

# TURFTALK

BY LAWN SOLUTIONS AUSTRALIA | DEC 2021



**AFL Grand Final,  
A HG Sports Triumph**

[... Read more \[pg 08\]](#)

**Whyalla Secondary  
Inspires Possibilities**

[... Read more \[pg 10\]](#)

**The Next Generation  
of Turf Farmers**

[... Read more \[pg 30\]](#)



Mollymook Golf Club Installation

# 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**

*Back cover image courtesy of Jacobsen*

## Inside this issue

WORLD'S FIRST SMART APPROVED TURF	PG 04	ROSEMOUNT CELEBRATES 100 YEARS	PG 26
GREEN SPACE WITH AMBIUS	PG 07	ROB WEIKS AND RAIN BIRD	PG 29
GRAND FINAL AND HG SPORTS	PG 10	THE NEXT GENERATION OF TURF FARMERS	PG 32
WHYALLA SECONDARY COLLEGE PROJECT	PG 11	GROWING LAWN SOLUTIONS AUSTRALIA	PG 36
Paddock to Pitch Field Day	PG 15	MOLLYMOOK GOLF CLUB	PG 38
THE ONGOING CHALLENGE OF COUCH DECLINE	PG 17	PENNMAG® PRE-EMERGENT	PG 42
GROWING AKERS OF LAWN	PG 20	IMPACTS TO THE FLORIDA SOD INDUSTRY	PG 45
THE NEW ECLIPSE 360 ELITE LITHIUM MOWER	PG 22	TRARALGON RECREATION RESERVE	PG 48
2021 FLOOD RECOVERY	PG 24		

# Smart Approved WaterMark, First in the World to Certify Drought Tolerant Turf

**Smart Approved WaterMark (SAWM) the one stop shop for water efficiency and is the first water efficiency accreditation scheme in the world to recognise drought tolerant turf.**

**The only water efficiency label in Australia**

SAWM has been certifying water efficient products and services since 2004 across many categories including irrigation, pool and spa, car washing, mulching, soil amendment products and commercial cleaning and more. Originally SAWM was established as the sister scheme to The Water Efficiency Labelling Standards (WELS), the Government program that uses a star rating system to classify household products such as taps, toilets, washers, and dryers. While the WELS program uses compliance with published standards to evaluate products SAWM requires applicants to supply evidence to support their license applications which demonstrate the water efficiency and water conservation characteristics of their product.

SAWM was born out of the 'Millennium Drought' when the water industry was keen for an independent scheme to help identify which products and services would

qualify for rebates. SAWM is a not-for-profit organisation and uses a panel of independent technical experts to evaluate information provided by applicants for licensing.

**The journey with turf**

In 2017, the SAWM Expert Panel received an application from Lawn Solutions Australia for TifTuf Hybrid Bermuda grass. This presented a new challenge for the Expert Panel as the evidence required to demonstrate that a grass is "water saving" is complex. The range of conditions under which turf is grown, such different soil types and different climate zones, mean that clearly demonstrating that a particular turf variety is likely to use less water or be more drought tolerant is a difficult task.

**Landing on the 'Drought Tolerance' eligibility criteria**

SAWM has previously used guidelines to help applicants to the scheme prepare the right information to support their applications. It was decided to develop a new set of guidelines for turf grasses. After much deliberation and consultation, it was decided that the guidelines would focus

on developing specifications that would describe trials which would demonstrate the drought tolerance of grasses rather than try to measure their comparative use of water.

**Smart Approved WaterMark working with the turf industry to develop turf grass guidelines**

SAWM has developed detailed guidelines that outline the drought resilient criteria each application should aim to demonstrate and the appropriate research and turf tests to support the claims. From the outset Jeremy Cape, Chair of the SAWM Expert Panel and Chris Philpot, CEO of SAWM, have led and facilitated extensive consultation with the Australian turf industry and with input from a panel of independent turf professionals. For nearly two years expert Panel members and the independent turf experts drafted and revised the guidelines. In August 2021 the final guidelines were released which SAWM believes will meet the needs of the growers and reflect the quality of the SAWM label to prospective purchasers.

Chris Philpot, CEO, Smart Approved WaterMark said "We are very excited to be the first water efficiency certification scheme

in the world to recognise drought tolerant turf. This has been a long journey for us and one that has taken careful consideration as it is critical we maintain the integrity of the labelling scheme. I'm pleased to say that we are launching the new turf category with confidence, acceptance, and a sense of innovation. I welcome all applications in this category".

Jeremy Cape, Chair of the SAWM Expert Panel since its inception in 2004, facilitated the development of the guidelines for SAWM. "It's great to see SAWM leading the way in water efficiency certification by developing practical guidelines for turf producers to make their applications to SAWM easier. The SAWM Expert Panel looks forward to reviewing many applications from here on in," said Jeremy.

**What does this innovation in certification mean for growers and consumers?**

The selection of drought tolerant turf varieties for the home garden will help to conserve water as well as provide important amenity values. A goal of SAWM since its inception has been to identify products and services which consumers can use to optimise their use of water and reduce waste. Historically up to half of all domestic water use has been outside the home. Identifying turf grasses that are drought tolerant and require less water to provide valuable amenity, will ensure that gardens can remain cool, green sanctuaries.

**Easy to follow guidelines ready to download at [smartwatermark.org](http://smartwatermark.org)**

The drought tolerance of turf grass varieties is best assessed by conducting an experiment or growth trials. While the Expert Panel does not insist on a specific trial methodology to demonstrate drought tolerance, the guidelines have been developed to inform applicants about the kind of trials that could generate the data to support an application.

It is important to emphasise that these guidelines are written solely to help applicants prepare submissions to Smart Approved WaterMark. These guidelines are not intended to set out a method for appraising all the characteristics of a turf grass. The aim is to evaluate the



\*Excluding Western Australia and Northern Territory

drought tolerance of turf grass to assist home gardeners who wish to use drought tolerance as their key selection criterion.

To evaluate applications, the expert panel requires objective, independent evidence that the turf grass demonstrates the drought tolerance characteristics claimed in the application (i.e., through independent testing or case studies). Note that unsubstantiated marketing claims are not regarded as evidence of water saving. All evidence submitted in support of an application to Smart Watermark certification must be prepared by an independent authority that has no financial interest in any turf varieties included in a trial.

TifTuf Hybrid Bermuda has led the way with independent testing through the Sports Turf Research Institute (STRI) with significant trial data provided in its application demonstrating its superior drought tolerance characteristics.

**About Smart Approved WaterMark**

Smart Approved WaterMark (SAWM) is the one-stop shop for water efficiency in Australia. Through its Smart Water Advice program, SAWM delivers a range of educational, interactive water-saving resources for councils and water utilities to talk to communities about saving water around the home, garden, and business. SAWM certifies water-efficient products and services in Australia. With Smart Water Solutions, SAWM helps businesses reduce their water use and save money by delivering water audits and recommendations. SAWM has also published the 'Water Efficient Australia' 2019 report and 'Water Efficiency 2017' in partnership with Water Services Association Australia (WSAA). Smart Approved WaterMark works towards a blue future that celebrates the many amazing qualities of water, its strength, and its vulnerability.



# The Incredible Power and Versatility of Green Space

## The Professional's Choice for Lawns & Landscapes



### From the makers of Osmocote

- 15kg bag for convenience
- Ideal for Landscapers and large homes
- Slow and controlled release fertiliser for proven results
- Blends suitable for new or existing turf and garden beds
- Blends suited to low nutrient use turfgrasses TifTuf and Sir Grange



Available from:



lawncaresupplies.com.au | lawnsolutionsaustralia.com.au | gardencityplastics.com

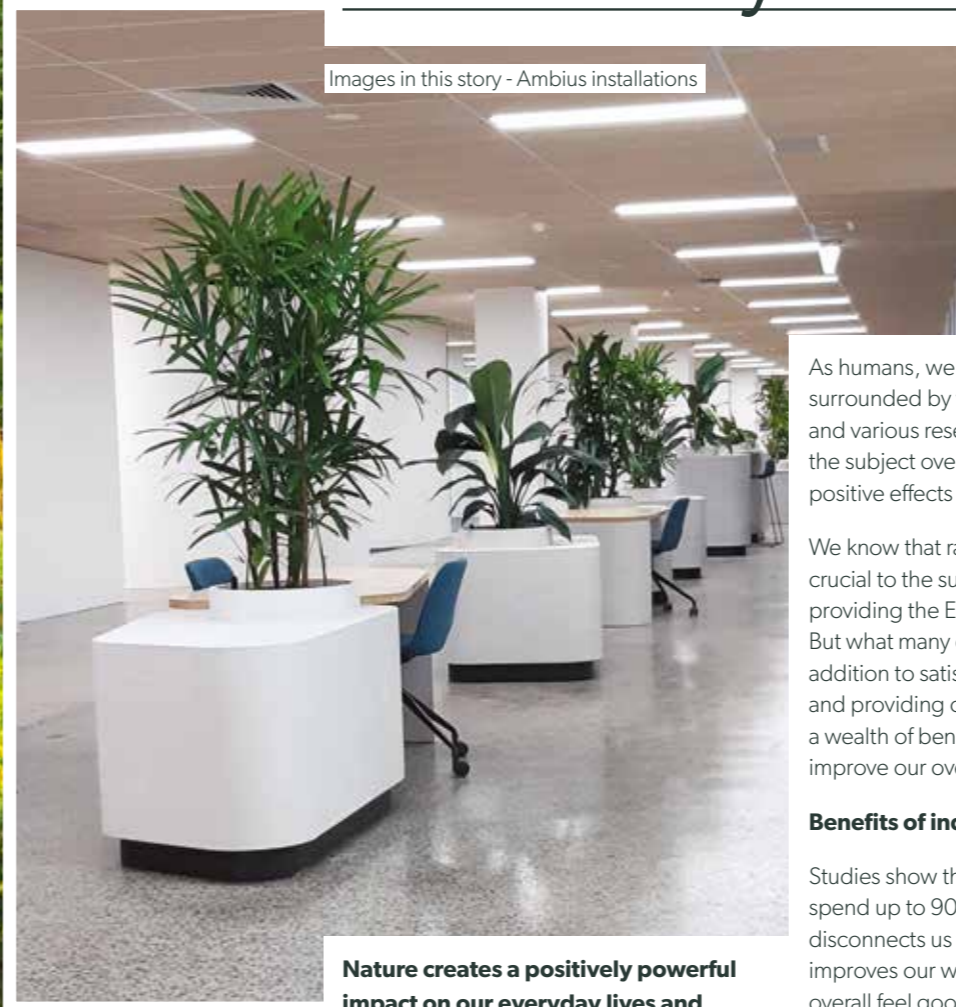


FACEBOOK



INSTAGRAM

Images in this story - Ambius installations



**Nature creates a positively powerful impact on our everyday lives and exposure to nature and all its health benefits is crucial to our health and wellbeing. It is a fact, when surrounded by nature we feel happy, motivated and relaxed.**

Australians are known for our outdoorsy lifestyle. BBQ's in the park, backyards, bush walks. We welcome every opportunity to get outside and utilise the amazing landscape at our doorstep. Our passion and desire for the outdoors is validated by the experts, and there is a term for this - it is called Biophilia!

"The Biophilia hypothesis suggests that humans possess an innate tendency to seek connections with nature and other forms of life." -Edward O. Wilson\*. Introduced and popularised the hypothesis in his book, Biophilia (1984).

As humans, we respond positively when surrounded by vibrant green landscapes and various research studies focused on the subject over the years have proven the positive effects that nature has on us.

We know that rainforests and trees are crucial to the survival of our planet, providing the Earth with vital, clean oxygen. But what many of us don't realise is that in addition to satisfying that Biophilic need and providing oxygen, plants also provide a wealth of benefits that promote and improve our overall health and wellbeing.

#### Benefits of indoor plants

Studies show that the majority of us spend up to 90% of our day indoors. This disconnects us from the very nature that improves our wellbeing, mental acuity and overall feel good factor. This is alarming, however there are additional reasons as to why this is concerning.

While the air quality in Australia is overall better than many other countries around the globe, the most concerning factors that affect us are the pollution and toxins that loom in the air as a result of Industrial emissions, burning of fossil fuels, wildfires and many others. These pollutants enter the indoors and when paired with inadequate ventilation and other indoor pollutants they create an unhealthy indoor environment.

In fact indoor air is 2-5 times more polluted than outdoors.\* There are a couple of contributing factors to this:

- Inadequate ventilation allows external pollution to enter and recirculate in the indoor environment.
- Volatile Organic Compounds (VOCs) and

when combined with carbon dioxide / monoxide, form additional toxins that add to the already polluted air.

