

TURFTALK

BY LAWN SOLUTIONS AUSTRALIA | MAR 2021

TifTuf Travels *to Dubai*

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**TEVEN VALLEY'S
STUNNING COMPLETION**

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BOWLING GREEN**

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**CRICKET PNG
GROWING FIRST CLASS**

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Musturf installing the XtraGrass™ Hybrid Turf System at the Royal Botanic Gardens

Welcome to TurfTalk,

Australia's most comprehensive turf magazine. TurfTalk is suitable for all turf professionals, from turf growers to landscapers, golf courses and sports ground curators, to government and related industry organisations.

TurfTalk is here to share with you the latest information on the turf industry, the exciting developments in turf research and to keep you up to date with everything you need to know about turf.

TurfTalk is a free magazine, distributed to over 3000 landscape and turf professionals.

TurfTalk is published by Lawn Solutions Australia.

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The First Wall to Wall Sir Grange Zoysia Golf Course in Australia

TEVEN VALLEY GOLF COURSE

The newly completed Teven Valley Golf Course offers visitors a truly unique and tranquil experience on its nine-hole boutique course. Located on the Northern Rivers of New South Wales, a 20-minute drive from Byron Bay, the course becomes part of its natural environment allowing players to enjoy and take in the stunning scenery of Teven Valley. Along the course, you will hear the songs of native birds and trickling creeks and rivers which are home to many

platypuses, while immersing yourself in a lush tropical landscape.

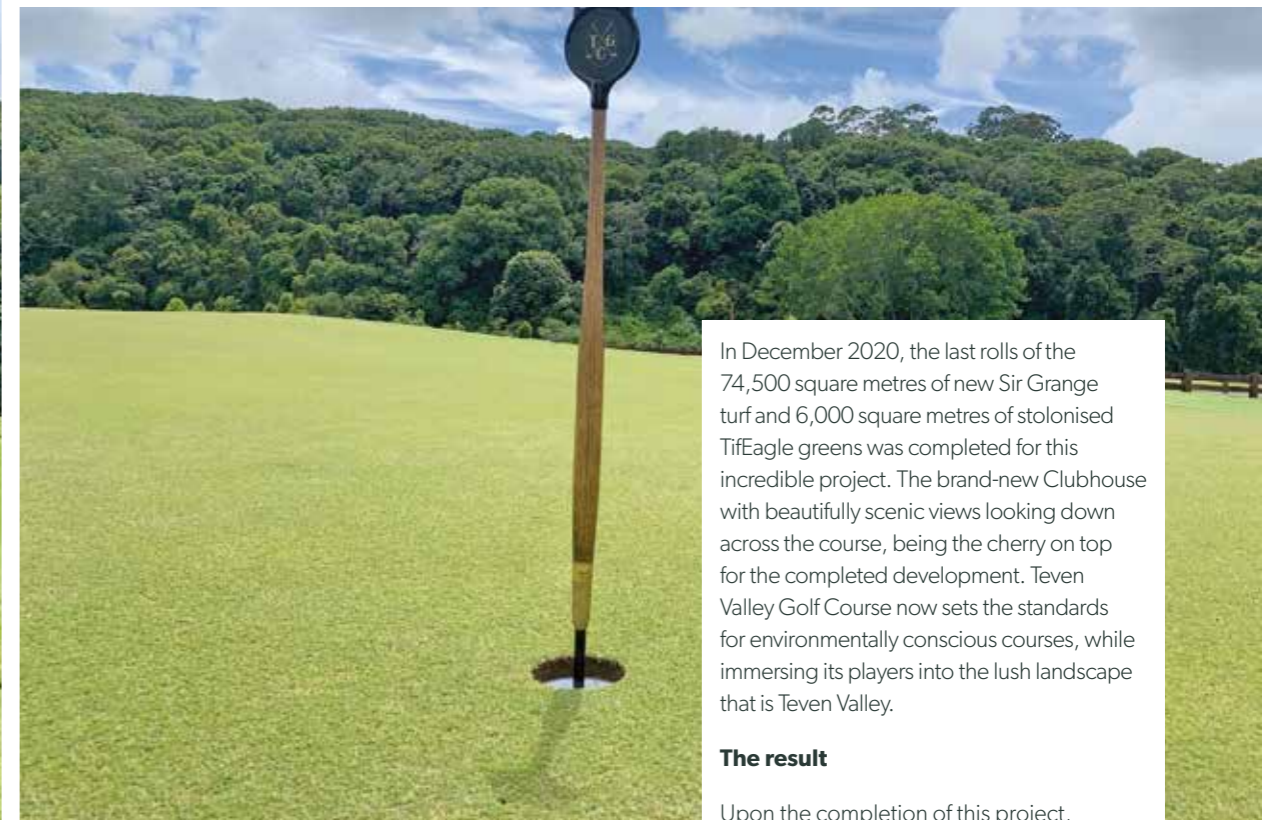
Teven Valley was purchased in early 2016 by Curt Zuber. He visioned that the course would allow a way for golfers to immerse themselves into the unique landscape of Teven Valley while providing an exciting but challenging course to play on.

Project planning

The 9-hole, 18-tee revamp was designed by Craig Parry, a professional Australian golfer. Construction of the course was put

in the trusted hands of Superintendent Paul Gumbleton, a former Monash Country Club Superintendent, Bob Simmons, Assistant Superintendent of Kingston Heath for over 30 years and Arnie Garrigues, Assistant Superintendent from Townsville Golf Club. This experienced team was hand selected to help create Zuber's image of a sustainable and exciting course.

In the early stages of construction, there were plans in place to close the course until all nine holes were completely finished, however given Teven's members love for playing at their serene landscape, a decision



In December 2020, the last rolls of the 74,500 square metres of new Sir Grange turf and 6,000 square metres of stolonised TifEagle greens was completed for this incredible project. The brand-new Clubhouse with beautifully scenic views looking down across the course, being the cherry on top for the completed development. Teven Valley Golf Course now sets the standards for environmentally conscious courses, while immersing its players into the lush landscape that is Teven Valley.

The result

Upon the completion of this project, golfers have been rushing to the course to experience the serene and luscious landscapes. The completed course has become a hit with both locals and visitors, resulting in the number of memberships growing dramatically. Paul and the teams hard work has paid off in making Teven Valley Golf Course a place where people can come to enjoy a high-quality course while providing the opportunity to explore the tropical region.

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

Both Curt and Paul would like to offer a special thanks to Craig Parry Golf Course Design, David Worrad from Living Turf for his technical advice and agronomic support, Dale Stafford from Poly Source Australia for their irrigation design, Jamie Bosward and the crew from Lime Landscapes and Terry Daley and the team at Daleys Turf for supplying all of the turf for the project.

Paul also would like to thank his wife Nicky for all her support and the club’s volunteers for their contribution in helping bring the project to fruition.

was made to keep the course open and to renovate the course one hole at a time.

A major component of the planning process of Teven Valley was to gain the support of the local Teven Valley community. The team wanted to ensure that the town was involved in the planning stages of the course, while ensuring that they were well informed of the steps that were going to be taken to make sure the course worked symbiotically with the surrounding ecosystem. Additionally, the team reached out to local land care and conservation groups for further advice and knowledge to ensure that the environment would remain as a top priority at all times throughout the construction. By taking these steps the team were able to gain further local knowledge of the lush tropical region and while going above and beyond to maintain the unique environmental integrity of Teven Valley.

Curt entrusted Paul to bring his vision of both a luxurious but tranquil course to life, handing over him the responsibility of making his vision a reality.

As the sustainability of the course has remained a top priority throughout planning, Paul needed to ensure that the turf variety chosen was going to not only look great but require less maintenance for an environmentally friendly option.



Arnie Garrigues, Paul Gumbleton, Bob Simmons



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

“Once Craig saw that Sir Grange was available, he said ‘If that’s available here in Australia, then that’s what we want’; Craig had played on it in the USA and loved it.” Paul Gumbleton said.

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

Project Stages

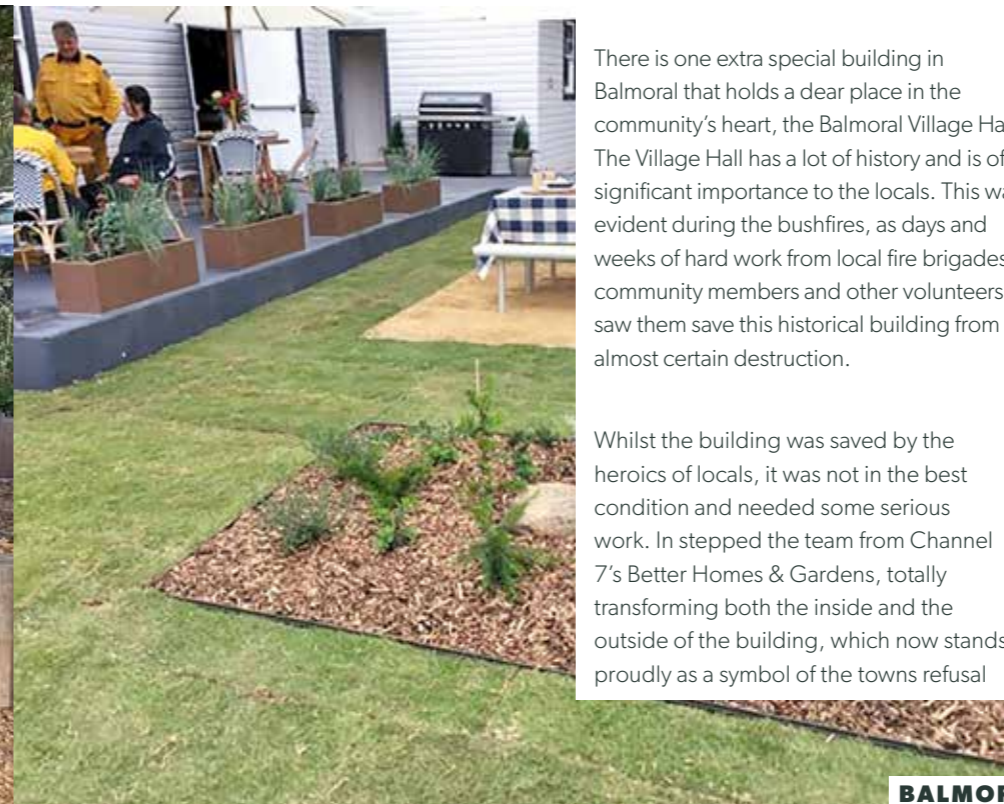
In order to be able to keep the course open for members and visitors, construction of the new course was broken up into two stages, the Eastern side and the Western side. During this time of construction, further environmental works were implemented, including revegetation and tree planting. A stunning new clubhouse was also built during this time. After all the labour and love put into the course by the team over a three-year period, the completed course is a standout.





