary support mechanisms in place to assist and educate.

Our next calendar event is the annual Open Golf Day in mid-November which will be hosted at The Dunes Golf Links (superintendent **Simon Muller**) and sponsored by Oasis Turf. This will be the last meeting for a few months as we hunker down and hope that this summer is kinder than the last.

**John Neylan** is currently collating all the data from our winter *Poa annua* trials which have showed some promising results in the management of the most resilient pest in turf management. We look forward to receiving the final report in the months to come.

BARRY PROCTOR PRESIDENT, VGCSA

### ON THE MOVE...

**CRAIG BROWN:** From assistant superintendent The Dunes, Vic to superintendent Yering Meadows, Vic.

STUART CAMPBELL: From assistant superintendent to superintendent Maroochy River Golf Club, Qld.

**CRAIG CHATILLON:** From irrigation technician to assistant superintendent Maroochy River Golf Club, Qld.

**DION COPE:** Appointed superintendent Redland Bay Golf Club, Qld.

PETER FITZGERALD: From

superintendent Magenta Shores, NSW to superintendent Cumberland CC, NSW.

JAKE GIBBS: From assistant superintendent NSW Golf Club, NSW to superintendent Royal Canberra GC, ACT.

DYLAN KNIGHT: From superintendent Kingston Beach Golf Club, Tas to

superintendent Axedale Golf Club, Vic. **BLAINE KNOX:** From assistant

superintendent Palm Meadows Golf Club, Qld to superintendent Beenleigh RSL, Qld. MATT LEGGE: Appointed superintendent

Brookwater Golf Club, Qld.

**RICKY METHER:** From assistant superintendent to superintendent Gisborne Golf Club, Vic.

### STA ACT



TA ACT is now in full swing for the 2019/2020 financial year, coming off a successful Annual Seminar and Annual General Meeting where 120 delegates and sponsors turned out.

During the AGM we elected a new committee which saw a few new faces step up. STA ACT would like to thank those past committee members that stepped down, some of who have been part of the committee for many years. The new-look STA ACT committee comprises:

- President: Brad van Dam (Cricket ACT)
- Secretary: Jon Tait (Green Options)
- Treasurer: Chris Bale (Yowani CC)
- Committee: Bruce Davies (CIT), Dave Mann (ACT Government), Jimmy Correll (Federal GC), Todd Russell (Federal GC) and Brandon Williams (Yowani CC).

The ACT and surrounding regions have recorded one of the driest winters on record. With an outlook of a hot, dry spring and summer, we are all preparing to manage our water resources sustainably.

Plenty of activities are planned throughout the STA over the next 12 months with plenty of cricket hitting Manuka Oval over the summer, including men's and women's International T20 matches along with the Women's T20 World Cup in February (five matches)

Stadium Golf is also hitting the capital, with GIO Stadium hosting the unique style of golf from 4 December - 15 December. If you are in and around Canberra make sure you check that out. After its success at Adelaide



Oval, Canberra is hoping it makes the same mark.

Finally, we wish to give a warm welcome to new Royal Canberra Golf Club superintendent Jake Gibbs. With a great turf background, we wish him the best of luck and look forward to his input within the turf industry here in the Canberra region.

Congratulations also to our own Chris Bale who was named as a finalist for the Apprentice of the Year Award at the 2019 ACT Training Awards held in mid-September. Chris was one of six finalists who were drawn from across all trades (carpenters, plumbers, etc) and not just sports turf management. A great achievement for Chris and the sports turf industry here in Canberra.

### JIMMY CORRELL COMMITTEE, STA ACT

Cricket ACT head curator Brad Van Dam was elected the new STA ACT president at the recent AGM



Chris Bale was one of six finalists in the 2019 ACT Training Awards Apprentice of the Year

### TURF NSW Turf Onew South Wal



t's been a busy few months for Turf NSW with conferences, water restrictions, continued issues with buffalo yellows and increased advocacy efforts with local government.

Greater Sydney is currently under Level 1 water restrictions and efforts are being focused on communicating what these changes mean for growers and their customers, particularly surrounding water metering, reporting and exemptions to establish new lawns. Other parts of NSW are also under varying water restrictions.

In May, Turf NSW, in conjunction with Master Landscapers LNA and Mosman Council, hosted a 'Getting back to Grass Roots' field day at Middle Harbour. Forming part of the Hort Innovation funded Market

Development Project, this day aimed to educate landscapers about the importance of soils, irrigation and other factors that contribute to the successful installation of turf.

There was a strong line-up of speakers and presentations, including:

- Dr Mick Battam discussed the importance of correct soil preparation and specification of natural turf in order to achieve a healthy and resilient lawn.
- Greg Keys (Mosman Council) provided an overview of the reconstruction of its oval and the specific benefits and challenges of managing a high-use field.
- Neale Tweedie (Grechs Turf) presented on different turf varieties and drought tolerance and provided background on irrigation technologies.

Mariana Cidade (Sydney Water) - gave a presentation on better water management and consumption.

The market development day was a great opportunity to engage with end-users and network with industry stakeholders to better promote the social, economic and environmental benefits of natural turf.

On 22 August, Turf NSW represented industry at the Parks & Leisure Australia seminar and tour event at Gore Hill Park. There were discussions on synthetics and natural turf and a presentation from Syngenta highlighting the mental, social and environmental benefits of natural turf.

> MATT PLUNKETT **IDO, TURF NSW**

### **TGCSA**

would firstly like to congratulate Mark Unwin, the Board and all of the staff at the Australian Sports Turf Managers
Association (formerly the AGCSA) for the bold move recently to rebrand the association to collectively include every turf entity under the one banner.