VOC's are gasses emitted from items and processes that occur indoors and are considered harmful to health in large doses. Everything that surrounds us emits toxins and chemicals.

A buildup of these VOC's can cause Sick Building Syndrome; a term used to describe situations in which building occupants experience acute health and discomfort effects that are directly linked to time spent in the polluted building. These manifest through a range of conditions; dry, itchy skin, nausea, throat irritation, breathing difficulties, allergy like symptoms, sore eyes, wheezing, fever, tightness in the chest which then cause loss of concentration, irritability and forgetfulness to name a few.

Thankfully there is a straightforward remedy to help deal with indoor air pollution. Indoor plants have been proven to reduce the effects of Sick Building Syndrome by helping to reduce the toxins and pollution indoors. Through the process of photosynthesis plants absorb these toxins, break them down and release oxygen back into the air. In fact multiple studies have shown that indoor plants help reduce:

80% of VOC's and up to 20% of Carbon Dioxide and Monoxide

More specifically a University of Technology research study conducted on the benefits of plants found that indoor plants:

Reduce:

- Workplace illness: Sick leave absence from 20%-60%



- Coughing and Wheezing by up to 35%
- Dry eyes nose and throat by up to 20%
- Reduce negative mood feelings and tension levels by up to 40%

Improve:

- Quality of indoor air
- Creativity, productivity and attention capacity
- Promote good office relationships
- Job satisfaction

Our new normal needs a practical approach to healthy indoors.

The coronavirus pandemic has had an incremental impact on everything, more specifically the way we live, work and behave. Boosting a healthy indoors should be a part of every conversation, as is the focus on tailored spaces that provide more to building occupants.

Indoor plantscaping designs have evolved and become more important. Green displays provide more than an aesthetic benefit. Plants are now an important asset that drives excellent business performance.

Ambius Australia is Australia's leading interior plantscape partner, specialising in the supply and installation of rich indoor plants that are designed to create beautiful indoor spaces that make the environment look amazing and make people feel significantly better.

We bring nature indoors through a large portfolio of creative solutions that transform the indoors into Biophilic spaces. Our portfolio offers the widest range of plant solutions that suit all indoor environments, and we work with each individual client to deliver:

- Custom/bespoke solutions - tailored to specific requirements and designs
- A selection of green walls - a wide range that suits every space in size and requirement
- A range of contemporary containers – desktop, floorstanding and hanging
- A wide offering of indoor plant species grown and procured in Ambius's Accredited Nursery

Ambius is known for transforming indoor spaces into amazing environments where people thrive. In consultation with our customers, the Ambius experts deliver transformation through the delivery of innovative and vibrant solutions. Ambius is also passionate about improving the quality of the indoor space, where staff and clients benefit from the array of benefits that indoor plants provide.

**Social distancing solutions**

Green and vibrant indoors stretches further than the corner display or entry feature. Ambius is leading the way with providing solutions to workplaces ready for a safe restart. A unique way to separate spaces using a solution that is also aesthetically pleasing and saves time and money otherwise spent on office reconfigurations to achieve this result.

A range of designed options are available that assist in applying these measures in a subtle yet effective and unique way all while enabling cleaner indoor air. Such as:

- Separation of workstations
- Sectioning off open plan offices, creating desired zones
- Dividing entry and exit traffic
- Creating distancing guides for cueing and more

**Flexible / smart spaces**

As indoors evolve in line with the post pandemic trends, more conversations are around smart and flexible spaces. Utilising the indoors for multiple uses; from town hall sessions to team meetings, breakout areas or hangout spaces. How do we get more out of the space we have? Ambius offers a range of options whether it be a mobile green wall, troughs or containers applied as part of the solution or a tailored custom/ bespoke design. Installation of plants into the indoor space is all about creating spaces to suit varying needs. We help to deliver the right solutions, thinking outside the box, with options such as application of recessed wheels that allow versatility in their use or the required adjustments as needed, these solutions remain a part of your space, with a different look and purpose.

**Return to work**

The challenge for businesses as we return to the work environment is how to encourage staff to return to the workplace with confidence. Through a wider lens this not only means competing with the comfort of our homes, but also competing with other businesses in their offering to staff.

Ambius's answer is simple and has proven effective; 'create amazing indoors' where people thrive and want to be a part of this amazing experience.

*\*U.S. Environmental Protection Agency. 1987. The total exposure assessment methodology (TEAM) study: Summary and analysis. EPA/600/6-87/002a. Washington, DC.*



# The AFL Grand Final at Optus Stadium

## FIELD CONSTRUCTION AND SURFACING BY HG SPORTS TURF

### Q&A with Tony Hemming, Arena Manager

**In 2017, experienced Sports Turf Contractor HG Sports Turf were awarded the Design and Construction contract for the new Optus Stadium in Perth. Post construction HG were also selected to manage and maintain the new playing surface in the new jewel of the west. The field was officially opened in 2018 and is a mixture of HG's Eclipse Stabilised Turf and HERO Hybrid Turf.**

In a historic first for Western Australia, Optus Stadium was chosen to host the 2021 AFL Grand Final, the prestigious AFL Premiership event that has been held at the MCG in Victoria almost every year since 1902. Up until the Covid-19 outbreak, the AFL Grand Final had been played exclusively in Victoria, with the first hosting outside of the state being in 2020 at the Gabba in Brisbane, QLD.

Tony Hemming, Arena Manager, Optus Stadium is somewhat of a turf industry legend and is commonly known as 'Hemmo.'

HG Sports Turf recently sat down with Tony before and after the grand final to get an insight into the preparations and challenges he and his team undertook to get the ground looking immaculate for the big day.

#### What was involved in the lead up into the big day?

We spent the first week recovering from the heavy AFL season with the highest rainfall for 50 years, which was challenging to say the least! From there it was turf replacement, aerate, core, vertimow, divot repair, seed, fertiliser and groom the HOC (height of cut) to the height to incorporate the AFL extravaganza entertainment side of the event.

The field is ready by the Monday before and then we must manage the team's training and rehearsals for artist and dancing crews. We also do a practice bump in of the stage with LED screens, fireworks, and lights.

On Friday there are Captains runs and then ground staff have the field for 13 hours to prepare before the curtain-raiser game. It's

a total whirlwind, but it's totally worth it for the result.

#### How did the ground perform on the day and what challenges were faced?

We had a busy lead in with the 2019 Bledisloe Cup / AFL Change over into the next day with 4,000 seats on the ground. We flew the HG Turf crew in from Victoria to help and it was a great team effort.

On the day ensuring there was nothing left out on the surface from the pre-game entertainment or during half time was very important. I know the staff enjoyed being out on the ground while the players were warming up. This is one of the reasons you would choose to work in our industry, up close and personal with professionals while carrying out your job. All credit to the Frontier Group, there was nothing to pick up.

We were very happy with the performance of the surface during the two games, with pre, during and post-match commitments. On the Sunday morning the surface could



The HG Turf team



have been ready for a second match, very little divoting was evident. We had full confidence in our range of HG Turf Products and our team's professional know how to get it right on the day.

#### How do you find the technology helps you to produce the surface and the high standards within Optus Stadium?

We believe that it helps us in the wet and allows for faster recovery from damaged turf by major events, the fact that we only just replaced the centre circle for the AFL grand final (a 27-game season and training) is testament to that.

#### What achievement or contribution are you most proud of and what's the best moment you experienced?

The entire month of September was a great achievement with just 21 days' notice to prepare for the Grand Final. After the final siren, all our staff drove out onto the ground in an AFL Toyota vehicle for the presentations, it was a surreal atmosphere!

#### What were the main differences between the AFL Grand Final and other large-scale events you've managed and what was learnt in the process?

Usually, we have six to twelve months to plan for major events, so the turnaround was very short. We now have a check list ready for the unlikely next one, but it will be nice to enjoy the next Grand Final when it returns to Melbourne. I love the history of the game and the "G", it's hard to beat a 100,000 person crowd at the MCG.

#### What does preparing the field mean to you and your team and where does it rank in your career in terms of preparing for major sports events?

We aim for the highest technical standards for each event. If it's Rugby, we want to be Eden Park, Cricket – Lords and Soccer - Wembley. The AFL Grand Final at Optus Stadium is in my top ten events and I'm sure my staff will say it's their number one day to remember.

# 'Inspiring Possibilities Through Turf'

**WHYALLA SECONDARY COLLEGE PROJECT | SUNNYSIDE INSTANT LAWN**



Images in this story- Whyalla Secondary turf install

**Whyalla is positioned at the gateway of the Eyre Peninsula and is surrounded by beautiful beaches. Its unique temperatures see warm summers and cold winters with low rainfall.**

The Turf Guy, Jamie Kloeden supplied Kikuyu to repair an oval at a school in Whyalla. Replacement of patchy turf was necessary from time to time with the field due to its high use. Jamie said that while the school is renowned for its playing field, discussions around alternative hard wearing turf options with lower water requirements were increasing in the area.

Following this project, Andrew Rowett from Sunnyside Instant Lawn learned of a new school construction in Whyalla. Andrew connected with Sarah Constructions, the contractor for the new school construction to discuss the turfing requirements of the new sports fields. While Kikuyu was initially specified for the project, Andrew wanted to highlight the opportunity to utilise a new sports turf variety with a higher drought tolerance – TifTuf Hybrid Bermuda. In selecting the turf for the project, it was also important to consider salinity in the soil and a couch grass like TifTuf would be a better fit in these conditions.

With the help of Lawn Solutions Australia and AusGAP (Australia's leading turf certification program), drawing from the data and information on the qualities that TifTuf possesses, Andrew was able to inform Terry Kildea, Sarah Constructions Site Manager, that TifTuf was the best option for the new Whyalla Secondary College.

"The extensive research was a huge help in the transition from Kikuyu to TifTuf. We were able to offer independent STRI research and show them our experiences on farm which highlighted the winter colour, the low water usage and wearability" Andrew said.

The water saving qualities of TifTuf was the biggest factor in its selection, with Whyalla known as a dry area with low rainfall. Sustainability was of utmost importance. The farm also offered the opportunity to see both Kikuyu and TifTuf side by side for comparison, giving Terry Kildea the confidence to move forward with the specification.

Soil testing was carried out by Living Turf at the Sunnyside farm who supplied both the sub grade of soil and the turf to be used. Living Turf was also in full support of the opportunity to use TifTuf on this important project for the community.

Water usage numbers were calculated by Terry Kildea on a recommendation from Sunnyside and Lawn Solutions Australia. This information was shared with the South Australian Education Department, emphasising the benefit of this environmentally sustainable water saving option.

Outside Ideas, an Adelaide based landscaping business, won the tender for the landscaping.

Sunnyside worked directly with Sarah Constructions and Outside Ideas throughout the entire turf process.

Meetings with Outside Ideas were arranged during January, offering the chance to share the knowledge about TifTuf and its requirements in preparation.

Sunnyside planted turf for the project in November 2020 ensuring that it was available to meet the project deadlines.

### Harvest on the farm

A new Firefly Turf Harvester was ordered and arrived two days prior to the job commencing. The new Firefly allowed for a significant increase in harvesting efficiency on the farm required for this large project. The consistency of the product





harvested with this machine was also of the highest standard.

50,000m<sup>2</sup> of TifTuf was installed at the new state-of-the-art secondary school in total across two soccer ovals, one AFL oval and the building surrounds.

The first of 24 B-Doubles arrived on site on the 17th of May and saw the team of 10 from Outside Ideas lay over 3,600m<sup>2</sup> a day over 14 days.

To complete the install Sunnyside offered to co-ordinate the freight, unloading and retrieval machinery and provision of a project manager to oversee the install. Sunnyside worked together with both Sarah Constructions and landscaping contractor Outside Ideas on site as the TifTuf arrived and was laid. Data was taken on soil temps, watering, and weather conditions every day of the install showing the root activity and the establishment of the turf during winter.

40,000m<sup>2</sup> was laid at the beginning of winter, a time when turf growth establishment is usually a slow process, however, watching the turf establish in the first 3 weeks Andrew and Terri from Sunnyside were also blown away by the turf development. 16 weeks later and there was a fully established freshly mown sports field.

Winter often turns on some interesting weather, with rain also a factor. The teams saw rain, hail, and shine during the installation, but only experienced a one-day delay across the installation period. Once laid, the turf was rolled three times.



#### Establishment period

Sunnyside travelled to Whyalla fortnightly keeping close communication with Outside Ideas and Sarah Constructions to monitor the turf establishment. The established TifTuf at the Whyalla secondary school is that of the “Mercedes-Benz” of turf and has not only created elite surfaces, but a water efficient, sustainable playing surface for the future of the students and Whyalla Secondary School.

Andrew believes that these school ovals will increase Whyalla’s reputation to become one of the best playing surfaces in the state. “The turf is ready to go, the appearance is spectacular,” said Andrew. “It’s ready for the school to open and the action to begin.”