Providing Bushfire Mitigation Through Living Turf

BETTER HOMES & GARDENS HELPS BALMORAL HALL



“ THERE IS ONE EXTRA SPECIAL BUILDING IN BALMORAL THAT HOLDS A DEAR PLACE IN THE COMMUNITY’S HEART... ”

2020 was a tough year for a number of towns around Australia for a number of reasons. One particular town to experience this hardship was the small town of Balmoral in the Southern Highlands region of NSW. Balmoral is a town with a population of just over 400 people and found itself right in a path of the devastating bushfires of 2019-20 which damaged so much of the eastern coastline of NSW. This small town suffered devastating losses, with the fires destroying 18 homes and around 90% of its surrounding bushland.

to give up during what was one of the toughest periods in their long history.

Part of this major renovation was a total makeover of the surrounding lawn and garden area. A big part of the project was to not only ensure the gardens looked fantastic but were also able to stand up to the harsh climate of the area and provide some natural barriers to the surrounding bushland as a buffer in case the bushfires were to one day return. The centre piece of this is the lawn, which is 1000 square metres in size and surrounds the picturesque hall. The grass chosen to fit the brief was TifTuf Hybrid Bermuda. TifTuf was selected due to its excellent drought tolerance, which will enable it to stand up to Balmoral’s long hot summers without the need for constant irrigation. As presenter Charlie Albone states “TifTuf is the only grass in the world with the Smart Approved Water Mark, it can take lots of wear and tear and it’s also got a lovely fine green leaf.”

There is one extra special building in Balmoral that holds a dear place in the community’s heart, the Balmoral Village Hall. The Village Hall has a lot of history and is of significant importance to the locals. This was evident during the bushfires, as days and weeks of hard work from local fire brigades, community members and other volunteers saw them save this historical building from almost certain destruction.

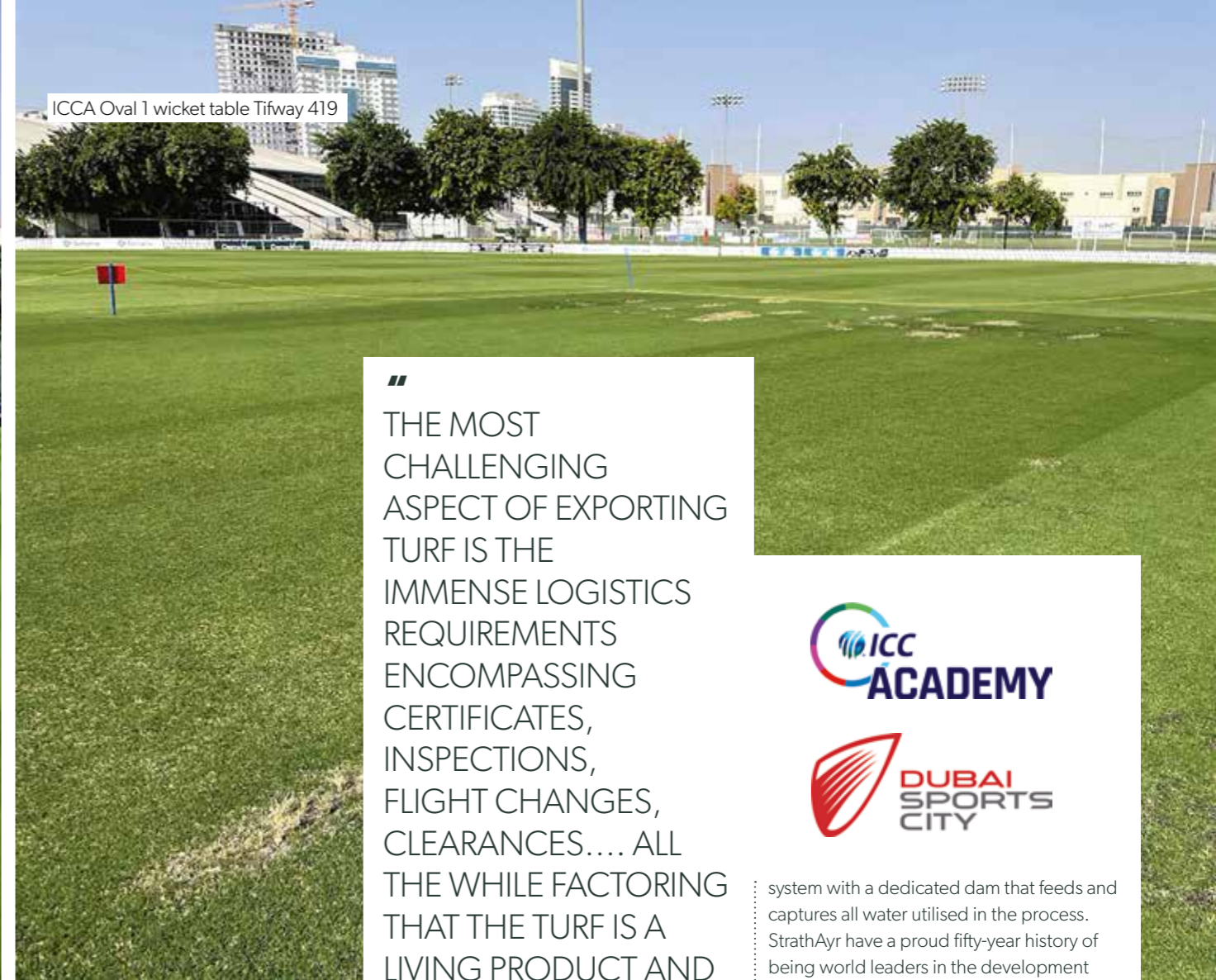
Whilst the building was saved by the heroics of locals, it was not in the best condition and needed some serious work. In stepped the team from Channel 7’s Better Homes & Gardens, totally transforming both the inside and the outside of the building, which now stands proudly as a symbol of the towns refusal

The 1000m of TifTuf for this project was supplied by local turf farm Cobbitty Turf, located around 40 minutes north of the community hall. The beautiful, dark green leaf of the supplied TifTuf made an incredible difference and was the star of the external makeover of this historical building. This was a fantastic initiative from Better Homes and Gardens and a credit to all involved in the saving and upgrading of this small-town community hall.

ICCA Oval 1 outfield Princess 77



ICCA Oval 1 wicket table Tifway 419



TifTuf Travels to Dubai

In July 2020, Lawn Solutions Australia was approached by Dubai Sports City ICC Academy and Stadium Head Curator Toby Lumsden to see if it was viable to send TifTuf stolons over for a project in Dubai. Having conducted some research on drought tolerant grasses, Mr Lumsden decided to try TifTuf as a trial grass to see if the data would be relevant to Dubai's extreme heat.

Currently, Mr Lumsden and his team use Princess 77, TifWay 419 and have recently planted Paspalum Pure Dynasty. In summer the Dubai average temperature is 42 degrees Celsius, "soil temperature can climb to over 40 degrees and water temperature pushing 40 degrees also" Mr Lumsden said. With grass under stress, water consumption is high, so Mr Lumsden was looking for a new grass that might help reduce water consumption.

With TifTuf new onto the market and being the only turf type to have the Smart Approved Water Mark, Mr Lumsden thought this would be an excellent grass for the Dubai climate. After some communication with Lawn Solutions Australia, Mr Lumsden

was put in contact with Victorian turf grower StrathAyr to arrange for the TifTuf stolons to be delivered.

StrathAyr have extensive experience with growing, harvesting and exporting specialist turf products and services domestically and abroad. StrathAyr made contact with Mr Lumsden to determine their exact needs and requirements, before arranging the stolons to be sent from Australia to Dubai - over 11,500km away.

The Project

The scope of works was to provide 100kg of washed TifTuf turf stolons to enable a trial area of 400m² to be planted. The most challenging aspect of exporting turf is the immense logistics requirements encompassing certificates, inspections, flight changes, clearances.... all the while factoring that the turf is a living product and there needs to be time minimisation between harvest and replanting on the other side of the world.

Preparation and Delivery

Office Manager Alison Hall has been with StrathAyr for many years and her experience enabled careful manoeuvring and persistent

Establishment of the Tiftuf after a light topdress



“ THE MOST CHALLENGING ASPECT OF EXPORTING TURF IS THE IMMENSE LOGISTICS REQUIREMENTS ENCOMPASSING CERTIFICATES, INSPECTIONS, FLIGHT CHANGES, CLEARANCES.... ALL THE WHILE FACTORING THAT THE TURF IS A LIVING PRODUCT AND THERE NEEDS TO BE TIME MINIMISATION BETWEEN HARVEST AND REPLANTING ON THE OTHER SIDE OF THE WORLD. ”

coordination of all the processes required for the Dubai project to be successfully accomplished over a six-month period.

The TifTuf stolons were harvested on November 25th, with sanitisation then conducted to ensure the grass was free from disease, insects and nematodes.

The turf material went through the washing plant three times to ensure all of the soil was removed. The turf washing facility in Seymour is environmentally friendly and water is continually recycled in a closed loop



system with a dedicated dam that feeds and captures all water utilised in the process. StrathAyr have a proud fifty-year history of being world leaders in the development and provision of natural turf solutions. The process of washing turf was developed and commercialised by StrathAyr many decades ago and their world-wide patent resulted in turf washing equipment being manufactured in Seymour Victoria and exported to specialist turf farms across all corners of the globe.

The washing facility at Seymour in Victoria has a module that precisely shreds the turf to create stolons ready for planting. Once the stolons were bagged, they were rapidly dispatched to the airport where pre-arranged officials were waiting to thoroughly inspect the plant material for any diseases or pests. The stolons were then re-packed in temperature-controlled packaging and loaded onto the plane, which immediately departed via air freight to Dubai International Airport (DXB).

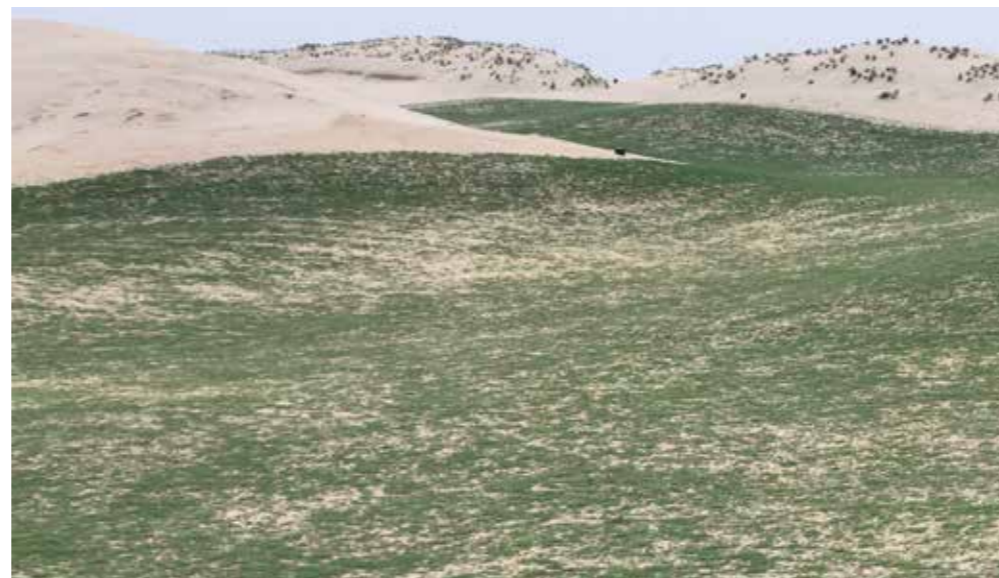
After a lot of communication with the UAE Ministry of Finance and Dubai Customs, Mr Lumsden received the TifTuf stolons on November 30th, after sitting in cold storage for 4 days.

