

# TURFTALK

BY LAWN SOLUTIONS AUSTRALIA | SEPT 2021



**The Turf of  
Tokyo 2020**

... Read more [pg 05]

**Queensland Country  
Bank Stadium, Townsville**

... Read more [pg 08]

**The History of  
'Tif'ton Turf**

... Read more [pg 16]



Turf trials at Harden Park Lawns

# 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.

**Contact:**

For any enquiries, submissions or to subscribe to our digital edition please contact us at [news@turftalk.org.au](mailto:news@turftalk.org.au)

## Inside this issue

WESTERN PLAINS TURF	PG 04	SPECIFICATION OF GRASSES	PG 28
TURF OF TOKYO 2020	PG 07	NORTH QUEENSLAND TURF TRIALS	PG 30
QUEENSLAND COUNTRY BANK STADIUM	PG 09	UGA AND BRIAN SCHWARTZ	PG 33
AUSGAP CERTIFICATION PROGRAM	PG 14	HIGHFIELDS SPORT & RECREATION PARK	PG 36
ASTMA CONFERENCE 2021	PG 16	SEDGE MANAGEMENT IN TURF PRODUCTION	PG 39
THE HISTORY OF 'TIF' TON TURF	PG 18	TIFTUF IN BUSSELTON	PG 42
DIVERSIFYING AT YARRAMALONG TURF	PG 21	MANAGING A MULTI-SPORT FACILITY	PG 44
WOMEN IN TURF LEADERSHIP OPPORTUNITIES	PG 26	HYBRID TURF SOLVING HIGH WEAR PROBLEMS	PG 49

# The Growing Beauty of the Western Plains

WESTERN PLAINS TURF



**It's not the famed Western Plains Zoo we are talking about here, but another iconic local business. Located in the heart of NSW, Western Plains Turf (formerly known as Orana Turf) started from humble beginnings. Over the years, it steadily grew into a business that services all of Central and Western NSW. The original name Orana Turf, traces back to over 25 years in and around Dubbo and the Orana region.**

The business is owned and operated by father and son partnership Mick and Tim O'Neill, along with their partners- Debbie and Simone.

Tim and his wife Simone live on the property with their four children - Milla, Sully, Ellie and Halle. Born and bred in Dubbo, Tim was fortunate enough to spend most of his childhood outside in the backyard playing football and cricket with his mates, on his parents' lawn. Tim has been heavily involved in the Dubbo community through the years, attending St Johns Primary and College as well as being a proud member of the Dubbo community through his passion for rugby league.

The family were originally timber cutters, Mick was 4th and Tim was 5th generation. A lot of the state forests around the area became national parks making it a dying trade with sourcing timber getting harder and harder. The family were at a crossroads as to what they should do. Tim's uncle had the Orana Turf business, but it was a small farm. There wasn't enough work for the three of them, so Tim and Mick made the decision to take on the business and expand.

Established in 2017, the family purchased a forty-five-acre property, converting it from mixed farming and horsing into a fully irrigated operating turf farm specialising in residential and commercial instant lawn.

"Soon after purchasing the farm, we stood a 200m centre pivot for paddock irrigation. Six months later a storm rolled through and blew it over on the last day before the Christmas break and it took four months to get any money to fix it," said Tim.

The farm only had forty irrigation pipes available to keep twenty acres of turf alive through forty-degree heat. The pipes needed moving four times a day for two



months, just to keep the turf alive. At this point, the family had realised they had bought into the business during one of the worst droughts in history. The rain had stopped, and the dust just kept rolling in.

“By the end it was nothing to have two or three major dust storms a week,” said Tim.

This put a lot of strain on relationships and the family financially. Dubbo then brought water restrictions in which has never happened before, without any warning. The families only income stopped. Two weeks before restrictions came in, Tim sprayed out twenty-five acres of Lucerne, not knowing that could have been a small income to help them through.

“We were just about to give up... when it finally rained.”

“I still remember the storms rolling in, looking out the window you could see the rain once it hit the river it followed it and kept going around us.”

Since then, they haven't looked back. Covid hit and they initially weren't sure of what would happen, but business was good, and sales have been consistent. The family had managed to build the business from the ground up through the worst drought in history.

As of now, Western Plains Turf have three employees full-time and four casuals. Tim said they have been slowly building up and investing in their equipment, acquiring a bigger truck and forklift as well as a turf harvester.

“We have absolutely built our name and business up through hard work and pride in all the work that we do, from the first phone call to the way we leave each job site and our after sales service,” said Tim.

Western Plains Turf are now one of the exclusive suppliers of TifTuf Hybrid Bermuda lawn in Central and Western NSW. Tim believes TifTuf is the perfect grass for the region and has seen some incredible results in challenging conditions to date.

Tim is looking forward to what the business can continue to achieve in the west over the coming years. They might have a brand-new name and logo, but the same great people and product remains.



# The Turf of Tokyo 2020

**The 2020 Tokyo Olympic Games have finally come and gone, completed in 2021 for reasons well known but also to confuse future trivia buffs. We enjoyed seeing the Aussie success in the pool, out in the ocean and on the hard surfaces, but what we really enjoyed as turf enthusiasts, was the sports played on natural turf.**

Hundreds of hours of wear experienced over a short two-week period really put the turf to the test. The sports ground curators responsible for getting these fields ready for competition and maintaining their quality throughout the games, really are magicians.

Tokyo 2020 involved 33 sports, with 339 medal events, held across 42 venues.

Here's some insight into some of these turf playing surfaces that featured during the games...

## The National Stadium

The National Stadium in Tokyo was the main stadium for the games, with construction completed in November 2019. The National Stadium hosted the athletics, rugby

and some soccer games, along with the opening and closing ceremonies.

The turf used for the playing surface at the stadium is TifGrand Bermudagrass (Couch), developed by Tifton University in South Georgia USA. The same turf development program grasses such as TifTuf and TifWay were released from. Japan National Stadium was built on the site of the formerly demolished old National Stadium in preparation for the games. The grass used at the old stadium was another Tifton bred grass called TifSport.

TifGrand can handle the humid conditions of Tokyo and the high traffic experienced at the games. It has increased shade tolerance which was also important with the stadium's high walls and roofing. TifGrand also has a great dark green colour which is ideal for televised sport. The stadium's roof collects rainwater that is stored in underground cisterns, which is used to irrigate the arena turf as well as the numerous plants on the top storey promenade.

## Sapporo Dome

The Sapporo Dome is an incredibly multi-functional venue for sport. The dome

throughout most of the year hosts baseball and soccer, through a retractable playing surface. Baseball is played on an artificial turf field, while football is played on a real grass/turf surface that can slide in on top when required. Sapporo Dome hosted soccer events during the games.

The 'hovering' natural turf surface is 120m in length, 85m wide and 1.38m deep. Because the Sapporo Dome has a permanent roof, the playing field needs to be out in the open to receive sunlight. The surface is then moved into the dome shortly before being required for matches.

A surface of such size is incredibly heavy (8,300 tonnes) and has taken some clever ingenuity for it to be moved in and out. Air is blown underneath the surface lifting it up and effectively reducing its weight by 90%. 24 sensor-guided wheels then roll underneath allowing the surface to be put in place over a four-to-five-hour process.

## Yokohama Baseball Stadium

Home of the Yokohama DeNA BayStars baseball team, Yokohama Stadium is one of the only baseball stadiums in Japan to have a natural turf outfield. This wasn't always the case though, with the previously



artificial surface being replaced with real turf in 2016. This change was part of several improvements designed to convince hometown fans that the stadium would be more enjoyable. With the major league-style grass being mowed to create a more attractive MLB-style checkerboard pattern.

**Miyagi Stadium**

Miyagi Stadium is in Rifu and has hosted many international sporting events over the years including the 2002 FIFA World Cup matches. The stadium was used for track and field competitions and soccer matches at the Olympics.

The turf is grown especially for the stadium by East Japan Reconstruction Lawn Growing Enterprises run by Seiichi Otsubo. The grass used is a composite of three different varieties of Kentucky Blue Grass due to the stadium being nearly 5 hours north of Tokyo experiencing a milder climate. Two of the varieties are known as 'Granite KBG' and 'Sudden Impact.' This combination provides a durable surface and dense coverage, which Otsubo believes to be fitting of his recovery or reconstruction turf, given it is being used at an Olympics being dubbed the 'Recovery Olympics.'

**Kasumigaseki Country Club (East Course)**

The home of golf at this year's Olympics, Kasumigaseki Country Club first opened in 1929.

The club features both an East and West Course, with the East Course being used for both the men's and women's Olympic events. The East course underwent a full renovation in 2016 in preparation for the games. The course previously featured 2 greens per hole, one with warm season grass and the other cool season to manage the extreme seasonal conditions experienced. For the games, each hole was transitioned to a traditional layout with just one green per hole, enabling them to extend the course length by 500 yards.

# PERFECT CUT. TOTAL CONTROL. LESS EMISSIONS.



“ ...THE TURF USED FOR THE PLAYING SURFACE AT THE STADIUM IS TIFGRAND BERMUDAGRASS (COUCH), DEVELOPED BY TIFTON UNIVERSITY IN SOUTH GEORGIA USA. THE SAME TURF DEVELOPMENT PROGRAM GRASSES SUCH AS TIFTUF AND TIFWAY WERE RELEASED FROM. ”

**DESIGNED TO FREE UP TIME**

Lawn mowing doesn't have to be a time-consuming and costly job. When you invest in our professional robotic mowers, the digital management tool Husqvarna Fleet Services™ is included. Allowing you to easily monitor and control your mowers from your smartphone, tablet or laptop - just as easy as it should be. [Learn more at husqvarna.com](https://www.husqvarna.com)



HUSQVARNA PROFESSIONAL AUTOMOWER® RANGE



# The New Heart of Townsville

## QUEENSLAND COUNTRY BANK STADIUM

**After 13 years maintaining the North Queensland Cowboys' former home ground, 1300Smiles Stadium (AKA Dairy Farmers Stadium), Head Groundsman Bruce Fouracre wistfully locked up his shed for the final time on February 6th, 2020, to begin a shining new chapter at Australia's newest venue, Queensland Country Bank Stadium.**

The \$293.5 million, 25,000 seat venue, built in the heart of Townsville's CBD, was set to put the region on the map for major events. It would be a big job, but Fouracre's time at 1300Smiles Stadium coupled with years under legendary Curator Tommy

Parker at the Sydney Cricket Ground (1993-2008), meant Fouracre knew he has what it takes to tackle the role.

"It was an honour to be asked to be the Grounds Manager at Queensland Country Bank Stadium, and I am really grateful to Stadiums Queensland for giving me this chance. It's a once in a lifetime opportunity, and one that I will never take for granted," Fouracre said.