The TifTuf ovals will become the heart of the school with students from years 7 to

12 bringing it to life next year. We expect to watch these ovals continue their current level of performance for years to come. Students will enjoy hours of fun with a multitude of sports being played year-round. The community have engaged with the school to access seasonal sporting events throughout the year also.

Sunnyside shared lawn care, technical data and research with Outside Ideas that has been included in the Hand Over Operations and Maintenance Manual for the Education Department. Outside Ideas are managing the maintenance program until hand over. The oval is currently being regularly maintained at 15mm with a cylinder mower.

Whyalla Secondary School is due to open in 2022.

Paddock to Pitch Field Day



## Paddock to Pitch Field Day

**This event was a first where industry bodies came together – Turf QLD, Sports Turf Association and Golf Course Supers Association to provide an education and knowledge gaining day for the sport turf industry.**

The event provided an element for all sectors of the industry – from turf production, sporting fields, golf courses to turf and facility maintenance. The event was supported by over 30 sponsors and exhibitors allowing attendee’s the unique

opportunity to see machinery operational and demo’s on a range equipment. The main part of the day was to encourage industry to learn and engage with the exhibitors and talk about – soils, chemicals, nutrition, irrigation, machinery, tools, turfgrasses and turfgrass certification.

After lunch was served industry leading speakers presented on soil testing, analytical services, fertiliser and soil nutrition. This was extremely informative and the attendees were involved with many questions and of course the free giveaways.

“ OVER THE YEARS MANY EVENTS HAVE BEEN HELD BUT NOT LIKE THIS WHERE WHOLE OF INDUSTRY CAN COME TOGETHER AS ONE. ”





As this was the first time this joint venture event was held, especially during testing times with QLD restrictions the organisers were extremely happy with the industry support during the day, numbers were well over 150, all attending to gain knowledge and experience. The event was held at All Turf Solutions Turf Production facility, Tamborine, QLD.

Turf QLD did an awesome job initiating

the idea and working with other industry groups pulling this event together. Over the years many events have been held but not like this where whole of industry can come together as one. A big thanks goes out to Turf QLD – Hugo Struss President, STA – Trent Hobson, President and GCSAQ – Paul McLean, President.

After the success of this event there is one in the planning for 2022 in Regional QLD.

# Couch Decline – an Ongoing Challenge

Words by Nuturf Australia

**The condition loosely described as couch decline has been an issue for the turf management industry for a while now. Initially more associated with ultra-dwarf putting greens the problem is now seen in a broader range of situations.** When we see the word ‘decline’ things get a bit hazy because that word usually implies a range of issues (not necessarily all directly connected and not necessarily caused by a plant pathogen) all working together to cause a general loss of turf health. The word decline may also imply change that occurs over an extended period (often months) in a progressive manner. This makes it rather difficult to separate out the individual contributing factors to assign each a role in the broader condition. So, for simplicity let’s make two points to begin with – firstly a condition we wish to describe as a decline (like we have here) is often a multitude of factors all working together to have a combined, or possibly additive, effect. Secondly, lets acknowledge some of those factors may be genuine plant pathogens and others may be environmental, physical, or cultural and they could be operating independently of any pathogen.

The reason this clarification is made is there has been considerable research done around the globe over the last decade or so that has tried to unravel what’s going on with ‘couch decline’ and out of this has come some valuable learnings, a couple of highly significant facts, a reminder of how destructive ERI pathogens can be and another couple of disease names just to throw you off the track completely. Its

challenging to follow and it does require a little detective work.

One limitation that must be acknowledged up front though is the fact here in Australia we simply do not have the number of diagnosticians, the surveillance and mapping, nor the ongoing research into many of these turf issues on a scale anything like we see in the US. We certainly do have some good local pathology services conducting frequent disease testing picking these issues up regularly. That however is quite different to extensive analysis from classically trained pathologists looking beyond the presence of a pathogen to deliver a more complete characterisation of the industry situation. It’s a gap that ideally would be closed but is hard to see that happening. Fortunately, there are some turf issues for which we can reasonably transpose findings from elsewhere to help the local situation – especially where the involvement of a pathogen is known, and its identity confirmed as same – and this is the case here.

So firstly, lets address the ERI tag as its relevant here. This is an acronym for Ectotrophic Root Infecting fungi. It’s an umbrella term for a range of pathogens with common diagnostic features. For example – if you look at root tissues under a microscope and see threads of dark fungi running longitudinally along a root then plugging in to that root at intervals, then reasonable chance one of the ERI pathogens is involved. If these observations are associated with patch diseases or a decline type issue, the diagnostic process

potentially gets even more specific. If you see strange multi-lobed structures around the hyphae this narrows the candidates further. The threads of dark fungi seen on root tissues are what’s termed runner hyphae while the multi-lobed shapes are termed hyphopodia (see Martinez-Espinoza et al, 2016). Observing these gets you in the ERI family and is suggestive of certain candidates but doesn’t necessarily tell you exactly which pathogen is involved. That requires further diagnostic work to be overlaid with the host, the symptom, the time of year etc to paint the full picture. Even that may not always be enough and further pathogenicity testing or DNA based molecular investigations may be required.

Secondly, narrowing this back to a ‘couch decline’ focus, some incredibly important technical clarifications have been made around the decline part of the equation and the role of actual pathogens versus other abiotic factors. There is one particular ERI pathogen that has been consistently implicated as ‘involved’ in couch decline – but that very same pathogen is now also recognised as causing a separate disease condition in its own right. This has been nicely articulated by Tredway (2019) who says ‘the fungus *Gaeumannomyces graminis* var. *graminis* is a common contributor to bermudagrass decline (AKA our couch decline), but it is also a bonafide pathogen causing take-all root rot even in the absence of stress’. So, we have a specific pathogen recognised as being a common player acting in concert with a range of other precursors or additional factors creating the broader ‘decline’ issue. Individually this

pathogen can be responsible for a defined disease in the absence of any other physical or environmental stress factors. So, if you stayed on the detective case through this, we went from a disease we called couch decline, to understanding the decline condition is a complex of issues that involves pathogens and other factors, but also noted a new disease name with an acronym of TARR. It is hard to keep up. Now, just to ramp up the confusion the couch decline name is also somewhat interchangeable with the term 'root decline of warm season grasses' simply because it was established the pathogen involved doesn't exclusively affect couch. So, when in couch its couch decline, when in other warm season turf its decline of warm season turf. If solo in couch and acting independent of other factors its TARR. Still hanging on?

It's important to add a further clarification here because the name Take All Root Rot could cause confusion with a disease that is well known and characterised in cool season turf – i.e. Take all patch. There is a relationship there and you will see it in the name of the pathogen behind take all patch - *Gaeumannomyces graminis* var. *avenae*. That last word makes all the difference. It's closely related but a different pathogen!

Since we have now established as turf managers, we may deal with TARR or Couch decline or root decline of warm season grasses, we get to the point of what can we do to manage the issues when they are revealed in disease tests. Here we need to temper expectations as history has shown this is not something easily addressed

by short term fungicide application. Partly because it has proven a resilient and tolerant pathogen to a range of fungicide options, partly because recent history around ERI diseases in Australia suggest it is possible there are more pathogens out there we have not fully recognised yet, partly because the abiotic factors that can potentially enhance the damage from the pathogen are quite diverse in nature and partly because most things that occur over time equally require time to undo them. Water stress, salt stress, drought stress, pH anomalies, nutritional deficiencies, wear and physical damage, heat / cold stress – the list is long and likely differs site to site. Furthermore, it has been established chances are by the time you see a physical manifestation of damage the harm has been insidiously occurring for a while. Best analogy to draw here is another ERI disease that affects couch – Spring Dead Spot. This is well characterised as having an infection window in autumn but physical presentation of the damage turning up many months later. Bottom line – if trying to address this after the fact turning it around will not happen quickly and will likely involve a reconsideration of a range of management practices. If trying to proactively prevent it, there will be chemical, cultural, and physical elements to it and the chemical application timings may not necessarily be as obviously intuitive as you hope – and it will be more than one.

In terms of chemical options to address the pathogen part of this issue, a common finding across many sources is the involvement of both DMI and strobilurin fungicides in successful management. The

DMI's are known as strong fixers and for a long time now have been the foundation of both prevention and control strategies for a range of ERI diseases. The strobilurins by their very nature are preventers. Their activity spectrum is broad, their behaviours are reliable, our dependence on them strong. In combination (i.e., DMI + strobilurin or group 3 + 11) they are outstanding. If you scan the web for efficacy ratings and product recommendations around this issue it is common to see this combination in the upper echelon of performance. However, as noted earlier the expectations should be slightly tempered as studies where sensitivity of the *Gaeumannomyces* pathogen against various fungicide options has been examined closely invitro to remove other variables (e.g., *Butler 2019*) the fungicides do find this a tough combatant. It seems there remains much to learn about truly managing the pathogen and / or the decline condition.

*References and suggested reading:*

*Butler, L. (2019). Take-All Root Rot: A Complex Disease*

<https://turffpathology.ces.ncsu.edu/2019/12/take-all-root-rot-a-complex-disease/>

*Martinez-Espinoza, A., Price, J., Gardner, D. and Little, E. (2016).*

*Take-All Root Rot of Warm Season Grasses: Identification and Control. UGA Cooperative Extension Circular 1102. [https://secure.caes.uga.edu/extension/publications/files/pdf/C%201102\\_1.PDF](https://secure.caes.uga.edu/extension/publications/files/pdf/C%201102_1.PDF)*

*Tredway, L. (2019). Are bermudagrass decline and take-all root rot the same thing? <https://www.greencastonline.com/techarticle.aspx?gcaid=204367>*

# Equipment Finance that is a cut above the rest

Expand, grow or replace with Finlease



## Chris Girle

Specialist in finance for:

- ✓ Harvesters
- ✓ Tractors
- ✓ Trucks, Trailers, Vehicles
- ✓ Irrigation Equipment
- ✓ Mowers
- ✓ All other commercial equipment

- ✓ Fast approvals
- ✓ Minimal paperwork
- ✓ Friendly service
- ✓ Trusted 30+ years industry experience

**Chris Girle - Equipment Finance Broker**

P: 0448 480 180

E: [cgirle@finlease.com.au](mailto:cgirle@finlease.com.au)

W: [finlease.com.au/broker/chris-girle/](https://finlease.com.au/broker/chris-girle/)

Scan QR code to save my details to your phone





# Growing Akers of Lawn



**Before becoming a company in 1986, the grass roots of Akers of Lawn was developing over several years. Dal and Jacqi Akers worked together selling and delivering fertiliser from the mid-70s until one day Dal decided to purchase and bring home a coring machine. From this purchase onwards, the service of lawn rejuvenation became Das and Jacqi's focus.** Over the coming years Akers of Lawn grew from just a two-person team to a full staff of 24, with the business extending their skill base from simple lawn rejuvenation to complete landscaping packages, ranging from small courtyards to whole school soccer pitches.

Akers of Lawn is truly a family business, featuring Dal and Jacqi Akers at the helm, supported by their three children. Son Brad

“  
AKERS OF LAWN PRIDES THEMSELVES ON BEING ABLE TO PROVIDE A COMPLETE SERVICE WITHOUT REQUIRING SUBCONTRACTORS.  
”

Akers is an Area Manager in Sales, son Scott Akers as a Site Supervisor, with his wife Karlyn Akers as the Account Manager, and daughter Julie Field (born Akers) as Head of Administration and Marketing. In addition, the team is made up of many long-term employees who are also considered family. Having this strong family focus, Akers of Lawn really understands the importance of establishing long-term relationships with their customers.

Akers of Lawn prides themselves on being able to provide a complete service without requiring subcontractors. Now sporting four trucks, six utes and various speciality machinery, the team continues to train their employees to provide specialist services. These services range from lawn rejuvenation, new lawn establishment, irrigation, paving, small retaining walls, raised garden beds, garden preparation, plant sourcing and planting and complete landscaping advice.

### Lonsdale Expansion

For the first 34 years of the business, Akers of Lawn operated from the family premises, first in Happy Valley and then expanding to a bigger property at Onkaparinga Hills. A family dream for many years had been to expand from landscaping, into creating their own products and relocating to an independent location, featuring a shop and landscaping product displays.

During 2020, after looking for the right space for years, the perfect location came up in Lonsdale, a well-known manufacturing and trade suburb in the south of Adelaide. The new shop features a wide range of products covering all aspects of lawn and garden install and maintenance. Customers can view a wide range of landscaping products which can be used to landscape their yard, from instant and artificial lawn, to pavers, pebbles, and various mulch options.

