

Turfgrass



VOLUME 18.3 MAY-JUN 2016

MANAGEMENT JOURNAL

Barwon Heads A slice of peninsula paradise

A Fuller life

From Sydney to the deserts of Sudan

In a hole?

The do's and don'ts of changing holes

Future leaders

Jacobsen's FTMI comes to Australia

32nd Australian Turfgrass Conference and Trade Exhibition
Melbourne, 20-23 June 2016
Conference Guide

Speakers
Workshops

RAIN BIRD syngenta TORO

Welcome to Melbourne 2016

Your guide to the 32nd Australian Turfgrass Conference and Trade Exhibition



0%*
P.A.
FINANCE

Now that's well under par.

OFFER
ENDS
31 JULY

Act now to lock in this great rate.

Now's the best time to add to your fleet with a great finance rate available on selected golf and commercial equipment. Other low-rate finance and leasing options also available. Hurry – this offer ends 31 July, 2016.

Contact your local John Deere dealer today or visit JohnDeere.com.au/golf.



JOHN DEERE
GOLF

*Conditions apply. Finance available through John Deere Financial Limited to approved commercial applicants only. Valid on selected golf and commercial equipment. Offer is based on 30% deposit, GST back and 36 month term. Fees and charges apply. If not amended or withdrawn earlier, the promotion expires on 31 July, 2016. Other terms and rates are available.

I wish to apply for:
One year's subscription to Australian Turfgrass Management
(Six editions per year)

PLEASE TICK BOX

ONE COPY PER EDITION

\$65.00

O/S ONE COPY PER EDITION

\$105.00

Prices include GST.



SUBSCRIBE NOW



ORDERS CAN BE MADE SECURELY ONLINE THROUGH www.agcsa.com.au

Name:

Company:

Postal Address:

Town/Suburb: State: Postcode:

I enclose cheque for (amount):

Please charge my credit card: MasterCard

Visa

Card Number: _____ Expiry Date: ____/____

Cardholder Name:

Address:

Signature:

Funds have been paid by electronic transfer to Westpac BSB 033 380 Acc 385360

Please send me more information about becoming an AGCSA member

**Forward to: Australian Turfgrass Management
 Suite 1, Monash Corporate Centre, 752 Blackburn Road
 Clayton, VIC 3168
 FAX: (03) 9548 8622**

Australian Turfgrass Management

Journal published by:

Australian Golf Course Superintendents' Association

ABN 96 053 205 888

Production:

Editor:

Brett Robinson Ph: (03) 9548 8600
 brett@agcsa.com.au

Art Direction & Design:

Jo Corne Ph: (03) 9548 8600
 jo@agcsa.com.au

Advertising:

Peter Frewin Ph: (03) 9548 8600
 peter@agcsa.com.au

Chief Executive Officer

Peter Frewin
 peter@agcsa.com.au
 Twitter: @AGCSACEO

Events and Education Manager

Simone Staples
 simone@agcsa.com.au

Membership Coordinator

Allison Jenkins
 admin@agcsa.com.au

Accounts

Philip Horsburgh
 philip@agcsa.com.au

AGCSATech

Andrew Peart
 andrew@agcsa.com.au



AGCSA

Suite 1, Monash Corporate Centre
 752 Blackburn Road, Clayton, VIC 3168
 P: (03) 9548 8600 F: (03) 9548 8622
 E: info@agcsa.com.au
 W: www.agcsa.com.au
 Twitter: @AGCSA2

Printed By

Southern Colour Pty Ltd
 2 Southpark Close
 Keysborough Vic
 3173

Copyright © 2016

The AGCSA believes that material sourced and produced for Australian Turfgrass Management is accurate, but gives no warranty in relation thereto, and disclaims liability for all claims against the AGCSA, its subsidiary companies, its employees, agents or any other person which may arise from any person acting on the materials contained within. No portion, in whole or part, may be reproduced without the written permission of the AGCSA.

AGCSA Board

President: Peter Lonergan
Directors: Darren Wilson
 Brett Balloch
 Stephen Lewis



COVER

Barwon Heads Golf Club: The par three 13th at Barwon Heads Golf Club on Victoria's Bellarine Peninsula. **Photo:** Barwon Heads Golf Club/Gary Lisbon www.golfphotos.com.au.



PHOTO: GARY LISBON WWW.GOLFPHOTOS.COM.AU

LEAD STORY: Peninsula paradise - Barwon Heads Golf Club

6

Barwon Heads Golf Club holds a unique place in the Australian golfing landscape and over many years has rightly been ranked among the best courses in Australia both for its layout and course presentation. Set to play host to the 2016 Toro AGCSA Golf Championships, Barwon Heads is home to course superintendent Adam Lamb who in his seven years on the links has overseen a raft of course improvement works. Nearing completion of a full greens reconstruction programme, along with bunker refurbishment and clearing of vegetation to enhance the site's wonderful topography, it has been a productive tenure for Lamb who is looking forward to showcasing the course to his superintendent colleagues in June.

FEATURES

A Fuller life

16

Kym Fuller has never been afraid to step outside his comfort zone during a long and rewarding career as an ex-pat course superintendent. Having worked in far flung places like South and North Korea, India, China and Mauritius, Fuller now finds himself working at the only golf course in Sudan. Here he looks back on his career and some of the valuable lessons learned about turf management and life in general.



Holing out

22

Changing holes at a golf facility is the most critical job completed on a regular basis and has significant impact on golfer satisfaction, pace of play and how a course plays. USGA agronomist Larry Gilhuly presents six simple recommendations to ensure there is less chance of upsetting players and less negative discussion come the 19th hole.

Making good CAKES

28

Managing staff is one of the most critical skills a turf manager can possess. HR management guru David Bancroft-Turner, who returns as a keynote presenter at the 2016 Australian Turfgrass Conference in Melbourne, looks at a simple yet effective model turf managers can employ.



Approach with care

32

Approaches are an often overlooked part of the golf course but play a critical role in the game and ultimately its enjoyment. USGA agronomist Larry Gilhuly looks at some steps to achieving firm and consistent approaches.

Looking to the future

52

The inaugural AGCSA Future Turf Managers' Initiative, presented in partnership with Jacobsen, will be held during the 32nd Australian Turfgrass Conference in Melbourne, comprising an intensive two days of seminars, talks and workshops. ATM profiles the 13 successful applicants who form part of the programme's first intake.



TIME FOR SOIL TESTING!
Let us provide you with a **truly independent** soil report

Send samples to **AGCSATech**
Analytical, Diagnostic and Consultancy Services

Ph. 03 9548 8600
Fax. 03 9548 8622
Email. andrew@agcsa.com.au

Suite 1, Monash Corporate Centre
752 Blackburn Road
Clayton 3168 Vic



GRASS-ROOTS WITH JOHN NEYLAN
Tip top greens 36

Greens construction is a major undertaking for any golf club and it comes with enormous expectation. As ATM columnist John Neylan writes it all comes down to thorough planning, understanding the local environment, understanding the objectives for building the green and doing your homework on soils and construction.



CONFERENCE GUIDE
Welcome to Melbourne 2016 41

The Australian Turfgrass Conference returns to the AGCSA's home town of Melbourne in 2016 but this year things are set to be a little different. To be held solely within the confines of the Crown Entertainment Complex, all is in readiness for a great week and ATM will again be your official conference guide in tandem with the AGCSA smartphone app.

RESEARCH

Do amendments reduce water use? 58

University of Western Australia researchers Pieter Poot and Gausul Azam report on the second year of their Horticulture Innovation Australia funded project on amending sandy soils to retain irrigation water and reduce turfgrass water use.

Also in this edition...

Foreword Thinking	4
Projects – Lakelands Golf Club, Qld	62
Regional Profile – Bundaberg GC, Qld	64
Around the Trade	70
Association Reports	76



Contributors to Australian Turfgrass Management Journal
Volume 18.3 (May-June 2016)

Gausul Azam (University of WA); David Bancroft-Turner (Matrix Training & Coaching); Peter Frewin (AGCSA); Kym Fuller (Fenti GC, Sudan); Larry Gillhuly (USGA); Stuart Gill (NSWGCSA); Neil Graham (GCSAWA); Tony Guy (STA Australia/STA WA); Scott Harris (STA ACT); Mark Johnson (TGCSA); Adam Lamb (Barwon Heads GC); Gary Lisbon (www.golfphotos.com.au); Peter Lonergan (AGCSA); Paul Mogford (Crafter + Mogford Golf Strategies); John Neylan (Turfgrass Consulting and Research); Pieter Poot (University of WA); Mat Poultney (VGCSA); Matt Roche (ASTC); Kellie Rose (STANZ); Phil Soegaard (Lakelands GC); Richard Stephens (Turf Australia); Sean Stuchbery (Bundaberg GC); Ben Tilley (GCSAQ); Garry Woolard (STA Vic).

Being heard

The Australian Turfgrass Conference is nearly upon us and once again the industry will gather in Melbourne to share ideas, discuss current issues, pray for some good grace from Mother Nature for the coming 12 months and solve the world's turf problems into the early hours of the morning. As I have often said it is a cathartic experience to simply chat to your colleagues and it's this aspect that truly makes the annual conference such an important and unmissable event.

We all know how challenging the role of course superintendent has become but communicating that to those outside our immediate profession often falls on deaf ears. It was therefore refreshing to see the comments of NSWGCSA president and Terrey Hills Golf and Country Club superintendent Stuart Gill get some good exposure following his recent address at a Golf Management Australia NSW Open Forum at Ryde-Parramatta Golf Club.

In front of a gathering of golf club general managers and superintendents, Gill eloquently summed up the challenging nature of the profession, saying that the role can be "all-consuming, managing a perishable product that is controlled by an uncontrollable force". Gill cited a raft of issues currently facing him and his fellow superintendents and how for many the stresses of the job were becoming too great.

Gill raised issues surrounding the dearth of new blood coming through the industry (largely due to poor pay rates below the level of superintendent), the increasing pressures of maintaining turf in changing climatic conditions, budgetary pressures and many clubs' fervent pursuit of ridding their greens of the ubiquitous *Poa annua*. Not only were these difficult enough to contend with, they were exacerbated by the unrealistic expectations that members, golfers and committees often have and it was therefore no surprise that some superintendents were at a significant crossroads in their career.

Gill went on to stress the importance of a strong working relationship between general manager and superintendent and that an onus is placed on effective communication between both parties: "If this relationship is strong and honest and you are able to freely communicate your feelings and concerns, then life will be so much easier," Gill espoused. "It's also really important that the general manager is there to protect the superintendent from golfers and in some cases the committee. We all know you can't please every single member all the time [but there are instances when a superintendent] needs the GM to deflect criticism."

Of equal importance was the superintendent's approach to the relationship: "If there is something going on with disease on the greens, then inform everyone so they know. If you try to hide everything they will jump to the conclusion that you haven't even noticed what's going on and you have no idea. But if you have said this is what has happened, this is why it happened and this is what we are doing about it, you will be held in much higher regard. And not only that, you will feel a lot better that everyone knows about it and you are not trying to cover it up before anyone finds out." You can read further excerpts of Gill's address through the GMA NSW website (www.gmansw.org.au) and no doubt many of the aspects he highlighted will be at the forefront of conversations in Melbourne.

In this 'conference edition', we take a look inside Adam Lamb's operations at Barwon Heads Golf Club, which hosts the 2016 Toro AGCSA Golf Championships, and profile the 13 successful applicants for the inaugural AGCSA Future Turf Managers' Initiative presented in partnership with Jacobsen. I look forward to seeing you all in Melbourne. Enjoy the read...



Brett Robinson, Editor



LOOKING FOR GREENKEEPING STAFF?

Advertise on the AGCSA website - the Australian turf industry's **LEADING** online job resource
Post your job online now at www.agcsa.com.au or email admin@agcsa.com.au

Conference set to be a ‘Crown’-ing week for industry



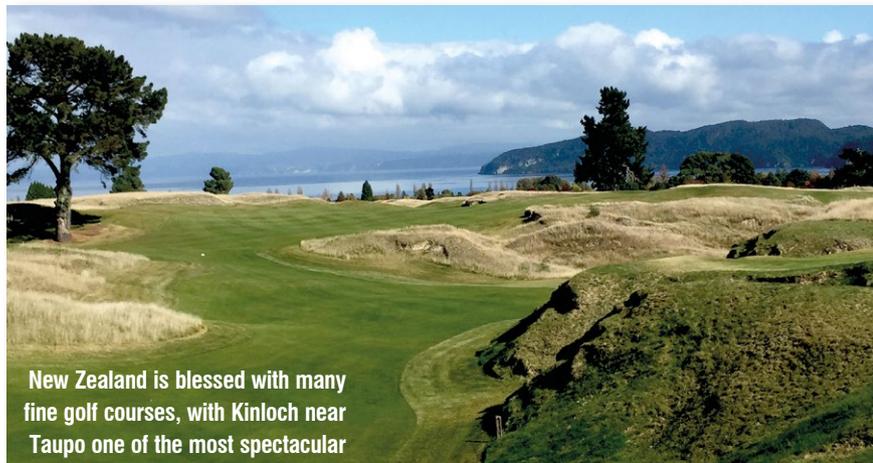
The past few weeks have been extremely busy as we put the final touches on what is the highlight of the annual calendar for those involved in the turf industry. The 32nd Australian Turfgrass Conference and Trade Exhibition is now only weeks away and while most things are in place, there are a few items still to prepare to ensure all who attend have a great experience. After being held for many years at ‘Jeff’s Shed’, this year the conference will be wholly staged ‘across the road’ at the Crown Entertainment Complex. With both the education and trade exhibition components literally a room away from each other it should make for a fantastic venue.

Every conference is a big one for the AGCSA but this year’s takes on greater significance as it also marks the 25th anniversary of the association in its current structure. Although originally established in 1981 to further the profession of golf course management in Australia and the Pacific Rim, it wasn’t until 1991 that the AGCSA began to represent the industry in its current form.

This year’s event will not only feature the usual high quality education and social events but also see the inaugural AGCSA Future Turf Manager’s Initiative (FTMI) presented by AGCSA Gold Partner Jacobsen. This event is staged across many countries and is a great opportunity for those looking to take the next step in their careers. The FTMI includes a mentoring programme and training in areas like CV writing, communication and managing staff which are skills that are often not a high priority for those starting out in the industry. In 2016, 13 lucky candidates have been selected to take part and in this edition we profile the first intake in what we hope will become a long-running feature of every conference.

The 32nd Australian Turfgrass Conference and Trade Exhibition also sees the return of the popular AGCSA phone app. The app is a great tool for those attending the event and it’s also a great resource for those not attending as it contains a great deal of information from speakers and our trade partners. The app is free through the Apple or Android stores.

The trade exhibition will also feature the ‘Hear from the Trade’ education sessions which are free of charge. Aside from presentations by our major sponsors Hybrid Ag, Jacobsen, Nuturf, Rain Bird, Syngenta and Toro, there will also be presentations by Ohio State University (The Ohio Program) and Danger Sun Overhead.



New Zealand is blessed with many fine golf courses, with Kinloch near Taupo one of the most spectacular

RTO DECISION DEFERRED

For those that read this column, you would be aware the AGCSA has been looking at the possibility of becoming involved in the training sector by way of working with a current RTO. In recent times there has been significant change with Skills Impact recently taking over from Agrifoods as the skills provider for our sector.



Turf Drain
Australia

The leaders in sports field drainage & sports field construction using the latest machinery & technology.

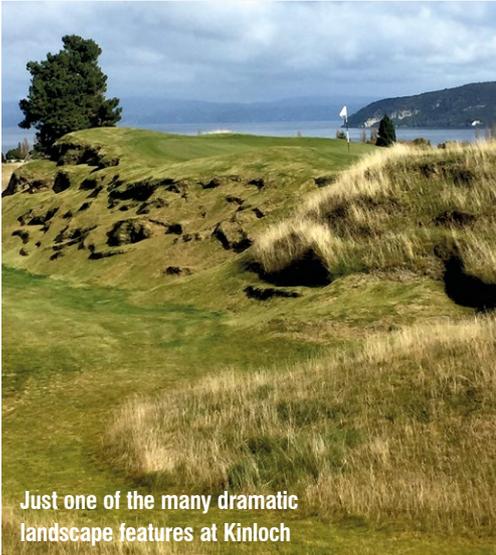
Staff with over 60 years combined golf course and sports field drainage, sports field construction & horticultural experience. Choose the specialists – 100% of our projects are either the drainage or construction of sports grass surfaces.

Our Services include:

- Slit drainage • Laser controlled trenching • Sand grooving • Turf wicket construction to international level
- Sports field design & construction • Bowling green construction • GPS guided and two-way laser controlled grading

Proven methods. Proven results.

PO Box 112, Mt Kuring-gai, NSW 2080 | Phone: (02) 8117 8100 Fax: (02) 8117 8101 | Email: info@turfdrain.com.au www.turfdrain.com.au



Just one of the many dramatic landscape features at Kinloch

With Skills Impact being an industry based group, the AGCSA believes this should provide industry with improved input into what training is being offered in the sector. Greater industry involvement was the catalyst for the AGCSA considering this direction. While it may take some time for Skills Impact to gain traction, the communication we have had with them seems positive and we look forward to seeing what they can offer the sector.

Given the 'goal posts' have significantly changed and with the looming Federal Election, the AGCSA Board has deferred any decision regarding direct AGCSA involvement in the training sector until the end of 2017. Ongoing, quality education is one of the AGCSA's main concerns so the issue will remain a high priority as indicated in the recent Strategic Plan Review.

NEW ZEALAND 2018?

I recently had the opportunity to travel to New Zealand with the AGCSA Board during which time we met with the NZGCSA Board. The trip provided a great opportunity to discuss collaborative initiatives, in particular the possible joining of our respective conferences in 2018. Wellington will be the preferred destination as the city is perfectly placed to host the event having great facilities.

As with any proposal like this feedback from all members is vital and I would encourage discussion and welcome feedback on the possibility of taking the annual event to New Zealand. Given we share speakers and many of our corporate partners currently participate in back-to-back events, it would seem a great opportunity to offer improved value to all those that participate.

While across the 'Ditch' we also had the opportunity to visit a couple of world class golf courses in Kinloch and Cape Kidnappers. If you have a golf destination 'bucket list' and these courses are not on it, then change your list immediately!

If you are heading to Melbourne for the 32nd Australian Turfgrass Conference and Trade Exhibition I look forward to seeing you there. 🍷

PROUDLY AUSTRALIAN PROUDLY INDEPENDENT



“The Australian turf industry’s leading provider of agronomic services.”

- **CONSTRUCTION SPECIFICATIONS**
- **EXPERT AGRONOMIC ADVICE**
- **SOIL, PLANT AND WATER ANALYSIS. DISEASE DIAGNOSIS**
- **ENVIRONMENTAL AND WATER MANAGEMENT PLANS**

“All funds generated through AGCSATech services are re-invested for the benefit of the Australian turf industry”

**CONTACT AGCSATECH
SENIOR AGRONOMIST
ANDREW PEART
andrew@agcsa.com.au
(03) 9548 8600 0422 418 038**



Mark Maclure knows a thing or two about the importance of a strong team culture. As centre half-forward in Carlton's VFL premiership winning teams of 1979, 1981 and 1982, 'Sellers' was part of a playing group that is now etched in Blues folklore. With the likes of Peter Jones, Wayne Johnston, Jim Buckley, Peter Bosustow, Val Perovic and Bruce Doull wearing the Navy blue alongside him, it was an eclectic mix of big personalities and freakish football abilities, but together as a team they crafted a winning culture and an enviable era of dominance in Australian Rules football.

Guest speaker at the 89th VGCSA Annual General Meeting at Yarra Yarra Golf Club in early May, Maclure waxed lyrical about those halcyon days and lamented some of the 'subtle' differences between the cultures of playing groups then and now. The 243-gamer went on to stress the importance of developing and promoting a strong team culture, something that was borne out of hard

work, honesty and respect, and that no matter how good the cattle were, if a poor team culture existed then precious little could be achieved.

For one superintendent sitting in the room that day, Maclure's words could not have resonated any more. It was half a lifetime ago when an 18-year-old Adam Lamb, hailing from the tiny Victorian township of Tarrawingee outside of Wangaratta, walked through the maintenance facility gates at Metropolitan Golf Club in Melbourne to start his apprenticeship. It was the end of 1998 and while his Year 12 mates were off living it up during Schoolies Week, Lamb was literally on his hands and knees ripping up turf under the watchful eye of eminent superintendent Richard Forsyth.

It was a bit of rude awakening, but it didn't take Lamb long to appreciate he had walked into the right place. As has become well recognised within the turf management industry, that period at Metropolitan was akin to a superintendent 'finishing school', with Forsyth fostering a unique culture that



Nearing the completion of a full greens reconstruction programme, along with bunker refurbishment and clearing of vegetation, Adam Lamb's tenure at Barwon Heads has been busy. Pictured is the par three 4th

WORDS: BRETT ROBINSON PHOTOS: GARY LISBON WWW.GOLFPHOTOS.COM.AU

would ultimately produce some of today's leading superintendents.

Lamb joined a crew that included aspiring turf managers Leigh Yanner (now superintendent at The National), David Mason (now superintendent at Metropolitan), Nathan Bennett (now superintendent at Royal Adelaide) and Danny Brown (now superintendent Danang, Vietnam). With such a strong group to work alongside combined with the expertise of Forsyth who had developed a reputation for providing some of the finest turf surfaces in Australia, Lamb was like a sponge.

Once his apprenticeship had finished he was quickly elevated to foreman and when Mason left to take on the superintendent role at Warrnambool Golf Club, Lamb was elevated to assistant superintendent where he would spend his final five years at Metropolitan. It was a relatively quick, but thoroughly deserved, rise through the ranks and looking back on his time there Lamb could not have asked for a better initiation to managing turf at the highest level.

"It (Metropolitan) had an incredible culture when I started," reflects Lamb, now 36. "It was all about hard work. You had guys like Leigh Yanner, Nathan Bennett and Dave Mason who were the senior guys at that stage and a few others on the groundstaff who were leading the way at the time too. It was a very strong top end and just a great club to start your career in.

"If you stepped out of line you were pulled back in pretty quick. The days were long and the work was hard, but it suited me perfectly. I loved working with those guys and when they moved on I was able to make the step up. When I look back and think about how quickly my career progressed it's quite amazing.

"Richard was a leader in every way. It was all about work ethic and the structures he had in place both on and off the course. He would promote internally and reward those staff who put in the hard yards over the duration of their career. He threw you in at the deep end and challenged you. As an assistant superintendent he drummed into me the



Barwon Heads Golf Club course superintendent Adam Lamb

Peninsula paradise

Barwon Heads Golf Club holds a unique place in the Australian golfing landscape and over many years has been ranked among the best courses in Australia both for its layout and course presentation. Set to play host to the 2016 Toro AGCSA Golf Championships, Barwon Heads is home to superintendent Adam Lamb who over the past seven years has overseen a raft of course improvement works.



With holes like the magnificent par three 13th, it's no wonder Barwon Heads ranks among the best courses in Australia

importance of setting an example as a leader out on the course, being honest with people and treating the staff with respect. Then of course there was the turf management side of things. Being able to learn and watch the way he was able to establish and maintain his turf to such a high level was fantastic. I certainly look back on my time as an assistant at Metropolitan with great fondness and while I did appreciate it then, I probably appreciate it even more now."

AT THE HELM

With his skills finely honed, after 10-and-a-half years at Metropolitan the time had come for Lamb to take the next step in his turf management career. Having applied unsuccessfully for a few superintendent positions, the Barwon Heads Golf Club role became available following the departure of Peter Frewin who resigned after 21 years in charge.

Just 28 at the time, Lamb had never seen the course and prior to his interview journeyed down to the Bellarine Peninsula on Good Friday and walked the course to get a feel for the place. As with many who step onto the course for the first time, Lamb was entranced by its many intricacies – the subtle

yet perfect topography, the course's proximity to the rugged coastline, the grandeur of the clubhouse and, of course, the immaculate *Poa annua* greens. Having spent his entire career schooled in the art of trying to eliminate *Poa*, here was a facility where it was nurtured and embraced and in turn it provided some of the truest (and quickest) surfaces in the state.

Beating a very strong field of candidates, Lamb was duly appointed and started at Barwon Heads in May 2009. Given 12 months to settle into his first superintendent posting, it was in 2010 when the hard work really began. Although Lamb wasn't aware of it at the time of applying for the job, during Frewin's time as superintendent the club had commissioned Crafter + Mogford Golf Strategies to undertake a Course Development Plan (CDP). Although completed in June 2004, the club sat on it for a number of years, but shortly after Lamb's arrival it was approved, paving the way for a period of unprecedented course works.

The CDP had three key platforms – to restore the links character of the course by removing existing vegetation and opening the course up; to develop a coherent and consistent bunkering style; and enhance the strategic elements of each hole.

The works teed off in September 2010 with the 18th hole first to be targeted. This included re-contouring sections of the green, resurfacing and reshaping the surrounds as well as construction of a left-hand side fairway bunker. At that time, the scope of the CDP didn't include greens reconstruction, but rather than just tweak sections of the 18th green, as recommended by the architects, Lamb took the opportunity to lift the whole green, rework the profile

The sweeping terrain of the opening six holes is a real feature of the Barwon Heads layout. Pictured is the 6th



CONTINUED ON PAGE 11

Why fear the winter.

Keep your grass in perfect condition with SeaMax.



SeaMax

ICL offers a wide range of turf and landscape fertilizers delivering outstanding results. Turf managers across the globe trust our cutting edge technologies to provide high quality nutrition for optimum health, performance, resilience and visual appearance. Using premium high density Atlantic *Ascophyllum nodosum*, SeaMax contains 75% active seaweed content to enhance turf quality, colour and root growth. SeaMax also has TMax technology that is designed to improve overall nutrient uptake by the plant, both through the roots and leaves. 100% water soluble. Ideal to tank mix* with wetting agents and plant nutrients.

*Do not mix SeaMax with any pure Iron products.

Visit www.icl-sf.com.au for more details or contact your regional ICL manager

AU 1800 789 338 NZ 0274908 438.

ICL
Where needs take us

Fernland Agencies

globe
GROWING SOLUTIONS
WA only

K&B
ADAMS PTY LTD



Tas Turf Solutions



SMALL BUT PERFECTLY FORMED – BARWON HEADS' PAR THREE COURSE



Purposely 'bunkerless' to maintain ease of play, much attention was given to the use of contour hazards

One of the unique features of Barwon Heads Golf Club is the adjoining par three course which has contributed just as much to the soul of the club as its championship sibling. First laid out by long-standing member Legh Winsler in 1961, the par three course received a significant makeover under the auspices of Crafter + Mogford Golf Strategies in 2008.

The par three course has been a favourite of many members, bringing together young and old and providing a relaxed environment for those new to the game. Unencumbered by the grandeur of the main course, players on the par three course are free to discover the joys of golf as well as learn etiquette and the subtleties of links play.

The catalyst for the redesign was the creation of a flood detention basin providing a much needed additional irrigation source for the club. Golf Strategies' greatest challenge was to create holes that would essentially disguise the construction of the basin wall and the basin itself. Three holes fall within its clutches, with holes 2 and 3 being built across the top of the wall and hole 7 along

its northern bank. The balance of the holes were re-routed as a consequence, and allowed for the course to expand its footprint into unused land to the north. A wetland serves as the centrepiece while providing a hazard to play on the 2nd and 3rd holes.

Great care was taken to minimise the disruption of the remaining natural contours. The northern 'Murt' holes (4, 5 and 6) adjacent to Murtnaghurt Swamp were inserted into the landscape rather than imposed. Shaping was limited to the greens and their surrounds. Purposely 'bunkerless' to maintain ease of play, much attention was given to the use of contour hazards on the course, relying on the golfing interest born out of the intricate and sometimes devious unearthed terrain that Golf Strategies subtly enhanced.

Holes vary in length from 70m to 130m and the greens range in size between 250m² and 320m². Couchgrass fairways and greens ensure minimum inputs are required to maintain the course. The Wintergreen couch on the greens gives slower putting speeds than bentgrass, giving the freedom to accentuate green undulations.

The 4th hole rates as one of the signature holes of the par three course, with a tee nestled among Moonah trees. The green sweeps across the slope and features a sneaky bold depression immediately short of the green gathering many a ball. The 7th required a creative touch, building an attractive green in an area with few natural cues.

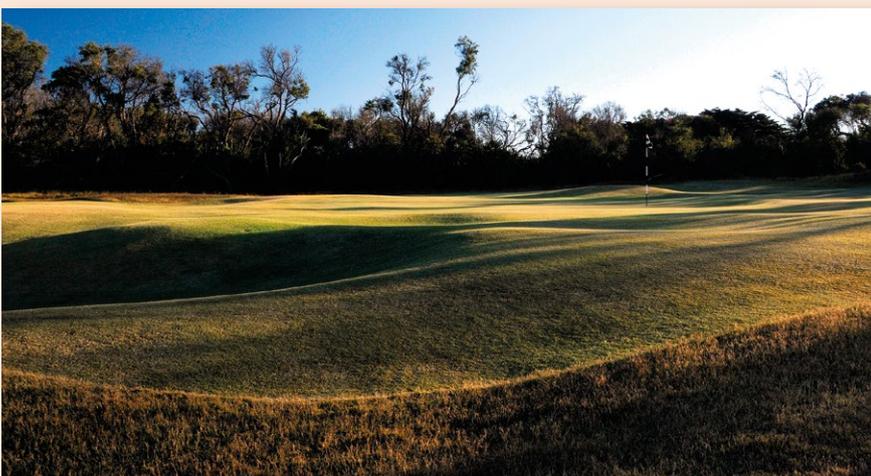
The 8th is Golf Strategies' homage to Lahinch's famous 'Dell' hole and is high among every golfer's favourite holes. The 9th utilises a bold foreground ridge to deceive depth perception to a wickedly undulating green, where a two putt is considered a good result. With a round completed in an hour, the par three course is a refreshing layout and enjoyable time and time again.

- Paul Mogford



The catalyst for the redesign of the Barwon Heads par three course was the creation of a flood detention basin

Couchgrass fairways and greens ensure minimum inputs are required to maintain the course



down to almost half a metre, re-contour the surface then re-lay the existing *Poa annua* turf.

That process flowed onto a couple more holes after which time it was decided to review the CDP and expand it to include the reconstruction works to the greens and surrounds. The updated CDP would see two greens taken out of play each year (during September-October), changes made to the contours to allow for more pin positions (on some greens only a quarter of the surface was pinnable) as well as the installation of a bentgrass collar to help with definition of the greens surface. Initially using A1 and then Mackenzie for the collars, Pure Distinction is now the preferred variety.

A key part of the new works was reworking the profile of each green. Once the *Poa* surface was sod cut, removed and stored on plastic, the existing heavy soils were removed down to the native sand layer. That layer was then blended and 400mm of a fresh construction sand brought in and placed over the top. Surface contour changes were then made and the existing turf re-laid.

At the same time as the greens were being worked on, the surrounds also underwent a significant makeover. Kikuyu encroachment had been an increasing issue, so to remedy that the surrounds were sprayed out with Round-up and the top 150mm excavated to get rid of any residual



kikuyu. Santa Ana couchgrass oversown with fescue was then put down.

To this point, greens 8-18 have now been completed with the biggest changes coming to the 11th and 14th greens. The 11th, which is quite exposed and quickly became unplayable if windy, was softened, with the back part of the green brought down by about 800mm. As a result the area for hole locations has significantly increased.

Similarly, the 14th green was built up rather than down. A troublesome green over the years, it is the only one on course to have a gravel drainage layer because of its close proximity to the nearby Murtnaghurt wetlands. The gravel layer

As part of the greens reconstruction programme, two greens are taken out of play at a time, the existing surface lifted and placed on plastic and then the contours and profile reworked

CONTINUED ON PAGE 13

GrowthPack[®]

AZOPRO[™] TURF

Soil Microbial Inoculum

- Naturally occurring soil bacteria
- Promotes root elongation
- Encourages the development of lateral roots, root hairs and root hair branching
- Fixes atmospheric nitrogen (N₂) and may make it available to the plant

www.simplotpartners.com.au



The Barwon Heads short game chipping and putting practice facility



Just shy of one hectare in total area, the facility is one of the largest in Australia

PRACTICE MAKES PERFECT

Along with the ongoing improvement works to greens and bunkers, one of the major projects undertaken at Barwon Heads in recent times was the 2010-2011 development of the club's short game practice facility. Course superintendent Adam Lamb and Crafter + Mogford Golf Strategies were responsible for the transformation of the practice facilities, tennis court precinct and car parking at the club.