“ WE ARE CONSTANTLY EVALUATING WHAT WE DO AND PUSHING AHEAD WITH NEW INNOVATIVE PRODUCTS AND RESEARCH. I SEE TIFTUF AS A GREAT OPPORTUNITY FOR US TO DO THAT.

“ -TONY LUMSDEN , DUBAI SPORTS CITY ICC ACADEMY AND STADIUM HEAD CURATOR



ICCA Oval 2 wicket table Tifway 419



Planting and Establishment

The stolons were spread over the plot for spraying and once given the go-ahead Mr Lumsden and his team were able to press ahead and gave the grass a very light top-dress and fertiliser application.

Hessian covers were placed over the stolons to help with moisture retention while the stolons began to establish. Day time temperatures were sitting around 26-28 degrees Celsius during this time. After approximately 12 days, the hessians were removed to see good signs of leaf growth and some root development. With half the plot covered in shade during the winter months, it was a good sign that the grass was establishing well.

The TifTuf is planted next to Princess 77 in the trial nursery, so that will provide a starting point in regard to water consumption, growth rate, shade tolerance and thatch accumulation. The shaded area of the plot will also be a valuable trial to see

how the grass will perform in shade and see if it is a viable option for the cricket stadium, which has a shade issue.

The plan for the grass is to also look at trialling it in the cricket wicket, as the texture (leaf size, small internodes) is very similar to TifWay 419 and quite a bit less coarse than Princess 77.

“I am very excited about the possibility of this grass in the Middle East, given the possibility of less water consumption and the lack of varieties available here.”

“Given that the International Cricket Council Academy needs to be leaders in the field, we are constantly evaluating what we do and pushing ahead with new innovative products and research. I see TifTuf as a great opportunity for us to do that.” Mr Lumsden said.

Further testing, evaluation and analysis will continue over the next 12-24 months.



Preparing the turf



Dubai International Stadium ready for IPL final November 10 (wicket and outfield Princess 77)



Preparing the stolons





StadiaPitch demonstration centre at STRI

Innovations in sports, lawn and urban green space sectors

BY DR RUTH MANN, DIRECTOR OF RESEARCH AT STRI GROUP

We all want more in every aspect of our lives. We want smarter ways to use the environments we live in. We want to recycle more and minimise inputs and we want it to enhance our lives. We know technology is now available to do this. We all like the data in our smart phones and devices clocking up reams of information about us. How many steps we take, how long we slept, our calorie output, etc. We can use this information to help us determine what exercise we should take, what our calorie input should be and how we can improve daily routines to make us perform better.

The same is happening in the sports turf, lawn management and urban green space sectors. We want more out of our sports stadia. We want them to be multi use

allowing different sports to be played on a natural pitch while still housing concerts or motor sports. We want our home lawns to be lush green and dense all year, good for entertaining family and friends. We want to install and manage green and blue roof systems providing flood reduction, cooler air and increased biodiversity. However, we want the amount of time, inputs and expense associated with these improvements to be minimised and as automated as possible. Therefore, we must look to innovative technologies to help us achieve these goals. This article looks at three current innovations using technology to enhance sports turf, lawn and urban green space management.

StadiaPitch

StadiaPitch is a modular multi-event sports pitch with a unique storage solution.

Currently, stadia cover the pitch during concerts, which kills the grass underneath, requiring complete renovation to return the pitch to natural turf sports. However, StadiaPitch, developed by Bosch Rexroth and designed, built and tested by the STRI Group, utilises a modular hybrid natural grass system which is transported from the arena floor to pitch storage area by automated guided vehicles. Once stored, the pitch is maintained as normal ensuring the sports turf is always in a playable condition and ready to be reinstalled. The underlying concrete floor can be used for many other opportunities, such as concerts, motor shows, corporate events and fashion shows. The pitch can be stored outside of the venue at floor level or on elevated platforms or within the stadium structure, as required. As the changeover time for the stadium is reduced to a matter of hours, it is possible to have multi-uses consistently throughout the year, making much greater use of the facilities within stadia. The StadiaPitch research and demonstration centre is located at STRI's headquarters in England. This is the culmination of 7 years of research and development building on a concept developed by Nutcracker Solutions bringing together Bosch Rexworth, Hydro and STRI Group.

TurfSync

TurfSync is an online turf surface performance tracker providing turf managers with all important management data. Currently, it is used mostly by sport venue grounds teams, coaches and consultants to monitor the playing surface and identify trends and risks to solve problems before they occur. This is where the data trackers in your smart watch meet turf management. As an industry we often forget the importance of recording data. This could be performance data, nutritional inputs or pest activity, for example. Data are facts and if you store this information and can access it easily, it can aid you with your current and future management practices.

TurfSync is an easy to access portal, designed by STRI Group and Mashup Analytics to support turf managers across a wide variety of sports and turfgrass surfaces, in making informed decisions. Turf managers take and store surface performance data and set performance targets for their sites. This can be done with the help and support of the STRI consultancy team. For example, TurfSync is providing real time information



Automated guided vehicles moving the turf modules

to assist decision making around managing usage, allocating resources & planning capital works. It enables condition assessment to be undertaken using multiple criteria during the season, highlights issues, allows trends to be easily seen, and compares potential usage to actual usage to shows whether a sportsfield is being under or overused.

TurfSync's weather station also monitors a variety of different conditions. These include air temperature, humidity and surface wetness and automatically feeds this information into a cloud-based database for instant use on the TurfSync portal. This helps you to plan vital maintenance practices such as fertiliser applications and to forecast potential disease outbreaks.

The portal offers a visual aid, that has a traffic light system, with parameters that are set by you to assist you and your team when making decisions. The portal allows you to map the collected data onto a visual image, making it easy to identify problem areas and perform targeted management practices. Consistency is important across all aspects of turfgrass management. For example, golf club members want consistency across the playing surface and from green to green. Football and rugby players want to train on a sports pitch that represents the match day pitch. Turf growers want consistency of product maintained at equal quality across large areas of turf. Local councils want early warnings if sports facilities are being overused. TurfSync is the easy way to assess all of this! For example, Turf managers can collect firmness/hardness readings and aerate specific areas based on the data rather than blanket aerate or

NDVI readings to determine the colour and density of the turfgrass.

Urban Green Space and Urban Water Management

Green space solutions improve the quality of urban spaces for residents and can provide multiple other benefits for the wider area, for example providing a buffer for stormwater management. However, stormwater management of the wider urban environment is increasingly become a problem. Main sewage and old drainage systems are reaching capacity due to a number of reasons including impact of climate change on extreme storm events, increased development and less stringent design codes in years gone by.

Sustainable drainage systems (SuDs) are designed to store water during peak flow, and slowly release this back into the sewage network at a much slower rate, therefore preventing massive surges in water entering the system. One issue with conventional SuDs is that they usually require very large storage tanks as the system has to

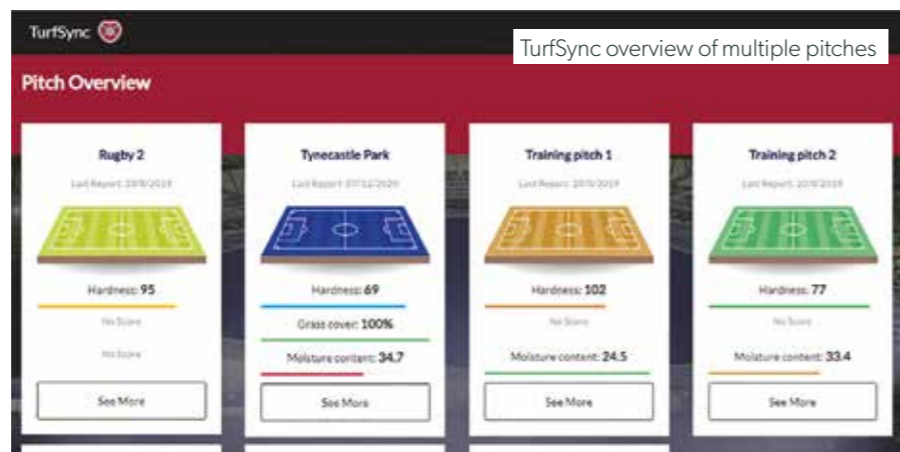
be designed to accommodate very large storms (often a 1 in 100 year event + 20 % for climate change). This means that these tanks are empty most of the time, except during these very extreme, but irregular storm events.

STRI are working with Mashup Analytics, EPG, Kisters and Polypipe to develop a smart SuDs system which allows much more efficient use of space in urban areas, and efficient use of drainage water. The smart tank control system uses accurate forecast data to predict storm events. This then sends a signal to the storage tank to release water in advance of the storm. Importantly the system only releases exactly the amount of water that is due to arrive in the storm and holds the remaining water back. Therefore, the system is full for the majority of time, making it much more efficient. This can then be used functionally as irrigation water or toilet flushing, rather than being discharged down the drain.

Therefore, smart green roofs, parks or home gardens with built-in water storage capacity takes pressure off both urban drains, and their capacity to absorb rain slows the flow greatly during the sudden downpours reducing associated flooding common in parts of Australia.

The system will help revolutionise the way that storm water drainage systems are designed on a city scale. Future systems, for example, will have the ability to talk to one another, and potentially move water around a city to where it is most needed.

Therefore, by collecting information on the turf and green space areas we manage and utilising these data, we can make maintenance decisions providing environmental and financial benefits to all.



TurfSync overview of multiple pitches

GEO Foundation Accreditation for Hoiana Shores

BY ROB WEIKS, HOIANA SHORES GOLF CLUB SUPERINTENDENT



All images in this story: Hoiana Shores Golf Club



The GEO (Golf Environment Organization) Foundation Certification is the golf industry's international standard for sustainable course design and construction practices.

For Hoiana Shores Golf Club to achieve the GEO Foundation Accreditation, there was a plethora of key milestones that needed to be achieved. One key component of these milestones was the use of sustainable turfgrasses.

BRF Zeon Zoysia was selected for its drought tolerance, colour, playability, malleability to what you want from the grass and resistance to disease. Without doubt these characteristics have proven to be more than a sustainable factor amongst others. In Australia, BRF Zeon Zoysia is known as Sir Grange and is exclusively licensed through Lawn Solutions Australia.