In addition to a new space, Akers of Lawn have been busy developing their very own range of products. Product development has involved utilising their extensive knowledge, whilst working alongside expert agronomist Ryan Sheridan, and consulting with leaders in the field such as Peter Wadewitz of Peat's Soil, Neutrog, Omnia, FPAG and Adelaide garden guru, Michael Keelan.



The new products are a range of liquid, granular and pelletized fertilisers for both the lawn and garden. As a product line, Akers of Lawn products focus on building up good soil microbes, leading to healthy soil. A healthy soil contains microscopic bacteria, fungi, viruses, and other organisms which work together to breakdown organic matter and ensure nutrient uptake and retention is maintained. Strong microbial activity ensures all plants are given the best foundation for growth and pest resistance.

### Partners in Turf

Akers of Lawn established a relationship with Rowett's Turf (now Sunnyside Instant Lawn) over 12 years ago in 2009. At that time,

Rowett's Turf were three years into running a turf farm on the family property near Mundulla. As fellow small family businesses, the Akers' and Rowett's supported each other and understood the importance of strong trade relationships. Over the years, Rowett's Turf has expanded, changed their name to Sunnyside Instant Lawn and throughout this growth, Akers of Lawn has grown with them. Together they are proud to be providers of Lawn Solutions Australia turf varieties throughout Adelaide metro and beyond.

Akers of Lawn's vision is to be the leading landscaping provider in South Australia by creating inspiring, quality outdoor spaces with their clients for years to come.

# Jacobsen Introduces the Eclipse 360 ELiTE Lithium Mower

## THE ELITE STANDARD OF GREEN MOWING

**The new Eclipse 360 ELiTE from Jacobsen has been designed to combine the next generation of ELiTE lithium-ion batteries with a signature cut that has been trusted for a century.**

ELiTE batteries have powered E-Z-GO vehicles for over 15 million hours, and the Eclipse 360 ELiTE has adopted that technology to make a mower that can cut 50+ large greens on a single charge.

Noise during operation is reduced to virtual silence, meaning the machine can cut anywhere early in the morning without disruption. The significant reduction in noise pollution is combined with zero air pollution with the all-electric model, while fuel consumption is reduced when cutting with the diesel hybrid.

Jacobsen has a decade's worth of experience with the Eclipse range, which has been reflected in the features of this new machine, as Jacobsen Product Trainer, Rob Hayward, explains.

"We've had the Eclipse itself out now for ten years, and we've learnt a lot from that experience, and the result is we have a great machine. There is a focus on the environmental impact of machinery now, and in golf especially, and the desire from people to use all-electric mowers is evident, and we're happy to be able to offer the Eclipse ELiTE 360 to meet that demand.

"We're finding that cutting about 18-20 greens, large full-size greens with travelling time in between, with 15 blade reels, groomers and rear roller brushes, uses about 30% of the charge from the battery pack. So if you work that out, we're talking about 50 to 60 greens easily runtime on an Eclipse 360 ELiTE.



"One of the great features of the Eclipse 360 ELiTE is a programmable frequency of cut. And what we do with this is have the cylinders turning in time with the wheels. So if the operator drives a little bit faster, the cylinders will increase speed, so we keep the same frequency of cut regardless of who mows. And that's keeping a consistent cut right across the course.

"We can change this as well, and it's set behind a PIN number, so the superintendent or head greenkeeper can exactly set their frequency of cut for the day, and there is nothing the operator can do to change that. And what we do is fit a 15 blade reel in here, so if you've got a competition or a special day and you want an even better frequency of cut, slightly tighter but keeping the same height of cut, we can increase that frequency of cut and not reduce the mowing speeds. So we're getting around the course in a very good time but getting a better frequency of cut."

Several on-course demonstrations have taken place throughout a rigorous testing process at a mixture of locations in the United Kingdom and Ireland. A prime example where battery life and cut quality were put to the test is Waterville Golf Links, Country Derry, Ireland.

The sea surrounds the 7,378-yard course with views of Macgillycuddy's Reek Mountain range and Ballinskelligs Bay. The course has gently undulating fairways on the front nine, contrasted by the channels of elevated dunes on the back nine, culminating in a unique golfing experience and a varied challenge for the Eclipse 360 ELiTE.

Course Superintendent Gerrard O'Neil explains: "It's the future as we're seeing with cars and everything going down the electric

and hybrid routes. Golf courses will probably have to start changing in the next five to ten years, so if Jacobsen is producing this machine this early, it's a quality machine already, so it'll only get better with more testing and more usage, so I'm excited for that.

"We had it on the course for a day, and I thought it was a very good machine. Very quiet, and a bit quicker in transport as well. A very solid machine and the speed from green to green for us paramount, and as I said that has improved.

"The charge is something that surprised me because it lasted a lot longer than I expected. I was like, 'Oh god, this thing is just going to die after a few greens'. But we could have gone again, again and again really without charging it - I was impressed with that.

"The lack of noise is something that you really notice as well. You can hear other things in your units, so you're listening out for something; you might hit a stone that you'd otherwise miss if you had a diesel engine rattling behind you. So the quiet working is good for that, the operator generally and for reducing noise for anyone else on the course.

"And the weight, another thing with the battery is with the weight. I remember seeing a Ransomes around 20 years ago when I worked in Australia, and you could see the tyre tracks, but the Eclipse 360 just floated across the greens and left no tracks. It was beautiful; I thought it was a very good machine."

Delivering unrivalled performance from an all-electric mower is about more than just battery performance. The features that provide a leading operator experience and the highest quality cut every time are crucial, and on this machine, they have been revisited and elevated to new heights.

The Patented Frequency of Clip Control ensures a consistent cut by linking the reel speed to the forward speed. By having the reels turning in time with the wheels, you can keep a consistent frequency of cut regardless of who is mowing but still have the option to increase it without reducing the mowing speed. This control is taken further with individual unit control that can adapt the cutting configuration to vary wheel runs and truly eliminate triplex ring.

Attention has also been paid to the access and maintenance aspects of the machine.

A swing-out centre unit features for quick and easy cleaning, maintenance or swapping the unit. No tools are required to swing the unit out with the removal of a lynchpin that is then used to hold the unit in the swung-out position all that is needed.

Jacobsen has made all of these changes following a 360-durability review that has also included the addition of new brushless lift actuators that have ten times the lifespan of the previous option.

Seven, nine, eleven or fifteen blade reels are available for the Eclipse 360 ELiTE to allow for varied applications of the machine from golf greens and tees to football pitches and ornamental gardens.

Textron Inc. is a multi-industry company that leverages its global network of aircraft, defense, industrial and finance businesses to provide customers with innovative solutions and services. Textron is known around the world for its powerful brands such as Bell, Cessna, Beechcraft, Hawker, Jacobsen, Kautex, Lycoming, E-Z-GO, Greenlee, Textron Off Road, Arctic Cat, Textron Systems, and TRU Simulation + Training.

Certain statements in this press release may project revenues or describe strategies, goals, outlook or other non-historical matters; these forward-looking statements speak only as of the date on which they are made, and we undertake no obligation to update them. These statements are subject to known and unknown risks, uncertainties, and other factors that may cause our actual results to differ materially from those expressed or implied by such forward-looking statements.

### About Textron Specialized Vehicles Inc.

Textron Specialized Vehicles Inc., a Textron Inc. company, is a leading global manufacturer of golf cars, utility and personal transportation vehicles, snowmobiles, side-by-sides, all-terrain vehicles, professional turf-care equipment, and ground support equipment. Textron Specialized Vehicles markets products under the E-Z-GO®, Cushman®, Arctic Cat®, Textron Off Road™, Jacobsen®, Ransomes®, TUG™, Douglas™, Premier™ and Safeaero™ brands. Its vehicles are found in environments ranging from golf courses to factories, airports to planned communities, and theme parks to hunting preserves.

For further information, please visit: [www.textron.com](http://www.textron.com) or contact: Peter Schumacher [pschumacher@textron.com](mailto:pschumacher@textron.com)



# Rising Above the Flood

## THE NSW TURF INDUSTRY RECOVERY

**The devastating NSW floods occurred in March 2021, with the forecast in the lead up being of “minor to moderate flooding,” but never major flooding. The amount of rain that did come, caused utter destruction. Areas of the Hawkesbury Valley west of Sydney and on the NSW Mid-North Coast were the hardest hit, with over 2,800 hectares of turf production severely impacted. The flood peaked around 9pm on Friday 19th of March. Turf growers were left in a state of emergency and their families and businesses were turned upside down overnight. There would be a long road ahead, with significant emotional, physical, and mental challenges to overcome.**

Floods are not new to the Turf Industry, but until this year’s flood in March there hasn’t been a major flood on the Hawkesbury-Nepean for more than 30 years, with the last comparable one occurring in 1990. Long-term Sydneysiders, however, will remember

that twelve major floods occurred during the 40 years before 1990. Five of these were larger than this year’s flood in height, but the damage is always comparable. The big one Windsor and parts of the North Coast saw this year has been called many things. A “once-in-50 or 100-year flood”, “unprecedented” and “chaotic”, regardless of whether it was or was not as big as others in history for some areas, one of the most damaging factors to the Turf Industry is the time of year it came.

Whilst all floods are incredibly damaging, having one this late in the growing season is somewhat rare, with a much longer lasting effect. Silt, sadly is a result of all floods, and it can take months of good growing weather to recover crops even partially effected from the impact of silt. The other major floods in the past 35 years all came much earlier in the season. In 1986 it was August, in 1990 – February and in 2016 it came in September.

A flood in late March means that silt covered crops must enter winter and wait for more than six months for favourable growing

conditions to return. What this means in short, is root rot, very heavy and brittle turf for months with huge increases in wastage and transport costs due to weight increases for months to come. In a normal year, this causes a turf shortage. This year it was more of a perfect storm, with the biggest building boom, the largest flood, and the largest demand for turf in 30 years, creating turf shortages we have never experienced before.

Earl’s Turf is a Lawn Solutions Australia accredited turf supplier based in Taree on the Mid North Coast of NSW. Owner and Manager Earl Stanley said, “the farm looked like it had been hit with a tsunami. All the fences were ripped out, all gravel roadways ended up on paddocks, tonnes of flood rack were strewn across all the paddocks.”

Many of Earl’s paddocks were inundated with up to 300mm of silt. One paddock surprisingly even had a Nissan X-Trail on it and numerous bales of silage from surrounding farms. Three of their travelling boom irrigators were mangled with some

also losing their hoses. One Hardi spray unit was found 40km away on Tuncurry beach, with another being found on Dumaresq Island and a third found at Manning Point, 20km’s away. Thanks to the power of social media the Hardi spray unit was found on a Buy Swap Sell. ‘One very disappointed seller he ended up being!’

“At the time of our worst drought ever three years ago we thought things were tough, but we now know what tough is. A flood has proven to be far worse than any drought.” said Earl Stanley, Earls Turf

The turf industry was able to unite, along with their local communities and began the clean up as soon as the flood water receded. Growers from different areas helped supply machinery and banded together to rebuild and recover what they could.

With many turf suppliers impacted by the floods, supply was significantly reduced in the regions effected. Some growers lost entire paddocks, some hoped to save 50% of their turf in production, with the impacts of the flood being felt across their entire farms. Some growers had farms located on higher ground and were able to recommence supply within weeks. Others were not so lucky.

Green Life Turf is based in the Hawkesbury region of NSW in Freemans Reach. Green Life Turf are fortunate to have a farm in Singleton as part of a flood proof plan for their business. This allowed them to continue to supply their regular customers. The biggest challenge they have faced with reduced supply is the timing of matured stock affecting the overall availability. Managing the timing of mature stocks, the extra logistics required to transport turf from Singleton, combined with the added demand of turf this has immense pressure on their team.

The damages Green Life Turf incurred included erosion to riverbanks, drainage systems blocking and failing, pump sites being washed away, broken fences, damaged irrigator infrastructure, damage to sheds, offices, cool room, and the loss of crops.

“As soon as the flood waters receded and we could get access to our properties again, we started to wash and broom out all the silt from our sheds and offices. We then started to focus on fixing failed drainage in our paddocks to help them dry up, allowing us



to start salvaging the crops that we could,” Joshua Muscat from Green Life Turf said.

This has been a long and ongoing process for the Green Life team. They started by fixing things that were important for supply first and are continuing to work towards finding time to fix other things, like the fences.

“We keep on doing what we do best. Growing and supply the highest quality turf possible.” - Joshua Muscat, Green Life Turf

If it wasn’t for the resilience, quick thinking and innovative nature of the modern turf farmer that saw flood clean ups at record speed, using new flood recovery and silt removal techniques, the current turf supply crisis may have been a lot worse. We are now seeing the turf quality and supply chains starting to return to normal, which is possibly the quickest we have seen in history.