The genesis of the project was conceived by former Barwon Heads superintendent Peter Frewin who together with Paul Mogford prepared a long-term plan for the redevelopment of the tennis court and car park area which badly needed attention. Along with rationalising the number of tennis courts and increasing car parking capacity, another goal was to create a sizable area to be dedicated to the creation of Australia's best and largest short game chipping and putting practice facility.

By way of preparation a review was undertaken of Victoria and Sydney's best clubs boasting similar facilities to better understand the elements which would combine to make up a successful facility. Armed with this first-hand knowledge the brief for the Barwon Heads facility was refined and the following features recommended;

- Proximity to practice fairway and other facilities such as the par three course;
- Maximise retention of natural contours of the precinct;
- Provision of a variety of shot making experiences of varying length;
- Greenside bunker(s) to closely mimic course conditions, including a long sand bunker to play to green (i.e.: 10m-20m);
- Large green with distinct sections to allow multiple users of facility. Green area approx. 1500m² minimum;
- Fairway bunker (orientated to practice fairway);
- 'Broken ground' incorporated into rough, as found on the championship course;
- Grassy hollows - both tightly mown and at rough cut height;

- Areas of variable and sloping lie, including a 'Valley of Sin' with tightly mown surface.
- Provision of an attractive marshalling area;
- Plentiful yardage markers and signage.

Just shy of one hectare in total area, the facility is one of the largest in Australia and offers all manner of shot variety to be found out on the 18-hole championship course. While there are two greens separated but linked via fairway 'pathways' by a large 'broken' dune, there are importantly three main areas of green to play too.

The small green (about 450m²) was initially grassed with Manor browntop bentgrass and the large two-tired green (1200m²) seeded with Mackenzie creeping bentgrass. Since then three quarters of the smaller green has been converted to Arrowtown, while 12 months ago the large green was reseeded with Pure Distinction. Fairways were solid turfed with Santa Ana and the tee Wintergreen. Bunker faces were seeded with a fescue mix.

While the area was constructed with site sands including spoils from the excavation of the redeveloped practice tee and car park, the green profile has a 400mm layer of medium/fine construction sand. The roughs were seeded with a mix of chewings, sheeps and hard fescue as well as some native bentgrass. Indigenous plantings include Moonah trees (*Melaleuca lanceolata*), knobby club-rush (*Ficinia nodosa*), coast sword-sedge (*Lepidosperma gladiatum*), coast spear-grass (*Austrostipa flavescens*) and coast tussock-grass (*Poa poiformis*).

With construction taking around eight weeks, local shaper Steve Speechley cut around 2023m³ and filled 2180m² with a net fill requirement of 157m² in order to sculpt the end product. Along with the invaluable contribution made by Speechley to bring the project to life, much kudos was given to the club's ground staff who worked tirelessly to install the irrigation system, grassing and the hundred and one small tasks which combine to bring about a successful outcome.

– Paul Mogford and Adam Lamb

The large two-tired green was seeded with Mackenzie bentgrass and the fairway solid turfed with Santa Ana couchgrass



CONTINUED FROM PAGE 11

and the profile layer were retained, with the fresh construction sand (as used on the other greens) brought in and effectively placed on top of what was already there to build the green up.

“Overall the greens works have gone extremely well,” explains Lamb, who will tackle greens 2 and 5 this coming spring. “The end results to date are excellent – far superior surfaces which are firmer, quicker and much easier to manage.

“In addition to these works we are also trying to increase the bentgrass population in the greens during renovations. When we built the new short game facility in 2010, we seeded the two greens with bentgrass; the smaller one with Manor browntop and the larger one with Mackenzie creeping bentgrass. Since then we have replaced the Mackenzie with Pure Distinction and have converted three quarters of the smaller green to Arrowtown browntop.

“At this stage the club has no plans to change the *Poa* surfaces on the championship course, but at the moment every time we renovate – a hollow core in March and scarify in September – we are incorporating a mix of bentgrass seed (creeping and browntop) into the sand.

“We’ve been doing this now for two years after initially trialling it on two greens – the 2nd and 10th – about five years ago. Those greens were chosen as the *Poa* was more susceptible to disease than other



greens. The aim was to try and strengthen the turf surfaces through the summer by giving the *Poa* a bit of support, so that if it did thin out or get attacked by disease the bentgrass would be there to fill in the voids. We started to see some good development of the bentgrass, most notably through summer, so we decided to roll it out across all the greens. It’s a long-term plan, probably 10 years, but we are hoping to get the greens to a 50/50 mix of *Poa* and bent.

“If, in the future, the club decides to change the variety on the greens, the bentgrasses we currently have on both chipping greens (Arrowtown and Pure Distinction) would provide two extremely good options, but for very different reasons.”

The 5th (above) and 2nd greens will be reconstructed this spring. Once completed, only minor modifications will remain to be completed on holes 1, 3 and 6

KEEP IT SIMPLE!
Some people would have you believe that fertility management has to be a highly complex process

Mauritius - Seashore Paspalum

Long Paddock - Sportsturf Range

Promoting Biological and Environmental Outcomes

Long Paddock’s unique European Carp based Organic fertilisers allow Turf Managers the opportunity to reduce unnecessary fertiliser stock by getting back to the basics; and let Mother Nature provide simplistic, sustainable, consistent turfgrass performance.

Rich in Organic Carbon, Omega Oils, Macro & Micro Nutrients, Proteins, Minerals, Hormones and Amino Acid; Long Paddock – Sportsturf Range will simplify fertility programing, saving you time and labour but most importantly make fertilising a simple task again.

More and more Sportsturf Professionals are discovering the Sustainable Simplicity of Long Paddock Organic Fertilisers.



Organic Fertilisers
Made from whole European Carp



KEEPING IT SIMPLE – NATURALLY

Contact: Phil Knight - Director
Long Paddock Organic Solutions Pty Ltd
PO Box 278 Guyra NSW 2365 Ph. 0408 533 090
pknight@longpaddock.net
www.longpaddock.net

Distributing agent for Charlie Carp Limited
Manufactured by Charlie Carp from European Carp



A significant component of the ongoing improvement works has been to clear the landscape of tea-tree to enhance the site's subtle topography and showcase the native vegetation. Pictured is the 11th



REDISCOVERING THE LINKS LOOK

Harking back to the original scope of the CDP, reinstating the true links characteristics of the Barwon Heads layout has been a central thread to all of the works. As Crafter + Mogford outlined in the CDP, over time "tea-tree had consumed the surrounding landscape, effectively hemming in many of the hole corridors, eroding the very essence of an open links aesthetic." On a few holes, 11 in particular, the tea-tree encroached on the line of play.

Despite some challenges obtaining permits to remove the tea-tree, in the areas where Lamb and his crew have been able to remove these stands it has made a dramatic difference. Not only has it opened up the landscape, it has also exposed some wonderful natural contours, sandy wastes and areas of limestone that have enhanced the course's natural links feel.

It has also enabled the existing delicate native flora, which before had been choked out by the tea-tree, to flourish. Stands of Moonah trees have been exposed, while wallaby grasses, stipas, sedges and rushes are now prevalent across the course. Lamb's two part-time vegetation management staff are now collecting seed from these new found areas and growing on stock for future course plantings.

Course bunkering, another central plank of the CDP, has also been a major focus. Over the years a number of differing bunker styles had evolved across the course and as Crafter + Mogford highlighted in the CDP, one of their "most pressing tasks" was to "identify the essential elements of the existing bunkering perceived as the most appropriate for the course and distil these elements to form a model for the new and remodelled bunkering."

To this end many bunkers, both fairway and greenside, have been constructed or reconstructed

in such a way that they won't be a maintenance headache for Lamb and his full-time staff of 10 in the future. The bunkers have deliberately been left small and deep and cut down into the ground rather than built up. Grassy fescue lips, instead of a hard manicured defined edge, complete the links feel the bunkers now boast.

With the back of the CDP works broken, Lamb estimates another 2-3 years to go before this chapter in the club's history is closed. As well as works to the 2nd and 5th greens, this spring will see the fairway bunkers on holes 12 and 14 redeveloped and constructed along with significant vegetation removal on the left-hand side of both holes. Once those works are finished it means that holes 7-18 will have been completed, with only minor modifications to holes 1, 3 and 6 earmarked in the coming years.

HEADS UP

All the above course changes will be on display for Lamb's superintendent counterparts when they travel to the Bellarine to contest the 2016 Toro AGCSA Golf Championship on 19 June. It is the first time that Barwon Heads has hosted the event and will do so in tandem with 13th Beach (superintendent Steve Hewitt). Lamb is looking forward to hosting the event and hopes all those teeing up will appreciate the uniqueness of the Barwon Heads layout.

"It's a fun course, not heavily guarded by rough or bunkers and isn't overly long. It's just a very enjoyable course to play," sums up Lamb. "How it plays will depend on the conditions. If it's blowing, brace yourself; if it's a benign day then a course record could be on the cards for the lower markers. Knowing what we produce week in week out for the members, they should expect the greens to be pretty slick which is always the goal here. Peter (Frewin) certainly established that during his time here and when he told me to 'hold back' on them for the championships he did so with a rather wry smile on his face.

"We will be aiming to have the course looking as good as we can – we certainly won't be able to hide anything from all those professionally trained eyes – and are very much looking forward to the day. For those who haven't seen the course before, they'll get a good appreciation of what a links style course is, while those who have played before will be able to see the works that we have done to reinstate that true links feel." 🍷



Barwon Heads plays host to the Toro AGCSA Golf Championship for the first time this June



The industry standard

MONUMENT LIQUID Turf Herbicide is highly effective in controlling tough weeds like Winter Grass, Ryegrass, Nutgrass and broad leaf weeds like Clover and Burr Medic. Used correctly, this will be the only SU herbicide you need. It is important that MONUMENT is applied correctly.

Check out the usage tips flyer on www.greencast.com.au or by using the QR code below.

 **Monument[®] Liquid**
Turf Herbicide

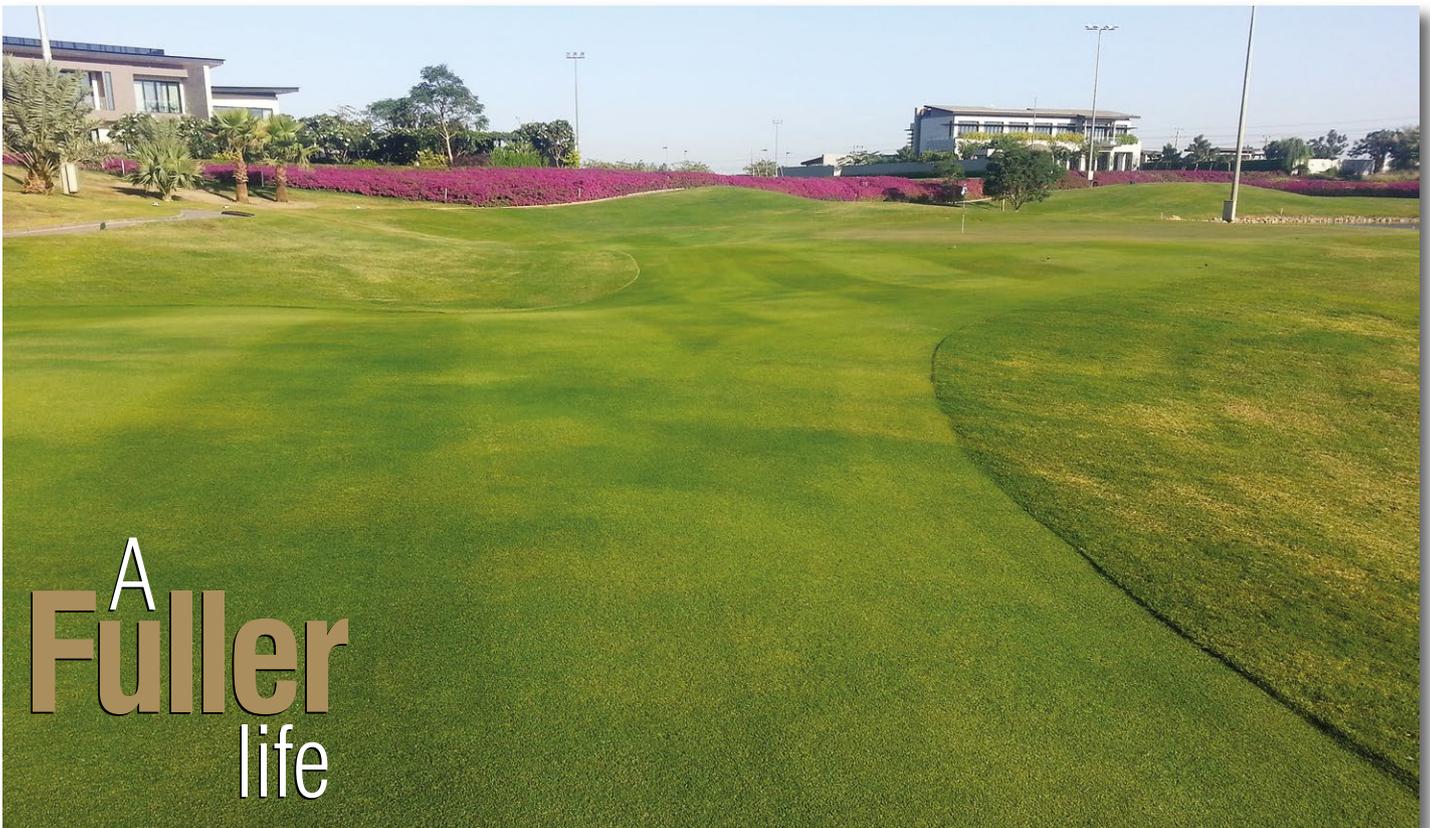
syngenta[®]



For more information and to download the full registered label and MSDS, ask your Syngenta Agent or go to www.greencast.com.au

Syngenta Australia Pty Limited, Level 1, 2-4 Lyonpark Road, Macquarie Park NSW 2113. ABN 33 002 933 717.
® Registered trademark of Syngenta Group Company. ™ Trademark of a Syngenta Group Company.
All products written in uppercase are registered trademarks of a Syngenta Group Company. AD 15/164

TM



A Fuller life

Kym Fuller has never been afraid to step outside his comfort zone during a long and rewarding career as an ex-pat course superintendent. Having worked in far flung places like South and North Korea, India, China and Mauritius, Fuller now finds himself working at the only golf course in Sudan.

Khartoum's Fenti Golf Club, the only golf course in Sudan, is the current home of Aussie ex-pat superintendent Kym Fuller who over nearly three decades has plied his turf management career in almost every climate imaginable

I have been very fortunate to have lived and experienced a rich life in the turf management industry, living and learning in a broad range of climatic conditions and cultures and hopefully being able to impart some of my knowledge onto people along the way.

I have been able to satisfy my passion for travel and the ability to grow and manage turf in all climates, from the snow-covered mountains of North and South Korea, Kashmir and the Himalayas, to the tropics of Indonesia, Malaysia and Thailand, into the deserts of Sudan and the temperate climate of the Indian Ocean.

Surfing trips up and down the NSW coast along with my first apprenticeship in the wool industry, where I learned all aspects of wool classing from the wool sheds of western New South Wales to the big wool stores of Sydney, gave me my first taste of travel. However, it was at St Ives Bowling Club in the northern suburbs of Sydney in 1973 where I would get my first exposure to the turf industry. I was only at the club for two months when the head greenkeeper at the time decided I had enough experience (although not much talent) to take three months' long service leave. We never saw him again.



Combining my love of surfing and now my new found enjoyment of turf management, I applied for a job at Warringah Golf Club. From there it was the assistant's job at Wakehurst Golf Club and within 12 months I found myself as superintendent. At about the same I started a turf management course at Ryde Horticultural College. It was the first year of the 'new' three year course and included a very competitive bunch of aspiring superintendents, among them Jeff Gambin, Greg Smith, Scotty Mackay and Laurie Walsh.

Armed with my new credentials and the desire to travel, I bought a one-way ticket around the world and got as far as Christchurch, New Zealand and Lincoln Golf Club where I took on the role as 'sole charge greenkeeper' (meaning the only person working on the golf course). It was one of the best jobs I ever had. While in New Zealand I came across a product made from seaweed which I thought may be a benefit to our industry, so I brought it back to Australia with the mindless thought that I might be a good salesman. Wrong! As a result I had a hiatus from the turf industry and as I had previously run bars and nightclubs as a second job, I ended up managing The Cottage Point Inn on the Hawkesbury River for a few years.

From there Phil Knight gave me a job at The Lakes Golf Club in Sydney, my first at one of the 'big' clubs. This gave me the appreciation and understanding of the management techniques and budget variation within our industry. We got the call one day to prepare for the 1987 Australian PGA Championship after Liverpool Golf Club had been washed out; we had only four days to get the course ready but because Phil always had The Lakes in



good nick it didn't take much to get the course up. Phil had a great team at the time with the likes of Peter Frewin, David Scaife, Shaun Probert and Randal McNeill to name just a few.

In 1987, for some reason, they cleaned out Bonnie Doon and I became the assistant superintendent to Gary Smith (boy what an education for any of you that know Mr. Smith!). It was through Gary that I managed to get an interview with a Malaysian company and the rest, as they say, is history.

MALAYSIA BOUND

In 1992 I was appointed superintendent on the Marsh-Watson designed Staffield Country Resort just outside Kuala Lumpur. Built for the State's Royal Family, we prepared the course for the 1994 and 1995 Malaysian Senior Opens and it was voted third best course in the country for maintenance by Golf Digest.

I would end up spending over eight years in Malaysia working on four different courses, setting up the Malaysian Golf Course Superintendents Association with the local supers, Peter Smith and later Martin Greenwood. We also initiated golf course maintenance lectures around the country, which was a very fulfilling exercise.

The ex-pat community in Malaysia during the 1990s and early 2000s was full of Aussies – Scott Mackay, Phil Knight, Dave Patterson, Laurie Walsh, Danny Potter, Brad Leahey, all of whom were in great demand. Many clients in that region requested only Australian superintendents because of our strong work ethic, budget control and the ability to get the job done with minimum fuss and noise.

I also spent some time with Ted Parslow in the northern state of Kedah on the border with Thailand. The course was in the middle of the jungle 90 minutes from the main town. Ted was asked to redesign a course that was built on the edge of a reservoir that supplied water for rice production in northern Malaysia. The problem was when they were building the course the water level in the dam was low, but the owner insisted the hotel and golf course to be down at water level and there was no convincing him otherwise. When the dam eventually returned to its maximum level the course and hotel were three metres under!

Another story with that course was the original Aussie construction superintendent there decided to check out the smuggling tunnels that ran from

Malaysia to Thailand. When he arrived on the Thai side the local military were waiting for anyone coming through and so he spent a few days as their 'guest'!

At that time I was managing the 54-hole Tanjong Puteri course which held the Q-School for the Asian Tour. The patron of the club, whose name I can't mention, would come and play regularly and prior to his arrival his staff would ring ahead and demand the course be cleared of golfers. He would bring his own police and have the outriders go ahead to check where his ball went. Unfortunately it would end up in the lake more times than not, so he would send his fully clothed policeman in to look for it and not come back until they had found it!

These positions were the start of my time in pre-opening golf courses, which included everything from the hand over from the construction company to getting the course ready for play, employing and training staff, setting up and stocking the workshop to establishing golf operations departments.

THE SUB-CONTINENT AND BEYOND

While in Malaysia I saw the advantage of being connected to the various management companies that were expanding into the Asian region and was fortunate enough to get a call from IMG through Phil Knight to do the pre-opening of the new Arnold Palmer-designed DLF Golf & Country Club in New Delhi. As shocked as my mother and many of our friends were at this prospect my wife Lina, who I met in Malaysia, and I jumped at the chance.

The project to construct Jack Nicklaus Golf Club, venue for the 2015 Presidents Cup, was one of the most rewarding of Fuller's career. Pictured above left is the site before construction and above the finished product

Fuller (right) with the legend himself Jack Nicklaus during the development of Jack Nicklaus Golf Club in South Korea





◀ In 2003 Fuller was stationed at the idyllic Le Touessrok Hotel & Spa in Mauritius

It took four months to train the staff and set up the course before opening. After the first year we convinced the owner that holding major golf tournaments was a good direction to take the course and advertise the city he was building, especially when it was associated with the Asian PGA. We were already holding events on the property for 3000-4000 people on a regular basis, so the scale and set up was not daunting to him or the team.

The winning score that first year was 12-under which the owner wasn't too pleased with and demanded that next year the score be over par. To that end we built eight new tees and planted over 1000 mature trees and he was a little happier when the winner posted 7-under the following year. We were rated the No.1 course in India while I was there.

During my time on the sub-continent the owner also sent us to Kashmir to help out on the new Trent Jones II Royal Springs course as well as the original Srinagar course (the old honour boards in that club listed the club champions back to 1898!) The locals were still a little upset with each other at that time so we had to be chauffeured between the two golf courses in the back of a van with two AK47-toting security personnel. When they had a tournament, the car park would be full of armoured personnel carriers, the course surrounded by the army and each group of players would have eight Gorkha soldiers escorting them down the fairways!

Fuller and the Jack Nicklaus team during one of their early site inspections in South Korea



In 2001 I was transferred to Zhuhai, in south west China, across from Macau, to do the pre-opening of the 27-hole Colin Montgomery-designed Golden Gulf Golf Club. The course was very innovative for the time with seashore paspalum surfaces and irrigated from the Pearl River and South China Sea. The five phase project started with an eight metre fill of sand for the 125 hectare course, barged in from the Pearl Delta. Two months before the opening, a Level 3 typhoon came through and blew all the newly placed imported sand into the lakes.

During my time in China we were connected with so many great Australian superintendents, or as they were known locally 'the Hong Kong mafia'. The table on the veranda at the Hong Kong Golf Club during the Hong Kong Open was where the 'mafia' held their 'management meetings' which were needless to say very educational!

Early 2003 saw us transferred to Mauritius and the 18-hole Bernard Langer-designed Le Touessrok Hotel & Spa. Just to make paradise even more special the golf course was on an island a short boat ride from the hotel! The initial layout proved a little demanding for the clientele (who typically played their golf in thongs and thongs), so we built a new par three island green, enlarged three others and cleaned out some of the jungle and volcanic rock.

The course was under great scrutiny from local authorities and constant studies and monitoring was carried out on and around the course. We were given the all clear regarding our management practices and policies and over time provided over 100,000 native plants including rare species to various facilities and government departments. I worked with the local Department of Agriculture to provide us with lady beetles to control the very destructive mealy bug which turned out to be a tremendous success and introduced growth retardants to the country.

KOREA CALLING

Feeling a little isolated in the middle of the Indian Ocean, I put in a request for transfer to South Korea with the thought of adding another climate in which to manage turf to the CV. The brief was to oversee the management of five courses for a private owner, from the very south coast of Korea to a new construction on the east coast of North Korea. To say the Koreans are keen golfers is an understatement!

On the two courses north of Seoul, during winter all staff (indoor and outdoor) would be required to clear all the snow from the greens each day so the members could take their pink and yellow balls and continue their golfing. At the time golf course management was some way behind the rest of the world and the two greens per hole concept prevailed – one bentgrass and one zoysia.

The course in North Korea was an interesting experience. Built and designed by a local at the North-South Reunification area, it was situated in

a beautiful bay once used as a submarine base which is surrounded by tank embattlements. The course had some novelty aspects to it, including a 'par six' hole and a par three shaped like a funnel so everyone who played it got a hole-in-one! The trip across the pristine demilitarised zone from South to North Korea and the constant propaganda being blasted from the loudspeakers was an experience never to be forgotten.

It was while in South Korea that I became involved in what would be the biggest project of my career. In September 2007 I became construction superintendent of the \$54 million 18-hole Jack Nicklaus Golf Club, site of the 2015 Presidents Cup. Built as part of the new city of Songdo just outside Seoul, the course was part of a \$4 billion city and bridge construction project. The course started as part of the Yellow Sea, with the site barricaded off and filled with 40 meters of marine clay.

Within three years (minimal work during winter) we were open for play and three months later holding the first US PGA Seniors tournament outside the US. There were eight overseas consulting companies and 13 local contractors to manage, with the weekly site meeting numbering 45 people or more. The course's lake system had its own drainage and pumping system, the entire golf course had subsurface drainage (Sub Air) and wireless green sensors as well as 18,000m² of artificial rock and waterfalls.



One of the more humbling aspects of working abroad for Fuller has been the ability to impart his turf management knowledge on the local staff

The course was covered with four varieties of bentgrass – T1 for greens, PLS for the putter, L93 and South Shore for tees and fairways – and four varieties of fescue – Red, Chewings, hard and sheep – for roughs. With midwinter temperatures of -18°C the irrigation had to be below the permafrost layer, a minimum of 1.2m. Fortunately, the Koreans being the perfectionists they are, I had only one blow out.

The contract there came to an end in 2011 and both Lina and I felt it was time to head back to Australia. We had family in the Riverina and settled there to run Leeton Golf Club where I thought I would be for the rest of my career... wrong again!

INTO THE DESERT

After two years back home, at the start of 2013 I was offered a job in North Africa. I am now in the middle of the Sudan desert at Fenti Golf Club in the capital of Khartoum, where average rainfall is about 120mm, winter temperatures get as high as 8°C

All your irrigation information at your fingertips. Anytime. Anywhere. Lynx® Central Control

Developed specifically for golf courses, Lynx allows you to;

- Optimally manage your water and resources
- Access your irrigation controller from anywhere
- Maximise your course playability and aesthetics

STEP INTO THE FUTURE AT A FRACTION OF THE COST
NEW Toro Lynx GAC AC Decoder System now available

1300 130 898 www.torolynx.com

TORO





Fenti's Riviera bermudagrass fairways, tees and rough and TifEagle greens cater for an exclusive membership of just 28

and average summer days peak at 45°C (it's a dry country in more ways than one!). My time here will complete my goal of working in and understanding turf management in almost every climate.

The project is held by a diverse private company that operates in the education, health and agriculture sectors along with importing vehicles and heavy equipment. The course is designed by Peter Harradine and we run Riviera bermudagrass on fairways, tees and rough and TifEagle on greens to cater to our 28 members (the owner is a very private person!). Nine holes (which are fully floodlit) have been completed and the next 18 will run through the real estate development, which will see us develop a new division of the company to provide landscaping services for residential and commercial clients. We expect to grow in a 50 hectare turf, tree and plant nursery to support this division.

Although the Blue and White Nile rivers are less than a kilometre away, our water comes from an aquifer which supplies water with a pH of 9-plus along with high salts. We apply approximately 1.3 million litres of water onto the 35 hectares every day.

When managing turf in this environment you tend to throw most of what you know out the window. If you apply the same techniques in this climate it would cost a fortune, even more than the US\$1.8 million a year we spend now. The sanctions against Sudan tend to make materials very expensive and most quality products out of reach.

One of the unique climatic events here are the dust storms which travel across North Africa every few weeks. They do nothing for our lakes, bunkers and soil profiles and after one of these 'harboobs'

we literally have to 'wash' the golf course – washing trees is one of our regular tasks! Among the projects on the go we have nearly finished renovating six hectares of landscape which has seen the addition of 800 trees and 50,000m² of bougainvillea.

During my time at Fenti I have set up the Golf Course Superintendents Association of Sudan and as this is the only golf course in the country I have assumed all the board roles. Needless to say I'm hanging out for the opportunity to chew the fat with a fellow superintendent just down the road!

REWARDING AND HUMBLING TIMES

I have been very fortunate to be taught by and learn from some great mentors including Phil Knight, John Odell, Peter Frewin, Robbie Ashes, Andrew Purchase, Dave Patterson and John Pryor to Jack Nicklaus and John Scott, Dr. Ronnie Duncan and Ron Carrow, PGA Tour staff and many others willing to pass on their knowledge.

Working away from family and friends is one of the drawbacks of this lifestyle, and it's certainly not for everyone, but for me it has been extremely rewarding and stimulating from both a career and personal development perspective. I have worked and trained over 1200 people, purchased over US\$25 million of golf course machinery and spent in excess of \$40 million on golf course maintenance.

Working in Third World countries is obviously difficult; the poverty, constant sickness of staff, lack of infrastructure and quality food are but some of the issues you have to contend with. But there is the rewarding side too; giving a person new skills, job security and regular income just to feed and clothe their family is very humbling and in return they are very grateful and loyal. At Fenti, for instance, we have a certain obligation to the 2000 local villagers that live next to the course which adds an extra element to our responsibilities. Hopefully we have given them the skills to make a decent life for themselves and family.

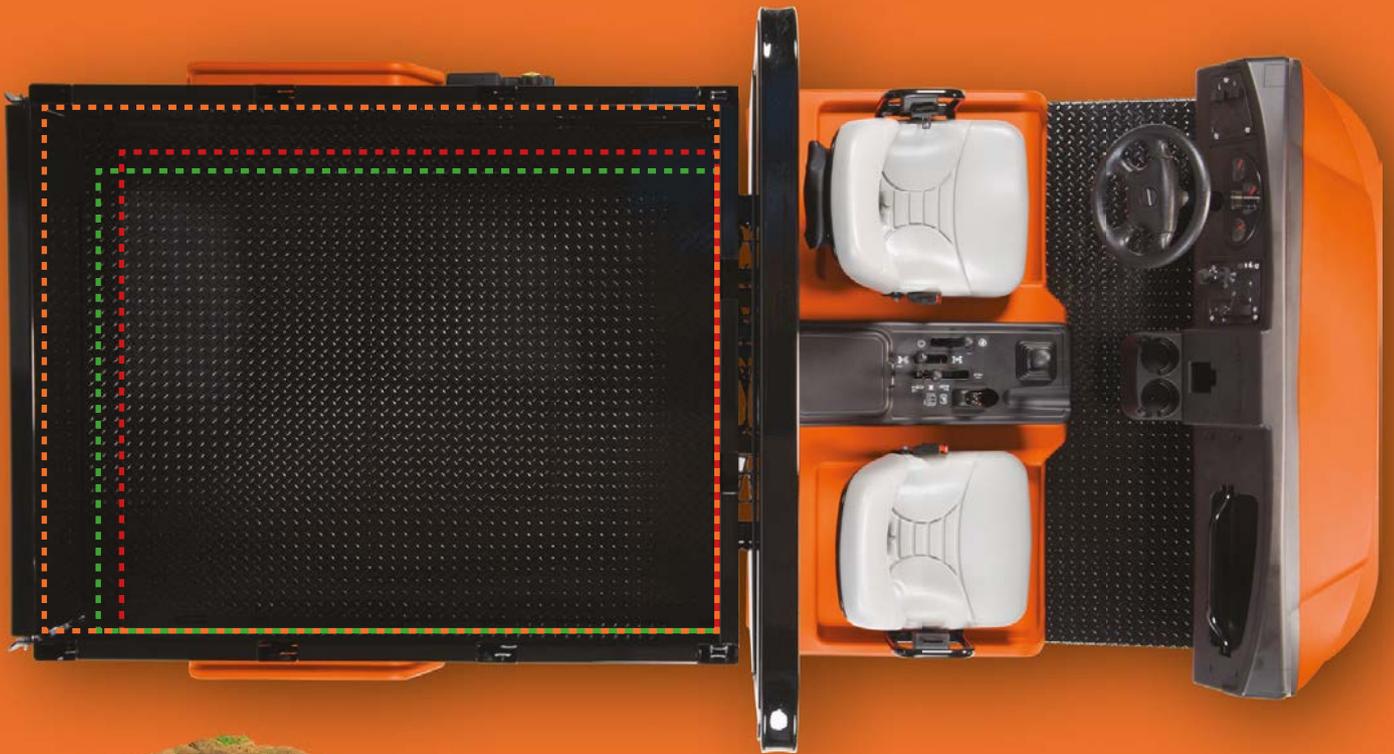
When you move on from a job it can be very difficult given the relationships you have forged and knowing how their lives may go. As a somewhat sobering example, I had a situation in India where one of my staff passed away at the age of 23. We had to go and pick him up from the morgue ourselves, buy the ice to pack him in and send him to his village several hundred kilometres away. If we didn't go and get him we were told they would just 'dispose' of him.