KEY COMPONENTS OF ZEON'S PERFORMANCE

Drought tolerance

Through our daily pogo we have had canopy temperature readings exceeding 48 degrees Celsius. Throughout these periods the Zeon has shown to be more than capable of accepting this as a stress and

areas that have 'blued off' recover via hand watering or scheduled irrigation practices.

We have inherited some less-than-ideal irrigation issues and via rectification we have eliminated all of those issues systematically. Through this time having Zeon was a distinct advantage. While we had some areas 'get hot' they always recovered and returned to uniformity faster, if not faster than any Bermuda grass I have previously worked with. Zeon's ability to respond to applied water after showing signs of drought stress, is also better than anything I have worked with prior to working at Hoiana Shores.

Colour

Originally, we went for a lighter shade of green close to a 'brown-green' aesthetic after taking it over from grow in. This was not quite to the liking of the target market, so we changed this to a darker green aesthetic and have stuck with this ever since. Simple changes occurred that allowed us to achieve this were a slight increase in irrigation frequency and amounts, and fertility adjustment via granular application. With only a slight change we were able to achieve a completely different aesthetic.

Zeon's ability to conform to how you as a manager want it is excellent. Unlike

Paspalum, you have options with Zeon in how and what you want from it from a turf manager standpoint and this is probably one of the most overlooked aspects of the grass. I have also found this adaptability to be very achievable within short timeframes.

I have full confidence if we had a professional tournament at the right time of year, we could get things even firmer and faster if needed. Zeon has another gear it can go to, so to speak.

This year I went out with a light verticut at -2mm once over prior to our cooler weather in December and applied a simple triple 15 at 3kg per 100m². The grass was notably greener through the same period as last year and also whilst temperatures have dipped as low as 10 degrees Celsius throughout the night, we haven't had any colour loss. In fact, it has outperformed itself while only needing to be cut at 11mm once per week. Our target greens on the driving range are at 8mm and both colour and density is excellent.

Playability

Firm and fast has been our mantra here at Hoiana Shores. Apart from typhoon type weather where we had 2.7m rain in less than 40 days, the Zeon has performed as

expected. The upright leaf growth is an advantage over Bermuda and without the waxy cuticle of Paspalum, the Zeon rolls out much better.

With the detail RTJ / Shapers put into our fairways the Zeon has complimented these swales, with long balls gathering and taking off speed ramps throughout the course. This makes the course exceptionally fun to play. I have witnessed miss hits (thinned shots) take a swale and end up 6 feet from the hole whereby this would normally have rolled through or not even made it onto the putting surface.

Even while we are only mowing once per week through our cooler months, December and January to the end of February, ball roll from tee shots is still comparable to summer roll.

Our practices throughout the year have been to keep the Zeon density as a priority, so we groom our tees, fairways and surrounds frequently (sometimes twice per week in Summer). This has definitely paid off throughout this period and we will continue with light and frequent grooming once the weather warms up into daytime high 20's.

Resistance to Disease

We have experienced very few issues apart



“ ZEON HAS ANOTHER GEAR IT CAN GO TO ”

from some Brown patch in the Zeon and some very isolated Dollar Spot that did not complete its cycle. We have not sprayed the Zeon with any fungicides since 2019, which indicates as the plant matures it does build up some resilience to disease.

Note: We have had 3.1 metres of rain since October 13th, 2020 til December 31st. The wettest season since 2009 (I do not have records going back further) and zero disease on the Zeon.

Sustainability of the design

From a purely GEO Foundation Accreditation point of view, we have successfully been the only course in Asia to achieve this. Through planning and application, we have maintained the course within these protocols since we achieved this award. Sustainability is an absolute importance on this site and we manage everything within these constraints stringently.

Natural vegetation areas have been protected and we have seen exponential growth as far as native birds and reptiles is concerned. We have also had various migrating birds stay and feed and breed as well, which has been rewarding.

Our Eco Bag installation completed by course construction contractors Linksshape, led by Dan Brown and Darry Koster, has been a highlighted success, with these areas repelling the recent typhoons and the vegetation keeping the dunescape in place.



First Bowling Club in the World to Trial Trinity Zoysia

BROOMS HEAD BOWLING CLUB



Brooms Head Bowling Club is located on the North Coast of NSW between Coffs Harbour and Ballina.

Greenkeeper Blair Littlechild has worked at the club for over 13 years. The club currently has Tifdwarf bowling greens, which have proven to be difficult to manage over the years. Some issues have included ground pearl, turf disease, salinity issues from proximity to the ocean and poor greens construction also a contributing factor to the overall performance of the greens.

Tifdwarf has been the prominent bowling green grass in Australia for over 40 years. Up until recently there have been limited alternatives with superior traits available to greenskeepers. Many bowling clubs operate with very limited budgets, so any investment in construction or refurbishment of greens is critical to get right. Bowls Australia produces Bowling Green Construction Guidelines that provide greenkeepers with a solid resource for ensuring greens facilities are constructed to a particular standard. These guidelines, with the experience and expertise of greenskeepers like Mr Littlechild, have gone a long way to ensuring quality bowling green surfaces in Australia.

Mr Littlechild, the club and their staff were looking for an alternative option that would address the issues they continue to experience. They were looking to introduce a more cost-effective surface that didn't require the stretching of financial resources for upkeep costs and were prepared to look outside the box for these results.

Enter Trinity Zoysia

Early discussions into exploring turf varietal trials began with communication between Mr Littlechild and Simon Adermann from Lawn Solutions Australia (LSA). With Sir Grange Zoysia having achieved considerable success in the Australian sporting market, Teven Valley Golf Club nearby in particular, Mr Littlechild asked Mr Adermann what other new turf varieties may be suited to being used in a bowling greens situation.



“ THEY WERE LOOKING TO INTRODUCE A MORE COST-EFFECTIVE SURFACE THAT DIDN'T REQUIRE THE STRETCHING OF FINANCIAL RESOURCES FOR UPKEEP COSTS AND WERE PREPARED TO LOOK OUTSIDE OF THE BOX FOR THESE RESULTS. ”



Trinity Zoysia is a newly introduced turf species in Australia, exclusively licensed through LSA and ticked a lot of the boxes required for a bowling green and for the Brooms Head climate and proximity to the beach. Trinity Zoysia is a Zoysia Matrella that was originally bred for the golf course industry as a versatile grass that can be mown low, primarily suited for greens and tees.

Mr Littlechild drove to Brisbane and checked out the newly installed Trinity Zoysia putting green at Indooroopilly Golf Club. Impressed with the appearance and performance of the grass, Mr Littlechild put a trial proposal to the Brooms Head Bowling Committee. The proposal was approved in December 2019 to be trialled on one rink, making it the first trial in the world to use Trinity Zoysia for a bowling green application.

Eradication of Tifdwarf for the trial commenced in January 2020. Fumigation followed in February and the Trinity Zoysia stolons supplied by Twin View Turf were planted in March. The Trinity Zoysia showed signs of fine white fibrous roots within 5 days of planting. Shortly after, 200 millimetres of rain fell leaving the greens underwater for over 4 days, but no damage was caused to the trial.

The Fertiliser program started 14 days after planting and progressed throughout winter. In August granular fertiliser was applied to promote growth and the green was top dressed in September. Mr Littlechild worked with Andrew Smith from Nuturf on the fertility program required to get the most out of the Trinity Zoysia.

From there regular mowing, grooming and rolling commenced to prepare the surface for play. Play started on the green in December 2020.

Over the next 12 months the club will monitor winter dormancy, playability, maintenance requirements and member feedback. If everything goes to plan the club will add another 3 rinks to the green in January 2022.

The primary goals they are hoping to achieve in order to determine the trials success include:

- Lower maintenance costs
- Reduced chemical use
- Less weekly maintenance hours
- Increased winter colour

The grass has already received glowing reviews from both the committee and club members, with first and foremost Trinity looking and performing as a bowling green should. Members have commented on the beautiful fine leaf and some have even said it almost looks artificial with how good it looks.

“Australia is leading the way to find a new turfgrass variety for bowling greens – Trinity Zoysia is showing some really positive signs thanks to Brooms Head Bowling Club in New South Wales”. David Doguet, Trinity Zoysia Turf Breeder – Bladerunner Farms.

Mr Littlechild would like to thank the volunteer support and the committee for backing the opportunity to trial this new grass and is excited to see how it performs over the coming years.



Mick McCarthy, Reg Austin & Blair Littlechild

Trinity Zoysia going strong



Sustainably Green with Turf Pigments

COLOURGUARD PLUS ORGANIC PIGMENT

Sustainability pressures are higher than ever and even more so on recreational sports facilities and commercial areas where green grass is considered by some a luxury commodity.

While turf colourants have been around for some time now, it wasn't until recent times that they have become more relied upon to maintain this green appearance, with the important need to reduce water usage.

Dyes and pigments are commonly used on golf courses, but without any nutrient component they only provide short-term colour and no additional benefit to plant health. The solution is the combination of a robust blend of vital micronutrients with an organically derived pigment. Products like ColourGuard Plus are providing turf managers with an all-in-one solution - maintaining critical appearance while nurturing plant health.

The benefits of pigment-based products like ColourGuard Plus don't stop there. ColourGuard Plus also works like a sunscreen for turf grass by absorbing harmful UVB rays during the warm months and acting as a blanket that absorbs available heat in the cooler months. The ability to reduce moisture loss in summer and limit the level of dormancy experienced during the winter months, provides a smaller range of conditions for turf grass to endure.



The ColourGuard Plus formulation consists of natural ingredients that will not harm the health or growth of the turf. ColourGuard Plus delivers micron-sized organic pigment solids into the tiny pores of the leaf, issued via water delivery spray applications.

Who can use it? - Golf courses, turf farms, sport fields, commercial properties, council facilities and lawn lovers everywhere.

Benefits of ColourGuard Plus

- Instantly restores the natural green colour of turf grass – year round
- Substantially reduces watering needs

- Stays green during droughts and water restrictions
- UV fade resistant
- Won't bleed, run, or stain once absorbed into the grass
- Safe for the environment, pets and people
- Works in extreme heat, cold and frost
- Organic and natural – no harmful chemicals
- Reduces the amount of fertiliser and water used on turf grass

Commercial Quantities Now Available:

- *ColourGuard Plus 2.5Lt Concentrate.*
A 2.5ltr concentrate will cover up to 6,250m² (0.625Ha)

- *ColourGuard Plus 10Lt Concentrate.*
A 10-litre concentrate will cover up to 25,000m² (2.5Ha)

When used bi-monthly or quarterly, you could reduce the need for irrigation by as much as 50%. With less irrigation you will be naturally slowing the growth rate of the grass, so less mowing too, which saves both time and money while also providing benefit to the environment.