Earl’s Turf would like to thank Geoff Hatton from Cobbitty Turf for helping them out, providing valuable knowledge and giving them the use of their Blecavator to help rebuild the farm.



# Boyle Family Celebrates 100 years on Rosemount Farm



Sugar cane planting



The Rosemount Team



Third generation Boyles

**On the 7th of October 1921 Nicholas and Maria Boyle and ten of their eleven children (seven boys and four girls) moved to Rosemount from Northern New South Wales and purchased the farm that would become their legacy, still supporting the Boyle family four generations into the future.**

Ross, the current custodian, is an immensely proud third generation Boyle to work the land his ancestors bought and cleared in 1921. Nicholas and Maria, Ross' grandparents started farming sugar cane on the rich river flats and a variety of small crops including beans, bananas, pineapples, pawpaw's, and ginger on the hill land.

In 1939, four of the seven Boyle Sons were 'called to arms' and went to fight in World War II. Three of the boys returned to the property, while one was sadly killed by a sniper 45 days before WWII ended.

The story goes that Sam Boyle who returned after surviving Changi Prison and The Burma Railway, kissed the ground, and vowed to

never leave Rosemount again... and he never did.

As per tradition the family helped establish all the boys on their own properties in the district with the home farm being taken on by Harry and Gloria Boyle (Ross' parents) in partnership with his brother Nicholas Boyle.

Harry and Gloria had four children; Barbara, Hugh, Geoff & Ross and continued farming sugar cane on the original property, while slowly buying neighbouring properties as they came up for sale. After 45 years on the farm Harry was ready to retire.

Ross had been living in Mossman in far north Queensland and was training to become a sugar chemist at the local mill. He was 18 years old when Harry asked him to come home and join the family business. Harry and Ross worked together for several years so that he could mentor Ross in the fine art of farming. Hugh Ross's oldest brother who was working in the sugar industry in Ayre, also expressed a desire to return to the family farm and so from 1980 Ross and Hugh worked in partnership.



In 1998 Ross bought Hugh out of the partnership and Ross and Lynelle continued farming sugar cane on this property.

2003 threw a spanner into the works when the sugar mill shut down, which left the entire local cane industry without anywhere to process the cane. Selling the family farm was never an option, Ross had to find a crop to be productive and equally forgiving to grow on a flood plain.

After much research the family decided to go into farming turf. The beautiful farm is a long narrow farm on a flood plain with Petrie Creek and Petrie Creek Road as boundaries. They can get up to a metre of water over the farm several times a year in a wet year. Sugar cane as a crop was great for such an area as it would survive the deluge and so would turf.

This is when Rosemount Turf was born. In the blink of an eye, the family went from being sole traders to employers.

This 'let's grow turf' became the thing that took over the Boyle families lives, and it was



The Boyle Family today

all they talked about, problem solved and made plans for. Rosemount Turf originally grew Wintergreen Couch and then bought a licence for Sapphire Soft Leaf Buffalo. A local turf farmer who had sold his farm for a housing development approached them to buy his goodwill and licences. The family were happy to acquire these licences and started growing other turf varieties to give their customers choices to suite their property's needs.

Changing the farm from sugar cane to turf was not the only challenge faced, suddenly the bookkeeping for the cane farm that Lynelle managed on weekends turned into a fulltime job and they had to figure out a way to market and sell the product.

As sole traders there wasn't any policies or procedures in place. These had to be researched, written and enacted. Training and managing staff was a whole new game and learning to grow a new crop was a daily challenge. Most of the machinery was for sugar cane farming which was unable to be utilised for turf farming, so sourcing and financing this change presented challenges.

Ross Boyle believes in serving and giving back to the industry that feeds them. He was on the Moreton Mill Suppliers Committee while a cane farmer and quickly became involved in Turf Queensland, followed by Turf Australia as a turf farmer. Ross was the president of Turf Australia from 2016 to 2021. Rosemount Turf from the get go have been regular attendees of turf conferences and being new to the industry learnt a lot

“ WE MAY NOT SEE ANOTHER ONE HUNDRED YEARS BUT WOULD LIKE TO GIVE IT A RED-HOT CRACK! ”

from the organised speakers and from networking with other turf growers.

Rosemount Turf's first turf sale was 10m<sup>2</sup> of couch, which was sold for \$3.00m<sup>2</sup>. "We had all the family down at the farm watching the first cut with the old Van Vuuren hand stacking turf harvester." Things are a little different now, where they harvest on average between 5 and 10 thousand square metres of turf per week, using a Trebro SC2010 auto stacking turf harvester. Rosemount Turf service the Sunshine Coast and parts of Brisbane.

Rosemount Turf specialise in backyard renovations and are passionate about educating customers on how to get the best out of their lawns. The farm is centrally located on the Sunshine Coast, which means customers can collect their turf direct and buy products from the lawn shop.

In 2016 Rosemount Turf accepted the opportunity to join Lawn Solutions Australia

(LSA). Rosemount Turf believe in the research and development program and the dedication LSA have to their growers and how they strive to meet the modern and everchanging turf market.

"Sir Walter DNA certified Soft Leaf Buffalo has become a household name and we wanted to ensure the future of our business for the next generation."

To mark the 100th anniversary of the farm, a mural was commissioned for the machinery shed, painted by Ross Holloway, a local mural artist. It depicts our evolution from cane to turf. The family has had numerous people comment on how much they miss the cane trains and cane fires on dusk in the Valley, but also express their appreciation of the manicured and peaceful vista the turf farm presents now.

Rosemount Turf have also installed a 500m<sup>2</sup> new display area called 'Gloria's Garden' overlooking the dam 'Lake Harry' for customers to enjoy and help visualise what their backyard would look like with - Sir Walter DNA Certified Soft Leaf Buffalo, Sir Grange Zoysia or TifTuf Hybrid Bermuda.

Ross and Lynelle's Daughter, Penelope Boyle and Son in Law Greg Pelka (married to Jessica Pelka nee Boyle), together with farm manager Sam Wasmund are ready to take the business into the future.

"We may not see another one hundred years but would like to give it a red-hot crack!"



# From Hoiana Shores to Rain Bird

**FORMER SUPERINTENDENT ROB WEIKS**

**Hoiana Shores is a stunning Zeon Zoysia (Sir Grange) links golf course on the coast of Vietnam. Former Superintendent Rob Weiks, an Australian expat, had the privilege of overseeing this beautiful new course during both construction and its successful launch in 2019.**

Rob recently transitioned away from this role as Superintendent at Hoiana to a new position with Rain Bird. The move was brought about through the opportunity to apply for the Rain Bird role as the Area

Manager for Southeast Asia. Being a superintendent has always been Rob's passion with the irrigation component of the position an unavoidable but enjoyable skill set to have. With this experience, the challenge of a new role, and the quality of product and people involved with Rain Bird, the choice was easy for Rob to jump into this exciting new role.

Being recently based at Hoiana Shores GC, Rob has lived and breathed the systems he is now responsible for in these regions.

"Having experienced firsthand the benefits of the Rain Bird Integrated Control System at

Hoiana Shores is a real advantage to taking that experience into in the marketplace. There is nothing quite like actually utilising something and seeing it work firsthand that allows me to communicate the benefits of not only the Rain Bird IC System™, but other components of Rain Bird as well" Rob said.

Rob has found that what was specifically relatable for him was the level of playability achieved at Hoiana Shores, proving that if you get both the turf type and irrigation control system correctly specified, you had the ability to produce firm and fast golf in Asia, which Rob said is somewhat of a rarity.

“The individual head control that IC generates and uniformity we were eventually able to achieve was very pleasing. Plus, the diagnostics of the IC make it a no brainer for courses looking to produce the best possible turf surfaces.”

Rob’s distribution area includes Thailand, Singapore, Indonesia, Vietnam, Laos, Cambodia, Myanmar, Guam, Philippines, Malaysia, and Brunei. In all these regions there are very competent and enthusiastic distributors. “Good people create good results and I’m lucky to be entrenched with just that with the distributors in my region” Rob said.

Asia is a boom area for growth, which Rob has witnessed during his time working in the region. This had made it a very exciting time to be a part of it while working with the Rain Bird team. Rain Bird is well positioned for new works and renovation that will continue to develop in the region. Rob is working with some excellent course designers and irrigations specifiers which is exciting for the delivery of quality courses for both local golfers and the tourist market.

With an ongoing focus on irrigation systems throughout the region, systems will be continually put under the microscope for both efficiencies and playability purposes.

The renovation market is varied from small upgrades to full system upgrades, the integration of new technologies and communication systems, to new pump stations. The ability to provide these options from the smallest requirement to a complete overhaul is a strength of Rain Bird and its distributors in the Southeast Asia region. Golf isn’t new to the region, so course renovations is a growing market. The renovation success stories are a valuable reference in being able to suitably adapt a system change to Rain Bird. Rain Bird can produce a ‘Hybrid System’ for adaptation during a changeover process. Upgrading existing Rain Bird systems or other types of systems is part of the intelligent use of water push in the region to give turf managers the best opportunity to control their water applications. The Intelligent Use of Water™ is Rain Bird’s guiding philosophy and the continual requirements from golf courses to ensure they are responsible for water use. Turf managers using the Integrated Control Modules are in control of putting water exactly where they want with exactly how much they need.



Hoiana Shores GC had zero issues with the Integrated Control Modules in a near 3-year period. This system coupled with a Rain Bird pump gives real time feedback with the ability to intelligently shutdown if a broken pipe occurs limiting water loss and turf damage. The simplistic usability and the

speed of the diagnostics testing make it an extremely valuable tool. The diagnostics saves valuable time and gives peace of mind that the system is working to maximum potential day in day out.

Tech support and new product information is another key role of working with an



“  
ROB IS WORKING WITH SOME EXCELLENT COURSE DESIGNERS AND IRRIGATIONS SPECIFIERS WHICH IS EXCITING FOR THE DELIVERY OF QUALITY COURSES FOR BOTH LOCAL GOLFERS AND THE TOURIST MARKET  
”

innovative company of the standard of Rain Bird. Weekly updates and ongoing product information alerts are an important part of the service, to not only end users but architects and specifiers as well. Rob’s role includes training distributors and initiating activity with their staff to create an environment of continual learning. Utilising a culture of education is extremely important and it’s what Rain Bird does exceptionally well both from the Headquarters in Tucson and across the world. Being able to call on specific knowledge and skill sets is another advantage of Rain Bird’s international culture.

Rain Bird Southeast Asia is blessed with experience and knowledge, coupled with a new lease of enthusiasm for the region. The team is headed by Rob Nadebaum, International Business Manager for Australia/ NZ & Southeast Asia, Mark Donohue as Regional Manager and Alex Angileri Area Manager Landscapes Southeast Asia. This commitment shows how much Rain Bird is dedicated to not only their distributors in the region, but the end users. Having three people based in Asia is unique for the region, especially for an irrigation supply company.

“Having the ability to be available in real time in Asia is a massive benefit to our established customer base and gives potential customers peace of mind knowing we are awake and available when they require our attention,” said Rob.



Tim Muscat – Greener Lawn



# The Next Generation of Turf Farmers

**A turf business is a specialised one, with families of turf growers passing on their skills from one generation to the next. This means that many family operated turf businesses remain as such. The children grow up in the business, learning new skills along their way to adulthood before taking over management and even ownership roles when their parents are ready to let go of the reins.**

This generational transition is prevalent right across the country, providing some difficulties of course but also some exciting opportunities. We recently got in touch with some next generation turf farm employees to find out how they have progressed within their own family businesses and what they are anticipating for the future of the industry.

### Tim Muscat – Greener Lawn

Tim Muscat from Greener Lawn is the youngest of three brothers, with his father

Anthony currently running the business. Tim has been working full-time within the business since he was 14 and 9 months, but like many turf families, Tim was involved in the business well before then.

Tim said Greener Lawn are on the tail end of a generational transition, "Dad is starting to step back and let us take the reins more. It was difficult and the circumstances for the transition were not ideal, however it is looking very positive for the coming years."

There are plenty of learning opportunities working in a turf business, providing different areas where you can slot in to suit your interests as they develop.

Tim has developed both business and life skills while working in his family business and has progressed through varying roles. "I am currently managing on site preparation and installation jobs, driving delivery trucks in the busier months and in any spare time, or if needed, assisting in workshop repairs

Sarah Mason – Coastal Turf



and maintenance. This allows me to apply some of the skills I learnt while completing a Certificate 3 in engineering," Tim said.

Every year Turf Australia hosts a NxGen Conference for turf farm employees under the age of 40. Tim has been every year that he can and said it's a great way to learn about other parts of the industry you may not know about. It also provides a great opportunity to network and share knowledge with others from right across the country. Plus, it has the added benefit of providing a break from the everyday pressures they are under in the business.

