

Royal Melbourne Survival on the sandbelt

Profiles
Jeff Gambin
John Lloyd
Ranald McNeill

Research
Poa annua control
Sportsfield audits



24th Australian
Turfgrass Conference
Your official 24-page guide to Melbourne

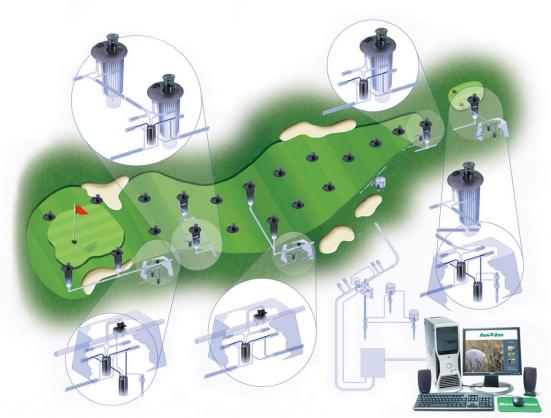
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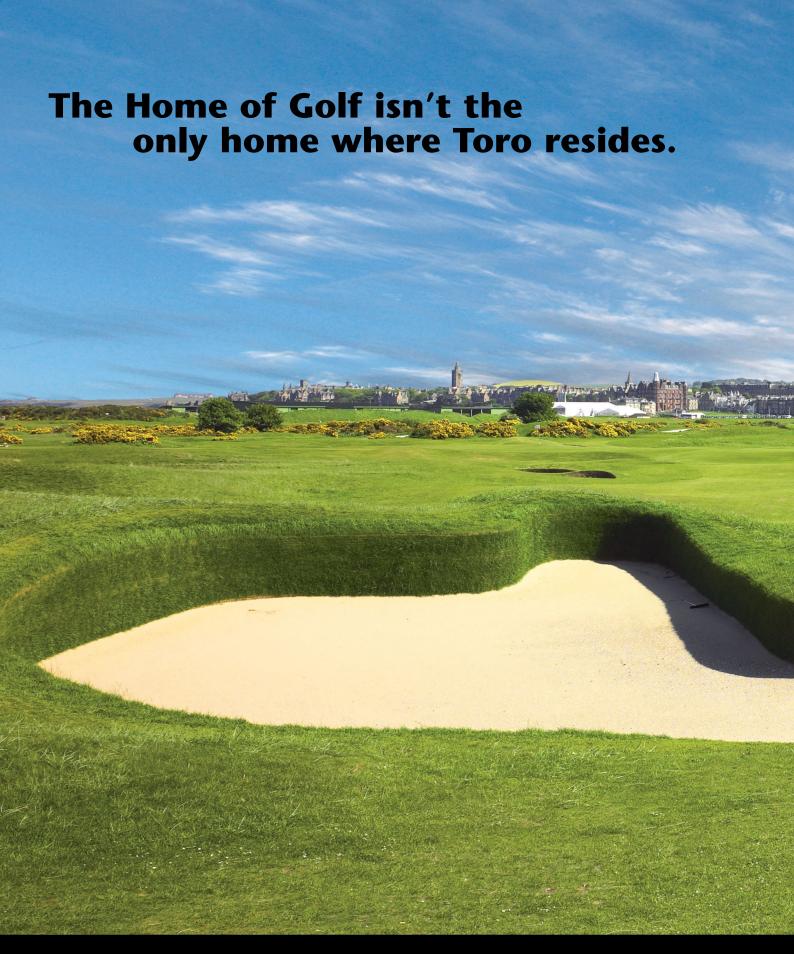


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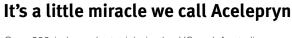




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COVER: Royal Melbourne Golf Club

The signature 6th West at Royal Melbourne Golf Club. The iconic sandbelt course will play host to the 2008 Toro AGCSA Golf Championships this July.

Photo: Brett Robinson



Survival on the sandbelt

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The past three years have proved to be some of the most challenging in the history of Royal Melbourne Golf Club. ATM catches up with superintendent Jim Porter and discovers that with a major stormwater harvesting project about to come on line, the future is starting to look brighter for the sandbelt gem.

The restoration of Ratho

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Last year ATM ran an extensive feature on the bold plans to restore one of Australia's oldest operating golf courses – Ratho Golf Links in Tasmania. Architect Neil Crafter and Ratho property owner Greg Ramsay look at the process to bring the new holes to life.

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After nine years on the AGCSA Board, including the last four as president, Jeff Gambin will step down at this year's AGM in Melbourne. ATM profiles the Gold Coast superintendent and reflects on an enjoyable tenure at the helm of one of the turf industry's leading associations.

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24th Australian Turfgrass Conference and Trade Exhibition Guide 41-64

Melbourne plays host to the 24th Australian Turfgrass Conference and as always ATM will act as your official guide for the week. Our 24-page guide has all the information delegates need to enjoy the week, including profiles of this year's AGCSA Awards finalists and full listings of companies exhibiting at the two-day trade exhibition.

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Contributors to Australian Turfgrass Management Volume 10.4 (July-August 2008)

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What's in a name?

s many readers will be aware by now, the AGCSA, which produces Australian Turfgrass Management, has been undertaking a major review of its strategic plan recently in order to provide enhanced services and benefits for members.

As part of this ongoing examination, the AGCSA, together with the Australian Turfgrass Management production team, has decided to make a subtle yet important change to the publication which you currently hold in your hands. From this edition forward we will now be known as Australian Turfgrass Management 'journal' instead of Australian Turfgrass Management 'magazine', dropping the latter title which the AGCSA's flagship publication has carried since the first edition back in February 1999.

Australian Turfgrass Management has been an integral tool for turfgrass industry professionals over the past decade, combining robust research content with incisive features on major issues affecting the industry and engrossing human interest pieces. As such, it has become a key reference tool and it is in light of this important role that we have decided on the change in reference from magazine to journal. The title magazine implies a publication which has a short shelf life, whereas a journal carries more value in respect that its content can be referred back to many years after initial publication.

Over the past decade Australian Turfgrass Management has continued to grow in terms of size and stature and has started receiving national and international recognition, picking up awards from the Turf and Ornamental Communicators Association and more recently the Australian Golf Writers Association. We are committed to improving the content and design of Australian Turfgrass Management (in line with the new journal title you will also notice with this edition some subtle design tweaks by art director Jo Corne) and hope that this small yet significant change in title will further preserve and enhance Australian Turfgrass Management's status as a leader in the industry.

As if to mark the occasion of the first journal publication, this edition is the biggest in ATM's 10-year history. Volume 10.4 weighs in at an impressive 104 pages, eight pages more than the previous biggest (Volume 2.3, June-July 2000) and, rather fittingly, leads with an extensive feature on Australia's most famous golfing establishment – Royal Melbourne Golf Club. Of all the courses to have felt the impact of the drought in recent times, Royal Melbourne has been doing it very hard, but as we find the future of turf management operations is looking healthier now that water issues have been resolved.

Elsewhere in this edition we profile Ranald McNeill, who after over two decades in the oil-rich sand dunes of the Middle East is back home in Australia, as well as outgoing AGCSA president Jeff Gambin, superintendent of Gold Coast Burleigh Golf Club. Jeff is set to stand down after nine years on the AGCSA Board at this year's AGCSA AGM and his presence will definitely be missed. During the five years I have been ATM editor Jeff has always provided plenty of encouragement and ideas, even if the majority of his calls to me each week during the footy season are to hang the proverbial on this scribe's beloved Warriors. I would like to wish Jeff all the best in his future endeavours and our thoughts will no doubt be with him when son Ryan takes to the pool at the upcoming Beijing Olympics.

Finally, with the 24th Australia Turfgrass Conference just weeks away, this edition contains a 24-page guide to the Melbourne gathering. All is in readiness for another great conference and I am particularly looking forward to hearing some of the tales from Tim Moraghan, the former USGA director of championship agronomy who spent 20 years preparing courses for golf's toughest major – the US Open. Enjoy the journal.

Brett Robinson Editor



JOHN NEYLAN AND SCOTT PETERSEN, AGCSA JOINT GENERAL MANAGERS

The importance of shared experiences

he year has just about reached the halfway mark and we are still faced with the complexities of Australia's weather continuing to challenge the skills of turf managers and with little certainty of what the future may bring. At no time in the life of the AGCSA has the turf industry been forced more to consider what it does and whether it is sustainable.

As we seem to be always working harder and there are more demands on our time at work, it takes considerable discipline to stop and think about where we are at as an association and an industry. With the near completion of the AGCSA's Strategic Plan, it is apparent that it needs to focus more on golf and those that work on golf courses. In particular, it comes back to the very basic premise of making sure that all our members have access to the skill set required to manage the multiple challenges on an Australian golf course in an ever-changing environment.

The needs of our members are wide and varied, as is the frequency with which members need some form of support. Whether it is technical information or analytical services through AGCSATech, HR support, industry information through the acclaimed Australian Turfgrass Management journal and The Cut, or just a chat on the telephone, the specific needs are numerous.

There is a famous quote by English poet John Donne – "No man is an island, entire of itself; every man is a piece of the continent". I read this as meaning that no individual has all the answers to all of the problems or can live



in isolation and is relevant to how we work in the turf industry. Everyone needs a mentor, colleague, peer or other resources to support his or her activities/duties at that particular time

Many superintendents around Australia have been doing it tough over the past 12 months due to a lack of resources, water or understanding from committees and management. It has been important that there is a network of colleagues with which superintendents can chat to and at least reassure themselves that that they are not alone and there are others that are experiencing or have experienced similar challenges.

Shared experiences are as important as all the technical whys and wherefores explaining an event (or not). The AGCSA office doesn't have all the answers but the network of contacts it has and the knowledge of what others are dealing with can provide a much-needed contact or source of advice. One good example has been the ability to talk through with superintendents and clubs on how to assess approaches from a particular contractor and how to evaluate their value to the golf club going forward.

The AGCSA has been able to lead several clubs through the due diligence process to ensure that their decision is an informed one and interestingly (but not surprisingly) many clubs have been able to make a better choice.

What continues to be our greatest frustration is the exploitation of the current industrial relations laws and the way some clubs have chosen to oust a superintendent that has lost favour. A key plank of the AGCSA's strategic plan is to better inform general managers, club directors and golfers on the complexities of maintaining a golf course and providing resource material to clubs that strengthens the position of the superintendent.

The AGCSA has re-launched its Accreditation Programme as a way of encouraging and acknowledging the need for ongoing education and training. The revamped scheme is broader than the old system and encourages superintendents to seek acknowledgement for any further education and training undertaken. This is one more small way you can demonstrate to your club that you are keeping updated and developing new skills.

Changing from what we are familiar with is always difficult. It is that moving out of the comfort zone that is often the greatest challenge, not the challenge itself. Adapting to change, whether it is the lack of water, contractors or restricted budgets requires an innovative and considered response and there are resources out there that can help. Use your association to help.

The upcoming Melbourne conference provides multiple opportunities to mix with peers, swap ideas and discuss new innovations. We look forward to seeing you in July.



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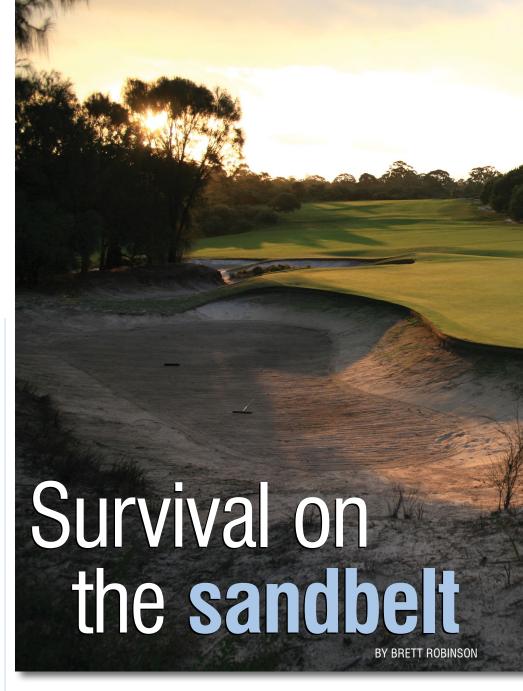
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Much has been said and written about Australia's iconic Royal Melbourne Golf Club. One of the world's unique golfing establishments, for well over a century it has been at the heart of the development of the game of golf in Australia. For the past two decades it has been the second home of superintendent Jim Porter, a former Kyneton lad who has continued to foster the excellent traditions set by the likes of forebears Morcom, Crockford and Williams. While overseeing a great deal of work to both the East and West Course layouts during his tenure, as ATM editor Brett Robinson discovers it has been the past three years, during some of the club's most difficult times, where Porter has truly earned his keep.



hen Alister MacKenzie crafted Royal Melbourne Golf Club's West Course in 1926 he incorporated what he deemed to be 13 essential elements into its design. What he created, as is now well recognised, was a timeless classic which not only put Australia on the world golf map but also cemented MacKenzie's reputation as one of the game's great architects of all time, if not the greatest.

Just as the West Course in many respects made MacKenzie, Royal Melbourne has also made those individuals who have been fortunate to act as its custodian. Rather remarkably, over the past 100 years Royal Melbourne has had just four 'keepers of the green'.

Mick Morcom, who MacKenzie described as "the best greenkeeper I have come across in Britain, America or Australia", presided over operations from 1905 to his retirement in 1935. During this time, which saw the club move from Sandringham to its current day site at Black Rock, Morcom was MacKenzie's right hand man when he came out to build the West Course, and then with Alex Russell constructed the East Course in 1932.

Morcom then handed the reins to a gentleman by the name of Claude Crockford who for the next four decades – yes, 40 years! – continued to nurture the unique Royal Melbourne landscape in keeping with the MacKenzie philosophy. Following his retirement in the mid 1970s Peter Williams assumed the mantle before he eventually handed over to current day superintendent Jim Porter in 1989.

Of the so-called MacKenzie 'elements', it is the thirteenth and final one which relates directly to course presentation and maintenance. MacKenzie writes: "The course

One of Australia's timeless courses, Royal Melbourne has had to endure three years of intense drought conditions which have had a huge impact on the famed landscape. The fairways in particular have gone backwards but with a new stormwater harvesting project about to come on line the future is starting to look brighter



should be equally good during winter and summer, the texture of the greens and fairways should be perfect, and the approaches should have the same consistency as the greens."

For those entrusted with Royal Melbourne's upkeep, that element has been a guiding philosophy, however you only have to look at the last couple of years of Porter's reign to see how increasingly difficult that has been to achieve.

Providing "perfect" texture when the native couch fairways are going into drought-stressed dormancy mid-way through summer, or achieving "consistency" when local authorities are dictating to you when, where and how much water you can apply to the course, and it is understandable how keeping in line with MacKenzie's philosophy has become a near impossible task.

The current drought certainly means Porter

could argue he has had it the toughest of all his esteemed predecessors, but he is not the sort of superintendent to cry poor. Instead it's the sort of challenge the 48-year-old, together with his crew and the club, is meeting head on and despite watching the landscape go backwards in recent years, Porter can now see a much brighter outlook for MacKenzie's Down Under gem.

KYNETON KID

Porter's path in reaching the top job at Royal Melbourne was by no means conventional. His first introduction to the game came growing up in the small Victorian township of Kyneton where his father Stan was a passionate member of the local Kyneton Golf Club.

A one-time club captain, Stan also possessed a very keen sense of community and expounded the belief that in order to derive pleasure from something you had to put in. He instilled that principle in his son and it was not uncommon to see the young Porter down at the club on the weekend or during school holidays alongside his dad undertaking a variety of maintenance tasks – from handwatering greens in summer through to digging drains in winter.

When he finished school Porter wanted to go to university. Born with a natural affinity for the land, Porter chose to undertake an agricultural science degree at the University of Melbourne. After graduating he tried for the standard Department of Agriculture job but with positions few and far between Porter was forced to go elsewhere. In the meantime he kept himself busy with volunteer work maintaining Kyneton.

While enjoying the work immensely, it wasn't exactly paying the bills so one day Porter replied to an ad for a jackeroo in Stock and Land. Porter soon found himself heading to the western districts of Victoria and for two years worked on sheep studs. During that time he kept up his golf and played regularly on the sand scrapes of Caramut Golf Club.

After riding around on motorbikes and drenching sheep for a few years, Porter yearned for a change. Getting a job where he could apply his ag degree was still proving difficult, so drawing on his love for golf and his practical experience at Kyneton, Porter penned letters to a number of Melbourne golf clubs, including those on the sandbelt. By chance he was taken on at Royal Melbourne Golf Club as a groundsman.

During his two years at Black Rock Porter completed night studies in turf management through Burnley which introduced him to the likes of John Neylan, Ron McCartney and Terry Woodcock who at the time worked with the Department of Agriculture.

Porter showed an interest in what they were doing at the then Turf Research and Advisory Institute and a vacancy soon became available looking after the turf research plots in Frankston. Porter took the position before moving into a consultancy role with the institute which took him around the state advising various sporting clubs on how to best prepare their surfaces.

While the job provided plenty of scope, the travel eventually got the better of Porter and he decided to put his hat in the ring for the vacant superintendent position at Metropolitan Golf Club in 1987. To his surprise he got the nod.

"I think a lot of people were surprised as well because I had minimal practical experience," recalls Porter. "I had more of an academic background than a practical one and I thought that would count against me.

Royal Melbourne Golf Club The Porter Years — 1989-Present

1989

Porter arrives at Royal Melbourne following two years as superintendent at Metropolitan Golf Club. Taking over from Peter Williams, Porter continues with the greens conversion programme which has already seen six greens converted to Penncross.

1992

After converting a further nine greens, Porter recommends to the club to halt the programme over concerns that the new greens were inferior to the old Suttons mix greens. The Penncross surfaces needed far greater inputs, exhibited poor winter vigour and density.

1993

Porter starts to trial some of the new bents now available to the market as well as the original Suttons mix. In conjunction with the trial, the club investigates the possibility of recreating the Suttons mix and with the help of Martin Eade (Wrightsons) and New Zealand plant breeder Keith Salisbury, the collection of desirable colonies begins and grown on at Kimihia Research Station (NZ).

1996

The trial produces enough seed for Porter to sow a trial plot in the nursery green in 1995 and in 1996 that turf is transplanted into the 16th East green. The 'new' Suttons performs well and continual monitoring shows it has all the desirable qualities of the original mix – dense and upright, wear resistant, good year round density, can survive on reduced nitrogen applications and provide a true and fast putting surface. That same year the club approves the reconstruction of the 12th East and Porter sows the entire green with the new Suttons mix.

1998

The Composite Course (12 holes from the West Course and six from the East Course) hosts the 1998 Presidents Cup, the first time the event has been held outside of the United States. Jack Nicklaus captains the US team and Peter Thomson the Internationals. The Internationals, boasting Australians Greg Norman, Steve Elkington, Craig Parry and Stuart Appleby, cruises to victory 20½ to 11½.



After shelving the Penncross greens conversion programme in 1992, Royal Melbourne undertook a lengthy investigation into recreating the old Suttons mix. Once enough seed was produced, test plots were planted into the 16th East green pictured here. Between 1999 and 2003 all greens were converted to the new Suttons mix.

1999

Three years after the initial planting of the new Suttons mix on the 12th East, and following innumerable committee meetings and member information nights, Porter gets the all clear to convert the remaining 35 greens across to the new Suttons mix. The project is completed by 2003 (a full rundown of the project is contained the proceedings to the 18th Australian Turfgrass Conference).

EARLY 2000s

Amid the greens conversion programme, Porter embarks on a tee resurfacing project converting *Poa*/couch tees across to couch oversown with fescue. With water issues taking effect from 2005 onwards, the project is scaled back and by 2008 15 holes have been completed.

2002

Royal Melbourne hosts the first of four consecutive Heineken Classics. Ernie Es wins the first three. Water restrictions impact preparations for the 2005 event.

2003

The club's appointed architect Dr. Martin Hawtree completes a strategic plan review, part of which includes major changes to five holes on the East Course. Subtle changes are made to holes 5, 6, 7, 8 and 15 due to ball encroachment and safety issues.

2006

The South East Recycled Water Scheme for the sandbelt, of which Royal Melbourne had been a big proponent of, finally gets knocked back after four years of lobbying. At the same time Royal Melbourne undertakes a joint investigation into sewer mining with neighbour Victoria Golf Club but the project is deemed not feasible. Following one of the harshest summers on record (06/07), stormwater harvesting is also examined and a decision made to pursue this path as a potential new water source for the club.

2007

US Golf Magazine releases its world top 100 golf course rankings. For the first time in the magazine's history it rates Royal Melbourne's East and West Courses separately, rather than ranking just the Composite Course. The West remains Australia's highest ranked course at 15th, while the East Course 'debuts' 72nd.

2008

Construction begins on the 37.5M lagoon next to the maintenance compound. A 1.8km transfer pipe is connected to this which links to a diversion structure and 1M underground storage located alongside the 7th East to capture stormwater. Modelling shows that in an average rainfall year up to 90 megalitres can be harvested (nearly three quarters of the club's needs)

"I was at Metropolitan for just two years when the Royal Melbourne job just came up. I never had any visions of grandeur of becoming superintendent at Royal Melbourne and to be honest I was quite surprised I got the job. But I am glad I did.

"As most superintendents will tell you, this job can give you a huge amount of satisfaction. It's a very, very tough job – high pressure, high demands – but ultimately it is very satisfying especially on a golf course of some standing, like Royal Melbourne."

That was 1989. Porter is now about to notch up his 20th year as Royal Melbourne superintendent during which time he has arguably overseen some of the biggest changes to the landscape.

No sooner had he landed the job than he was straight in the thick of things converting greens to Penncross, a programme the club had instituted the year before Porter arrived. After calling a halt to that and investigating a new Suttons mix for the greens, Porter convinced the club to switch back to the new mix, a project which was completed between 1999 and 2003.

As well, Porter has overseen a tee resurfacing programme, major design changes to five holes on the East Course to address



safety issues and more recently there has been the painstaking work securing the club's future water resources.

"It is hard to believe some times that I've been here nearly 20 years and I suppose the last three to four years have been the hardest for various reasons," reflects the father of two. "The drought, but more so the extent of the drought, has been crippling and then we had the chemical damage to the greens on top of that. The last three years have been fairly awkward to say the least.

"But I still love the job. Just ask any superintendent what they find the most satisfying aspect of the job is and quite often the answer is the same – looking at your golf course on a certain day, in a particular light, in a particular condition. It's a great thrill and the sense of satisfaction and achievement is enormous

"For me, seeing the 6th West in pristine condition and knowing that you have been a part of creating that is one of the most pleasurable things you can get. Unfortunately I haven't been able to get that in the last few years mind you but you always strive to."

IN NEED OF A DRINK

While Porter enjoys the challenges the superintendent profession affords, in particular the changing nature of managing two very distinct courses, there has been one aspect of the job which he could have done without in recent times. The drought has impacted on many golf clubs around the country but, Royal Melbourne has by far and away been one of the hardest hit.

Reliant on potable water to support low yielding bores for most of its existence, Royal Melbourne was always going to struggle when the industry caught a first whiff of water restrictions back in 2005. Unfortunately for Porter and the club those restrictions only got tighter which in turn has had a marked impact on the landscape.



While the greens and tees have survived relatively intact, the famed Royal Melbourne fairways have truly manifested the full extent of the drought.

The summer of 2006-2007 proved most crippling and by Christmas that season the couch had lapsed into drought-stressed dormancy. They never recovered and went into winter crisp and brown.

Despite some relieving rains last July, the club was forced to tank upwards of 17 megalitres of Class A recycled water last summer which was blended with bore water to keep tees and fairways alive. At the height of operations, Porter had up to 50 trucks a day visiting the course to top up dwindling dam levels.

Porter recounts with some mirth how he and his assistants spent most of last summer running back and forth between the office and the dam, checking levels and calculating just how much they could afford to water each day.

"Drought has always been an issue at Royal Melbourne," explains Porter. "We've been drilling bores since the 1960s and there were a number of occasions back in the old days where they had to cart water onto the course to hand water greens.

"It was 2003 when we started to get concerned about our current water issues and in terms of impact on the golf course we really started to notice it in 2005. We had the last of the Heineken Classics that year and were forced to ration water in order to get the fairways up, so the non-tournament holes had to be neglected. Since then it has been a real struggle and last summer was particularly disastrous.

"To see the course go backwards has been pretty difficult both professionally and personally. We had the VGCSA AGM here in May and obviously the turf wasn't in the sort of condition I would liked it to have been, which when you've got 80 of your colleagues inspecting is a little difficult.

"Then you have the members to think about. There has been plenty of talk in golfing circles about the condition of Royal Melbourne and when they go and play at the other sandbelt courses where water isn't such an issue, they are always going to compare standards and question your management techniques.

"Three years ago when water wasn't quite the same issue as it is now the golf course was in fine condition. The turf was healthy, coverage was excellent and the surfaces were playing well.

"What's changed? We have gone from a situation where we could water when and where we wanted judiciously, to one where we are now being dictated by amounts and times. I'm certainly not trying to hide behind anything and I and the staff are first to admit that the course isn't up to scratch. But we know why it isn't and we are slowly starting to move in the right direction and we can see some light at the end of the tunnel."

TORO 2008 Toro AGCSA Golf Championships

Royal Melbourne West Course

oyal Melbourne Golf Club's West Course will play host to a full field of 100 superintendents who will vie for the coveted 2008 Toro AGCSA Golf Championships when the 24th Australian Turfgrass Conference returns to Melbourne in July.