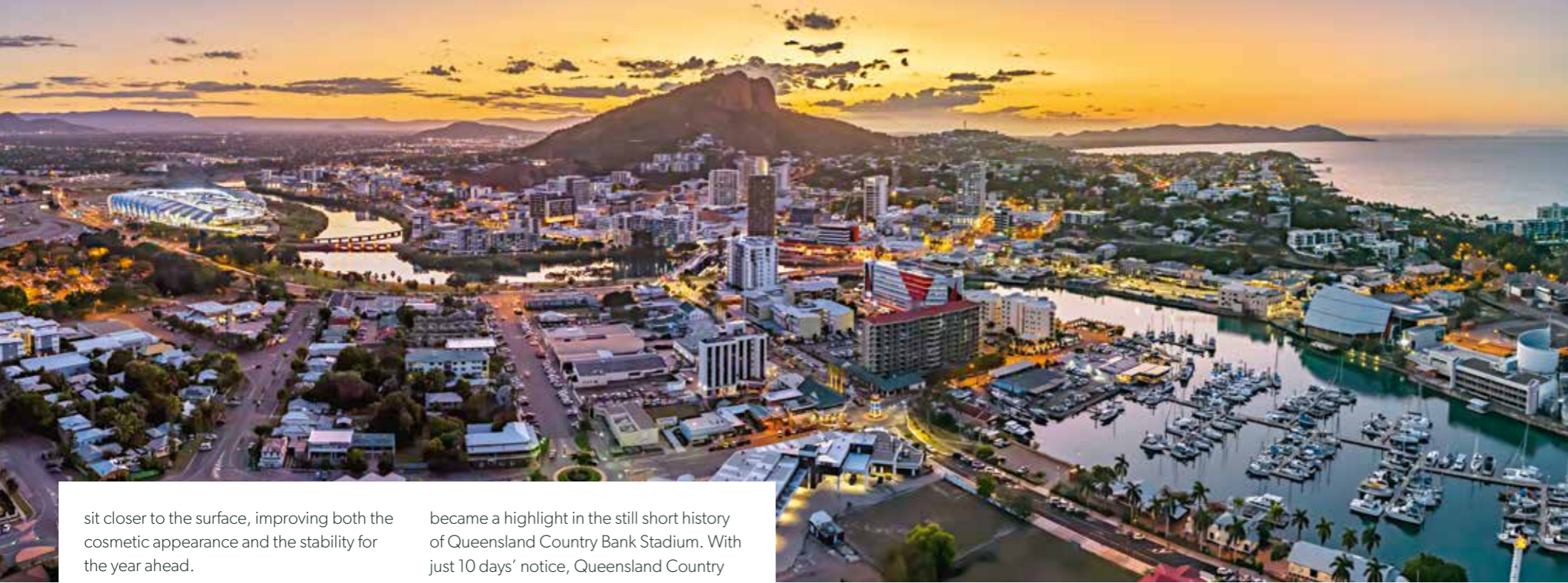
With construction on the venue only finalised in December 2019 and the turf laid a month later, Fouracre and his assistant Adam McNeil a former colleague from the SCG, had just four weeks to get the surface as healthy and strong as possible ahead of the Elton John Concert scheduled for late

February and the start of the NRL season just two weeks later.

"It wasn't the ideal preparation, but we just had to do our best. The weather up here is pretty good for establishing grass, so I was confident everything would bounce back after the concert and be right for the start of the NRL season".

The turf differed from that used at the previous stadium. The key difference was the use of the "Eclipse" Hybrid System which combines artificial fibres and natural turf ensuring turf is "ready to play" and can be used within 48 hours of being laid.

After some teething issues, Fouracre shaved 10-15 mm off the playing surface at the end of the NRL season, allowing artificial fibres to



sit closer to the surface, improving both the cosmetic appearance and the stability for the year ahead.

“Since the start of the year where we had the Maori/Indigenous All-Stars Game right up to the recent State of Origin Game, I’ve been really happy with how the surface has looked and has played”.

“A lot of people don’t realise that last year, the ground was being used 2-3 times a week for training, as well as the game on the weekend, so it was getting a lot of traffic. All that has changed now, with the Hutchinson Centre of Excellence Training field next door now open. This has really helped take some of the traffic off the main field, and the grass has responded accordingly!” Fouracre explained.

Some of the major events that have been on the ground since the stadium opened include:

- Elton John Concert (more than 22,000 fans)
- North Queensland Cowboys NRL games
- Horn vs Tszyu Boxing Match (more than 10,000 people)
- Queensland Opera
- Trans-Tasman Super Rugby game - QLD Reds vs Chiefs
- A 3-day International Rugby 7s event featuring Australia, New Zealand, Fiji & Oceania
- Several fully catered functions for over 300 people on the playing field

Following Covid restrictions in Victoria, the 2021 State of Origin match on 9 June,

became a highlight in the still short history of Queensland Country Bank Stadium. With just 10 days’ notice, Queensland Country Bank Stadium and the whole of Townsville, pulled together and put on a spectacular event that will be remembered forever by locals, and whoever was lucky enough to be in attendance.

An extra 2,000 temporary seats were erected at the northern end of the stadium to try and fit in as many people as safety restrictions would allow.

It is estimated the event contributed more than \$7 million into the local economy, with 22,500 room nights booked during this period. Around 10,000 people watched big screens in Flinders St, whilst nearly every shop was decorated with maroon balloons and streamers.

“There was an absolute buzz around the whole city! It was the only thing people were talking about. The support shown from our partners and contractors was outstanding and there was more than 1,000 staff working at the venue that night, doing everything from security to catering. The stadium was also lucky enough to have additional staff flown up from other Stadiums Queensland venues to assist with Administration, IT, Ticketing and other matters and it was an amazing experience for our whole team!” exclaimed Fouracre.

With other big events in the pipeline, such as the “Kiss - End of the Road Tour” concert in December, it is shaping up as a blockbuster year for the team at Queensland Country Bank Stadium.

Watch this space!



# Your Turfgrass Purity Assurance

## THE AUSTRALIAN TURF CERTIFICATION PROGRAM



**Want to know what AusGAP is all about? To give a different perspective on Australia's leading turf certification program we asked a local producer that is AusGAP certified, a landscaping contract manager, and a sports turf consultant to reflect on the impact AusGAP has on their daily work.**

AusGAP is Australia's leading turf certification program working with the country's leading turfgrass producers to provide genetically pure and true to type grass varieties. AusGAP work in collaboration with the turf producer and the client to ensure every project is supplied

with turf that is visually free of pests, weeds, and disease and is true to type.

AusGAP Certified turf is produced under the best industry practices from start to finish. This ensures that all steps along the chain are carried out in accordance with AusGAP protocols and standards along with state and federal requirements.

### **AusGAP Certified Turf**

AusGAP turfgrass varieties are exclusive to producers that are AusGAP compliant.

It can take a turf producer up to 12 months to become AusGAP compliant. The program includes a rigorous set of

guidelines for both business and turf standards for the turf grower to adhere to.

These guidelines can be broken down to 5 main components:

- Business and farm regulatory compliance
- Environmental Stewardship
- Turfgrass genetic purity practices
- Customer service and satisfaction
- Staff welfare and safety

### **Geoff Hatton from Cobbitty Lawn Turf**

Manager of Cobbitty Lawn Turf Geoff Hatton is a second-generation turf farmer and sports field constructor. Geoff is a passionate



farmer and avid supporter of AusGAP's turf certification program. Ready for change in the industry, Geoff takes accountability of the standards AusGAP stipulate.

### **Why get involved in AusGAP?**

"The independent inspections that come they actually prove what we're doing here, it actually raises the standard for the end-user, so they know what they're getting when they buy their product. It has the assurance and the guarantees that come with it and all the information that comes from all the other farms is then inputted into everybody's farm, so the standard of turf growing just becomes sensational."

### **How has AusGAP helped the way you grow turf and prove that it is certified?**

"It's made our business practices a lot better as a whole because you keep developing every year with the certification because you learn so much, so your farm safety improves, your quality of grass improves and the end product for the clientele is just so much better so over all its all more sustainable."

### **AusGAP Certified Turf Consumer**

Each certified product has its own certificate so the customer can be sure they will never receive a substitute or inferior product.

This ensures a product that has spent decades in development is never substituted and performs for the consumers every need.

### **Leigh Brain from GHG**

Manager of Green Horticulture Group, Leigh is a master of contract management and delivery. With years of industry experience under his belt, Leigh understands what it takes to make a project a successful one.

### **Why is it so important as a turf professional to have something like AusGAP backing the turf that is coming to you and your customers?**

"As a company, we're constantly striving to provide our clientele with consistent communication, quality service and a quality product. A major ingredient of our end result when we're doing turf construction or turf installation jobs is obviously the turf itself. Having the knowledge that AusGAP certified varieties are grown under strict regulations and guidelines providing a consistent and quality product allows GHG the confidence to provide our client with a superior turf and excellent result."

### **Why do you think an AusGAP variety was chosen for this job?**

"Consistency and quality of the turf is why AusGAP was chosen here at Campbelltown Stadium, the fact that it's pest and weed free guaranteed, the short growing period and the excellent colour made it a perfect choice for us, and the results speak for themselves."

### **Sports Turf Consultant**

AusGAP has certified turf at many professional sporting complexes, from tennis courts, football fields, to the golf course.

Many AusGAP certified varieties have been developed for the sports field and are able to provide the assurance that they will perform under pressure and remain true to type.

### **Matt Roche from Australian Sports Turf Consultants**

Director of Australian Sports Turf Consultants and developer of TurfFinder.com, Matt has over 19 years of experience in the sports turf industry. Understanding the needs of sport turf professionals Matt

knows the importance of turfgrass purity and assurance.

### **What does AusGAP mean to you as a professional turf consultant?**

"AusGAP, from my perspective it is setting the bar but also keeping the bar raised. There's a lot of competition when it comes to pricing so to get the optimum price per square metre the standards must be high so from a quality control perspective, AusGAP is potentially the first of its kind. I know consultants like myself who had normally undertaken routine inspections across farms for plant breeders in old turfgrass varieties but now have a lot more newer varieties and a dedicated system in place there is a significant opportunity to maintain the quality of those grasses."

### **How do you think AusGAP has shaped the turf industry?**

"I guess the power of AusGAP is that there are a great number of farms involved already. Any new role outs of programs or developments is tough and it can be very slow to take effect in the turfgrass industry. To have an immediate pick up of 40 plus farms that want to apply that banner and also say they are AusGAP accredited, there's a support base there immediately. From our perspective working alongside AusGAP and undertaking third party inspections gives us the opportunity to promote the turfgrass industry and maintain our push for that quality control to come through to the end user."

Gaining an insight to the practical applications of the AusGAP program showcases the industry standards AusGAP sets, and consumers have come to expect. AusGAP is designed to help the entire industry from producers to consumers by creating and setting an industry standard for what is to be expected and delivered of turf varieties.



All images in this story- ASTMA Conference 2021



# ASTMA Conference

## GOLD COAST CONVENTION CENTRE, JUNE 21 - 24, 2021

**The Turfgrass Conference & Trade Exhibition is the largest sports turf event in the Southern Hemisphere. Each year the conference encompasses over 120 hours of education and over 60 exhibitors showcasing the latest in turf management machinery, equipment, research, technology and products.**

The importance of the trade show is to connect with the industry, discuss new innovations, listen to the needs of sports turf managers, offer solutions and advice and most important of all collaborate, listen and learn.

Each year, turf industry professionals attend the varied education seminars to hear from experienced industry representatives and professional presenters. The trade show offers unique access to a range of sports turf management brands all under one roof making it a must-see event.