Tim's looking forward to going with the flow of the business and exploring what the future brings, adapting to the changes that will happen along the way.

"There is a lot of pressure from a young age in a family business, but it is well worth it when you look back and see everything you have achieved with your family." Tim Muscat – Greener Lawn

### Sarah Mason – Coastal Turf

When Sarah was 14 her family decided to move from Mt Victoria in the Blue Mountains near Sydney to Cabarita Beach near the QLD/NSW border. Being a 5th generation farmer, Sarah's father bought a little turf farm in Cabarita Beach, and excitedly announced that they would all be helping.

While Sarah's brother loved it, Sarah decided that although she was happy to help on the farm, it was not something she was going to do forever. "I got myself a job at McDonalds to make myself money. As a teenager my ambition was to work in an office, wear high heels all day and never get dirty again."

Sarah went on to university where she studied public relations. On weekends Sarah would go and work on the farm, mowing and driving trucks, but also providing customer service and covering most aspects of the turf business.

When Sarah's daughter was about 4 months old, Coastal Turf was booming. With over 10 employees, they had turf going out left right and centre, and calls and paperwork were becoming overwhelming. Sarah's brother had joined the Board of Turf QLD and was often busy helping in other areas of the turf industry.

Coastal Turf needed someone part time in the office to do all the little things that were building up. Luckily, Sarah was available and was volunteered by her father and brother. Working within the family business would be challenging, but it would also be extremely rewarding.

"The thing I really love about the turf industry is that there are so many family businesses, so when you go to an industry

meeting you are chatting with families as well." Sarah Mason – Coastal Turf

"My daughter learnt to walk in the office and the kids learnt to say, "Coastal Turf, how can I help you?" as one of their first sentences."

Sarah had a third child and stepped back from the business, so she had more time for her family. Her husband Tony also started his own landscaping and turf maintenance business, Tony the Turfman and the two businesses complimented each other well.

Once the children were a bit older, Sarah started doing a couple days back in the office at Coastal Turf again. Sarah's brother thought it was time to move forward and sideways in his life and went to work for the Macadamia Industry.

Over the years they took the business from a little enterprise, to turning over well over a million dollars a year. "My father and I made a plan to concentrate on providing wonderful turf products rather than all the extras associated with turf. We would let The Turfman business do that."

Sarah became great at organisation, helping to run two businesses. Today Coastal Turf grows and sells over 9 different varieties, servicing NSW and Southeast Qld and have a wonderful relationship with their landscapers.

Sarah's father has recently become unwell, that has meant that a generational shift has come faster than they expected. While he has stepped back, he is still available for advice and reminders about things, like making sure you are greasing all the grease points on the harvester. "I am pretty sure I have greased them all though," Sarah said.

"Change will be inevitable. Possibly in the future we may combine the two businesses back into one again. And this will bring a younger skill set into the team too."

At this stage Sarah's kids are not interested in turf. Her eldest is working towards becoming a baker, her daughter wants to be a Biological Engineer, and the youngest is too young to know what he wants to do yet. But having a family business that can support them in whatever way they want to moving forward is really comforting to Sarah.

"But then again, I didn't want to be a turf farmer either. And here I am loving it!"



Troy Muscat – Active Turf

#### Troy Muscat – Active Turf

Troy Muscat from Active Turf's interest in turf farming didn't really come along until he was 13 or 14. But a switch was flicked one day, and he hasn't looked back. Troy's parents Charlie and Anne were born in the Hawkesbury region, and both came from farming families. They started the turf business in 1999 with Troy's grandfather's help before he retired in 2004.

Many turf farms are also where the family home is and it's an added benefit that Josh has come to appreciate. "I really enjoy spending time out on the farm and love that most of our work is from home."

Troy's parents have started to try slowing down and taking more time off. Troy and

his wife Vanessa are both trying to take on more responsibility in the general running of the business wherever they can. As Troy didn't have much knowledge of farming at a younger age, he has had to learn everything the business needs from growing the turf to emailing invoices at the end of the day if need be.

"The last few years I have a role to play in every aspect and if need be, I can do any job in our business that is needed."

Troy said he has noticed considerable change in the industry during his time, with automatic harvesters being the biggest game changer. "The new generation have a young mindset which helps bring in new ideas and a different business approach, which is also showing in the way things are changing."

## Wish you could bring the golf course home with you?

Now you can with a new lawn from **Lawn Solutions Australia**.



# Lawn Solutions Australia are Growing



**Lawn Solutions Australia are always on the look out for new additions to our group that have the same high standards as the current network of LSA turf producers. Over the past 12 months we have welcomed 2 new additions to Australia's largest network of turf producers, both in NSW, to make sure LSA premium turf varieties are readily available no matter where you are in Australia.**

Lawn Solutions Australia is a network of Australia's best and most experienced turf producers that produce Australia's leading turfgrass varieties for varied markets including – homeowners, sporting oval, golf courses, commercial and government bodies. The LSA Group has a national footprint to ensure coverage and supply for the consumer. It is always important to manage the supply chain and develop strategies to foresee sales growth and production align. Over the last 8 years the LSA Group has been proud of our strategic review on market analysis, supply chains and infrastructure development and implemented plans to fill this market demand.

#### **Who are our new team members?**

Tyagarah Turf in the Northern Rivers region of NSW. This name has a long history in turf, however over the last 10 years the business lost focus and changed hands several times. Now with a new owner the property was purchased for cattle and grazing. 50 hectares of excellent high country with an option for another 50 hectares form the new Tyagarah Turf farm. The Tyagarah Turf business is owned by Helen & Travis Stone who also own Clarence Valley Turf business

in Grafton, NSW. During 2021 they have worked hard in preparing, levelling land ready to plant new turf varieties such as – Sir Walter DNA Certified, TifTuf Hybrid Bermuda, Sir Grange Zoysia and Zoysia Australis. This fits perfectly into the LSA model of expansion to ensure a national footprint and coverage to meet the growing market demand in the Northern NSW Region. Tyagarah Turf is open and operating to servicing this area.

Lawn Solutions Australia is proud to have secured Direct Turf in Windsor, NSW – this business is owned by Cameron & Jayden Vella who are part of a long family history in turf farming. Direct Turf has been working with the LSA Group for the last 4 years in a wholesale capacity. From July 2021 the decision was made to come on board to strengthen the supply chain for the LSA Group in NSW. Direct Turf currently grow 120,000 square metres of Sir Walter DNA Certified buffalo and have the potential to expand with additional plantings of Sir Walter DNA Certified and TifTuf Hybrid Bermuda. Over the last 4 years the Direct Turf business has supported the LSA Groups supply chain not only in NSW, the east coast QLD and VIC benefited from the Direct Turf business supply. This was of value to all LSA members and the growing customer base for the LSA Group.

We would like to welcome these 2 new additions to the Lawn Solutions Australia Group. It's our vision to ensure we maintain and increase our footprint, our strategic goal is to continue to strengthen our network and supply chain to ensure all our customers continue to experience certified quality turf and industry leading customer service experience.

# Beachside Gets an Upgrade

## MOLLYMOOK GOLF CLUB BEACHSIDE GOLF COURSE RENOVATION

Images in this story- Mollymook GC install



Beachside is one of two beautiful golf courses housed under the Mollymook Gold Club. Beachside is a 9-hole, par 33 course that lies atop the southern tip of the gorgeous Mollymook Beach, surrounding the stunning Collers Beach inlet. One of the larger tourist attractions for the small South Coast town, Beachside Golf Course accommodates many new faces, as well as regularly hosting its loyal members.

After many successful years and a strong community presence, the Mollymook Golf Club made the decision for its Beachside Course to undergo a transformation. A massive redesign and course restructure was on the agenda, with opportunity to level up the functionality, and overall experience for those who step up to the tees.

This renovation project was originally discussed around 15 years ago, with several redesigns proposed by various architects, but the project never got off the ground. Over recent years, the Club has become very strong financially, and the renovation project was revisited roughly 3 years ago with the various stages of planning discussed between Programmed Turnpoint (Construction and Maintenance Services), Troon Golf (Golf Club Management Services) and Mollymook Golf Club. Mollymook Golf Club were planning to start construction in winter of 2020, but it was postponed by 12 months due to the uncertainty of Covid-19 at that time. Programmed and Troon worked very closely behind the scenes to present the final design to the Club that ticked all the boxes.

The main reason for the course redesign, was to improve safety both on and around

“ WITH BEACHSIDE COURSE IS SUBJECT TO BOTH FULL SUN AND HEAVILY SHADED AREAS, AS WELL AS CONSTANT HIGH TRAFFIC AND WEAR & TEAR... ”



the course. With 9 holes in a rectangle that is surrounded by houses, roads and pedestrian traffic, issues can arise time to time. The 1st and 9th holes had a public road going across the middle of them which was not ideal. As the Club worked its way through the design process, it became more and more evident that moving a couple of tees and greens wasn't going to be enough. When the final design shortened the course from a Par 33 to a Par 28, the club wanted to provide superior playing surfaces and raise the profile of the course.

The Club agreed the best way forward was to rebuild every tee and green in the renovation with a whole new irrigation system to compliment the course. An irrigation system was a high priority, being both a vital and sustainable step for large-scale area turfing during its establishment, and future maintenance.

Mollymook Golf Club were working with a short time frame (18 weeks) to complete the whole project to get the course open again in time for the busy tourist season in December. After a few meetings and visits to other courses, it was decided to seed all the greens and returf all the surrounds and tees.

The Mollymook Golf Club had a small team that have worked very closely all the way through the design, planning and construction phases which included preliminary site visits to other courses and local turf farm, Turfco.

The design and construction plan were spearheaded by;

- Justin Trott, the General Manager of Programmed Turnpoint and a very experienced course architect.
- David Lunardelli, the Director of



Agronomy for Troon, has a wealth of knowledge in agronomy and new golf courses.

- Barry West, the Golf Manager at Mollymook Golf Club who has been involved in several large golf projects interstate and overseas.
- Mollymook Golf Club Superintendent Mark Pullinger, who has worked on the courses at Mollymook for over 20 years before becoming the Superintendent 3 years ago, with good knowledge of what is above and below the ground at Mollymook.

Turfco produces more than 200 acres of quality turf and is the NSW South Coast's only Lawn Solutions Australia accredited turf grower. The Turfco team were included in the planning process during multiple site visits to the Berry Turfco Farm. Mollymook Golf Club presented a timeframe that scheduled the large-scale turf installation within September-November 2021. Turfco would supply a quantity of around 3,500m<sup>2</sup> within this window, with Mollymook Golf Club and Programmed Turnpoint to complete the turf installation.

With Beachside Course is subject to both full sun and heavily shaded areas, as well as constant high traffic and wear & tear, the Mollymook team were in the market for a turf that could thrive in this setting. Turfco hosted various display visits to farm the Mollymook Golf Club with all the necessary knowledge to ensure a successful returfing on the Beachside Course.

Sir Grange Zoysia was the favoured variety for the Mollymook team for both its beauty and heavily researched qualities. In the month of May 2021, Turfco delivered a small quantity of Sir Grange as a trial on a

particular Beachside tee. The team were impressed with the results, despite the turf being laid in the cooler months. The go-ahead was granted for Sir Grange Zoysia on the Beachside Golf Course reconstruction.

The greens were seeded with a mix of A1/A4 Bent and the surrounds were solid turfed with Sir Grange Zoysia while the tees were solid turfed with TifTuf Hybrid Bermuda. The Club wanted a low maintenance grass for the surrounds that looks very impressive hence the Sir Grange Zoysia, while also after a grass that can handle high traffic and repair quickly, so the TifTuf Hybrid Bermuda was an obvious choice. TifTuf was also selected in areas for its fast establishment, ensuring a quick turnaround for the more popular spots that were of high priority in the reopening.

It was decided to periodically deliver the quantities of turf over two-three months. Spaced intervals allowed both Turfco and the Mollymook Golf Club to manage and optimise the workload, while allowing certain areas of the course an extended period of establishment prior to the reopening.

In the coming weeks Turfco will begin their delivery of TifTuf Hybrid Bermuda to Beachside Golf Course.

Turfco and Mollymook Golf Club have a long-standing relationship developed over many years, in the past supplying Eureka Kikuyu turf. Turfco welcomed the opportunity to provide The Club with a more suitable turf variety that would top-off their course transformation.

The Superintendent Mark, and many others at the Beachside Golf Course are well equipped and experienced individuals who no doubt will provide the course with all the required maintenance and care.