It will be the second time that Royal Melbourne has hosted the AGCSA's top golfing event, having held the tournament on the East Course back in 1996 (which was won by then Grange Golf Club superintendent Peter Schumacher). The opportunity to play on the hallowed turf of Royal Melbourne is rare indeed and not surprisingly spaces were quickly snapped up once conference registrations opened back in March.

The 2008 field will be at full strength this year with a number of past champions and future hopefuls teeing up at Black Rock. 2007 champion Scott Harris (Gold Creek Country Club) returns to defend the title he took out in tough conditions at Paradise Palms last year, while 2006 winner Steve Jacobsen will be hoping he doesn't get



struck down by a virus just days out from the conference, as happened last year which prevented him from starting.

Two superintendents to look out for will be perennial challenger and two-time Toro Red Jacket recipient Trevor Ridge (Sawtell Golf Club) and home-town favourite Michael Grant (Kooringal Golf Club). Ridge, who finished runner-up to Harris in 2007, earlier this year won the NSWGCSA's highly prized Rube Walkerdon Trophy, while Grant recently shot 72 on the West Course en route to picking up the VGCSA's Powell Trophy.

Despite some trying times recently with the drought, Royal Melbourne superintendent Jim Porter is looking forward to hosting his colleagues for the prestigious tournament. "It should be a great day," predicts Porter. "It has been a difficult few years as far as turf management goes, and they certainly won't be playing on turf as good a quality as I would like it, particularly the fairways. What they should do, however, is come here and enjoy the architecture, the history and the ambience – just don't worry about the turf quality. Turf management is currently GUR."

The 2008 Toro AGCSA Golf Championships tees off at 7.40am on the Monday of conference week (21 July). Full details of transport arrangements are included in the conference guide contained in this edition of ATM.

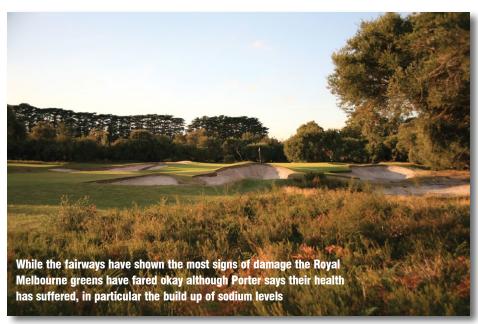
RESTING A LITTLE EASIER

The 'light' Porter refers to is the major stormwater harvesting project which should, by the time this edition goes to print, up be and running. After years of examining numerous options, undertaking feasibility studies and coming up with no sure-fire solution, it was finally decided last year to construct a new 37.5M storage lagoon next to the existing maintenance facility. This is linked via a 1.8km transfer pipe to a stormwater diversion structure which is located on the far eastern reaches of the course.

With the dam completed in May, Porter has been filling it with bore water and once the harvester comes on line it will mean the club will head into the next growing season in a far stronger position.

"The bottom line is that we will be heading into spring with nearly 40 megalitres of water that we have never had before," says Porter. "That is about a third of our water needs before we have even started. While certainly not drought-proofing the course it will make a huge difference and it now means that even though we have gone backwards considerably in recent years we can start getting our turf management practices back on track.

"We've had some better rainfall this year



too and the fairways are certainly in a lot better condition going into this winter than they were last year. We may not have as much couch on the fairways as last year but what we do have is a lot healthier and the colour is there.

"While the greens have handled the drought to a degree, we have had to increase our reliance on bore water which has led to a significant increase in sodium and chloride levels in the soil. That has obviously impacted

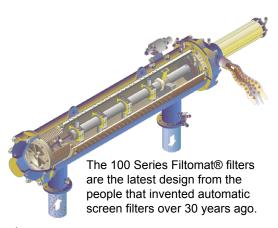
on turf health and our ability to provide the surfaces we would like. Now that we have our water management issues under control, the focus will be managing the health of the greens rather than concentrating on playing quality.

"The drought has also had a big impact on the little things too. We used to put out spinners and soaker hoses to keep turf cover up in some of the high wear areas. The roughs



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■ too have been battered hard and there are a lot of exposed tree roots around. In some areas Parramatta grass is the only thing that's holding the roughs up. Due to a lack of moisture the bunkers have lost a lot of sand too and we are looking at starting a bunker restoration programme.

"From a turf management perspective we have increased the use of wetting agents and have been using more organic fertilisers, particularly on fairways and tees. We have avoided using synthetics which rely on being watered in and we are using more humic acid-type products. We are trying to condition the soil more and we have done this by introducing an acid injection system. We are also using a lot more calcium-based products because it is one of the key ingredients getting locked up by sodium, as well as products that enhance flushing through the profile."

RESHUFFLING THE PACK

As any superintendent battling with the current drought will attest, having skilled and trusted staff is paramount and Porter has been blessed to have a dedicated crew that has been able to work through some pretty trying conditions.

Up until a couple of years ago Porter had a pretty typical management structure in place. Long-time lieutenant Michael Love was his right-hand man while underneath were foremen for each course. Adapting an idea that John Odell employed to good effect at Royal Sydney Golf Club, Porter had also assigned certain holes to some of the more qualified members of his crew.

While this system worked, Porter felt it didn't quite achieve the consistency he wanted and so a few years ago he decided to reshuffle the pack to not only improve communication and accountability but also give a more definite career structure for the younger members of his staff to strive for

His first move was to take Love away from day-to-day operations on course and

make him superintendent of works. Any major projects going on around the course, such as the recent construction of the new storage dam, are now Love's domain. Love is also in the process of examining changes to some more holes, as well as greens replacement on the 10th West, 3rd East and 17th East which will be carried out later this year.

With Love moving into this new position, Porter now relies on three assistants to oversee the day-to-day on course maintenance programmes. Darren Dicks tends to the needs of the West Course, Simon Muller to the East, while Justin Dickinson is Porter's horticulture assistant. In the workshop head turf technician Luke Spartalis looks after an impressive array of turf machinery.

Each assistant has a foreman and under them 6-8 allocated staff. Although independent, the teams will often overlap, particularly if there are major projects or maintenance programmes on the go (e.g. renovations).

"It's not a perfect system but it certainly improves accountability, monitoring of operations and communication," says Porter,





who oversees a total staff of 27 full-timers and two part-timers. "And with the creation of these assistant and foreman positions it demonstrates to the younger guys that there is a career path here which they can aspire to."

ROYAL'S CUP RUNNETH OVER

While Porter's immediate concern is getting Royal Melbourne back on its feet for the members, there is also the matter of a rather significant tournament which looms large on the horizon. Earlier this year it was confirmed that Royal Melbourne would be hosting the 2011 Presidents Cup, becoming the first venue outside of the US to host it twice.

Royal hosted its first Presidents Cup back in 1998, with the International side prevailing for the first time in the event's history, and Porter has many fond memories of a great tournament which tested the mettle of his crew in a number of different ways.

"It is a unique tournament," explains Porter. "In terms of looking after the golf course it was quite easy, although the two inches of rain we had one night during the tournament made a mockery of that. But you don't have 150 golfers traipsing around the course as you would in a regular tournament. That means the greens don't get smashed, there's less divotting required and you don't have two-tee starts at 7am. So from that perspective it was easy to manage.

"However, it was all the other stuff that went with the tournament that proved to be the challenge. Our responsibilities expanded beyond just looking after the Composite Course. A practice area was constructed across the road at Sandringham Golf Club which we looked after. We had to accommodate over a hectare of television trucks.

"We had a marquee erected on our turf nursery for 120 golf carts for three weeks, while the bowling green had a marquee on it for two weeks. It was very demanding on all staff, but we learnt a hell of a lot and that will set us in good stead for when it returns.

"It is fantastic to get the nod again and the staff are really looking forward to it coming back. It was a big event in 1998 and it will probably be two or three times bigger come 2011.

"To say that we have a hell of a lot of work between now and then would be an understatement. It's going to be a lot different than last time because we will be getting the course back up from a much lower base, but I'm confident we will get there."

The construction of a new storage lagoon this year means Porter has 37.5M of water up his sleeve heading into the next growing season



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BY GREG RAMSAY AND NEIL CRAFTER

Golf as it was The restoration of Ratho

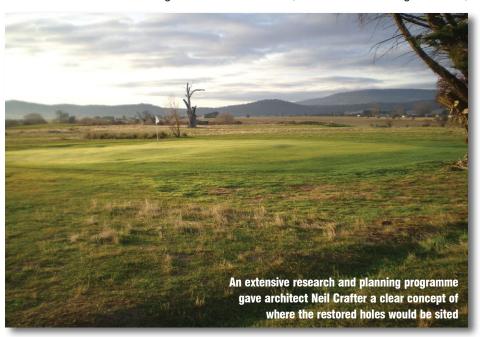
he five-times Open champion teed up his ball and after his customary waggle, drew the club back smoothly as he had done countless thousands of times before. And with a crack, the ball flew off the first tee.

This first tee, though, was not at Royal Troon, Muirfield or even the Old Course, but at Ratho Golf Links, just outside the small town of Bothwell in Tasmania's Central Highlands.

And the golfer? Peter Thomson, of course, who graced Ratho by attending the opening of the recently restored six holes and firing off the inaugural tee shot as part of an exhibition match featuring Tasmanian and Australian champions in the form of Peter Toogood and Lindy Goggin.

The planned restoration of the lost holes at Ratho, Australia's oldest golf course,

Last year ATM ran a feature on the bold plans to restore one of Australia's oldest operating golf courses - Ratho Golf Links in Tasmania – to its former glory. The plan involved the reconstruction of six 'lost' holes which for varying reasons had been abandoned over the past 50 years. Respected golf architect Neil Crafter was charged with the task of recreating these holes and over the past year he and a dedicated team of volunteers have gradually brought them to life. Here he joins with Greg Ramsay to look back on the project which saw the lost holes unveiled at the recent Australian Golf Heritage Festival.





was described in an Australian Turfgrass Management article – 'Reviving Ratho – Restoring Australia's Oldest Golf Course' – back in Volume 9.3 (May-June 2007). In this follow-up, we plan to describe the holes as they were put on the ground, and the process of construction and grow-in, in readiness for the opening held during the Australian Golf heritage Festival in early May.

An extensive research and planning programme enabled us to have a clear concept of where the restored holes would be sited within the southern paddocks of Ratho. The lost six holes had been abandoned in two stages since WWII, with three holes given up as golf resumed at Ratho after the war (to conform with the standard nine-hole country course). The final three were abandoned when a new highway bridge across the Clyde River was constructed in the 1980s and land lost to the course on which part of the old par five 1st hole and green were located.

As it was not possible or practical to restore this green under the bridge, the restored 1st hole had to be pushed further away from the road. From old aerial photographs, old scorecards, member recollections and even old home movie footage, information was gleaned that was used in our endeavours to restore the holes as accurately as possible given the changes to the site.

While a concept routing was prepared, no construction plans were drawn with the idea being that we would rough-in the greens on site until we were happy with them. We wanted to see how we would respond to each greensite's opportunities without having too many pre-conceived ideas.

CONSTRUCTION

Prior to commencement, sand from a drift at the northern end of the Ratho property was tested and deemed suitable for the tees and greens that were to be built in an old fashioned manner without gravel or drain lines.

Stockpiles of sand were pre-placed at the green and tee locations, with the fairways proposed to be unshaped and gradually mown down from pasture grasses to improve the turf sward over time – as they once were.

We were fortunate that American architect and shaper Brian Schneider was able to return to Tasmania for a week in June 2007 to run the bulldozer at Ratho. Brian is one of Tom Doak's talented team and the man primarily responsible for the wonderful construction work and shaping at Barnbougle Dunes at Bridport. Mat Hose from The National Golf Club, another veteran of the Barnbougle construction, was invaluable in managing surrounds and tees shaping as well as the hydro-seeding of tees and greens.

Our aim with the shaping of our restored greens was to make them feel both natural and old-fashioned at the same time, quite a task indeed but one we feel satisfied has been achieved.

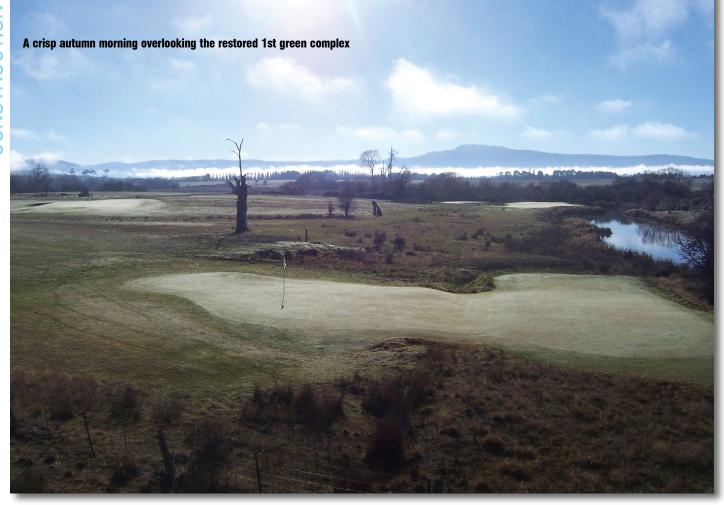
Only two bunkers were built, at the 3rd and 4th greens, and the other greens have sufficient interest in and around them not to miss such a hazard. The six greens and tees were shaped within a week and the team then set about preparing them for turfing.

GROW-IN

The course grow-in was done by local Peter Jeffrey, who put in countless hours managing the installation of an irrigation system from







Irrigation Tas, involving a quick coupling valve at each teeing ground, landing area and green.

The simple instructions on the design were to replicate the early watering systems with enough pressure and capacity at each point to locate one large 'knocker' to irrigate the area in question without any rotations on the greens complexes (and so, picking up the surrounds) or tees, and through the use of towable 'pod' sprinklers, a row of a dozen knockers could be towed into position in the fairways to provide a wide coverage, without locking in 'scalloping' shades of green through the summer.

The owners feel that the effects of varying seasons on the turf are integral to maintaining a traditional course, and that the best impediment to over watering, is to limit the ability to water!

Peter's turf care was greatly assisted by the input of Doug Ollington (Tasmanian Turf Supplies), Chris Hay (Coretaz), Phil Hill (Barnbougle Dunes) and the generosity of David Westall at Scotts.

THE RESTORED HOLES

Hole 1

The opening hole is a good length par five that plays to the south, parallel to the main highway into Bothwell from the north. The tees are sited in the sheepyards adjacent the shearing shed and the tee shot is a challenging one. The yard fences, a hawthorn hedge and a drainage

ditch must all be carried before the fairway can be safely reached.

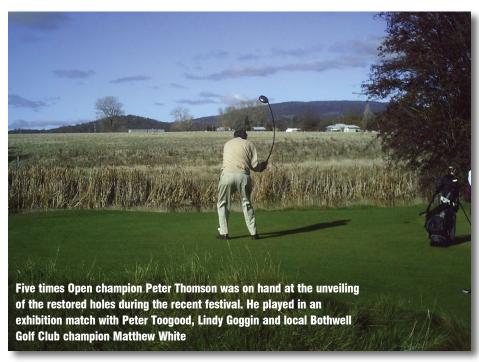
The hole doglegs slightly to the right around an old cypress tree and the green has been built against a backdrop of the Clyde River. A shallow drainage ditch ran across the greensite and this has been gravel filled with a perforated drain line installed and the green built over the top.

The ditch is somewhat reflected in the

finished contours of the green, with a linear depression dividing the green into two distinct sections, one front and one rear. A low bump positioned at the front left of the green impacts considerably on a running approach into this testing three-shotter.

Hole 2

The tee for this long par 3 emerges imperceptibly from the back left corner of the 1st green – a



throwback to the days when many tees joined up with the previous green. Given that intense traffic is not a significant issue at Ratho, this should be a sustainable location.

All the golfers who have played the restored holes have been taken by the vista from this tee – the green is sited in a corner where the river turns and runs alongside the hole for its full length. We built a green that steps up towards the rear, but with a steep grassy bank at the left side, so those tee shots that bail-out well left, away from the river, face a testing recovery.

Hole 3

A bridge formed from an old truck chassis (good old country ingenuity to the fore) takes golfers across the Clyde River to the elevated tees on the southern side for this par four. The tee shot from here is into the face of a steep hill that was populated with a large number of rocks (extensive rock picking has occurred and will be an on-going activity for some time yet!)

From here the shot over the crest is to a small green set in a corner of vegetation, with a hedge behind and willows on the Clyde banks at the right side. A small bunker has been shaped into the low side at middle right of the green.

Hole 4

This short par 4 plays across a hedge to a fairway that slopes from left to right with a sinuous drainage ditch bordering the left side and coming in close at the green. The rectangular shaped green is set at an angle to the line of play and is highest at the front left, falling away to the back right in keeping with the natural ground.

A small but deep bunker is positioned at the front right and this bunker is key in forcing the golfer to choose what type of approach shot to play, depending upon the pin position.

The fall-away green is an uncommon architectural device in Australia with only a handful of examples, but it can be used to great effect, especially on a short par 4 like this hole.



Like many of the very first golf courses, Ratho originally comprised of 12 holes



Taking on the tee shot at the second

■ Hole 5

The original hole was a short par 3 played to a green set uniquely in the middle of four large gum trees. Sadly these trees are long dead and the hole could not be restored in its original location due to the road bridge realignment that forced the 1st hole to be recreated further to the east.

However, we identified a greensite with two large trees at the left, and with the transplanting of two hawthorn trees into the front right and back right corners, we were able to recreate the essence of this hole with the building of a new green in a new location.

Hole 6

The final hole is a long one-shotter played across a hedge and a drainage ditch into the paddock at the side of the shearing shed.



The ditch continues along the right side of the hole, and with the future reinstatement of the vegetable garden that was a feature of the original hole, the right side will be best avoided. The left side is open but the contours at the front of the restored green ensure that a run-up shot had better be well judged.

The restored holes at Ratho hark back to earlier days when golf courses were more found than built, and any construction work limited to shaping up some greens and tees while using the natural ground with its features as the primary hazards.

Ourholes, while not totally pure restorations, already have that sense of timelessness, and as they mature we hope they will become seamless with the fabric of the remainder of the Ratho links and give future generations the same enjoyment the old holes once gave to our forebears.

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After nine years on the AGCSA Board, including the last four as president,

Jeff Gambin will step down at this year's AGM during the 24th Australian

Turfgrass Conference in Melbourne. ATM profiles the Gold Coast superintendent and reflects on an enjoyable tenure at the helm of one of the turf industry's leading associations.

During his 15 years at Gold Coast Burleigh, Gambin has overseen major changes to the course

t's 3am. While most sane superintendents are still wrapped in the confines of a snug doona dreaming of pristine fairways without a golfer in sight, for Jeff Gambin a new working day is just dawning.

By 4am he is out the door and just a tick after 4.15am the maintenance shed doors at Gold Coast Burleigh Golf Club are open and a work ethic that has been instilled in Gambin since he was a child kicks in.

Quietly and methodically he moves machinery out of the cramped conditions of the course's maintenance facility, parking them outside in order for his team to get straight on with the job when they turn up at 5.30am.

Heading back into the lunch room, Gambin grabs a marker and starts allocating daily tasks on his beloved whiteboard before checking over what he himself has on the agenda for the day. Once the crew has turned up he then spends four hours out on the course, helping out where needed and inspecting his surfaces to make sure all is readiness for the day's play.

Superintendents are an idiosyncratic bunch at best of times and are well known as early risers, but for the 52-year-old president of the Australian Golf Course Superintendents Association (AGCSA), this routine has become second nature over the 15 years he has been

in charge at Gold Coast Burleigh. Gambin readily admits it's a shocking habit he has got into – fortunately his wife Karen is a heavy sleeper – and one that he is never likely to shake, but it works for him, his crew and ultimately the course.

The early starts have another benefit too. On the weekends it means Gambin can indulge in his other passion – surfing – and being up with the sparrows enables him to get in some quality sets before the hordes of Kelly Slater wannabes descend. As Gambin proudly proclaims, he embodies the true essence of surfing's weekend warrior and as long as he gets wet and catches a few waves he is a happy man.

STRAIGHT OUT OF REDFERN

The golden beaches of the Tweed Coast are somewhat removed from Gambin's formative years growing up in one of Sydney's more notorious southern suburbs Redfern.

Father Joe and mother Doris settled there having migrated from Malta shortly after World War II and brought up their four sons right in the middle of Rabbitohs heartland (Gambin's endearing affection for the red and green still burns just as strong today).

As with most Mediterranean cultures family was of the utmost importance and Gambin can remember clearly the tiny home they lived in which not only housed his family but that of his dad's sister's family that had also emigrated from Malta.

Gambin and his three brothers shared one room and more often than not there would be mattresses on the floor where other relatives would be sleeping having just arrived from the homeland. Once that lot had found their feet another batch would invariably move in.

Father Joe worked as a linesman for the Post Master General and together with Doris had second and third jobs in order to give their family the best start they could.



One of these side jobs was cleaning offices and Gambin can recall numerous occasions traipsing along with mum to help out. That probably explains why Gambin is now such a stickler when it comes to cleaning and general appearance. Indeed, you only have to admire the state of his work utility which would rate as perhaps the cleanest of any superintendent in Australia!

Growing up in the southern suburbs, a career in greenkeeping was, understandably, the last thing Gambin expected to get into. Instead a career in plumbing appealed to the young Rabbitohs nut but he couldn't catch a break in the industry.

Gambinwoundupgettinganapprenticeship as a fitter and machinist at a large factory in Waterloo which was situated across the road from Moore Park Golf Course. Deciding more out of necessity than love to go down the machinist path, Gambin remained at the factory and would often gaze out across to the golf course and wonder what it would be like

to work there, but never had the gumption to make any enquiries.

When he wasn't working in the factory, Gambin was with his mates cleaning up sets at Sydney's famous eastern suburbs beaches. Surfing was his number one passion back then and in 1974 Gambin did what any self-respecting boarder would do and bought himself a brand new bright yellow VW Kombi.

Being a machinist he fitted it out with all the top notch stuff and on two occasions drove the Kombi from Sydney to Perth. The first time he did so the Nullarboor was still a dirt track! The West appealed to the young machinist and so much did he like the lifestyle over there he was all set to move across and start a new life.

It was around the same time when the family of one of Gambin's close high school friends moved to the outer northern Sydney suburb of Palm Beach. The move opened up a new world to Gambin who would regularly drive the Kombi north to see his mate – another keen surfer.





It just so happened that his friend's family had moved next door to the Knight family, whose son Phil was just then starting as a trainee greenkeeper at the nearby Mona Vale Golf Club (Knight is now superintendent at Le Touessrok Golf Club in Mauritius). Knight was a keen surfer too and the two quickly clicked.

Purely in passing one day Knight mentioned to Gambin there was a job going down at Mona Vale. With visions of the West still firmly in his mind it was going to take plenty to convince Gambin to shelve those plans, but as it turned out he needed very little encouragement to make a go of it.

"Phil took me down to Mona Vale to show me what the job was all about," recalls Gambin. "I didn't know anything about golf courses or maintaining turf, but what I loved was that the golf course was near to the beach. The guys who worked there were allowed to go for a surf if the conditions were good, provided they had completed all their tasks and then stayed back a little bit later.

"I was hooked. I thought how good would this be? So then and there I decided to give the job a go rather than head to WA. And that's how it began"

Packing up the Kombi, Gambin headed for the northern suburbs of Sydney and duly took up the vacant groundsman position at Mona Vale. The young Gambin thrived in the conditions, the outdoor lifestyle and working alongside the likes of Knight and fellow apprentice Ross Griffin (who would later become superintendent at Manly Golf Club).

And true to the promise, every now and then when the surf was up Gambin and his workmates would get the opportunity to head to the beach. "It didn't happen a lot, but there were those great days when the swell got up and the wind was offshore," recalls Gambin with a glint in the eye.

SOME LUCKY BREAKS

Having learnt the basics of the trade at Mona Vale under superintendent Ken Maxwell, Gambin then followed Knight across to Manly Golf Club. Knight had taken the assistant posting under veteran superintendent Bob Smith and when a vacancy came up he had no hesitation in asking Gambin to join the crew.

The added bonus for Gambin was that the position enabled him to attend Ryde College one day a week. He would go on to be among the first students to go through the three year course and in his year were the likes of Mark Couchman (former AGCSA president and now superintendent at Cromer Golf Club), Paul Bevan (now with Simplot Pro-Line) and Alan Mulcahy (former assistant at Palm Meadows and now superintendent at Helensvale).

"Working with old timers like Ken Maxwell and Bob Smith really opened my eyes, especially having come from working in a factory in south Sydney, to how much fun and rewarding a career in the turf industry was," says Gambin.

"You did your work, and you worked bloody hard, but you had so much fun doing it. Obviously I dropped money when I changed from being a machinist, but I didn't have any commitments and it wasn't about the money hack then."

Gambin would spend four years at Manly

and it was towards the end of his stint there that Smith retired. He was replaced by a gun Queensland superintendent by the name of Doug Robinson. Despite spending just a short time at Manly, Gambin was hugely impressed by Robinson who to this day still rates as one of his key mentors.

Robinson too developed a liking for the hard-working Gambin and upon leaving Manly to take the job at Coolangatta Tweed Heads Golf Club, he encouraged Gambin to keep striving with his studies and commented that there would always be a position for him if one came up.

Keeping Robinson to his word and with little movement among the Sydney industry at the time, the newly married Gambin (he and Karen tied the knot in 1981) decided to chance his arm and move north. Coolangatta Tweed Heads was just a small coastal village back then and Gambin instantly warmed to the environment and lifestyle.