The opening on Tuesday afternoon was a great experience for all involved. The registered attendees joined the exhibitors for two hours of networking, food and drinks; one of the best features of the conference, with industry professionals all coming together at one of the few opportunities to do so each year.

The education sessions continued on Wednesday and was led by Paul Gumbleton with a presentation on the redevelopment project at Teven Valley Golf Course. The room was full and enthusiastic to hear from Paul about this unique project and the reasons behind the turf selection for the course. Paul has described Sir Grange Zoysia as one of the most exciting turfgrass developments in the redevelopment and said it's providing a massive upside for him and his team and of course the golfers visiting the course.

Matt Oliver from QSAC Stadium delivered an excellent presentation discussing the current couch grass trials he is conducting

for the main oval resurfacing. This trial is highlighting a number of key components – wear, recovery, oversowing and transitioning. Some excellent data has been developed from this trial in attempts to further the sports turf industry.

At the ASTMA trade show this year – Lawn Solutions Australia featured some exciting new turfgrasses that will offer the sports turf industry some real factual advantages over the current varieties being used.

The main point of discussion was around shade and wear, and how current turf varieties are up to par (excuse the pun) when looking for a year-round option and how this can be improved. However, new varieties of zoysia such as Sir Grange and Trinity, are displaying how they are the perfect grass to eliminate these issues.

The other main problems are wearing on sports fields with a predominant focus on goals mouths and centre squares – again there is a new option that is proving to be outstanding with wear and recovery – TifTuf Hybrid Bermuda, a turfgrass already showing promise on a professional sporting level.

One of the most exciting turfgrasses in 50 years to come to Australia is Primo Zoysia, perfectly suited as a greens grade grass. Not only for golf greens but bowling greens as well. This super fine leaf zoysia offers many benefits to the superintendent, greenkeeper and ground manager. Low inputs, hard wearing, shade tolerant with excellent year round colour.

The ASTMA conference offers the Australian turf industry a great opportunity to meet new people, rekindle long-term friendships, share knowledge and talk to like-minded people. This was highlighted on Monday night at the ASTMA awards dinner, with many awards being presented from Environmental Stewardship, Golf Course Management, Graduates to one of the most prestigious awards - the ASTMA Distinguished Service Award awarded to former Avondale GC superintendent David Warwick.

Congratulations goes to ASTMA President Peter Lonergan and the ASTMA team for putting on an excellent conference in difficult circumstances.

Now onto Melbourne for the ASTMA 2022 conference.





# The History of 'Tif'ton Turf

**'Tif' grasses, have become synonymous with sporting surfaces across the world. Grasses like Tifway, Tifdwarf, Tifton 419, TifEagle and more recently the highly awarded TifTuf. These grasses were all bred at the University of Georgia, Tifton in the USA, driving the moniker 'Tif'.**

The University of Georgia has one of, if not the most highly successful turf breeding programs in the world. Turf research at the facility began in 1946 with the introduction of an annual grant provided by the United States Golf Association (USGA). The goal of

the grant was to develop a better Bermuda (couch) grass to replace the sand greens and seeded Bermuda grass greens.

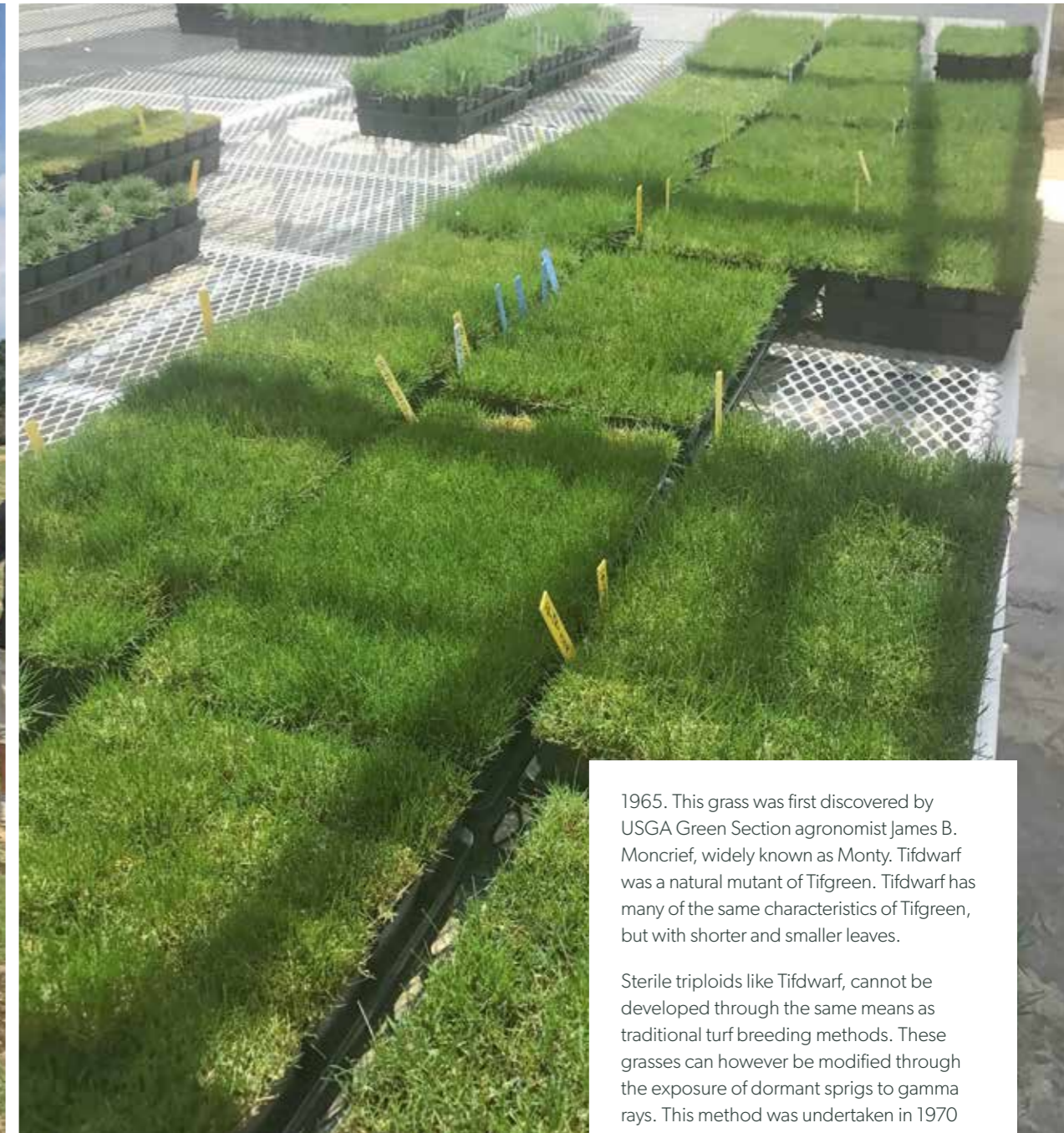
In 1947 trials began using plugs taken from the best greens from several golf courses in the Southern area. These plugs were planted along with by-products of the existing pasture grass breeding program. In addition, a seeded plot of common Bermuda grass was included.

After 3 years of testing with golf green management, the common Bermuda grass that was planted from seed was the poorest performer in the test. The best grass was a hybrid created from a dense dwarf type and

a disease resistant selection originating in the pasture breeding program. This grass was released in 1952 and was known as Tiflawn. Unfortunately, it was later found to be too coarse for golf greens.

Development didn't stop there though, with a wave of new superior grasses developed over the following years - such as Tiffine with a finer softer leaf, a better putting-green grass named Tifgreen, leading into the introduction of Tifway in 1960. Tifway had superior green colour, frost tolerance, a denser profile and was more resistant to pests and diseases.

Tifdwarf, a sterile triploid, was released in



1965. This grass was first discovered by USGA Green Section agronomist James B. Moncrief, widely known as Monty. Tifdwarf was a natural mutant of Tifgreen. Tifdwarf has many of the same characteristics of Tifgreen, but with shorter and smaller leaves.

Sterile triploids like Tifdwarf, cannot be developed through the same means as traditional turf breeding methods. These grasses can however be modified through the exposure of dormant sprigs to gamma rays. This method was undertaken in 1970 on Tifway, Tifgreen and Tifdwarf, resulting in 158 new mutant strains. These strains underwent evaluation until 1981, before the release of Tifway II, an improved version of Tifway. Tifgreen too had an improved mutant released known as Tifgreen II.

After Tifgreen II, the focus of the breeding program pivoted more towards the development of hardier Bermuda grasses for winter conditions. This resulted in the inclusion of a hexaploid Bermuda grass collection being included from a lawn in China. This grass had a dark bluish-green colour and was quite winter hardy. It had a coarser leaf, with lower wear tolerance than Tifway. This grass was later released in 1988 as Tifton 10, by Dr. Wayne Hanna.





# Turf, Coffee, Sunflowers and Produce

## THE DIVERSIFICATION OF YARRAMALONG TURF

While there had been significant successes in developing successful Bermuda grass types for release, there were still demands and improvements required to improve putting green quality when compared to bent grass. They simply could not tolerate the conditions and low mowing height required to perform at the same standard of quality.

This culminated in a new goal for the breeding program, developing dwarf cultivars of a higher standard for short mowing. More mutations were introduced to the program along with continued gamma radiation. In 1995, a new grass known as TifSport was released. This grass was followed shortly after in 1997, by TifEagle. These two grasses were the first patented hybrids from Tifton.

Improved characteristics in other areas were identified, initially shade tolerance was priority. Six genotypes with lower light requirements were crossed with six cold tolerant varieties. In 1999, 60 hybrids were identified and studied for reduced light performance. The standout was a dark green dwarf-type genotype later named TifGrand.

In more recent years the breeding program has changed its focus towards grasses that could withstand longer periods without irrigation. Those with a higher drought tolerance, that could perform well in a broad

range of environments. This continues to become significantly more important with water restrictions and drought conditions becoming more common occurrences, not just in the US but right across the world.

This research resulted in one of the latest commercial turfgrass releases, DT-1. DT-1 is an interspecific hybrid triploid that succeeded in 19 drought-stress trials. After more than 20 years of continued evaluations the grass was released in 2014. This grass was named TifTuf.

TifTuf maintains better coverage, stays greener and requires significantly less water. After introduction and continued trials and assessments throughout Australia, TifTuf was released to the Australian market exclusively through the Lawn Solutions Australia national network of turf suppliers.

TifTuf is now the benchmark in Australia for not just couch grasses, but all grasses, and is showing all the superior characteristics achieved through a highly successful breeding program. Lawn Solutions Australia has led the way for TifTuf to be made available through significant investment and trials. This trial data and continued observation has culminated in the awarding of the Smart Approved WaterMark to TifTuf. TifTuf is the only grass to achieve this level of recognition for its water saving benefits.

We can't wait to see what the team at Tifton come up with next.



**Farmers of any kind will understand the joy that their beautiful farms can bring. At Yarramalong Turf in Wyong NSW, they have opened their doors to the public, diversified their business and are providing more than just turf for sale at their very own slice of paradise.**

Alan and Renai Doggett had big plans for the Wyong, NSW turf farm when they took the helm in September 2018 and less than a year later, they were breaking new ground.