For more information on ColourGuard Plus or to place an order, please contact Lawn Solutions Australia directly on **1300 522 091** visit lawnsofaustralia.com.au

Mike Campbell, owner of Organic Lawn Solutions



Organic Lawn Solutions



Organic Lawn Solutions is a new family-owned business on the Sunshine Coast, Queensland.

Mike Campbell, the owner of the company, has been successfully using ColourGuard Plus since the opening of his business in 2019. Initially working solely with residential clients and real estate agents looking to improve the curb appeal of their listed homes, Mike quickly found additional value and success in commercial venues such as the Woodford Folk Festival stadium (2019) as well as various resorts in Noosa. Mike introduced 'Lawn Painting' to his clients as an eco-friendly, affordable, instant and dramatic solution to the yellow grass that can leave homeowners and ground crews frustrated. The 'liquid fertiliser that goes on green' is a very quick and healthy solution to transforming yellow grass to a natural and beautiful green colour.

These days, Mike continues to work with

“ I LOVE THE WOW FACTOR OF THE INSTANT RESULTS AND VALUE THAT I CAN PRESENT TO MY CLIENTS EACH DAY.

“ - MIKE CAMPBELL, OWNER ORGANIC LAWN SOLUTIONS

residential clients, however, his main focus now is with larger venues and councils promoting regular service treatments, not only to keep lawns green year-round, but to also help the environment with the

added benefits of significantly decreasing watering and mowing if used regularly. Mike's new passion and purpose is to introduce this 'new way' of doing things, helping golf courses, councils, commercial venues and resorts understand the benefits of this amazing product and the cost savings and environmental impact his services can provide.

Mike added "I was so excited of how this product was being used on golf courses, commercial venues and sports fields across the globe and so I knew I had to build a business to grow this concept to the Australian market. ColourGuard Plus has given me the opportunity to introduce a new and exciting solution both cosmetically as well as economically and environmentally for my clients."

Organic Lawn Solution's goal is to provide services to the Sunshine Coast that not only improve the cosmetic appeal of lawns

year-round but improve the overall health of the grass by assisting with decreasing the water demands that lawn maintenance historically has had. This innovative product can be a great solution to help decrease the massive water demands that traditional lawn maintenance has demanded, which is incredibly beneficial, especially throughout drought seasons.

Mike is very passionate about this product, his services and his innovative vision. He truly feels that 'seeing is believing' and is happy to provide free samples of his services to truly showcase the instant benefits as well as discuss potential water and cost savings with regular maintenance work.

For more information:

www.organiclawnsolutions.com.au
Facebook: **Organic Lawn Solutions**
Instagram: **@organiclawnsolutionsqld**

Xtragrass™ Hybrid Turf System



Growing Tougher Turf with Musturf

XTRAGRASS™ HYBRID TURF SYSTEM



Maitland Oval Project



substantially. Musturf have been involved with various high-profile projects such as Campbelltown Sports Stadium, Maitland Athletics Field and the Royal Botanical Gardens in Sydney, which has seen them rewarded with numerous industry accolades.

Maitland Oval

One particularly memorable project for the young business was the opportunity to supply 8,500 sqm of TifTuf Hybrid Bermuda to Maitland Oval over a period of three days.

“This was a challenge, when tackling a job this size it’s important to have a good team behind you as the tight timeframe causes long tiring days. The job was a success, we fulfilled all the requirements in the brief and finished just in time before a large dump of rain.” Mr Muscat said.

One of the challenges faced was the soft sand profile that caused the machinery passing over it to shift the sand into an uneven surface. This needed to be rectified throughout the process as the brief required the surface to be level to laser specification.

With time ticking, the most efficient way to lay the turf was to have someone operate a double maxi roller, have someone leveling ahead of the maxi roller and two guys behind the maxi roller butting up the edges. Starting out there were only handheld leveller’s, until the tractor came with a big lawn level to speed up the process. (Couldn’t imagine leveling 8500sqm by hand!)

Musturf was established in 2018 by Patrick and Melissa Muscat with a vision to provide the Sydney, Hunter and Central Coast region with green healthy turf using eco-friendly fertilisation methods. Since inception, Musturf have been finding success with their strong focus on the customer experience and fulfilling customer expectations. In doing so, they have positioned themselves as one of the most highly considered turf farms nation-wide. Musturf proudly owns and operates over 250 acres between

Freemans Reach and Singleton, which consists of 50% TifTuf Hybrid Bermuda, 40% Sir Walter DNA Certified Buffalo and 10% Sir Grange Zoysia.

“We are focusing on TifTuf due to its drought resistance, wear tolerance and ability to adapt to nearly all types of soil. We feel that TifTuf ticks all the boxes for most projects and is becoming popular in the commercial space.” Patrick Muscat said.

As the business has grown, even over such a short period of time, experience with commercial projects has grown

Royal Botanical Gardens Trial



“ THIS PRODUCT CAN INCREASE PLAY TIME ON FIELDS, REDUCE DIVOTS, ELIMINATE ESTABLISHMENT TIME AND KEEP FIELDS LOOKING GREENER FOR LONGER. ”

The machinery for the project included:

- Maxi roll installer
- Tractor lawn level
- Tractors and forklifts to move maxi rolls and level wheel tracks
- 3 tonne smooth drum roller
- Small 3 tonne tipper for scraps

Maitland oval was a great project for Musturf to showcase as an example of their work, assisting in generating new business.

XtraGrass™ Hybrid Turf System

In 2019 HG Turf approached Musturf with a product called XtraGrass™, a hybrid turf system with both natural grass and synthetic fibres. This product can increase play time on fields, reduce divots, eliminate establishment time and keep fields looking greener for longer. Musturf saw the opportunity to use XtraGrass™ on high-wear sporting areas and proceeded to grow 3,500sqm on their turf farm in Freemans Reach.

Growing the XtraGrass™ product requires you to first excavate, lay out geotextile, insert the nylon woven base containing the synthetic fibres, fill with sand then sprigging TifTuf into the fibres. This surface is then strictly mown down to 18mm two times a week using a Toro Reelmaster.

When harvesting, a large rotary blade is used to cut the product. This saw blade needs to cut through soil, sand and a nylon woven base. Using a saw blade gives the turf a clean cut making it easier to butt the edges when installing.

As the news of XtraGrass™ with TifTuf quickly spread, we were approached to

conduct trials at various locations including Waverley Oval, Castle Hill Golf Course, Australian Catholic college and the soon to be conducted trial at the Wanderers Training facility. Each client clearly saw the benefits of XtraGrass™ and have all been impressed by its performance.

The Royal Botanical Gardens Trial

Another great case study was conducted by The Royal Botanical Gardens in trial a high traffic pedestrian area. This section suffered intense wear from people overtaking others via the grass beside the walkway.

Musturf proceeded to excavate the soil, spread and level a layer of sand creating a stable profile to lay the XtraGrass™.

The section is performing strongly and can be easily top-dressed and maintained as required.

Musturf is a growing turf company with a strong focus on turf innovation and the supply of quality certified turf for both the domestic and commercial turf sectors.

Add Versatility. Add Value.

When it comes to grass in hard-to-reach spaces – around trees and fences, down driveways, through gates or over kerbs – the wide-area mower you use in the field quite literally won't cut it. But time is money, and efficiency is king. Imagine how quick and easy it would be if you could do it all with one machine – or better yet, with one press of a button.

We at Trimax Mowing Systems want you to make the most of your mower. Our new Multi-Lift System (MLS) is specifically designed to maximise the functionality of your Trimax wide-area mower by giving you more control over the mowing decks than ever before.

MLS combines five different lift configurations for maximum flexibility and usability in your environment. A remote control inside the tractor cab is used to change and monitor the various lift functions, with LED lights marking the current lift state of your mower. With Remote Unlock included as part of the MLS package, the entire setup of your mowing decks can take place from the comfort of your tractor seat.

MLS encompasses these innovative Trimax lift functions:

- The Independent Lift System (ILS) controls either of the side decks independently to simplify mowing operations around trees and other obstacles.
- Trimax QuikLift slightly raises all

OUR NEW MULTI-LIFT SYSTEM (MLS) IS SPECIFICALLY DESIGNED TO MAXIMISE THE FUNCTIONALITY OF YOUR TRIMAX WIDE-AREA MOWER BY GIVING YOU MORE CONTROL OVER THE MOWING DECKS THAN EVER BEFORE.

mowing decks off the ground while the PTO is still engaged. This is ideal for traversing kerbs, creating striping patterns, or preventing turf damage while making tight turns.

- BiLIFT, exclusively available as part of MLS, offers rear deck-only mowing for tight spaces such as gateways and driveways.
- Transport Mode lifts all three decks into a road-transportable configuration.

Every Trimax mower lift option comes equipped with Drive Protect as a standard feature. Drive Protect uses built-in sensors to prevent the mowing decks from lifting in unsafe conditions. A programmed blade spin-down brings the spindles safely to a stop before lifting the mowing decks, which are also prevented from fully lifting if the PTO is engaged to avoid damage to the tractor.

MLS is currently available on the Trimax Pegasus and the Trimax Snake.

Visit us online at www.trimaxmowers.com.au or contact us at info@trimaxmowers.com.au for more information or to book a free demo.



MEETS INTERNATIONAL STANDARDS FOR

- SAFETY: ISO:5395-3
- WATERPROOFING: IP67



Cricket PNG Growing First Class

AMINI PARK, PORT MORESBY



Turf establishing



Trent Hobson from Twin View Turf and Dean Reeves from the University of Queensland



Port Moresby

The home of Cricket PNG is located at Amini Park Cricket Ground in Port Moresby. In 2018, Cricket Curator at the University of Queensland Dean Reeves was asked to oversee an international match at the ground between Papua New Guinea (PNG) and Hong Kong. This also involved the assistance with an ongoing project to improve the Amini Park facilities to ICC standard as an International Consultant for Cricket PNG. With the PNG Prime Minister James Marape supporting the importance of cricket and fully backing the works program to improve existing conditions.

Dean has long been involved with Cricket PNG through his cricketer relationship with former players who represented Australia. Dean also consults to Herbert international Stadium and the National Football Stadium in PNG, something that he has really enjoyed during his tenure.

The Project

Early 2020 saw major work commence on the wicket block, outfield and practise wickets at Amini Park. Dean oversaw the project and worked with local staff including Head Groundsman Vani Morea, Head Coach Joe Dawes, CEO Cricket PNG Greg Campbell and board member Michael Harrison.

The wicket block consists of 8 turf wickets which were reconstructed, and laser levelled. The turf selected for the wickets was Nullarbor Couch, which was a known performer for cricketering surfaces and provided an economical option for the PNG facility. The outfield was cleared, graded and seeded with Princess 77 couch seed. With the practise wicket being renovated and levelled to bring it up to an acceptable standard.

Dean contacted Twin View Turf (TVT) who had experience exporting turf material

From the leaders in automated harvesting, comes the R300 and PS160



overseas. TVT had worked with both Dean and the team at the University of Queensland St Lucia campus before. This was however the first time that TVT had exported turf as solid slabs, with previous exports being stolons.