Working initially under Robinson, Gambin would go on to spend 10 "glorious" years at Coolangatta Tweed Heads, three as assistant and then as superintendent when Robinson left to build Sanctuary Cove.

Gambin hadn't even turned 30 at the time of taking over Coolangatta Tweed Heads and even now he admits he was unsure whether he had it in him to handle the responsibility. "How was I going to take over the job from one of my mentors," Gambin recalls asking himself at the time. "How could I follow in his footsteps, manage 36 holes with bentgrass greens and have the pressure of televised tournaments each year."

Gambin need not have worried. During his tenure the club hosted three Queensland Opens, including one which featured then British Open champion Greg Norman and David Graham. "It was an incredible atmosphere," recalls Gambin. "I was stoked as the only complaint Norman made the whole week was about pin placements! We got away with everything else."

STRESSFUL TIMES

Up until this point in his career, Gambin had been fortunate to work with some pretty good operators. He was enjoying the job, the industry and the immense satisfaction that came with preparing a golf course for major tournaments.

In the early 1990s there was a boom in golf course development on the Gold Coast and one of the new courses being constructed was Royal Pines. Having had a successful tenure at Coolangatta Tweed Heads, Gambin thought it a perfect opportunity to further his skill base and duly applied for the job. Gambin can laugh about it now but in hindsight he probably wished he hadn't.

"What an experience," sighs Gambin. "I was really looking forward to going from the club scene to a private course which was brand new. You obviously didn't have the committees, but the problem was if you don't get along with the general manager, there was nowhere for you to go. You just had to wear it."

And wear it he did - for three long and at times demoralising years. Despite hosting the first three Australian Ladies Masters at Royal Pines, long hours, scant recognition, unreasonable demands and lack of remuneration were enough to drive Gambin to the brink. On more than one occasion he would arrive home at the end of a tiring day and lock himself in the bathroom and question just why he was putting himself through the wringer. It took wife Karen to finally sort him out and in no uncertain terms either.

"I still clearly remember Kaz's words," recalls Gambin. "Either get another job or get another family. We were supposed to be going camping that particular weekend but not only were we late in leaving because I was at work, I then had to leave early in order to come back to work. The kids - Jasmine and Ryan - were young and our family life was suffering as a result of my job. Kaz was pretty blunt about it and said enough was enough."

Whether it was karma or not, but that same weekend Gambin received a phone call from a fellow GCSAQ committee member (Gambin had been on the committee since taking over at Coolangatta Tweed Heads) informing him that there was a possible vacancy coming up at Gold Coast Burleigh Golf Club.

"I jumped at the chance," says Gambin. 'I just had to get out of Royal Pines. I must admit I was a little concerned about what people would say, but again it was Robbo (Doug Robinson) who straightened me out. He told me that at the end of the day, who was going to be there for me - my family or work? That's what the move was all about and it made my decision so much easier."

BACK ON TRACK

The move proved just the elixir Gambin needed and he has now been ensconced at Gold Coast Burleigh for the past 15 years. Sure there have been a few ups and downs along the way - he nearly came to blows with one former greens chairman which saw him take stress leave but as he comments, "what superintendent hasn't had those sorts of moments".

Gambin joined at a time when a number of courses on the coast were starting to trial the new hybrid couches and the club was keen to go down a similar line across the entire course. The existing fairways at Gold Coast Burleigh



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were a real mix – some pure paspalum – and Gambin recalls the early days when he had to mow some of them – the second in particular – with an out-front rotary mower.

Soon after joining, Gambin instituted a major overplanting and post-emergent herbicide programme. CT2 was chosen by the committee at the time for fairways and surrounds and 328 Tifgreen for the greens. As well as resurfacing fairways and tees Gambin would also completely build four new greens and undertake some major works to remedy drainage issues on the first and second fairways. Such was the scope of works and the results achieved that Gambin was bestowed the Queensland Golf Industry's Superintendent Award in 2000.

More recently, Gambin has seen the upgrade of the course's irrigation system, complete with new pumphouse, which has not only saved the club a considerable amount of money but has also vastly improved water efficiencies. A new clubhouse is currently being built and once that is complete Gambin and his team will start constructing a new practice putter.

While the course has changed dramatically over the years, so too has the role of superintendent. Gambin still laments the continuing decline in the hands-on aspect of the job and always makes sure he spends most mornings out on the course.

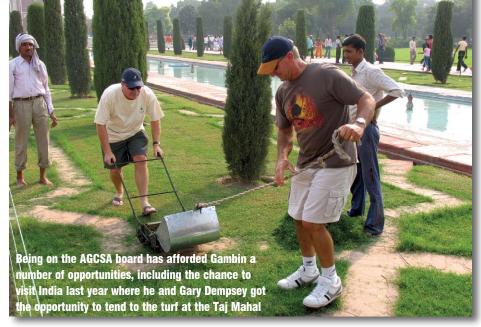
"The job has changed immensely since when I first became superintendent at Coolangatta Tweed Heads," reflects Gambin. "There has always been paperwork to do, whether it's planning, budgets, ordering stock, and I always keep the back part of the day to concentrate on that. That has never changed, but definitely the amount has increased.

"I still like the hands-on aspect of things in the morning and still go out at 5.30am with the boys. Admittedly it might be just changing holes and tee markers, but at least I still get to do a job which helps them out and gives me a chance to see how the surfaces are. It is important that you don't lose touch."

GIVING SOMETHING BACK

Gambin's move to the Tweed Coast all those years ago coincided with the start of his involvement at state superintendent association level. Encouraged to become further involved in the industry by Doug Robinson, who at the time was president of the GCSAQ, Gambin joined the Queensland committee and was promptly put in charge of field days and newsletters. Gambin soon found himself as Robinson's vice-president and then was elected to the top job for a term.

"Being involved with the GCSAQ and



ultimately the AGCSA has been one of the real pleasures I have derived from being in this industry," says Gambin. "You really get to form close relationships with your colleagues and I just hope that the young guys coming through today realise just how important and rewarding this part of the turf management game can be.

"I clearly remember my manager at Royal Pines questioning me why I wanted to 'waste' my time with an association like the GCSAQ rather than put the time and energy spent on that back into working on the course. I just couldn't fathom his rationale!

"As far as I am concerned it's better to be involved, be active. How many times have I picked up on something that someone else is doing that could work at my course? And to have that friendship and support of your fellow professionals is very comforting. If you are having a bad time you know you can confide in and talk things through with them."

After spending time on the Queensland committee and following his AGCSA John Deere Fellowship Award in 1995, Gambin became interested in taking the step up on to the national executive. His opportunity came in 1999 when Craig New stepped off the AGCSA Board. Gambin was elected onto the executive and found himself alongside president Peter Frewin, Peter Schumacher and Mark Couchman.

Despite feeling "a little bit out of his league alongside those guys", Gambin eventually found his feet in what proved to be an exciting and challenging period for the AGCSA. It was around the time that the association was looking to form its own technical services division – AGCSATech – as well as its own magazine – Australian Turfgrass Management.

"It was a tough gig and a bit of a shock," laughs Gambin. "Having been involved at state association level I thought I would be okay but I was blown away.

"They (the existing Board members) were very good operators and I even commented to then chief executive Euan Laird that I thought I wasn't quite cut out for the job. It was an absolute privilege to be among them and to watch how they worked."

In 2004, following the departure of then president Mark Couchman, Gambin was elected unopposed as AGCSA president, a position which he will relinquish at the upcoming 24th Australian Turfgrass Conference in Melbourne. After serving nine enjoyable and challenging years with the Board he decided earlier this year that it was his time to pull the pin and let some younger blood fill the ranks.

"I just believe it is my time," says Gambin. "I genuinely think it would be selfish to continue. I have had nine wonderful years with the AGCSA but it is time for some new faces. It has been great having John Odell come on board recently, especially someone of his caliber and respect and it has been great seeing the professional manner in which he conducts all his affairs.

"Even though I would love to continue to work with him and the rest of the Board, I think it is just the right time to move on. I could quite easily go on, but that would be selfish of me to deprive someone else of the opportunity.

"We have achieved a lot recently and it is amazing to think that when I joined the Board there was just two staff working at the AGCSA. We now have 10 staff and I feel the association is in a very strong position and the future is looking good.

"Without wanting to sound big headed, the hardest thing will be to keep that momentum going. There will always be new challenges and sure there have been a few things that we haven't been able to resolve during my time. But we now have some very good policies, programmes and initiatives in place which can help our members and that, after all, is what the association is all about."



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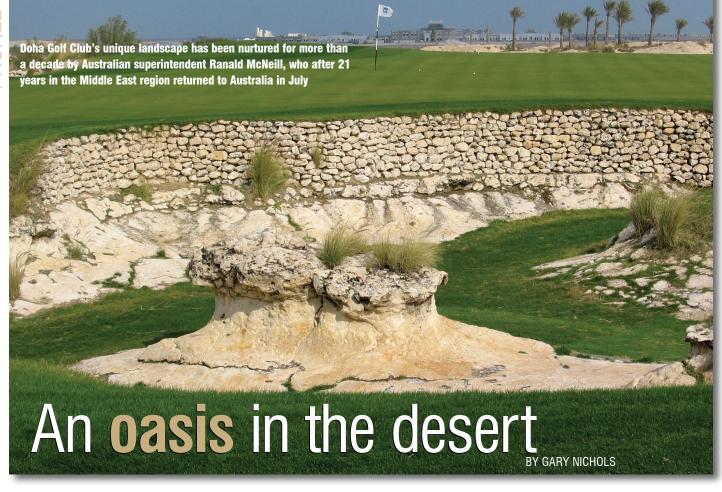
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After 21 years plying his trade as a golf course superintendent in the Middle East, Ranald McNeill said goodbye to Doha Golf Club in July to resettle in Australia and begin a new chapter in his turf management career. Close friend Gary Nichols sits down with the former Moree lad to reflect on what has been a unique and ultimately rewarding overseas journey.

McNeill (left) was on hand to witness
Adam Scott's dramatic final round 61 to
win the 2008 Qatar Masters

t's just clicked over to noon, the temperature has climbed to 45°C and for Ranald McNeill it signals the end of another day ensuring the greens and fairways at Doha Golf Club have been manicured to perfection.

With the heat and humidity reaching near unbearable levels, work at the Qatar-based golf club begins nice and early for McNeill and his crew of up to 50. The maintenance shed doors are open by 4.30am and come midday it's knock-off time. By then it's time to head somewhere where the air conditioning is cranked up to max, or if you're brave enough, tackle the afternoon heat and smash a golf ball around for a few hours.

For the past 21 years the unique landscape and culture of the Middle East has been home to this particular Australian greenkeeper, seemingly a world away from his formative years in the industry which were spent as an apprentice at Moree Golf Club in northern NSW.

It was the love of the outdoors which prompted McNeill to get into the industry, but he could never have predicted that nearly three decades later he would be reflecting on a career which to this juncture has taken him all over the world.

THE ROAD TO THE MIDDLE EAST

After gaining his golf course management and greenkeeping ticket, McNeill made the move to Sydney to further his career. Short



stints at the prestigious Lakes and Ryde-Parramatta golf clubs gave him the confidence and experience to apply for a job abroad, which would ultimately take him and his wife Beth on a wonderful and rewarding journey.

It all started in 1987 when a job vacancy appeared in The Sydney Morning Herald for an assistant golf course manager at the Emirates Golf Club in Dubai, United Arab Emirates.

"Beth must have put together an impressive CV as I was informed a few weeks later of my appointment," jokes McNeill. "We rushed down to the local library to find out all we could about our future home and were taken aback by pictures depicting mud buildings aligned next to a dirty creek."

After many sleepless nights and plenty of agonising, they finally made the decision to pack up their belongings and head for the oilrich sand dunes of the Middle East.

When McNeill arrived at the Emirates Golf Club, the course was 70 per cent completed. To his astonishment, over 80 hectares of undulating sand dunes were being transformed

into a golfing oasis. After careful planning and two years of dedication, Dubai finally had its desert miracle.

The Emirates Golf Club, with its eyecatching signature Bedouin-style clubhouse inspires awe among those who play the course and today it plays host to the PGA-sanctioned Dubai Desert Classic.

So how difficult was it to assimilate with the locals and social customs in an area deeply rooted in Islamic traditions?

"It was a real learning curve," says McNeill. "Simply pointing the soles of your feet at anyone is regarded as highly offensive, although locals in the main are understanding of social blunders.

"I do recall an embarrassing moment when I asked a local driver if I could purchase a sheep to put in the freezer. We drove to the outskirts of town to a saleyard where he told me to pick out which one I liked. I selected the one with the nicest eyes.

"The driver arranged to take the sheep to the butchers to be cut up. I was so excited that we would soon be dining on roast lamb and chops, but to my dismay it arrived cut up into one inch cubes, bones and all. For the next two months Beth and I lived on stews and curries."

Like most Australians who take the plunge to work in the Middle East, there is an upside. Wages are tax-free, accommodation and vehicle are supplied and children receive free education. "They really look after you and as an added bonus they fly you home twice a year so you can catch up with family and friends," says McNeill.

According to McNeill the highlight each year in Dubai was the rugby season. Back in his playing days McNeill was an accomplished league player, a hard-hitting lock forward who almost invariably topped the tackle count.

"I had never played rugby union before going to Dubai but enjoyed the game immensely, particularly the social side of things," says McNeill. "They flew us to most games, places like Kuwait, Bahrain and Oman. You would end up with plenty of scratches and loss of skin as the playing fields were mostly sand with a few seashells thrown in for good measure."

MIDDLE EAST UNREST

In 1990 the McNeills were faced with an unexpected decision. With the outbreak of the Gulf War, the area was deemed as being volatile and unsafe. McNeill's parents were phoning daily concerned for their welfare and with Beth five months pregnant at the time the decision was made to leave the region.

"There was a lot of talk about chemical warfare and with Beth being pregnant we had no alternative but to leave," recalls McNeill. "I was lucky enough to find work in the UK as golf course manager at two championship courses in Essex and Leeds. At least the weather was somewhat milder and I could watch plenty of rugby league and cricket on TV."



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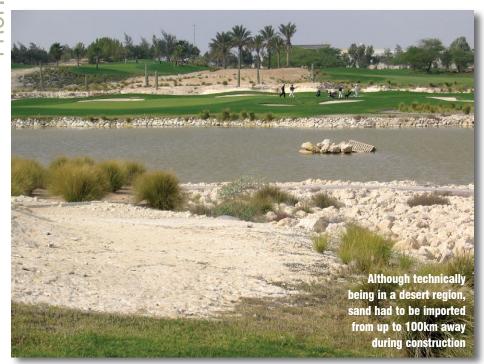








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With the Gulf War coming to an end, and through a contact in Dubai, McNeill was coaxed into returning to the Middle East, this time to Doha, Qatar some 370km north of his previous base in Dubai. McNeill says the offer was "too good to refuse", helping with the construction and management of a course from scratch which had always been a dream of his.

"It was a daunting task to say the least," says McNeill. "The site chosen for construction was an old quarry. There was nothing but rocks and the odd palm tree. We had to import sand from 100km away to help grow grass and fill the bunkers."

Doha Golf Club occupies 150 hectares in total, of which 60ha is grassed. Facilities include an 18-hole championship course, a fully lit nine-hole academy course, a large practice putter, practice tee, the Qatar Golf Academy and a magnificent Arabian-style clubhouse which is an attraction in itself.

The course was designed by renowned architect Peter Harradine and opened in 1995. Harradine's design and philosophy relies on the natural preservation and enhancement of existing sites to create a unique course for a particular location. The natural features of the desert have been preserved and enhanced with the inclusion of artificial lakes, some holding potable water (treated by desalination plants for irrigation) and others containing sea water.

The site is extremely rocky and construction involved excavating and crushing most of the rock before the natural dune sands containing a small percentage of clay were used to cap the base material.

The course is totally grassed with a

combination of Tifgreen and Tifway. During the cooler months, greens are over sown with 6kg/100m² of *Poa trivialis* and the roughs and tees are oversown with perennial ryegrass at 150kg/ha. For the 2005 Qatar Masters, a small approach area in front of greens was oversown with *Poa trivialis*. Due to the extreme summers (>40°C) transitioning out the oversown species is not an issue.

Money appears to be no object in this part of the world and if McNeill needed anything it was simply a matter of getting it shipped in. For instance, large cactuses were imported all the way from Arizona to complement the huge limestone rock features which form a key part of the striking golf course landscape.

As with most golf courses in this day and age water is a big issue, but not so in Doha. Millions of litres of water are pumped from the Persian Gulf each year and treated by large scale desalination plants.

Water is stored on site in eight large artificial lakes with a specially designed irrigation system having the ability to pump 3000 gallons a minute. This is achieved by six pumps and three jockey pumps, of which five main and two jockey pumps are in operation at any one time. This allows the entire course to be watered in 12 hours using up to 6500m³ of water per night.

During his time at Doha, McNeill oversaw a crew around 70 which also included landscape workers. The golf club has been involved in a number of landscape projects outside of the course and McNeil was charged with maintaining the Al Arabi Sports Complex, Al Sadd Stadium and Khalifa Stadium, the home of the 2006 Asia Games.

TOURNAMENT TIME

One of the highlights for McNeill over the years has been preparing the course for the Qatar Masters which has become a regular stop on the European Tour. Doha hosts two major tournaments for the year – the 36-hole Qatar Open (amateur) and the Masters which is a co-sanctioned event with the European and Asian tours. The Masters was first played at Doha in 1998 and is one of the longest layouts on the European Tour.

Greens are cut at 4mm for the Masters and do not run much faster than 10-10.5 feet due to a couple of exposed greens. The grassed rough is cut at three lengths – a triplex-width cut at 25mm (short rough); another at 50mm (step rough); and outside that at 100mm (long rough) before the grassed surface disappears into natural sands and gravel of the desert.

Missing the fairway can be fraught with danger as there is only a small area of grassed rough between the fairway and desert. In 2002 a severe sandstorm caused the cancellation of the first round when 2mm of sand was deposited on all holes.

McNeill has had the pleasure of watching the game's elite tackle the course and its unique conditions during his time and earlier this year was on hand as Australian Adam Scott fired an incredible final round 61 to collect his second Qatar Masters title.



At the 2002 Masters, McNeill was fortunate enough to team up with Scott to win the Pro-Am prior to the main event.

"Playing with a fellow Aussie was fantastic," recalls McNeill. "I gave him some good tips on how the course played, hazards to avoid and speed of the greens.

"When Adam won the 2008 Masters he made mention of me in his victory speech, alluding to the fact that my tips in 2002 came flooding back to him which helped maintain his focus in the final round."

For McNeill, the 2008 tournament would be his last overseeing maintenance at Doha Golf Club as he and his family had decided by then to return to Australia to begin the next chapter in their lives. Beth arrived back in 2007, while McNeill returned home recently and is now based on the Gold Coast.

"Twenty one years is a long time to be away from family and friends, although we forged many strong relationships with people from all over the world during our time abroad," says McNeill.

"Beth has been fantastic and very supportive; we have two beautiful children in Kate and Brennan who have been fortunate enough to experience life in a completely different environment."



So what does the future hold for McNeill? In the interim he will be travelling back and forth from Australia to Doha to ensure the new landscape manager makes an easy transition and there is also the possibility that McNeill will undertake some consultancy work given his vast experience working overseas.

"I hope to get my own website up and running and undertake consulting work in

Australia and possibly overseas," says McNeill. "The Middle East and parts of Asia is where it's all happening at the moment so hopefully a new project may come my way.

"My main focus at the moment though is to enjoy the wonderful Aussie lifestyle, play the odd round of golf on the Gold Coast and watch the Titans in the NRL. But deep down I will miss my oasis in the desert."



t's the sort of career which would lend itself well to a book. After 20 years working in the nation's political hub, Parliament House landscape manager John Lloyd recently drew the curtain on an impressive and ultimately rewarding career, finishing up on 29 May.

After two decades navigating the labyrinth of Parliament corridors and internal garden courtyards, rubbing shoulders with the country's powerbrokers and nurturing one of this country's most unique landscapes, the 54-year-old has handed the baton over to incoming manager Paul Janssens.

One of the real gentlemen of the profession, Lloyd has had a profound impact on both the local ACT turf community and national turf scene. Despite stepping down from Parliament House, Lloyd will continue to play a key role in the industry and shortly before his departure accepted a role as chairman of the Horticulture Australia Ltd Industry Advisory Committee which is charged with the important task of determining the allocation of funds for research and development within the industry sector.

Over the years Lloyd has been heavily involved in the training and education of young turf and horticultural apprentices. He was a member of the Primary Industries Training Advisory Board, giving advice on the direction horticultural and turf training should take nationally. He was also an original member of the National Turf Education Working Group and has been heavily involved within ACT turf training through industry advisory boards.

A strong feature of Lloyd's career has been the importance he places on good science and research in making management decisions. In his role at Parliament House he has been involved in the set up and evaluation of a number of pieces of important research and the trailing of new grass varieties, including the TGAA cool-season grass seed trial

After 20 years as Parliament House landscape manager, John Lloyd finished up on 29 May, handing over to incoming manager Paul Janssens DPS

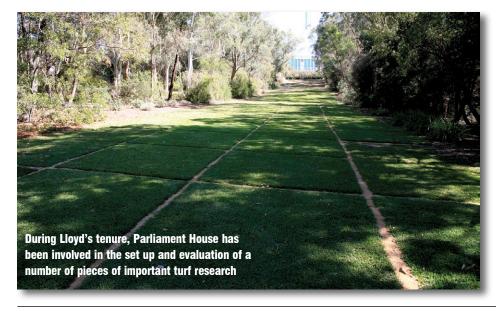
(2000-2003) and the Queensland Department of Primary Industries' buffalo trial presently being evaluated. He was also innovative in exploring the use of a variety of new turf species including *Poa sapina* and *Microlena stipoides* within the Canberra environment.

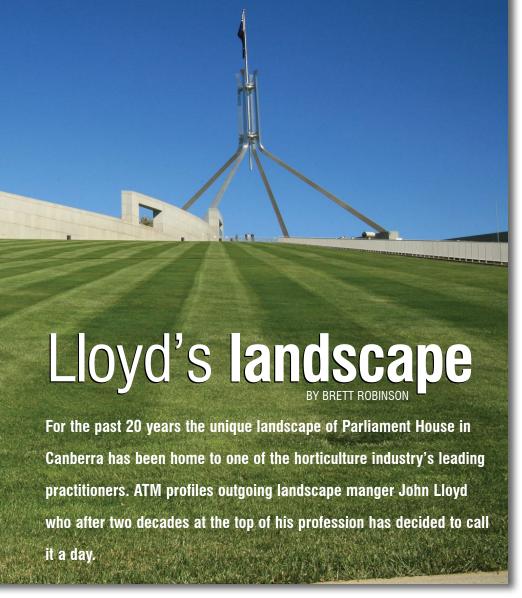
As well as his work at Parliament House, Lloyd has been a driving force in setting up the ACT branch of the TGAA. In 1992 he saw the need for an association which brought all of those involved in turf management together. The ACT branch has been very active since that time and has strengthened the turf network in the ACT and surrounding region, bringing together turf managers from the golf, bowling, sportsfields and landscape disciplines.

Lloyd was the inaugural TGAA ACT president from 1992-1994 and has since served on the committee and acted as a senior advisor to the TGAA. Not surprisingly, his efforts were recognised with life membership status.

"John has developed a reputation for his knowledge and leadership within the turf management fraternity, both in Canberra and more widely in Australia," says TGAA ACT colleague and president Garry Dawson. "His ability to use sound science, make it work practically and then communicate his findings freely with others has endeared him to many within the trade."

In the weeks leading up to his retirement, ATM spent a day with Lloyd touring the Parliament House landscape. Last edition's lead feature, titled 'Canberra's Couch Encroachment' looked at the extensive landscape review Lloyd had undertaken prior





to his departure and in this edition ATM looks back on his career and asks what will be some of the key memories he will take from 20 highly enjoyable years.

How did you become involved in the horticulture/turf industry and why?

My parents were farming sheep and cattle as well as irrigated crops, including carrots for 1080 rabbit poisoning, potatoes, corn and cattle turnips for winter feed. Following my schooling at Braidwood my father was insistent that I undertake a trade as farming (and income) could be variable at best.

As I always had dirt on my hands, loved machinery and the outdoors, the horticultural trade was very attractive. I successfully applied for an apprenticeship with the Department of the Interior and started there on 19 January 1970.

My apprenticeship with Parks and Gardens was a fantastic journey. Over the four years we worked in all areas of landscape maintenance plus design, administration and the Horticultural Research Station (which later became known as the Technical Services Unit - TSU).

It was a great place to gain a wide range of skills and experience. Parks and Gardens had the best equipment and town planning was state-of-the-art stuff. Canberra was growing at an incredible rate in the 1970's.

Following my apprenticeship, I specialised in weed, pest and disease control for six years before acting in a wide range of duties that included tree surgery, area management and technical officer positions at the TSU.

I travelled overseas for nine months in 1986 and on returning decided to try something different so I applied for an acting position as reserve manager for the newly gazetted Murrumbidgee River Corridor. I did this for 12 months but then the landscape manager's position came up at Parliament House and I decided that that was the position for me.