## The Turf

After purchasing the farm, the Doggett's invested what they could in new machinery and infrastructure. Yarramalong Turf joined Lawn Solutions Australia (LSA) and were able to utilise their newly formed relationship for information and LSA members Greener Lawn were able to help with supply while they were low on stock. Being able to grow relationships with other members has been a blessing, "we love the fact that people in the industry are so willing to help each other" Alan said.

Glen and Paige, a family that the Doggett's know and love also moved in at the turf farm, where Glen would soon begin helping make the farm what it is today.

In 2019, it was time to start renovating paddocks after turf had been harvested. During this time, Alan and his team learnt a lot about the importance of good soil testing and understanding their inputs.

In 2020, the farm undertook their second major paddock renovation, turning four older paddocks into one laser graded paddock, on a scale unheard of for their little farm to date. Supply was still coming from partner farms during this time, with a lot of advice flowing freely and learning the depths of the trade. Alan realised they would never have enough turf supply with the current farm size, so he planted the seed within his network for ways to expand supply.

In December of 2020, Yarramalong Turf took delivery of their first auto harvester, upgrading the older Kesmacs for a JD Brouwer, which was of great excitement for Alan and his team, "600mm rolls were finally coming from our farm!"

The seed Alan had planted earlier in the year had started to develop and an opportunity to purchase some neighbouring land was also showing some positive signs.

## The Coffee

"To begin with Renai started our Turf Hut Espresso," Alan said. "That has been a great way of starting to open the farm to other opportunities and a great way to get to know more locals and tourists alike."

Having a farm that is not only productive as a turf farm, but one that could also be a place where people could come and hang out seemed like a good idea to Alan and

his family. The open space, the country feels and yet literally minutes from the M1 at Tuggerah (75kms south of Newcastle) was just waiting for new avenues to be explored. The farms rear boundary is Wyong creek and follows its twists and turns, so there are many areas that may not be great for growing turf but are perfect quirky little spots for growing other things and community activities.

## The Sunflowers

Coffee may have started conversations, but what's really got tongues wagging is Yarramalong's sunflower harvests.

"Initially there was an idea by a staff member for a green manure crop before replanting in paddocks that were in fallow," Alan said. "It was suggested millet, ground-breaking radishes and for a bit of fun a strip of sunflowers."

Alan had drawn a positive response with sunflowers in the past.

"When I was younger there was a house on the main road at Lisarow," he said. "They have a little roadside store set up that I used to buy my girlfriend - now wife of 22 years - sunflowers on my way home from work. So, I thought as a surprise for Renai and my kids, definitely throw the sunflowers in."

"Unbeknown to us people were stopping on the side of the road, jumping in the field and taking selfies," he said. "This became known to us as they started appearing all over Facebook and Instagram, along with comments thanking us for putting them in."

Social media surprises suggested sunflowers were a solid selection. That is when we decided that if we were going to do it, we should do it properly and create an environment that was not only fun but safe for people to enjoy."

Interest in the January harvest was "overwhelming." Social media may have played a part again by the second harvest day on the Mother's Day weekend.

"We had a car counter and averaged out over 1000 cars an hour for the eight hours, so I guess that means there was a lot of people who got to enjoy the day," Alan said. "Some stayed just long enough to grab a big bunch, others just got some pics and others hung out on a picnic rug and soaked the atmosphere for hours."



Alan said his whole family got involved with the entire operation.

"The crops have all to this stage been planted by hand mostly by Renai, the kids and I, also Glen and his family that reside at the farm and are also a big part of the harvest day," he said. "We deep rip the paddock, run the tynes, rotary hoe, plant, and then roll the seeds in. It is a fun thing to get out in the paddock, enjoy family time and the results speak for themselves."

"On our most recent harvest we had the sunflowers, a turf display showcasing our newest grass varieties, the turf hut espresso, barbecue, live music, local beekeeper selling their honey, local fresh produce grown at Kulnura, Trader Vic's stand (local surf shop), jumping castles and even pony rides."





The enterprising farmer said Yarramalong had received positive feedback from local businesses who had benefited from the harvest days through increased trade, and the events brought people from not only Sydney and Newcastle but also further afield.

Alan said charities had also benefited from the events and money is being reinvested.

“We have made some direct donations to charities on behalf of the harvest, as well as donating flowers and time to multiple, smaller, more personal events,” he said. “It has been an absolute pleasure to be able to do this. We are now reinvesting into attaining all the appropriate permits for an event this size and are in the process of working with the council to make “YTs (Yarramalong Turf’s) Central Coast Sunflower Harvest” a must-do for locals and tourists well into the future. We also have other farm events in the making so it’s definitely an exciting time for the farm.”

#### The Produce

The Doggett family hasn’t stopped there, earlier this year preparations were put in place to bring what was known as Wyong Creek Produce in under their umbrella. Plans were set in motion and the final major renovation at the existing farm was put on hold to allow resources to be available for works on the new venture.

The produce shed is now named ‘Yarramalong Farm Supplies’ and has been a successful addition to an already diverse product offering.

In May the Doggett’s were honoured to be given the go ahead to be a Ringers Western country clothing supplier. A lawn store was also added to supply Lawn Solutions Australia lawn care products and Husqvarna Automowers, with an indoor display and a working 80m2 plot of their three premium grasses. They have even enjoyed being able to remodel the produce shed to include

an express drive thru, which has been beneficial throughout COVID restrictions.

Alan has been pleased with how well things have come together. “I guess for us although it seems like there is a lot happening, the way the businesses integrate with each other sometimes even surprises myself.”

“Our staff from each side of the business really want each to succeed and they work in together so well. Stock food deliveries are being taken by the turf team and unloaded with Moffets; the produce team are picking up fertiliser along with the feed runs, the girls in the produce shed are learning to load trucks. It’s a real team effort across all areas.”

“I feel the diversification we have undertaken, although at times has some hurdles, helps create its own form of peace of mind. It certainly also keeps things exciting!”



# WE DELIVER

#### STATE-OF-THE-ART MANUFACTURING

We deliver expertly built machines, on-time and as promised. Using the latest manufacturing technologies for highest precision, our fuel efficient harvesters and mowers are rolling off the FireFly line every day!

#### CONTINUED TRAINING

We deliver operator, mechanical, and preventative maintenance training schools to help you get the most out of your equipment. We also offer access to an online library of maintenance and trouble-shooting videos. If interested, please contact [sales@fireflyautomatix.com](mailto:sales@fireflyautomatix.com) to sign up!

#### RESPONSIVE CUSTOMER SUPPORT

We deliver prompt phone support by skilled specialists, as well as timely service from our highly competent Field Service Technicians.

Come and see why FireFly is  
**THE WORLD’S TOP-SELLING TURF HARVESTER**  
 in both slabs and rolls!



[paul.newcombe@fireflyautomatix.com](mailto:paul.newcombe@fireflyautomatix.com)

+61 417 709 104  
[fireflyautomatix.com](http://fireflyautomatix.com)

## ROLL



## SLAB



## MOW



Images in this story: Women In Turf Events with Turf Australia



# Challenge Yourself

## WOMEN IN TURF LEADERSHIP OPPORTUNITIES

Words By Jenny Zadro, Market Development Manager, Turf Australia

**The topic of leadership can conjure up some very different views for people and there certainly are many different aspects to leadership. So, what opportunities are there for women working in the turf industry to enhance their skills and opportunities to have an influence in their workplace and the industry?**

There are a few different options currently available to the women working in turf and I believe that with the right opportunities offered, the industry will see the benefits of many years to come.

In 2019 Turf Australia launched the inaugural Women in Turf Conference in Sydney. Initially, this concept was met with mixed views and uncertainty as to whether it would be seen as appropriate to have a woman only event. Traditionally most conferences focus on the needs of the men in the industry, including presentations and field days, but there was a missed opportunity here. As a very family focused industry, wives, mothers, and daughters play a significant role in keeping turf businesses operational. Women in Turf was an opportunity to bring the ladies together to share their stories and ideas and to learn about the issues that they deal

with as a mum, a wife or daughter of a turf farming family. Most importantly it was an opportunity to connect and acknowledge the input women in our industry have on its success.

The concept exceeded expectations and created a new community for sharing, learning and inspiring and hopefully will continue to grow for many years to come. One of our presenters acknowledged that initially she was hesitant to be part of a segregated program but was surprised and impressed with the clear benefits it provided to those who participated.

Another opportunity on offer, is the Hort Innovation scholarship for the Women in Leadership program and if you are considering ways to enhance your skills and knowledge, then this is a wonderful experience. This 12-month program run by Women & Leadership Australia (WLA) is an extensive look at the attributes and tools needed to be an effective leader, whether you are starting out or an experienced manager. I am currently fortunate to be undertaking the Advanced Women in Leadership course and highly recommend this process to anyone in the turf industry who is looking to learn or just wants to be challenged and inspired.

The idea of starting an educational course initially seemed a bit over whelming, knowing the challenges of juggling my existing work and family life, and of course, finding the time. But despite the reservations I felt I needed the challenge. Instantly after the first course workshop, I knew this was the right decision.

As Covid19 reared its ugly head, the course went completely online and initially we were concerned about being able to connect as much and share our thoughts and experiences, but the organisers at WLA had this sorted and from the very first workshop we all felt connected with each other, and all had the opportunity to chat as a whole group and as smaller groups. I now am connected to about 30 other women from across Australia and New Zealand, from an array of industries and all different ages and at different stages of their working life and family life, who have similar work challenges and experiences, and are all excited to learn from WLA and from each other.

At the time of writing, I am just over half way through the course and it has already had a positive impact on my day-to-day work and personal life. The course takes a deep dive into understanding your own style of communication, leadership and management and assists you to consider what works well and what could be refined. The course teaches the processes of developing and leading a strong team to achieve great outcomes for your business. Learning to work with people and understanding conflict of ideas and thoughts and the benefits it could have to a business.

The Women In Leadership course encompasses so many aspects of a working environment and allows you to discover new or different approaches, thought processes and ideals and is incredibly inspirational and motivational. The course not only addresses the work environment but is strongly focused on wellbeing and promotion of resilience, in its many forms.

The course teaches adaptive leadership and how to inspire change, creativity, and innovation. It promotes an authentic style of leadership to empower teams to achieve their goals and build a strong work environment.

The phrase 'imposter syndrome' was a common one throughout the group, lacking confidence in themselves and their abilities and the course addresses the need to focus on our strengths rather than what we perceive are our weaknesses. It provides the opportunity to take a different view of ourselves and our workplace and encourages reflection of a situation and assessment of solutions.

Whether you are an experienced manager who has a role of influence in a turf business or someone who is looking to the future, an emerging leader, there are opportunities within the turf industry to develop your skills and most importantly, expand your network of industry connections.