Harvest, washing and treating of the turf

The turf was harvested, washed, dipped in solution (treatment specified by Department Agriculture and Fisheries for export overseas) and stacked into a cool room in February 2020. The turf slabs were dipped in a solution of Azoxystrobin (fungicide) and Tempo Xtra (Imocloprid and Beta-Cyfluthrin insecticide) left sit in the cold room to drain excess water and chemical solution for approximately 5 hours. Pallets were then restacked the same afternoon, with dry ice placed between the layers of turf. The process from harvest to packed with ice and wrapped for delivery took a total of 17 hours, from 3am through until 8 pm.

Delivery and Installation

On the 21st of February 2020, the turf was delivered to Vision International Forwarding in Pinkenba Queensland for customs inspection and holding until loading onto plane. The turf arrived in PNG with local airline Air Niugini and was installed in the afternoon on the 23rd of February. Air Niugini donated their services for the freight of the 13 pallets of turf. With the cricket wicket being installed on black soil supplied locally by Curtain Bros Quarry.



The turf arrived in good condition, with some burning from the extreme cold of the dry ice and yellowing of the turf from being stacked on the pallet for over 3 days. However, not a single slab was lost. Once laid, Dean started on a program of quick root establishment by using Floratine Perk-up and root hormone Auxinone. Most of the turf's nutrient requirements were supplied by Paul Lierse from Greenway Turf Solutions.

Dean managed the project and ongoing management by spending 2-week intervals in PNG before returning home to Australia again. Up until COVID, Dean undertook 8 work trips in order to have the project completed.

Project Outcomes

Dean currently has weekly Zoom meetings with ground staff, coaching staff and

management to help with ongoing preparation, game scheduling, maintenance requirements and online training. As a whole, the project has been very successful, and all parties are more than satisfied with the outcomes achieved.

The team at Cricket PNG now have adequate turf maintenance machinery, which has been upgraded to include a Toro fairway mower, Mow Master wicket mower and updated heavy roller. Dean manages the nutrition program on the wickets with Floratine liquid products.

Dean is excited about the improvements that are being achieved in Papua New Guinea and is dedicated to continuing to help bring world class cricket to the country.

HIGH PERFORMANCE - LOW MAINTENANCE - BEST COST-PERFORMANCE RATIO



The R300



The ProSlab 160

Nobody has more experience than FireFly in cutting wide varieties of grass type and conditions. Once again, FireFly's disruptive technology changes the game.

DESIGNED FOR LOW MAINTENANCE COSTS

FireFly has proven expertise to engineer machines with high cycle counts and lower maintenance costs. Through careful engineering, FireFly machines use less fuel than the competition—typically 1/2 to 3/4 less!

Stable, wide stance front axle delivers much better cutting performance than tricycle designs.

- High flotation radial tires allow for lower tire pressures
- Four-wheel drive with traction control
- FireFly-proven depth control with excellent blade stability and long life

- With a much lower horsepower engine, the ProSlab 160 outperforms all other single head machines
- Eliminated need for DEF and any after-treatment filters to meet the latest Tier 4 emissions standards

R300

Designed for high performance cutting. Machine stability + weight balance + high flotation = high quality cutting in all conditions with less scrap.

The R300 is the pinnacle of efficiency and power. FireFly's smooth operations are unmatched due to our servo electric harvester mechanisms. Quiet mechanisms are long lasting mechanisms.

DESIGNED FOR EASE OF USE IN ALL CONDITIONS

- Exclusive Smart Rollup system uses advanced roll sensing and an

- electrically-driven rollup conveyor
- The cab focuses on operator comfort and is custom-built for optimal turf harvesting
- Intuitive touch screen for simpler operator controls and descriptive self-diagnostics

ProSlab 160

The ProSlab 160 has proven it can handle the toughest conditions and turn out a higher quality product. Slabs are rotated to produce stable and perfectly square-sided pallets.

FLEXIBILITY AND EFFICIENCY

- Cut virtually any slab length and depth at incredible speeds
- Single or Multi-slab mode
- Rotated tie-in layers

Contact us at: (801) 842-1327

Rodney Fordham, winner of Brisbane's Best Lawn and his daughters Summer and Aria



Brisbane's Best Lawn is Crowned

BY JAMES MCCULLOUGH, GENERAL MANAGER, CENTENARY LANDSCAPE SUPPLIES

The idea for the 'Brisbane Best Lawn Competition' was born right at the start of COVID lockdown here in South East Queensland. Everyone was stuck at home getting into the gardening and we thought it would be great to give people something fun to do while at home.

I am passionate about my lawn and the lawn fanatics community is growing all the time. While they are not all our customers, we wanted to create another platform or

channel to bring all the fanatics together and create a Brisbane (SEQ) based competition. Centenary Landscaping Supplies (CLS) is also known as a leader in our industry and we want to align ourselves with gardeners and landscapers that share our passion.

Lawn Solutions Australia (LSA) and Twin View Turf (TVT) are always fantastic supporters of our endeavours and of course this was no exception. We approached them both with the idea of 'Brisbane's Best Lawn' and they were keen to jump on board with support.

"It was really a no brainer to support the concept. Centenary Landscape Supplies have been a long-term supporter of Twin View Turf and we are proud to be part of the concept" said Twin View Turf's Michael Cox.

Being just before Easter, timing wasn't quite right knowing lawn fanatics would be keen to present their lawn in the best light, so we moved the initial competition plans to spring. Once again, we ordinarily have an expo to launch spring which LSA and TVT are heavily involved with, but with COVID



James McCullough from Centenary Landscaping Supplies, Finalist Casey Challcross, Michael Cox from Twin View Turf and Andrew Pegg from Centenary Landscaping Supplies



Finalist Andrew Egan (second from left)

preventing large gatherings, we thought it best to focus our efforts on something that encourages social distancing.

"There have always been 'Lawn Lovers' but with the COVID 19 pandemic I think that many people have been provided with an opportunity to spruce up their backyards and to make their home their castle." said Michael Cox.

LSA Brand Ambassador Jason Hodges was due to help out with judging, but once

again COVID threw a spanner in the works. Jason recorded some great promotional videos to help with getting the word out there for the competition, hopefully in 2021 we can get him up here in person! The competition included 4 categories:

Best Manicured Lawn

A lawn (usually couch, Bermuda grass or Zoysia) kept short (<25mm) and maintained using a cylinder, reel or roller mower. On top

of looking healthy and green, a manicured lawn will be maintained neatly with well-defined edges.

Prize: \$500 worth of gear for your lawn from Centenary Landscaping Supplies.

Best Natural Lawn

A longer lawn (25-50mm) of any species maintained regularly. Edges are well defined and maintained neatly but may feature more organic shapes.



Finalist Michael Cole (second from left)



Finalist Bradley Jackson (second from left)

accessories valued at over \$3,500 and a \$1,000 voucher for Centenary Landscaping Supplies.

Thank you to all our supporters including UltraGrow and Rover for their involvement in supplying prizes. In the end we had almost 50 entries and over 3,000 votes, which was a great result for our first year.

Each finalist presented a unique lawn, with it clear that these guys took lawn care very seriously. From flawless Nullarbor Couch lawns, a Blue Couch golf green, through to a massive 800sqm block with perfectly manicured couch all round. It was a tough competition to win.

BRISBANE'S BEST LAWN WINNER

The winner was Rodney's flawless Blue Couch lawn in Narangba. It was a tough decision with 5 fantastic yet very different lawns featuring a range of lawn types, kept differently with a broad array of lawn care regimes. The winning lawn was selected based on the owners' fastidious care and flawless presentation. The colour was amazing and consistent, while the accuracy of the mow was spot on, with not a single blade out of place. While the care regime was extensive, it was still simple and achievable for all aspiring greenskeepers.

The Brisbane's Best Lawn website will now transition into a resource for budding greenskeepers and begin promotion for the 2021 competition. While Centenary Landscaping Supplies owns the asset, we want to make sure we maintain our integrity and promote everything lawn care, so we will be sure to present it in such a way. Centenary Landscape Supplies and Twin View Turf enjoys nothing more than watching their customers enjoying beautiful lawns. There are a few competitions out there now, but we quietly hope our Brisbane based comp will be the one to win in the future!

The competition will be back again this year and we have learnt plenty, so expect to see some great additions/changes for Brisbane's Best Lawn 2021. I think that there are people preparing already for a shot at the title!

Prize: \$500 worth of gear for your lawn from Centenary Landscaping Supplies.

Best Landscaped Lawn

The last category before the biggest prize. A lawn of any species integrated into a broader landscape (e.g., smaller lawns surrounded by well-maintained gardens featuring organic shapes and edges).

Prize: \$500 worth of gear for your lawn from Centenary Landscaping Supplies.

Brisbane's Best Lawn 2020

Brisbane's best lawn judged by a panel of experts and assessed against the following criteria - Visual appearance (Colour, Thickness and coverage, Presence of weeds and/or pests). Maintenance Regime (Schedule, Equipment). Care Regime (Fertilising schedule, Weed & Pest Management, Mowing frequency).

Prize: Brisbane's Best Lawn recognition, Rover Liberty 43 Cylinder Mower and



The Professional's Choice for Lawns & Landscapes



Wentworth Park's Water Saving Resurface



Images through this article- Wentworth Park Sporting Complex

“ THE CITY OF SYDNEY COUNCIL CAREFULLY SELECTED TIFTUF OVER A NUMBER OF OTHER VARIETIES BASED ON TRIAL RESEARCH AND RECOMMENDATIONS FROM OTHER SPORTING STADIUMS. ”

Green Horticulture Group (GHG) are both sports turf management and open space maintenance specialists who undertake turf related projects. For the past 8 years GHG have been undertaking sports fields renovations for the City of Sydney Council. This has included specialised turf services such as aeration, topdressing, turf installation and fertilisation of the City of Sydney Council's 25+ hectares of sport field areas.

During GHG's 2019-2020 maintenance period and on the request of council, they installed a number of TifTuf Hybrid Bermuda trial plots throughout the council's sites. As a result of these trials, the City of Sydney Council informed GHG they wanted to expand the use of TifTuf and complete a field installation, due to its ability to use less water than other couch's. A location at Wentworth Park Sporting Complex was selected for this new turf installation.

Wentworth Park Sporting Complex
Wentworth Park is a multi-purpose sporting facility located near Glebe in Sydney. The park hosts many different sports including, greyhound racing, soccer, rugby union, rugby league and speedway events.

The Project
For this project a 7,000m² soccer field in the south west section of the park was chosen, due its high annual usage as well a reduced amount of water needed to irrigate. Due to the number of ongoing users, a 2-week construction and a 12-week maintenance period window was granted by council.

GHG undertook the whole process using their own equipment and trained staff to complete the works in the required timeframes. MusTurf Lawn & Turf Company provided the TifTuf turf required for the project to be completed.