# Maximising Results From Pennmag® Pre-Emergent Herbicide In Turf Production

## Introduction

Pre-emergent herbicides are a vital tool in managing weeds in the turf production industry. The efficient and timely use of herbicides to minimise weeds while maintaining good plant growth and health is a turf production management challenge. PENNMAG® is a useful tool when facing this challenge, allowing you to control weeds whilst the turfgrass is re-establishing post-harvest. PENNMAG® (S-metolachlor) a Group 15 (formerly K) herbicide has been developed for use in turf production, offering a turf registered, economically viable option for turf producers.

Given its unique mode of action where it is primarily absorbed by the emerging leaf of the germinating weed, PENNMAG® has a lower impact on re-growth when compared to Group 3 (formerly D) herbicides which are predominantly root absorbed and can be known to root stunt/prune. Longevity, or the breakdown or degradation of herbicides, including PENNMAG® varies with environmental and soil conditions. This article aims to summarise some of the key factors that affect how long S-metolachlor lasts between applications and how to get the best out of its use.

## PENNMAG® longevity

A single application of PENNMAG® will in most situations provide weed control for up to 8 weeks. After this, PENNMAG® will biodegrade allowing for weed seeds to germinate and a further application may be required. In general turf maintenance, we would recommend an application of BARRICADE®, however in a turf farm situation monitoring of the root growth is required before applying a long-lasting Group 3 pre-emergent herbicide such as BARRICADE®.



The processes that reduce the concentration of PENNMAG® in the soil vary depending on soil and environmental conditions. Organic matter content, microbial activity, temperature and soil moisture all influence how long the herbicide lasts. A healthy soil with good organic matter content and conditions suitable for a healthy microbial population will breakdown or degrade some herbicides faster than soils without. Therefore, different longevity could be expected on different blocks if the soils vary from loam to sand.

Based on temperature alone, application intervals may be shorter in summer and longer in winter. Laboratory testing found the breakdown of S-metolachlor was roughly twice as long at 10°C than at 25-35°C, explaining why PENNMAG® may provide longer control in winter than in summer on some properties. This should be measured and assessed at each individual location (Long et al, 2014).

## Application rates

Applied prior to weed emergence, PENNMAG® will provide up to 8 weeks

control of many problematic weeds in turf in most instances. For best results, apply PENNMAG® at 2 L/ha in 750 L/ha water volume using Syngenta XC08 nozzles and follow with 3 mm of irrigation to position it into the upper profile.

PENNMAG® is registered for a wide range of weeds in both warm and cool season turf. Germination of weed seeds is primarily soil temperature driven with many common weeds such as Summer Grass germinating at soil temperatures between 12-15°C and Crowsfoot Grass germinating between 15-18°C. Weed germination can be increased further when turf is harvested and sunlight comes in contact directly with the soil surface. In Australia, plant protection labels are painstakingly assembled and the rates on the label are certified by the regulator (APVMA) based on data they receive from trial work. Half rates, full rates and double rates are used in trials to assess products.

At different rates, different issues can occur, such as turfgrass phytotoxicity and environmental run-off to name just two. When a product is first registered for a particular crop, the factors are calculated via replicated trials. In the case of S-metolachlor, it was originally registered for use in agricultural crops and not specifically on turfgrass as a crop until PENNMAG® was introduced.

Lab tests on S-metolachlor found degradation occurred at a slower rate in soils when higher concentrations were applied (Long et al, 2014). Therefore, over application or re-application may influence how long S-metolachlor lasts in the profile for weed control. Situations where over application may have occurred, either from incorrect rate or overlap may degrade slower in the soil. Applications that are re-applied before the previous application has



fully degraded in the soil may also influence longevity, as a higher accumulated rate in the soil may degrade slower.

## What can I do on my site?

Initial applications should be planned for 8-week intervals with close observation of the area to assess and record when the weeds begin to break through the barrier. One method to assess how long pre-emergents are lasting is to lengthen the times between applications and leave an untreated area on each application to assess weed emergence. By documenting application dates and taking photos or

records of untreated and treated areas you should be able to gain a better idea of how your soils and conditions are affecting PENNMAG® longevity at a concentration to control weeds and when to re-apply. It is recommended that paint be used to nominate the control area (area not sprayed). Please feel free to contact the Syngenta Turf & Landscape team for assistance in setting up a trial.

## Does PENNMAG® move?

Another question is whether S-metolachlor moves with water sideways in the profile or down site to low areas resulting in higher

concentrations. Whilst PENNMAG® is more soluble and less persistent than longer lasting pre-emergents such as BARRICADE®, it will not move sideways after its initial application and incorporation into the soil. It is critical for all pre-emergent applications, that the soil is allowed to dry down after the initial application and irrigation. Once PENNMAG® has dried it absorbs to soil and significant lateral movement will cease. PENNMAG® is soluble and will move in water which is why the dry down period is critical to the success of the application. Some movement downward through the soil can also occur, as PENNMAG® moves

into and out of solution in the soil during normal drying and irrigation cycles. Each time the soil dries out and re-wets a portion of the product held by the soil will release into the soil water solution becoming available to the germinating weed seed. This portion is also vulnerable to leaching if rainfall or irrigation is sufficient to push the soil water down through the profile. Movement of water sideways through the profile is very slow or negligible.

During spring 2021 Syngenta will be assessing the movement of PENNMAG® on a number of different turf farm soils to determine the best use patterns for certain soil types.

**Irrigation after application**

If the irrigation to incorporate PENNMAG® into the soil surface is excessive or heavy it may move some of the product sideways on the soil surface before it can move into the soil, particularly if there is a downhill slope. On some of the heavy soils found on turf farms, a slow infiltration rate into the soil may result in sideways run-off and move the product to the cutting face or low-lying area where the active ingredient can accumulate and slow new growth.

If applying to the bare soil where sideways movement of the product is a greater risk, we highly recommend using the 750 L/ha or higher to get some movement into the soil prior to irrigation. If infiltration rate is low, it may be necessary to aerate or de-compact the soil more regularly to avoid losing products in run-off. Run-off of any product at application or irrigation should be avoided and with PENNMAG® it could result in the accumulation of active ingredient at the cutting face, ribbon or low-lying areas.

**PENNMAG® the leading registered pre-emergent for turf production in Australia**

PENNMAG® is a highly effective pre-emergent herbicide that is well suited for turf production. This article is written to provide a greater understanding of how PENNMAG® may perform differently at different sites. Before using PENNMAG® please always read the label and apply the product at the label rate. At Syngenta we recommend that you leave an area untreated that can be used as a control spot. This should be then used to compare the treated area versus the untreated to gain a



local understanding of the level and length of control. As mentioned above this will be dependent upon:

- Application techniques: nozzles, water volume (avoiding run-off) and overlap
- Watering-in and irrigation: be sure to not flood irrigate the site after application as PENNMAG® is soluble and will initially move in water
- Temperature and soil types: differing lengths of control will be achieved depending on soil types, organic

matter and temperature as these affect the degradation time of PENNMAG®.

For more information regarding the use of PENNMAG® in turf production please contact your local Syngenta Turf & Landscape Agent or your Syngenta representative or visit [www.syngentaturf.com.au](http://www.syngentaturf.com.au)

Reference:  
 Long, Y. H., Li, R. T., & Wu, X. M. (2014). Degradation of S-metolachlor in soil as affected by environmental factors. *Journal of soil science and plant nutrition*, 14(1), 189-198.



# Fighting to Farm

## HOW GOVERNMENT, GROWTH, AND DEAD FISH ARE IMPACTING THE FLORIDA SOD INDUSTRY

Words By Betsy McGill, Executive Director Turfgrass Producers of Florida

**Betsy McGill has served as executive director of Turfgrass Producers of Florida (formerly the Florida Sod Growers Cooperative) since April 2003. The association has represented sod farmers statewide since 1989.**

Florida is roughly the same size as Victoria:

- Florida (65,758 square miles / 170,311 km<sup>2</sup>)
- Victoria (91,761 Square miles / 237,659 km<sup>2</sup>)

Florida is one of the two largest sod (turf) production states in the U.S. In 2021, Turfgrass Producers of Florida member farms produced 48 different cultivars of turf on over 50,000 acres.

St. Augustine (buffalo) grasses are the most widely produced and generally used for

home lawns, followed by zoysia grasses and bermuda (couch) grasses, including specialty bermudas for golf and other sports turf uses.

Sod in Florida is vegetatively produced, and most harvested sod is used for in-state jobs.

Florida is a story of contrasts: vibrant urban areas and vast master-planned communities surround (and increasingly intertwine with) a quiet, largely rural interior. 9.7 million acres of Florida is farmland yielding 300 different commodities, including over 50,000 acres of sod. Depending on the year, Florida and Texas swap spots as the top sod producing state in the U.S. Currently, Turfgrass Producers of Florida members grow 48 different cultivars, most of it for in-state use.

Roughly the size of Victoria geographically, Florida is home to 22 million people with an

estimated 1,000 new permanent residents arriving daily (the population swells by several million more seasonal residents - "snowbirds"- each winter). This growth has supported a robust housing market and with it, a good market for sod. But it also highlights a deep and escalating conflict over water that is squeezing sod producers at the both the farm and market levels.

**Who gets the water?**

With over 60 inches of rainfall annually and ample natural waterways, Florida has historically enjoyed an extensive and relatively inexpensive water supply. Five state water management districts regulate permitting for farms and other stakeholders as well as overseeing supply plans and projections for counties and cities.

Agriculture is a major economic driver for



the state, second only to tourism. It is also one of the largest permitted water users, however, and as such, is being specifically targeted by regulators seeking increased water allocations for development and future growth. As traditional resources stretch thin, we find ourselves competing with cities, counties, and developers to both justify our livelihoods and to protect access to enough water to grow our crops.

Water use is also pressing the industry hard in our end markets. For nearly twenty years, turfgrass has been widely criticized as a water-waster, despite ongoing educational outreach on reducing watering and increasing irrigation system efficiency. Unfortunately, ordinances restricting turf are often seen as a low-cost, limited-impact way for local governments to demonstrate a commitment to decreasing water use. In the 18 years I've served as executive director for this association, we've seen a range of ordinances from those that sought to ban turf entirely to those severely restricting turf (no more than 33% of a landscaped area) to a current one mandating one type of turf for front yards and a different, unirrigated turf type for the backyard.

**Algae, dead fish, and a task force is born**

Florida's water management districts are also tasked with ensuring water quality – another area that is squeezing sod operations at both the farm and end-market levels.

More than 20 years ago, the Florida Department of Agriculture's Office of Agricultural Water Policy (OAWP) was charged with developing Best Management Practices programs for Florida's agricultural

commodities. TPF assisted in developing the original sod BMP program in 2008 and is participating in the current revision (2018-present). BMPs were voluntary in most areas of the state (the exception was the Lake Okeechobee – Everglades Agricultural Area which has a separate mandatory program) and designed to balance water quality protection with economic feasibility of implementation. Growers in the program received a "presumption of compliance" with state water quality standards and were afforded some protections if a water quality impairment was detected in their area. In 2016, the program was made mandatory for anyone with a farm in an area with a designated Basin Management Action Plan (defined water impairments), but for many areas of the state, it remained voluntary - until dead fish led to beach closings brought nationwide attention to Florida, and ultimately, to Florida's farms and lawns.

In 2018, Florida's southwest coast experienced a series of red tide (*carina brevis*) and blue-green algae (cyanobacteria) events that clogged coastal waterways, caused respiratory issues for residents, and resulted in massive fish kills. It was an economic catastrophe for tourism and the public outcry was significant. Newly elected Governor Ron DeSantis had campaigned on addressing these issues, and by June 2020, his Clean Waterways Act was passed. The act provided for the formation of a Blue-Green Algae Task Force to examine the causes of the outbreak and provide recommendations. Because both types of outbreaks can be worsened by nitrogen, all potential sources of nutrient loading came under intense scrutiny: aging infrastructure (sewer leaks/breaks); Florida's extensive septic systems; and of course, potential run-off from both farms and landscaped areas.

One Task Force recommendation took aim at agricultural BMP programs, questioning both compliance and effectiveness. The Task Force required more frequent verification visits and most concerning, the mandatory annual reporting of a farm's fertiliser applications, to be forwarded to the U.S. Department of Environmental Protection. TPF has worked with a group of agricultural representatives to address concerns on how the data will be collected and how grower privacy can be protected. It's been well over a year and we're still waiting for the final version of the form to



be approved and an updated version of the Sod BMP Manual to go to rulemaking.

At the end-user level, we're facing another water quality issue: local fertiliser ordinances that typically include prolonged "rainy-season" blackout periods (from 3 to 6 months, depending on the location), ostensibly to reduce potential leaching and run-off. While there has been little proof that this protects waterways (and indeed, much science to indicate that growing turf suffers and is less able to perform its water filtration role), they are proliferating rapidly. Florida lawn care companies are now working in several areas of the state in which a county and a city within it are governed by different, locally adopted ordinances.