*"Above all, challenge yourself. You may well surprise yourself at what strengths you have, what you can accomplish"*  
Cecile M Springer

# SPECIFICATION OF GRASSES

**Landscaping is a vital part of building and urban design that can define the character of an area and promote social wellbeing for its inhabitants. Successful integration of landscaping can be achieved through careful design and good contract documentation, including specification using a master specification system such as NATSPEC, the National Specification System.**

The provision of landscape documentation in the form of drawings and specifications is a common requirement for development approvals and building certificates, where changes to external areas and landscaping are proposed. While it is expected that the documentation includes information to fulfill the application requirements, the presentation and quality of the documentation can vary significantly and impact project outcomes. In some projects, there is a heavy focus on drawings as the primary communication tool, with the specification being a secondary document. In others, there may be no specification at all.

The specification is a written document that defines the required quality of the end product and its component products. It is important to note that the specification works in conjunction with the drawings and the two should not conflict each other.

In the absence of a specification, important details such as material quality, performance requirements and execution methods may be ambiguous and unintentionally left to the contractor. Any discrepancies between expectations for the quality of work and the end product may not become apparent until the later stages of the project, giving rise to disputes and delays. There is also no guarantee that relevant standards and regulations have been considered by both the designer and contractor if they are not mandated in the contract documents, usually the specification.

After considering location, use, site conditions, availability, sowing rates and timing of application, designers can use the specification to document design decisions and selections, and convey them to the contractor. Are grasses in the form of rolls,

seeds, grow cells or tube stock required? Does Council mandate selection of native drought-tolerant grasses only? What preparation, fertilisation, establishment and maintenance procedures are suitable for the project?

The extent of documentation depends on the type and scale of the project. Specifying only the type of grass could be sufficient for minor works. On larger scale projects, additional details such as the topsoil mixture, fertiliser, and establishment and maintenance procedures would be prudent. Adding detail to your specification helps convey the desired level of quality to meet client expectations.

To complete the contract documentation, it may be appropriate to consult a specialist grower for advice on a suitable grass and application method for your project. Specialists can also offer advice on the topsoil mixture and fertiliser type. Again, the recommended uses and application rates may vary for different mixes and products and should be documented in the specification. For example, the

Nitrogen:Phosphorus:Potassium ratio in fertiliser will vary depending on the use, with a higher phosphorus ratio recommended to promote root growth for areas where grass is being freshly sowed.

To ensure the grass specified establishes successfully and is kept well maintained, appropriate procedures to be performed following application can be nominated. This includes setting out clear requirements for any monitoring programs, required inspections, and necessary actions in the event of pests and diseases or the need for replacement. Maintenance schedules and maintenance reporting can also be used. These typically specify tasks to be undertaken at set intervals such as watering, weeding, mowing, trimming, and top dressing. Defining the scope and frequency of maintenance work benefits both the contractor and the client.

The clearer the specification, the clearer it is for everyone involved in the project. Quality cannot be managed if it is not defined. In construction, as there are many different parties who work on a project, the desired

level of quality must be clearly specified in order to achieve it. Poor documentation and low quality are compounded by re-work, variations, excess meetings, and delays.

Construction specifications are the most reliable way to define the required level of quality and meet technical standards. An up-to-date and comprehensive specification to support your contract and drawings is required to deliver a project with reduced risk of litigation.

NATSPEC provides worksection Templates that include the construction processes required for each particular item of work, and define clear industry standard acceptance criteria in the form of tolerances, performance requirements, and testing requirements. These worksections can be customised to suit the defined quality levels agreed for the particular project by completing prompts, adding relevant material and deleting material which is not applicable.

Individual worksections on natural grass surfaces, soils, planting, irrigation and

establishment are available for subscribers to selected NATSPEC and AUS-SPEC packages. NATSPEC also offers resources and training on specification writing and compiling your project specification, as well as other general technical resources.

NATSPEC is a not-for-profit organisation owned by Government and industry. It maintains the National Building Specification and has been a valued part of the Australian construction industry for over 45 years. It also manages AUS-SPEC, the national specification system for the design, construction, maintenance and operation of local government assets.

For more information, visit [www.natspec.com.au](http://www.natspec.com.au).





# Trialling Turf in the Tropical North

**Turf is an essential part of the Australian landscape and choosing a variety for your specific climate and use is important to get right.**

Many different varieties and cultivars are used as a turf cover for lawns, for sporting fields and local council areas. Turf is also integral to some of the most important places around our country, such as Parliament House.

The hard work that goes into research and development of these turf varieties can sometimes go unnoticed, but the extensive trial process, usually conducted over many years is critical to their success.

Most of the current varietal stock in Australian trials has come from the University of Georgia, Bladerunner Farms and Texas A & M in the United States. The world's leading institutes for turf breeding and research.

In Australia, trials and assessments have been conducted on these grasses by the Sports Turf Research Institute (STRI). STRI is the world's leading research and consultancy organisation for sports turf. STRI manages trial protocols at each of the trial sites in Australia in conjunction with AusGAP, the Australian Genetic Assurance Program for turf. Many of the current grasses under assessment have been in these trial programs since 2016.

While maintaining genetic purity of certified grasses is the primary focus for AusGAP, they also play a big part in the expansion of trial assessments across different







geographical and environmental localities. Testing couch grass, buffalo, and zoysia turf varieties in different climate zones provides an insight into their ability to maintain turf quality in a wide range of conditions.

AusGAP is currently working with different organisations on sites located in New South Wales, Victoria, Southeast and North Queensland. AusGAP recently announced the expansion of 12 new varieties chosen by the Sports Turf Research Institute (STRI) to be added to the already extensive trial area in North Queensland on the property of Harden Park Lawns (HPL) in Edmonton QLD. STRI evaluations led to these 12 grasses being selected with superior traits being observed during assessments.

There are now 44 different varieties of buffalo, couch and zoysia under assessment in Northern Queensland. This includes trials on some exciting native zoysia's, as well as varieties of zoysia japonica, macrantha and matrella, along with sites also in Victoria and Southeast Queensland. It will be interesting to see how these varieties go in North Queensland at HPL given the climates extreme growing conditions of high humidity, rainfall, heat, and cloud cover. Michael and Melissa Denney at HPL are very invested in the trials with the excitement of hopefully finding new varieties suited for their tropical environment.

These new grasses have been subjected to monthly assessments over the last 18 months. Leaf texture, uniformity, density, plant growth and overall appearance all being observed.



Some of the trial grasses have had rust issues and thatching, a lot of seed heads. Michael noted that some other grasses however look like they might be great for the northern tropical and sub-tropical regions, with great lateral growth and minimal vertical growth, minimal thatching and no disease recorded to date. All samples have withstood all chemical applications at various temperatures with no adverse effects, so no trial plots have been removed from the program at this stage.

The trial work will continue for up to another 18 months to collaborate with other site data, with the hope of finding a turf variety or varieties that excel. Consideration will include varietal features that are suitable for applications such as presentation lawn areas, home lawns, fairways, stadium surfaces or putting greens standard. There is always the hope and possibility of finding one specific variety that can deliver the required traits for all applications and in all climates, which would be the ultimate achievement.

TifTuf on University of Georgia Campus in front of the UGA Chapel (built in 1832)



## It's Not Easy Being 'Green'

By Bryan Tolar, Tolar Capitol Partners

**"It's not easy being green," goes the saying. As far back as 1975, the legendary country and blues singer Ray Charles of Georgia, USA, with the 1960's hit "Georgia on My Mind" recorded the song "Bein' Green."**

"It's not easy being green," he sang. "It seems you blend in with so many other ordinary things, and people tend to pass you over ..."

It's not easy, either, for turfgrass growers and associated businesses, for whom "green" is

crucial to the industries they have built and the jobs they have created for so many. Their customers and the communities they serve strive to be green.

So perhaps it's fitting that it is Ray Charles' home state of Georgia that has produced a

turfgrass cultivar that demonstrates amazing potential: TifTuf bermudagrass is anything but ordinary. The environmental community, utility managers and economic developers are seemingly eager to embrace the water conservation characteristics of TifTuf.

### How has this happened?

For well over a decade, in Georgia and in communities across the globe, outdoor water use has been vilified, often labeled as wasted water. The numerous benefits of turfgrass have been overwhelmed by the bully pulpit of government leaders and activists, their viewpoints regurgitated in media outlets that buy ink by the barrel. A conversation about turfgrass management has historically been a non-starter – until now.

Yes, green is the colour of spring... and TifTuf personifies the green of conservation, and for the first-time environment-focused communities are taking notice.

TifTuf has captured the attention of one of Georgia's fast-growing conservation communities, Athens-Clarke County. Normally this local government focuses on water re-use and storage, low-flow fixtures, and changes to lifestyle practices to conserve. They have now discovered the benefits of TifTuf through water conservation advocacy efforts of the Georgia Urban Agriculture Council, the state's premier green industry association for professionals involved in all sectors of the landscape industry.

In April 2021, the Athens-Clarke County Unified Government awarded the "Water Conservation Leadership Award Winner for an Individual" to Dr. Brian Schwartz and his work to produce the drought-tolerant bermudagrass TifTuf. The reduction of water use by 38% over the most popular bermudagrass cultivar and the expanded availability of TifTuf across the USA and in Australia were key to him winning this special, well deserved recognition.

In addition to being intensely focused on environmental stewardship, Athens-Clarke County also happens to be home to the University of Georgia (UGA), the flagship turfgrass research institution where the cultivar TifTuf was bred under the leadership of Dr. Schwartz and his turf research staff. TifTuf can be found on the beautiful and iconic quad of UGA's North Campus, covering the area between the famed

Arch and the UGA President's Office. It endures frequent foot traffic from students and tolerates moderate tree canopy shade, performing beautifully for more than five years.

Presenting the award, Athens-Clarke County's Water Conservation Coordinator Laurie Loftin acknowledged this: "Thank you, Dr. Schwartz, for your efforts to help us all use water efficiently while maintaining a beautiful lawn."

This was by no means the first special recognition of TifTuf or Dr. Schwartz, but it was the first by a local government with a laser focus on water conservation. In 2020, both the Georgia House of Representatives and Senate recognized TifTuf for its characteristics as a high quality turfgrass with extraordinary water conservation characteristics. In doing so, they also lauded the research of Dr. Schwartz, as well as his predecessor Dr. Wayne Hanna.

In addition, the Smart Approved Watermark label established by the Water Services Association of Australia (WSAA) is an important component of consumer recognition. With water use reduction of 38% over the most popular bermudagrass, the conservation benefit reputation resonates.

At the same time, there is an expectation that consumers and property managers take action to reduce irrigation and to adapt their turf management habits for TifTuf to make its mark. There is no doubt the Smart Approved WaterMark label educates consumers who clearly want to make informed choices when seeking products that use water efficiently, thus reducing per capita water consumption.

A recent move to advance the drought-tolerant characteristics of TifTuf in a large population center took place in June 2021. The metro area around Atlanta, Georgia, is the ninth largest and one of the fastest-growing metro areas in the United States. It serves over 6 million people and grew over 15% in the last decade. Oversight for water conservation and planning for the communities in this area is the responsibility of the Metro North Georgia Water Planning District. After months of engagement by landscape industry advocates, along with supporting testimony from Dr. Schwartz, the planning district's board voted to support and promote education to the public that



TifTuf on University of Georgia Campus near UGA President's Office

"encourages the installation of drought tolerant turf such as TifTuf."