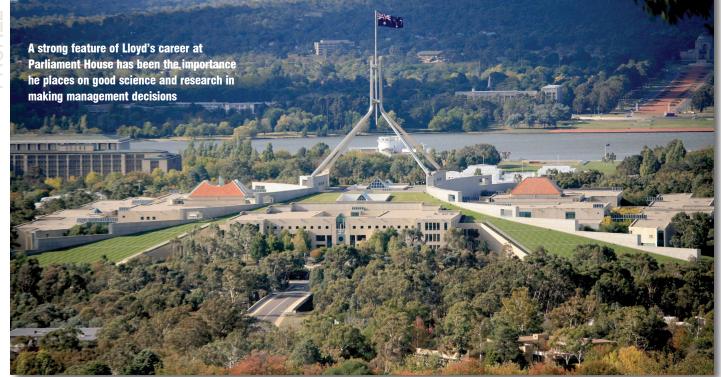
I had all the skills and experience but going for the Parliament House job was like shooting for the stars. I was able to convince the selection panel that I was the man for the job and I started there in October 1987.

Can you recall your first day on the job?

I remember being quite overwhelmed by the size of Parliament House and the scale of the project. I got lost about eight times, had to go through three separate induction courses and had to sign my life away about a dozen times so I had the authority required. I was really rethinking things and must admit I did wonder whether I had the ability to do the job.

How has the landscape changed from then to now? What has been the biggest challenge that you have faced in your time there?





■ The biggest challenge was getting all our plant nutrition programmes right. The 10 hectares of sand-based turf were easy as there were several people around that had experience with sand-based stadiums and there were plenty of resources to draw from.

It was the 13ha of trees, shrubs, bulbs, perennials, flowers and herbaceous plants that were also growing in a sand-based profile that proved a challenge. No one had ever maintained a complete landscape grown on a sand-based profile and growing azaleas, bulbs and perennials was not easy. There was no one to talk to so we had to learn it all ourselves.

Irrigation was also quite daunting early on as the system was computer based (one of the first) with 41 satellite controllers, managing 1134 solenoid valves with 98 irrigation programmes! Prior to working at Parliament House I had never turned on a computer and the system was DOS-based, so it was a bit of a nightmare!

Certainly products and technology have improved out of sight and in some ways it's now harder to keep up with things. The information that is now available at the click of a button is truly vast and communication now means you're available 24/7.

The quality of our landscapes certainly has improved but I think that it is the resources available that allows you to maintain higher standards

I still remember past colleagues that I have worked with who were really good operators, great people managers and very capable, but they didn't have all the smart gizmo's and products that we have nowadays. What we need to do is ensure that the industry continues to attract very capable people.

How unique are the operations at Parliament House?

We have always had a 'science based' approach to managing the landscape and would always trial new items or methods before implementing a full scale programme (probably a leftover trait from my TSU days). Given the importance of the building, we were very conscious that mistakes could be disastrous.

Trial work at the moment is related to evaluating couch and buffalo varieties and identifying the water savings that can be expected. We have the National Buffalo Trials (run by Redlands Research Station) on site and have eight couch varieties that we are interested in evaluating for use on site.

We have had a lot of success in our IPM programmes and now use eight beneficial insects on site every year to control pests. Green lacewings, Cryptolaemus beetle larvae, predatory mites, parasitic wasps and entomopathogenic nematodes have been very successful for us. We are currently trialing three new predatory insects (a mite-eating mite, wasp and lady beetle).

What do you think you have contributed to the parliamentary landscape during your time?

Basically I think I have being a good captain. I have been very fortunate in that I have had excellent staff to work with, and if you can provide the resources, equipment and support that they need, then success is much easier.

Has it become easier or harder to manage the parliamentary landscape?

The first five years were not easy but as we picked up the skill and expertise needed and the maintenance programmes were locked in it became easier. The landscape has now matured and we are having to change how we do some things.

Also drought has had a big impact on the landscape and this will also impact on future plans for the landscape. A complete review of the landscape has been completed and is now with the executive for their consideration. There will be some changes – including the possible conversion of the turf ramps across to couch – but the overall design intent will not be affected.

The drought has had a significant impact on Parliament House. Has it been personally hard to see some areas let go?

Yes, having to turn irrigation off to some areas (2.2ha of turfed area and 9ha of native areas on the periphery of Parliament House) and letting them die has been hard.

All the staff have had to watch these areas die off and see years of hard work disappear. But we tell ourselves that it's not as bad as the farmers that have to watch stock die and their livelihood disappear.

What will be the biggest challenges facing your successor and the Parliament House landscape team and how do you think they will manage?

They will manage very well. They know the site and what is required to keep it maintained. They have also experienced the impact that six years of drought has had and what is needed to reduce the impact of future droughts. Yes they have some work to do and a few hard decisions to make, but I have every confidence that I have left it in good hands. They will do an excellent job.

What has been your proudest moment during your tenure as manager?

There have been many proud moments but it was my last day (29 May) that capped off 20 years in the top job at Parliament House.

Another enjoyable aspect of the job has been training the many apprentices and staff that have learnt their trade at Parliament House. I have always been grateful for the extensive training and support that I received, and to be able to provide excellent training opportunities and support for our future managers is very satisfying. To achieve the results that we have is a great accomplishment.

To take the Parliament House project from construction through to a successful landscape has been challenging but we did it and did it well. The challenge has been to make it all happen, deliver the goods without any stuff ups (okay, without any big stuff ups!).

Working in the nation's political hub, you must have some interesting stories to tell.

Yes, there are a few good stories and I may tell them one day. Maybe I should write a book? I've had the fortune to meet some very influential people and attend some great functions. The opening of Parliament House by the Queen on 9 May 1988 still rates as

one of the best. The excitement, buzz and atmosphere still makes it a day to remember.

During the construction days, then Prime Minister Bob Hawke would not hesitate to include a visit to the site sheds and have a chat. He was happy to talk to you any time he was free and he would send out drinks to the gardeners working in his courtyard on very hot days.

What are some of the other perks working at Parliament House?

Not many! It has all been hard work and long hours. If anyone thinks that it is easy then they need to do the job for a few weeks. To me the perks have been working in an absolutely fantastic place, great landscape, with the resources needed to do the job, and being able to practice your trade at the highest level.

What will be the one thing you will miss most about the job and Parliament House?

I think I will miss the challenge and satisfaction. Going from being Parliament House landscape manager to unemployed will be different but having time for golf, fishing and riding my Ducati (a Mike Hailwood replica) should ease the pain.

I have a few very interesting projects coming up so I should be busy enough and I look forward to remaining active within the industry. It has been good to me and I still get a lot of satisfaction and enjoyment from being involved. It's in my blood.

I have just accepted an offer to take on the chairman's position of the Industry Advisory Committee (Turf) for Horticulture Australia Ltd. My main focus will be to improve how we spend all the R&D dollars so we can get maximum benefit and result.

What won't you miss?

The hours and the pressure of making sure it all happens. No matter how well things are organised, you still need to keep following up, checking and looking for the unexpected.

What became your most favourite part of the parliamentary landscape?

It has to be those turf ramps. Seeing them on TV every night still gives me goose bumps.

If there was one thing you could "take" with you when you leave, what would it be?

I don't need to take anything. I'm happy to leave it there and come back to visit and say, 'I helped to develop and maintain this'. \pm



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24th Australian Turfgrass Conference and Trade Exhibition — Melbourne

After basking in the tropical climate of Far North Queensland in 2007, the Australian Turfgrass Conference and Trade Exhibition heads back to one of its more traditional venues in July. Melbourne will play host to the 24th annual gathering and as always Australian Turfgrass Management will act as your official guide for the week. Over the next 24 pages delegates will find all the information they need to get the most out of conference week, including a full run down of companies exhibiting at the two-day trade exhibition.

WELCOME TO MELBOURNE

Il delegates heading to magnificent Melbourne this July to join up with colleagues will have to pack a few more warmer clothes than when we last met in Cairns over a year ago

Personally, I feel that one of the great benefits of attending the annual Australian Turfgrass Conference is that it gives us the opportunity to experience diverse weather and climatic conditions that we as turf managers have to operate in.

During my nine years of being on the AGCSA Board I have really come to enjoy travelling to Melbourne. It really is a beautiful city and I have been very fortunate along the way to meet some great superintendents here and be invited to inspect the magnificent golf courses the region boasts, particularly the famed sandbelt.

I am sure everyone will be impressed with the effort the AGCSA has put into the planning of the 24th Australian Turfgrass Conference, which this year carries the theme "Our New Tomorrow".

An excellent line-up of speakers has been drawn locally and from overseas, while after a hard day's work in the lecture theatres there will be our famous social functions where delegates can let their hair down and enjoy the company of their industry colleagues.

It is especially pleasing to see that the trade has again turned out en masse to support the turf industry's biggest annual gathering and I would like to say a special thanks to all those companies that are supporting the conference, either as a sponsor or exhibiting in the trade show. The trade exhibition is a must-visit and



there will be some exciting new stands as well as the latest in new products and technology on display.

I hope you and all delegates have an enjoyable and informative week in Melbourne and I look forward to seeing you for what is set to be another feast of networking and high quality education.

JEFF GAMBIN PRESIDENT, AGCSA he Australian turf industry continues to be challenged by the effects of climate, change, client demands for the best playing surfaces, shortages of qualified and experienced staff, declining budgets and the responsibilities of being good environmental stewards.

The turf manager continues to be the person responsible for initiating and implementing change at a time where turf as we have known it is becoming more difficult to provide. Turf managers are always adapting to change whether it is introducing new turf species, employing new methods or searching for the edge that will provide the sportsperson with the best and safest possible playing surfaces.

Further education and training is critical in adapting to the demands of change and this year's 24th Australian Turfgrass Conference will provide turf mangers and their staff with a broad range of speakers and topics that will challenge the mind, promote discussion and debate and more than the occasional laugh.

This year's conference is about 'Our New Tomorrow' and will look at the issues, challenges and the solutions of the next decade. Five educations streams will be presented during the week – golf course management, sportsfield management, turf technicians, bowling greenkeepers and general managers. A full rundown of the conference education programme is presented on pg 50-51.

While there will be a group of well-qualified and interesting speakers presenting at the conference (turn to page 48 for profiles on this year's keynote speakers), there will also be the major trade exhibition which will run on Wednesday and Thursday.

After last year's smaller format in Cairns, Melbourne will see upwards of 100 companies exhibiting their wares, with a number of new companies exhibiting for the first time. The trade does a lot for the industry and is often the leader in innovation and a few hours spent at the trade show will undoubtedly provide delegates with plenty of new ideas and solutions. A full layout and listing of all exhibitors is contained later in this quide.

Following the successful format of the Cairns and Brisbane conferences, the Syngenta team returns to run two sessions of its interactive workshop. This year's workshop is themed 'Diagnosis to decision making: A holistic approach to disease management'. At the time of printing the Wednesday workshop was full, but spots were still available for the Thursday session. Please check in at the registration desk if you have missed out as some spots may become available.

2008

TEEING UP

Golfing connoisseurs are in for a treat this year with two of the finest sandbelt courses playing host to the two major golf tournaments. Royal Melbourne Golf Club (superintendent Jim Porter), for a long time Australia's number one golf club, will host a full field for the 2008 Toro AGCSA Golf Championships, while Australian Masters venue Huntingdale Golf Club (superintendent Michael Freeman) will entertain the 2008 AGCSA Corporate Cup.

For a full preview of the 2008 Toro AGCSA Golf Championships see the lead feature on Royal Melbourne in this edition of ATM.

AFTER HOURS FUN

What Australian Turfgrass Conference wouldn't be complete without the famous social functions and this year delegates have a great line-up of events to attend throughout the week.

The 2008 social programme has been designed to offer all attendees the opportunity to network and get re-acquainted with industry colleagues at a function that suits each individual's taste and stamina! Utilising some of Melbourne's premier venues, the programme offers something for everyone.

The conference will kick off in style with the Bayer Environmental Science Welcome Reception on Monday night which will be held at the Melbourne Convention Centre. Theme for the evening is Viva Las Vegas so cards, cons, the King and bling will be the order of the night and delegates are invited to get into the spirit of the night by dressing accordingly.



In lieu of the usual touch rugby competition, Scotts will be hosting a last pair standing darts competition on Tuesday which is open to all conference delegates. At the time of printing final details had yet to be confirmed.

Conference week concludes with the prestigious Syngenta President's Dinner which will again include the AGCSA Awards presentation ceremony. Awards to be presented on the night include the Distinguished Service Award, Claude Crockford Environmental Award, Excellence in Golf Course Management Award and the much anticipated Graduate of the Year Award. All finalists are profiled on pages 46-47.

Studio 3 in the Crown Complex will host the finale and overlooks the banks of the Yarra River. In a departure from previous years, the night will boast some light comic entertainment.

To wrap up conference week, the Friday turf tour will take in some of Melbourne's premier turf facilities including Australia's second ranked course Kingston Heath Golf Club (superintendent Martin Greenwood), Flemington racetrack, Telstra Dome, while delegates will also get the chance to inspect Toro's Braeside headquarters

While delegates will be well catered for during the week, their partners won't be forgotten and as in previous years a dedicated partners programme has been organised. Taking advantage of Melbourne's wealth of sights and venues, this year's programme includes chocolate walks, winery tours and a pamper package. Contact the AGCSA for more information about these events and costs or visit the registration desk.

REGISTER NOW

Although the conference is now just a few weeks away, there is still plenty of time to register. Log on to the AGCSA website (www.agcsa.com.au) to download a delegate registration brochure or call the AGCSA office (03) 9548 8600.

Cut-off date for sending registrations to the AGCSA office is Friday 11 July. After that time the AGCSA asks those who wish to attend the conference to register at the Melbourne Convention Centre.

Upon registering you will receive a conference satchel, sponsored this year by Mentay, which contains a wealth of product information from those companies exhibiting at the tradeshow, as well as a copy of this edition of ATM journal and the conference proceedinas.

The AGCSA, supporting organisations and conference principal sponsors trust you have an enjoyable and informative week in Melbourne.

This year's trade exhibition is set to attract around 100 of the industry's leading companies



24TH AUSTRALIAN TURFGRASS CONFERENCE **MELBOURNE 2008 - EVENT INFORMATION**

2008 Toro AGCSA Golf Championships

Where: Royal Melbourne Golf Club

When: Monday 21 July

(7.40am shotgun start)

Details: Buses will depart for Royal

Melbourne from the Melbourne Convention Centre at 6am. Light breakfast will be served upon arrival. Buses will return at about 2.30pm.

2008 AGCSA Corporate Cup

Where: Huntingdale Golf Club. When: Monday 21 July

(12.30pm shotgun start)

Details: Buses will depart for Huntingdale from the Melbourne Convention

Centre at 10am, BBQ lunch will be served on arrival. Buses will depart Huntingdale no later than 6pm.

Baver Environmental Science Welcome Reception

Where: Melbourne Convention Centre (You

Yangs Room)

When: Monday 21 July (7.30pm-10.30pm)

Details: Theme for the evening will be 'Viva Las Vegas' and all delegates are invited to get into the spirit of the night by dressing accordingly. This event is included in the price for all fully registered delegates. Day delegates, delegate partners and industry representatives are welcome to attend at an additional expense (please visit the registration desk for ticket information).

Scotts Darts Tournament

When: Tuesday 22 July (from 4.30pm)

Details: Final details for this event were still to

be confirmed at the time of printing. Please visit registration desk during the conference for updates.

24th Australian Turfgrass Conference Trade Exhibition

Where: Melbourne Exhibition Centre

(Jeff's Shed)

When: Wednesday 23 July (9am-5pm) and

Thursday (9am-2pm)

Details: Entry to the trade exhibition is free.

If you are attending the trade show only you will be required to fill in a registration form before entering and receive a name tag. See later in guide for a full listing of companies

that will be exhibiting.

2008 AGCSA AGM

Where: Melbourne Convention Centre (You

Yangs Rooms 4-5)

When: Wednesday 23 July (5pm)

Details: Open to all current AGCSA

members.

Syngenta Presidents Dinner and 2008 AGCSA Awards Presentation Ceremony

Where: Studio 3, Crown Complex When: Thursday 24 July (7.30pm-late)

Details: The dinner will include the 2008 AGCSA Awards presentation ceremony. The dinner is an optional

extra for all delegates. Tickets can be purchased from the registration desk up until Tuesday. Jacket and

tie dress code applies.

Post Conference Turf Tour

When: Friday 25 July (8am)

Details: The tour will visit Flemington, Kingston Heath Golf Club and Toro's Braeside headquarters where lunch will be provided. At the time of printing Telstra Dome was still to be confirmed. Buses will depart the Melbourne Convention Centre at 8.30am and return by 4pm.

Morning, afternoon tea and lunch

will be provided.

Please Note: The above information was correct at the time of going to print. If there are any changes these will be announced during the course of the conference. If you are unsure of any details, please visit the registration desk.



REGISTRATION DESK

The conference registration desk is located in the Level 2 lobby of the Melbourne Convention Centre (the same location as in 2004). Delegates are requested to visit the registration desk prior to attending the conference to confirm their arrival and receive their conference accreditation and delegate satchel.

Throughout the conference the registration desk can assist delegates and guests with any conference requirement including: providing a message service to fellow delegates; hosting a notice board for any general information and the promotion of or changes to a particular session, function or venue. The desk will also receive and store lost property, and handle any other enquiries.

The conference registration desk will operate at the following times:

Sunday 3-5pm Monday 8.30am-4pm 7.30am-4pm Tuesday Wednesday 8.00am-4pm Thursday 7.30am-4.30pm

KEY CONTACTS

Conference Enquiries

Contact: Simone Staples

Prior to conference: (03) 9548 8600 During conference: (03) 9235 8608 or

0415 322 213

Trade Exhibition Enquiries

Contact: Scott Petersen

Prior to conference: (03) 9548 8600 During conference: 0413 620 252





The AGCSA would like to acknowledge the following companies and organisations for their support of the 24th Australian Turfgrass Conference and Trade Exhibition in Melbourne.

Principal Sponsors









Bayer Environmental Science











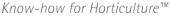
Supporting Organisations



















2008 AGCSA Awards — Recognising Excellence



Every year the AGCSA rewards excellence in the golf course maintenance industry at the Australian Turfgrass Conference. The AGCSA Awards represent the ultimate in recognition for members of the industry, and in turn provides the perfect opportunity for the industry to collectively honour its outstanding achievers. Over the next two pages, ATM profiles the finalists in the Excellence in Golf Course Management, Claude Crockford Scotts syngenta 4 Environmental and Graduate of the Year awards.

s in previous years, the AGCSA will bestow four awards at this year's conference - the Distinguished Service Award (sponsored by Scotts); the Claude

Crockford Environmental Award (sponsored by Syngenta), the Excellence in Golf Course Management Award (sponsored by John Deere) and Graduate of the Year (sponsored by Toro).

While the Distinguished Service Award is bestowed by the AGCSA Board in recognition of an individual that has left an indelible mark on the industry, the AGCSA annually calls for nominations in the Excellence and Claude Crockford awards. After narrowing down a field of excellent submissions, the 2008 finalists were flown to Melbourne in early June to present to an expert industry judging panel. The AGCSA, in conjunction with award sponsors Scotts, Syngenta, John Deere and Toro, is pleased to announce the successful finalists:

SA CLAUDE CROCKFORD RONMENTAL AWARD



Presented in partnership with Syngenta Kenton Boyd - Magenta

Shores Country Club, NSW One of the country's newest golf course developments,

Magenta Shores Country Club on the NSW Central Coast is situated in a highly environmentally sensitive area, which means that superintendent Kenton Boyd has environmental management principles firmly at the forefront of his course management agenda.

Having been involved with the development of the course right from the construction phase, Kenton has a strong focus on environmental and sustainable development principles and has played a key role in the implementation and ongoing initiatives at Magenta Shores.

Kenton has implemented the e-par EMS, put forward concept designs for the maintenance facility and saw these through to completion, worked closely with bush regeneration teams to rehabilitate native borders as well as implement significant landscape improvements on the golf course.





Wayne Marshall - Bargara Golf Club, QLD

Wayne Marshall will be hoping to emulate the feats of his Queensland counterpart Stuart Moore from Southport

Golf Club who won this award last year in Cairns. Recipient of the GCSAQ Environmental Award at the 2008 Queensland Golf Industry Awards, Wayne has been superintendent at Bargara Golf Club, situated on the Coral Coast, for the past five-and-a-half years.

One of Wayne's many concerns with respect to the management of the course has been securing a more reliable water source. As part of this, he has led the way in getting the club and the local community behind an ongoing fight to help protect and improve one of the area's main natural hydraulic features - Money's Creek Lagoon - which abuts the southern end of the course. Wayne has also implemented the e-par EMS and on top of everything else is completing a four-year Bachelor of Environmental Science degree in his spare time.

AGCSA EXCELLENCE IN GOLF COURSE MANAGEMENT AWARD



Presented in partnership with John Deere

Mark Jennings - Box Hill Golf

Mark has been superintendent of Box Hill Golf Club for the

past 10 years and has helped transform this

eastern suburbs course into one which now carries over 80,000 rounds of golf each year.

In recent years Mark has overseen the complete redesign and construction of the back nine, a fairway conversion programme which has seen all existing surfaces switched to Legend couch, a complete overhaul of the club's irrigation system as well as the design and construction of a new maintenance facility. He has achieved all of this on time and on budget and with the least amount of disruption to the Box Hill membership.



Kym Traeger - Berri Golf Club,

Berri Golf Club would be a lot the worse for wear were it not for the efforts of long-standing superintendent Kym Traeger.

In recent years Kym's vast experience and broad knowledge of the turf management game has seen him implement a number of steps to improve the course which is situated in the Riverlands region of South Australia.

With the drought impacting the region severely in recent times, Kym has played a major role in trying to secure the water resources for the club as well as acquiring sufficient resources to see the club through these tough times. As well, Kym has helped rehabilitate four-hectares of salt-affected area on fairways and surrounds and has also negotiated and implemented a labour and machinery sharing agreement between the club and other local organisations.



Warren Lawler – Armidale Golf Club, NSW

Warren has been superintendent at Armidale Golf Club in northern NSW for nearly two years and in that

time has made major improvements to the course. One of Warren's key accomplishments has been improving the irrigation water quality through careful management techniques and strategies which has seen a dramatic turnaround in the quality of turf surfaces. Warren has also, in conjunction with the greens committee produced a five year plan for improvements to the course.

AGCSA GRADUATE OF THE YEAR AWARD

Presented in partnership with Toro

The Graduate of the Year Award rates as perhaps the most unique in the AGCSA Awards programme. Today's recipients will go on to become tomorrow's superintendents and turf managers who will play a major role in the development and direction of golf course maintenance in this country.

This year's finalists come from the state superintendent association apprentice of the year programmes, and in deciding upon who wins national honours the judging panel will consider the graduate's academic achievements, career goals, ambassadorial skills and how winning the award will assist them in meeting their career aspirations.

With Toro coming on board as sponsor in recent years, a lucrative education package goes the way of the winner. The 2008 recipient will be flown to the US to attend the Annual Winter School for Turf Managers at the University of Massachusetts. As well, the winner will get the opportunity to visit Toro's manufacturing and parts distribution facilities, including the company's Minneapolis headquarters. The five finalists for 2008 are:

NEW SOUTH WALES



Name: Chris Thompson
Club: Maclean Golf Club
Maclean Golf Club is situated
inland from Yamba in northern
NSW and is home of this year's
NSWGCSA representative

Chris Thompson. Chris completed his Certificate III Horticulture (Turf Management) in 2007 through Wollongbar TAFE and works under Maclean superintendent Patrick Day.

Chris has proved to be a valuable asset for the club and enjoys presenting the course to members in the best condition possible. During his time at the club Chris has learnt to complete all tasks a qualified greenkeeper would be expected to do, as well as other jobs outside the normal scope. He has taken charge of the course and its employees when the superintendent has had time off, fulfilling duties such as assigning tasks to other employees, setting up the course for the day's

play and planning fertilisation programmes, disease, pest, and weed treatments.

Chris leads an active life outside of the golf course and is heavily involved in the local community. He has been a member of the Maclean Soccer Club for the past 14 years and as well as playing and refereeing has assisted in preparing the club's grounds. He was also a member of the Lower Clarence Amateur Swimming Club for 12 years and recently assisted in the construction of amenities.

Chris is also a member of the Gulmarrad Volunteer Bush Fire Brigade and is involved in meetings, pre and post fire maintenance, as well as working as part of a team on the fire line.

QUEENSLAND



Name: Chris Robinson
Club: St Lucia Golf Links
This was 's Ownered

This year's Queensland representative hails from St Lucia Golf Links which is situated in Brisbane's

south and operated by the Brisbane City Council. Chris Robinson was named the GCSAQ's Apprentice of the Year at the recent Queensland Golf Industry Awards and will be aiming to be the first Queensland graduate to win the award since 2000 when Brett Barsby took the honours at the Millennium Conference in Melbourne.

Chris, who turned 22 in May, started at St Lucia in 2005 and since then has gone on to complete Certificate III Horticulture (Turf Management) through Grovely TAFE. Earlier this year he was promoted to qualified greenkeeper and enjoys his challenging role in providing the best possible surfaces.

SOUTH AUSTRALIA



Name: Scott Murray
Club: Willunga Golf Club
Willunga Golf Club has a
knack of producing top quality
graduates and this year's
representative Scott Murray

will be aiming to go one step further than former Willunga apprentice Brenton Wenham who was a finalist in 2005.

At 31, Scott has the distinction of being this year's oldest finalist and started his career in the turf management game back in 2003. Having been a member of the golf club for 15 years, Scott decided he wanted to become a greenkeeper after talking to groundstaff.

In early 2003 he started a prevocational course and moved on to an apprenticeship at Willunga in 2004 with Onkaparinga Council. Scott completed the course in 2007 with good grades and the enthusiasm to continue study for the future development of his career and knowledge of the industry. At present the council will not fund his next course, so he is looking to undertake night studies.