Most have traditionally exempted farms,

golf courses, sports turf, and lawn maintenance by professional applicators – but increasingly, professional applications are also banned from, and at least one Miami-area ordinance sought to prevent fertilisation of golf courses for the four summer months. We have argued the science, we have argued turf benefits, and we have received no response. Again, these ordinances are low-cost, have limited impact, and are politically popular. They are also vigorously promoted by environmental activists with deep pockets and an extensive grassroots network.

Unfortunately, in our mounting frustration, those of us in the industries have occasionally found ourselves at odds. Some in Florida's larger green industry have been perhaps too willing to accept ordinances

discriminating against turfgrass as "not my problem", relieved to not be the target - yet. In one memorable meeting of agricultural leaders, a farmer from another commodity group pointed out that, "It's not agriculture using too much water; it's all that grass." I politely raised my hand and remarked, "But we are farmers, too. We are you."

I wrestled as I wrote with the point of this tale and how to end it. Simply conveying our challenges seems like whining, but for the life of me, I couldn't find anything to gloss over our deep frustration and complete bewilderment.

We have fought these challenges for over two decades and the pressure seems to be mounting. Population and politics are pressing us hard, and the tools we've relied

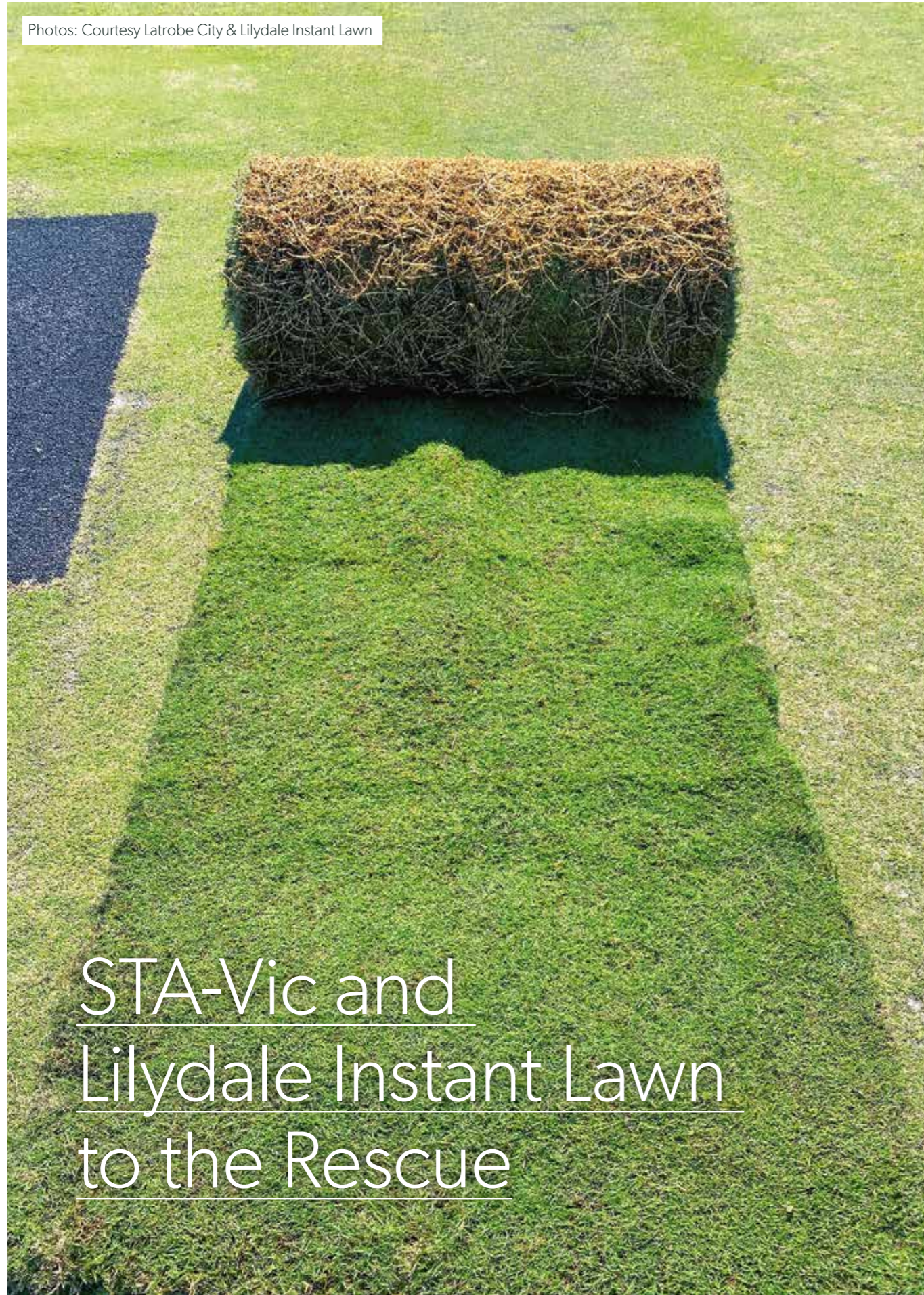
on – promoting turf benefits, presenting the science - are no longer working.

Politicians seem to create reactionary policy based on agendas and ambitions. When presented with science, many people are either skeptical or simply do not understand the research process or the concepts. We are not living in a science driven world.

I then realised that perhaps that was the point after all: to share our challenges, even if it's whining, to better understand each other and know we're not alone. To raise the alarm that the tools we've used in the past are ineffective, and we absolutely must think differently. To encourage us to continue to work together, regardless of whether it's your problem today, so that we all remain aware, that you are us, and we are you.



Photos: Courtesy Latrobe City & Lilydale Instant Lawn



## STA-Vic and Lilydale Instant Lawn to the Rescue



**The flood of June 2021 had immediate impact across all user groups at the Traralgon Recreation Reserve, but one who was going to be affected severely was the Ex-Students Cricket Club. The sediment left behind by flood waters meant the wickets were going to be unusable in their current state and so a significant investment was going to be required to restore them to their previous high standard.**

The Sports Turf Association (Victoria), along with their sponsor member Lilydale Instant Lawn of Bairnsdale have combined to offer 450 square metres of washed TifTuf Hybrid Bermuda for the re-turfing of the wickets at Traralgon Recreation Reserve. Lilydale Instant Lawn provided the TifTuf and free delivery to the site. The Sports Turf Association (Victoria) covered the cost of the washing of \$1575.00 (plus GST) for the turf.

This will no doubt provide a huge boost to the Cricket Club during this difficult period and enable them to focus on the upcoming season.

Latrobe City are pleased to have been able to assist in bringing together the Sports Turf Association (Victoria) and Ex-Students Cricket Club in the Traralgon & District Cricket Association. Latrobe City wishes to thank the Sports Turf Association (Victoria) and Lilydale Instant Lawn for this generous donation to one of the Latrobe City's most significant venues.

### **Background:**

In June 2021, the Traralgon Creek burst its banks flooding adjacent properties, farmland and the Traralgon Rec Reserve. At its peak the water was 1.5 metres deep, but as quick as it rose - it subsided and what was left behind was a thick layer of clay & silt which smothered the oval in its entirety.

The Traralgon Rec Reserve is one of the Latrobe City's major ovals, with a sand profile, full drainage system and a Santa Ana couch surface. Even after our clean-up efforts there was still a significant amount of clay & silt present on the oval, this had a massive impact on the ability of the oval to drain as it had previously and the priority



“ THIS WILL NO DOUBT PROVIDE A HUGE BOOST TO THE CRICKET CLUB DURING THIS DIFFICULT PERIOD AND ENABLE THEM TO FOCUS ON THE UPCOMING SEASON. ”

from there on was to ensure that we did nothing to contaminate the rootzone further, causing significant drainage issues in the future. There will also be the issue of the quantity of seedbank which was bought onto the oval from neighbouring farmland.

With the couch being dormant, the range of practices that could be carried out were next to zero but after some hunting around we were able to hire a Verti-Rake from Leongatha Golf Course which we used to flick up the material to encourage drying and then removing with a Harper-Vac. This at least enabled the local football club access to train on the oval.

**Steve Cole, General Manager, Lilydale Instant Lawn**

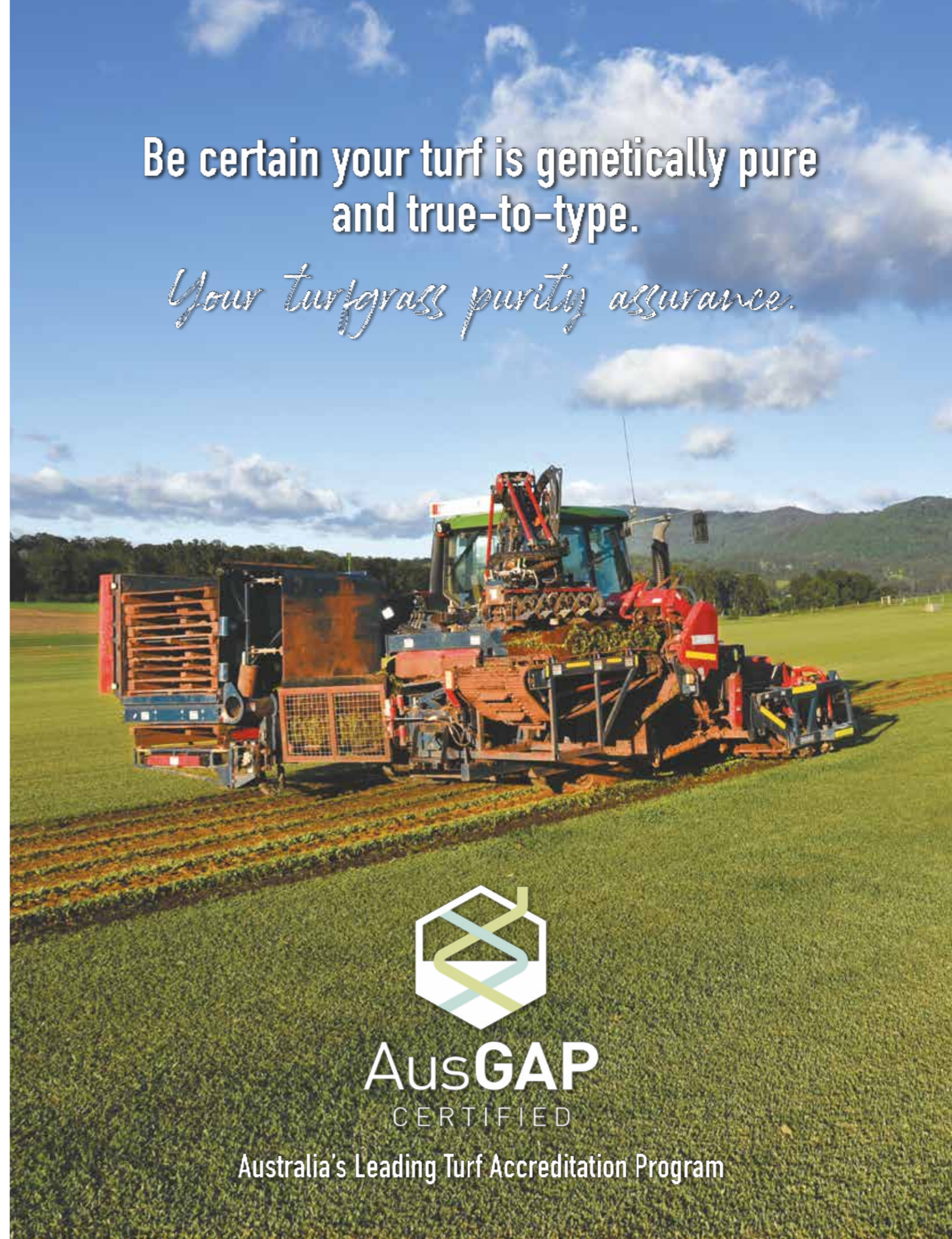
Lilydale Instant Lawn are heavily entrenched in the Gippsland region, with most of our turf production land now in East and West Gippsland. When the call came from STA Vic for assistance to help the Traralgon Ex Students Cricket Club, along with Latrobe council getting their oval back up and running after the floods, we were quick to jump on board.

The last couple of years have been tough on everyone, and the possibility of the club not having a wicket after all the disruptions to community sport would have been terrible.

Our donation of 450 square metres of TifTuf Hybrid Bermuda in washed maxi rolls, will not only replace the old wicket table, but will lift it up to be the new benchmark in Turf wickets in the region. We wish the club all the best for the coming season.

Be certain your turf is genetically pure and true-to-type.

*Your turfgrass purity assurance.*



**AusGAP**  
CERTIFIED

Australia's Leading Turf Accreditation Program

For further information visit [ausgap.com.au](http://ausgap.com.au) or call 1300 287 599