This includes updating the district's printed and digital education materials on landscape and irrigation resources to include drought-tolerant turfgrasses. TifTuf is the only cultivar specifically mentioned.

Much as the song by Ray Charles begins as a self-pitying list of disadvantages of meeting the challenges of being green, it evolves into a full-throated embrace of the many benefits of being green. After all, as the song goes,

"Green is the colour of spring... I'm green and it'll do fine. It's beautiful and I think it's what I want to be!"

With over 25 years of research, TifTuf is now in its sixth year of commercial production and expected to surpass 10,000 acres in the United States this year. By any measure, this is an incredible milestone for such a short time in commercial production. In 2020 alone, over 21.3 million square metres of TifTuf were installed, bringing the total to nearly 69.5 million square metres since its release in 2015.

So, what does this mean for being green? The 2020 figures indicate that over 41.7 billion litres of water have been saved through the use of TifTuf. As the strength of sales continues through 2021 and the future, we will soon see total installations exceed 93 million square metres. Imagine the billions of litres of water saved each year. Indeed, "It's beautiful and I think it is what I want to be," could be the TifTuf anthem.

TifTuf and the tireless efforts of Dr. Schwartz and others like him, along with many turf and landscape leaders, will continue to make being green even more positively impactful in the future. Sharing the TifTuf conservation story with those in the environmental community is deservedly a point of pride. Environmental stewardship is a responsibility we all share and to which we all can contribute.

Congratulations to Dr. Brian Schwartz and the University of Georgia Turf Team on this special recognition of their water conservation leadership. TifTuf and the industry's continued dedication to research that advance water conservation objectives show that being green is indeed the best colour to be. The legendary Ray Charles says so.



Georgia House of Representatives Houston Gaines with Dr. Schwartz



2020 TifTuf Presentation to Drs. Schwartz and Hanna on UGA Campus. Far Right, Georgia Senator John Wilkinson



BELOW: Presentation with Jackie Sherry, the Athens-Clarke County Program Education Specialist (L) and Laurie Loftin, the Athens-Clarke County Water Conservation Coordinator (R)

# Highfields Sport & Recreation Park

TOOWOOMBA REGIONAL COUNCIL



Highfields Sports & Recreation Park

**Lindsay Petersen has worked at the Toowoomba Regional Council for 36 years. Lindsay started as a machinery operator, before progressing to foreman for all parks and in 1994 Lindsay was promoted to Sports Field & Irrigation Supervisor. Lindsay's current role is the Coordinator of Sports Infrastructure Services.**

Toowoomba is a highly credited sports region hosting state and regional athletes' events. Toowoomba Regional Council (TRC) area covers some 13,000sqm with a population of over 120,000 people. The region including areas of Millmerran, Clifton, Pittsworth, Yarraman, Crow Nest, Jondaryan and Toowoomba.

A community study into sports and recreation instigated the development of a multi-use sports facility for the Highfields and surrounding areas. Lindsay oversaw the planning of the new grounds which would include facilities for a variety of sports and activities.

## Highfields Sport & Recreation Park

Construction commenced with great eagerness in 2015, after an in-depth and assiduous planning period that began back in 2012-13. The project was completed over a 4-year period concluding in 2019. With the total value of the project estimated to be in the vicinity of \$30 million dollars. The expansive site covers over 40 hectares and is comprised of 3 rugby union fields, 6 soccer fields, 7 grass netball courts, 8 all weather netball courts, 2 turf wickets and 4 tennis/netball areas. All sporting fields are under lights with the main oval meeting lit to accommodate night cricket matches.

The site also includes playgrounds, walking tracks and a natural environment development area. The facility also houses a modern multi-purpose clubhouse.

The fields are highly used with activities 7 days a week, with training afternoon and night, fixtures midweek as well as weekends, along with general community occupied activities. Some of the sporting



“  
TIFTUF HAS PERFORMED BEYOND LINDSAY'S EXPECTATIONS AND THE TWO FIELDS ARE THE PREFERRED OPTION FOR THE SPORTING CLUBS.  
”

events that are catered for include QLD Schools State Soccer Championships, QLD Schools Regional and State Cross Country Finals, Schools Rugby Union Regional Championships and Schools Netball Regional Championships.

## Turf Selection

There are 4 different turfgrass varieties that have been installed across the fields. These include 2 TifSport fields, 1 OzTuff couch field, 2 TifTuf Hybrid Bermuda fields and 4 kikuyu fields.

Lindsay made the decision to include TifTuf Hybrid Bermuda into this project in 2017 after attending the AGCSA trade show on



Lindsay Petersen – Coordinator of Sports Infrastructure Services



Highfields Sports & Recreation Park

the Sunshine Coast and visited the Lawn Solutions Australia trade stand. Lindsay saw TifTuf first-hand and discussed the potential use on high use sports fields. After reviewing valuable trial data and varietal information it was decided that TifTuf would be a perfect option for the 2 main fields directly adjacent to the clubhouse.

These fields were stolonised in November 2017 by Twin View Turf and were ready for play in February 2019. Training commenced in February on the fields, with the official opening on the 9th of March.

Over the next 3-year period the TifTuf has performed beyond Lindsay's expectations and the two fields are the preferred option for the sporting clubs. General use of these fields being double that of the other fields, due to being located directly out from the clubhouse. Field usage experienced for June this year being over 153 hours with both daytime and weekend sports, including night games and training.

Observations after 3 years of high wear usage:

- Harder wearing with no bare patches developing
- Goal mouths and centre areas have experienced minimal damage
- No turf replacements due to wear on the TifTuf fields required
- Less water use – Only 2 cycles of irrigation during summer and no irrigation required during winter
- Vigorous recovery rate experienced in spring

**TifTuf Maintenance Practices:**

- Renovation once a year completed in September/October
- Aeration routine to alleviate compaction using Weidman and Agri-Vator machines
- Scarification only when required
- Top dress as part of renovation
- Limited fertiliser schedule

Fertiliser applications are applied in December and March, no other nutrition

is applied outside of renovation. Lindsay runs the TifTuf fields lean and doesn't need to promote active vigour for leaf growth, TifTuf just doesn't need the same amount of fertiliser as the other turfgrass varieties.

PGR (Plant growth Regulator) is used during the growing season and is one of the best tools for turf management. It allows the grass to form a really tight knitted surface, which Lindsay believes is part of the reason why TifTuf is such an awesome grass on the two main sports fields at Highfields.

Overall TifTuf Hybrid Bermuda has played an important role in offering two first class sporting fields at the Highfields Sporting Park, with teams and sporting clubs wanting to always play on the TifTuf fields. Lindsay and his team couldn't be happier with the result.

"From a council perspective we ensure best practices and TifTuf Hybrid Bermuda fits that bill – low fertiliser inputs, less water requirements and a smooth first-class playing surface for the community," said Lindsay.



# Sedge Management in Australian Turf Production

Words By Peter Kirby, General Manager, Indigo Speciality

**Management of sedge species (Nutgrass and Mullumbimby Couch) is quickly becoming one of the most difficult jobs for growers in turfgrass production in the northern and western states of Australia. The task is difficult due to the reproductive biology of sedges and their prolific capacity as an invasive weed species, ranking them as one of the world's hardest to control weeds.**

**Key Sedge Species in Turf Production**

There are 3 main sedge species in turf in Australia.

*Nutgrass (Cyperus rotundus)* – A perennial grass like plant growing 15-20 cm tall. It

“ THE TASK IS DIFFICULT DUE TO THE REPRODUCTIVE BIOLOGY OF SEDGES AND THEIR PROLIFIC CAPACITY AS AN INVASIVE WEED SPECIES, RANKING THEM AS ONE OF THE WORLD'S HARDEST TO CONTROL WEEDS ”

possesses narrow leaves (7.5-20 cm long) born in the tuft of the base of the upright triangled stem. Branched seed heads with 2-3 green leafy bracts at the leaf base. Seed heads bearing numerous elongated reddish or purple flower spikelets (Navie 2013).

*Mullumbimby Couch (Cyperus brevifolius)* – A perennial grass like plant with upright triangled flowering stems up to 20 cm tall. Leaves are 1-3 mm wide and hairless. Small oval seed heads (6-7 mm long) with 3-4 leafy bracts at the base (Navie 2013).

*Yellow Nutgrass (Cyperus esculentus)* – This weed is often confused with Nutgrass. It is much less commonly naturalised in Australia when compared to Nutgrass but is a pest in Queensland in particular. The key distinguishing feature of this species



## indigo

SPECIALTY PRODUCTS

is its numerous yellowish brown, flattened flowers. Its stems are usually 1-4mm wide, and 10-70cm high. The leaves are generally 3-6mm wide.

A key distinguishing feature of all sedge species is their triangular stem structure. To positively identify that you are dealing with a sedge weed, if you cut a cross section of the stem, you will see the stem has a distinctive triangular shape. This is more visible if you use a hand lens.

### Key Vegetative Structures of Sedge Species

The below ground portion of most sedge species consists of a basal corm. From this extends fibrous roots and rhizomes (Bruce 1981). The rhizomes are capable of forming additional rhizomes, basal bulbs or tubers.

Tubers are the most important reproductive organ of sedge species. Sedges are capable of producing new growth from the basal bulb, nodes on the rhizomes and tubers on the rhizomes. (Bruce 1981). The primary method of production is considered to be tubers. Sedges are generally tolerant of wet soil, sodic (high sodium) conditions

and high temperature and have the ability to convert carbon dioxide into carbohydrates via both C3 & C4 pathways making it one of the most efficient weed species (Bendixen and Nandihalli 1987) we come against. Temperature is the main factor regulating sprouting of tubers. Natimoto (2001) demonstrated that no sprouting occurs above and below 10°C and 45°C. Optimal sprouting appears to be in the range of 25 to 30 °C. In pot trials Dor and Hershenhorm (2013) demonstrated that first shoots appeared at 4-6 days after planting and reached maximum levels at 30 – 50 days later.

The prolific reproductive capacity of sedges was demonstrated by Tumblesom & Kommedahl (1961) who planted a single tuber. In the space of one year the tuber had produced 1,918 individual plants and 6,864 tubers. The estimated total tuber and biomass production under optimum conditions is considered to be just under 20 t/ha (Bruce 1981).

Tuber production occurs in the top 50 cm of soil surface with the majority produced in the 15-20 cm range (Stoller et al. 1972). Tuberisation occurs from summer but is dependent on photoperiod (sunlight hours) which is estimated at 8-12 hours. Each tuber is capable of germinating more than once (Jansen 1971).

Coleman, Kristiansen, Sindel and Fyfe (2018) estimated that there are up to 15 tubers per plant and 6-10 viable buds per tuber. Nutgrass appears to be vulnerable to extended dry conditions. Once water content of tubers drops from 85% to 15% tubers will not be viable.

Nutgrass has poor seed germination (in many studies no more than 5%) and spreads predominantly via vegetative means. Mullumbimby Couch and Yellow Nutgrass on the other hand have much higher production capabilities and disperses by both seed and vegetative rhizomes. In studies these species have resulted in seed germination rates as high as 78%.