For most of his apprenticeship Scott served under superintendent Bob Dellow,

who only recently retired from the industry after more than 30 years' involvement, and has since slotted in under Paul Cameron.

During his time at Willunga Scott has been involved with ongoing construction work such as tee redevelopments, drainage lines on green surrounds and bunker construction. Scott has a passion for the industry and according to his boss is very switched on to the club's needs at present and also the future direction the club should take.

VICTORIA



Name: Rhys Whitling
Club: Safety Beach CC
Home state representative
this year is Rhys Whitling,
the popular apprentice at
Safety Beach Country Club

on Victoria's Mornington Peninsula. Rhys, who celebrated his 21st birthday in May, was named as the VGCSA's Apprentice of the Year at the recent AGM held at Royal Melbourne Golf Club, beating home two other finalists.

Employed by the club for the past four years, Rhys will be looking to become the first Victorian graduate to win the award since 2003 when James Dalton collected it in Adelaide. Rhys resides in Dromana and is also a well known member of the Mt Martha Cricket Club. The Graduate of the Year Award judging panel may have to overlook the state of his hair during his final presentation as he recently shaved it all off in support of the Leukaemia Foundation, raising around \$500 for his efforts.

WESTERN AUSTRALIA



Name: Luke Hoglin
Club: Wanneroo Golf Club
Western Australian graduates
have fared very well in the
AGCSA Graduate of the Year
Award in recent years and

this year's representative Luke Hoglin will be aiming to emulate the feats of previous WA winners Peter Beach (2007) and Craig Webley (2004).

Hoglin, who resides at Wanneroo Golf Club under the watchful eye of long serving superintendent Jon Carter, was prompted into the turf management profession by his brother who incidentally served his apprenticeship at Wanneroo as well. In 2004 Hoglin started Murdoch TAFE under the Wayne Miller and completed his training in May this year.

During his time at Wanneroo, Luke has been involved in the reconstruction of greens and their approaches, including the installation of irrigation, as well as re-shaping of fairways. Outside of work, Luke is a passionate footballer and cricketer and is involved at committee level of the local cricket club. In October 2007 he also started up his own private business in turf and garden maintenance.







24th Australian Turfgrass Conference — Keynote Presenters



MAJOR GRANT GLEESON Ex-Australian Defence

In a slight departure from recent years, opening this year's conference will be retired Australian Defence

Force major and motivational speaker Grant Gleeson. Grant graduated from the Royal Military College, Duntroon, in 1989 as an officer in the Royal Australian Corps of Transport. Upon graduation he was appointed as the troop commander 158 Tank Transporter Troop and promoted to captain and second-in-command of the 3rd Transport Squadron.

On completion of regimental duties Grant was posted to land headquarters as the staff officer to the chief of staff. During this posting Grant was selected for an instructional post at the Royal Military College (RMC). Grant's appointment as a leadership instructor, and subsequently adjutant, at RMC, began his active involvement in the study of military leadership. During this appointment, Grant headed a working group to rewrite the Army's leadership manual. On completion, Grant was awarded a Chief of Army Military Commendation and promoted to Major.

He was then posted overseas, as a military observer on the Golan Heights in Syria and southern Lebanon. During this posting Grant was the team commander of Team X-Ray in the United Nations Truce Supervision Organisation multi-national peacekeeping force. While dodging Katyusha rockets, Grant was awarded a Commanding Officer's Citation for bravery under fire and was posted back to Australia as the officer commanding army squadron at the Australian Defence Force Academy.

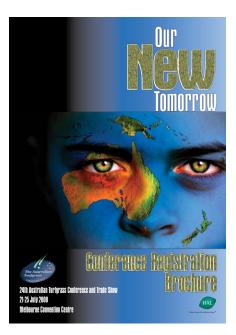
Grant, who resigned from the ADF in 2002 will be talking about the challenges and lessons learnt of leadership in a multinational environment with particular focus on his time in the United Nations.



TIM MORAGHAN
Ex-USGA Director
of Championship
Agronomy

For more than 30 years, Tim Moraghan's talents and work ethic have brought a wealth of benefits

to the golf course maintenance industry and its practitioners. From grounds crew to golf course superintendents, Moraghan's experience encompasses a wide range of talents and expertise in the golf arena, topped by the prestigious position of director of championship agronomy for the United States Golf Association (USGA), a position he held for more than two decades.



One of the standout features of the Australian Turfgrass Conference is the wide array of speakers, both local and international, which are brought together for the benefit of all delegates. This year's conference is no exception and there are guaranteed to be topics of interest no matter what level of the turf management profession you operate in.

During that time he was responsible for assisting in preparing golf courses for the game's toughest 'major' – the US Open. He worked with countless superintendents, club boards and management to provide optimal playing conditions, while always considering the club and golf course needs. His ability to prepare detailed, long-range plans for executing superior conditions in high-profile situations earned the admiration of golf course superintendents, club management and his fellow staff members.

A popular and knowledgeable speaker, Tim regularly addresses industry groups and golf club boards of directors on the topics of tournament preparation and challenges, ultimate conditioning and the need to know the game.



PETER MCMAUGH
Turfgrass Scientific
Services

Peter McMaugh needs little introduction to Australian turf managers, having spent the past 44 years in the turf industry. The

first 14 of these were spent setting up and running the now defunct Australian Turfgrass Research Institute, while the subsequent 30 years were spent as a consultant worldwide, turf farmer, plant breeder, machinery designer and sometimes venue designer.

A past president of International Turfgrass Society, Peter received the AGCSA's highest honour – the Distinguished Service Award – in 2000 and is a life member of the NSW Turf Growers Association and TPI honorary member. In Melbourne, Peter will take a reflective look at the history of turf management as well as take a peak into the future.



DARREN WILSON Wembley Golf Complex

The current president of the GCSAWA, Darren started his career in golf course management at Lake Karrinyup Country in late 1989 before moving to

The Vines Resort as assistant superintendent. Completing his Masters in Turf Management in 2001, the following year Darren was appointed superintendent of the 36-hole Wembley Golf Complex.

Six years later and after considerable work turning around this public facility, which hosts upwards of 170,000 rounds of golf a year, Darren was awarded the AGCSA's Excellence in Golf Course Management Award. Darren will talk on some of the strategies he employs to manage his high-traffic public facility.



LEONIE OTAGO University of Ballarat

Associate professor Leonie Otago is head of the School of Human Movement and Sport Sciences at the University of Ballarat. She is a researcher in sports injury

prevention and risk management in sport and has practical and industry experience in sports coaching, coach accreditation and coach education.

Leonie headed the research group which recently completed a study for Sport and Recreation Victoria on ground conditions and injury implications for sports grounds assessment practices in Victoria. She is currently working on a joint project with the AFL and Cricket Australia on the safety and potential use of artificial turf on sports ovals.



DR DANESHA SETH-CARLEY North Carolina State University

Dr. Danesha Seth-Carley was born in West Virginia and after spending a good deal of time informally

studying woodland ecology on her family's farm, she attended Earlham College in Richmond, Indiana and received a BA degree in biology.

After a brief time working as an outdoor education intern, she entered graduate school at the University of Tennessee and graduated with a Master of Science in Entomology and Plant Pathology. She then began a PhD programme at North Carolina State University and graduated with a double-major in Plant Pathology and Crop Science.

She is currently working as a postdoctoral research associate in the Plant Environmental Biology Laboratory at NC State. Danesha will make presentations on important diseases in warm-season turfgrasses and summer bentgrass decline.



DR IAIN JAMES Cranfield University

Dr lain James is lecturer in sports surface engineering and heads the Centre for Sport Surfaces at Cranfield University, England.

lain leads an industry-

focussed research programme that aims to improve the quality and sustainability of sports facilities in a range of sports. He joined Cranfield in 2002 having worked for NRM Ltd, a large analytical services company with key agricultural and sports turf clients in the UK and Europe. He graduated in Earth Sciences at Oxford University and did his PhD in Soil Science and Agricultural Engineering at Cranfield. Iain is an advisor to a number of sports governing bodies and is a member of a number of scientific and engineering societies in the UK (and just happens to be sports mad).



DR VAN CLINE Toro Company

Dr. Van Cline is manager of turf agronomics and research for Toro. His responsibilities include applied turf research related to commercial and

irrigation product and services development, technical training and consultation in turf management for Toro personnel, and general agronomic support for professional turf

Van maintains an active relationship with the scientific community in the turf industry through collaborations with a number of

scientists across the US. His current research focus at Toro is the development of various sensing technologies in combination with geographical information systems to optimise water use efficiency.

Van holds a BS in Forestry and a MLA in Landscape Architecture from Iowa State University and a PhD. in Horticultural Science from the University of Minnesota.



KEN MANGUM Atlanta Athletic Club

Ken has been superintendent over the past three decades and for the past 20 years has been golf course and grounds operations director at the

private Atlanta Athletic Club in Georgia.

Ken is responsible for the entire club property, which includes two 18-hole courses (70,000 rounds each annually), a nine-hole par 3 course, 20-acre practice area, 70-acre recreational area, clubhouse, pool, athletic and tennis centre grounds. The Highlands Course has been the site of the 1976 US Open, 1981 PGA, 1982 Junior World Cup, 1984 Mid-Amateur, 2001 PGA and is the future site of the 2011 PGA. The US Women's Open was played on the Riverside Course in July 1990. Ken, who was named the 2002 Superintendent of the Year by the Georgia Golf Course Superintendent's Association, will discuss irrigation management.



ED MCGAWLEY

Ed McGawley nematologist and professor at the Louisiana State University's Department of Plant Pathology and Crop Physiology. A prolific researcher who has been

widely published in numerous technical journals, Ed has nearly 40 years' experience in the academic field.

Among his areas of research interest are nematode diseases of agricultural plants, nematode disease complexes, nematodefungus interactions, reproductive variation in populations of the reniform nematode and the development of environmentally-responsible nematicides. During his sessions Ed will discuss some of his work with nematode diseases and summarise his research over the past three years with turf-related nematode pathology and management.



DOUG ROBINSON Pacific Golf Operations

A former AGCSA and GCSAQ president, Doug Robinson is the construction supervisor and assistant project manager Hamilton West Pty Ltd, the

developers of an 18-hole golf course on Dent Island for the Hamilton Island Resort. Doug has had many years experience in golf course maintenance and construction in Australia and overseas and rates the Dent Island Golf Course as the most challenging he has been involved with.

The building of a new golf course is a major exercise in any location but when the location is a remote one the logistics can have a major impact on just about every aspect of construction. Doug's presentation outlines some of the issues that have confronted the construction team.



GARY DEMPSEY NSW Golf Club

One of the most experienced superintendents in the business, Gary Dempsey has been in the top job at NSW Golf Club for the past 19 years. Gary began

his turf management career as an apprentice greenkeeper at Cabramatta Golf Club in 1974 and picked up his first superintendent posting at Orange Grove Golf Club at the age of 24. In 1991 we was bestowed the AGCSA's John Deere Fellowship[Award (now the Excellence in Golf Course Management Award).

Gary has hosted a raft of tournaments during his time at NSW Golf Club including the 1994, 1996, 1997 and 1998 Australian PGA Championships, the 2003 ANZ Championships, 2007 Australian Men's and Ladies Amateur Championships as well as the 2004 and 2007 BMW International World Finals. Gary has also had the opportunity to work at a number of major tournaments including the 1997, 2000 and 2004 US Opens.

ALSO PRESENTING IN MELBOURNE

Terry Muir (EBS); John Neylan (AGCSA); Phil Ryan (Pacific Coast Design); Jim Porter (Royal Melbourne Golf Club); Stuart Moore (Southport Golf Club); Peter Murray (PGA); Andrew Peart (AGCSA); Richard James (The Grange Golf Club): David Warwick (Avondale Golf Club); Symon Scott (Avondale Golf Club); Daryl Sellar (AGCSA); John Lloyd (ex-Parliament House); Natalie Atkins (City of Monash);

lan McKendry; Graeme Logan (ANZ Stadium); Adrian Harvey; Lindsay Tomlinson (Peninsula Country Golf Club); Craig Day (Spray Safe); Gary Price; Wade Turner (Queanbeyan Bowls Club); Phil Ford (NMIT): Grea Turner (Foley United Grinders); Rod Crowe (Castrol); Glenn Wright (Jacobsen); Rene Lubbers (John Deere); Rohan Carroll (Briggs & Stratton); David Smith and Rod Bamford (BOC).

24th Australian Turfgrass Conference Schedule

Golf Course Management Stream Monday 21st July

2008 AGCSA Toro Championships

6.00am - 3.00pm

Royal Melbourne Golf Club



Buses depart and return players to Melbourne **Convention Centre**

AGCSA Corporate Cup 10.00am - 6.00pm

Huntingdale Golf Club Buses depart and return players to Melbourne Convention Centre

Bayer Welcome Reception 7.30 - 10.00pm **Melbourne Convention Centre**

Bayer Environmental Science



Tuesdav 22nd July

PLENARY - JOHN BATMAN THEATRE

8.00 - 8.10am Jeff Gambin 2008 Conference Opening Address

8.10 - 9.10am Grant Gleeson Motivational session on facing challenges and complexities and overcoming them

9.10 - 10.10am Tim Moraghan My experiences as the USPGA tournament agronomist

10.10 - 10.30am MT

10.30 - 11.30am Representatives from Australian Secondary Principals' Association, Australian Golf Industry Council and Municipals' Association of Victoria Managing turf facilities into the future

11.30am - 12.00pm Terry Muir Exploring the future roll of fine turf in carbon offset schemes

12.00 - 12.30pm Phil Ryan Job opporunities in South East Asia

12.30 - 1.30pm Lunch

1.30 - 2.30pm Dr lain James Soil management and health

2.30 - 3.30pm Peter McMaugh History of turf management in Australia

Scotts Darts Tournament Scotts 4.30 - 7.30pm



Wednesday 23rd July

IPND 'The Miracles of Science™' Breakfast

7.00-8.00am Clarendon Room - MEC

GOLF 1 - LA TROBE THEATRE

8.30 - 9.00am Darren Wilson Excellence on a high traffic public course

9.00 - 9.40am Doug Robinson Perils involved with constructing a golf course on an island

9.40 - 10.20am Tim Moraghan The specifics of preparing for a US Open Tournament

10.20 - 10.45am Morning Tea

10.45 - 11.15am Ken Mangum Golf course irrigation toward 2010 and beyond

11.15am - 12.00pm Ed McGawley Management options for parasitic nematodes

12.20 - 1.00pm Danesha Carley Summer decline in bentgrasses

GOLF 2 - YOU YANGS 4-5

8.30 - 9.00am Andrew Peart Golf courses of the Monterrey Peninsula and Bandon Dunes

9.00 - 9.40am Phil Ryan Asian golf course construction, architecture and maintenance

9.40 - 10.20am Tim Moraghan The specifics of preparing for a US Open Tournament

10.20 - 10.45am MT

10.45 - 11.15am Peter McMaugh Development of Australian Cynodon sp. cultivars

11.15am - 12.00pm Gary Dempsey Strategic Planning - Plan your work and work your plan

12.20 - 1.00pm lain James Engineering sustainable sports surfaces: investigating human - sport surface interactions

1.00 - 5.00pm Trade Show; Lunch; AT

1.00 - 5.00pm Terry Muir EMS information sessions (Trade Show)

5.00 - 6.30pm 2008 AGCSA AGM

Thursday 24th July

GOLF - LA TROBE THEATRE

8.00 - 8.30am Danesha Carley Diseases in warmseason grasses

8.30 - 9.15am Jim Porter, Darren Wilson, Richard James and Stuart Moore Innovative Superintendent

9.15 - 10.00am Van Klein Golf course machinery toward 2010 and beyond

10.00am Trade Show

10.00am - 2.30pm Terry Muir EMS information sessions (Trade Show Arena)

10.00am - 2.30pm Trade Show; Lunch 2.30 - 3.15pm David Warwick and Symon Scott Team Work - How a joint approach works

3.15 - 4.00pm Daryl Sellar and Gary Dempsey Time and staff management

7.00pm - 12.00am

Syngenta Presidents Dinner

Studio 3, Crown Complex syngenta Includes 2008 AGCSA Awards presentation Jacket and tie

Friday 25th July

8.30am - 4.00pm

Post-Conference Tour Buses depart and return delegates to Melbourne Convention Centre

Sportsfield **Management Stream** Mondav 21st July

2008 AGCSA Corporate Cup 10.00am - 6.00pm **Huntingdale Golf Club**

Toro GM5900 Launch TORO

1.00 - 2.00pm **Telstra Dome**

Bayer Welcome Reception 7.30 - 10.00pm **Melbourne Convention Centre**

Bayer Environmental Science



Tuesday 22nd July

PLENARY - JOHN BATMAN THEATRE

8.10 - 9.10am Grant Gleeson Motivational

session on facing challenges and complexities and overcoming them

9.10 - 10.10am Tim Moraghan My experiences as the USPGA tournament agronomist

10.10 - 10.30am MT

10.30 - 11.30am Representatives from ASPA, AGIC and MAV Managing turf facilities into the future

11.30 - 12.00pm Terry Muir Exploring the future roll of fine turf in carbon offset schemes

12.00 - 12.30pm Phil Ryan Job opporunities in South East Asia

12.30 - 1.30pm Lunch

1.30 - 2.30pm Dr lain James Soil management and health

2.30 - 3.30pm Peter McMaugh History of turf management in Australia

Scotts Darts Tournament Scotts 4.30 - 7.30pm



Wednesday 23rd July

IPON 'The Miracles of Science™' Breakfast 7.00-8.00am Clarendon Room - MEC & NUTURE **SPORTSFIELD - YOU YANGS 1-2**

8.30 - 9.00am Leonie Otago Results of Ballarat University studies into sports injuries

9.00 - 9.45am John Lloyd A look at the priority zoning model on grass species being implemented at Parliament House

9.45 - 10.15am Andrew Peart ANTEP ryegrass and tall fescue trial results

10.15 - 10.45am MT

10.45 - 11.15am Natalie Atkins Water gathering

11.15 - 12.00pm Van Klein General turf machinery toward 2010 and beyond

12.20 - 1.00pm Ken Mangum Sportsfield irrigation toward 2010 and beyond

1.00 - 5.00pm Trade Show; Lunch; AT

1.00 - 5.00pm Terry Muir EMS information sessions

1.00 - 2.30pm Industry VIP Lunch

Thursday 24th July **CRICKET WICKET SEMINAR** -

YOU YANGS 1-2

8.00 - 8.30am Grant Gleeson Motivational start to the day

8.30 - 9.30am Includes Ian McKendry and Graeme Logan Innovative turf manager sessions

9.30 - 10.00am Warm season grasses

10.00 - 10.30am MT

10.30 - 11.10am Adrian Harvey Cricket wicket renovations

11.10 - 11.50pm Lindsay Tomlinson D.I.Y. -Ongoing machinery maintenance

11.50 - 12.30pm Dr lain James The optimisation of cricket pitch rolling

12.30 - 3.00pm Trade Show: Lunch

12.30 - 3.00pm Terry Muir EMS information sessions

2.00 - 3.00pm

MEC-LEVEL 5, SUITE 1 AND 2

Cricket wicket seminar speaker forum TGAA (VIC) Annual General Meeting

7.00pm - 12.00am

Syngenta President's Dinner

Studio 3, Crown Complex Syngenta Includes AGCSA Awards presentation

Jacket and tie

Friday 25th July

8.30am - 4.00pm

Post-Conference Tour

Buses depart and return delegates to Melbourne Convention Centre

Turf Technicians Stream

Monday 21st July

MELBOURNE CONVENTION CENTRE YOU YANGS 1

8.30 - 9.00am Registration

9.00 - 10.00am Technical presentation

10.00 - 10.30am Morning Tea

10.30 - 12.30pm Powerturf technical presentation PowerTurf

12.30 - 4.30pm In-depth tour of (TBC) venue

workshop, machinery and facilities (includes lunch) PowerTurf

4.30pm Return to Melbourne Convention Centre

Bayer Welcome Reception

7.30 - 10.00pm

Melbourne Convention Centre

Bayer Environmental Science



Tuesday 22nd July

TORO COMPLEX, BRAESIDE

8.30am Depart Melbourne Convention Centre

9.30am Arrive Toro

9.30am - 12.00pm Greg Turner Demonstration of set-up and grinding of cylinders and bedknives

12.00 - 1.00pm Lunch

1.00 - 2.15pm Craig Day Spray Safe TORO

2.30 - 4.00pm Gary Price Hands on training TORO

4.00pm Return to Melbourne Convention Centre

Scotts Darts Tournament Scotts 4.30 - 7.30pm



Wednesday 23rd July

IPIND 'The Miracles of Science™' Breakfast 7.00-8.00am Clarendon Room - MEC 💩 NUTURE HOWQUA 2

8.30 - 9.15am Daryl Sellar Team Work - How a joint approach works

9.15 - 10.00am Van Klein Maintaining new machinery that detects agronomic conditions

10.00 - 10.30am MT

10.30am - 12.00pm Webcast: Topic TBA

12.30 - 3.00pm Trade Show; Lunch

3.00 - 5.00pm The future and new direction of turf equipment and machinery

7.00 - 10.00pm John Deere Technicians Association Dinner, Golden Gate Hotel, South Melbourne

Thursday 24th July

HOWQUA 2

8.30 - 10.30am



Briggs & Stratton technical presentation

10.00 - 10.30am MT

10.30 - 11.15am BOC Gas Interactive/hands on training in inverter technology, cutting and

11.15am - 12.00pm Ken Mangum Irrigation technology towards 2010 and beyond

12.00 - 3.00pm Trade Show and Lunch

12.00 - 3.00pm Terry Muir EMS information sessions

7.00pm - 12.00am

Syngenta President's Dinner

Studio 3, Crown Complex Syngenta Includes AGCSA Awards presentation Jacket and tie

Bowling Greenkeepers Stream

Mondav 21st July

AGCSA Corporate Cup

10.00am - 6.00pm **Huntingdale Golf Club**

Buses depart and return players to Melbourne Convention Centre

Bayer Welcome Reception

7.30 - 10.00pm

Melbourne Convention Centre

Bayer Environmental Science BAYER



Tuesday 22nd July

PLENARY - JOHN BATMAN THEATRE

8.00 - 8.10am Jeff Gambin 2008 Conference Opening Address

8.10 - 9.10am Grant Gleeson Motivational session on facing challenges and complexities and overcoming them

9.10 - 10.10am Tim Moraghan Preparing for U.S.

10.10 - 10.30am MT

10.30 - 11.30am Representatives from ASPA, AGIC and MAV Managing turf facilities into the future

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2.30 - 3.30pm Peter McMaugh History of turf management in Australia

Scotts Darts Tournament Scotts 4.30 - 7.30pm



Wednesday 23rd July

IPID 'The Miracles of Science™' Breakfast 7.00-8.00am Clarendon Room - MEC & NUTURE OTWAY 1

8.30 - 9.15am Wade Turner Managing warmseason grasses in a cool climate

9.15 - 9.45am Ed McGawley Management options for parasitic nematodes

9.45 - 10.30am Phil Ford Highton Bowling Club: Innovative flat base and sub-irrigation techniques in practice

10.30 - 11.00am MT

11.00 - 11.30am Grant Gleeson Motivational

11.30am - 1.00pm Daryl Sellar and Communications Consultant Human resources, communication and reporting skills workshop

1.00 - 2.00pm Trade Show; Lunch

2.00 - 2.30pm VGA Annual General Meeting

2.30 - 5.00pm Trade Show; Afternoon Tea

Thursday 24th July

YOU YANGS 1-2

Fully registered delegates in this stream are to attend the Cricket Wicket seminar in the Sportsfield stream. (Refer previous page)

7.00pm - 12.00am

Syngenta Presidents Dinner

Studio 3, Crown Complex syngenta Includes AGCSA Awards presentation Jacket and tie

Friday 25th July

8.30am - 4.00pm

Post-Conference Tour

Buses depart and return delegates to Melbourne Convention Centre

General Managers Stream Thursday 24th July

OTWAY 1

9.00 - 9.30am Grant Gleeson Motivational speaker

9.30 - 10.00am Madgewick Lawyers Your club and its legal responsibilities in regards to accidental damage, injury or accident.