The City of Sydney Council carefully selected TifTuf over a number of other varieties based on trial research and recommendations from other sporting stadiums. Increased drought tolerance, a hard wearing surface with a quick and strong recovery rate after heavy winter use, are the key outcomes they are hoping to achieve with TifTuf.

The Council has expressed their enthusiasm for how well the grass is performing to date and GHG is continuing to find out more about TifTuf's behaviours and the benefits that it can provide.



- GHG Construction Process**
- 12/10/20** – Two applications of herbicide with 6 metre boom sprayers
 - 10/11/20** – Stripping of existing turf and addition of 3 tonne of gypsum with FTM and Vicon Spreader
 - 11/11/20** – Spreading of 160 tonnes of organic soil mixture supplied by Benedict Sand and Gravel
 - 17/11/20** – Double bleccavation of site using 120hp John Deere with the BLEC bleccavator
 - 17/11/20** – Laser level field and final trim with tow behind blade and roller
 - 20/11/20** – Final trim and application of TX10 fertiliser prior to turf install using the laser blade and Vicon Spreader
 - 24/11/20** – MusTurf Lawn & Turf Company installed TifTuf turf rolls
 - 5/1/21** – Rotary cut at 45mm. Initial cut 65mm two weeks after install then cut twice per week at 45mm for 12 weeks



The Turf Health Balancing Act

THE RELATIONSHIP BETWEEN SOIL, WATER AND TURFGRASS

BY MICHAEL SUTTON – AUSGAP YOUR TURFGRASS PURITY ASSURANCE

Achieving a healthy turf surface is directly reliant on soil composition and optimum water levels. The connection that occurs between water, soil and plant is imperative in the establishment of new turf and in the continued success of an established surface. Water, soil and turf must be united and work together to ensure healthy growth in any situation.

Simply put, water and soil are the main natural resources that act as factors of life in a turf environment. Turf needs soil as a growing medium and nutrient contributor, along with water's metabolic process to replace water loss via transpiration and as a diluent and carrier of nutrients needed by the plant.

When one of these components is out of balance, the performance or growth of turf can be compromised. An important aspect

“
SIMPLY PUT, WATER AND SOIL ARE THE MAIN NATURAL RESOURCES THAT ACT AS FACTORS OF LIFE IN A TURF ENVIRONMENT
”

to examine in troubled areas of turf is the movement of water through the surface into its root zone. Correct volumes and occurrences of this process are crucial in supporting the turf profiles transpiration cycle. Accessibility of moisture within a turf root zone and the level of moisture in the soil are important factors that can influence turf performance and appearance.

It is important to maintain the association between water, soil and turf to enable the best growth and production. Knowing a soil type and how much water it requires, how it supports turf growth and how it aids in creating a superior turf are important in maintaining this association between water, soil and turf.

More often than not, people will evaluate turf watering requirements by the colour of the grass, this method however, does not work sufficiently. Turf that is watered correctly does not always have less colour

than an overwatered turf. When turf is underwatered, it can create detrimental long-term effects to the plant as well as influencing the colour.

Once you have determined the soil type, an approximate range of the soil's water holding capacity is necessary. Key factors in watering frequencies and amounts are:

Soil water holding capacity

The total water holding capacity will differ for each of the soil types, as well as the plants available water content (Table 1).

Evidently, soil texture influences water holding capacity, with Table 1 (page 42) revealing that loam soils have the most plant available water. Sands have the smallest moisture retention, with clays having the highest. It is important to note that a portion of moisture in all soil types is held too tightly to be available for plants to uptake.

Important notes about water holding capacity:

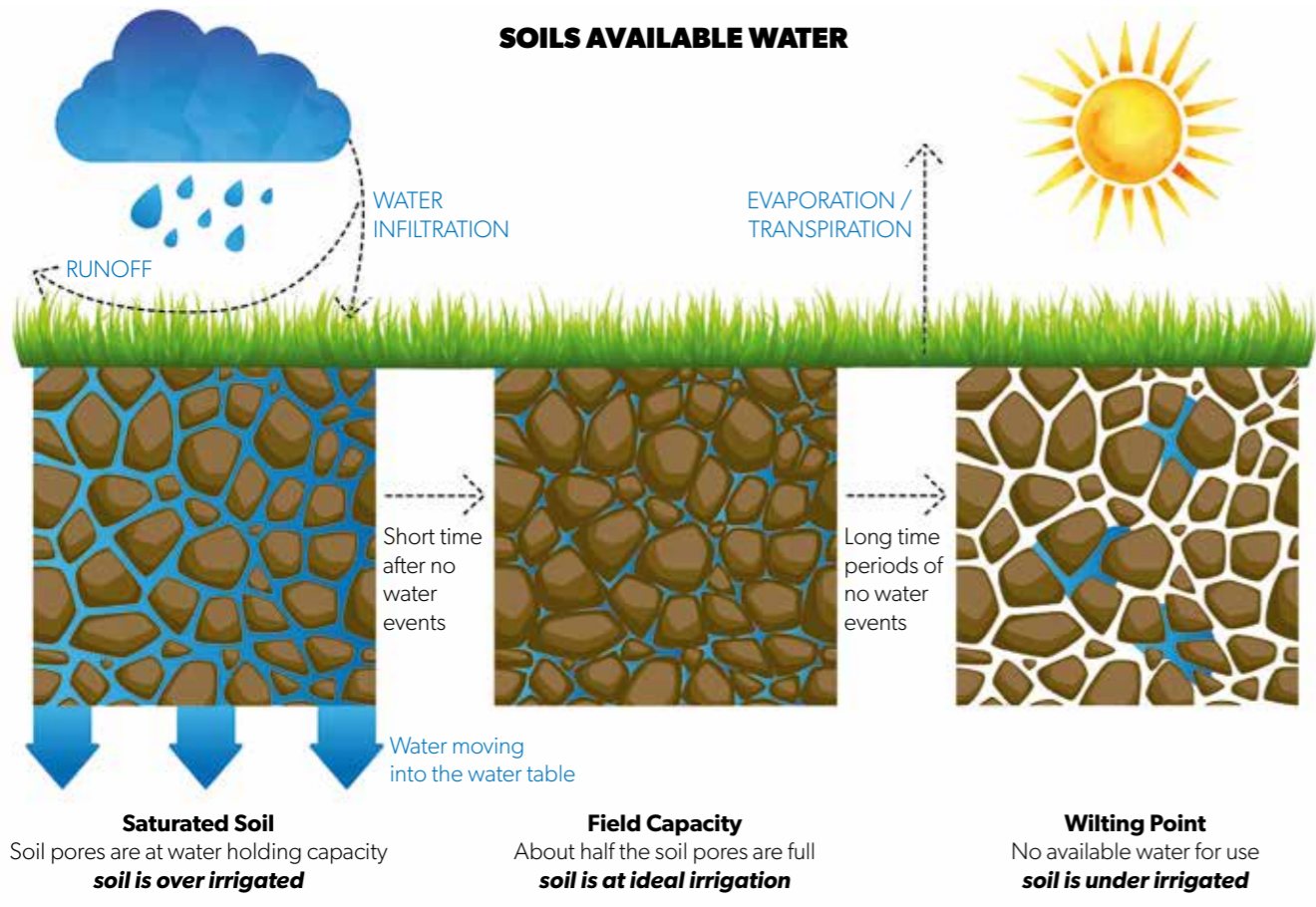
- Organic matter can improve water holding capacities of sands. Often very high sand content soils or root zone mixes can be assisted from the addition of a well-decomposed organic amendment. Too much organic matter, however, may be unfavourable and reduce soil aeration creating unnecessary moisture held within organic matter, which can create a waterlogged soil.
- Another factor that can increase soil-water content is the control of the water table within 600mm to 1.2m of the soil surface. Water will rise above the free water table by capillary (adhesion and cohesion forces) action, this zone is called the capillary fringe. Fine-textured and organic soils

have the greatest capillary rise, and this can be used to sub irrigate turf in some situations.

Soil infiltration

Soil infiltration is the movement of water into the soil surface. Consequently, soil surface conditions are of prime importance. Other elements that effect infiltration are soil texture, structure, slope, and current soil-water content.

- Sandy soils may have infiltration rates in excess of 25mm per hour, while clay soils are often less than 2.5mm per hour (Table 2, page 42).
- A well-structured soil will provide large macropores (> 0.10 mm diameter pores, also called non-capillary pores or aeration pores) for infiltration, compared to a tight clay or compacted soil with few macropores.



Water available to plants

APPROXIMATE SOILS WATER HOLDING CAPACITY (mm/305mm of soil)					
Range*	RAW**	Unavailable	Soil Type	Range	RAW**
114 – 124	46 – 48	68 – 76	Clay	114 – 124	46 – 48
119 – 124	46 – 53	73 – 71	Clay Loam	119 – 124	46 – 53
69 – 102	33 – 50	36 – 52	Loam	69 – 102	33 – 50
46 – 69	23 – 33	23 – 36	Sandy Loam	46 – 69	23 – 33
15 – 46	10 – 25	5 – 21	Sand (Fine)	15 – 46	10 – 25

* Is an average and further research and/or testing into the soil samples region of origin to ensure correct range.

** RAW = Readily Available Water and is an average and further research and/or testing into the soil samples region of origin to ensure correct range.

Table 1: Suggested Total, plant available and unavailable water holding capacity of different soil texture types.

SOIL INFILTRATION RATE*	
Soil Type	mm/hr
Clay	0.2 – 2.5
Clay Loam	1 – 15
Loam	2 – 25
Sandy Loam	10 – 65
Sand (Course)	12.5 – 80
Sand (Fine)	25 – 200

* These values are approximate. Infiltration rates can vary widely, depending on surface conditions and water content.

Table 2: Representative infiltration rates for different soil textures. Surface conditions can cause these values to vary.



- Organic matter often aids infiltration by providing a better-structured soil.
- Cracks that develop upon drying can markedly increase initial infiltration rates after irrigation. These are especially beneficial on heavy clay soils.
- A sloped surface will exhibit a much lower infiltration rate which can complicate watering, particularly on rolling terrain.
- Thatch can reduce infiltration if it becomes hydrophobic (water-repelling) in nature. Observations made in hydrophobic sands that have very low infiltration rates, are usually caused by organic coatings on the sand particles that repel water.
- When water is applied to a dry (or partially dry) soil, the initial infiltration rate is high and then gradually decreases as water content increases.