### Control Options in Turf Production

### Pre-Plant Fumigation Options

Metham sodium is an organosulfur compound used for soil fumigation. Metham is highly soluble in water and converts via soil moisture to methylisothiocyanate (MITC) and acts as a fumigant to kill weed seeds and vegetative plant structures. It is volatile for 1-5 hours depending on soil moisture. Best results are achieved at soil temperature of 15-25 °C with placement at 5 to 8 cm below the soil surface. Soils should be at 60% field capacity for at least 5 days prior to application. Soil preparation of a fine clod free tilth is critical for success as Metham sodium will dissipate through the soil profile. Sealing of the soil surface with a roller and or irrigation (5mm) will maintain the fumigant effect post application. Metham sodium does not move so therefore placement is critical for successful results.

Dazomet is another fumigant product that can be used at the pre-planting and ground preparation stage. The most universally known trade name is Basamid which contains 940 g/kg Dazomet. The breakdown product of Dazomet is also methylisothiocyanate (MITC). One advantage of Dazomet products is that comes in the form of a granule, making the requirement for specialised equipment such as required with Metham Sodium application unnecessary.

### Post Emergent Herbicides

**Group B Herbicides:** Sulfonyl Urea herbicides are a broad group of herbicides, and a range of turf specific herbicides belong to this group including Halosulfuron methyl (Sempra, ProSedge, Sedgehammer) and Trifloxysulfuron sodium methyl (Monument). For resistance management purposes these herbicides belong to the Group B family of herbicides. The mode of action of sulfonylurea herbicides is inhibition of acetolactate synthesis (ALS). The Sulfonylurea herbicides are generally known to be stronger on Nutgrass and Yellow Nutgrass and not as strong on Mullumbimby Couch. Their safety to Couch and Zoysia turf varieties are good, however their safety to other species is more questionable and

needs to be trialled in your specific turf situation to ensure it doesn't unsatisfactorily hold back plant growth.

**Group C Herbicides:** Bentazone is a member of the benzothiadiazole group of herbicides, which acts to inhibit photosynthesis at photosynthesis II. It is a selective, contact herbicide which is absorbed mainly by the foliage, with little translocation potential.

Bentazone is a selective post emergent foliar applied herbicide. It has no soil activity and doesn't translocate through the plant too far. It is currently registered as an ingredient in 3D Herbicide in turf, but we are aware of registrations coming to the market with this active in isolation. Bentazone is generally known to be stronger on Mullumbimby Couch and Yellow Nutgrass and less effective on conventional Nutgrass.

**Group Z Herbicides:** The arsenate chemistry group in MSMA and DSMA have known activity on sedge species. MSMA / DSMA are foliar absorbed herbicides. They accumulate in root and leaf tips, where they rapidly kill leaf and stem tissue. MSMA/ DSMA have multiple sites of action within the plant, however it is thought to impact on weed growth by interfering with ATP production (energy storage) and cell division (growth process). Their safety is best on Couch and can be used on Zoysia species at lower use rates. Their usage on Buffalo turf however, should be avoided.

### Weed Resistance

Indigo Specialty Products has recently undertaken some resistance testing to a range of herbicides on Mullumbimby Couch in Queensland. This work indicates a level of resistance with some commonly used herbicides has formed, on certain biotypes of the weed. This validates why the weed has seemingly become more difficult to control, and with the same chemistry groups having been used for many years to control the sedge species in turf production and maintenance, this wasn't unexpected. To determine your levels of resistance to sedge control herbicides, please contact Indigo Specialty Products for more details.



# City of Busselton Try Tough New Turf

Words By Brad Reynolds, Parks Coordinator – City of Busselton



**The City of Busselton were looking for a way to improve the new diversion entry statement to the city. The road realignment and construction work were carried out with an emphasis on making the entrance to Busselton something special for everybody who drives into the town.**

The entry statement consisted of a mix of native couch and kikuyu and looked unsightly. After a consultation process with council staff and local turf supplier Down South Turf, where turfing options were discussed, it was decided to use TifTuf Hybrid Bermuda. The reasons for this choice were simple – green colour year-round, low cost in maintenance, drought tolerance and speed of establishment.

Soil preparation for the area was limited, with no special or extensive site preparation completed prior to the sprigs being planted.

The existing soil profile was simply levelled with a small amount of topsoil incorporated into gravel and road base subsoil. A small amount of fertiliser was then applied in preparation for planting.

The 3,000 square metre area was planted by a local contractor with stolons in August 2020 at a rate of 10% of area coverage. Once the stolons were planted the area was oversowed with ryegrass to provide some quick green up and coverage. The unwashed stolons were planted across the area without any irrigation used during the establishment. Not sure if this was good judgement, timing or grass selection, but rainfall figures tell a story of the months following installation.

During the establishment period Busselton received 555mm rain for a 10-month period. While the two hottest months of the year, December and January only received 2.4mm and 0.6mm of rain respectfully. From around



“ THE REASONS FOR THIS CHOICE WERE SIMPLE— GREEN COLOUR YEAR-ROUND, LOW COST IN MAINTENANCE, DROUGHT TOLERANCE AND SPEED OF ESTABLISHMENT. ”

October the TifTuf was starting to take off and by November/December it was really starting to dominate and quickly cover across the ground. The ryegrass died out naturally during the warmer, drier months. The December average temperature was 24.2 degrees and January 27 degrees, with humidity averaging 71%.

A second application of fertiliser was applied in February and the Council have been super impressed with the result. The entry statement area is mowed by council staff on a 4–6-week roster, with the area classified as a rough-cut area.

The success has now led Busselton Council to look at other opportunities within the region where they can utilise TifTuf to replace existing ground covers for a natural green environment with ease of maintenance and its water saving features. The City of Busselton is building a new sports precinct called Dunsborough Lakes, where a number of new sports fields will be established for the community. TifTuf is proving to be the preferred turfgrass for these ovals based on what the Council has seen with its performance at the entrance to the region.

The Busselton entry statement is now incredibly inviting and showcases a natural green environment for the community.

# A Superintendent's Journey

Words By Michael Pascoe

**In 1994, as a 17-year-old my mother to took me to every golf course from Tweed Heads to Gainsborough Greens with my resume in tow. As my bravery depleted throughout the day I was about to give up and not even bother going to the last one on the list, Arundel Hills Country Club.** A new private golf course with bent grass greens, I thought to myself there is no way that I would be lucky enough to get a job here. As it happens, I was, and Rob MacDonald employed me to be the 2nd apprentice to go through Arundel. I was fortunate enough to have Dave Warwick as a Superintendent for the majority of my apprenticeship before he made the move to Avondale. A few years passed, and I was exempt from the last six months of my apprenticeship and became a tradesman to then become Superintendent at 21 years of age a feat in its own right. Sadly, that would only last about six months before the Asian stock market collapsed and the club was going to have a contractor come in and take over maintenance. My journey took a new path.

I remember the day it happened. I was on block release at Grovley College and Mike O'Keefe from The Ohio State Program had been doing the rounds. As I returned to my office, I was curious to see Mike's business card. I remember him asking me where I wanted to go, providing I was successful in obtaining a visa. Keeping in mind Payne Stewart had just won the US Open a few months earlier in Pinehurst, it did not take me long to answer.

I remember arriving for my first day at Pinehurst, Scott Kinan picked me up and took me to my dorm room, within the first 30 minutes there was a tornado warning. All I could think was where had I come to? Was everything going to be ok? The next 18 months turned out to be magical. Pinehurst would then go on to set the standard for me on where golf courses should be and how they should be presented. I was fortunate to be on course #3 and #5 for 12 months and then promoted to foreman on course #4 which had been newly renovated by Tom Fazio at the time. What still makes me laugh is that 22 years on and I am still in regular contact with most of the guys;

Nigel Taylor, Mark Stanley and Steve Lalor to name a few, all very successful in the industry both in Australia and Asia and they too went their separate ways around the world greenkeeping and when we have the opportunity to get together and talk about the old times is always a good time. The bond that you have having gone through the Ohio State program is something that I cherish, and it was the steppingstone for not only my career but many other excellent superintendents in some very high-profile golf courses around the globe.

After 18 memorable months at Pinehurst my time had run out and my next adventure was around the corner. Through Mike O'Keefe again I had the opportunity to go over to England to volunteer at the Ryder Cup that was to be held at The Belfry. Before that would happen, I worked at The Forrest of Arden an English Open course under Kenny Mackay and Ewan Grant a 36-hole course and rich with tournament history. Having worked the English Open and Peter O'Malley winning that year it was then time to get ready for The Ryder Cup. Sadly though, 9/11 changed the world forever,

especially with travel. The Ryder Cup along with many other events were called off and postponed to the next year.

During my time at the Forrest of Arden, I would travel down to Bristol and join up with a great mate of mine to play Division 4 cricket. I lived for those weekends and after my time was up at the Forrest I moved to Bristol and awaited my next move. England was a rewarding but tough place to be a greenkeeper, long hours and terrible wages made me wonder if I even wanted to be in the trade or not. I spoke to Mike O'Keefe yet again and asked to go somewhere warm as the winter had approached and so had the dark, cold and gloomy weather, something that I did not want to hang around for. To my surprise, Mike let me know about a posting that was coming up in Barbados, I just had to wait a few months, which was no issue for me at all. I was able to have a break from greenkeeping and enjoyed and counted down my time in England until I was to go to Barbados.

Unknown to me at the time I was in the running for an assistant superintendent's

position with a good friend Nigel Taylor who I had been with in Pinehurst. I knew this was going to be fun and to be in the Caribbean together... what a way to get back in to greenkeeping again. After being an assistant for one year I was promoted to Course Superintendent of Royal Westmoreland a Robert Trent Jones course. Having hosted 3 European Senior tournaments and starting the process of remodeling the bunkers on the course, I was extremely lucky as a 25-year-old to be where I was. It was a dream come true, but little did I know more dreams would come true on a cricketing rich island. Members of the golf course included Sir Garfield Sobers who I got to know very well, Ian Woosnam Masters champion and ICC Hall of Famer Desmond Haynes who I was very fortunate to play cricket with. When I met Dessie on the first day, he asked if I was related to Lenny Pascoe and when I assured him, I was not, I was then invited to training at Carlton Cricket Club. How good was this! Here I am in the Caribbean playing cricket with a Windies legend, I had no idea at the time that I would then end up playing with future Windies players and playing 3 seasons with Carlton CC.

Four years passed quickly, and I thought it was my time to head back to Australia after not returning for 6 years. I was 3 days away from coming home when I was asked to come to Jamaica as I was needed for a job interview. I flew to Jamaica and became Superintendent at The Tryall Club, famous for the Johnnie Walker championships. I remember as a kid seeing this course on tv and being blown away that there was golf in Jamaica, and there I was as the superintendent. Jamaica has and always will hold a special place in my heart, I spent 10 years at Tryall and met so many wonderful lifelong friends, I was able to play two years of cricket and amazingly met some more Windies players and also play golf with them.

It did not stop with just Windies players, I was lucky to attend dinners with the Indian cricket team, the Australian team on a few occasions and also lucky to have many wonderful members who are all successful in their own right, but I do remember having many a tennis and golf game with Lennox Lewis Undisputed Heavyweight Champion of the world.