These situations enlighten and change your perspective on life in a positive manner, especially seeing how under-privileged people have to live. Working with other cultures teaches you tolerance, understanding and important life lessons that you would never glean in Australia. It is, and has been, rewarding, satisfying and fulfilling when I look back over what we have achieved and I am very proud to be an ambassador for Australian golf course superintendents and the legacy they leave. 🙏

Khartoum's climate is pretty unique – average rainfall of 120mm, winter maximums of 8°C and average summer days of 45°C



PUTS THE COMPETITION TO BED



Class-Leading Payload Capacity, Power & Comfort

The all-new Jacobsen Truckster XD heavy-duty utility vehicle features the largest and toughest bed in the industry. With a massive 1,610 kg (3,550-lb) payload capacity and thick 12-gauge steel, the Truckster XD hauls more turf, more rocks, more sand, more of anything you need to move. That means less trips, less time and less work. Only the all-new Jacobsen Truckster XD can make easy work of your toughest jobs. Visit www.jacobsen.com or your local Jacobsen dealer to schedule a demo.

www.jacobsen.com

JACOBSEN[®]

The focal point of every golf hole is the 4.25-inch-diameter hole on the green. When hole-changing duties are performed well and the hole is located in an area that will give fair results, golfers are more likely to enjoy their round



Holing out

Many tasks are required when setting up a golf course but none impact the game more than hole location and how well hole-changing duties are performed writes experienced USGA agronomist Larry Gilhuly.

The game of golf truly encompasses every human emotion. During any round of golf, or even from one shot to the next, one can experience the highest of highs to the lowest of lows. From the emotional response of a well-struck golf shot that feels like butter to a horror shank, golf truly awakens our emotions.

However, it is on the putting surface where things really get rolling (pardon the pun). For all of us, the focal point on any golf hole is the 4.25-inch-diameter hole on the putting green. Like it or not, this small area of every golf course largely determines one's feelings about a round of golf.

Well-placed holes and the job performed according to the textbook generally go unnoticed by many players, yet questionable hole locations or poorly performed hole-changing duties quickly evoke negative feelings about the entire maintenance programme. Let's take a look at the creation of this very small target, how to get the best results and common issues associated with the very important tasks of selecting hole locations and changing holes.

WHAT IS A HOLE?

Rule 1-1 in the 'Rules of Golf' states, "The Game of Golf consists of playing a ball with a club from the teeing ground into the hole by a stroke or successive strokes in accordance with the Rules." The very first rule in the Rules of Golf identifies the focus of the game — to get that little white ball into that little round hole.

In the definitions section, the 'Rules of Golf' states, "The hole must be 4¼" inches (108mm) in diameter and at least 4 inches (101.6mm) deep. If a lining is used, it must be sunk at least one inch (25.4mm) below the putting green surface, unless the nature of the soil makes it impracticable to do so; its outer diameter must not exceed 4¼" (108mm)."

SELECTING HOLE LOCATIONS

In the Rules of Golf there are no directions for the exact placement of holes. There is no rule for how close holes should be to the edge of the green or for the amount of slope on or near the hole. However, the USGA does have a very good reference document



While there is no rule on the matter, it is recommended to place holes at least four paces away from putting green edges for competitions and special events, and preferably five paces or more for daily play



The end result of a sharply cut hole in accordance with the Rules of Golf is the ultimate goal



titled 'How to Conduct a Competition.' On page 48 of this document, the following common-sense recommendations (not rules!) are given for selecting hole locations:

- It is recommended that generally the hole be located at least four paces from any edge of the putting green. If a bunker is close to the edge, or if the ground slopes away from the edge, the distance should be greater, especially if the shot is more than a pitch.
- An area two to three feet in radius around the hole should be as nearly level as possible and of uniform grade. In no case should holes be located in tricky places or on sharp slopes where a ball can gather speed. A player above the hole should be able to stop the ball at the hole.
- Consider the condition of nearby turf, especially taking care to avoid old hole plugs that have not completely healed.
- Holes should be cut as nearly on the vertical as possible, not plumb with the contour of the putting green.

- There should be a balanced selection of hole locations for the entire course with respect to left, right, central, front and back positions.

The person who cuts the holes should make sure that the Rules of Golf are observed, especially the requirements that the hole not exceed 4.25 inches in outer diameter and that the hole-liner be sunk at least one inch below the surface.

These six common-sense ideas are recommended for competition and special events; however, they can also be used for regular play. Let's briefly review each recommendation to determine if they apply to your golf facility during regular playing conditions or if minor changes may be needed.

1. Place the hole no closer than four paces from the edge of the green: For years this recommendation has been no closer than five paces from the edge of the green. For tournaments being played by low-handicap players, the four-pace recommendation makes sense. For regular play, the old standard of five paces makes more sense, if greens are of adequate size. This is especially true with ever-increasing green speeds. Keep in mind



Changing holes at a golf facility is the most critical job completed on a regular basis



Placing a new hole too close to a recent hole location will adversely influence putting and the concentrated foot traffic will slow recovery of the old hole plug

that faster green speeds will decrease the number of locations where holes can be placed. For smaller greens, the four-pace recommendation should be considered.

2. Have a radius of two to three feet around the hole that is relatively flat: Once again, faster green speeds will decrease the number of locations where holes can be placed. In his article 'Putting green speeds, slopes and 'non-conforming' hole locations' (USGA Green Section Record, July-August 2008), golf course architect Jerry Lemons does a superb job demonstrating the relationship between these factors.

His chart on page two of the article shows that as green speed increases, so does the radius around the hole where the slope needs to be consistent and playable. This is a useful chart when identifying hole locations on your greens. Avoid tricky hole locations that make it impossible to stop a ball near the hole when playing from above the hole.

3. Avoid old hole plugs that have not recovered: This recommendation is for regular play. First, and from a playability standpoint, hole plugs often can be too high or low. Although fixable by players according to the Rules of Golf, it is best to avoid them, if possible. Second, and more important, old hole plugs should be avoided because golfer foot traffic that focuses around a hole will slow recovery of the old hole plug. Keep in mind that concentrated traffic also compacts the soil.

Returning to an area on a regular basis, and the soil compaction that results, will slowly impact turf health and impede water movement into the soil. Regular rotation of holes is a critical priority for maintaining turf health when changing holes.

4. Cut holes as vertically as possible: This simple recommendation relates to balls that hit a flagstick and do not go into the hole. If the flagstick is straight (i.e.: vertical), the maintenance staff cannot be blamed for the ball not dropping into the hole. If crooked, it becomes a subject in the 19th hole.

5. Balance hole locations in regard to left, right, central, front and back: This recommendation involves the rating of a golf course and its overall length. It is sometimes difficult to balance holes when greens are shaped irregularly or when slopes

reduce hole locations in some portions of a green. Every golf facility is different in this regard, thus every green needs to be studied carefully with a plan to distribute traffic daily, weekly and throughout the entire year.

Another issue that can occur with hole changing is placing holes in the same area on the same day of the week. Players that play the same day(s) each week will take notice if they frequently encounter the same course setup. The simple way to avoid this is to create multiple hole location cards. Each card takes into consideration the balance — front, middle, back, left, right and center — and shape of the green.

As an example, if a golf facility changes holes six times weekly and begins January 1, and they utilised 11 different hole location cards, it would take 78 days (i.e.: until March 19) before the same hole locations will be in the same area for all 18 greens. No matter how it is performed, hole changing should be balanced so as to maintain optimal turf performance and produce diversity in playability.

6. Set the hole size and depth according to the Rules of Golf: This is very simple and self-explanatory. There are many different hole changers and hole setters that provide the desired results as specified by the Rules of Golf.

ALL IN THE DETAIL

By following the six aforementioned recommendations, there should be no problems or complaints with holes at your golf facility, because every hole will be in a good location and cut properly. In reality, however, this is often not the case. Let's look at the most common issues that need to be avoided.

Old hole plugs that are too high, too low or too dry: The most common problems observed with old holes are plugs that are too high or too low. Plugs left too high are most problematic because they are prone to mower scalping. Regardless of whether hole plugs are set to high or too low, they become an eyesore and create an uneven putting surface. This is where the experience and attention to detail of the person responsible for changing holes really makes a difference.

To avoid dry hole plugs, the use of water is critical to minimise drying on hole edges. Finally, pushing the plug perimeter next to the surrounding turf is critical to expedite recovery and prevent excessive drying along the edges.

Be very aware of turf grain: One of the great myths often uttered by various golf announcers is that grain on greens goes toward the setting sun or to the water. In most cases, the grain on a green follows the slope of the green. Thus, when plugs are replaced, the maintenance staff must be very aware of the turf's growth habit.

This is not much of an issue with *Poa annua* because of its upright growth habit, but it is critically important on warm-season turfgrasses

There is a 'need to knead' the edges of the old hole plug back into the surrounding turf, while rolling a PVC or metal pipe over a freshly cut hole (below) helps ensure a smooth playing surface



and bentgrass that have a more lateral growth habit and greater tendency to develop grain. In such cases, any plug set in the wrong direction will be more prone to scalping. If it is set too high, the combination of grain going in the wrong direction and plug height will result in prolonged recovery.

Crooked flagsticks: Although this is seen less often, the need for a straight flagstick cannot be overemphasised. The flagstick must be vertical and not follow the contour or slope of the putting surface. As mentioned earlier, balls are less likely to drop into a hole if the flagstick is not perfectly vertical and centred in the hole. The flagstick should be equal in radius from all portions of the outside perimeter of the hole, and this is only possible if the flagstick is vertical. Those changing holes must be ever observant of this.

Hole locations found on slopes too severe for modern green speeds: This issue is viewed quite often on contoured putting surfaces that were designed and built for considerably lower green speeds, or green speeds that were common at the time the golf course (or greens) were constructed.

Perhaps the best article on this topic is 'You've gotta know your limits' (USGA Green Section Record, Sept-Oct 1995). This article is as true today as it was more than 20 years ago. With modern green speed measurements often found above 10 feet, it is extremely difficult to find enough hole locations that provide the following: "In no case



should holes be located in tricky places or on sharp slopes where a ball can gather speed. A player above the hole should be able to stop the ball at the hole."

Using the same areas too much or placing holes close to previously used plugs. As a general rule, try to avoid old holes that have not healed by at least 10 feet when placing a new hole. This is advised for the purposes of both agronomics and playability.

Changing holes too often or not enough. The frequency by which holes are changed is primarily a function of staff size, the amount of play and

There are many different models of hole changers that are in accordance with the Rules of Golf in regard to hole size and depth

There is no such thing as bad weather.. only unsuitable clothing

Stay warm and dry this winter with David Golf's exclusive products

From **\$115** + GST

\$185 + GST

Seal Flex

100% WATER PROOF

> Seal Flex Wet Weather

The Seal Flex workwear is highly breathable, extremely light weight, flexible and 100% waterproof.

- > Seal Flex Parka
- > Seal Flex over trousers
- > Seal Flex bib and over trousers

CODE: SFW-SFPOTNS (Parka)
SCW-SFBBN (Overalls)

\$110 + GST

OTWAY

100% WATER PROOF

AUSTRALIAN OWNED

EASY OFF HEAL KICKER

> Otway ranger boot

100% waterproof boot designed and engineered to provide comfort, durability, warmth and ventilation.

- Work Boot height
- Steel Toe
- Natural Rubber Upper
- Sizes US 7 - 13

CODE: SFW-0M0017

\$59.95 + GST

Gondwana

> Gondwana Barrow Jacket

Barrow Tek Fleece Sherpa Jacket is perfect for any time you need extra warmth.

- Relaxed Fit
- Centre Front & Side-entry Zipper
- Outer Brushed Fleece
- Inner Sherpa Fleece

CODE: SCW-BJ-(S)(M)(L)(XL)(XXL)



Visit our website or contact your David Golf Rep for more information

1300 790 890

www.davidgolf.com.au



If the flagstick is straight and not crooked, the maintenance staff cannot be blamed for a ball dropping into the hole



Attention to detail in the hole-changing process can make all the difference



available budget. While many golf facilities have an adequate staff to change holes daily, some do not. Also, when play is minimal, do holes truly need to be changed every day? So long as hole edges are tidy and not damaged, there is little reason to change holes every day if only a handful of players are using the facility. Holes should still be observed daily and the edges cleaned, if needed.

In reality, attention to the actual number of players can be considered more important than following a strict calendar schedule, especially when labour and resources are limited. When holes are not changed often enough, holes develop edges that are not sharp and often 'collapse' into the hole.

This situation is seen frequently on putting greens that have excessive organic material near the surface where sand topdressing has not provided a firm surface. The option in this case is to either use white paint or plastic liners. The better option is to provide the surfaces with regular applications of properly sized sand to evenly mix with organic material production. Sharper holes with crisp edges and improved hole integrity will result from following this fundamental programme.

'Volcanoed' holes: The final issue regarding holes that is frequently observed is the 'volcanoed' hole syndrome. Players often believe it is the fault of the maintenance staff for reasons such as poor technique in hole changing, lack of attention or not using proper tools. This is rarely the case. In reality, it is players who cause this issue in two ways.

- When a flagstick is removed from a hole that has been cut into a high sand green, there is always a chance that sand particles will be on the end of the flagstick or in the hole liner. Any particle of sand can cause the flagstick to 'stick' when attempting to pull it from the hole liner. Simply, the removal of the flagstick by each group of golfers throughout the day can imperceptibly move the liner up and cause the edge of the hole to 'volcano' upward. A ball without adequate speed can stop just shy of the hole, or veer right or left, when the edges of a hole are raised.

- While raised hole edges are certainly noticeable when they exist, this is not the most common reason why holes 'volcano'. Instead, it is much more common to view a change in direction of ball roll approximately six to 12 inches away from holes. It can happen early in the morning, but it is far more common later in the day after many more players have trafficked the greens. The reason? Players' feet!

Players removing golf balls from the hole do not step on a hole's edge, rather they keep some distance, usually half a foot or more, between their feet and the hole. When play volume is increased, the players' feet subtly push the turf down and even slightly compact the soil with frequent and repeated steps. Keep in mind the firmer the putting surface, and the better the sand topdressing programme, the less this occurs.

When a ball is losing speed and it enters this area, its direction will be influenced. This results in the impression that the person setting the hole made a mistake. This has been reported on numerous occasions despite the hole changer using proper equipment and technique. It has even been observed that volcanoed holes can be present even when using a board or special plate around the hole as well as a device used to roll and level the area after the hole has been set. So the next time your ball does not react as you wish near the hole, blame your fellow players and not the person setting the hole.

HOLING OUT

Changing holes at a golf facility is the most critical job completed on a regular basis. It has significant impact on golfer satisfaction, pace of play and how the course plays that day. Unfair or not, players' perception of the maintenance staff is largely determined by hole locations and the quality of the hole-changing process. By following the six simple recommendations outlined in this article, as well as avoiding the most common mistakes, there is less chance of upsetting players and less negative discussion at the 19th hole.

Now, if we could just find a way to never miss a three-foot putt without increasing the size of the hole!

ACKNOWLEDGEMENTS

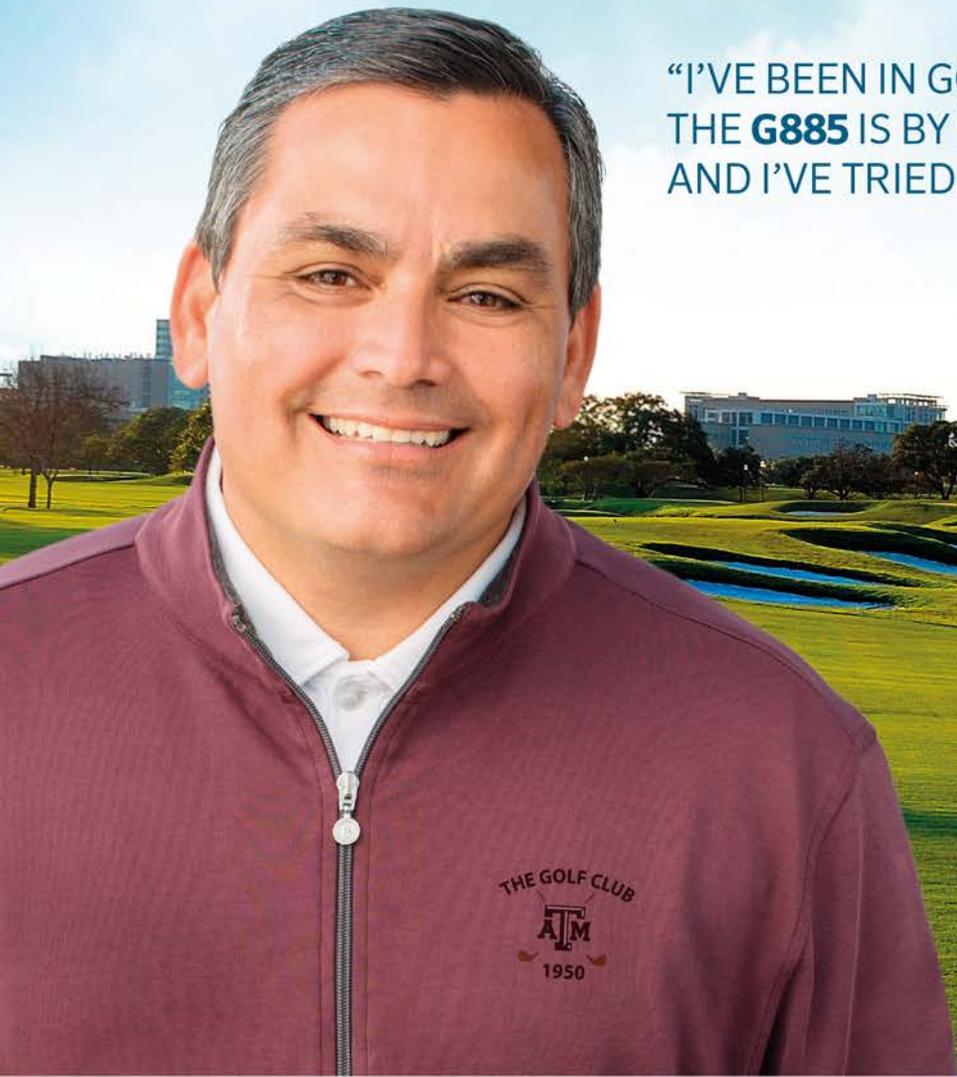
The AGCSA thanks the USGA for allowing permission to reprint this article. Larry Gilhuly's article originally appeared in the Green Section Record Vol. 51 (9) May 3, 2013. 🍷



“I’VE BEEN IN GOLF FOR OVER 25 YEARS.
THE **G885** IS BY FAR THE **BEST ROTOR EVER**,
AND I’VE TRIED THEM ALL!”

Rene Rangel

RENE RANGEL - STERLING GOLF MANAGEMENT



THE PERFECT COMBINATION OF POWER, PERFORMANCE, AND SERVICEABILITY.

Powerful – patented gear drive offers the highest torque output of any rotor on the market

Total Top Service – access every component through the top without disturbing the playing surface

21 Nozzles – precision, versatility, and wind-fighting efficiency



**G885
DECODER-
IN-HEAD
ROTOR**



National Free Call: +1 800 HUNTER
Toll Free Fax: +1 800-651-680
www.hrproducts.com.au
hrrsales@hrproducts.com.au



Tel Call: +1 300-856-386
Fax: +1 300-856-369
www.nelsonirrigation.com.au
info@nelsonirrigation.com.au

Suite 7, 202 Ferntree Gully Road
Notting Hill, Melbourne, Victoria 3168, Australia
Tel: 61 3-9562-9918 Fax: 61 3-9558-6983
Call today for your free Hunter catalogue
+1 800-811-370

GOLF IRRIGATION | Built on Innovation
Learn more. Visit hunterindustries.com/golf

Hunter®



Making good CAKES

Managing staff is one of the most critical skills a turf manager can possess.

HR management guru David Bancroft-Turner, who returns as a keynote speaker at the upcoming Australian Turfgrass Conference in Melbourne, presents a simple yet effective model to employ at your facility.

A golf club maintenance crew is made of many personalities and skill levels. Being able to effectively manage each person and bring them together as a cohesive team is critical to the overall success of your operation

When I look back at my leadership and managerial career, there are many exciting aspects that I could write about. Unfortunately this article doesn't cover any of those, but it is about something that is as crucial to you as breathing, particularly if you are a manager of people or are about to become a manager of people. This is the bit of your job that you are going to have to get right because if you don't the rest won't work.

I'm going to give you a model to work with (if you don't like 'models' then it's not a 'model', it's a new and different way of doing things that will give you results much more quickly – oh, and it will help all those people you are managing as well) and a process to follow that will save time, get more accurate results and help build fantastic working relationships with your colleagues.

The situation is this. You have a work colleague called Sam and you are his manager. Sam's performance could be better. He's not terrible, but he's not brilliant either. And you want to get him to be brilliant. There's something about Sam that makes you think he could be very, very good. In summary, he is a guy with potential that is not being realised. This should be familiar to you as this is an all too common situation in all organisations.

In order for people to be brilliant at what they do they need to satisfy five different criteria and here they are in this model that I have designed to make it easier for you to manage others.

FACTORS THAT CREATE BRILLIANCE

1. Clarity: Everybody needs to know what is expected of them. Makes sense doesn't it, but they also need to know about a range of other things about their role/job that may not be so obvious, such as:

- What order things have to be done in;
- The timeframes involved;
- The measures applied to each aspect of their role;
- Who they have to interact with and the boundaries of each person's job (who does what);
- Why what they do is important; and
- The outcomes that are required.

I'll stop now as there are too many to list here but hopefully you get the idea.

2. Attributes: Attributes are defined as the emotions, dispositions and personality preferences of a person – some people call them behaviours and behaviours are nothing more complicated than what people say and do and the way they say things.

Example: If you are going to be a brilliant air traffic controller you need what we call 'an eye for detail'. Now some people have this and some don't. It would probably be a good idea if you an air traffic controller to have this attribute (I can't imagine an air traffic controller saying 'Ah yes, we can get another four planes in that sector no problem, just squeeze them in, it'll be fine...')

Other attributes for a range of roles may be things like:

- You are comfortable with your own company, or you need/prefer the company of others;
- You are prepared to take decisions with/without referring to others;
- You suffer easily with nerves/anxiety/stress, or not;

- How you choose to respond to people things and different situations (e.g. problem solving – some people will talk a lot about their problem which helps them to think it through whereas other people will keep quiet about their problem until they have thought it through and will only then speak to others about it. Neither is right/wrong of course, just different);
- You are naturally creative and continually look to do things in a better, more efficient way;
- You are happy to follow a given process and not look for different ways of doing things;
- You show high levels of empathy and understanding of others and their situation;
- You are motivated to a certain level and direction;
- Your sense of humour;
- The extent to which you are driven (Donald Trump is a prime example here); and
- The values that you bring to your role (being on time, doing what you say you will do etc...)

Again, there are lots and the above are just a sample.

3. Knowledge: For you to brilliant you need to 'know' stuff. Let's look at a greenkeeper as an example. You need to know fundamentals like;

- The correct application rates for pesticides and fertilisers;
- The height of cut settings;
- The way in which you need to dispose of different chemicals;

- The order in which you need to do different tasks during the day depending on weather conditions

Makes it sound as if I know about greenkeeping! I bet you could add a lot more elements to this section of 'knowledge'.

4. Environment: This section always breaks down into two distinct areas – the physical and emotional. The physical includes:

- Does the person have the right equipment to do a brilliant job;
- Are the weather patterns helpful or not;
- Are there things in the external environment that help or hinder;
- Are the external support mechanisms to help;
- Do colleagues help or hinder; and
- Are people familiar with the equipment they are using or is it all new to them.

The emotional includes:

- What sort of atmosphere does the manager create for the person to perform;
- Are there things happening in the person's life (outside the job) that affect performance;
- How is the person's mood hour to hour/day by day affected by others around them;
- How does the person respond to the behaviour of others/colleagues/manager/members that they interact with; and
- How does this person respond to being managed by you!



In order to be brilliant at your job you need a certain level of skill

DINT HAS A NEW...

...the surprise is on the inside

We look forward
to seeing you at
the conference

DINT
Golf Solutions
We Make Golf Courses Look Better

Stand 22





Building a constructive working relationship with the people you manage is the hallmark of any good leader

5. Skills: For brilliance you need to demonstrate skills at a certain level and for a superintendent or greenkeeper this could include:

- Moving vehicles safely and considerately;
- Using machinery in the way the manufacturer specified;
- Hand/eye/foot co-ordination in the correct measures and at the correct time;
- Responding to a changing environment and conditions in the right way;
- Interacting/communicating with others in an effective way; and
- Being able to influence a wide range of people in different situations.

WHAT DO YOU GET...CAKES

So you can see from the above this brilliance model is called 'CAKES'. In order for somebody to be good, if not brilliant, at their job they need to satisfy all the aspects within CAKES. If any one (or more) element of CAKES is missing then performance will be below standard. So, you can use CAKES in two ways:

- As a manager you can create your own checklist under CAKES that you believe will lead to a high performing member of staff and use it as a checklist for recruitment, selection, promotion, development and assessment; or
- Use CAKES as a diagnostic tool to identify why somebody is not performing to the level you would like.

As well as creating the right emotional environment for performance, it is equally important that your team have the right tools to do the job to a high level



Let's take an example under the second category, a story to bring the model to life: I was head of training in a bank. A manager came to me and said 'My secretary is too slow. I want you to send her on a speed typing workshop'. Ok, I said that's no problem, can I have a word with her. 'No' he said. 'I've just told you what the problem is so book her into the workshop'. Hmmmm...

I 'accidentally' bumped into her a day later and asked her what was up. 'My manager is driving me mad!' she said. 'I'm thinking of resigning. He gives me work to do, I type as fast as I can, I then go up seven floors....' 'Stop', I said. 'Why do you go from your office and then go up seven floors?' 'That's where the printer is Dave. Then I go back to my office after getting the lift back down because I find it difficult to walk downstairs – up is ok, but down is very difficult for me'. With this new information the solution is now easy – buy her a new printer!

The problem looked like a skills issue but it was actually an environmental issue. And this repeats itself many times. Managers will look to training and development as a solution when actually the answer lies elsewhere in the CAKES model – if only they chose to look!

The CAKES model can provide all managers with a very useful tool to accurately diagnose the underlying problem and then to put in place a solution that will actually fix the problem that you have identified. Why don't managers do this anyway? Because they are short of time, lack skills themselves, jump on the first course of action and decide on an easy solution as opposed to the right one – there many reasons.

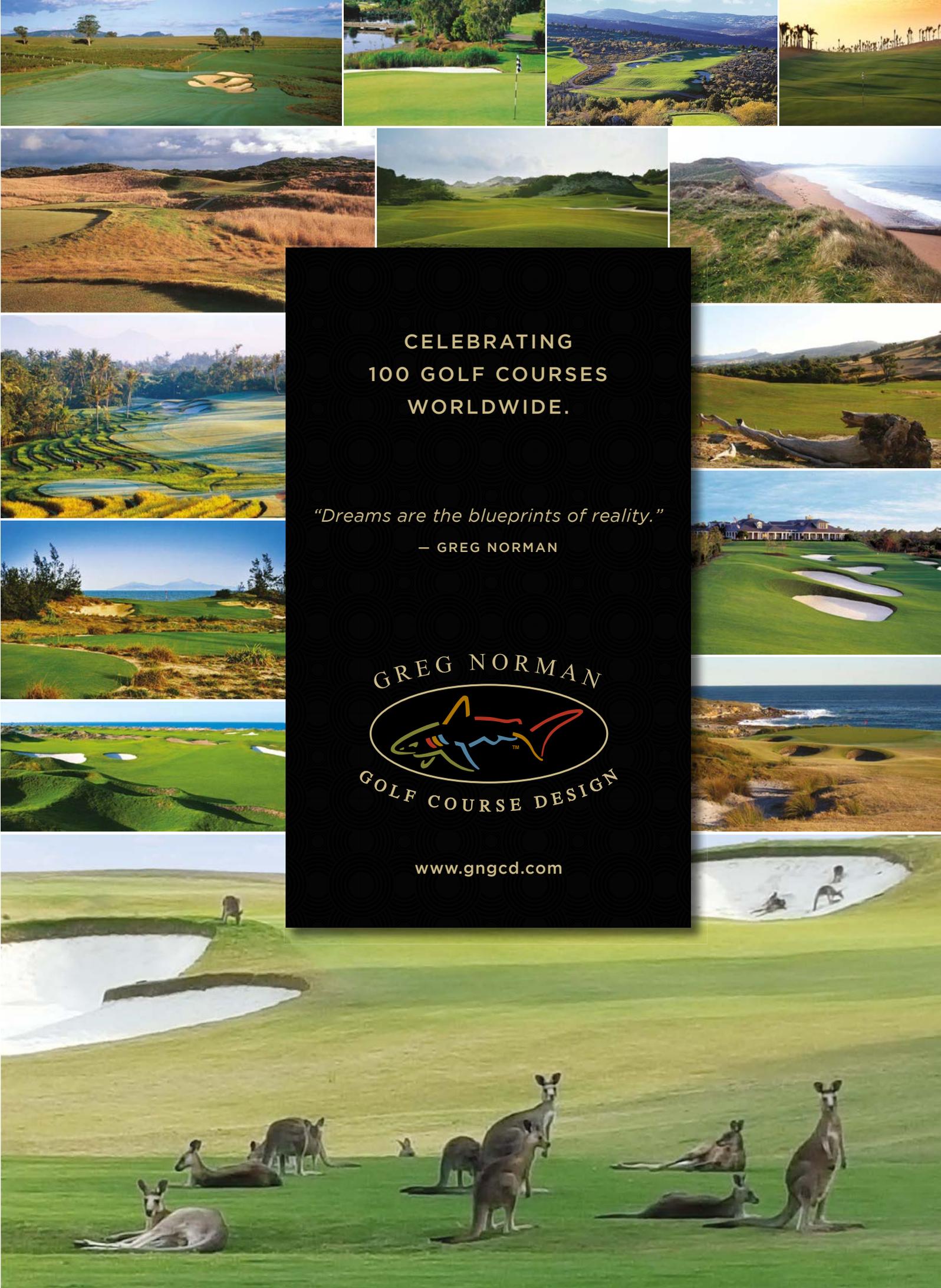
MANY USES

So, in summary, use CAKES on a daily/weekly basis when thinking about the performance of your staff. Use it to accurately identify the real reasons as to why somebody may not be performing to the standard you would like and use it to think about how to manage your people even more effectively.

And another use – for those people that you are managing that are brilliant, you can use CAKES to identify what it is that they do so that you can replicate that in other people in the team.

And one final piece of learning before I see you in Melbourne for the 32nd Australian Turfgrass Conference – you can also use CAKES at home! When things are not going so well with your partner/friends/family, you can use the model to identify what is going wrong and use it to identify what needs to happen to fix it. The model CAKES is copyrighted to our training company (Matrix Training and Coaching Ltd) and please feel free to use it and mention us to others when you do. Have fun using it and let us know of your success stories when using it.

Editor's Note: See the 32nd Australian Turfgrass Conference timetable (pgs 48-49) for David Bancroft-Turner's presentations and workshop times. 📄



CELEBRATING
100 GOLF COURSES
WORLDWIDE.

"Dreams are the blueprints of reality."

— GREG NORMAN



www.gngcd.com





The approaches in front of greens should be firm enough to allow the 'bump and run' option

Approach with care

Approaches are an often overlooked part of the golf course but play a critical role in the game and ultimately its enjoyment. USGA agronomist Larry Gilhuly looks at some steps to achieving firm and consistent approaches.

Consistent aeration/topdressing, light sand topdressing and vertical mowing can greatly reduce the negatives associated with too much organic material

The hole is located at the front of the green, the green is firm and the wind is at your back. How many times have you faced this type of shot on a golf course? Most golfers would respond by landing the ball in front of the green (if the contour allows) and playing the bump-and-run shot that was prevalent so many years ago.

Take the same example and make the approach area considerably softer, without the golf ball releasing to the front hole location. For a regular player without the skill to spin a ball, what are the choices? Approaching this issue from the maintenance perspective is the answer, and the players deserve it.

Over the years of playing the game and watching it at the highest levels, there is no question that the most difficult and frustrating shot faced by the majority of golfers is the shot into a firm green with a soft approach. Articles on this subject over the years have recommended basic programmes of aeration and sand topdressing to address this situation, however other major improvements have been made with equipment, irrigation application and the ability to truly compare firmness between a green and approach. Let's take a closer look at this critical area that has received more attention, but still can be improved on many golf courses.