Techniques to improve infiltration rates depends on the particular factor that limits the soils infiltration rates:

- On soils with poor infiltration rates, a good aeration/cultivation program can be very beneficial.
- Allowing the soil surface to dry between irrigations can increase the initial infiltration rates by causing soil cracking.
- On heavy clay soils, irrigation programs to apply a long run of water initially, followed by shorter runs with time in between for infiltration to occur. This is called pulse irrigation and would be in contrast to irrigating at very low rates (to match saturated infiltration rates)

- Application of organic matter to the soil surface of badly structured soils can improve infiltration. The easiest way to add organic matter is by growing a healthy plant and returning clippings. Well decomposed organic materials applied as topdressing may be useful. However, these should be applied in conjunction with a good core aeration program to prevent surface layering.
- Breaking up any surface layer, whether from compaction, or a distinct textural change, will improve infiltration. For example, profiles containing a silt-loam soil laid over a sandy root zone mix will result in slow moisture penetration as the silt loam establishes the infiltration rate.
- If a hydrophobic sand is the cause of poor infiltration, wetting agents may be beneficial to rewet the surface and aid in water absorption.

Conclusion

The importance of knowing a turf soil profile and its traits will give the best understanding of:

- Best watering quantities and regularities specific to turf and soil type.
- Best turf maintenance practice specific to turf and soil type.

It is important to note that this is a guide and other factors may be present or occurring in turf profiles, so please contact the appropriate turf professional for further advice on any turf related issue/s.

Inaugural AusGAP Turf Industry Scholarships Catch-up

AUSGAP 2020 SCHOLARSHIP PROGRAM

Last year presented many challenges for the inaugural AusGAP Scholarship recipients, as it did for everyone. Initially there were concerns whether the recipients would be able to commence their studies as planned, among many other concerns relating to COVID-19.

AusGAP can announce scholarship recipients were successful in commencing their studies.

“The recipients had to deal with a number of challenges during a trying year. Issues like the best way to enrol in their courses, if the courses would proceed and how these courses would be delivered were common across all recipients.

To have all scholarship beneficiaries make great in-roads in their courses, was a great achievement”.

We recently caught up with each of the recipients to find out how they have progressed with their studies & what the last 12 months have looked like for their careers.

Belinda Evans, the Finance Officer for Coolabah Turf in Echuca continued her education in Accounting, Finance and HR with a course that will run over 2 years. As Belinda is a self-taught finance officer, enrolling in these courses would enable her to formalise her current proficiencies, as well as update her knowledge and current business practices relating to her role.

Due to the current world climate, Belinda was unable to start her course early in 2020.

With the changes that COVID-19 produced in the learning sector she commenced an online Accounting course in September and will look to complete it as well as the Finance and HR components this year.

Chris Erikson is a Team Leader at Woronora General Cemetery and Crematorium in Sydney NSW and is responsible for the presentation of the lawns at the Cemetery.

Chris commenced study in July. Chris said “It has been a challenge, but a very enjoyable course in which I have loved every minute. The course has also given me a better understanding on the finer details involved with Sports Turf Management and on how to read turf needs, including when to apply products and keeping turf healthy”.

2021 will see Chris undertake the second year of the course which will allow him to gain more knowledge and learn new things in an industry that he has a real passion for.

Nick Skerys is a Turf Technician at Lilydale Instant Lawn in Pakenham VIC. Nick is undertaking an Agriculture and Technology (Sport Turf Science) Degree offered by the Latrobe University/Melbourne Polytechnic.

Nick’s course was moved to online lectures through Zoom. Nick said “It all went well, the classes were completed online, and I gained a good understanding of what was taught. The subjects mostly covered a broad foundation of biology and organic chemistry”.

“The best parts of the course were the amount of content that was covered, which

was impressive. Organic chemistry was cool to learn, for years I’ve used many different chemicals on the farm and being able to look at a chemical name and have a bit more understanding about its structure and properties is helpful”. Nick continued.

In the next 12 months of Nick’s study, he is really looking forward to the Applied Genomics and Plant Breeding class. In 2020 the course touched on and built a foundation of understanding on DNA, inheritance and plant reproduction and this subject will expand on everything even further. “Plant Physiology will be nice to really get into the specifics of turf and crop management.” Nick said.

Nick works at the Pakenham farm with Sir Walter DNA Certified and is seeing some great results using the knowledge he has attained. “I have to say it’s looking healthier than ever. Gaining the knowledge from the course has enabled even better fine tuning of our nutrition program to optimise growth. With the current program we’re seeing Sir Walter fill in significantly faster than before. Obtaining quality mature turf roughly 4 - 6 months faster than it would have taken in previous years.” Nick said.

Steven Tonkins is the Harvest Coordinator for Coolabah Turf in Echuca VIC. He successfully completed a Multi Combination licence training in August and has been assisting with turf deliveries in Coolabahs B-Double truck.

AusGAP will be relaunching the Scholarship program in 2021.

Now is your opportunity to secure funding for Australian turf industry related studies in 2021.

APPLY NOW!

AusGAP – The Australian turf certification body, is offering financial assistance through its ongoing scholarship program in 2021.

APPLICATIONS CLOSE MARCH 31ST, 2021.

For more information or to apply visit ausgap.com.au, email administration@ausgap.com.au or call 1300 287 599.





Wyong Rugby League Club

Stronger Together

THE WYONG RUGBY LEAGUE CLUB GROUP

Wyong Rugby League Club is the oldest established club on the Central Coast, dating back as far as 1900. It wasn't until the 1970's when land was purchased at Kanwal, that it established its licensed club and fields, and still remains there today. The main field is named after Morrie Breen,

who was the driving force of the club at the time.

The Wyong Group

Under the guidance of CEO Michael Coughlan, in October 2001 saw the first amalgamation, when the struggling Central Coast Masonic Club were taken

on board. Now known as Wallarah Bay Recreation Club, it is situated on the shores of Tuggerah Lake at Gorokan, and is now a hugely popular social club, that caters for weddings, functions and conferences with its great views across the lake.

The Wyong Rugby League Club Group consists of 7 clubs, employing over 300 staff.



Wyong Rugby League Club

- Wallarah Bay Recreation Club
- Wyong Bowling Club
- Budgewoi Soccer Club
- Canton Beach Sport Club
- Goulburn Railway Bowling Club
- Avoca Beach Bowling and Recreation Club
- Bateau Bay Bowling Club

With the exception of Goulburn Railway BC, all the remaining clubs are situated on the NSW Central Coast. Things have not stood still for any of these clubs. Huge investments have been made to all the clubs, with renovations and alterations being carried out at each venue.

Head Greenkeeper at Wyong Bowling Club - Kim Smith

Kim Smith is Head Greenkeeper at Wyong Bowling Club. Kim acts as the conduit between the main club and all their other bowling greens staff at each venue, along with the Head Groundsman at Budgewoi Soccer Club. They have 15 staff across 5 bowling clubs, plus Budgewoi Soccer Club.

Kim's main role is to work in with each Head Greenkeeper at each venue regarding programming of greens renovations, top dressings, soils, products, equipment and contractor hire. At this point in time, the main club is under contract to Green Options, who are doing a great job.

It can be an extremely busy time with so many greens all happening at roughly the same time. Kim said one of the challenges is trying to make sure they are all working in together to make it as smooth as possible. "Unfortunately for the guys at Goulburn, due to the distance involved, these poor fellas are left to carry on by themselves." Kim said.

Major Projects

The most recent major works carried out have been at Wyong BC over the past two summers. Both greens 1 and 3 have had 100mm removed from the height of the playing surfaces and re-grassed in local 'Wyong Couch' to bring these greens back to regulation height from green to bank.

Last winter also saw a new irrigation and filtration system installed at Avoca Beach Bowling Club. Budgeted at around \$50k the system was installed by ABC Pumps,



Bateau Bay Bowling Club. LEFT: Graham Sherer and Laurie Barrett from Avoca Beach BC



Justin Smythe & Michael Howard from Goulburn Railway BC. LEFT: Canton Beach SC



Frank Edwards, Chris Thurlow, Keenan Field, Greg Munday from Bateau Bay BC



Bateau Bay BC



Head Groundsman Luke Carabott



Budgewoi SC

and includes 2 x ING storage tanks, pumps from the holding dams and from tanks to greens. Also included was a 3000lt aerating tank and filtration system to remove the high iron oxide content from the water. This will now allow the proposed repainting of the outside of the venue to commence, along with a covered walkway from the car park to the club. Staining from the iron oxide needed to be removed prior to these being able to go ahead. New sunshades around the greens are planned for stage 2.

In October 2019 the maintenance of Budgewoi Soccer Club grounds again became in house, after the fields had been leased to Central Coast Football for the previous 3-4 years. Now employing Head Groundsman, Luke Carabott to look after this facility. Big money items on all new equipment such as mowers, boom spray, workman was purchased along with the installation of irrigation (again by ABC Pumps) to the field 3.

Other minor projects have seen the installation of galvanised plinths to most of the greens in the group over the past couple of summers. Yet to be confirmed, but the plan is for further lowering of the playing surfaces at other venues where needed, or if suitable raising the height of the Bowls banks by capping with a paver or brick.

For Kim, he has found that for most of his career it's purely been about being a hands-on Greenkeeper. "I find it difficult at times to just leave my assistant and apprentice to carry on when I'm often called away, or just doing the rounds to see how everyone is getting on. Recently, there has been more

“ IT CAN BE AN EXTREMELY BUSY TIME WITH SO MANY GREENS ALL HAPPENING AT ROUGHLY THE SAME TIME. ”

things taking me away, even though I know things are in good hands.”

“We have a great team involved in the maintenance of our facilities. The relationship between our staff is fantastic.” - Kim Smith.

Executive Manager of Property, Safety and Sport, Corey Garratley is a huge support in allowing the staff to do what's needed to maintain the facilities to the standard that they are able to.

“That wasn't always the case in much earlier days. Times have certainly changed! Strictly from our turf side of things, there are very few cons to working as a group. Its all-pros!” Kim said.

The one downside occasionally experienced is the expectations of a minority of members.

“The same old chestnut about someone's greens running better than others. Because we are all under the same umbrella, some

seem to think everything will be the same at each venue. It's a hard task for them to realise that each venue is different.” Kim said.

“Greens have been constructed differently over the years and location plays another part. Some venues struggle with disease issues or nematodes, some with slower drainage, while others closer to the coast have prevailing breezes that reduce the disease issue but present other problems. It's definitely not a one size fits all with each venue.” Kim continued.

Turf Machinery

18 months ago, the group purchased two ECO250 top dressing/soil spreading machines. Each summer they undertake around 36 top dressings when renovating the bowling greens. “A couple of older guys start to feel the pinch, with even the younger ones asking the question around January, ‘how many more to go’.” Kim said.

These two machines have made a huge difference for the group. Easily transported between venues, highly manoeuvrable and able to be driven to the soil heap and back to the green. This has allowed them to reduce the numbers required at the venue when top dressing as well as making spreading simple and even.

“While the events of last year (COVID 19) have affected us, as it has with everyone, we entered it in a very strong position, and have at this stage of coming out the other side been able to remain in a strong position.” - Kim Smith.

It's not just a game. It's not just a grass.



*Excluding Western Australia and Northern Territory

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- Needs a fraction of the water other Varieties require to establish. Plus outstanding drought tolerance requiring up to 38% less water than other varieties.
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