“  
 ...BEING ABLE TO EXPERIENCE SO MANY DIVERSE GRASSES, SITUATIONS AND CLIMATES AND BUDGETS I AM A VERY LUCKY MAN.  
 ”

Jamaica not only gave me many memories with golf and sport in general, but it also changed my life for the better. Meeting my wife and starting a family who are everything to me and the journeys that we would undertake in the coming years I could never fathom. Camille and I used to visit Panama for weekend getaways and to my surprise, Camille had arranged to look at real estate on one of our visits. A few months had passed, I had resigned from Tryall and left to start consulting and set up Floratine in Panama and Central America with Tom Tremblay from Trigon Turf Sciences.

Moving to a new country where we did not speak the language was very daunting and I often questioned what we did, but like any new adventure you have your ups and downs. I was asked to become Superintendent at Santa Maria Country Club a Jack Nicklaus design on Platinum Paspalum wall to wall, this was a challenge and one that took a little while to master but was very rewarding and enjoyable. To work with non-English-speaking staff was tricky and google translate was my best friend, the family learnt Spanish and the kids did very well and were pretty much bilingual. However, with aging parents and the need and feeling to be closer to them and the rest of the family, I was very fortunate to be offered a position with Sports Turf Solutions (STS) and Brad Burgess in Vietnam. A new adventure awaited and another language, the kids were not happy, but Camille and I knew they would adjust, and they did.

To work with Sports Turf Solutions was such a privilege, to travel the country assisting superintendents with their fertiliser programs, growing in Hoiana Shores (ranked #94 in 2020) and learning from John Gibb with Zeon Zoysia (sold in Australia as Sir Grange Zoysia) and being able to hand over to Rob Weiks was something incredible. Being a part of STS's sister company Sustainable Turf Farms was also a very rewarding experience and being able to grow the nursery from 2.5 hectares to over 16 hectares of turf which included Zeon Zoysia, Trinity Zoysia, Primo Zoysia, TiffTuf and Tif Eagle. Harvesting, washing and

packing in refrigerated containers to then send grass all over Asia was an experience that I will never forget. When I reflect about my experience with STS I think it made me a better greenkeeper and being able to experience so many diverse grasses, situations and climates and budgets I am a very lucky man.

To be honest the next part of the story has to start this way and it relates to where I am right now. Three very close friends all in three totally different parts of the world called me within two hours of each other and mentioned that the position as Course Superintendent at Noosa Golf Club had become vacant and that job sounds like it would be one that would be very much suited to me and the family. I was nervous but I applied. A few nervous weeks went by and thought that I did not make the cut. However, after a few days of thinking that I was not lucky this time, I was contacted by Allan Harris General Manager of Noosa Golf Course. I attended an interview via Zoom as many of us have now become accustomed to with the current world climate. The interview went well but again I did not think I was successful. With the club embarking on an exciting Master Plan of remodeling all greens, tees and bunkers with two holes being constructed per year over a nine-year period combined with the history of the Noosa Golf Club, there was no way I could be successful... wrong! I got the role, what an honor to be chosen for this position. The fun was just beginning, with obtaining visas and applying for exemptions into Australia, Covid tests, quarantine for 2 weeks and we finally made it to Noosa where the family and myself have been so warmly welcomed and made to feel like family.

It is great to be home after 22 years. I would have never thought that I would have done what I was able to do. It gave me the highest of highs and some pretty big lows, but I would not change a thing about it. To come back to Australia with my family and to be a part of the next exciting chapter of Noosa Golf Clubs history is a dream come true and I'm looking forward to the next nine years and beyond.



# Spring focus – insects and weeds.

Well, Spring is here and with it, great weather for enjoying the great outdoors. Growing weather for turf is perfect too, although there are some watch outs to be mindful of. Fortunately, most are easily overcome, and Adama are at the forefront of bringing solutions to the turf growing community.

**Soil borne insects** – you can't always see them, but you can certainly see the damage they produce. Pests like African Black Beetle and Billbug are well known for turning great turf into very average turf. Like many things in life, prevention is better than cure, and Adama have two great products worth considering either separately or in a program with each other – Kohinor and Venom Pro.

**Kohinor**, containing 350g/L imidacloprid (the highest concentration liquid in the market) provides strong systemic efficacy against African Black Beetle, Billbug, Argentinean scarab and Pruinose scarab larvae. Whilst **Venom Pro**, containing 240g/L bifenthrin, is a good option for treating adults of these pests, along with armyworm, sod webworm and nuisance pests such as ants.

**Weeds** are probably the most noticed pest in spring, and on this front Adama have many good options, such as **Negate**, **Stadium**, **Fairway** and **3-D** for mainly broadleaf weeds, but not all can be used on all turf species.

**Quali-Pro Crest** is a more recent addition to the Adama suite. Containing florasulam and fluroxypyr, it is very safe across a wide range of cool and warm season grasses, is schedule 5 (so safer to users than many other products), and also safe to use around trees for the landscapers out there.



Coming soon will be another useful, turf-safe option for Nutgrass and Mullumbimby couch – the control of which in buffalo is particularly difficult with conventional products without the expectation of some damage. **Quali-Pro Nutmeg**, which contains 480g/L bentazone, is safe to use across all common turf species, and aside from nutgrass and Mullumbimby couch, also picks up a number of common broadleaf weeds as well.

For more info go to [adama.com](http://adama.com) or contact: Matt Holmes, Turf & Ornamental Commercial Manager on 0418 710 129 [matt.holmes@adama.com](mailto:matt.holmes@adama.com)



# XtraGrass Combined with an 'XtraTough' Turf

## HYBRID TURF SOLVING HIGH WEAR PROBLEMS



South Park in Chipping Norton for Liverpool City Council

**HG Turf Group have long been pioneers in the Australian and International turf industry. This pioneering mindset doesn't look like changing any time soon as the company strive to further innovate and bring new technology and hybrid turf systems to market.**

Working closely with Lawn Solutions Australia grower Musturf based at Freemans Reach in NSW, the collaboration, is growing and supplying the XtraGrass Hybrid System with TifTuf Hybrid Bermuda for community sports fields.

Having completed a number of projects over the last 6 months, we look back on the

work completed at South Park in Chipping Norton for Liverpool City Council.

Liverpool City Council is one of the largest LGA's in NSW. With a rapidly growing population and ever-increasing participation rate in community sport, sports field provision is a constant challenge. This combined with shortages of available



open spaces for sports fields and high usage demands on current sports field infrastructure, means that councils have their work cut out to ensure safe and playable pitches.

South Park in Chipping Norton, forms part of the Liverpool City Councils community sporting fields and is used extensively by multiple teams within the Southern Districts Soccer Football Association. Being an open parkland, it is also available for local community passive usage of the playing fields.

Due to the high usage of the fields the natural turf in the goal boxes would be replaced up to three times per year to ensure that they remained safe and playable. The replacing of turf would often mean that the fields would have temporary closures, while the new turf took time to establish. A long-term solution was needed to address these requirements.

### The Solution

XtraGrass was installed in the goal boxes on both fields and was supplied as a pre-grown 'ready to play' maxi turf roll. The XtraGrass carpet had been laid at the Musturf Turf Farm 12 months prior and had been established with the hard wearing and drought tolerant TifTuf.

XtraGrass is a natural grass turf reinforced with artificial fibres to give a winning formula of great natural grass playability and a surface that is much more resistant to wear. Developed and refined over the last 15 years, XtraGrass is a unique and patented turf reinforcement system which provides the flexibility to adapt to the unique differences that exist at every location. Hybrid turf is the perfect solution for clubs that find it difficult to maintain a natural grass pitch but do not want, or are not permitted, to play on a 100% artificial turf pitch.

The existing goal box areas were removed to a depth of 40mm and prepared to allow for the new turf to be installed. Musturf harvested and transported the turf to South Park and installation was completed by their specialist crew and with specialist equipment.

The 40mm thick maxi-rolls are 1m wide and 10m long and due to the weight and installation process, can be played on immediately after installation. By combining natural grass with synthetic fibres, playing hours will increase by 3x on average.

Although the synthetic fibres are only 5% of the playing surface, XtraGrass offers the best of both worlds. A durable, hardwearing surface that provides consistency and playability which reduces risk and eliminates the need for turf replacements.

XtraGrass is a proven hybrid turf system that has been tested to meet FIFA quality standards. Liverpool City Council required a solution that could meet their usage requirements, while ensuring the fields remained open and safe for play, XtraGrass with TifTuf was the perfect solution.

"The investment in our asset at South Park, Chipping Norton with XtraGrass Hybrid has now provided Council with a real solution for the high wear playing area in the goal boxes. With XtraGrass now being installed in the community field, Council can ensure the field remains open year-round and provide a safe, stable natural playing surface. The use of XtraGrass Hybrid in our goal mouths and the quality now provided for our community has exceeded our expectations. We look forward to adding XtraGrass Hybrid in our other community fields in high wear areas." Damien Curtis – Acting Manager City Works

If you would like more information on Xtragrass Hybrid Turf with TifTuf contact HG Turf Group on [info@hgturfgroup.com.au](mailto:info@hgturfgroup.com.au)



# Know Your Options



Trimax Pegasus with Quattro Blades



Trimax Pegasus with Turf Tyres



Trimax Pegasus with QuikLIFT

**Your equipment plays a key role in your success. Why not choose it to make your job easier and faster and to deliver better results? Trimax Mowing Systems recommends a set of options specifically for turf growers to optimise performance, increase efficiency, and improve productivity.**

Turf tyres are designed to reduce overall impact on the turf. They have a shallower tread depth and wider footprint, along with rounded shoulders and flexible side walls, to reduce turf compaction by spreading the load from the weight of the mower across a wider area of ground.

Anti-bounce skids reduce the distance between the bottom of the side channel and the bottom of the roller to prevent scalping and ensure a uniform cut height when mowing over uneven terrain. They also

reduce mower chatter, allowing you to mow at faster speeds without bouncing.

The Trimax Quattro Blade System adds two extra blades to each spindle for a total of four per spindle, doubling the cuts per meter of travel. This means that each blade is processing less material, leading to a more precise and defined cut across each blade of grass. All Trimax Quattro systems are fitted with Trimax LazerBladez with flat or uplift design.

Flat blades are excellent for warm season grasses and immature turf with less than 60-80% coverage as they draw up less of the top dress than an uplift blade. For heavier growth, uplift blades are recommended to ensure that longer clippings are discharged evenly over the rear roller, preventing clumping and excessive thatch accumulation.

Trimax QuikLift with Drive Protect allows operators to partially raise the mowing decks for short distance travel without disengaging the PTO. The Drive Protect function prevents damage to your equipment and saves time by eliminating the required waiting period for the PTO and spindles to wind down after disengaging.

It's important to consider your needs when you are ordering a new mower for your turf. Trimax's friendly and knowledgeable representatives are always happy to answer any questions you may have. Visit Trimax online at [trimaxmowers.com.au](http://trimaxmowers.com.au) or phone 1800 874 629 for more information.





***Congratulations  
to our Aussie  
Athletes, winning  
17 Gold, 7 Silver  
and 22 Bronze on  
Tokyo home turf!***