10.00 - 10.30am MT

10.30 - 11.15am Tim Moraghan Preparing for US Open tournaments

11.15am - 12.00pm John Neylan and Terry Muir The 'Green' golf course from environmental stewardship to carbon offset

12.00 - 2.30pm Trade Show; Lunch

2.30 - 3.15pm David Warwick & Symon Scott Team Work - How a joint approach works

3.15 - 4.00pm Daryl Sellar & Gary Dempsey Time and staff management

7.00pm - 12.00am

Syngenta President's Dinner

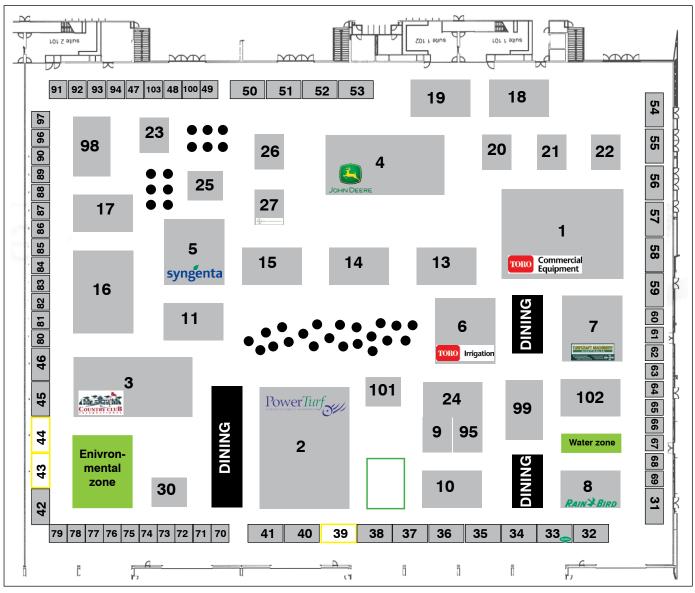
Studio 3, Crown Complex syngenta Includes AGCSA Awards presentation Jacket and tie

Friday 25th July

8.30am - 4.00pm

Post-Conference Tour

Buses depart and return delegates to Melbourne Convention Centre



24TH AUSTRALIAN TURFGRASS CONFERENCE TRADE EXHIBITION FLOOR PLAN

- Toro Australia (Commercial) 2. PowerTurf
- 3. Country Club International
- 4. John Deere
- 5. Syngenta
- 6. Toro Australia (Irrigation)
- Turfcraft Machinery Aust. 7.
- 8. Rain Bird Australia
- 9 Tycrop
- Golf & Bowling Machinery 10.
- 11.
- Strathayr Turf Systems/ 13. Legend Couch Grass
- Greencare
- David Golf & Engineering
- 16 Australian Seed and Turf Farm
- **QTurf Machinery** 17.
- Club Car 18.
- 19. Turf Link
- 20. Globe Australia
- Barmac 21.
- 22. DINT
- Metroturf Machinery 23.
- 24. Graden Industries
- **Brown Brothers Engineers** 25.
- Tru-Turf

- Bayer Environmental Science
- 30. Floratine
- Ocker Blue 31
- 32. K&B Adams
- 33. Scotts Australia Geofabrics Golf 34.
- 35. Simplot Pro-Line
- Evergreen Turf/GrandPrix 36.
- 37. Triangle Filtration and Irrigation
- 38. Advance Seed
- 39.
- 40. Anco Seed and Turf
- Bernhard and Company 41.
- 42. SigmaMat/Keygreen
- 43. 44.
- 45. **Curtis Barriers**
- 46. Lawn and Turf
- 47. Greenfix Golf
- 48. Biogreen
- 49. **Boddingtons**
- 50. ProFloor
- 51. **PGG Wrightson Turf**
- 52. Active Safety Supplies 53. Mentay
- No Fuss Solutions 54.

- Becker Underwood 55.
- 56. Golflinx
- 57. Oasis Turf
- 58 Conquest Couch
- 59. Nuturf
- 60. Underhill International
- The Groundsman 61. Magazine
- 62. Paul Jones and Associates
- **DuPont Professional** 63. **Products**
- 64. Organic Crop Protectants
- 65. Sportcrete
- 66. Seapage Control
- HydroChem 67.
- 68. Tru-Match
- 69 Velvetine
- Twin View Turf 70.
- 71. **Hunter Industries**
- TurfCraft International 72.
- 73. **BMS Turfline**
- 74. Densal
- 75. Orica Australia
- 76. MT Ground Aeration
- 77. Rural Solutions SA
- Ultimate Agri-Products 78.
- Eco Golf 79.
- Hydrosmart

- 81. Campbell Scientific Aust.
- **HG** Turf
- 83. etp Turf
- 84. Golf Biz
- 85. Superturf Line Marking Systems
- E-Z-Go 86.
- 87. AFL SportsReady Ltd
- OzSafe Software
- 89. Sydney Environmental & Soil Lab
- 90. **NMIT**
- **TGAA** 91.
- 92. Bowling/Greenkeepers
- Turf Technicians 93.
- 94.
- Roy Cripske & Sons Foley United Grinders 95
- Ohio State University 96.
- 97. Redlands Research
- 98 **AGCSA**
- 99. Grundfos
- 100. Hume Turf and Machinery
- 101. JRM Inc
- 102. Enware Australia
- 103. Felco Distribution Pty Ltd

2008 Trade Show Exhibitors

ACTIVE SAFETY SUPPLIES Stand 52



Active Safety will display a range of products at the 24th Australian Turfgrass Conference trade exhibition. These include: protective, uniform and hi-viz clothing; wet/cold weather gear; disposable coveralls; safety footwear; all types of gloves; safety eyewear; earmuffs and ear plugs; respirators; dust masks; first aid supplies; sun protection; safety drum tippers; chemical storage cabinets; spill kits; safety and information signs; entrance and anti-fatigue matting; safety showers and eye/ face washes.

ADVANCED SEED Stand 38 Advanced Seed

A broad range of turf seed and equipment will be on display at the Advanced Seed stand at this year's 24th Australian Turfgrass Conference trade exhibition, Special interest will centre around visual displays of new turf seed varieties grown in demonstration trays. These include new leading bentgrass varieties Tyee and 007 along with improved seeded couches, fine fescue and ryegrass material. Of particular interest to turf practitioners will be the Evergreen Turf Cover which is now being widely used throughout Australia with excellent results. Graeme Tanner from Evergreen will be present on the stand to help answer any of your queries and talk to you about their new product Evergreen Radiant which offers a 10-year warranty and increases heat retention by up to 25 per cent. The range of Earthway commercial spreaders will also be on display. Be sure to visit and enter into our trade show draw for some great prizes.

AGCSA Stand 98

The official host of the 24th Australian Turfgrass Conference, the Australian Golf Superintendents' Course Association is committed to the ongoing professional development and support of all those involved in the golf course maintenance industry. With a membership of over 850, the AGCSA is growing in size and offers a range of services to help superintendents and their staff who are seeking access to resources, training and networking opportunities. Visit the AGCSA stand during the exhibition to experience first hand the extensive range of services and how they have been tailored to meet the needs of people working in the golf course maintenance industry. Copies of the AGCSA's flagship publication. Australian Turforass Management journal, will be available, merchandise and turf text books will be for sale at discounted prices, and an internet café style set up will see computers set up for delegates to use. New membership applications from delegates are always welcome and these can be lodged and processed at the stand. Current members can renew their membership, update their contact details and arrange access to the members-only section of the AGCSA website. AGCSA Board members and staff will be present throughout the show to help out with any queries.

ANCO SEED AND TURF Stand 40 ance

For over 30 years Anco has been growing and supplying quality instant turf to the professional turf industry. Anco turf is grown on fumigated sandy soils ensuring the turf you receive is of the highest purity and weed free. Anco also supplies washed turf in small and big rolls. Our turf range includes greens grade bentgrass, Santa ana, Santa ana Plus. Conquest and Grand Prix couch. kikuyu, Winterkike, tall fescue, fine fescue, fine-leaf rye/fine fescue blend, Sea Isle and soft leaf buffalo. In addition to our extensive turf range Anco supplies a wide range of sod quality turf seed which is a grade higher than certified seed. Anco can contract grow to specification. Our contract growing and laying projects include turf for resurfacing Flemington and Caulfield racetracks and greens turf for Huntingdale Golf Club. Anco has developed a state-of-the-art line planting machine that has floating heads ensuring minimal disturbance to the existing surface on both flat and undulating ground. An even planting rate and depth is achieved ensuring optimum growth of the line planted warmseason grasses. Our experienced staff can help you with your next grassing project. See us at Stand 40.

AUSTRALIAN SEED & TURF FARM Stand 16

The Australian Seed & Turf Farm management collectively has over 100 years' experience in the seed and turf industry. This has contributed to Australian Seed & Turf Farm's market positioning as one of the leading suppliers of instant turf in the domestic and commercial markets Australia wide. We pride ourselves on understanding our commercial clients' needs. We offer our standard varieties for commercial clients and offer consignment growing to the client's specifications. Standard bentgrass varieties are available all year round - Penn G2, Penn A1 and Penncross. We grow all of our bentgrasses on USGA specification sand. All of our bentgrass is grown with no netting inside the turf sod hence making it easier to maintain after establishment (i.e.: de-thatching, scarifying, and aerating. A standard fine fescue blend (50 per cent creeping red fescue and 50 per cent Chewings fescue) is available all year round. We grow this blend on USGA specification sand and it is also grown with no netting inside the turf sod. We have a range of warm-season drought-tolerant turf grasses available to our commercial clients including Santa ana couch, kikuyu, buffalo and tall fescue.

BARMAC Stand 21

Barmac is a name that has been associated with the turf industry for more than 50 years. The Barmac brand is recognised for its quality and value in providing specialty use products to assist the professional turf manager. Barmac products are regarded as reliable and dependable and have many tried and trusted



products in its range. CoRoN, Noculate and Olympic Blends have all been firsts and leaders in turf nutrition. Scurol DG, Rhysol DG, Chloroturf DG and Fungol are all unique and effective fungicides. Another area of specialist products are the Barmac herbicides DSMA Clear, Trinoc, Broadleaf Weeder, Lawnweeder Plus and Trinoc which are all specialised turf products. Out of Bounds is a new insecticide to the Barmac range and is extensively used by turf managers. To support our products in the field, Barmac has assembled a leading technical team. Wayne Sear, Jon McCarthy and Luke Hamner are available to assist whenever possible. Barmac - Australian and innovative; an investment in a Barmac product is an investment in the future of the Australian turf industry.

BAYER ENVIRONMENTAL
SCIENCE
Stand 27
Bayer Environmental Science

Bayer Environmental Science is once again proud to be associated with the AGCSA's 24th Australian Turfgrass Conference and Trade Exhibition. First, we hope to see you all at the Welcome Reception which promises to be a great night. Be sure to drop by the stand for your free Bayer Science for a Better Life pack. This year we have great pleasure in introducing you to Dr Danesha Seth-Carley from North Carolina State University, who will be on the stand and lecturing at the AGCSA about her ground breaking turf work in the USA. Joining her on the stand will be Nadine Hope, Bayer's new Victorian sales manager, and Jyri Kaapro, our resident doctor turf who will also be available to answer all your technical turf questions. We will also have live demonstrations with tree injecting equipment designed to assist your tree management programme. If you require any information please contact Paul Jackson at paul.jackson1@bayercropscience.com

BECKER UNDERWOOD

Stand 55



As a leading supplier to the turf industry, Becker Underwood produces an innovative array of spray indicators, turf paints, lake and mulch colourants, and an ever-growing line of agronomic products that enhance plant health and root development. Becker Underwood's bio-agronomic line includes Bio-Gain WSP bio-stimulant to energise turf and ornamental growth and Wettasoil Ultra, a specialised long-term wetting agent and soil penetrant used for the acceleration of water movement to rootzones. In addition to these products, Becker Underwood offers Turf Mark, the first spray pattern indicator available in water-soluble packets, and NutrasolTM, a non-caustic tank and equipment cleaner that effectively removes traces of 2 4-D and sulfonylurea residues. The company also

manufactures Green Lawnger, to permanently restore the bright green colour to damaged or discoloured turf; Lake Colorant WSP, an ecologically safe dye for use in ponds and lakes; and Lake Pak WSP, a biological aquatic deodoriser and clarifier. Finding the right chemistry through acquisitions, such as the purchase of the Sprint brand of iron chelates in 1998, continues to add momentum to Becker Underwood's strategic growth and leadership in the turf industry. To learn more of these and other exciting products come and see us at Stand 55.

BERNHARD AND COMPANY Stand 41

Bernhard and Company has some exciting news to announce at the 24th Australian Turfgrass Conference trade exhibition in Melbourne. Adding to our comprehensive range of sharpening solutions, Bernhard and Company is launching its latest product evolution - the Express Dual and Anglemaster 4000. Keeping operator safety, ease of use and productivity at the forefront, Bernhard's new models are faster, simpler, quieter and even more intuitive to use. Redesigned safety quarding gives the Anglemaster 4000 models a whole new look to the Express Dual range. The taller guard accommodates walking greens mowers, even those with lighting kits attached. Customer led changes means the new Express Dual 4000 has a working height 5" taller and the electrical control system is integrated into the upper framework for easy access, giving both a more ergonomic working heights. While there have been many attempts to imitate our technology over the years, Bernhard's thorough understanding of workshop realities and turf management, with its continuing R&D programme, have ensured our sharpening systems remain unsurpassed. Bernhard's comprehensive range of grinders enables us to meet the budget range of any golf course facility. Visit Stand 41 to see the new Express Dual and Anglemaster grinding systems.

BMS TURFLINE Stand 73 Ms TURFLINE

Better Methods has a variety of new products to launch at this year's 24th Australian Turfgrass Conference trade exhibition, however, the main feature of our stand will be the new BMS TURFLINE on-line sales of golf course hardware, accessories and hand tools. Superintendents visiting the stand will be able to see the exciting new website in action and can quickly learn how to place orders and save money! BMS TURFLINE has been designed to enable anybody to access specialist turf hardware from anywhere in Australia at a very competitive price. Putting cups, flags, poles and ball washers are all available along with bowling green and

cricket wicket accessories and a complete range of the specialist hand tools that Better Methods are famous for around the world. New Products to feature at the show include the full LawnGrips range of work footwear, Mechanix Mits gloves, the Rhysome Rake for tidying up bunkers, the Standard Golf Coir Drag Mat and the Equipment Caddy which enables turf managers to load and carry one or two fertiliser spreaders or hand mowers around the course quickly and easily without having to hoist them into a tray.

BIOGREEN Stand 48 BIOGREEN

Biogreen is an Australian company producing raw materials and peat-based substrates for horticulture, viticulture, agriculture and the turf industry. Biogreen is committed to saving water naturally and delivering intelligent solutions for the environment.

BODDINGTONS AUSTRALIA Stand 49 BODDINGTONS

What is Boddingtons displaying? Boddingtons is the manufacturer and marketer of a novel new range of products now available to the Australian turf and landscape professional. These products are designed to reduce the wear and tear from player, pedestrian and vehicle traffic on turf and landscape surfaces. The range consists of products such as GrassProtecta which can be installed on new or existing turf or earth surfaces that offers protection from traffic of up to 8 tonnes in axle weight. GrassProtecta is ideal for use on cart paths, footpaths in heavy wear areas or wet turf areas. BodPave is a grass paving system designed to allow the use of turf or other fillers in heavy traffic zones. BodPave can take loads up to 150 tonnes/m² making it perfect for driveways, parking areas and other areas where a turf surface with the durability of hard surfaces is required. Boddingtons also offers Sentree, a high quality extruded plastic tree guard. Boddingtons also manufactures a large range of specialty plastic meshes such as drainage and fencing mesh. Safety equipment such as barrier fencing, detectable and nondetectable warning tapes and meshes are also available. For information call (03) 9310 2100 or go to www.boddingtons.com.au

BROWN BROTHERS ENGINEERS

Stand 25 @ Brown Brothers

Brown Brothers Engineers Australia Pty Ltd is proud to be associated with AGCSA and the exhibition again this year. Brown Brothers is a supplier of a huge range of pumps and associated equipment for the irrigation markets. The range includes Lowara premium stainless steel single and multi stage pumps, Goulds ISO, vertical bore hole turbines, split

case and large cast multi stage pumps. Accompanied with the technology of the world's smartest hydraulic VSD (variable speed drive) available on the market, known as the Hydrovar, Brown Brothers Engineers has the ability to assemble and supply the cleverest and simplest pump packages available to the Australian irrigation market. Our pump systems are built to application needs and demands. From single pump simple systems through to more elaborate packages like 6 VSD pumps on a common base with single manifold system, we are able to offer pump packages to suit nearly every application. If you are in the market for a new pump or pump set to suit you specific requirements we are definitely able to assist you. Our customer base of experienced irrigation industry dealers and contractors span across Australia and New Zealand.

CAMPBELL SCIENTIFIC AUSTRALIA Stand 81

Campbell Scientific Australia supplies a complete range of weather station, data loggers, sensors, peripherals and telemetry options for your irrigation and& turf needs. Globally renowned for their robustness, reliability and flexibility in the field, Campbell Scientific products will give you accurate data everytime - no more overwatering! See our Hydrosense portable soil moisture system at Stand 81. This small, easy to use unit gives you instant soil moisture readings anywhere in the field!

CLUB CAR Stand 18 50 Club Car

Club Car is proud to release at the 24 Australian Turfgrass Conference trade exhibition the NEW Turf 252iq+ electric utility vehicle. With its silent environmentally-friendly yet powerful 21peek horsepower motor and best in class range of 138km to a single charge, it's sure to be a hit. We are also displaying our Carryall 295 Diesel with its tough Kubota engine, on demand 4x4 and ROPS with seatbelts standard, the Turf 6 for those extra long jobs and much more. So make your way to the Club Car stand for plenty of trade show deals.

CONQUEST COUCH

Stand 58 CONQUEST

Conquest Couch is a sports couch which has been proving itself from Cooktown in the north, out into central Queensland and right around the country as the leader in commercial and domestic turf. For the last two years, demand has been outstripping supply as growers struggle to keep up supplies to new sports ovals, golf courses and local government authorities changing to better types of turfgrass. Enquiries for resorts, golf courses, cricket wickets are ever increasing from Asia and the subcontinent. All Conquest



growers are certified and are subject to regular inspections to ensure purity of stock and quality. Visit the stand at the 24th Australian Turfgrass Conference trade exhibition to see first hand the varying aspects that make Conquest stand out from its competitors. Talk to not only the breeder but local and interstate growers who are only too pleased to give any assistance to you.

COUNTRY CLUB INTERNATIONAL Stand 3

Country Club International is today probably the most diverse supplier of equipment to the golf industry of almost any company in the world. The driving philosophy over the years of sourcing and manufacturing the 'best' products available have created an eclectic high quality range of equipment from some of the biggest or best in the business. Country Club International is the master distributor of Par Aide golf course equipment, Waste2Water wash water treatment systems, Enviromist spray equipment, Convault fuel storage systems, Range Servant Sweden golf range equipment, Southwest synthetic turf, Redden safety barrier netting, Seair irrigation water treatment systems, Greenjoy range and course equipment and much more. Complementing these big names, Country Club also distributes selected lines from Better Methods, Repeat Plastics, Netting Australia, Miller Brothers, Store Safe, Eagle One USA, Derone Enterprises, Parklands Trading, Enware. Turf Irrigation Services. Fiberbuilt. Tee-Up and many others. While 'world's best' has been the vardstick, environmental and safety issues have been the driving force. Enviromist CDA spray equipment, manufactured in Australia, has now been launched into the US with the assistance of Country Club, while Waste2Water has quickly become the leader in washdown systems in just two years on the Australian market.

DAVID GOLF & ENGINEERING Stand 15 Amesic

David Golf & Engineering is pleased to be exhibiting at the 24th Australian Turfgrass Conference & Trade Exhibition in 2008. Come and see our new safety wear set to revolutionise the turf industry. Better Methods products will also be featured with their extensive range of hand tools that you don't get to see on a daily basis. There will be many other new products and giveaways. Products that will be on show include the Tournament ball washer, Big Ezee bunker rake, Razor bunker rake, Tournament holecutter, new generation sprinkler head trimmer, Tuff Guy litter bin and a great new course signage range. Come and visit us at Stand 15 and find out about some great show specials. We look forward to seeing you all in Melbourne. Contact us for all your golf course solutions - sales desk 1300 790 890, www. davidgolf.com.au or email dge@davidgolf. com.au

DENSAL Stand 74 DENSAL

Densal specialises in golf course construction, maintenance and commercial landscape construction. Densal has proudly completed a number of large scale 18-hole constructions from bulk earthworks to grow-in. Additionally, Densal has provided support and expertise to golf clubs undertaking smaller projects. With a large complement of small to medium sized construction equipment, operated by experienced shapers, Densal prides itself on its ability to produce quality finishes and structurally sound golf projects. Together Densal's golf construction team has over 125 years of specialist golf course construction expertise, with a long history of working on golf courses through Australia and SE Asia. This experience gives them a great understanding of working in a golf course environment and producing a quality golf product. No project is too large or too small and Densal is always willing to assist a client, whether it's a large project, an expert shaper and plant to assist club employed staff or advice and cost estimates for a project. Densal staff look forward to seeing you in Melbourne and discussing your next golf course project.

DINT Stand 22 DINT

The 24th Australian Turfgrass Conference trade exhibition promises to be something a little different for DINT and its customers. It is great to be back in Melbourne and we will be taking the opportunity to showcase

the newest facets of the DINT business. We will also be proudly displaying a number of exciting and innovative new products. We are looking forward to catching up with all the delegates, so be sure to visit DINT at Stand 22, the first stand you will see as you walk in the doors. DINT – innovation through experience. Visit www.dint.com.au.

DUPONT Stand 63

DuPont Professional Products brings more than 200 years of science, innovation and safety to the golf and turf industry with a ground breaking, new insecticide product Acelepryn. Acelepryn contains the new active ingredient DuPont Calteryx insecticide, an entirely new class of chemistry with a novel mode of action. for excellent control of target pests such as African black beetle, Argentinian scarab, billbug and Argentine stem weevil. Offering both preventative and curative control, with a long residual performance, Acelepryn will provide golf course superintendents, sportsground managers and landscape professionals superior, consistent performance and flexible application timing. Acelepryn will offer turf professionals consistent performance, low application rates plus an excellent toxicological and environmental profile. DuPont Acelepryn has been the classified as an unscheduled poison and has extremely low toxicity to most non-target species including birds, fish and bees. The outstanding handling profile coupled with its low environmental impact make Acelepryn a valuable addition to Integrated Pest Management programmes. Please stop by the DuPont stand (No.63) to learn more about this exciting new product.

ECOGOLF Stand 79

Ecogolf incorporates integral golf equipment maintenance activities into a single sustainable program "bringing the environment up to par". Relating to golf course maintenance facilities there are three main areas of potential concern. The first is environmental discharge related with equipment washing and the release of associated wash water which is known to contain oil and grease (hydrocarbons), herbicides, fertilisers and pesticides. Over a period of time as the equipment is continually washed these residues accumulate to dangerous levels adversely effecting surrounding environments. The second area of concern is chemical handling involved with storage, mixing, loading, rinsing and maintaining related equipment. Improper chemical storage and loading can lead to spills, both large and small, which over time can lead to ground and surface water contamination. The third area of concern is the refuelling station and associated fuel tanks. Poor fuel storage facilities can directly

endanger not only surrounding environments but also staff members. Generally uncovered areas, fuel spills and leaks are instantly washed into soil and ground waters with associated rainfall leading again to accumulation of contaminants over time. Integrating Ecogolf into your maintenance facility ensures regulatory compliance and reflects your club's desire to operate sustainably.

ENWARE AUSTRALIA Stand 102 **ENWARE**

For wash water recycling and safety solutions visit Enware's display which will be featuring the WaterStax wash water treatment system made specifically for golf and turf applications. The WaterStax uses bioremediation to remove contaminants such as grease, oil, herbicides. insecticides and pesticides - hydrocarbon based contaminants, which remain in the water unless treated. There are two output options to suit vour site requirements - discharge or recycle as wash water. Collect your free DVD that provides more information on the system including a walk through on how the WaterStax system works. Safety showers and emergency eye wash equipment are required where hazardous chemicals are stored or used. Enware will show a range of Australian made plumbed and self-contained options compliant with ANSI Z358.1 and AS4775. Spill containment and portable bunding solutions including spill pallets and drum dispensing will be on display. Enware has a wide range of products to help you meet your OH&S and environmental requirements.

ETP TURF (ENDEAVOUR TURF PRODUCTS)

Stand 83 etpetpturf.com.au

Endeavour Turf Products (ETP) is an independent national supplier of services and specialty products to the turf industry. The company is a culmination of the combined commercial, practical and

academic experiences of Grant Greenway and Jerry Spencer totalling 40 years in the Australian and UK turf industries. With minimal warehousing ETP supplies what you need rather than what we have in stock and without inflated marketing and handlers fees. This unique point of difference results in extremely competitive pricing and a true product brokerage service on seed, fertiliser and chemicals. With qualified staff ETP also offers a solution based consultancy and technical services such as soil testing and tissue testing. Services offered by ETP include technical consultancy, soil and tissue testing, water solutions and drought proofing and product development and sourcing. With a new office and laboratory facility in Melbourne, ETP will continue to grow and offer a professional and practical consultancy attached to a product brokerage service providing real value. With global fertiliser and chemical pricing on the increase, ETP can offer a viable and economical alternative when considering product supply. Please feel free to visit ETP on Stand 83.

EVERGREEN TURF/GRAND PRIX Stand 36 TUBE

Seeking a new couchgrass for your facility? Evergreen Turf is the agent for Grand Prix. This exciting new couchgrass is performing well in industry trials and in the field. With the breeding backed by the knowledge and experience of David Nickson, Grand Prix should be considered for your next project. In addition to this, Evergreen Turf has the ability to prepare and plant fairways with warm-season grasses. Our cultivation and line planting machinery has been specifically developed for the golf course industry. And of course we supply a wide range of instant turf from our Pakenham farm including Santa ana and Conquest couch. Feel free to drop in to see us at stand 36 and have a great conference.



FLORATINE Stand 30 FLOR.

Obtaining 'the strongest turf' comes from having the correct balance of the physical, chemical and biological elements all working together. Floratine is based on a commitment to solid science and works alongside nature itself, creating an entire philosophy and product range geared toward achieving optimal results in every situation. We call our system 'The Floratine Approach'. It involves research, diagnosis, implementation and monitoring. The intensity of this approach is based upon the objectives and resources of each of our clients and their facilities. Floratine understands that you need a lot of different tools and hard-earned experience to handle all of the issues you encounter every day on the job. Our tool box of over 50 different products is comprised of four main categories: foliar, soil, biological and additional and has grown over the past 17 years. Being a global company that designs, manufactures and distributes its own proprietary technology on over 6000 golf courses and professionally managed athletic facilities in over 45 different countries, this gives us a tremendous amount of valuable exposure to new concepts and practices. We are proud of our ability to work with every segment of the turf industry in every climatic zone around the world.