HISTORICAL PERSPECTIVE

While putting green construction became largely sand-based starting in the 1960s, the approaches were not built in a similar manner. To this day, with the exception of those golf courses built on sand or with a sand cap, the 10- to 15-yard area in front of greens often has insufficient drainage and is typically maintained the same as the fairways.

Adding to the difficulties is the fact that the typical architecture of greens is slanted toward the player rather than away. This results in a natural flow of water to the front of the green and the approach, with excess moisture being one of the key ingredients in making these areas too soft. At the same time, the average golfer has not quite grasped the concept that a golf course is a playing surface and not a sea of green. Over the years, this desire for green has resulted in overwatered greens which become easy targets.

However, to achieve both the type of smoothness and speed desired by players, these surfaces must be maintained in a firmer condition — hence the dilemma. The reduction of water for the greens will improve firmness for these playing areas, but oftentimes the approaches receive additional water. The result is firmer greens with considerably softer approaches. While many struggle with this issue, there are three simple ways to improve the approaches on every golf course.

STEP ONE

Step one in this process is the easiest, least expensive and will actually save money. It involves the careful application of fertiliser and water. There is a distinct difference in the philosophy of fertiliser use between the US and other parts of the world such as the UK and Australia where they understand that the game is played on the ground and overall firmness is a requirement. Less water plus less nitrogen equals less organic matter production. They also understand that green grass requires far more 'green' (i.e., cash) to maintain the surfaces.



Colour is not a requirement for a good playing surface, thus the reliance on nitrogen is far less. Instead, less expensive micro-nutrients, such as iron sulfate and magnesium sulfate, are used to create some colour on their golf courses without excess organic production near the surface. Less organic plus less water equals firmer and faster surfaces.

The desire for green colour results in much higher labour costs to maintain grasses that are often over fertilised. Nitrogen is often used to produce green colour, thus more organic material forms near the surface. Much like a sponge, organic material holds a significant amount of water. However, when it dries, it repels water, resulting in localised dry spots and the need for wetting agents. At the same time, water use is another way to keep grass green, and, in many cool-season areas, is the only way to allow *Poa annua* to survive during the summer months. More nitrogen plus more water equals more organic material production. When this occurs, the by-product will be much softer playing conditions.

The first step in improving the firmness of approaches is to look at how you are providing colour in these areas. Less nitrogen and more control of water will result in less organic material.

STEP TWO

The dual practices of aeration and sand topdressing have been around for decades on greens and tees. This fundamental combination has proven to be

very effective in improving fairway playing surfaces. Research conducted in Connecticut, US showed that more sand use resulted in less dollar spot, reduced earthworms and improved overall firmness. The question then becomes, how often should the approaches be aerated and how often should sand be applied? The answer can be found by looking at your greens.

The process of adding sand, removing organic material and improving firmness has been conducted on putting greens for decades. Push-up greens without drainage have been transformed over the years to putting surfaces with good firmness and smoothness due to regular aeration and topdressing programmes, with drainage added where needed.

Since this has been so successful, it makes sense to simply expand this same program 10-15 metres in front of the greens. The best results are found when aeration is completed at least twice annually (spring and autumn) with large tines (5/8" minimum) spaced as close as possible to remove more organic material. Sand is then applied to completely fill the aeration holes.

But is this enough to truly firm the approaches? In reality, the above programme will help firm the approaches, however it will result in layers of sand and organic matter that develop in the time between aeration treatments. To eliminate this problem, many have simply expanded their light sand topdressing programme for the greens to the



Where greens slope towards the front, this can result in a natural flow of water to the approach, making these areas too soft

parkland

Australian Distributors of Spectrum Monitoring Equipment



Strike Guard

The Complete Lightning Solution for your Facility

- Proven technology
- Fully Automated
- Zero False Alarms
- Used at over 800 golf courses worldwide
- Reliable, Consistent, Affordable

Call us for more information and a product brochure



Bailey Decoders

All Network CDS course customers your future upgrade path is with Bailey.

- You will not have to change your decoders or solenoids.
- Windows platform
- GTS (Gemini Trident Support) is available
- Mapping
- Full back up support
- Talk to us for your cost effective upgrade path



Trusted Specialists:

- Certified Irrigation Designers
- Certified Irrigation Auditors
- Certified Irrigation Agronomists
- Australia-wide coverage

Australian distributor for
Spectrum Technologies, Inc.



Remove more organic material and the potential of getting the approaches at or near the same firmness of the greens increases dramatically

approaches, with some including an additional pass with the topdressing machine on this higher mowed area. Regardless of how much sand is applied (remember, the more the better), this will help offset excess organic material production.

STEP THREE

The final step of achieving approaches at or near the same firmness as the greens is vertical mowing. This is not your everyday 'tickling' process completed on the greens. This process requires up to 1/2" – 5/8" deep vertical mowing to effectively remove far more organic material than open aeration tines. However, the mowing heights found in front of the greens will allow for faster recovery of both warm- and cool-season grasses. Researchers at the University of Arkansas found that the use of deep vertical mowers with various blade widths removes significantly more organic material than hollow-tine aeration. The next question with deep vertical mowing is how often should it be completed? This answer generally is at least one to two times annually, based on location and type of grass found on the site.

The next question is, should deep vertical mowing be completed separately or at the time of aeration? Based on the amount of organic material that will be removed, it is best to deep vertical mow immediately prior to aeration of approaches. Remove the organic material created by the vertical mowing and then aerate the approach. Once the cores are removed, apply enough sand to fill the holes and slice marks created by the vertical mower.

If this combination does not prove successful on your approaches due to shallow roots, then consider one deep vertical mowing and one aeration annually, rather than the two-aeration programme. The addition of deep vertical mowing truly provides significant firmness to a playing surface.

TESTING RESULTS

The USGA TruFirm device monitors firmness. It is used to compare greens and approaches to help players and the maintenance staff understand the differences and the impact of organic material production on playing conditions.

At a recent USGA national championship, firmness values were taken in the morning and afternoon hours. While the values are only pertinent to this golf course and championship, the important observation was the wide difference in values between the greens and the approaches at the start of championship preparation week and how they changed over time. Once the overhead irrigation system was shut off, the firmness values began to drop noticeably as a hand-watering programme was initiated. While the approaches were not tested through the end of this championship, the differences between the greens and approaches became smaller as less water was applied.

There is no question that the amount of water, combined with the amount of organic material found near the surface, has a significant impact on how firm the approaches will become. Remove more organic material and the potential of getting the approaches at or near the same firmness of the greens increases dramatically.

This is especially true if you do not have the manpower to hand water or live in an area where normal rainfall and growth combine to give soft conditions during the wetter portions of the year. While the following example shows the impact on firmness with the removal of automatic irrigation on approaches, the same type of positive impact can be achieved when more organic material is removed by deep vertical mowing.

Excess organic material also impacts warm-season grasses. The positive impact of deep vertical mowing on bermudagrass was observed during a visit in Hawaii. In this case, the 16 approaches that were tested with the USGA TruFirm had firmness values similar to the greens due to identical programmes for aeration, sand topdressing and deep vertical mowing on both the greens and approaches. However, two of the approaches were significantly softer than their greens. The only difference – they were comprised of hybrid bermudagrass with more organic production. Once again, more organic production equals softer surfaces.

SUMMARY

Regardless of the type of grass, controlling organic matter production in front of the greens will significantly improve playing conditions on this critical area of the course. Whether it is less nitrogen and water or programmes focused on the physical removal of organic matter, the days of soft approaches can be over at your golf course, regardless of budget.

ACKNOWLEDGEMENTS

The AGCSA thanks the USGA for allowing permission to reprint this article. Larry Gilhuly's article originally appeared in the Green Section Record Vol. 50 (9) April 27, 2012. A full list of references can be obtained from the AGCSA. 🙏



hydrolink

Connecting Soil and Water

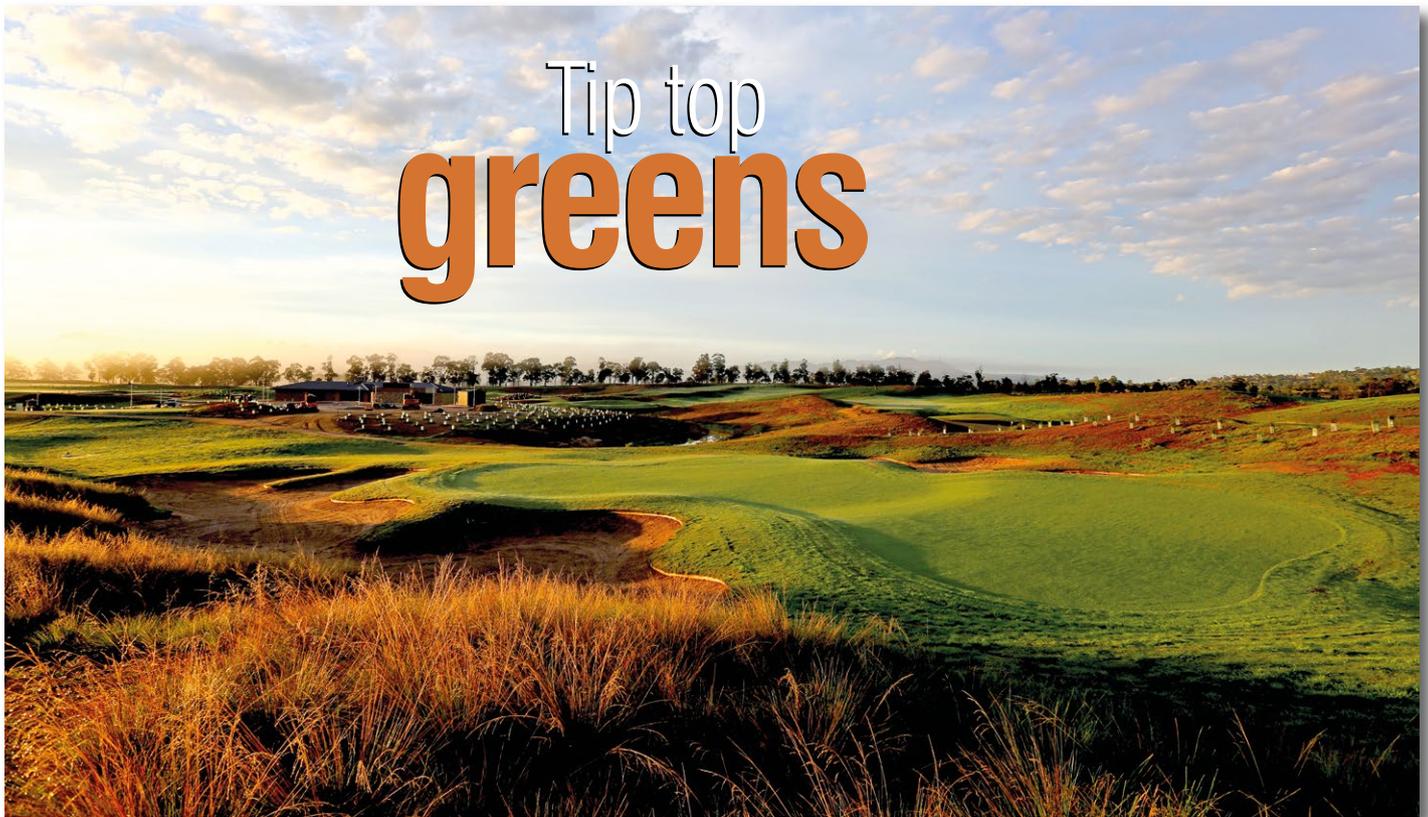
- 100% Australian Made
- Formulated for local conditions
- Backed by independent data



globe
GROWING SOLUTIONS

Your professional partner for
turf and urban horticultural solutions

globegrowingsolutions.com.au



Tip top greens



ATM columnist

John Neylan

gives his top

10 tips for ensuring

a successful greens

construction or

reconstruction project at

your course.

Greens construction is a major undertaking for any golf club and it comes with enormous expectation that the new surface will be superior to the green that is being replaced

The article 'To rebuild or not rebuild' in Australian Turfgrass Management Vol 18.2 on whether to rebuild a golf green, raised the ongoing topic of debate as to what is the ideal profile for a golf green. The discussions revolve around the best sand type, sand depth, perched water tables, gravel drainage blankets and does it have to conform to a USGA method of construction.

The debate becomes somewhat more confused when examining the greens on the sand belt and coastal golf courses and the original links courses in the UK where the native sands are used. What we do know is that one size does not suit all and that understanding the site conditions, the available soils, climate and grass types and taking a methodical approach to construction are key factors in deciding how the greens will perform.

Many of the earliest greens constructed in Australia consisted of a fine loamy sand that naturally occurred on-site and we now refer to them as 'push-up' greens. The texture of these natural sandy soils is often modified by the presence of a very fine organic matter or a small proportion of silt and clay in varying amounts and it is these fine particles that give the soil a loamy feel and improves the characteristics of the sand. It increases moisture and nutrient retention, provides a good soil moisture buffering capacity and a firm, resilient surface. It is also these fine soil particles that, in excess, blocks the pore space, reduces drainage and gives a low aeration porosity.

It has been because of the failure of these fine loamy sands, particularly when they are out of their natural environment, that turf managers looked for an alternative method of construction.

Consequently, we had a move towards medium sands for greens construction as well as the specific USGA Green Section recommendations.

There is no doubt that there are many examples of where the different greens construction alternatives can all function extremely well, providing that certain key criteria relating to porosity and drainage are met. It also must be said that for each example of success, an equally disastrous result can also be demonstrated. In my experience of observing golf green construction and the problems that beset greens, the following are my top 10 considerations.

1. POOR SURFACE DESIGN

Poor surface contouring will result in agronomic problems. Since the introduction of fast draining sands in USGA style profiles, golf course architects have been more inclined to pay less attention to surface drainage. Closed contours that prevent surface runoff or direct water to a particular location within the green will result in problems. The excess moisture causes black layer, provides a soft surface, encourages *Poa annua* (in bentgrass greens) and there is more damage from foot traffic.

Some of the other design issues that affect the performance of the green include surrounds that slope directly onto the putting surface, unmowable slopes on greens and surrounds and where the front of the green is not elevated above the fairway. Greens that transition straight into the fairway or the surface drainage of the green is towards the front of the green will invariably result in a wet approach and the front portion of the putting surface.

Traffic movement on and around the green is a significant issue on high traffic golf courses. Traffic

flow is dictated by the design and features of the course. Narrow entrances and confined walk-off areas due to bunker positioning can focus wear along certain routes. In certain parts of many golf courses there are areas of intensive golfer traffic resulting in damage to the turf surface. These problems are more severe in the winter due to limited grass recovery and increased susceptibility to compaction. The landscape may not make it possible to change this aspect, however, it must be factored into ongoing greens management.

2. UNDERSTAND THE STYLE OF CONSTRUCTION REQUIRED

The requirement of putting surfaces has always been about being firm and reasonably fast. In the AGCSA (2012) benchmarking study it was determined that the elite level clubs provided greens that were firmer, drier and smoother and were considered to be superior. Windows and Bechelet (2010) stated after their extensive study of putting greens in the UK that "If you want your greens to provide an optimum test of golf and perform well throughout the year, then set your sights on firmness first".

With the issues around having firm, smooth and consistent putting surfaces year round and the greater questioning of the USGA or perched water table greens profile concept, deciding on the style of greens profile can become more complicated. Whatever style of construction is selected it has to

be based on science. In addition, the further you depart from the recipe of a perched water table green or USGA profile there are more factors to consider and less margin for error.

Irrespective of what components are used to provide a rootzone mix, most of the research specifies the need to have a total porosity of 33-50 per cent, non-capillary porosity (aeration porosity) of at least 10-15 per cent and a capillary porosity (moisture retention) of 15-20 per cent. The key factor is the non-capillary porosity which has a dramatic impact on root growth and development. Where the fines component of the rootzone mix is increased there will be an increase in moisture retention and reduction in aeration porosity. Consequently, the optimum depth of the rootzone needs to be researched in order to achieve adequate aeration and deep drainage. On finer soil greens a shallow profile will result in a disastrous result.

3. SELECTING SANDS AND GRAVELS

Selecting the correct sand and gravel is a critical part of the process if the desired outcome is to be achieved. There is no substitute for testing. Once the profile type is decided on, including a specification for the rootzone sand and gravel, then a supplier can be sourced. In my experience not all sand suppliers can supply the required sand type throughout the job and then over time for future constructions and topdressing.



Cultivar selection is an important consideration in the long-term management of greens. It is important to do as much research as possible, including undertaking trials at your facility

DON'T JUST COLLECT CORES RECYCLE THEM WITH THE - CORE RECYCLER -



CORE RECYCLER

- « SAVE 75% OF TOP DRESSING
- « UNIQUE MACHINE THAT COLLECTS CORES AND RECYCLES THEM DIRECTLY BACK TO YOUR TURF
- « SAVE MONEY
- « SAVE LABOUR TIME

FIND OUT MORE FROM
AUSTRALIA'S LEADING SUPPLIER OF TURF MACHINERY

VISIT QTURF.COM.AU
OR CALL 0428 290 009





◀ **Sampling and testing of rootzone materials and gravel are a critical part of any construction programme**

If a firm and fast surface is the desired outcome, then there is a lot of extra homework required in selecting the correct sand. That is, a sand that will give a firm surface but will also have an adequate drainage rate and aeration porosity. In the research that I have undertaken on sands for greens construction, sands that have some fine soil particles tend to produce a harder surface. With the finer sands it is the frictional forces produced by the smaller particles fitting within the voids of the larger particles that maintain the harder surface. The sands with no fines (e.g. washed sands) have maximum surface hardness when the moisture content is near field capacity and this firmness diminishes relatively quickly as the sand dries out.

Calculating the coefficient of uniformity and fineness modulus provides some indication of whether a sand is likely to be hard, however, the range of the values are quite narrow and at this time do not appear to provide a particularly clear guide. The proportion of fines is probably the best indicator with about 3 per cent by weight being the point where the firmest surface can be achieved.

The sources of natural loamy sands are rare, they are in relatively low volumes and are highly variable and consequently the commercially available loamy sands tend to be manufactured by adding a 'soil' to a clean sand. It is important to note that when

Renovate early particularly if the greens are solid turfed



using a sand with a silt and clay content, the margin for error in terms of drainage rate is small. That is, a shift of 1-2 per cent can dramatically reduce the drainage rate.

Regardless of the sand that is selected, the questions that need to be asked are;

- How is the sand produced? Is it produced in a controlled process or is it mined from a natural face.
- Is the sand a blend of sand and 'soil'? Where soil is blended with sand, what is the particle size distribution of the soil?
- Does the supplier have in-house testing and quality control procedures?
- What is the long-term availability of the sand?
- Where has the sand been previously used?

4. QUALITY CONTROL TESTING

Sampling and testing of rootzone materials and gravel are a critical part of any construction programme. Before construction starts there first must be a detailed specification for the sands and gravel. Second, an appropriate sand must then be selected, tested and approved. The approved sample then becomes the benchmark sample for all future quality control testing.

A typical quality control programme involves sampling soil stockpiles in accordance with the USGA specification for sampling stockpiles or AS 1141. This involves taking multiple samples from various points around the stockpile and then combined for testing.

Samples must be tested at the minimum rate of one test/500 cubic metres of material as they are manufactured. Each stockpile must be clearly labelled and approved prior to amalgamation with other tested material. Samples of the mixed rootzone medium and gravel must be tested for the following parameters;

- **Gravel:** Particle size distribution, compacted hydraulic conductivity.
- **Rootzone media (including organic amendments):** Particle size distribution, compacted hydraulic conductivity, bulk density, aeration porosity and volumetric water content.

The most commonly used test methods are those adopted from the USGA Green Section (www.usga.org/turf/articles/construction/greens/quality_control_sampling.asp). However, the testing procedures developed by Bent Jakobsen have also received wide acceptance.

To keep laboratory variability to a minimum, it is critical that the same accredited laboratory be utilised throughout all phases of the project. Through extensive statistical analysis, it has been determined that the amount of test variability within the same lab is quite small (assuming they are testing the exact same material each time). However, sending the same sample to different laboratories greatly increases the amount of test variability that will occur. This is due to differences in test equipment

and laboratory technique. These factors should be given strong consideration when establishing variation tolerances for quality control testing.

Setting tolerances that are unrealistically tight can result in the disqualification of a perfectly good rootzone mixture, significantly increase the cost of the project, unnecessary litigation and lengthy construction delays. Setting tolerances that are too loose could result in large changes in the make-up of the rootzone mixture, to the point that the performance of the greens could suffer. The USGA Green Section's 'Guidelines for Establishing Quality Control Tolerances' should be used to assist in the process of determining a reasonable and acceptable variation.

5. GRASS SELECTION

Cultivar selection is an important consideration in the long-term management of the greens. Again, the question has to be asked, what are we trying to achieve and what can we afford to maintain? Whether it is creeping bentgrass or hybrid bermudagrass, are there specific cultivars that are better suited to my location?

It is important to do as much research as possible. The US National Turfgrass Evaluation Program (www.n tep.org) provides data on numerous cultivars across a wide range of climates. The downside is trying to find a location that is a reasonable climatic match for your golf course.

Over the years the AGCSA and the QDPI have undertaken independent trials that provide another excellent source of data on which a decision can be made. Seed company trials can also be useful providing that they are replicated trials and independently assessed.

Understanding what is happening on other golf courses is also another very important reference. This provides an opportunity to observe the performance of a particular cultivar under real golf course maintenance and traffic and is likely to expose weaknesses that are not apparent in trials.

If time permits, once all of the research has been done, select 4-5 preferred cultivars and establish them on your golf course under your maintenance regime. Some of the potential problems in selecting a new cultivar are not understanding;

- Thatch production and thatch control methods;
- Mowing requirements;
- Cold or heat tolerance;
- Disease tolerance; and
- Water requirements and drought tolerance.

6. ORGANIC MATTER INCLUSION

The addition of organic matter and in particular the wrong type of organic matter can quickly undo all of the good work undertaken in selecting the sand. Organic matter can be added to improve moisture retention and to stimulate growth during the establishment phase.



Attention to detail when installing drainage is important



FOLEY UNITED DELIVERS - THE LARGEST LEAP IN GRINDING TECHNOLOGY IN TWO DECADES

THE ALL-NEW ACCU-MASTER 653 AND ACCU-PRO 633



Accu-Master 653 with Accu-Touch 3

Accu-Pro 633

- **Automatic Reel Positioning** with a revolutionary adjustable rear roller mounting system.
- **Counter Balanced Spin Drive** that floats to connect directly to the reel shaft and easily moves from side to side.
- **Relief Angle Adjuster** that presets angles and proper clearances when choosing to relief grind.
- **Accu-Touch 3 Control** features pre-programmed spin speeds, relief torque, and infeeds based on reel make, diameter, and blade count. You tell the machine what you're working on and the machine does the rest!

Whether it's quick "touch-up" spin grinding or returning the reel to manufacturer specifications, no one does it with more quality and innovation than Foley United.

For more information, call 1800 356 372 or contact your Toro Golf Area Sales Manager.

toro.com.au

 /toroaus
  @toroaus
  /toroaustralia





The grow-in phase is a key point in any greens construction or reconstruction with any setbacks to the young turf having a significant effect. During the grow-in the emphasis is on getting a complete turf cover and developing as strong a root system as possible

The first 12-18 months of turf growth is when a large amount of thatch and organic matter is produced. It is absolutely crucial with all of the newer grass types of high density that a dusting programme is started as soon as there is a complete turf cover.

Where the moisture retention of the sand is less than the minimum (i.e. less than about 15 per cent v/v) then the addition of peat moss or coco fibre will be required. It is important that the rate of addition is tested in the laboratory to ensure that the sand is not overloaded. While peat moss and coco fibre are the main sources of organic matter, they can vary and need to be tested for their organic matter content. They must be at least 90 per cent organic matter based on a loss on ignition test. As the organic matter content falls it is likely to contain more fine soil particles which can clog the sand and reduce drainage. Test the organic matter and test the combination and from these establish a benchmark against which future tests can be compared.

Where organic matter amendment is necessary for moisture retention and involves more than about 2-5 per cent by volume, most of the blending is done off-site at the sand pit. Where the blending goes wrong is if a large volume of organic matter is blended in-situ. Blending in-situ will most often result in inconsistent mixing which will result in variable moisture retention and drainage rate.

7. SUBGRADE AND SUBSOIL DRAINAGE

Where greens sites have to be built up with soil it is extremely important that the soils are well compacted so as to prevent differential settlement. While the base is usually easy to compact, the edges of the greens basin can at times be neglected which creates a weakness in the edge of the base. With regular applications of water during the grow-in, water will work its way through the poorly compacted edge of the basin and appear as a localised wet spot in the surrounds.

Where the subgrade soils are silty and unstable, additional work may be required to stop the base from settling. The use of geofabric membranes may be needed to assist in forming a stable platform on which to build the green.

For subsoil drainage to be effective it must be installed correctly and protected as the subsequent layers of gravel and sand are installed. Flat pack drainage is being used extensively in greens construction. It typically has a geofabric cloth around it and this needs to be opened up before the gravel

is placed over it. Geofabric layers have a history of holding fines and can quickly become clogged and therefore reducing the effective function of the pipe.

8. GROW IN

The grow-in phase is a key point at which any setbacks to the young turf can have a significant effect on the opening of the green. During the grow-in the emphasis is obviously on getting a complete turf cover but also developing as strong a root system as possible. From my experience the root system at opening is about as good as it is going to be before the effects of traffic and the other stresses cause a natural shortening of the root system.

Mowing height during the grow-in is one of those areas where there are differing opinions as to what is the best procedure. Most of the new warm- and cool-season grasses are selected for their tolerance to low mowing heights. Get the cutting height down as close to the playing height of cut as soon as possible is desirable. It helps to stimulate lateral growth and minimises the build-up of thatch.

The first 12-18 months of turf growth is when a large amount of thatch and organic matter is produced. It is absolutely crucial with all of the newer grass types of high density that a dusting programme is started as soon as there is a complete turf cover (or even earlier). It is a good habit to start early as trying to remove a dense thatch layer in a new green can be a difficult task.

9. NOT RENOVATING IN YEAR 1

New greens don't need renovating in their first year – true or not? If a good programme of dusting is introduced early then what may be considered to be a renovation may not be necessary. However, for all sorts of reasons, during the grow-in some layers may form or the greens are of different ages with some being more mature than others. Consequently, at least a hollow tining and sanding will often be justified.

10. OPENING TOO EARLY

How long before the green will be open for play? A vexed question indeed. My advice is to under promise and over deliver. If it is not quite ready don't open it. Where the turf is thin and struggling to cover it is likely to become worse and may then require plugging out or maybe taken out of play for a period again after opening.

SUMMARY

Greens construction is a major undertaking for any golf club and it comes with enormous expectation that the new surface will be superior to the green that is being replaced. It is all about planning, understanding the local environment, understanding the objectives for building the green and doing your homework on soils and construction. Taking your time, planning thoroughly and closely managing the project will provide the desired outcome. 🌱

32nd Australian Turfgrass Conference and Trade Exhibition



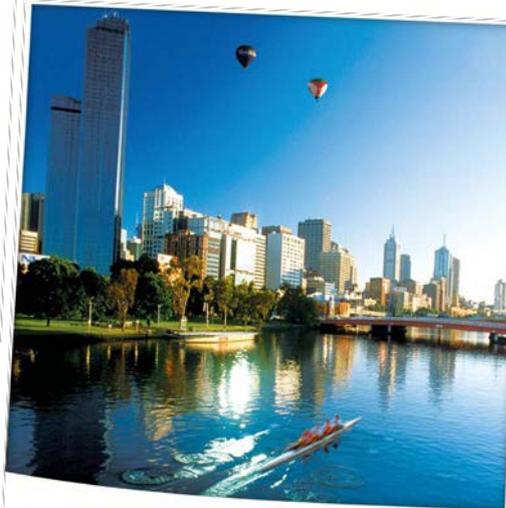
Melbourne, 20-23 June 2016



Conference Guide



Speakers



Workshops





WELCOME TO THE CROWN ENTERTAINMENT COMPLEX

On behalf of my fellow AGCSA Directors I would like to welcome you to the 32nd Australian Turfgrass Conference and Trade Exhibition in Melbourne and ask you to join us in celebrating the 25th birthday of the association this week. The Crown Entertainment Complex will be called home for this 'must attend' event on the Australian turf industry calendar and I congratulate and thank you for making the effort to attend.

The popular Monday workshops, which are presented with thanks to AGCSA Gold Partner Jacobsen, continue and we once again welcome **David Bancroft-Turner** to our shores. David's presentations have been some of the most popular over the past three years, with some fantastic information and strategies on dealing with clubs and committees put forward. Prof. Fred Yelverton (North Carolina State University) conducts the other workshop and with his knowledge of weeds, in particular the oft despised *Poa annua*, it will again be a must attend.

An excellent range of speakers have been engaged for the week highlighted by the return of Cornell University turf guru **Dr Frank Rossi**. Frank was quite possibly the highest rating speaker to ever present in Australia when he last visited in 2012 and will no doubt create much discussion within the walls of Crown during the week. **Ken Mangum** and **Stan Kostka** round out the international speakers who will be ably supported by the cream of Australia's turf presenters.

An innovation this year is the introduction of specialised focus sessions on Wednesday which are available for all attendees, however, numbers

have been deliberately limited to ensure the quality of these forums. Not surprisingly these have been quickly subscribed and I'm sure all those who got in early will greatly benefit from these workshops.

Once again the trade exhibition will bring together a broad range of turf related companies and the proximity to the education sessions will ensure exceptional interaction for exhibitors and delegates alike. The AGCSA thanks the trade for their support of this sell-out event and I encourage delegates to 'do some business' on the show floor.

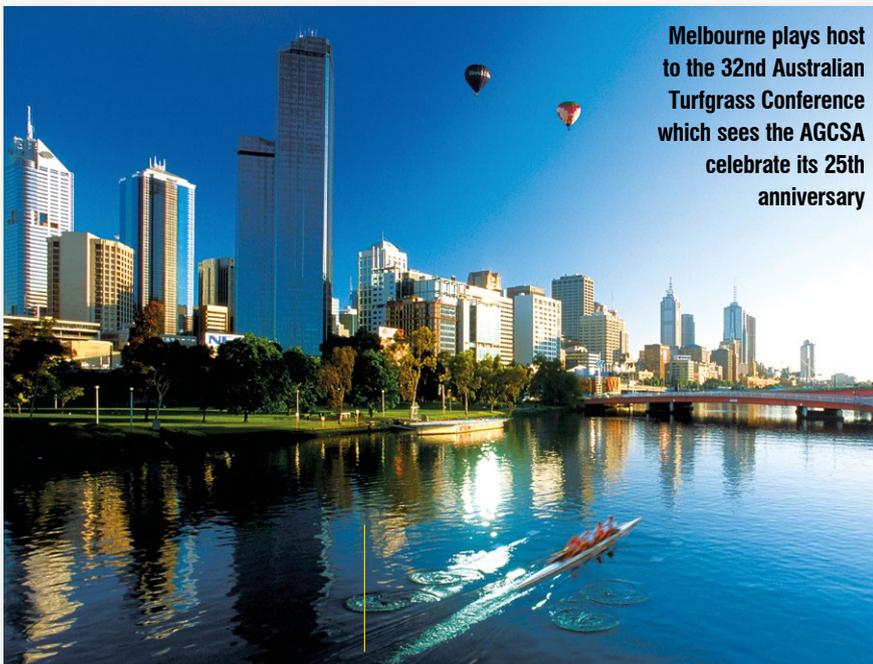
As always we are pleased to provide a forum for the sportsfield industry, turf equipment technicians and Society of Australian Golf Course Architects to conduct educational streams for their members and we welcome all those delegates to Melbourne.

The 2016 AGCSA Golf Championship, sponsored by Toro, will be hosted by superintendent **Adam Lamb** at Barwon Heads Golf Club, with the stableford event hosted by **Steve Hewitt** at neighbouring 13th Beach. Both are very highly regarded and I am sure we will be provided with two wonderfully presented golf courses.

The usual social events are also scheduled and the week promises to provide everything you could want in a conference. I have said this before, but if you can glean three new ideas to take back to your course to improve your operation then your attendance will have been worth it. Please enjoy the week and if you have any concerns please do not hesitate to contact me personally.