At the time of writing this report, the TGCSA committee was due to meet in late September to finalise the constitution documents for a name change to head in the same direction and as a collaborative organisation be much stronger and have a bigger voice. Very exciting times ahead!

### STATE CONFERENCE

Since I last put pen to paper, on 13-14
August the TGCSA held its annual Sports
Turf Conference at Tamar Valley Resort. This
premier event cannot happen each year
without the fantastic support of sponsors and
delegates. Toro once again provided great
support, for which we are very grateful of,
with thanks to Brodie and Geoff from Pellows
and Clint from Toro Irrigation. Other sponsors
did not go unnoticed and big thanks also
goes to Waratah/Bactivate, Nuturf, Rain Bird,
Syngenta, Heritage Seeds, Oasis, Globe,
John Deere, epar, Applied Agronomics and
Hybrid Aq.

We were privileged to have some top shelf guest speakers representing all areas of turf management. **Michael Smith** (Scotch College, Vic) opened up proceedings with an overview of his maintenance and preparation of cricket wickets for the school and also outside cricket bodies. Excellent presentation and a credit to your work Mick.

Royal Hobart's **Bryce Walsh**, who was a joint winner of the 2018 AGCSA Graduate of the Year Award, took us on a journey of his time in the US with Toro, visiting their production sites and golf courses which was an eye-opener for us all and a goal for all up and coming turfies to aspire to. Well done Bryce.

Mike Clayton needed no real introduction as he is well known not just for his golfing achievements but in more recent times his architectural prowess. Mike had the audience captivated on his design philosophies as he traversed us through his works at Victoria Golf Club and also Peninsula Kingswood. Minimalistic and stripping back was the emphasis and when you really think about the game of golf and where it is heading, how correct he is.





University of Tasmania Stadium in Launceston is currently undergoing a full surface redevelopment

Matt Day (Collier Park GC, WA) gave us a presentation on golf developments as a community hub. Having been involved with the multi-million dollar development at Wembley Golf Complex in Perth during his time there as an assistant, Matt explained the process, red tape and hoops that were encountered to get all government bodies onside. The completed project is now a destination for families to enjoy as well as a venue for weddings and corporate events.

A very enthusiastic **Peter Briscoe** (Bactivate) recounted his activities over the past 12 months where he spent time in the USA researching further the use of beneficial bacteria and improvements to an already successful product. **Nathan Tovey** (epar) followed up on his great work with the AGCSA's Roving Seminars held earlier this year. Once again 'front and centre' was the importance of health and safety in the workplace and as an association it is our duty as well to keep the awareness active.

Brett Sipthorpe (curator WACA/wicket curator Optus Stadium) took us on his working experiences from Westpac Stadium in New Zealand to the new Optus Stadium in Perth. The art of pitch preparation in two different countries can vary so much with soil types and temperatures, and Brett took us through some of the challenges he faced, and faces, to produce world class wickets under scrutiny from media and world cricketing bodies. Brett also teamed later with Blundstone Arena curator Marcus Pamplin for a half hour cricket wicket forum.

We were then entertained by **Leigh Yanner**. Leigh has been working closely with **Tom Doak** (Renaissance Golf) over the last
couple of years to re-design the former Ocean
Course (now Gunnamatta Course) at The
National Golf Club on Victoria's Mornington
Peninsula. I do look forward to having a round
there as the presentation Leigh gave us has
definitely whet my appetite to visit there. The
construction process did not go without a few
hiccups as Leigh explained, with the Army
bomb squad needing to be called in at one
stage to detonate an old bomb discovered!

We also had some short presentations from **Paul Hudson** (Electronic Signage), **Tim** 

**Bilston** (Syngenta) and Mac Ross (Rain Bird) – thank you to these guys as well.

The trade show was the central hub for networking and of course a cold ale before the conference dinner. Entertainment at the dinner was an 'On the couch' type sports forum with Paul Hudson (AFL champion), John Fitzgerald (Davis Cup tennis great) and Mike Clayton. What started out as a 30-minute forum went on for two hours before we had to call stumps.

At the dinner we were proud to bestow a 'Service to the Industry Award' to **Neville** 'Mooch' Coulson for some 30-odd years' service to the turf industry with Toro Pellows Saws and Mowers. Well done Nev and we hope you and Carolyn enjoy your retirement.

### **NEW-LOOK COMMITTEE**

During the conference the TGCSA held its AGM with the following re-elected/elected to the committee:

- President: Phil Hill (Barnbougle)
- Vice-president: Tony Smith (Launceston)
- Secretary: Andy Byard (Nuturf)
- Treasurer: Gary Byard (Tam O'Shanter)
- Committee: Marcus Pamplin (Blundstone Arena), James Pyke (Mowbray GC), Adrian Box (Oasis) and Bryan Dunn (University Tas Stadium).

On behalf of the TGCSA, I would like to take this opportunity to sincerely thank **Danny Gilligan** (Tasmania GC) for his countless years of service to our association. Danny has stood down from the secretarial role that he has upheld for I don't know how many years. Thank you Danny.

Upcoming events will include a late
October day at University of Tasmania
Stadium to have a look at the reconstruction
process currently underway with host curator
Bryan Dunn. I do look forward to the next
12 months working with the committee to
grow our association and expand to give our
membership exposure to more educational
days and provide more opportunities to the
younger brigade coming through the ranks.

PHIL HILL PRESIDENT, TGCSA

## PAUL ARMITAGE, General Manager LE GOLF NATIONAL, HOME OF THE 2018 RYDER CUP

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