FOLEY UNITED GRINDERS Stand 95 FOLEY

If you are looking for superior grinding equipment, Foley United Grinders are now available through Toro Australia. Featuring an extensive range of rotary, reel, spin/relief and bedknife grinders, the Foley United range offers technical superiority and performance combined with easy maintenance and use. Elevate your performance, increase cut quality and production with the leading name in grinding equipment. You'll also get a better grind quality than other methods, a more precise cut, and less demands on time and effort. The Foley range also includes 5kg and 11kg pails of lapping compound with different grit - all designed to make the job easier. No matter what your budget, Toro Australia can offer a Foley United Grinder to fit your budget or needs. Feel free to discuss your brief with us at the Toro stand and we'll direct you to some of the best grinders on the market. For more information please contact Toro Australia on (02) 8787 4100.

GEOFABRICS GOLF Stand 34 & GOLF &

Geofabrics manufactures and distributes a range of geosynthetic and drainage products throughout Australasia. Geofabrics has a range of products currently being utilised in the golf industry, both in construction and re-development projects. Three products being displayed at the conference are Megaflo, BunkerMat and ElcoSeal. Megaflo is a flat pipe drainage concept that has both been approved as an acceptable alternative to round corrugated pipe and also proven in courses over the past decade in the US and Australia. Megaflo has several advantages over the trenching method, including time saving, not disturbing the green base, twice the drainage response time, no imported trench backfill and less equipment required on site. BunkerMat is a three dimensional erosion and drainage mat. BunkerMat will reduce the use of sand on bunker walls as well as keeping the sand clean from migrating subsoil. BunkerMat has excellent tensile strength as well as using the highest UV stabilised fibres. ElcoSeal is a high quality Bentonite clay between two geotextiles and locked together through the process of needle punching and thermal locking the fibres. ElcoSeal removes the need to use thick layers of clay to line your water courses and has the ability to reseal itself if punctured.

GLOBE AUSTRALIA Stand 20 Go with Globe

Globe is a long-term supporter of the Australian Golf Course Superintendents Association and has been a major participant in the trade exhibition for many years. It is a great opportunity for Globe to introduce new products and services to the Australian professional turf market. Equally, it is important for Globe staff to spend time with their clients both at a business and social level. Globe is an Australian privately owned national company with distribution agreements with many international suppliers. It is exciting to have many of these international suppliers as well as our local suppliers visiting us and displaying on our stand at the conference. This includes Tom Malehorn (Aquatrols), Rich Christ (Andersons), Mark Minatel (Spyker Spreaders) and John Brauer (Sandtrapper). Please spend some time with them and the Globe team on our stand. We hope all superintendents have a successful and enjoyable week.

GOLF & BOWLING MACHINERY Stand 10

Golf & Bowling Machinery will have a variety of machines on display. The ever-popular 30" Scott Bonnar Queen electric mower, both new and fully reconditioned will be available. All fully reconditioned units are sandblasted. powder coated and have new motors and come with a 12 month warranty just as the new option does. We will also have on show the 24" and 30" Smoothcut petrol cylinder mowers along with the Scott Bonnar Model 46 Scarifier. If greens rollers are what you are after then be to sure to come and check out both the 3-foot and 5-foot Smoothrolls. A range of spare parts including catchers to

suit Queen mowers, various model scarifiers, Smoothcuts, Smoothrolls etc will be available at conference-only specials. We specialise in hard to find parts and can supply you with all of your spare parts requirements. A range of blades including the ever-popular Aussie Blue hardened blades will also be available. We have a variety of blades to suit Smoothcuts, Queens, scarifiers, Toro, Jacobsen etc and all will be available to purchase. For clubs that have synthetic greens, you are not forgotten. We stock a large range of brushes and vacuums to help maintain your surface.

GOLFLINX Stand 56 GolfLinx®

GolfLinx allows superintendents to very accurately grow good quality, sustainable and robust turf at the minimum of water usage and cost. This same technology enables superintendents to maximise the appearance of greens, minimise grass growth to cut back on mowing and maintenance, manage the leaching of salts and improve root growth for sustainability and strength. And, most importantly, soil moisture technology also gives superintendents the definitive tools and intelligence to improve course playability, relying on accurate information rather than previous experience or ET. Advanced technologies, such as GolfLinx's new multisensor probe, deliver water savings as well as enabling managers to fine tune and manipulate the speed of the greens and bring the course up to competition level. GolfLinx soil moisture technology not only maximises water use efficiency and provides a three dimensional view of plant root activity, it quantifies the water saved and the power saved to distribute the water across a golf course. These savings come with the promise of lower water costs, reduced power costs and a new revenue stream built on reducing greenhouse gases and aggregating carbon credits. GolfLinx innovative turf water management. Phone (08) 8416 9900 or visit www.golflinx.net.

GRADEN INDUSTRIES Stand 24 GRADEN

On show at this year's conference will be the Graden range of greens rollers. These units have an in-built trailer for ease of transport, as well as innovative split roller technology in the steering heads. The speed and performance of this machine has been warmly received in the USA where it has been on the market for just over a year. We will also have our revolutionary Contour Sand Injection (CSI) Verticutter on show. This machine scarifies then accurately fills the grooves right to the top with sand, all in one pass. We will also be launching a seeder box attachment for the CSI, further enhancing the usefulness of the machine. New this year, Graden will unveil some fantastic zero-turn ride-on mowers.

These mowers will impress you with their rugged build quality, speed and reliability. With different engine and deck size options available you are sure to find a model to suit your needs. Graden will also have on show their complete range of turf care machinery which includes the proven GS04 Scarifier, as well as the two tractor-mounted scarifiers – the GBS 1200 and the SW04 Swing-Wing, which is now available in a two-metre cutting width version.

GRUNDFOS Stand 99



At the 24th Australian Turfgrass Conference trade we exhibition we will be displaying a range of products to meet all your professional irrigation needs. This year we will be showcasing a wide range of professional irrigation products, include dosing systems, submersible pumps, our Hydro Solo E and Hydro MPC and our TurfPro Booster System, which has been designed to provide solutions for applications with golf courses, sports turf and municipal irrigation projects. The Hydro MPC Booster System can be used wherever additional pressure is needed. Each booster model has been designed to meet the specific demands for capacity and control ensuring the right booster solution for your application. Pump control is made easy with the TurfPro Booster System. It has been designed with an advanced graphical user interface, making controlling and interacting with the pump system much simpler than ever before! The intuitive 15" full colour touch screen interface allows quick and easy control of the pump system enhancing overall system flexibility and reliability. Grundfos solutions are tailored without compromise to give you optimal quality and the right product.

HG TURF Stand 82



HG Turf Pty Ltd is a family owned company specialising in the production and sale of instant turf. With 350 acres in production, HG Turf is one of Victoria's largest turf farming enterprises supplying turf to the home lawn, commercial landscape and sports turf markets. Over the last decade HG Turf has supplied its turf to high profile events including the 2000 Sydney Olympic Games (Olympic Stadium), the 2006 Melbourne Commonwealth Games (MCG) and the 2006 Doha Asian Games (Qatar). Since 2001 HG Turf has worked closely with the Australian Institute of Sport and resurfaced a number of playing fields. HG Turf's expertise extends into sports field design and construction. The company has rebuilt a number of sports fields over the last decade, including the Gabba in 2000, Eden Park (NZ) in 2003, the MCG in 2004 and the company will be undertaking the design and reconstruction of AMI Stadium (NZ) in 2008. HG Turf also supplies the sports field market

with a unique turf replacement product called Motz Stabilized Turf which is used at the MCG, Canberra Stadium, Telstra Dome and Telstra Stadium (now ANZ Stadium). Log on to www. hgturf.com.au for more information. Please visit us at Stand 82.

HUNTER INDUSTRIES Stand 71 Hunter

As one of the world's leading manufacturers of irrigation equipment for the landscape and golf course industries, Hunter Industries has enjoyed a well-established reputation as the innovation leader in irrigation. We continue to focus on the needs of the irrigation professional, just as we have since being founded 25 years ago. This year we are excited to introduce the G900 which completes the Hunter Golf range. Hunter is the only manufacturer to offer a true total top service valve-in-head rotor that is both adjustable and part circle. Hunter: the irrigation innovators.

HYDROCHEM Stand 67 @HydroChem

HydroChem is the market leader in Australia's water services industry. We specialise in water treatment, wastewater treatment, membrane filtration, screen filtration and water recycling. At the 24th Australian Turfgrass Conference trade exhibition we will be showcasing the newest screen filtration technology available in Australia – the VAF automatic self-cleaning water filters, featuring the patented Infinity Drive mechanism. These revolutionary filters cut water usage, increase cleaning efficiency and minimise maintenance requirements. They are simple to use and currently operate in turfgrass irrigation applications across the US.

HYDROSMART Stand 80

Hydrosmart is a new and innovative technology, using latest advances in particle physics research to provide effective, affordable and chemical-free solutions to the problems caused by minerals and chemicals present in our water supplies. Using a series of highly accurate computer generated resonance frequencies to confuse electron polarity, Hydrosmart neutralises the bonding ability of any minerals or chemicals present in the flow, eliminating and preventing scale formation. These resonance frequencies are focused in the flow, via antennae, wound in tight coils around the treated water pipe with no flow restrictions and remain active in water for up to five days. They progressively break down the bonds of any scale already formed with all pipes and equipment connected to the treated flow, becoming scale-free within a three-month period. Two years of independent scientific research has shown a significant improvement in plant growth and a corresponding reduction in growing problems on plants irrigated with Hydrosmart treated water. These results are largely due to the minerals in the treated flow being changed into a form readily available to the plant. Healthy turf and ovals are now viable using highly mineralised bore water or reclaimed water which was previously considered unfit for propagation.

JOHN DEERE Stand 4



John Deere is proud to be a part of the 2008 Australian Turfgrass Conference. We look forward to hosting you on our booth, where we can introduce you to the new additions to the John Deere Golf and Turf range for 2008. New models being introduced this year include the new terrain cut trim mowers and precision cut fairway mowers. The 7400 Terrain Cut trim mower will shift your expectations of what a trim mower can do, with 15" of reach to the right and the left that can be adjusted right from the seat. The new Precision Cut fairway mowers feature steering cylinders that for the first time in fairway mowers equalise right and left pressure to help keep things straight and also optional GRIP all-wheel-drive traction system. This new range complements John Deere's full line of turf maintenance equipment, including specialised reel mowers, utility mowers, aeration and debris maintenance equipment, utility vehicles and a comprehensive range of tractors. As the official golf course equipment supplier to the US PGA Tour, John Deere can be trusted to provide superintendents the tournament-level quality needed on today's golf courses.

K&B ADAMS Stand 32



K&B Adams has been Victoria's leading turf product supplier for the past 39 years offering the turf market good service and delivering quality products including fungicides, herbicides, insecticides, fertilisers and wetting agents. At K&B Adams we have dedicated and experienced staff in all aspects of turf management. We work with our clients to get the best possible result with that experience and dedication. Special guests on our stand will be Ramsay and Nadeem Zreikat from Colin Campbell Chemicals. Campbell's have been supplying the trade, Australia wide, with quality products for 65 years. Products like Methar-Tri Kombi, Poachek, Protak, Proplant, Tridim, Dacogreen, Pennside, Dek, Ippon and Goldazim are all trusted household names in the industry. As well Campbell's will be launching new technology in turf presentations and two new exciting fungicides. We will also be displaying the '3Tier' range of products. These products are designed to cleanse soil impurities, restore microbial balances, aid in natural disease suppression and activated

nutrient delivery. Come see as at Stand 32 or call us on (03) 9752 4133 or visit us at www. kbadamsturf.com.au

LAWN AND TURF Stand 46



Established in 1989 and now incorporating one of Victoria's most advanced turf renovation systems, we at Lawn and Turf pride ourselves on providing highly efficient, cost effective, quality turf renovation practices to the wider turf industry. Since establishment, the company has continually developed by gaining expertise, using state-of-the-art equipment, a professional approach and more importantly, listening to feedback from turf managers to achieve exceptional results. In a world of 'want now', expectations of turf surfaces in all sporting sectors has increased, however, the time available to carry out the most important turf requirement - renovations - has decreased! Just imagine scarifying, top dressing and verti-draining 19 greens by just after lunch, verti-draining or scarifying 18 fairways in just over one day, or seeding 12 ovals per day in-between the cricket and football seasons - all without compromising on quality while ensuring competitive pricing. These are just a few of the procedures we at Lawn and Turf have streamlined to suit that minimal window of opportunity. We also specialise in line planting of warm-season turf types with two specially modified line planting machines capable of using turf rolls or your sprigs. For all your renovation requirements visit the Lawn and Turf exhibit.

LEGEND COUCH GRASS/ STRATHAYR TURF SYSTEMS

Stand: 13 Legend

Legend - the king of couch grass. Legend is Australasia's premiere couchgrass. For over 15 years Legend has continually proven itself as a top performer from elite golf courses and stadiums to parklands and home lawns. Please come by Stand 13 for details of your licensed local producer - www.legendcouch.com. StrathAyr - world class grass and systems for all natural turf applications. Premium turf types of Sir Walter, Legend couch and RTF self-repairing tall fescue. Natural car parking systems. Safe, natural, all weather sportsfield and racetrack constructions. Portable drop-in cricket wickets and removable sportsfields. Please come by and see the StrathAyr team - www.strathayr. com

MENTAY

LLU WELLTAN

Here we are again at the Melbourne turf show. We have been all around the country this past year. The best place we went to was Cairns. I have never had so much interest. We worked on a big job at Townsville at Thuringowa and

made some good contacts and got the work done. Mentay's team has been mainly involved in turf wicket preparation making equipment. Our Mentay turf roller has changed, not so much our Mentay Hydra Glide, but the Mentay 2000 now has a steering wheel and carpet on the floor. The Mentay Hydra Ride - well it has to be seen to be believed. This year we sold our turf equipment to Dubai for Dubai Sports City for international cricket. We have sent three containers across to Dubai. It takes six weeks to ship the items there. Tony Hemming is the top curator. He has been doing all the ground works. We are currently designing a new unit to go with our Mentay Aqua Wizzard. A special 12 volt winch will be fitted to load and unload this machine. So how can Mentav help in your part of the world? Why not email us today mentay@bigpond.com

METROTURF MACHINERY Stand 23

Metroturf Machinery is proud to be exhibiting quality pre-owned turf machinery, for the first time, at the 24th Australian Turfgrass Conference. Metroturf Machinery specialises in nationwide sales of imported and locally sourced ex-lease turf equipment, including all makes and models. Our machinery list consists of utility vehicles, cylinder and rotary mowers, spray units, top dressers, renovating equipment, tractors and attachments. Examples of our equipment will be on display. With a focus on after sales service, our fully equipped workshop offers everything from affordable contract maintenance to cylinder grinding, on site repairs and maintenance, spare parts supply and equipment evaluations at highly competitive rates. Tim Magee, founder of Metroturf Machinery, has spent all his working life in the turf equipment industry. He learnt his trade as a turf equipment technician at a 36-hole golf complex, then went on to work at a significant level with two of the leading golf course machinery manufacturers. Ask the team at Metroturf Machinery how your organisation can benefit from investing in quality pre-owned turf equipment. Free call 1800 21 71 21.

M T GROUND AERATION



At M T Ground Aeration we are able to resolve compaction issues in almost any situation, from golf and bowling greens to sportsfields. By using the only Gwazae tractor mounted and GP Air pedestrian ground probe aerators in Australia, we are able to achieve depths (between 300mm and 700mm) that other machines struggle to reach, with minimal to no disturbance to the surface. A blast of air is injected to the soil profile via a single spear that then breaks up the profile from the bottom up, thus breaking compaction past the surface. Spacings are between 1000mm and 2400mm depending on pressures used and decompaction required. Any damage to pipework is easily avoided by marking irrigation lines and working between them. We can also inject liquids through the machine (e.g.: insecticides to control cockchafer, wetting agents for better water retention and liquid gypsum into clay profiles). By using M T Ground Aeration you can increase the amount of use your grounds can handle by reducing the chance considerably of areas bogging up in winter and in summer the grounds will be safer for use as the compaction has been broken up through the whole profile not just the surface.

NMIT Stand 90 > nmit

We at NMIT are looking forward to having a stand at the Melbourne conference and continuing our strong relationships with all sectors of the turf industry. It has been a time of change at NMIT with people moving on but the quality remains the same with the foundation well laid by the likes of well know industry personalities Phillip Ford and Gary Thomas. We have drafted well with first round picks Niall Martin (Royal Melbourne) and Mark Burchel (Heidelberg), with both fitting in well and bringing new ideas. NMIT continues to have good numbers in all our turf classes and hope to have a new group of trainees starting midyear. At the trade show we will have information on our Diploma, apprenticeship and adult trade rec-turf classes. We will have example of the notes and type of work that the students undertake at NMIT. We will have some power point presentations on some of the construction jobs undertaken by 2nd year students and irrigation installations carried out by 3rd year students. Most of the turf department will be on hand, so come in and say hi. We will be happy to answer any questions you may have regarding turf education

NO FUSS SOLUTIONS



Plot your next move in grass and ground protection with great products from No Fuss Solutions. Get tough tasks completed with Trak Mats and Plasto Rip. No Fuss Solutions is the stockist of the largest supply of ground and grass protection products in Australia. The company hires and sells products which are suitable for all types of grassed surfaces. The products are used on stadium surfaces. golf courses, construction sites, parks and gardens, as well as in cemeteries, to provide safe access over soft sensitive grassed sites. Plasto Rip is an exciting new temporary grass protection option. Special features include: restoration and access without damage to sensitive turf; fabulous selection of beautiful bright colours for a unique corporate image;

exhibition options include molded edging to compliment the colour choice; excellent surface to provide safe access for equipment; non-slip and anti static qualities; innovative design prevents grass deterioration; product can be left in position for up to five days; temperature tolerance - 40C to 120C; and is light and easy to handle (4.41kg per square metre). Talk to a representative from No Fuss Solutions at Stand 54 to discuss your requirements. Contact details: info@nofusssolutions.com. au. visit www.nofusssolutions.com.au or phone 1300 652 576.

NUTURF Stand 59 MOTURE

At Nuturf, our ongoing emphasis on product and service development is increasingly focused on environmental considerations. Developments must provide environmentally sensitive solutions that improve soil health and the turf ecosystem. Visit the Nuturf stand and find out about some exciting, new product developments - new pesticide registrations. new nutrition products and programmes, new diagnostic and analytical services and new seed varieties. Developing safer pest control solutions is essential to the turf industry's longterm relevance and viability. Improvements in our technical services are offered to help turf managers better plan and prepare their maintenance programmes. Our key goal is to reduce total inputs - save time and money - while achieving more resilient, high quality playing surfaces. Visit our stand and discuss these developments with our expert product management team and experienced territory managers. Book in your soil testing and learn about our new 'Turf Health Screen test - a pre-stress guide to potential nutritional, water management, disease and soil hydrophobicity issues. For the latest in turf protection product development, turf nutrition options, seed varieties, water management tools, analytical and diagnostic services, visit Nuturf - specialists providing solutions Stand

OASIS TURF * QASIS Stand 57

Oasis Turf will be showcasing its comprehensive range of turf products that have a proven record of delivering results, provide exceptional value and suit a wide range of turf situations throughout Australia. All Oasis Turf field consultants will be in attendance. plus there will be international representation by our major fertiliser suppliers, Lebanon Turf Products and Growth Products. Fairy Ring has long been a turf manager's nightmare, but now with a proven new programme available to Australian turf managers there is an answer. The manufacturer of a new product will be on our stand to answer questions regarding controlling this disease. Oasis Turf has a

strong focus on bringing new technologies and products to the Australian turf market and this will be clearly evident to visitors to our stand. Oasis Turf is fortunate to represent a number of major international and Australian manufacturers and all these companies' products will be displayed. There will be no better place to discuss new ideas, theories or ways of improving your turf than the Oasis Turf stand. We look forward to seeing you in Melbourne.

OCKER BLUE Stand 31



Visit Stand 31 to discuss how Ocker Blue can help you greatly decrease bunker washouts/ erosion, increase labour utilisation and efficiency, cut operating costs, save water and improve the overall plant/soil health and aesthetics of your golf course. Talk to us about one or all of our products. We are distributors for: SandMat - the first choice in geosynthetic bunker liners globally; TurfBreeze - surface aeration fans: Sub Air - subsurface aeration units; Tee2Green - water recycling units for machinery washdown bays; and Nutri-Tech Solutions - plant health and soil conditioning products. Whether it's for new or existing course construction or course maintenance improvements, we can help, anywhere across Australia, New Zealand and the South Pacific.

OHIO STATE UNIVERSITY Stand 96



The Ohio State University in Columbus, Ohio, USA, in conjunction with various TAFE colleges in Australia (including Northern Melbourne Institute of TAFE) have been recruiting turfgrass trainees from Australia and New Zealand for over 20 years. We will be in attendance at the 24th Australian Turfgrass Conference at stand 96 to advise and recruit potential turfgrass trainees who are single, drug free, between the ages of 19 and 28 and are willing to commit to a year in the States. Candidates must have a clean criminal record and be willing to take a drug test upon arrival. All expenses will be recouped due to the fact that all positions are paid well above minimum wage in US dollars. Housing, meals and uniforms are provided in most cases. We have an excellent choice of warm-season and cool-season courses. The university staff will give assistance with visas and health insurance. Opportunities to attend short courses/take classes at the Ohio State University are available to all who are qualified/interested during the internship. Past students have gone on to work at Pebble Beach, Pine Valley, Oakmont and Augusta National and gain excellent job opportunities both in Australasia, Europe and the Middle East. Stop by and talk with Mike O'Keeffe and past student David Goldie.

ORGANIC CROP PROTECTANTS Stand 64

We at Organic Crop Protectants (OCP) have been supplying a range of biologically based products to the Australian turf market for over 15 years. We support turf managers who see environmental stewardship not simply as a tick on their résumé but rather as fundamental to their future as successful turf managers. Turf management within ecologically sensitive areas can be tricky and OCP have a range of products well matched to these situations. Latest developments include an environmentally safe nematode management product and a broad spectrum botanical based insecticide.

ORICA WATERCARE Stand 75 LANDGUARD

Landquard OP-A reduces the risk associated with pesticide use. For every turf grower, superintendent, curator, bowling greenkeeper and racecourse manager, Landguard OP-A is designed to clean up organophosphate (OP) insecticide and nematicide contaminated water. In minutes, Landquard OP-A can reduce OP residue in equipment wash water to levels that can take years to occur naturally. It is simple to use, it is effective and requires no capital investment. Treatment reduces potential problems associated with on course disposal. Landguard provides a better environmental outcome that will minimise risk while still meeting your primary objectives: safe and satisfied patrons and neighbours. Greenex Aqua is a natural product that efficiently removes excess nutrients resulting in clearer water. By reducing these unwanted nutrients commonly found in water bodies, the natural balance of the water is restored. Greenex Aqua works using a clever two pronged approach. First, there is rapid scavenging and utilisation of soluble N and P in the water column, and second, Greenex Aqua digests organic matter, producing clearer water within days and minimising toxin levels in the water body. Greenex Aqua is effective on nutrients that lead to the proliferation of blue-green algae, microscopic algae and filamentous algae.

OZSAFE SAFE SOFTWARE Stand 88 OZSATE

OzSafe continues to be the dominant solution to the mandatory legal OH&S requirements in Australia. OzSafe has been specifically designed for golf courses, both clubhouse and course, and is a full Internet-based system which now carries an Australian patent. Each client who commits to an OzSafe system pays a once only upfront cost and a monthly ongoing fee of \$99. That ongoing fee is for software upgrades (at least two per annum), legislative upgrades and for the services of an OzSafe-trained 'monitor', whose job it is to set

up your system, including all staff profiles and a walk around of your premises. Your monitor simply sends you what you need to do each month by fax or email, you fill in the answers and send the forms back to your monitor who then does all the data entry required to ensure you are always up to date. OzSafe is close to finalising our insurance offering with Honan Insurance which will be a policy under the OzSafe master policy automatically extending to cover your directors, officers and employees in the event of statutory breaches up to \$250,000. This cover will only be \$21 per month for a golf course.

PAUL JONES & ASSOCIATES Stand 62

Paul Jones & Associates Pty Ltd has been operating since 1985 as independent irrigation consultants and has been involved with over 200 golf course irrigation projects both in Australia and around the world. The company specialises in the design and documentation of irrigation systems for the golf and landscape industries. In recent years there has been many large integrated golf and residential/resort projects combining total site management with computerised central irrigation control in many cases utilising reuse water both for golf irrigation as well as streetscapes. Our projects are spread throughout SE Asia in China, Singapore, Malaysia, Thailand, Indonesia, Hong Kong, Vietnam, Fiji and Japan as well as Italy, Scotland and, of course, Australia. The company is a freelance and independent operator. We are professional members of the American Society of Irrigation Consultants and are official landscape irrigation auditors. Services include irrigation system design and documentation, encompassing pump station and water treatment systems, water management strategies, tender documentation and tender assessment, irrigation system audits, contract administration, supervision and GPS mapping. Our philosophy is one of providing professional, comprehensive services to the irrigation industry, adopting practical solutions that suit the project requirements.