PETER LONERGAN
PRESIDENT, AGCSA

32ND AUSTRALIAN TURFGRASS CONFERENCE AND TRADE EXHIBITION



Melbourne plays host to the 32nd Australian Turfgrass Conference which sees the AGCSA celebrate its 25th anniversary

The Australian Turfgrass Conference returns to home territory in 2016 with Melbourne set to host delegates from 19-24 June. Traditionally one of the two 'big' conferences on the annual rota, this year is set to be a little different.

The AGCSA is extremely excited to be staging the 32nd Australian Turfgrass Conference and Trade Exhibition at The Crown Entertainment Complex in Melbourne. The unavailability of the Melbourne Convention Centre, where the conference has traditionally been held, has opened up the opportunity to host the 2016 Melbourne conference within metres of the trade exhibition. This accompanied with Crown's state-of-the-art and on-site conference, exhibition, accommodation and social facilities will ensure a fantastic week of networking and education as the industry gathers for one of its most anticipated events.

The four day education programme will again kick off with the full day Jacobsen-sponsored

workshops on the Monday (20 June) with both agronomic and HR management topics at the fore. Tuesday sees the traditional Plenary sessions before delegates break off into the dedicated Golf, Sportsfield or Technician streams on Wednesday and Thursday (22-23 June).

The trade exhibition will be held in the Palladium Ballroom of the Crown Entertainment Complex on Wednesday and Thursday with nearly 60 companies exhibiting their products and services. The trade exhibition sold out in record time this year and is a must-attend, even for those who are not coming to the conference as registered delegates. Entry to the trade exhibition is free so the AGCSA encourages all golf clubs and turf facilities in Melbourne to send along their delegates for a day while it is on. In addition to the great range of companies exhibiting, the event will also boast a delegate/VIP preview event as well as regular 'Hear from the Trade' education sessions.

INTRODUCING MC IAN COVER...

In a departure from past conferences, the AGCSA is delighted to welcome well-known broadcaster **Ian Cover** who will act as MC for the Syngenta President's Dinner on Monday 20 June as well as the Plenary session talks on Tuesday 21 June. Cover will be well known to Melbourne delegates as a founding member of ABC Radio's Coodabeen Champions, a hugely popular AFL show which is now into its third decade of broadcast.

Cover's work with the Coodabeen Champions has been a major part of a varied career in the media, sport, political and entertainment industries. He has written two books with the Coodabeens and a best seller about the 1993 Ashes Series with former Australian Test cricket star Merv Hughes. Cover is also a former member of the Victorian Liberal Party and was Shadow Minister for Sport, Recreation and Youth Affairs and Shadow Minister for Racing. A member of the Barwon Heads Golf Club, which is hosting the 2016 Toro AGCSA Golf Championships ahead of the conference, the AGCSA looks forward to welcoming Ian and hearing his anecdotes and observations on sport, media and life.

...AND OUR INTERNATIONAL GUESTS

Such is the recognition that the Australian Turfgrass Conference commands worldwide, this year delegates will be treated to sessions from some of the turf industry's pre-eminent international experts. The AGCSA is delighted to welcome back **Dr Frank Rossi** (Cornell University, US), **Professor Fred Yelverton** (North Carolina State University, US), **David Bancroft-Turner** (Matrix Training and Coaching, UK), **Ken Mangum** (formerly Atlanta Athletic Club, US) and **Stan Kostka** (Aquatrols, US).

Rossi was a massive hit when he headlined the last conference in Melbourne in 2012 and likewise loved Australia so much that he has been wanting to return ever since! One of the most engaging, lively



Cornell University turf maestro Frank Rossi makes a welcome return to Melbourne in 2016

and knowledgeable presenters in the business, Rossi's mix of plenary session addresses, forum sessions and seminars will be heavily subscribed. Joining him is Yelverton who makes a return to the Australian Turfgrass Conference after an absence of 10 years. Working as part of the NCSU's Centre for Turfgrass Environmental Research & Education, Yelverton is an expert on all things weeds and will host the agronomic workshop on Monday.

David Bancroft-Turner, or DBT as he has become affectionately known by AGCSA staff, has become a regular and popular fixture at the last two Australian Turfgrass Conferences and returns for a third consecutive year. If you have not been a part of his entertaining and thought-provoking sessions on club politics, change management and managing performance then do yourself a favour and get in.

Mangum, a Georgia Golf Hall of Famer, is the retired director of golf courses and grounds at the Atlanta Athletic Club and returns to Australia to conduct a session on zoysiagrass. Kostka is the director of technology and business development for Aquatrols and will host a two-hour workshop on water management.

PLENARY SESSIONS

Along with Rossi, Yelverton and Bancroft-Turner headlining on Tuesday, this year's men's health



Prof. Fred Yelverton



Jyri Kaapro



Les Burdett



Steve Herzberg



GolfAustralia

HR expert David Bancroft-Turner has become a popular fixture at the Australian Turfgrass Conference



David Talalla



Phil Beal



Nick Kinley



Shaun Cross

session is one not to be missed. Many will remember the day in late November 2014 when Australian Test cricketer Phil Hughes was fatally struck by a bouncer while playing in a Sheffield Shield match at the SCG. His death by such freakish means sent shockwaves around the sporting world and the outpouring of emotion that followed was unprecedented.

One man who will forever remember the events that unfolded that day is Cricket Victoria's **David Talalla**. A member of Cricket Australia's Umpires High Performance Panel (UHPP), Talalla was match referee for the game and was front and centre in dealing with the incident as it unfolded and in its aftermath. At the conference Talalla will recount the events of that unforgettable day and the immense stress that such a unique incident placed upon him. His address will open this year's men's health session which focuses on recognising and dealing with stress in the workplace and leads into presentations from AGCSA superintendent members **Phil Moylan** (Gosnells Golf Club, WA) and **Phil Beal** (The Australian Golf Club, NSW).

Another must-attend plenary session is entitled 'Drugs in the workplace - Your rights and obligations'. The sale and use of recreational drugs within society has reached alarming proportions and in a workplace situation it can have significant ramifications not only for staff members but also managers. In response to this growing societal trend, Tim Greenall from Madgwicks law firm will give a presentation which will look at your legal rights and obligations as an employer and how to deal with an employee if they are suspected of drugs-related issues or have been charged.

TURF TECHNICIANS

In addition to the Golf and Sportsfield Streams, the 32nd Australian Turfgrass Conference in Melbourne will again feature a dedicated Turf Technicians Stream. The comprehensive four-day programme kicks off on the Monday with a visit to the ADE Turf Equipment Workshop followed by a visit to Toro's Braeside factory on Tuesday.

A Tech Tour, run in association with Autotech and Wynns, will take up all of Wednesday and will include visits to a number of workshops at Melbourne sandbelt golf courses, along with a tour of an oil mixing facility and visit to NisMo, Nissan's motor racing HQ. Thursday will see technicians return to host venue Crown Entertainment Complex for a range of company presentations.

CONFERENCE APP

If you are heading to Melbourne then make sure you download the Australian Turfgrass Conference app to enhance your conference experience. Available on both Apple and Android devices, the conference app contains every bit of information delegates need to make the most of this year's event – everything from events, education programme, speaker bios, maps and conference documents. You can also

The AGCSA app is a must-have to enhance your Melbourne conference experience



KEY CONFERENCE EVENTS

2016 TORO AGCSA GOLF CHAMPIONSHIPS



Sunday 19 June, 11.45am
Barwon Heads GC and 13th Beach

SYNGENTA PRESIDENT'S DINNER

Monday 20 June
River Rooms, Crown, 6.30pm

TRADE EXHIBITION OPENING

Tuesday 21 June,
Crown Palladium, 4pm (full delegates only)

2016 AGCSA AGM

Wednesday 22 June
Garden Room 2, 7.30am



TORO RECEPTION

Wednesday 22 June
Trade Exhibition Stand, 5pm



ICL FAREWELL BASH

Thursday 23 June
Studio 3, Crown, 6pm



access marketing and product information from those companies exhibiting at the trade show. The best way to see what the app has to offer is to download it and play around with it.

CELEBRATING 25 YEARS

And finally, this year's Melbourne conference takes on extra significance for the AGCSA. It is 25 years since the AGCSA became a fully incorporated association and to mark the occasion the Syngenta President's Dinner will double as an anniversary celebration. Although formed in 1981, it wasn't until 1991 that the AGCSA started to operate in its current form and it is therefore fitting that the Melbourne conference should be the venue for this special occasion.

As part of the President's Dinner, the AGCSA is delighted to confirm that it will bestow its highest honour – the Distinguished Service Award (DSA). First awarded in 1997 to Victorian Billy Powell, the DSA is bestowed by the AGCSA Board and recognises an individual who has left an indelible mark on the Australian golf course/turf management profession. This year's recipient certainly lives up to that and we look forward to recognising them in the appropriate fashion.

Should you require any assistance during your time at the 32nd Australian Turfgrass Conference, please visit the registration desk or ask a member of the AGCSA staff. We look forward to seeing you all in Melbourne. 🌟





Results today, opportunities on the horizon

As golf evolves to embrace new markets and generations, so new challenges and opportunities will emerge. Syngenta is dedicated to helping course superintendents and managers capitalise on these changes, by providing the products, services and advice you need to achieve long-term sustainable business success – ensuring players always experience your course at its very best.

syngenta[®]



Scan to read more.
For more information and to download the full registered labels and MSDSs,
ask your Syngenta Agent or go to www.greencast.com.au

Syngenta Australia Pty Ltd, Level 1, 2-4 Lyonpark Road, Macquarie Park NSW 2113. ABN 33 002 933 717.
®Registered trademark of a Syngenta Group Company. ™Trademark of a Syngenta Group Company. AD 15/163

TM

FUTURE LEADERS OF THE INDUSTRY

Every year the Australian Turfgrass Conference recognises the industry's outstanding turf apprentices. Each state superintendent association and Sports Turf Association conducts its own graduate award programme with the winners going on to represent their state in the final of the AGCSA Graduate of the Year Award and National Sports Turf Graduate of the Year Award. Both awards are proudly presented in partnership with AGCSA Platinum Partner Toro Australia which provides the winners with a once in a lifetime education opportunity.

Being nominated for AGCSA Graduate of the Year carries a high level of credibility and as reward for getting to the national final the state finalists receive

complimentary registration to attend the 32nd Australian Turfgrass Conference. Judging takes place on the eve of the conference and the finalists are required to give a 15 minute presentation to an independent panel of three judges before being asked a series of general and turf management questions.

The winning graduate will be enrolled in the University of Massachusetts (UMass) Winter School for Turf Managers in the US. All education, travel, accommodation and living expenses will be paid during this eight-week period, during which time they will also attend the Golf Industry Show and visit various Toro facilities across the US.

The AGCSA, together with the STA, congratulate the following finalists:



2016 AGCSA GRADUATE OF THE YEAR



GCSAQ

Ashley Hill
Arundel Hills Golf Club

2015 GCSAQ Apprentice of the Year Hill finds himself at the top of his class after completing four years of training to obtain his Certificate III in Sports Turf Management. He has applied himself at three distinctly different golf course facilities to gain a vast variety of skills required to be a successful young turf manager. With glowing references from his previous and current superintendent mentors, this aspiring young superintendent not only applies himself on the golf course but also in the classroom. Gaining five credits and four distinctions, it comes as no surprise he was also nominated for his academic achievements, initiative and task leadership.



GCSAWA

Steve Lindley
Meadow Springs G&CC

Mature age apprentice Lindley (32) currently holds the dual role of assistant superintendent and mechanic at Meadow Springs Golf and Country Club in Perth. Lindley initially started at the club in February 2013 as the club's mechanic at which time he also signed up to take on apprenticeship through Challenger TAFE. In January 2015 he stepped up into the assistant's role while still undertaking his studies as well as the mechanic's role.

Prior to joining Meadow Springs, Lindley had a successful career within broadacre agriculture including seven years as a leading farmhand on a large broadacre cropping programme in the eastern Wheatbelt of WA. He then progressed into farm management working within the mid-West and then the northern Wheatbelt.



NSWGCSA

Mitchell Gibbs
Bankstown Golf Club

The Vince Church Award for NSWGCSA Apprentice of the Year is always hotly contested and this year it was Gibbs who earned the right to represent his state in the national final. Currently an apprentice greenkeeper at Bankstown Golf Club, Gibbs initially started in the parks and gardens industry before taking on sports turf management thanks to the encouragement of a family friend involved in the irrigation sector. During his time at Bankstown Gibbs has been involved in all aspects of course maintenance and has a real interest in the irrigation side of things which he hopes to pursue further along his career.



SAGCSA

Keenan Hutchings
The Grange Golf Club

Hutchings started as a trainee with The Grange Golf Club in November 2012 after the completion of his schooling at Millicent, SA, having identified the turf industry as a career path that he wanted to follow and one he believed he would be successful in. His interest in greenkeeping began through playing golf and also through his father being the course superintendent at Millicent Golf Club at that time.

Hutchings' passion for the turf industry was evident from day one of his traineeship and has continued throughout his training, where he achieved very good results academically and developed his skills to a very high standard. His work ethic and willingness to learn have been strengths and have seen Hutchings develop as a skilled and dependable member of the team at The Grange.

STA ACT

Caleb Swinbourn
Complete Turf & Landscape

One of the first state finalists to be announced, STA ACT Living Turf Graduate of the Year Swinbourn is currently employed by Complete Turf and Landscape and undertook his apprenticeship at Capital Public Golf Club in Canberra. The 22-year-old has history on his side with graduates from the nation's capital excelling in the national award over the years. He will be aiming to become the territory's third winner in four years, emulating the feats of last year's winner Alex Smith and 2013 victor Luke Jorgensen.



TGCSA

Trent Le Rossignol
Tasmania Golf Club

Twenty-four-year-old Le Rossignol is currently a qualified greenkeeper at Tasmania Golf Club under long-serving course superintendent Danny Gilligan. During his time at Tasmania he has been involved in preparing the course for the 2013 Australian Men's Interstate

Series and the Hobart Wrest Point International Masters. Outside of major events Le Rossignol has also played a major role in ongoing course works including relaying and improving drainage on greens, re-levelling tees as well as the club's annual renovation practices.



VGCSA

William Koopmans
Ballarat Golf Club

Koopmans prevailed in what was one of the strongest graduate fields in years according to immediate past VGCSA president Jeremy Cutajar. The 21-year-old is currently a fourth year apprentice at Ballarat Golf Club and joined three years after its recent redevelopment.

As with the maturing of any new golf course there have been plenty of ongoing works and Koopmans has been involved in the installation of two kilometres of fairway drainage, bunker improvements as well as enhancing the course's fledgling landscape areas. He has also helped prepare the course for the PGA Futures Championships the past two years and earlier this year was a volunteer at 13th Beach for the 2016 Oates Victorian Open.

2016 STA AUSTRALIA SPORTS TURF GRADUATE OF THE YEAR AWARD



STA ACT

Beau McFarlane
Stadium Turf Management

McFarlane started his turf career working as a casual groundsman at Muswellbrook Race Track before moving to Canberra Racecourse where he was offered a sports turf apprenticeship. After three years there, McFarlane was offered a position with Stadium Turf Management where he completed his apprenticeship through CIT and was subsequently employed as a turf manager. After four months at Stadium Turf Management he is now in charge of three ovals. McFarlane loves working outside and he enjoys being able to provide quality sporting surfaces for people to enjoy.



STA NSW

Kurt Dillon
Green Options

During the four years that Dillon has worked with Green Options he has been fortunate enough to work at a number of venues including Shark Park (home of the Cronulla Sharks), Cranbrook School, Randwick Golf Course and Gynea Bowling Club. This experience, coupled with great results achieved at TAFE NSI Ryde, has proven him responsible and capable of being second in charge at Shark Park. Dillon is keen to continue learning more about sports turf management and has a keen interest in travelling overseas to gain international experience.



STA QLD

James Stamatis
Landscape Solutions

Presenting a high standard of playability and aesthetically pleasing sports turf, as well as providing a safe surface for participants, is not only an important part of Stamatis' work but an enjoyable one. He takes pride in his work to ensure satisfaction from peers, coaches and students at Anglican Church Grammar School. Stamatis continues to develop his knowledge of sports turf management by volunteering at venues such as Allan Border Field and plans to undertake Certificate IV in Sports Turf Management this year.



STA SA

Marcus Kightley
Adelaide Oval

Kightley started his traineeship at Adelaide Oval in October 2013 and was offered a full-time position in November 2015. The favourite aspect of his job is the fact that he learns something new and exciting everyday as well as seeing amazing sporting events. His career ambitions are to continue working and learning at Adelaide Oval and progress higher up in the grounds department.



STA VIC

Matthew Pokorny
Danny O'Brien Racing

Pokorny, who completed his training through The Gordon in Geelong, is committed to working long-term in the racing industry and to continue his study of sports turf management. The most enjoyable part of his job is being involved in preparing the track for daily track work. He works on both sand and turf tracks to ensure they are safe for training, gallops and track work as well as property and equipment maintenance. His ambition is to one day work at a metropolitan racing venue.



STA WA

Jayden Pickering
City of Kalgoorlie-Boulder

Pickering started with the City of Kalgoorlie-Boulder in January 2013 undertaking an apprenticeship in amenity horticulture before transferring to sports turf management after 18 months. Pickering has spent the past 18 months of his apprenticeship working on the city's 10 sporting fields and five cricket wicket blocks. In January 2016 he was promoted to the position of curator. When asked what he enjoys most about his job Pickering says: "Growing up in a town like Kalgoorlie the expectation is to get a trade and work on the mines. To be able to have a trade that allows you to work outside in an area that is looked on as being a highly important part of the fabric of this town is enjoyable."



PAST WINNERS

AGCSA

- 2015 Alex Smith**
Royal Military College GC, ACT
- 2014 Ethan Bell**
Wangaratta GC, Vic
- 2013 Luke Jorgensen**
Federal GC, ACT
- 2012 Dave Canterbury**
Kiama GC, NSW
- 2011 Dan Oswin**
Novotel Forest Resort, Vic
- 2010 Adam Shields**
Casino Golf Club, NSW

STA

- 2015 Grant Woolley**
City of Launceston, Tas
- 2014 Luke Cooney**
Hale School, WA
- 2013 Andrew Spicer**
Wyong Shire, NSW
- 2012 Rory Bairnsfather-Scott**
WACA, WA
- 2011 Rebecca Dynon**
Racing Victoria



GOLF

SUNDAY

11.45am - 4.15pm

AGCSA Golf Championships - Stroke
Barwon Heads Golf Club

AGCSA Golf Championships - Nett &
Stableford 13th Beach

4.30pm - 5.30pm

Pre-dinner drinks and canapes

5.30pm - 8pm - Toro Golf Dinner

MONDAY

AGCSA Jacobsen Workshops
10am - 3pm (Lunch 12.30pm)

Dr Fred Yelverton



Weed control - Past, present, future

David Bancroft-Turner

Political intelligence: How to
survive, thrive and manage the
politics at your workplace

6.30pm - 10.30pm **syngenta**
AGCSA 25TH ANNIVERSARY
DINNER AND AGCSA AWARDS

TUESDAY

Plenary - River Rooms

8.15am - 9am

Dr Frank Rossi

Taking the high ground - A look at
current & future environmental issues

9am - 9.40am

Dr Fred Yelverton

New strategies in pre-emergent
control

9.40am - 10.20am

David Bancroft-Turner

Influencing with and without
authority

10.30am - 11am - Morning tea

11am - 11.30am

Golf Australia presentation

11.30am - 1.00pm

David Talalla, Phil Beal, Phil Moylan

Men's health - Recognising and
dealing with stress in the workplace

1pm - 2pm - Lunch

2pm - 2.40pm

Tim Greenall

Drugs in the workplace - Your
rights and responsibilities

2.40pm - 3.20pm

Frank Dempsey

Hazardous chemical information



3.20pm - 4pm

Nadeem Zreikat

Building your profile using social media

4pm - 6pm - **TRADE EXHIBITION**
OPENING FOR FULL/DAY DELEGATES

WEDNESDAY

Garden Room 2

7.30am - 8.30am

2016 AGCSA Annual General Meeting



River Rooms 1 & 2

8.30am - 9.50am

Nick Kinley and Simon Bourne

Way out West - 2015 AGCSA Excellence
in Golf Course Management and
Claude Crockford Environment Award
winner presentations

9.50am - 10.30am

Shaun Cross

From Byron Bay to Monterey

10.30am - 11am - Morning tea

11am - 1pm

AGCSA, PGA, GMA and SAGCA

Roles within a golf club

1pm - 2pm - Lunch and Trade Show

2pm - 3.30pm

Wednesday PM sessions

River Rooms 1 & 2

Dave Warnaar, Peter Briscoe and

Judah Rowe

Biological and sustainable
management applications

River Room 3

Marcus Hartup and Mick Kelly

The challenges, benefits and pitfalls of
working abroad

Garden Room 2

Don Loch & Peter McMaugh

Mights and mites, shoulds and should
nots

3.30pm - 5pm - Afternoon tea and
Trade Show

From 5pm - **TORO RECEPTION**



THURSDAY

River Rooms 1 & 2

8am - 9am

Dr Frank Rossi

Maximising turf stress tolerance

9am - 10.30am

Steve Herzberg

Charisma, conversations and
communication

10.30am - 11.30am - Morning tea
and Trade Show

11.30am - 12pm

Ken Mangum

Using zoysia at Atlanta Athletic Club

12pm - 12.30pm

Dr Fred Yelverton

Advances in *Poa annua* control

12.30pm - 1pm

Andrew Peart

An agronomist's perspective on UK golf
courses

1pm - 2pm - Lunch and Trade Show

2pm - 4pm

*Dr Frank Rossi, Prof. Fred Yelverton, Phil
Ford and Andrew Peart*

Turfgrass Talkback - Martyn Black will
interview and moderate our team of
turf experts.

Garden Room 3

1pm - 4.30pm

AGCSA Future Turf Managers'

Initiative - proudly supported by
Jacobsen



6pm - 8pm

FAREWELL BASH



FRIDAY

Garden Room 2

8.30pm - 3.30pm

AGCSA Future Turf Managers'

Initiative - supported by *Jacobsen*



ARCHITECTS

TUESDAY

SAGCA Golf Day

SAGCA Dinner - Incl. Fireside chat

WEDNESDAY

11am - 1pm

AGCSA, PGA, GMA and SAGCA

Roles within a golf club

1pm - 2pm - Lunch and Trade Show

Garden Room 3

2pm - 4.30pm - SAGCA AGM

4.30pm - 5.30pm - Guest Speaker

THURSDAY

Choice of education and Trade Show

6pm - 8pm

FAREWELL BASH



SPORTSFIELD

SPECIALIST WORKSHOPS

NB: Only delegates who have pre-registered for these specialist workshops can attend

Wednesday

Garden Room 2

8.30am - 10.30am

Water disassembled - *Stan Kostka*

Garden Room 2

11am - 1pm

Understanding growing degree day calculations - *Jyri Kaapro*

Garden Room 3

11am - 1pm

Managing performance & underperformance - *David Bancroft-Turner*

Thursday

Garden Room 3

11am - 1pm

How to change behaviour... without a gun - *David Bancroft-Turner*

TECHNICIANS

MONDAY

12pm - 4pm

ADE Turf Equipment visit

TUESDAY

8am - 3pm Toro factory - Braeside. Incl. new products session and tour

4pm - 6pm - TRADE OPENING

WEDNESDAY

8.30am - 4pm

Tech Tour - Sandbelt course workshop visits, oil mixing facility tour and Nismo Nissan Motor Racing HQ

From 5.00pm - TORO RECEPTION

THURSDAY

Garden Room 2

9am - 10am Briggs and Stratton

10am-11.30 Morning Tea, Trade Show

11.30am - 12.15pm Bernhards

12.15 - 1pm Kubota/Baroness

1pm - 2pm Lunch, Trade Show

2pm - 3pm Battery technology

6pm - 8pm

FAREWELL BASH



SUNDAY

11.45am - 4.15pm

AGCSA Golf Championships - Stroke Barwon Heads Golf Club; Nett & Stableford 13th Beach



4.30pm - 8pm

Pre-dinner drinks and canapes then Toro Golf Dinner

MONDAY

AGCSA Jacobsen Workshops 10am - 3pm (Lunch 12.30pm)

Dr Fred Yelverton

Weed control - Past, present and future

David Bancroft-Turner

Political intelligence: How to survive, thrive and manage the politics at your workplace.



6.30pm - 10.30pm

AGCSA 25TH ANNIVERSARY DINNER



TUESDAY

Plenary - River Rooms

8.15am - 9am

Dr Frank Rossi

Taking the high ground - A look at current & future environmental issues

9am - 9.40am

Dr Fred Yelverton

New strategies in pre-emergent control

9.40am - 10.20am

David Bancroft-Turner

Influencing with and without authority

10.30am - 11am - Morning tea

11am - 11.30am

Golf Australia presentation

11.30am - 1.00pm

David Talalla, Phil Beal, Phil Moylan

Men's health - Recognising and dealing with stress in the workplace

1pm - 2pm - Lunch

2pm - 2.40pm

Dr Michael Walsh

Understanding herbicide resistance

2.40pm - 3.20pm

Hazardous chemical information

3.20pm - 4pm

Nadeem Zreikat

Building your profile using social media

4pm - 6pm - TRADE EXHIBITION

OPENING FOR FULL/DAY DELEGATES

WEDNESDAY

River Room 3

8.30am - 10.30am

Forum involving AFL ground managers, Dr Frank Rossi and Andrew Peart

Accommodating the AFL - Inspections, expectations and irritations

10.30am - 11am - Morning Tea

11am - 11.40am

Dr Fred Yelverton

Weed management in sportsfields

11.40am - 1pm

Les Burdett

Need analysis for turf cricket pitches

1pm - 2pm - Lunch and Trade Show

2pm - 3.30pm

Wednesday PM session

See Golf Stream opposite

3.30pm - 5pm - A/T and Trade Show

From 5pm - TORO RECEPTION



THURSDAY

River Room 3

8.30am - 9.10am

Niall Martin

Knox warm-season ground conversion

9.10am - 9.50am

Phil Ford

Seeded couch applied with hydro-mulch

9.50-10.30am

Nathan Humphries

Natural, synthetic and hybrid grasses - A role for all

10.30am - 11.30am - M/T, Trade Show

11.30am - 12.10pm

Greg Askew

Preparing surfaces for the IPL

12.10pm - 12.30pm

CV - New Junction Oval proposal

12.30pm - 1pm

Tom Langworthy

Turf machinery innovations

1pm - 2pm - Lunch and Trade Show

2pm - 4pm

Dr Frank Rossi, Prof. Fred Yelverton, Phil Ford and Andrew Peart

Turfgrass Talkback - Martyn Black will interview and moderate our team of turf experts.

6pm - 8pm

FAREWELL BASH





32ND AUSTRALIAN TURFGRASS CONFERENCE TRADE EXHIBITION

MAJOR CONFERENCE SPONSORS

- 21 Rain Bird Australia
- 28 Hybrid-Ag
- 35 Syngenta Australia
- 37 Nuturf
- 39 Jacobsen
- 58 Toro Australia

AGCSA SILVER PARTNERS

- 5 Globe Growing Solutions 
- 14 Equipment Solutions
- 23 Bayer Environmental Science
- 24 John Deere Australia
- 36 Kubota Australia

AGCSA BRONZE PARTNERS

- 13 PGG Wrightson Turf 
- 16 Oasis Turf
- 19 Graden Industries
- 22 Dint Golf Solutions
- 25 ICL
- 30 Advanced Seed
- 31 Hunter Industries

- 40 Brown Brothers
- 44 Simplot Partners
- 54 Greg Norman Golf Design
- 32 StrathAyr Instant Lawn/Legend
- 33 Redexim
- 34 Lawn Solutions Australia

EXHIBITORS

- 1 Amiad Water Systems
- 2 Maredo BV
- 3 Trimax Mowing Systems
- 4 Tru-Match
- 6 HG Sports Turf
- 7 No Fuss Event Hire
- 9 Lawn and Turf Maintenance
- 10 Sustainable Turf Renovations
- 11 Maxwell & Kemp
- 12 BASF Australia
- 15 Floratine Products Group
- 17 Tru-Turf
- 18 Mentay Steel
- 20 Colin Campbell (Chemicals)
- 26 Bioactive Soil Solutions
- 27 Living Turf
- 28a Bernhard & Company
- 29 Ventrac Australia
- 41 Triangle Waterquip
- 42 Adama Australia
- 43 David Golf & Engineering
- 45 McMahons
- 46 SST Australia
- 47 BA Group Australia
- 48 Danger Sun Overhead
- 49 Crafter & Mogford Golf Strategies
- 50 SmithGolf & Irrigation
- 51 Geofabrics Australasia
- 52 TurfCraft International
- 53 Greenway Turf Solutions
- 55 Player Proximity Systems
- 56 Agsafe
- 57 Supaturf

NB: Trade Exhibition floorplan correct at time of this edition going to publication

**The renewable way
to reduce bicarbonates.**



Terreplex[®]

*From the **trees** back to the **turf**.*



14 Sonia Street, Carrum Downs VIC 3201 ■ (03) 9708 2911

www.oasisturf.com.au

Settlers Run 21C Stewart MacFarlane is one of 13 to be picked for the inaugural AGCSA Future Turf Managers' Initiative

Looking to the future



ATM profiles the 13 successful applicants for the inaugural AGCSA Future Turf Managers' Initiative, presented in partnership with Gold Partner Jacobsen, which will be held during the 32nd Australian Turfgrass Conference in Melbourne.

In January 2016, the AGCSA announced that it was teaming up with Gold Partner Jacobsen to bring the company's highly successful Future Turf Managers' Initiative (FTMI) programme to Australia. The inaugural Australian FTMI will be held during the 32nd Australian Turfgrass Conference in Melbourne and will comprise an intensive two days of seminars, talks and workshops covering subjects such as communications, budgeting, team management, CV writing and interview techniques, networking and career development.

Recognising the importance of preparing golf course maintenance personnel to take on the role of superintendent, course manager or assistant, Jacobsen founded the FTMI some four years ago in the UK. More than 80 young greenkeepers having since gone through the programme there with over 20 per cent of delegates going on to be promoted. Such has been its success that Jacobson has subsequently rolled out the programme in Portugal and New Zealand and along with its introduction in Australia in 2016 has plans to conduct it in Italy (2016) and Scandinavia (2017).

The FTMI has been designed to provide practical tools and guidance to help assist candidates with their career aspirations through an interactive, professional development programme. Working with qualified trainers, mentors, AGCSA and Jacobsen staff, it is the aim of the FTMI programme that participants leave with a clear understanding of what the future holds and a realistic overview of the expectations that come with their climb up the course management ladder.

In January, the AGCSA called for applications for the inaugural intake and was overwhelmed with the response. Originally limited to just 10 places, the calibre of this year's applicants was such that it was decided to increase that number to 13. The AGCSA, together with Jacobsen, congratulate the

following successful candidates who will travel to Melbourne in June:



BROCK AGNEW
SANCTUARY COVE G&CC, QLD

Currently the assistant superintendent at Sanctuary Cove Golf & Country Club on the Gold Coast, Agnew started at the 36-hole establishment in May 2014 under then superintendent Robin Doodson.

Agnew started his greenkeeping career at Old Bar Beach Bowling Club on the NSW North Coast. Finishing his apprenticeship in 2003, he moved to the Sunshine Coast and after a brief stint at Peregrin Springs Golf Club moved to Hyatt Cooloom. At that point Cooloom played host to the Australian PGA Championships and after two years there the assistant superintendent role became available.

Leaving Cooloom, Agnew then ventured overseas to Ireland and worked again as an assistant at The K Club. With the European Open being hosted there, Agnew's time at The K Club easily ranks as one of the highlights of his career to date. Upon returning to Australia, Agnew worked in course construction and also had stints as a sales representative for David Golf and Living Turf. Since joining Sanctuary Cove, Agnew has been involved in numerous ongoing works to the Pines course and in 2015 was a course volunteer at The Australian Golf Club for the Emirates Australian Open.



NATHAN ARNETT
TRARALGON GC, VIC

Arnett, who since July 2014 has been superintendent at Traralgon Golf Club, started his apprenticeship in 2001 as a 17-year-old at Melbourne-based Waterford Valley Golf Club during its construction. It didn't take Arnett long to realise that he had found his perfect career and

after completing his apprenticeship spent the next few years travelling and working on golf courses in Australia, the UK and the USA.

While in the US he got involved with The Ohio Program which took him to Augusta National where he had the opportunity to work on the crew for a year. Needless to say working at one of the most famous golfing establishments in the world only fuelled Arnett's desire to progress in the industry further. Building upon the networks created overseas has proven extremely beneficial for Arnett who returned Stateside last year as one of five Australian course volunteers for the 2015 US Open at Chambers Bay.



JARROD ARPS RYDE-PARRAMATTA GC, NSW

Arps' greenkeeping career began in 1994 as a first year apprentice at The Lakes Golf Club in Sydney. On completion of his trade certificate in 1999, he headed to Whistler, Canada to work at Nicklaus North Golf Club for a summer. After returning home, Arps' attention turned to his pursuit of a professional golf dream which took him to the Canadian Tour Qualifying School where he played in six events.

Returning to Australia, Arps took up greenkeeping stints at Eastlake and Wakehurst golf clubs before heading back to Eastlake as the 3IC/irrigation technician. In that role for 2.5 years, Arps was elevated to assistant superintendent, a position

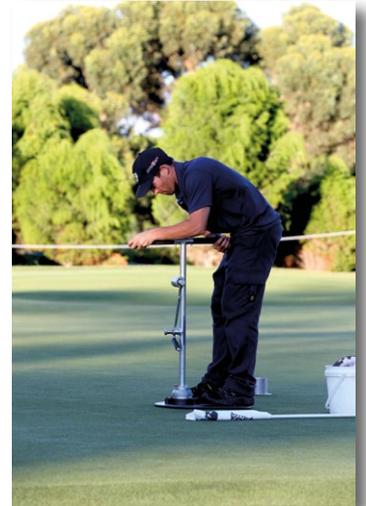
he held for a further 2.5 years before moving across to Ryde-Parramatta in 2010 to take on the assistant role under superintendent Shaun Probert.

Ask what he rates as his career highlights to date, Arps lists being involved in three major tournaments while at The Lakes, rising to the role of assistant superintendent at a Group 1 private golf club and taking charge of Ryde-Parramatta's ongoing bunker redesign/drainage programme.

LIAM ASH MONASH CC, NSW

Over the last five years, Ash has had a rapid rise through the greenkeeping ranks and recently his passion and work ethic saw him appointed assistant superintendent at Monash Country Club in Sydney's northern suburbs. Ash served his apprenticeship at Brookwater Golf & Country Club in Queensland, where he helped prepare the course for the 2013 Isuzu Queensland Open, before working a growing season at Barnbougle in Tasmania.

Currently undertaking a Diploma of Sports Turf Management through Ryde TAFE, Ash rates his elevation to assistant superintendent at Monash as his biggest career highlight to date, as well as volunteering at the 2015 Emirates Australian Open at The Australian Golf Club. "Becoming an assistant superintendent at a young age was a massive achievement for me and showed me that hard work does pay off," says Ash.



Rowan Daymond played a major role in The Grange Golf Club successfully hosting the 2016 ISPS Handa Women's Australian Open in February

\$0 Deposit Finance Solutions

Upgrade to a Rain Bird Irrigation System today!



Upgrading to the latest irrigation technology presents your course at its best, with the added benefits of saving up to 30% of water, power and labour costs.

Together we can offer:

- \$0 deposit finance
- On and off balance sheet payment solutions
- Flexible payment options
- We make the process as simple as possible
- Competitive Rates

FOR MORE PRODUCT INFORMATION, CONTACT:

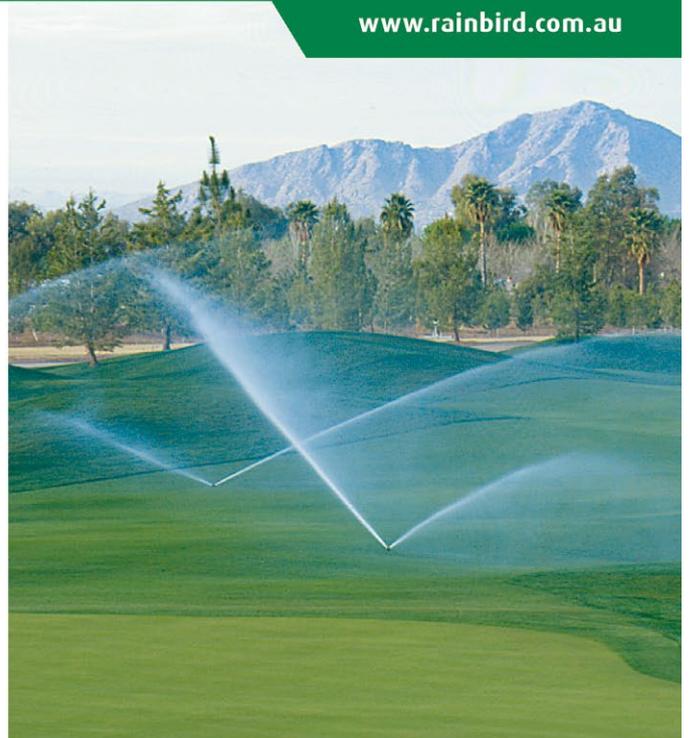
Mac Ross – 0427 720 139 | mross@rainbird.com.au
Paul Woloszyn – 0409 115 000 | pwoloszyn@rainbird.com.au

FOR FINANCE SOLUTIONS, CONTACT:

Jonathan Hill – (03) 8567 3555 | 0418 226 376
jhill@mkpfinance.com.au | www.mkpgroup.com.au

M K Moody Kiddell
& P & Partners

www.rainbird.com.au





Peninsula-Kingswood's Mark Harkness pictured volunteering at the 2014 US PGA Championship at Valhalla Golf Club



STUART CAMPBELL MAROOCHY RIVER GC, QLD

It has been an eventful couple of years for Campbell who currently resides as assistant superintendent at the new Maroochy River Golf Club on the Sunshine Coast. Campbell, originally from Melbourne and who spent six years working at Kingston Heath Golf Club, has played a significant role in the construction of the new course which duly saw him collect the GCSAQ Assistant's Recognition Award in early March.

Campbell was nominated for that award by highly experienced superintendent and former AGCSA Board member Pat Pauli specifically for his work in the establishment of the new course. In that capacity Campbell was responsible for all the permanent and casual staff, herbicide application programmes and WH&S meetings.

One of Campbell's many strengths is his attention to detail which is a key criterion in the presentation of a new golf course. He has great rapport with the staff and currently organises daily staff schedules and weekly work programmes. In winning the GCSAQ award Campbell will undertake a placement with Ogilvy, Clayton, Cocking, Mead during the company's ongoing redevelopment works at Peninsula-Kingswood.



JUSTIN CROWE HUNTINGDALE GOLF CLUB, VIC

As an apprentice at Jubilee Golf Club in Wangaratta 19 years ago, Crowe could hardly have imagined then where greenkeeping would one day take him. After completing his apprenticeship, he moved to Victoria's Bellarine Peninsula where he took on a turf tradesperson role at Barwon Heads Golf Club. Two years into that he was promoted to foreman where he was involved in the installation of the club's reclaimed water system and new irrigation system.

Crowe then ventured overseas, heading to Royal Dublin Golf Club in Ireland where he was part of the crew charged with reinstating the course back to its original design under the guidance of

architect Martin Hawtree. Upon returning to Australia in 2006 he landed a job at Huntingdale Golf Club and over the past 10 years has risen to be assistant superintendent under Michael Freeman.

Crowe has been involved in a host of project work during his time at Huntingdale, not to mention preparing the course for numerous tournaments. Crowe has been heavily involved in the management and preparation of four Australian Masters, two Victorian PGA Championships, three Australian Amateur Championships and the Australian Interstate Teams Championship.



ROWAN DAYMOND THE GRANGE GOLF CLUB, SA

Growing up in the small NSW township of Coomealla, Daymond began playing the game of golf at the age of 12 which would set him on a course to take on an apprenticeship at his local golf club. Once completed Daymond was offered a position at Kooyonga Golf Club and together with his young family moved to Adelaide.

During his four years at Kooyonga Daymond completed his Certificate IV in Sports Turf Management and also helped prepare the course for two Jacobs Creek Opens. Following Kooyonga, he spent nine months at the St Andrews Links Trust in Scotland where he assisted with preparations for the official opening of The Castle Course.

Upon his return to Australia in 2009, he was quickly snapped up by The Grange Golf Club as a groundsman. His acumen and work ethic saw him elevated to assistant superintendent of the East Course the following year where he played a significant role in its redevelopment under the auspices of Greg Norman Golf Design.

Further to this and in recognition of his skills and knowledge, Daymond was appointed in July 2014 to the newly created role of senior assistant superintendent at The Grange. He has since played a major role in the club's ongoing irrigation upgrade and was a key member of the crew which prepared the West Course for the 2016 ISPS Handa Women's Australian Open in February.



MARK HARKNESS PENINSULA-KINGSWOOD, VIC

It's hard to fault the passion and dedication that Peninsula-Kingswood assistant superintendent Mark Harkness has for the turf industry. Whether it's volunteering for major tournaments, broadening his knowledge base by recently completing a Diploma in Sports Turf Management or his current involvement in the remodelling works at Peninsula, Harkness has always immersed himself in every facet of the industry.

A soon-to-be-dad, Harkness began his turf management career as an apprentice at Cerberus Golf Club on Victoria's Mornington Peninsula before joining Kingston Heath Golf Club as a qualified turf tradesperson. A short period in the UK, where he was a seasonal greenkeeper at Queenwood Golf Club, was followed by a stint as an assistant superintendent at Patterson River Golf Club before moving back to the sandbelt as foreman at Victoria Golf Club. Just as Peninsula-Kingswood embarked on the remodelling of its South Course in 2015, Harkness was approached by director of courses Glenn Stuart and duly appointed assistant superintendent on the South Course.

Harkness has a wealth of major tournament experience and has been involved in the 2009 and 2010 Australian Masters, 2008 and 2014 Women's Australian Opens and the 2013 and 2014 Emirates

Australian Opens. However, his career highlight came in 2014 when he journeyed to the US to be part of the tournament crew at Valhalla Golf Club for the US PGA Championship.



KIRSTY HERRING KALGOORLIE GC, WA

At the age of 20 Kirsty Herring found herself unemployed and with her past experience in data entry and office work she was yearning for a change. Volunteering at Beachmere Bowls Club near Caboolture to help the local greenkeeper and keep herself busy, after three months Herring was offered a part-time apprenticeship. After two years she landed an apprenticeship at the then Horton Park Golf Club under superintendent Pat Pauli.

Upon finishing her apprenticeship Herring applied for The Ohio Program where she was stationed in Blufton, South Carolina working at the prestigious private course Berkeley Hall. Her time there would prove a turning point in her career, working as a spray tech and given the responsibility of leading a team of 15 Hispanic staff in a major bunker reconstruction project. While there, Herring also had the opportunity to work The Heritage PGA Tour event at Harbor Town.

After 12 months in the US, Herring returned to Horton Park briefly before taking a position as assistant superintendent at Cooroy Golf Club in the northern Sunshine Coast hinterland. Within three

“The FTMI has been designed to provide practical tools and guidance to help assist candidates with their career aspirations through an interactive, professional development programme.”



Lawn & Turf Maintenance

"Leaders in Sports Turf Renovations"

Vertidrain to relieve compaction and re-oxygenate your profile



Have you booked in your 2016 spring scarifying dates yet? The LTM43 minimises thatch like no other scarifier. DON'T MISS OUT!

Enquire about our 2016 winter special for root pruning. DON'T MISS OUT!



18 holes in one day!



8 weeks later



www.lawnandturfmaintenance.com.au



Over the past 10 years Justin Crowe has proven to be an invaluable asset at Huntingdale Golf Club

months she was superintendent and managing a staff of three as well as a large volunteer crew.

After six years at Cooroy, Herring challenged herself yet again and made the significant decision to head across to the other side of the country to take on the assistant superintendent role at Kalgoorlie Golf Course. The highly ranked Graham Marsh designed course is home of the WA PGA Championship and Herring rates it as one of the most challenging yet rewarding positions she has had to date.



TOM HOGAN
BARWON HEADS GC, VIC

Hogan was still at school when he got his first taste of the turf industry, being fortunate to work part-time at The National Golf Club with the construction crew building the Ocean and Moonah courses. This brief taste was enough for Hogan and on completing Year 12 he began working full time at Moonah Links where he would complete his apprenticeship. During his time at Moonah Links, the Open course hosted the 2003 and 2005 Australian Opens and exposure to these events fuelled Hogan's desire to become even more involved in the industry.

Upon completing his apprenticeship Hogan moved to Port Douglas after accepting the role of foreman at Sea Temple Golf Club. After a year in the tropics, he returned to the Mornington Peninsula and The National where he was primarily stationed on the club's famed Old Course. A highlight of his stint at The National was being involved in the construction of the impressive new driving range and practice facility.

After two years at The National, Hogan moved across Port Phillip Bay and took on the role of foreman at The Sands, Torquay. During his two years there the club hosted the Surf Coast Knock Out and he also implemented a plan to fill in/reshape a number of bunkers on the course. In 2011 he moved down the road to Barwon Heads Golf Club after being appointed as assistant superintendent. Gaining the position was a major career highlight for Hogan and over the past five years he has been involved in preparing the course for major tournaments as well as construction projects.



Five years ago Liam Ash was an apprentice at Brookwater in Queensland. Today he is assistant superintendent at Monash Country Club in Sydney



DAVID HURST
CROMER GC, NSW

Originally from Victoria, Hurst completed his apprenticeship at Churchill Park Golf Club before undertaking roles at Sorrento and Riversdale golf clubs where he honed and furthered his turf management skills. In 2010-2011 Hurst journeyed to the USA to take part in The Ohio Program where he spent 12 months working at the prestigious Los Angeles Country Club. It proved to be an eye-opening experience to see what could be achieved with unlimited resources.

All of those experiences have combined to give Hurst, an ex-pennant golfer, the skills to reach his goal of becoming an assistant superintendent. Hurst has been employed at Cromer Golf Club on Sydney's northern beaches for the past three years, initially as second assistant and most recently as assistant. Since his promotion he has been exposed to all aspects of course management including budgets and staff mentoring.



STEWART MACFARLANE
SETTLERS RUN G&CC, VIC

Hailing from Scotland, MacFarlane began his greenkeeping career after taking on an apprenticeship at his local golf club shortly after leaving high school. Although not a golfer, the appeal of a job outdoors in beautiful surroundings proved irresistible. After completing his apprenticeship MacFarlane headed across the Atlantic and took up a place on The Ohio Program and was based at Winged Foot Golf Club just outside New York City.

MacFarlane spent two summers at Winged Foot, the first rebuilding parts of the course in advance of the 2006 US Open the following summer. The winter in between was spent at Riviera Country Club in California where he was part of the crew preparing the course for a PGA Tour event. After his time in America, MacFarlane immigrated to Australia and landed a seasonal position at Huntingdale Golf Club, eventually working his way up to 3IC. Two years ago he was appointed assistant superintendent at Settlers Run Golf and Country Club.



NICK MARINO
CLUB MANDALAY, VIC

Marino is currently the assistant superintendent at Club Mandalay, a new course on the northern outskirts of Melbourne. Working under superintendent Brenton Coulthard, Marino has shown great drive to achieve high results and has a superb eye for detail.

Marino, the 2012 VGCSA Graduate of the Year, started his career at Northcote Public Golf Course in Melbourne and after completing his apprenticeship headed across the Tasman to work at the spectacular Jacks Point course in Queenstown, New Zealand for a year. Since joining Club Mandalay in October 2014 Marino received the VGCSA Diploma Scholarship for 2015/16.

Not **1**
But **2**
NEW
Turf Products!



Bayer is
launching two
new turf products
at this year's 32nd
Australian Turfgrass
Conference & Trade Exhibition!



Spect(i)cle[®]

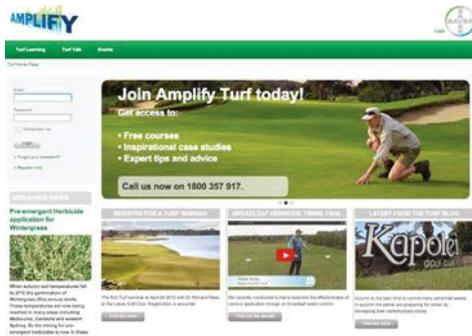


Reserve[™]
STRESSGARD[®]

Visit the Bayer team at
Booth 23 and pick up a brochure!



Not a member of
Bayer Amplify Turf?
It's **FREE!** Sign up at the
Bayer booth, **Number 23!**



Pick up
your **FREE**
Berocca
at Bayer's
stand

bayeramplifyturf.com.au

Do amendments reduce water use?

UWA researchers Pieter Poot and Gausul Azam report on the second year of their Horticulture Innovation Australia funded project on amending sandy soils to retain irrigation water and reduce turfgrass water use.

Many Australian cities are predicted to face water shortages due to increased temperatures, declines in rainfall and an increased demand for water as a result of the expansion of our cities. Western Australia's capital city, Perth, might experience a water deficit as early as 2020.

More than 10 per cent of Perth's annual water use is associated with irrigating community parks, gardens and sports fields. In addition, a substantial fraction of household water is used for watering home gardens including turfgrass. Water restrictions have been introduced to both scheme water and bore water in response to increasing water demands and declining rainfall. Thus, turfgrass managers and home owners are facing the ongoing challenge of maintaining turfgrass with less water.

As there is increasing evidence that public and private green spaces are important for maintaining physical as well as mental health, developing approaches for maintaining turfgrass under limited irrigation is essential. Maintaining turfgrass under limited water supply is challenging, especially in sandy soils (such as on Western Australia's coastal plain) which have a relatively low water retention capacity and a tendency to become water-repellent.

Turfgrass on sandy soils is often dependent on frequent irrigation during the summer (e.g., every 2-3 days). Amending sandy soils with materials containing smaller particle size (e.g. clays) or which have a porous structure (e.g. zeolite) that stores water internally, has been shown to increase the water holding capacity of these soils. These materials are also likely to slow the movement of



irrigation water beyond the rootzone, increasing soil water available for turfgrass and hence decreasing the demand for irrigation.

The aims of the current project were to obtain independent evidence of the efficacy of a range of soil amendments in decreasing the irrigation requirements of turfgrass and to identify the mechanisms responsible for the variation in efficacy.

EXPERIMENTAL APPROACH

The research has been conducted at the University of Western Australia's (UWA) Turf Research Facility at Shenton Park which has a sandy soil typical for the Perth metropolitan area. Six amendment types (i.e.: five inorganic and one organic, see inset), as well as the corresponding inorganic/organic blends, were rotary hoed into the top 10cm of the experimental plots (2.5m x 3.5m). Combined with untreated control plots, these 11 amendment treated plots were organised in blocks of 12 plots, with eight blocks all together in the experiment.

Soft-leaf buffalo ('Palmetto') was laid in late October 2013 and given three months to establish before commencement of two irrigation treatments;

- A low irrigation treatment administered twice a week (43 per cent evapotranspiration (ET) replacement; four blocks); and
- A high irrigation treatment administered three times a week (65 per cent ET replacement; 4 blocks).

Results of the first irrigation season were outlined in the May-June 2015 edition of Australian Turfgrass Management Journal. Results indicated that plots with clay-type amendments (i.e. bentonite and kaolinite) and those including compost had higher top soil water contents, but that despite this, all plots developed severe browning in the low irrigation treatment.

AMENDMENTS USED

Below is a list of the amendment treatments included in the experiment. Values in parentheses represent the percentage at which amendments have been incorporated in the top 10cm of the soil (weight fresh product/weight soil).

- Bentonite (5%)
- Compost (10%)
- Kaolinite (Ca and silt amended; 10%)
- Ready Grit™ (10%)
- Spongelite (5%)
- Zeolite (5%)
- Bentonite (5%) + Compost (10%)
- Kaolinite (10%) + Compost (10%)
- Ready Grit™ (10%) + Compost (10%)
- Spongelite (5%) + Compost (10%)
- Zeolite (5%) + Compost (10%)
- Control (no amendments added)



The UWA turf research site at Shenton Park (February 2015). Note the substantial browning in the low irrigation plots on the right side. This is despite some regreening in response to late January/early February thunderstorm activity

Therefore, for the second irrigation season it was decided to increase irrigation levels in the two treatments to 50 per cent and 75 per cent ET replacement, respectively. These second year irrigation treatments started in late October 2014.

MEASUREMENTS

Following the commencement of irrigation treatments, soil water content was measured once or twice a day at different depths (10cm intervals to 160cm) using a capacitance probe (Diviner 2000), for either three or four days following an irrigation, as dependent on the irrigation treatment.

Turfgrass growth was measured weekly or fortnightly by mowing the turfgrass (20mm height) using a cylinder mower and weighing the clippings. Turfgrass colour was measured weekly using a chromameter (Minolta CR-400 series), while surface temperatures were determined with infrared thermography on cloud-free days.

RESULTS

Turf colour: From the onset (late October 2014), plots in the low irrigation treatment lost colour and by mid-December all of these plots had developed extensive brown patches as was observed in the first irrigation season (Figure. 1, page 60). Significant summer rainfall at the end of January 2015 led to slight temporary re-greening. In contrast, plots in the high irrigation treatment, despite losing some colour initially, maintained acceptable levels of greenness throughout the summer.

Overall, compost treatments (i.e.: including compost-inorganic amendment combinations) tended to be greener under adequate water supply (i.e.: winter, high irrigation treatment), but tended to be less green than plots without compost during the most severe water stress period (mid-December

to mid-January). Their greener colour at adequate water supply is likely a reflection of a higher nutrient availability. The slight delay in browning in some amendment treatments, as observed in the first summer, was not apparent in the second summer.

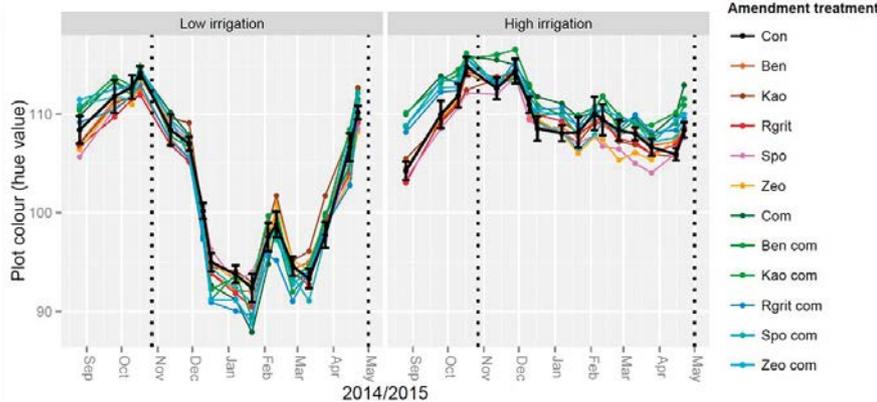
Soil water content: The loss of turf colour after the onset of the low irrigation treatment was strongly related to a reduction in top soil (i.e. surface 10cm) water content. By mid-December minimum weekly top soil volumetric water contents dropped to average values below six per cent for all treatments. Observed values were in the range of the apparent wilting points for the substrates, confirming that the observed turf browning was related to low top soil water contents in the low irrigation treatment. In contrast, average minimum soil water content in the high irrigation treatment never dropped below 10 per cent.

At soil depths between 10 and 60 cm the patterns in soil volumetric water content were opposite to those in the top 10 cm with control plots generally having higher water contents, especially during the most stressful period (weeks 7 and 16 in Figure. 2, page 60). These data show that most amendments retained water in the amended top soil layer and greatly reduced drainage to deeper soil layers.

Other measurements: As a result of declining soil water contents, turf growth was greatly reduced in the low irrigation treatment following the start of the experiment, with no apparent differences between

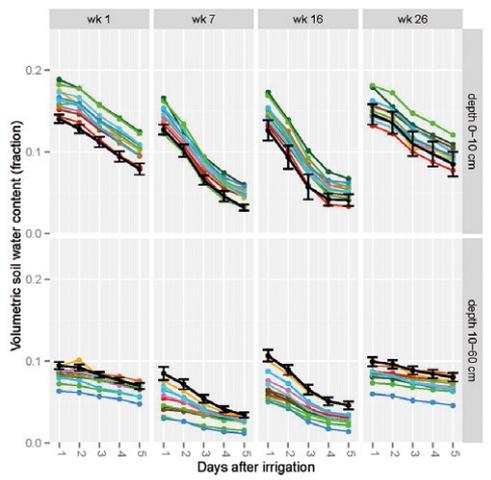


The aims of the current project were to obtain independent evidence of the efficacy of a range of soil amendments in decreasing the irrigation requirements of turfgrass



Above: Figure 1. Time course of turf colour as dependent on level of irrigation and amendment treatment in the second irrigation season. Dotted lines indicate the start and finish of the experimental irrigation treatments. Note that the black lines and symbols indicate the control treatment (i.e. plots without any soil amendments) and that a higher 'hue' value means a greener turf colour

Right: Figure 2. Weekly decline in soil volumetric water content following irrigation for the low irrigation treatment, as dependent on soil depth (0-10cm versus 10-60 cm) and particular week (1, 7, 16, 26) after starting the experiment (27 Oct 2014). Note that the first two measuring points in each week (labelled 1 and 2) were obtained in the morning and afternoon after overnight irrigation, whereas the other three (labelled 3, 4 and 5), were measurements on day 2, 3 and 4 after irrigation, respectively



amendment treatments. Turf maximum surface temperatures over summer were consistently above 42°C for the low irrigation plots, whereas they were mostly below 35°C for the high irrigation plots, with no clear differences between treatments.

However, comparison of turf surface temperatures in the days following irrigation showed that temperatures in the low irrigation plots tended to be lowest for amendment treated plots in the first day after irrigation, but were higher than those of control plots in the last two days. The relatively low temperature of amendment treated plots in the day after irrigation, is likely a reflection of their higher top soil water content, leading to increased turf transpiration, but also to greater losses of water through soil evaporation. In contrast, control plots did not retain as much water in the top soil, lost less water through soil evaporation, and at the end of an irrigation cycle still had some water available deeper in the soil.

CONCLUSIONS TO DATE

Results of the first two years of the amendment project have shown that compared to control plots many of the amended plots have:

- Increased soil volumetric water content in the top 10cm of the soil; and
- Decreased infiltration of water to deeper soil layers.

However, the reduced loss of irrigation water to deeper soil layers in amended plots appears to be offset by increased losses of irrigation water through

soil evaporation and/or turf transpiration. The lack of clear differences between treatments in both years of this project suggests that these processes (decreased deep drainage but increased initial evapotranspiration) cancel each other out.

This explanation may also elucidate why some of the amendment treated plots in the first irrigation season showed delayed turf browning; as the turf was young and establishing, root density in deeper soil layers would have been much lower in the first than in the second year, leading to larger irrigation water losses in the deeper draining control plots in the first year.

The above reasoning would entail that using amendments in the topsoil is only likely to reduce turf irrigation requirements in situations where root systems are still relatively shallow and/or irrigation volumes are large; in both cases a substantial part of the irrigation water would be lost through deep drainage which would not be the case if amendments were applied.

In addition, results of the first two years indicate that it does not seem possible to sustain soft-leaf buffalograss at irrigation levels below 50 per cent ET replacement administered twice a week.

FUTURE EXPERIMENTS

Hydrological modelling of water flows based on bare soils have corroborated that increased evaporative losses are likely from soils with amendments in the surface layer and have indicated that placement of amendments in bands deeper in the soil should minimise soil evaporation losses. Therefore, we have established a soil column experiment to test whether deeper placement of amendment bands can indeed reduce turf irrigation requirements. Results of this new experiment will be presented in a future edition.

ACKNOWLEDGEMENTS

This project has been funded by Horticulture Innovation Australia (project TU13000) using the turf industry levy, with co-investment from the Water Corporation, a consortium of local government authorities, amendment product suppliers, Turf Growers Association (WA), Sports Turf Australia (WA), the WA Land Authority and funds from the Australian Government. In addition, in kind support has been provided by: Baileys Fertilisers, Turfgrass Fertiliser Supplier, Irrigator Repairs, M.E.Y. Equipment, Mower Supply, Mow Master and Mower Service. Greenacres Turf Farm is thanked for providing the turfgrass for the research site and Darren Kirkwood from the TGA of WA for his support in the preparation of the field site. Members of the UWA Turf Industries Research Steering Committee are thanked for their support and advice. For previous articles on this project, refer to Australian Turfgrass Management Journal Volumes 16.3 (May-June 2014 – 'Water savers') and 17.3 (May-June 2015 – 'Water savings with soil amendments').



**5 COURSES.
81 TOTAL HOLES.
365 DAYS A YEAR.**

**ONE BRAND
OF TURF EQUIPMENT**

To keep its 81 holes of world-class golf in flawless shape every day, Pebble Beach uses *only* Jacobsen turf equipment on every inch of every hole.

For more than 90 years, Pebble Beach has been a national treasure. Its five breathtaking courses contain some of the most iconic golf images known to the game. Six major championships helped create an indelible image of majestic beauty and striking contrasts.

For more information about Jacobsen or to find a Jacobsen dealer near you, visit jacobsen.com.

**FOR A LEGENDARY PERFORMANCE
ON YOUR COURSE, VISIT www.jacobsen.com**



PEBBLE BEACH
RESORTS

JACOBSEN

The new 5th green at Lakelands Golf Club is one of three that have been reconstructed in recent times to remedy surface, drainage and encroachment issues

Continuing ATM's series highlighting course projects, Lakelands Golf Club superintendent Phil Soegaard provides an overview of some of the recent changes he and his crew have undertaken to Jack Nicklaus's first signature design in Australia.

The reconstructed Lakelands greens (pictured undergoing works is the 5th) were stripped of the top 150mm, fresh USGA-spec sand added and the surface stolonised with Tifdwarf from another green



Lakelands Golf Club, Qld

Lakelands Golf Club on the Gold Coast celebrates its 20th year in August and over the past five years there has been a real focus on reconditioning the course. During this time we have rebuilt over 60 of the course's 101 bunkers, rebuilt three greens, stripped and levelled a number of tees, rebuilt the club's turf nursery and revamped many landscape and garden areas.

After 20 years of applying very poor quality irrigation water, the Lakelands greens have become quite puggy and drain poorly despite regular aeration and dusting practices (infiltration rates of around 100mm/hr have been the norm). Showing this data to club management a few years ago was very beneficial and they agreed to allow the rebuild of one green every year, picking off the poorest performing green at a time.

Three greens have now been completed – the 14th, 11th and most recently the 5th. The east putting green is scheduled to be reconstructed in August and to date the new greens have performed brilliantly. The 14th green required new drainage whereas the 11th and the 5th didn't.

With all greens a detailed survey was undertaken prior to their reconstruction so that the contours of the original Nicklaus designed surfaces were not altered. Through this process it was amazing

to discover that the greens had lost nearly two metres all the way round because of encroachment from the surrounding couchgrass. This was despite some fairly intensive control programmes of edging, returning and Primo applications over the years.

The greens were stripped of the top 150mm, fresh USGA-spec sand added and the surface stolonised with Tifdwarf from another green. Evergreen turf covers were then put on the greens and helped to make establishment exceptional. All greens were in play 12 weeks after stolonising. The recent 5th green has had amendments of Ca, Mg, P and humate pre-mixed in the sand which has provided great results. Despite adding \$6000 to the cost of reconstruction, grow-in and the health of the turf has been superior.

Some of the challenges faced have been placement of and producing a suitable temporary green, what to do with the excess material and irrigation concerns. In each case we started our temporary green process six months earlier to ensure a suitable surface for the members to putt on. Dethatching, topdressing and slowly bringing the heights of cut down to 4mm actually produces quite a nice surface on the Windsor green fairways! Last year we also oversowed with bentgrass and the surface was more than adequate.





Above: Around 60 of Lakelands' 101 bunkers have also been rebuilt in recent years to address drainage and contamination issues

Left: Spoil from last year's green reconstruction was used to create a Tiger tee on Lakelands' 3rd hole

Getting rid of around 360 tonnes of soil from each green has also been a challenge. Last year we used this to produce a Tiger tee on the neighbouring 3rd hole and extended the normal blue tee which suffers a lot of wear in the cooler months. This cut down the hassle of carting the material a long way.

Irrigation is also crucial in a rebuild situation as we found out this summer when our pump station was hit by lightning and was out of action for three weeks. Pumping out of the dams into tankers to handwater the new 5th green was a time consuming process without the sprinklers!

To help in the annual green rebuilding programme, one area that had to be addressed was the course's Tifdwarf nursery. The members were a little upset with the severity needed when scarifying a green in order to generate the vegetative material to stolonise a new green. The old nursery had become really thatchy, unhealthy and was highly contaminated, so a rebuild took place this past summer. Constructed to USGA specs at a size of 1500m², the new nursery will serve the club well for future stock requirements, with the old material removed from the nursery used to construct a simple push-up green next to the practice bunker on the driving range.

Having 101 bunkers on course at Lakelands is a massive task for the maintenance team, with some of the 'waste type' hazards being over 3000m² in size! The way the course is designed also has the bunkers as the low points, thus they have suffered significantly over the years from silt run off and contamination which has ultimately sealed off the drainage in many of them.

As a result, over the past five winters we have significantly renovated on average 12 bunkers a

year. This process is all done in house and involves removing all sand, cleaning out the trenches, flushing the outlets, installing new ag pipe and gravel. We have finally reached a point where we can have 50mm of rain and not be running for the bunker pumps which is a massive labour saving.

With a couple of horticulturalists on the team, garden projects are always on the go where time allows and most recently we have completed a big garden next to our neighbouring villas. This area was a real eye-sore with many residents using it as a parking lot. Complaints were coming from all angles. We used some left over fill to shape the area, installed irrigation and drainage and planted out the area with many flowering varieties. This 'nothing area' now receives many compliments and has really enhanced our neighbouring wedding lawn area.

Future works scheduled for this year include rebuilding our putting green and its bunker, rebuilding two tee tops, taking two greens back out to their original size with our nursery grass, as well as rebuilding another half dozen or so bunkers. With these works complementing those we have already undertaken, the end result will be a far superior product for those teeing it up at Lakelands. 🌱



Lakelands' new 1500m Tifdwarf nursery (above) and a new garden area (below)



Lakelands' 14th green required new drainage



Over the past seven years superintendent Sean Stuchbery and his crew of two have helped improve the turf surfaces at Bundaberg Golf Club out of sight

Bundaberg Golf Club, QLD

Some 385 clicks north of Brisbane is the regional city of Bundaberg. Home, of course, to a famous Aussie spirit, it is also home to Sean Stuchbery, course superintendent at Bundaberg Golf Club.

Bundaberg GC received two Toro zero-turn mowers as part of a community benefit grant last year



Superintendent: Sean Stuchbery (35).

Nickname: Stuch.

Family: Wife Sophie, sons Sam (9) and Alex (6).

Period as a superintendent: Seven.

Association involvement: AGCSA (seven years), STA Queensland and GCSAQ.

Turf management career: I did my apprenticeship at Bargara Golf Club from 1997-2001. I then worked as a qualified greenkeeper before moving overseas, working as a summer casual (April-October) at Kirkbymoorside Golf Course in Yorkshire from 2003-2008 while playing cricket there. I then returned to Australia to take up the superintendent role at Bundaberg Golf Club.

Qualifications: Cert III Turf Management (Grovelly TAFE).

Give us a bit about your background and how you came to be a superintendent. I have always

been into sport and it always fascinated me how turf surfaces varied, whether for golf or my first love cricket. While at high school I volunteered at Bargara Golf Club during the school holidays and loved it so much that I soon had a cylinder mower of my own and would regularly try and turn mum and dad's backyard into a lawn bowls green. The thought of being able to do this anywhere in the world got me thinking and the interest just grew from there. I saw it as fun and not a job and today I still look at it from that perspective.

When I first started at Bargara, the superintendent there was the highly regarded Mark Gahan. I was

only a 15-year-old volunteer but I watched him and as a boss he was always the first to get his hands dirty and do the little jobs. Mark probably wouldn't even remember me, but it's small things like his work ethic that I remembered most about him and I thought I want to be able to do what he was doing. Everyone would ask his opinion and I thought I'd love to have that knowledge and skill that he possessed, so that inspired me to take on an apprenticeship.

The superintendent when I started my apprentice was Steve Balchin. Steve and I still talk on a regular basis and bounce ideas off each other. We talk chemicals and rates as Steve was someone who I remember for his spraying and I wanted to know more about how the chemical side of turf management worked. Steve also had the great ability to get Bargara's greens very fast and frightening come the annual Pro-Am.

After I finished my apprenticeship at Bargara I really wanted to play cricket in England and through some contacts I eventually secured a contract with Pickering CC in North Yorkshire. The club captain's nephew was a greenkeeper at the local Kirkbymoorside Golf Course and as part of my deal to play cricket I worked at the golf club through the summer – it was the perfect package. It was a great couple of years and I met some wonderful people and got to experience many things that I will never forget, like the time a badger ran out in front of me and I was so scared I took off and jumped in the back of a car!

I then got a call from back home saying that the contract company managing Bundaberg GC was about to be let go and whether I was interested in the super's job. After two years in the UK and not long married to Sophie (whom I had met at a cricket game) we moved back and after a bit of a longer than expected process the job came up.

I walked into a shed of nothing. The contract company had bought all the gear and the club only had a few dollars to buy me second-hand equipment. We got the basics in a greens, fairway and rough mower and I had an old slasher to put on my tractor which I still have. To be honest the first couple of years were a nightmare and I often thought to myself 'What am I doing?' But, once again, what I had seen first-hand in my former bosses was that 'get in, fix it and fix it properly' attitude. I adapted the 'crawl before you walk' principle and we worked together as a club to fix things. I had to earn their trust on many issues, but with time they believed me and we have moved forward significantly.

Give us an overview of Bundaberg GC and some of its unique characteristics from a course perspective? Bundaberg GC has a lot of big gum trees lining the fairways, more so than other local courses. When events are played against the other clubs we always seem to do very well as a lot of the golfers aren't used to the trees! The course is also very flat and I've heard comments of there being no more than eight inches of fall across the whole course.

One of the biggest challenges I had initially was changing the heights of cut. When the committee bought me some machinery they asked what height I wanted the fairway mower set up at. They thought 22mm and I started laughing and said 'No, 13mm will do.' They told me it wasn't going to work as in the clay I wouldn't be able to keep grass on the fairways. However, once I got the irrigation working properly, was mowing fairways regularly and incorporating Primo into my maintenance programme I had them down to 13mm in no time and they looked great. I have since lifted them to 15mm as the majority of members like a bit more grass on them.

I also had some issues early on with greens that had no grass on them. I told the club we needed to remove trees to address shade issues but they weren't keen and told me to put more fertiliser on. Once we removed the trees the next winter the greens were fine and have been ever since. I also bought a set of verticutting heads and use them regularly on the greens from October to April. This has made a huge difference to the surface and thatch levels that were present when I started. I then got a new greens mower about a year-and-a-half ago and made sure they had groomers. I have them on six months of the year every day and they too have helped with thatch reduction.

Another change I have tried to introduce is the turnover of machinery. The only machinery the club

had when I started was very old and run down so I got us into a 4-5 year finance/lease option so we can regularly turn our equipment over. The newer machines are a lot more efficient and do a better job and that in turn has cut our machinery and maintenance repairs bill.

Outline any major course improvement works recently completed and/or highlight any works you would like to undertake? For me it's tree removal around greens and tees. Some of our members love trees like I do, but as we are taught 'right tree, right place'. The course has changed over time but the trees have stayed. They affect my surfaces but the members would rather see that than a great looking tee or green.

Bunkers are also an issue with many of the fairway bunkers no longer in play due to changes with ball and club technology. With just three of us on staff and 56 bunkers we can't keep them all edged and with correct sand levels all the time. Being built on clay they don't drain well either and all need redoing. Anyone in the industry knows the cost of fixing them and I believe we would be better off turning them to grassy mounds and leaving the turf a bit longer.

The weather and climate is always a great leveller for a course superintendent. How has Mother Nature treated the course in recent times? As many will remember, Bundaberg has been hit hard by floods in recent years, in particular January 2013. On a personal level it was a huge test as our home was flooded, while on a work level I think it was even harder. After working all night at home to try and clean up before I could even think of trying to rebuild, I was back at work trying to sort things out there as well – there was no escape. The club was brilliant in letting me have two weeks off to sort myself out and then come back and try to get the course back in order.

It was a surreal time. I can still recall the aftermath of mud, silt, rubbish and the smell... things you will never forget. I remember thinking how does a club come back from this?; no one will play here for months! Once we got everything cleaned up, Toro again came to my aid with then rep



Bundaberg Golf Club superintendent Sean Stuchbery



Bundaberg apprentice Ferghas McCosh made headlines at the club earlier in the year when we rescued a baby owl that was being attacked by a group of butcher birds

A lot of work has gone into improving the irrigation system during Stuchbery's time as superintendent ▶





Above: Bundaberg's unique 'home-job' spray unit – a bit unusual but it does the job

Right: One of the big changes in Stuchbery's time has been a machinery turnover programme which has made a huge difference to the condition of the Bundaberg surfaces



Ben Cavanagh calling and asking what I needed. I got a rough mower and blower and that helped me so much.

The sad part was that after a few years hard work removing weeds and fixing the irrigation system we were back to square one. The crowfoot and wiregrass washed in from surrounding farms took over the low wet areas and spread around the course with mowing. We have a group of up to seven guys every Monday who go out for a few hours and weed wipe the fairways. I have also started using Barricade over the last two summers and have noticed a massive difference in weed control.

The one product I couldn't manage my course without is... Primo. I use Maxx on the greens and EC on everything else. I would tap it into my irrigation system if I could, I love it that much! With Queensland's fickle weather able to drop an 8-inch storm combined with 34 degree heat and

90 per cent humidity, you can't live without it. The greens have improved and the fairways don't need anywhere as much water as they did before I started using it.

What are some pros and cons of being a regional-based superintendent? Being able to see my kids do things as they grow up. I could only imagine the amount of time and meetings a superintendent at a major course would have to devote. I think you'd miss out on a few things like that.

Even though there's only the three of us on staff, we pride ourselves on the surfaces we produce and I have many local supers asking me how we do it. I guess you just have to be more resourceful as a regional superintendent. Besides, I love being a greenkeeper/spray tech/irrigation tech and mechanic daily – keeps me out of trouble!

If you could change one thing about your job as a regional superintendent what would it be?

Understanding. We are human too. We have lives and families of our own that sometimes need us. Because most regional supers have small staff, not everything can be done in a day. Also if something breaks it's not always easy to get replacement parts and may take a few days to get here. If only everyone understood that there would be a few less sleepless nights.

How important are the relationships you have with other local course supers/trade reps? I believe it's very important to have a great relationship with all the reps and superintendents and I regularly call and ask questions or ask for help if something breaks down.

What are some of the more unusual requests/things you have had as a regional super? I was once told I should spray concrete on the faces of all the bunkers to stop them being washed out when storms hit. I replied 'What happens if you hit the

Right: Bundaberg GC was hit hard by floods in 2013

Below: Bundaberg is quite heavily tree-lined which is one of the ongoing management challenges that Stuchbery has



bunker face playing your shot out and the ball flies back and hits you in the face?' Not surprisingly he hadn't thought of that...

What have you got in your shed and what's your favourite piece of equipment? Anything unusual?

Mostly red – Toro 3320 hybrid greens mower, 3150 tees mower, 3150 verticutting mower, 5040 bunker rake, Workman utility, 7000 fairway mower, 4000D rough mower, Toro 60' Z-master and 72' Z-master (we got these through a community benefit grant last year), Graden 1200 greens roller, Bolens and Kubota tractors, 400 litre spray unit, Turfco topdresser, tip truck, Agrimetal 3-point linkage blower and Silvan fairway cone spreader.

The fairway spray unit is without doubt my favourite – a serious piece of equipment. Next on the wish list is a decent spray unit/topdresser combo that can be swapped on the back of an MDX (Toro of course). Because I do a lot of spraying, I'd love to have something that was meant for the job. It's so important to have the right spray unit, nozzles and amount of water to do the job and in that machine you can have the lot.

Our existing spray unit is a bit unique – it has more home-built things on it than anything I've seen – but it works and does the job... remember crawl before you walk! My blower also is a tractor mounted unit so I can't drive it on or around greens and tees.



Favourite spot on your course? Any green when a member knocks in a monster putt. They turn and look, give you the thumbs up and say 'Nothing wrong with these mate, great job!' How could you argue with that!

Best advice you have received about greenkeeping and who gave it to you? My first boss in England was a Scottish man built like a brick outhouse. He got me up early one day as he always wanted us working together in the mornings – one would mow the green, one change the hole and the other hand rake the bunker. After throwing

Bundaberg's tees, surrounds and fairways consist of Queensland blue couch, green couch and Wintergreen

GRADEN

GRADEN INDUSTRIES PTY LTD • Thomastown, Victoria, Australia
 Phone +61 3 9305 3400 • Fax +61 3 9465 9182 • Mobile +61 457 422 464
 mark@graden.com.au

See you at AGCSA Conference - stand 19



- ✓ A Stand alone, time saving roller requiring no tow vehicle, just lower the wheels (takes 5 seconds) - and go!
- ✓ The FLEX roller system provides low psi (5.4) and allows rollers to conform to contours of greens
- ✓ All rollers are active providing great traction on steeper slopes
- ✓ The end result - a fantastic finish.

Graden **Z2R** FLEX ROLLER

Don't get rolled in the rush - come and see the "Z2R"



www.gradenturf.com



◀ **Bundaberg's 328 greens are renovated twice a year with a double scarify and hollow core in October and Vertidrain in April**

the hole changer at one of the boys on the course before heading to the next green, he decided to lay down the law with me when we had a cup of tea after finishing. He said to me, 'Don't do what the other bloke just did!'. He then finished his cup of tea, put his cup on a star picket, walked inside the shed, grabbed his shotgun and blew the cup to smithereens. He turned to me and said "Right, Aussie?!" Needless to say I got the message!

What do you think is the most challenging aspect of a superintendent's role today? The weather! I'm sure people would go along with me and say the storms and extremes have gotten far worse. It may be global warming or it may just be social media being able to see more things around the world you didn't know had ever happened. The storms in

Queensland have always been bad and totally out of your control – challenging for a superintendent to say the least!

What gives you the most job satisfaction? Being a regional super, it's not uncommon on a Friday that something goes wrong and you automatically think this could be trouble. But you make a few calls, you get the problem sorted and go home a happy man. It also comes down to some of the things I've mentioned earlier – having good relationships within the industry, picking up the phone and having a chat. I love catching up with all the AGCSA mates I've made over the years and talking about how everyone is going. We all help each other out.

Most pleasing/rewarding moment during your time as Bundaberg GC superintendent? Once every five or so years we hold the Wide Bay Open and Closed Championships. State players come from down south that wouldn't play our course otherwise. I had good conditions leading up and got everything how I wanted it. Greens were 12' and rolling great.

The state players were very impressed with the greens and the course record was broken. One of them said to me you don't break course records on bad greens. I remember thinking all these years of being a greenkeeper no one had ever taken the time to tell me they were great. The player that made that comment probably plays hundreds of courses and didn't have to tell me that, but he did. I was happy with my planning for this tournament and happy to hear that we produced some great surfaces. 🌿

AT A GLANCE – BUNDABERG GOLF CLUB, QLD

Course specs: 5872 metre par 71. Approx. 8000m² of 328 couch greens. Tees, surrounds and fairways consist of Queensland blue couch, green couch and Wintergreen.

Members/rounds: 437/34,000.

Major tournaments: DGZ Bundaberg Burnett Cup (two-man team matchplay event) each year which attracts about 70 teams from all around the Wide Bay area.

Staff structure: Sean Stuchbery (superintendent), Ferghas McCosh (apprentice) and Mark Wooldridge (labourer). We also have volunteers who come and help with odd jobs and mowing rough when the growing gets tough!

Climate/rainfall: Average temps are a high of 26.5°C and a low of 16.3°C. Average rainfall is 1142mm but half of that falls from January to March.

Soil types: We have push up greens as the ground is very bad clay. When it's wet it stays wet for a long time and when it's dry it can be very hard to get water to penetrate the surface.

Water sources: If I receive 100 per cent allocation I get 40 megalitres of surface water and 120ML of bore water. The quality of the bore isn't great, but mixed with surface water or rainfall top up it isn't too bad.

Irrigation system: Toro GDC decoder system with SitePro control system. We have back-to-back 835 sprinklers on greens and surrounds, 850s on fairways and 835s on tees. When I started at Bundaberg the system was an absolute mess. Wire joints were held

together by electrical tape and with every downpour came a decoder explosion and system fail. A lot of the decoders were still the first ever made and since then I have just about upgraded all to the latest high surge decoders and redone every joint with DBR/Y joiners. I have also installed more grounding rods as the system got hit by lightning early on and blew a lot of decoders up. I really have to thank Bruce (Toro NSN) and Sheldon Simmons (Toro Irrigation) for the support they have given me.

Cutting heights: Greens 3mm, tees 9mm, fairways and surrounds 15mm and rough 50mm. We mow greens Tuesday-Saturday and Sunday if an event is on. Tees get cut once to twice a week and fairways the same. That is only due to Primo applications as having small staff numbers I need to do it monthly in the growing season.

Renovations: We renovate greens twice a year. In October we double scarify and hollow core. In April we Vertidrain only and try to carry more grass into winter as we have a lot of shade issues on greens.

Major disease pressures: I get some brown patch and in recent times pythium. The heavy rain and high humidity provides perfect conditions for them from January to April. I get dollar spot quite bad on my blue couch fairways heading into winter as well.

Nutrition management: Greens are liquid fed between renovations and tees and fairways are granular fed as required. We need to do them a couple of times as a minimum as the tees aren't very big and need quick recovery.

NUTURF[®]
50
YEARS



 **NUTURF[®]**
SPECIALISTS PROVIDING SOLUTIONS



Nuturf, Specialists
Providing Solutions
for over 50 years.



With a strong focus on innovation and development, Nuturf utilises manufacturing capabilities around the country to develop, manufacture and distribute Australian made products developed specifically for local conditions.

Nuturf has a proud history as the innovators of new technologies in turf. Our internal Research and Development Division, in collaboration with our technically driven sales team, work to identify key industry needs, delivering solutions through the development of new products, services and ongoing technical support.



For more information contact your local Nuturf Territory Manager on **1800 631 008** or visit www.nuturf.com.au

IMPROVED TORO CUTTING REELS LIVING ON THE EDGE

Toro's new EdgeSeries reels feature updated blade materials for a longer reel life with improved wear-resistant properties



Toro Australia has announced the release of the EdgeSeries reels on all Toro Greensmaster and Reelmaster mowers as new units are produced. Toro has made a number of innovations to the reel cutting systems that will increase a golf course's overall performance and reduce maintenance whilst continuing to provide an outstanding quality of cut to greens and fairways.

The new EdgeSeries reels feature updated blade materials for a longer reel life, with improved wear-resistant properties that hold an edge longer. Extensive field testing of EdgeSeries reels to date has demonstrated that they typically last 30 to

50 per cent longer, which helps reduce both maintenance and replacement costs.

The forward-swept reel design has an improved helix and blade angle, offering a very precise cut across the full width of cut, resulting in an improved after-cut appearance. Better edge retention means there is less grinding, less backlapping and less maintenance involved for the overall cutting system.

Thanks to the new EdgeSeries reel design, cutting units retain their edge longer for a crisper, cleaner, healthier cut. Another benefit of the new cutting unit design is better grass collection in the baskets due to the geometry changes. That leads to fewer clippings collecting on or under the basket and falling onto the turf.

In addition to these improvements, select cutting units feature advanced bearings that allow the reels to spin with less friction, resulting in fuel savings. The advanced cutting unit design, which combines key features of the cutting unit components (e.g., the housing, the reel and bedknife), allows certain mowers to have a smaller engine while performing as well as – and frequently better than – competitive models with higher horsepower engines.

For more information about the EdgeSeries reels, visit www.toro.com.au or call 1800 356 372.

CONFERENCE LAUNCH FOR SPECTICLE AND RESERVE STRESSGARD



Spect(i)cle®

AGCSA Silver Partner Bayer will unveil two of its latest products at the upcoming 32nd Australian Turfgrass Conference in Melbourne – Specticle herbicide and a new contact fungicide Reserve StressGard.

Specticle, a brand new pre-emergent herbicide for warm-season turf, is a suspension concentrate formulation containing 200 grams per litre of the active ingredient Indaziflam. Indaziflam is the first chemical available to turf managers from the alkylazine chemical family and is a very timely tool to enable effective management of weeds resistant to DNA herbicides and dithiopyr.

“With exceptional control of *Poa annua*, crowfoot grass and summer grass, and unmatched use flexibility with a wide application window, Specticle is a tool that will enable turf managers to take their turf quality and management efficiency to a new level,” says Bayer turf market manager James Royal.

“Specticle, like other pre-emergent herbicides, does not prevent seeds from germinating. However, once weed seedlings come into contact with the Specticle barrier, the growth is terminated by

inhibiting the development of cells within the roots. There has been no documented resistance to this mode of action in turf.”

Among the benefits of Specticle herbicide include its ability to control a variety of weeds, its length of control (Bayer claims it out-performs every other pre-emergent available in Australia), its wider application window and its low use rate (up to 40 times less active ingredient is applied to the environment than other pre-emergents). Specticle is available in a 1 litre pack from Bayer distributor outlets now.

Bayer will also launch its new contact fungicide with StressGard formulation technology – Reserve StressGard – which contains 720g/L of the active ingredient chlorothalonil. Chlorothalonil is widely acknowledged and adopted as a component of preventative disease control programmes in turf across all major geographies of Australia, especially for the likes of key turf diseases such as dollar spot and brown patch.

“Reserve StressGard is the third product introduced to Bayer's disease control portfolio containing StressGard formulation technology, with both Signature and Interface StressGard already available,” says Royal. “Building on the success of Signature and Interface StressGard, Reserve StressGard provides a tool for turf managers to increase the application frequency of products containing Bayer's StressGard formulation



technology and see the proven benefits from this technology in their greens management programmes.

“StressGard is composed of active ingredients, inert ingredients and Bayer’s advanced formulation technology which combine to improve the ability of Bayer fungicides to deliver excellent turf quality above and beyond disease control. Bayer fungicides formulated with StressGard are proven to give outstanding disease control while alleviating plant stresses, ultimately improving turf quality, density, colour and playability.” Reserve StressGard is now available in a 10L pack at distributor outlets now.

For further information on Specticle and Reserve StressGard visit www.bayeramplifyturf.com.au.

SNAKE ARRIVES IN AUSTRALIA

New Zealand-based Trimax Mowing Systems is proud to announce the release of its new golf and turf mower – ‘Snake’. A 3.2m wide-trailed, tractor-powered, rotary mower launched globally in 2014, Snake is now available in Australia complete with a three-year warranty.

Trimax customer relationship manager Michael Quinn says the mower, which looks like a smaller version of the Trimax Pegasus mower, has some nice features integrated into its design. “Snake has been specifically designed for sports turf applications, where groundsmen and greenkeepers are looking for a high standard of presentation with



the need for safety, durability, contour-following and low downtime.”

Snake is fitted with Trimax LazerBladez, a blade system with a carefully engineered centre of gravity and distinctive tilt-forward blade design unique to Trimax. Utilising the LazerBladez full-length cutting edge, Snake produces a clean finish even when mowing at high ground speeds. A ‘kerb jump’ feature allows the decks to be lifted with the blades

The Trimax Snake is a result of over 30 years of Trimax innovation and expertise coupled with user insight

CONTINUED ON PAGE 73

EQUIPMENT SOLUTIONS

<p>THATCHAWAYS</p>	<p>VC60 SCARIFIER</p>	<p>AGRIMETAL BLOWERS</p>	<div style="background-color: #0056b3; color: white; padding: 5px; text-align: center; font-weight: bold;">DAKOTA</div> <h2 style="text-align: center; color: #0056b3; margin-top: 10px;">Leading Turf Equipment brands from around the world</h2> <div style="background-color: #008000; color: white; padding: 10px; margin-top: 10px;"> <p style="font-size: 1.2em; font-weight: bold; margin: 0;">Contact us for an on site demo.</p> <p style="margin: 0;">Full range of spare parts available Ask us about on site servicing of your Equipment Solutions products</p> </div>
<p>BLEC</p>	<p>LASTEC</p>	<p>GROUNDSMAN</p>	
<p>FIRST PRODUCTS</p>	<p>TRU-TURF</p>	<p>AMAZONE</p>	

Call us on 02 9827 1311, or Stan Wells 0428 263 516, Mike Pauna 0414 821 694, Dean Scullion 0439 808 840

KEEPING ALIVE THE TURF INDUSTRY'S 'LIVING LIBRARY'



Set-up underway in November 2015 of new benches in the turf collection's new home



Turf variety label with QR code which links to the new TurfFinder website

Following the termination of the Redlands Turf Research programme in 2012, there was significant uncertainty as to the future of the warm-season turfgrass collection in Cleveland, Qld containing some 200 varieties of turfgrass. The 'living library', which contains Australian and international germplasm, and is arguably the largest of its kind in the Southern Hemisphere, comprising of 15 genus and 27 species of turfgrass, and growing.

Following lengthy discussions between Australian Sports Turf Consultants (ASTC) director Matt Roche, the State of Queensland through The Department of Agriculture and Fisheries (DAF) and IP Australia, ASTC was able to secure the collection in August 2015. Later that year, individual stolons or plugs of each variety were selected by ASTC and re-potted. This painstaking process provided the best opportunity to prevent contamination between varieties and provide true-to-type material of each.

Pots were then grown on and subsequently divided into two to provide backup material and reference material. The backup material is being maintained at the office of ASTC, whereas the reference material is being maintained on the farm of Bob Cray of The Bottom Line Turf Supplies. The latter farm is located in Stockleigh 40 minutes' drive south of Brisbane's CBD.

The former Redlands turf plots were killed off in April 2016



The turfgrass collection containing both commercial and experimental varieties will be used for education, research, multiplication, breeding and serve as Australia's Warm-Season Turfgrass Genetic Resource Centre (GRC). As part of Plant Breeder's Rights (PBR) in Australia, an owner of a PBR protected variety, under The Plant Breeder's Right Act 1994 ('the Act'), must adhere to the following:

- A PBR protected variety must be stored in a GRC at the owner's expense;
- The quantity of plant material must be sufficient to enable that variety to be kept in existence;
- The person in charge of the GRC may do all things necessary to maintain the viability of the stored material;
- The delivery and storage of the material does not affect the ownership of the material but the material must not be dealt with otherwise than for the purposes of the Act; and
- The material stored at a GRC may be used for purposes of the Act, including the purposes of Section 19 (Reasonable public access to plant varieties covered by PBR).

"The turfgrass collection will also serve as an educational source for persons of the wider turfgrass industry and general public," says Roche. "It is anticipated that scheduled field days will be held so that people can see the different species and varieties of turfgrass growing side-by-side. This is particularly important for the next generation of turf managers and greenkeepers so they can physically see and feel the difference between species and varieties of turf. Such an education experience is invaluable to those starting in our industry."

A significant point of difference with the turfgrass collection, and in a first for the industry, is with its linkage with TurfFinder.com. The website has been developed by ASTC to assist professional turf managers and home owners in selecting the best available turfgrasses to meet their needs. Turf Finder provides factual independent information on commercially available turfgrasses being sold by professional turf producers across Australia.

Each variety within the reference collection will be labelled with a scientific, common and variety name and possess a quick reference (QR) code specific to that variety. The technology will allow a person visiting to be able to scan a QR code and be taken directly to the TurfFinder.com website listing relevant information about that particular variety and importantly from where it can be purchased.

"To date over 119 turf farms have been entered into the TurfFinder.com website and this number is expected to grow significantly by the years end," says Roche. "ASTC is looking forward to continue working with turf producers to help them provide up to date information to members of the industry." **For further information please visit www.ASTCs.com.au or www.TurfFinder.com.**

CONTINUED FROM PAGE 71

still engaged to go over kerbs, paths or other obstacles without stopping the PTO.

In addition to its quality of cut, Quinn says maintenance requirements and operating noise are also kept to a minimum. "Snake's sealed spindles means there are less points to grease and all grease points are easily accessible to ensure maintenance time is kept to a minimum. Its surprisingly quiet operation allows mowing in and around sensitive areas and without causing disturbance."

For more information about Trimax's Snake visit www.trimaxmowingsystems.com.au.

UPGRADE OLDER DECODER SYSTEMS WITH TORO LYNX GAC

Golf course users of older AC decoder control systems are now able to upgrade to a modern central without the need to replace their entire irrigation system thanks to the new Toro Lynx GAC. With Lynx GAC, all the advantages of Lynx Central Control are available to turf managers including a system that is intuitive, easy to install, control and use. It can be operated from smart devices anywhere and anytime and features moisture sensing, sophisticated diagnostics and run time in seconds.

Jennie Hartwell, Toro irrigation's national marketing manager says: "Lynx GAC gives instant

access to past, present and planned course management information from multiple irrigation system components, including weather and pump stations, electrical systems, sprinklers, intelligent field controllers, Toro Turf Guard wireless soil sensors, and more.

"It is the only irrigation control system that lets you set run times in seconds, not in minutes. This can result in savings of up to 35 per cent water and electricity usage as you can apply the exact amount of water required to the second, for improved irrigation efficiency. Another great benefit of Lynx GAC is that it can work with your existing sprinkler system and wiring. There is no digging required as you just replace the field decoders and central."

Integrated surge protection decoders are rated to 20KV lightning protection, the highest in the industry and offer improved reliability in lightning prone areas. The system also has built-in diagnostics that automatically alert if there are any problems and the wire path check quickly confirms that the whole system is operational.

"Every day, Lynx GAC auto-generates a detailed course report that lets greenkeepers know if their irrigation ran as planned, or if they need to step in and make changes based on course conditions," says Hartwell. Lynx GAC is serviced by Toro's National Support Network (NSN), which provides software and system support from experienced professionals.



ENSURE HEALTHY ROOT GROWTH WITH THE - T E R R A S P I K E S L 6 -



TERRA SPIKE SL6

- « UTILISE WATER AND NUTRIENTS
- « EASILY CHANGE WORKING DEPTH
- NO TOOLS NEEDED!
- « SUITABLE FOR TRACTORS FROM 14,5KW (20HP)
- « IMPRESSIVE WORK QUALITY
- « LARGE COVERAGE AREA

FIND OUT MORE FROM
AUSTRALIA'S LEADING SUPPLIER OF TURF MACHINERY

VISIT QTURF.COM.AU
OR CALL 0428 290 009

QTurf
MACHINERY PTY LTD



JOHN DEERE UPDATES RESIDENTIAL ZERO-TURN MOWER RANGE

John Deere residential ZTrak zero-turn mowers, formerly known as the EZtrak line, now feature a new deck option, enhanced ergonomics and updated styling.

Available on most residential ZTrak models, the new Accel Deep deck provides a better cut quality and added versatility. Featuring a flat-top design, the Accel Deep deck enables a clean flow of material throughout the deck and discharge area, while maintaining speed during cutting. Additionally, the new deck offers lift-up spindle covers to make servicing and cleaning easy and accessible.

The Accel Deep deck is also compatible with the innovative MulchControl kit. MulchControl allows operators to quickly switch between side-discharge and mulching with just a flip of a lever. Mulching returns finely cut clippings to the soil as a beneficial natural fertiliser that will potentially enhance lawn health.

In addition to a high-quality cut at a faster speed, operator comfort is enhanced on the residential ZTrak line. The Z500 ZTrak series now offers more vertical and lateral space between the seat and the ergonomically contoured steering levers. An updated, wider seat now provides more cushioning and suspension support to reduce operator fatigue. Also, on the Z540R model, the engine is noticeably quieter thanks to a new canister-style muffler.

When it comes to maintenance, an easy-fill fuel tank, with 28.5 per cent more capacity, allows Z500 Series operators to mow longer without filling up. A lift handle with ergonomic grasp and new filter placements allows for easier access during routine servicing.

The John Deere Residential ZTrak line is now available to order. Check with your local John Deere dealer for stock availability information.

The Wiedenmann Core Recycler recycles cores using a sieve system which separates the clean topdressing material from the thatch

QTURF ADDS CORE RECYCLER TO WIEDENMANN RANGE

QTurf Machinery has introduced the Wiedenmann Core Recycler to its product range. The machine is the only recycler on the market and touts unique features which ensure turf surfaces benefit in more ways than one.

Primarily used for golf greens, the Core Recycler uses a sweeping head to pick up cores which have been previously punched out. It then recycles the cores using a sieve system which separates the clean topdressing material from the thatch. While the thatch is sent to the collection hopper, the top dressing is re-directed back to the turf surface.

The topdressing that is returned to the turf surface is clean and still contains some fertiliser and amendments. This means that by using the Core Recycler turf managers can save as much as 75 per cent of the topdressing. If required the machine is also able to collect 100 per cent of the material.

For more information about the Core Recycler visit www.qturf.com.au or call 0428 290 009.

INDUSTRY APPOINTMENTS AND ANNOUNCEMENTS

EPAR BECOMES AN RTO

AGCSA Trade member epar has announced it has become a Registered Training Organisation and will be offering delivering a Certificate IV in Leadership and Management in a series of workshops to be held in Sydney and Melbourne this winter.

The course has been designed to work with the industry, with only seven workshop days face-to-face, spread over July, August and September in 2016. The Certificate IV assessments are completed primarily in the workshops with only small amounts of 'take home' materials to complete. The qualification includes epar Professional Certification (comprising of three Units of Competency surrounding risk management, environmental management and workplace safety).

For further information regarding costs, included Units of Competency and course dates, visit www.epar.com.au/certificate-iv-leadership/ or call 1300 471 175.



BOYLE SIMPLOT'S NEW VICTORIA TM

AGCSA Bronze Partner Simplot Partners has announced the appointment of **Andrew Boyle** as territory manager for Victoria. Boyle (pictured) has a wealth of experience in the professional turf industry, in particular the golf sector, with a work history that includes Barnbogle Dunes, Royal Melbourne Golf Club and most recently Royal Canberra Golf Club. Boyle can be contacted on 0419 768 025 or by email andrew.boyle@simplot.com.au



JAKE JOINS DAVID

AGCSA Bronze Partner David Golf has appointed **Jake Bushell** (pictured) as sales representative for Queensland. Bushell is trade qualified, completing his turf apprenticeship at Kooyonga Golf Club in Adelaide before being employed at The Grange Golf Club. After his time at The Grange, Bushell gained extensive sales experience outside the turf industry, but has now returned to take up the role at David Golf. Bushell can be contacted on 0410 780 430 or by email jakeb@davidgolf.com.au.

If your company has any new appointments or announcements, contact ATM editor Brett Robinson brett@agcsa.com.au

The logo features a green stylized leaf icon to the left of the word "DURA" in large, bold, white capital letters. Below "DURA" is the word "Turf" in a bold, red, italicized font, followed by a small "TM" trademark symbol.

DURA **Turf**TM

Trialled, tested, proven

1800 DURATURF
www.pggwrightsonturf.com.au

The logo consists of a stylized green and white swoosh above the text "PGG Wrightson Turf". "PGG" and "Wrightson" are in white, and "Turf" is in green.

PGG Wrightson Turf



Clayton Howell (left), VGCSA life member John Geary (middle) and Casey Johnson were all recognised at the recent 89th VGCSA AGM held at Yarra Yarra Golf Club

A long dry growing season continued through the autumn for VGCSA members with well below average rainfall recorded across the state. Despite the long range forecast predicting a wet June, the following months are expected to be well below average again. It is a credit to the abilities of Victorian turf managers that they were still able to produce great playing conditions for golfers statewide throughout a testing growing season.

The VGCSA recently held its 89th Annual General Meeting at Yarra Yarra Golf Club where superintendent **Rod Tatt** had the golf course in magnificent condition. As usual, with a sandbelt golf course, fast greens were encountered by those who played golf which was exacerbated by extremely strong winds blowing on the day.

Again the meeting was very well attended with over 100 members enjoying the day and the association is fortunate to be continuously supported well by its members. A big thank you to outgoing president **Jeremy Cutajar** for his dedication, commitment and leadership to the association over a nine year period and he leaves the committee with the VGCSA in a strong position.

The remainder of the VGCSA committee was re-elected unopposed with **Barry Proctor** (Cranbourne GC) elevated from secretary to vice-president, **Shane Greenhill** (Sorrento GC) shifting into the secretary role and Moonah Links superintendent **Kyle Wilson** taking up the vacant spot on the general committee. As the newest member to join the committee we believe Kyle will have a lot to contribute to the association. The full VGCSA committee for the coming year is:

- **President:** Mat Poultney (Green Acres GC)
- **Vice-president:** Barry Proctor (Cranbourne GC)
- **Secretary:** Shane Greenhill (Sorrento GC)
- **Treasurer:** Steve Burchett (Portarlington GC)
- **Committee:** Kyle Wilson (Moonah Links), Michael Freeman (Huntingdale), Steve Hewitt (13th Beach) and Tom Smith (Waterford Valley).

A highlight of the AGM was the bestowing of VGCSA life membership on Cape Wickham superintendent **John Geary**. John, the 10th VGCSA life member to be inducted, is an extremely well respected turf manager across the state and beyond who has ridden the highs and lows of the turf industry. He has also been a prolific contributor to the VGCSA in many forms for a long period of time, including president from 2000-2002. His life membership was very well deserved.

In accepting life membership, John said his involvement with the VGCSA had been pivotal to his success as a superintendent. "This is an absolute honour and I am very humbled to accept life membership. I've often thought the role of a golf course superintendent can be quite isolating if you let it be and that's where the VGCSA provides a vital role in enabling a forum for superintendents to come together and share their concerns, successes and discuss anything in an open manner.

"I was involved in the VGCSA committee for a number of years and it took my appreciation of the industry to another level and introduced me to people that I would probably not have otherwise been introduced to. But above all, and the thing I'm most grateful for, is the amount of friendships I have made over the past 30 years. I can honestly say that some of my closest friends today are those whom I have met through the VGCSA."

Along with John's life membership, two other colleagues were honoured at the AGM. Eastern Golf Club course superintendent **Clayton Howell** received the VGCSA Superintendent Recognition Award, while **Casey Johnson** from David Golf & Engineering received the Trade Recognition Award. We also recognised Ballarat Golf Club's **William Koopmans** as the VGCSA Graduate of the Year and Mandalay Golf Club's **Nick Marino** who received the VGCSA's Diploma Award.

Congratulations to Numurkah Golf Club superintendent **Mat Campbell** who mastered some tricky conditions at Yarra Yarra to take home the Powell Trophy for the second year running. **Travis Stillman** posted a very respectable 30 points to nab the Toro Cup for best stableford score, while **Adrian Camba** from A&M Watering won the Presidents Shield for best trade score.

Over the winter period the VGCSA will be holding its 21C/Groundstaff Education Day at Devil Bend Golf Club on 6 June (host superintendent **Trevor Uren**). This will be followed by a trip to Rich River Golf Club for the ever popular Supers/21C combined country meeting which will again provide relevant education, networking opportunities and, as always, plenty of enjoyment. See you there.

MATHEW POULTNEY
PRESIDENT, VGCSA

Mat Campbell (Numurkah GC) won the Powell Trophy for the second time in as many years



STA Queensland held its Annual General Meeting on 5 May at Golf Central in Brisbane. It was a great turnout following the unfortunate late venue change. The committee saw a few changes, with long-serving members **Martyn Hedley** (Landscape Solutions) and **John Hagan** (TAFE Queensland) stepping down from their positions. Both Martyn and John had been involved on the committee since 2009 which was the first full year of our association's inception.

Martyn was in charge of organising the STA Qld newsletters of which 17 editions have now been printed. This is an enormous effort, from gathering stories, editing content, dealing with the printers and then distributing the magazines. Martyn was also involved with the STA Qld Apprentice of the Year Award.

John served on the committee as the educational facilitator and was heavily involved also with the STA Qld Apprentice of the Year Award. John was able to see firsthand the apprentices coming through the TAFE system and how they were positioned to enter the industry.

Also stepping down from the committee in late 2015 was **Jarrold Bird** (Queensland Cricket). Jarrold was instrumental in moving STA Qld into the digital age and was in charge of all (social) media aspects. Jarrold launched the former web site, mobile phone app, Twitter account and our very popular Facebook account. Jarrold is still continuing to Tweet and upload threads onto our Facebook account because that's what he loves doing.

On behalf of the STA Qld members and partners, thank you to those who have given up their time and



The 2016-2017 STA QLD committee elected at the May AGM

served on the committee to help develop and foster the growth of the sports turf industry. The 2016-2017 STA Qld committee is:

- **President:** Mal Caddies (Suncorp Stadium)
- **Secretary:** Kristy-Ann Pratsch (River Sands)
- **Treasurer:** Matt Roche (ASTC)
- **General Committee:** Eddie Bennett (TAFE Queensland), Peter White (Parkland Australia), Dan Norton (Austspray Environmental Weed Control), Josh Kemp (Green Options), Scott Egan (Green Options), Tony Kanaris (Turf Irrigation Services) and Brett Evans (Nuturf).

MATT ROCHE
TREASURER, STA QLD

The Vince Church Award for NSWGCSA Apprentice of the Year has been finalised and the Board is delighted to announce that **Mitchell Gibbs** (Bankstown Golf Club) will represent the association in the AGCSA Graduate of the Year Award at the upcoming Melbourne conference.

Judging for the award took place at Terrey Hills Golf and Country Club in April with Mitchell beating home a quality field that included fellow finalists **Jackson Coutts** (Bonnie Doon Golf Club), **Matthew Lewis** (Cumberland Golf Club), **Harry Caine** (Port Macquarie Golf Club), **Zak Doevendas** (Crescent Head Golf Club) and **Beau Curry** (Forster Tuncurry Golf Club). Unfortunately Harry Caine was unavailable to attend the award as he is currently in the US taking up an internship through The Ohio Program.

All of these young lads were great ambassadors for their clubs and their superintendents and it was unfortunate that we could only choose one winner.

Mitchell conducted himself with confidence and showed excellent proof of knowledge throughout his interview and I have no doubt he will represent the NSWGCSA very strongly in the national final. It will be a tremendous experience for Mitchell and I am sure he will take away a lot from being involved in this year's conference and national graduate programme.

I would once again like to extend my congratulations to all six candidates who will surely be big names in our industry in the future.

The new-look NSWGCSA magazine has been released and as always though we need more submissions to the 'Around the Traps' section of the magazine; we would love to hear from more superintendents or their assistants regarding their golf course operations.



NSWGCSA president Stuart Gill (left) with Vince Church Award recipient Mitchell Gibbs

STUART GILL
PRESIDENT, NSWGCSA

STA VIC



The recent warm and dry summer in Victoria has provided excellent conditions for turf managers to re-establish warm season grasses following winter wear.

STA Victoria has a new website so we encourage members to get on and have a look as we are always trying to improve the services that we provide. We are also asking all members to please send through an update of their contact details to Jan Fenton vic@sportsturf.asn.au.

The association will be holding its annual Sports Field & Wicket Seminar at AAMI Park on 20 July with Simon O'Donnell confirmed as guest speaker. Other speakers on the day will include;

- Shaun Graf (Cricket Victoria)
- John Neylan (who will launch the final *Poa annua* report)
- Dr. Phil Ford (couchgrass trials)
- David McGeary (disease/pest control)

- Ryan Poole (Pace Health Management)
- Jarrod Hill (Sporteng – new sports grounds at Waurn Ponds)

The STA Victoria Annual General Meeting will be held prior to the seminar, starting at 8.15am. Nomination forms will be posted on the association website or available by calling Jan on 0439 089 005 or email vic@sportsturf.asn.au. Notice of the 2016 AGM and minutes of the 2015 AGM will shortly be emailed to members.

Finally, STA Victoria is pleased to announce that **Matthew Pokorny** is the association's nomination for the Graduate of the Year Award. We wish him well at the national final to be announced during the 32nd Australian Turfgrass Conference in Melbourne in June.

GARRY WOOLARD
COMMITTEE, STA VICTORIA

STA AUSTRALIA



Those that know me are well aware I am not a fan of Facebook, Twitter or Instagram. It could be a generational thing but too many times it seems to me that everyone could be better off being a little less concerned about internet goats and Dwayne Johnson's breakfast. However, I must admit the other day I came across one of those inspirational quotes that pepper the LinkedIn site, which I felt struck a chord with the aims of the Sports Turf Association.

The quote went that once upon a time a finance director commented to the company's CEO about the rising cost of training staff. He asked, "Can we afford to spend this much effort and money on our staff only to then have them move on to positions with other employers?" To this the CEO replied, "Can we afford to not train them and they stay?"

There are two things in this story that resonate with STA Australia. One is that we are a very strong advocate of industry training and personal development for our members and the other is

that we also proudly champion our members to progress throughout the industry, creating promotional opportunities for generational change and innovation.

When you think about it, it should come as no surprise that our members have been such keen participants when attending workplace training and events that provide open networking opportunities. The fact is that from one day to the next no two living turf surfaces are exactly the same. The best turf manager working on the best turf facility in the country will continue to diligently strive to produce the best surface possible. Regardless of the level by which that surface is used, when we maintain and manage its growth we are in essence continually training the turfgrass and in the process training ourselves to meet each new challenge.

Lesson one of that training is the acceptance of help and a willingness to learn. Lesson two is to have faith in our trainees. Rather than being concerned about what we have to lose when they graduate and move on, we celebrate that one more educated voice is added to the collective resource.

This June at the 32nd Australian Turfgrass Conference and Trade Exhibition, I will be looking forward to another opportunity to participate in both exercises. By attending as many educational sessions and networking opportunities as possible and also by celebrating all the finalists chosen from the 2015 graduating turf students vying to be selected as the National Sports Turf Graduate for 2016.

TONY GUY
PRESIDENT, STA AUSTRALIA

ON THE MOVE

LIAM ASH: From groundstaff Monash Country Club, NSW to assistant superintendent Monash CC, NSW.

MARTIN GREENWOOD: From Cape Wickham, Tas to superintendent The Heritage Golf & Country Club, Vic.

DANNY HACK: From superintendent Bairnsdale Golf Club, Vic to farm manager Lilydale Instant Lawn, Bairnsdale, Vic.

DANE MCBRIDE: Appointed supt. at Melville Glades Golf Club, WA.

ROB SAIN: From assistant superintendent Cromer Golf Club, NSW to superintendent Monash Country Club, NSW.

MATHEW SOLES: From Cronulla Golf Club, NSW to assistant superintendent Roseville Golf Club, NSW.

TAY WILSON: From asst. supt. Victoria GC, Vic to supt. Koorinal Golf Club, Vic.

LEE VEAL: From superintendent Melton Valley Golf Club, Vic to superintendent Sunshine Golf Club, Vic.

THE PERFECTION OF NATURE

BARONESS

The new Baroness GM2800B is engineered to the most exacting Japanese standards and is uncompromising in delivering an unmatched quality of cut and finish. Perfection is at the heart of this high performance and reliable rotary mower.

- / Five independently mounted cutting decks. 2.8m cutting width.
- / Traction control for minimal wheel spin and maximum traction.
- / Unique height adjustment system.
- / Powerful Kubota engine and high-torque wheel motors.

COMPREHENSIVE 4 YEAR WARRANTY, BACKED BY KUBOTA.



GM2800B
ROTARY MOWER



PEDESTRIAN GREENS MOWER



GREENS MOWER



ZERO TURN MOWER



UTILITY VEHICLE

FOR MORE INFORMATION ON THE KUBOTA BARONESS RANGE PLEASE CONTACT:
Trent Saunders on 0437 814 392 or baroness@kubota.com.au

For Earth, For Life
Kubota

Superintendents from all areas of the state have experienced very dry conditions with some areas breaking records for dryness and temperature. Conversations with colleagues have inevitably led to initiatives for conserving water with some desperate measures taken in some instances. Amazingly, on 29 April conditions changed as though someone had flicked the switch and turned off El Nino and all parts of the state have had consistent rainfall and cooler conditions since.

The TGCSA is pleased to announce that the Syngenta Graduate of the Year is **Trent Le Rossignol** from Tasmania Golf Club; congratulations to Trent and to Tasmania superintendent and TGCSA secretary **Dan Gilligan**.

On 3 May the TGCSA staged an educational seminar sponsored by Serve-Ag at the Launceston Tram Sheds function centre. Thirty-six delegates

attended and heard presentations on preparing turf for winter conditions, the workings of a soil and water testing laboratory and the potential use of some cutting edge techniques being used in precision agriculture for the turf industry. Thanks must go to **Andy Byard** from Serve-Ag for assembling a terrific group of presenters at short notice with some really positive feedback received from delegates.

The TGCSA and the STA will be staging a co-sanctioned conference and trade show on 16-17 August hosted by TGCSA vice-president **Phil Hill** at Barnboughe Lost Farm. Last year's event was a great success and this year looks to be shaping up to be bigger and better again.

MARK JOHNSON
PRESIDENT, TGCSA

With remnants of summer still hanging around, ideal growing conditions continue to keep us all busy. We have had a lull in field day activity over the last two months as our proposed days had to be postponed due to venue timing issues.

With this in mind the committee has brought forward our 'Day in the Life' series and we are planning to converge at Sanctuary Cove G&CC to inspect **Paul McLean's** bunker lining refurbishment, combined with a session from **David Hanby** (Hydro Pumping & Controls) on irrigation maintenance. GCSAQ committee member **Shaun Cross** will also be putting Paul under the microscope to get an insight into his daily routines and strategies that make his course maintenance 'run like a well-oiled machine'. We still have some minor scheduling and format adjustments to make and once these are finalised members will be alerted.

At the time of this edition going to print the GCSAQ was to hold an assistant's educational day in conjunction with Greenway Turf Solutions, while the combined GCSAQ/STA Qld bus tour was also scheduled for 30 May-2 June.

In other news **Peter Woods** has moved from Globe Growing Solutions to take on a sales role with Living Turf and he has been replaced by former Gainsborough Greens superintendent **Justin Kelly**.

And finally, Kooralbyn Valley Golf Course is set to reopen on 1 June. Ramada has rebranded the resort as a 'world first and only integrated health and wellness eco-resort'. It will be great to see that magnificent layout, first opened in 1979 and which still ranked 83rd in Australia's top 100 courses in 2008, back on the golfing radar once again.

BEN TILLEY
PRESIDENT, GCSAQ

Sanctuary Cove will host the next GCSAQ 'walk 'n' talk' session



STA ACT REGION



All turfs in Canberra have had a tough summer. Rainfall has been below average and temperatures at least five degrees above average (the Bureau of Meteorology was right for once!). Turf managers have had to cut water usage due to low levels in irrigation dams and high prices to purchase potable water.

The STA committee has been busy organising the annual seminar to be held on 27 July. We have organised some great speakers for the day including;

- Graham Logan (ANZ Stadium)
- Bruce Davies (CIT – training of apprentices)
- Nathan Humphries/Cameron Stuart (turf careers)
- James Graham (Eulonga Quarries)

The committee is also trying to set up machinery demonstrations for the day. Machinery companies can contact Scott Harris for information.

Brad van Dam and his staff at Star Track Oval (Manuka Oval) have been very busy over the last couple of months. The ground has been fully renovated after summer and oversown with Striker Gold seed for the 2016 AFL season. Brad hosted two premiership games in April with Greater Western



Sydney defeating Geelong and Port Adelaide and will host another game in July.

Cricket Australia has also announced Manuka Oval will be the 10th venue in Australia to host a Test match in the summer of 2018/19. Also, One Day International cricket will be back next year with Australia playing New Zealand in December.

Star Track Oval was fully renovated ahead of the 2016 AFL Premiership season

**SCOTT HARRIS
PRESIDENT, STA ACT**

STA WA



The STA WA community came together a few times during the first quarter of 2016.

As mentioned in our last report, we began the year on 24 February with a morning BBQ at Challenge Institute of Technology in Murdoch. Since then, as of 11 April, Challenger as we had come to know it for the last 10 years has had its name changed again to South Metropolitan TAFE.

The WA Government has sought to re-align the current 11 TAFE colleges and their 70 WA campus locations into a network of five administering TAFE college centres. Challenger campus and 13 other campuses will now make up this new south metro college. These changes are part of the new 'State Government Training Sector Reform Project' and will aim to provide increased opportunities for students through collaboration and sharing of resources across regional and metropolitan colleges.

Regardless of the name change, there will be minimal impact upon students or changes to their training courses. The STA WA is very proud to be associated with the turf and hort lecturing team at Murdoch campus as they continue to provide first class tuition and guidance to the students each year.

A month later on 23 March we held our traditional President's BBQ Breakfast at the Pines BBQ area in Kings Park. It was well received by more than 30 regulars as well as a number of new faces such as **Reece Jones** from Newman College joining the

gathering. Just small gatherings really but each equally important as an invaluable opportunity to meet new people and build relationships while catching up with old friends.

On 5 April the STA WA in conjunction with SERCUL hosted a one day Fertiliser Wise course. This course has been run for several years now and has proven to be a lasting educational tutorial to a clearer understanding of the make-up of fertilisers, how much to apply and when to apply and why. The workshop is designed towards reinforcing the discipline required for careful monitoring of fertiliser applications so as to not only efficiently produce healthy turf but also minimise the impact on the natural environment.

At the time of writing this report, STA WA members were due to tee off at the STA WA Golf Challenge at Hartfield Country Club in the second week of May. Major sponsor for the morning was T-Quip which is very proud to be associated with this event. They have created the 'T-Quip Trophy' for the winner with their name to be engraved upon the 'T-Quip Perpetual Shield' which will be displayed on the company's showroom wall. The STA WA also wishes to thank Growise and MowMaster for putting on breakfast for the event.

**TONY GUY
PRESIDENT, STA WA**

TURF AUSTRALIA



Turf Australia has produced a series of 'Turf Facts' fact sheets promoting the benefits of and dispelling some of the myths surrounding natural turf

Turf or grassed open space often is taken for granted. However, independent research has been able to qualify and quantify some of the many benefits turf provides in enabling cities to be healthier, more productive and more liveable. For example, natural turf...

Has a cooling effect: The temperature on a green lawn in midsummer can be 10°C less than bare soil, 20°C less than asphalt, concrete or pebbles and 40°C less than synthetic grass. Also, recent research from the United Kingdom has found that in green spaces of more than 5000m², the amount of grass coverage has a stronger effect on the degree of cooling than tree canopy.

Is environmentally friendly: Turf improves water quality by filtering runoff and reducing erosion. This has now been recognised by Standards Australia which is currently developing an Australian Standard for using turf for erosion and sediment control. Turf also improves the air we breathe by reducing greenhouse gases through the absorption of carbon and the production of oxygen, in addition to mitigating dust and reducing the loss of nutrients.

Promotes wellbeing: Open greenspace promotes physical exercise and improves mental health. New research from Western Australia shows that nature-based architecture within our urban environments reduces stress, decreases violence and crime, increases wellbeing, quickens healing rates in hospitals and results in greater altruistic behaviour, all due to the innate human psychological and physiological link to nature.

Uses less water than you think: With five main turf types and many different varieties to choose from, drought tolerant and water efficient options are available. Turf also grows well using recycled water and water saving crystals.

Is a natural product: Turf maintains and enhances biodiversity, self-replenishes, provides a natural fire barrier, reduces noise and glare and can increase home values by up to 18 per cent!

As the evidence mounts regarding the many and significant benefits of turf, the community and consumers of turf will more easily see the inherent value of turf, which means turf should be a relatively easy product to sell.

For example, while the majority of consumers do not know what the actual price of turf, on average consumers believe turf is worth \$15 or more per square metre, supply only. However, despite this, the average price of turf across Australia is

considerable less at only \$10.80m² for soft leaf buffalo, although the actual price varies by up to 123 per cent across Australia.

Reinforcing the inherent high value in turf, research shows that consumers:

- Want natural turf around their home and near their work place;
- Recognise that lawns add between 10-15 per cent to the value of a home;
- Believe natural turf provides an ideal surface for, and softens the look of, a home.

In addition, independent contract landscaping rates show that, when compared to pavers, synthetic turf, sandstone, concrete and mass garden plantings, natural turf is the cheapest ground cover option. This includes site preparation, supply and installation costs.

Also, natural turf has many environmental benefits that improve the atmosphere, water and land quality and there are significant differences between synthetic (plastic) grass and natural turf. For example, in comparison to natural turf, synthetic grass is more expensive to install and maintain, requires regular disinfection to control bacteria and germs, is artificial with an unnatural feel and smell, has been proven to result in more injuries, is flammable, on hot days can heat up to three times the air temperature and is not environmentally friendly.

Given these large differences between synthetic grass and natural turf, synthetic grass can be considered as a potential alternative to other hardscapes like concrete. It is not, however, an alternative to natural turf.

Turf Australia has produced a variety of 'Turf Facts' fact sheets promoting the benefits of natural turf, including:

- How consumers value turf;
- The actual price of turf across Australia;
- How the cost of natural turf compares with alternative ground covers;
- The real differences between natural turf and synthetic grass;
- The environmental benefits of turf grass.

For more information or to obtain copies of these fact sheets, contact Turf Australia via email admin@turfaustralia.com.au or phone (02) 4588 5735.



RICHARD STEPHENS
BUSINESS & INDUSTRY DEVELOPMENT
MANAGER, TURF AUSTRALIA

Manage your environmental responsibilities with *drum*MUSTER



Leading turf operators understand the importance of meeting QA and Environmental Management System requirements. **drum**MUSTER and ChemClear can help with responsible disposal of agvet chemical waste. Find your nearest **drum**MUSTER collection site online and join the turf operators who have already helped us collect nearly 30 million drums.

drummuster.com.au

Having already won the GCSAWA Environmental Award and AGCSA Claude Crockford Environmental Award in 2015, Hartfield Country Club superintendent Nick Kinley went on to collect both the GCSAWA Superintendent of the Year and Environmental Award at the WA Golf Industry Awards in March

The Western Australia Golf Industry Awards was held at Crown Casino Perth on Friday 6 March to recognise the tremendous efforts of those individuals and facilities that have excelled over the last 12 months. Finalists for Toro Apprentice of the Year were:

- Michael Giamboi (Meadow Springs G&CC)
- Matthew Ferguson (Seaview GC)
- Matt Kempton (Collier Park GC)
- Steve Lindley (Meadow Springs G&CC)

The GCSAWA was pleased to bestow the award on **Steve Lindley** who has been at Meadow Springs (superintendent **Greg Simmonds**) for the full length of his apprenticeship. Steve started out as the course mechanic after coming from a farming background but enjoyed the job so much he decided to extend his skills by doing an apprenticeship in sports turf management. The industry is fortunate to have a person of his calibre and the GCSAWA wishes Steve all the best in the final of the AGCSA Graduate of the Year Award to be announced in June.

The Superintendent of the Year Award, sponsored by McIntosh & Son and Jacobsen, had some well deserving finalists including:

- Eric Dennis (Lakelands CC)
- Nick Kinley (Hartfield CC)
- Aaron Petrovski (Nedlands GC)
- Ashley Watson (Joondalup Resort)

The winner was **Nick Kinley** whose focus on team building, course management and development, efficiency usage and environmental consideration is simply inspirational. Nick prepared the course for the 2015 Western Australian Amateur Championship with less than one month's notice with excellent reviews. Nick has also been instrumental in the development of the course, the design and re-shaping of the 6th green, the re-construction of the 10th tee and the replacement and design of the 18th green.

It proved to be a big night for Nick as he also collected the GCSAWA Environmental Award sponsored by Globe for the second year running (as



many will also be aware he went on to win the AGCSA Claude Crockford Environmental Award at the 2015 Australian Turfgrass Conference). Hartfield Country Club continues to make significant improvements in its surrounding course environment with a long-term commitment towards land management and sustainability.

The GCSAWA Management Challenge was held at Cottesloe Golf Club in early April with 11 teams competing for the association's main golf prize. Superintendent **Simon Bourne** once again presented the course in outstanding condition. Sun City superintendent **Brad Anderson** took out the event with Secret Harbour's **Adam Strachan** finishing runner-up. Thanks again must go to **Jason Kelly** (superintendent Royal Fremantle) for his hard work as GCSAWA golf secretary.

With the winter months fast approaching the GCSAWA has planned a number of events including the Trade Challenge at Secret Harbour, Superintendent Forum at Lake Karrinyup as well as irrigation and spray training workshops.

To end on a couple of sad notes, it was a shock to many members to hear that **Des Russell** had departed Bunbury Golf Club. As past president of the GCSAWA, Des put a great deal of time and effort into improving many areas of the turf industry. We wish Des well in the future and hope he will continue to be part of our industry. The GCSAWA also wishes to send its heartfelt condolences to members **Trevor and Adam Strachan** following the passing of wife and mother Leanne in late April after a long battle with cancer.

NEIL GRAHAM
PRESIDENT, GCSAWA

The NZ Turf Conference is fast approaching at the end of June at Sky City in Auckland. It is now only every three years that all our sectors including golf, bowls, cricket, council and sports fields come together under one roof to share ideas, so it's always something to look forward to. Congratulations to our top sports field graduates from 2015 **Aaron O'Connor** and **Tyrel Godsiff** who are being sponsored to attend the conference.

Changeable weather patterns are again creating headaches around the country with dry autumns for Canterbury and the Manawatu making renovations difficult and melting out very problematic in the Auckland region over summer when managing cool-season grasses such as ryegrass. The sooner things settle into the La Nina weather pattern the better!

KELLIE ROSE
CHAIR, STANZ

WORKMAN[®] GTX

MORE COMFORT. MORE POWER.
MORE VERSATILITY. MORE CONTROL.

SIMPLY SUPERIOR.

VISIT TORO STAND TO SEE THE REVEAL OF THE NEW WORKMAN GTX
Australian Turfgrass Conference & Trade Exhibition
19-24 June 2016, Palladium Ballroom, Crown Entertainment Complex, Melbourne

For more information, call 1800 356 372 or contact your Toro Golf Area Sales Manager.

toro.com.au



[/toroaus](https://www.facebook.com/toroaus)



[@toroaus](https://twitter.com/@toroaus)



[/toroaustralia](https://www.youtube.com/channel/UCtoroaustralia)

TORO[®]

Irrigation Water Systems featuring HYDROVAR®

Create a variable speed booster station to your technical specifications.

By utilising the well proven Lowara e-SV™ multistage pump and Hydrovar variable speed drives, you gain an efficient and robust system. You can create a booster set with up to eight vertical multistage pumps that are all controlled by Hydrovar frequency drives fixed directly on the electric motor of each pump. These systems can maintain constant pressure and optimized pumping efficiencies over wide flow ranges .

A selection of golf courses that have installed pumping systems with HYDROVAR®:

Australia

- Ballarat
- Bannockburn
- Barwon Heads
- Bermagui
- Bowral
- Box Hill
- Brookwater
- Cape Schanck
- Charlestown
- Clifton Springs
- Criagieburn
- Curlewis
- Dorsel
- Drovin
- Druin
- Elcho Park
- Emerald Lakes
- Eynesbury
- Garfield
- Goondiwindi
- Hidden Valley
- Kingston Heath
- Koohindah Waters
- Latrobe
- Marysville
- McLeod
- Melton
- Metropolitan
- Monash
- Montuna
- Morebank
- Moss Vale
- Muirfield
- Ocean Grove
- Ocean Shores
- Pacific Dunes
- Perigian Springs
- Rich River
- Richmond
- Ringwood
- Riverside
- Rockhampton
- Royal Melbourne
- Rosebud
- Rosedale
- Settlers Run
- Shell Cove
- Shell Harbour
- Shoal Bay
- Shoalhaven Heads
- The Goowa
- Tirhatuan Park
- Trafalgar
- Tuggerah Lakes
- Virginia
- Wyong

New Zealand

- Akarana
- Auckland
- Cape Kidnappers
- Carrington
- Clarke's Beach
- Formosa
- Grange
- Hamilton
- Howick
- Huapai
- Jacks Point
- Kaitaia
- Karori
- Kauri Cliffs
- La Pointe
- Mangawhai
- Matarangi
- Muriwai
- Napier
- New Plymouth
- Omaha Beach
- Omokoroa
- Onewai
- Pauanua Lakes
- Russley
- Sherwook
- Taupo
- Te Awha
- Te Puke
- The Hills
- Titirangi
- Waikanae
- Waipa
- Wanganui
- Wellington
- Western Bay
- Whangarei



Lowara's extensive pump range together with Hydrovar, can offer a complete line of booster systems ideally suited for the diverse requirements of the turf and landscape markets and for golf courses in Australia and New Zealand.