PGG WRIGHTSON TURF Stand 51 PGG Wrightson Turl

PGG Wrightson Turf is a division of PGG Wrightson Seeds, the largest breeder and producer of pasture and turf seed in the southern hemisphere. At this year's trade exhibition we are showcasing our brand new 'turf type' seeded kikuyugrass Emerald Green. Developed and grown here in Australia, it is a significant improvement on the existing seeded kikuvu cultivars available. We will have a sample of this on our stand. Come and talk to us about how your playing surface can be improved with the help from PGG Wrightson Turf.

POWERTURF Stand 2 PowerTurf

This year PowerTurf is providing solutions to problems, a complete range of products for renovations, maintenance and manicuring and new products that will blow you away. Jacobsen was founded on a commitment of providing world class products, responsive customer service and leading edge innovations. Jacobsen's industry firsts include the walking greens mower, riding greens mower, and magnetic bedknives. PowerTurf strides alongside this foundation with Australianwide distribution for Jacobsen, Ransomes, Cushman, Ryan, Turfco and Daedong. With commitment, dedicated and experienced staff and dealer network throughout Australia, PowerTurf is committed to providing top quality products to today's turf industry. This year we will be displaying a range of products: GPlex III (greens) - Jacobsen Comfort Plus controls and ergonomic design for operator comfort; TR3 (tees and surrounds) - with its unforgiving traction control; SLF1880 (surrounds and fairways) - high productivity and quality finish: GroomMaster II - latest technology for bunker maintenance; and for roughs we have the new HR330T frontline rotary mower that is a must see! We will also have the new Jacobsen Performaire deep aerator. Furthermore, our stand presents Turfco's revolutionary Triwave 60" overseeder and top-dressers and the new range of Daedong tractors. Have a great 2008 show from all at PowerTurf Australia.

PRO-FLOOR Stand 50

While visiting the 24th Australian Turfgrass Conference trade exhibition make sure you check out the fantastic products Pro-Floor has available. Pro-Floor Portable Flooring is the industry leader in portable flooring applications and best of all we are an Australian owned and operated company. Find out why leading event organisers, hire companies and major stadiums choose Pro-Floor Portable Flooring for their projects including the 2008 Australian F1 Grand Prix. Visit our website at www. profloor.com.au or contact sales manager Mark Borg on 0400 319 575 or email mark@ profloor.com.au

RAIN BIRD AUSTRALIA Stand 8 RAIN BIRD.

Complete confidence in your irrigation system gives you peace of mind. Rain Bird understands your need to get the most from your irrigation system. Our industry leadership and sole passion is irrigation and we continue our commitment to innovative irrigation solutions every day. Rain Bird Corporation -Golf Division manufactures a wide range of irrigation products for golf courses - pump stations, Rain Bird EAGLE Gear Drive Rotors, field controllers, map-based central irrigation

systems, decoders, swing joints, flow meters, filtration systems and valve and irrigation accessories. Rain Bird Central Control and Pump Station components are serviced and supported by a comprehensive Global Service Plan (GSP). We invented irrigation technology and continue innovating every day. We are the world leader in irrigation expertise with a proven reputation for high quality products and services. See our new product releases including MI Series Mobile Controller, Version 6 Software and the launch of the New Eagle Series Rotors. For further information regarding Rain Bird golf course irrigation system expertise, visit us at Stand 8 or contact Rain Bird Australia Pty Ltd on 1800424044 or at www.rainbird.com

RURAL SOLUTIONS SA Stand 77

Rural Solutions SA is a multi-faceted consultancy business combining economic, environmental and social dimensions. Our specialist team of consultants has been created to provide professional environmental services. We deliver the best of both worlds - a commercial focus and government connection. Rural Solutions SA and our partner organisations present an opportunity for the golfing industry to access the skills of many consultants and team players. Our commitment is to develop projects that complement your own resources, to understand local issues and provide professional assistance. Our consultants are knowledgeable in a range of areas from native grassland ecology to plant pathology, control of pest animals and plants, degrees in natural resource management and landscape architecture, water management and climate change. We do not merely advise on what needs to be done, we recommend the most effective processes to achieve the best results and we are happy to 'roll up our sleeves' and get right into a project, providing planning and management skills as well as hands-on involvement. At Rural Solutions SA, we are committed to positive outcomes. If we say we will deliver something, we do. Visit our display or contact Michy Kris on 0438 440 229.

SCOTTS AUSTRALIA Stand 33 Scotts

Scotts Australia is part of the global Scotts Company servicing the professional turf market in both Australia and New Zealand for over a decade. Scotts is a recognised leader in the industry, producing and supplying specialty fertilisers - Sierrablen and Sierraform GT: pest control products - Scotts MaxGuard (offering fast acting, contact insecticide in a choice of granular, liquid and granular combined with slow release fertiliser); combination products - Dicot II, Premax; wetting agents - including Hydraflo II, Hydraflo L and Hydraflo NPK

plus a new range of turf seeds through the acquisition of The Turf Seeds Company - USA. The latest introduction from Scotts is Sierraform GT, containing unique slowrelease potassium technology. It provides advantages such as protection against stresses, proven increased efficiency of turf water consumption, maintains a higher bank of 'available K' in the profile, accelerated disease recovery and maintains equilibrium of magnesium and calcium uptake. Scotts is pleased to be the continued sponsor of the 2008 AGCSA Distinguished Service Award. In addition, Scotts are hosting a 2008 darts competition. At Scotts we strive for excellence and quality from manufacture through to the end user. You can rely on the Scotts philosophy - a world of local knowledge.

SEEPAGE CONTROL Control, Inc.



Since 1958 Seepage Control has manufactured ESS-13, a liquid polymer emulsion that reduces hydraulic conductivity of the soil, thereby decreasing water loss due to seepage. ESS-13 is a vegetable oilbased product that is cost effective as a liner and seepage sealer and because it is vegetable based it is compliant with EPA regulations and ESS-13 toxicity levels have been tested and found to be 500 times lower than the EPA requirements. For lakes that are full or partially full, the most economical option for reducing seepage is the waterborne treatment. The product is simply poured into the existing body of water, and over the next 72 hours migrates through the water. During this process the product fills voids and binds with soil particles causing the majority of the sealing. The waterborne treatment creates a situation that also improves with time. The spray-on method has shown versatility in being a useful treatment in areas where heavy equipment is difficult to operate, as well as projects requiring an exceptionally low permeability. The spray-on can be used with most native soils to achieve a very good seal, and if integrated with a semi-treat and compact treatment, can achieve the lowest possible hydraulic conductivity.

SIGMA MAT/KEYGREEN Stand 42 KEYGREEN

Sigma Mat is a patented turf protection mat, honeycomb structured, designed to protect turf from intensive golfers' tracks. Several technologies incorporated; easy sliding hook, anti-sink and anti-aging.

SIMPLOT PRO-LINE

Stand 35 Simplot

Simplot Pro-Line is once again proud to sponsor the 24th Australian Turfgrass Conference in Melbourne. As leaders in turf

nutrition and plant health, Simplot Pro-Line this year will continue to showcase our Best granular fertilisers along with our Signature series liquid fertiliser range. We will again be running our competition to attend the annual study tour of the GCSAA Golf Show to be held in New Orleans in February 2009 ,this includes three days at the world renowned Farmlinks in Alabama, the home of Polyon. See one of our territory managers on how to enter. The Grass Roots Blues Night "The Tradition Continues", featuring The Kevin Borich Express and friends, is on again and will be held at The Star Bar (160 Clarendon St, South Melbourne) on Tuesday 22 July from 9pm until midnight. All those that wake with sore heads would be advised to head straight to Stand 35 at the trade exhibition on Wednesday morning to the 'Simplot Recovery Station where we will attempt to get you back on track. See you at the show!

SPORTCRETE

Stand 65



Sportcrete is a polymer bonded aggregate system that is strong yet porous. It has applications in golf as a bunker system and a cart path system, tennis, hockey, football and other sports like synthetic lawn bowls. It is a flat and level free-draining base. Sportcrete has over 1500 installations worldwide and is time proven with the first installation done in Red Hill, Victoria over 15 years ago. Sportcrete will have an interactive display at the show highlighting the profile, strength and porosity. The product has been tested here in Melbourne and by recognised organisations in the UK and US. The Sportcrete bunker system shows how this one product is a bunker drainage system, a bunker liner and a bunker sand stabilising system all in one. The Sportcrete systems are competitively priced and can be supplied as turn key, subcontract or supply-only installations. Sportcrete is an Australian designed and patented product that is supplied worldwide to some of the largest sports field contractors. The golf system has been used at Greg Norman, Jack Nicklaus and Robert Trent Jones designed courses. Take the time to come and visit us at Stand 65; we may have the solution to some of your problems.

SYNGENTA Stand 5 syngenta

The Syngenta turf team will endeavour to shine some sunlight on your winter turf issues at this year's conference in Melbourne. Local and international experts will be on hand to provide advice and recommendations regarding your turf issues and queries. Our stand will showcase some of our unique technology and products, as well as easy to read turf management literature. We'll provide you with an insight into the strong suite

of products in our development pipeline, while also informing you of our turf specific solutions and management tools already available. In particular we will demonstrate some of the benefits you can receive from implementing a customised preventative programme. Complementing our workshop, 'Diagnosis to Decision Making', we will be providing comprehensive up-to-date industry information on specific problems and how to provide a comprehensive management package that does not just provide band-aid options, but a suite of solutions. With prizes to be won, a wealth of information to be shared and giveaways galore, we're looking forward to catching up with you in Melbourne.

TGAA Stand 91

The TGAA provides support and technical assistance for the turf industry to deliver environmentally sustainable surfaces for sport and recreation. The TGAA was formed in Melbourne after a meeting at the MCG in November 1989. The TGAA was formed to give all turf managers and allied trades a single representative body. Up until this time the turf industry had been represented by organisations like the Australian Golf Course Superintendents Association, the Royal Australian Institute of Parks and Recreation and the various state bowling greenkeepers associations. This meant many sports field curators, racecourse managers, council workers and those connected with the industry. such as chemical, fertiliser and irrigation personnel, had only a small amount of input. Our membership is made up of industry representatives from soil, seed, instant turf and machinery suppliers. In addition, we have very close links to the Victorian Cricket Association, AGCSA, Melbourne University and TAFE colleges. The formation of the TGAA meant that everyone associated with the industry, no matter how small, had a say. The TGAA set up a Victorian division, which was closely followed by the ACT, Southern Tablelands and Murray regions. We now have a national body made up of representatives from all states.

THE GROUNDSMAN MAGAZINE Stand 61

At the 24th Australian Turfgrass Conference you will find The Groundsman at Stand 61. Amber will be there to help you with all your questions in relation to both advertising and subscriptions. The Groundsman will have many giveaways and specials on offer to trade show attendees only including magazines, pads, advertising vouchers and Internet advertising packages. For those of you who are not fortunate enough to be on our subscription database already, we will happily supply you with the current issue.

On display we will have all issues of The Groundsman produced over the past five years. Copies of past issues will be available on request. The Groundsman magazine is your premier resource for buying and selling new and used turf equipment. Why? Because The Groundsman is the first publication turf care professionals turn to when looking to buy the right equipment at the right price. The Groundsman, with a bi-monthly circulation of over 10,000 copies, is guaranteed of reaching your target market throughout Australia and New Zealand. Keep an eye on our website www.thegroundsman.com.au as it will soon feature searchable listings of second-hand and new machinery, along with a directory of business listinas.

TORO AUSTRALIA – COMMERCIAL TORO Stand 1 Commercial Equipment

For many years, Toro commercial turf equipment has been considered some of the very best machines in the business, with features that have won fans Australia wide. Toro Australia continues to provide unparalleled service and new technical innovations across all of the ever-expanding fleet. Each Toro model is designed to make the job safer, easier, more economical and kinder to the environment, while making your course one of the finest. As part of this, two new Groundsmaster models will be launched at the 24th Australian Turfgrass Conference trade exhibition highlighting a continued focus on groundbreaking technology and ecosaving benefits. Whether it's a championship golf course or your own golf club, the name Toro is synonymous with golfing paradise. Discover the Toro difference and be a part of the finest turf equipment story in Australia. For more information please contact Toro Australia on (02) 8787 4100.

TORO AUSTRALIA – IRRIGATION TORO Irrigation

A visit to the Toro Irrigation stand at the trade exhibition will leave you with a clear direction for handling the irrigation challenges faced every day by superintendents. Well known for constant innovation in product design and a complete range catering for all your course watering needs, Toro Irrigation will showcase our core range of golf products, from the tried and trusted, such as VP satellites and 835S/855S sprinklers. to our latest additions and even advanced showing of several upcoming products. Our professional team of technical and sales staff will be on hand to discuss your irrigation needs and challenges. Our aim is to give you confidence in the ongoing management of your existing system or even to help you plan for an upgrade or renovation to a more efficient and technologically advanced system. Ask the questions and find solutions within our extensive range of products designed to save money and water on the course. Highlighted products this year include the new DT series sprinklers, the Strike Guard Lightning Warning System and an exciting preview of the Toro Turf Guard wireless soil monitoring system. Come along and visit us at the Toro Irrigation stand to see more.

TRIANGLE FILTRATION AND IRRIGATION Stand 37

Triangle Filtration and Irrigation is an Australian owned company that has been established for nearly 25 years as a major distributor of irrigation equipment to the golf course and agricultural irrigation markets. We have been and continue to be a major supplier of filtration equipment to the golf course industry Australia wide. Over the vears Filtomat fully automatic self-cleaning screen filters have developed a reputation for reliability and dependability and even more so as golf courses need to rely on treated effluent water for irrigation. Additionally, we will be exhibiting the ITC range of electric fertigation injection pumps which can be installed to operate fully automatic with a controller and sensors or as a manually controlled system. Should your requirements be as simple as applying wetting agent on an irregular basis or injection acid for pH correction with every irrigation, we will have equipment on display to suit your application. Other products on display will include water meters, hydraulic control valves, impact sprinklers and manual filtration equipment. Our head office is in Melbourne with branch offices in Perth, Sydney and Brisbane. Key contacts are managing director Wally Menke and national marketing manager Gary Horton.

TRU MATCH Stand 68

Tru Match is a unique Australian invention for sharpening cylinders, bottom blades and truing sole plate supports. The operations can be all carried out on the one machine. It is capable of grinding any size cylinder out of its frame or in its frame. It can grind relief, or simply sharpen an edge. The machine is simple to use and its ingenious design gives a perfect matching surface on all parts. It is portable, and easily stored. It is a manual machine with simple controls doing the same quality job as machines four times its price and meets all OH&S standards. For information email qualturf@bigpond.com

TRU-TURF Stand 26

Tru-Turf's history in designing and building

golf greens rollers dates back to the early 1940's. With innovative design, we have been able to produce a quality, lightweight roller that is exported to England, Scotland, Ireland, Sweden, Spain, Germany, Austria, USA, Canada and Asia. Since 2003, the US PGA Tour has been using our Roll 'n' Spike golf greens rollers for preparing the greens for their prestigious tournaments and in 2008 we will roll 63 PGA Tour, Champions Tour and Nationwide Tour events. Sales of all rollers have increased significantly over the last four years due to the licensing by the PGA TOUR, ongoing product design and improvements and the reliability and ease of use of our equipment. In recent years we have exhibited the RS48-11C roller and MT5000 tote for walk behind mower as well as released the R52-11T, a triple head roller with a width of 1321mm in petrol and electric versions. Other products on display at the Melbourne trade exhibition include the R52-ELT and GR11000C as well as the Buffalo Turbine KB3 blower. For information on our range of turf maintenance equipment, visit us at www.truturf.com

TURFCRAFT MACHINERY AUSTRALIA Stand 7

TurfCraft Machinery Australia specialises in turf maintenance machinery, importing fine quality machinery to maintain all aspects of the turf industry, including synthetic surfaces. With 30 years' of experience we offer the industry the most comprehensive range of turf equipment and specialist vehicles. On our stand we will have world known brands of machinery include: Soil Reliever deep tine aeration equipment from Southern Green; Sisis equipment for sweepers, seeders, scarifying, multi-tine aerators, slitters, top dressers, hydraulic tractor mounted reel mowers; SmithCo for bunker rakes, tournament express greens rollers, tractor-mounted blowers, ride-on sweepers, spraying vehicles and equipment; Turfworks international greens mower cassette systems that fit all makes and models of rideon greens mowers. This system is designed by greenkeepers for greenkeepers and is classed as one of the most innovative products for greens maintenance in recent years. Also on our stand will be hover mowers and the innovative Bunker Blaster sand trap water removal system. This little machine will fit any make and model bunker rake and will clear 1300l/m. TurfCraft Machinery Australia - for all your turf maintenance machinery: aerators, scarifiers, seeders, sweepers, greens rollers, bunker rakes, mowers, new and quality used equipment. Better machines, better solutions. every application.

TURFCRAFT INTERNATIONAL Stand 72 TOWN

TurfCraft International magazine combines a

practical, hands-on approach and articles with technical stories from both local and overseas experts that give readers the best possible information. Columnists including Peter McMaugh, David Nickson, Jon Scott, Rod Riley have a wealth of knowledge combined with articles on leading turf managers who are putting knowledge into practice. TurfCraft has been supporting the turf industry for more than 21 years, the past 10 years under editor Alastair Dowie. Alastair and advertising manager Ed Kryskow are strong supporters of the industry and will be on the stand at the trade show to discuss any topics or issues with delegates. We particularly want to hear from you about what you want in the magazine and any news or information that might interest other readers. TurfCraft's aim is to cover every section of the turf industry in each issue. TurfCraft is the official publication of the Turf Producers Australia as well as supporting the TGAA in Victoria, NSW, the ACT, SA and WA, the bowling greenkeepers, associations in Victoria, NSW and Queensland. Ed and I look forward to meeting any readers who call by Stand 72.

TURF LINK Stand 19

Turf Link Australia Pty Ltd is proud to be associated with the 24th Australian Turfgrass Conference and Trade Show. Over the past 12 years we have introduced a number of quality innovative turf products to the Australian market. Our commitment to the industry is proven by our long association with international and local manufacturers. We offer and support the following innovative products: Lastec Articulator mowers - both trail behind and zero turn models; Wiedenmann deep tine aeration and renovation equipment; Wiedenmann debris collection equipment; Amazone debris collection and renovation equipment; SIP reel maintenance and grinding equipment; Buffalo blowers; and the Australian made Tru-Turf greens rollers. This year at the show we are featuring: Lastec Articulator's new diesel zero-turn mowers true high-definition mowing; Lastec's new 100" series out-front Articulator deck to suit John Deere, Kubota and Iseki; Blec seeders - the professional's choice - which feature 1500 holes per square meter allowing a fantastic strike rate of the seed as well as new innovative floating seed prep rollers. Our staff at the show will be happy to show you the features of our products and answer any questions you may have. See you at the show.

TWIN VIEW TURF

Twin View Turf is a supplier of quality turf varieties and services, supplying commercial landscape, recreational sports and residential

markets. Servicing the greater Brisbane, Sunshine Coast, Gold Coast, Northern Rivers and Toowoomba areas, Twin View Turf is dedicated to customer service, the growing of quality turf products and providing the right advice. Turf varieties include Sir Walter, Empire zoysia, Wintergreen couch, Greenless Park, TifSport, TifEagle and Queensland blue couch. Our services include site preparation, turf installation, maxi rolls, sportsfield renovation services and turf stolon planting.

TYCROP Stand 9

Since 1985, Tycrophas worked with commercial turf managers and golf course superintendents to design some of the best material handling and top dressing equipment. Available exclusively in Australia through Toro Australia, this line of products gives maintenance crews the ability to work better, faster and with less manpower to achieve exceptional turf grass surfaces and improved playing conditions. The Tycrop range features the new Propass 180 among other leading turf equipment. This new machine offers efficient and smooth ultralight to ultra-heavy top-dressing, to accurately top-dress turf and maintain a beautiful golf course. Truck mounted or tow behind, the Propass 180 can literally top-dress a green in less than 60 seconds making it a machine you cannot go past. See more of the Tycrop range at the Toro Australia stand and see the difference these machines can make to your golf course performance and playability. For more information please contact Toro Australia on (02) 8787 4100.

UNDERHILL INTERNATIONAL Stand 60 Underhill

Underhill International has released a new golf product catalogue that spotlights the company's expanding line of irrigation accessories. The full-colour catalogue features site photos, product details and specifications. Underhill's growing line includes specialty equipment for improved golf course irrigation and maintenance. The catalogue is free to golf course professionals and will be available at the trade show or by emailing Chris Smith csmith@uicorp.net. Featured in the new catalogue are: FCI Profile high uniformity metal replacement nozzles for Toro and Rain Bird golf rotors; Magnum and Precision solid metal spray hose nozzles and CoolPro cooling nozzles; HoseTap hose adapters; Tracker portable irrigation vehicles; PelletPro and LiquidPro applicator guns for wetting agents: Nastek stress detection glasses; Deep Drip tree watering stakes; and Gulp Series water removal pumps. All Underhill products can be viewed on the company website at www.underhill.us. Also featured at the Underhill booth will be the EZ-Flow patented fertigation line system. Used for the automatic dispensing of water soluble or liquid fertilisers into your irrigation system, install at the pump or anywhere on the course with proven water and fertiliser savings. Details at www.ezflofertilizing.com. All the products will be showcased at the Underhill stand (No.60).

VELVETENE VELVETENE Stand 69

Velvetene is a Plant Breeders Rights registered variety of seashore paspalum, which exhibits significant salt tolerance and grows in a wide variety of soil types and pH levels. Velvetene has good drought and low light intensity tolerance, good cool weather colour retention and requires lower daily levels of both water and fertiliser than traditionally used Bermuda grasses. The grass is ideal for a range of applications including sports fields and golf courses (including greens) with mowing tolerances as low as 2.5mm. Velvetene has been successfully trialled and is currently used by councils in WA. SA. NSW and QLD. Ongoing trials are being monitored on golf courses in Adelaide, Sydney, Gold Coast and Bundaberg with the first full 18-hole course in Australia (Ipswich Golf Club) to be planted wall-to-wall with Velevetene. First produced commercially by Turf Farms WA, Velvetene is supported by a number of experienced people from within the industry. Craig Flugge (Turf Farms WA) and Darren Allan (Ocker Blue), based on the Gold Coast, are currently working to develop a group of registered growers to service the expanding Australian market. For more information contact Craig Flugge or Darren Allan on (07) 5534 6996, or see us at Stand 69.

ENVIRONMENTAL AND WATER MANAGEMENT ZONES

A new feature of this year's 24th Australian Turfgrass Conference trade exhibition will be the interactive Environmental and Water Zones. Both zones will feature products and services designed to help improve the environment and water management operations at your turf facility, as well as information about how to join the AGCSA's Environmental Initiative and Water Initiative. Terry Muir and Dean Scullion from e-par will be on hand in the Environmental Zone to help you with implementing and/or developing an environmental management system, while the Water Zone will have access to the groundbreaking website portal which forms the central component of the AGCSA's Water Initiative. The portal will assist turf managers with their water management solutions and the AGCSA will be seeking feedback and comments about this new and exciting service.





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Sensor depth

0mm deep

First indication of effective water application

Monitor changes in infiltration

150mm deep

Observe root zone activity

200mm deep Prevent nutrient losses

250mm deep

Confirm strategic leaching

Monitor perched water table

Irrigating fairways, greens and tee boxes requires real intelligence and the world's most advanced soil moisture technology.

The new generation of GolfLinx water management systems gives you the definitive tools and intelligence to understand the turf environment right through the soil profile.

No other soil moisture probe in the world provides data at every 50mm increment through to a depth of 300mm.

GolfLinx gives you back the control to promote healthy turf, reduce water and energy consumption and increase the accuracy of fungicide and additive placement.

Competition level golf courses use GolfLinx systems to maximise these benefits while improving playability and fine tuning greens.

A modular, no maintenance design and an open and common platform enables plug and play connectivity. Manual, radio or cellular download options are available for delivering data online or to PC-based software.

A growing distributor network means there are GolfLinx dealers located across Australia – and support is just a phone call away.

GolfLinx - Intelligence in every drop

For more information go to www.golflinx.net or call (08) 8416 9900





Foundation to **enhance** golf environment

n 2005, the Environmental Initiative was established as a partnership between the Australian Golf Course Superintendents Association and Golf Australia. Its three primary aims were to promote care of the environment on Australian golf courses, recognise the environmental values of Australian golf courses and encourage all courses to develop and enact an ISO 14001-compliant environmental management system (EMS).

As part of the Environmental Initiative, the Australian Golf Environment Foundation (AGEF) has been formed recently to administer the funds derived through the Environmental Initiative. The Environmental Initiative generates funds through commissions from the sale of the e-par EMS and also receives donations and grants from golf clubs, organisations and trade groups involved in the golf maintenance industry.

All funds are directed to the AGEF for the express purpose of funding research projects, education programmes and study bursaries related to managing the golf course environment. An advisory board chaired by AGCSA Board

In this edition's instalment of AGCSATech Update, John Neylan looks at the recent formation of the Australian Golf Environment Foundation and expounds the virtues of going back to basics and ensuring the turf management fundamentals are all in order.



member John Odell (superintendent Royal Sydney Golf Club) has recently met to discuss the purpose and operation of the AGEF. We The Australian Golf Environment Foundation aims to use science and education to benefit golf in the area of environmental management, protection and enhancement

now have a structure in place for the foundation as well as some funds and are now preparing to initiate some work as it relates to golf and the environment.

The AGEF has established a mission statement as follows:

"The purpose of the Australian Golf Environment Foundation (AGEF) is to use science and education to benefit golf in the area of environmental management, protection, and enhancement". The AGEF has also established a number of key objectives which are:

- Ensure the environmental sustainability of golf into the future;
- Promote the environmental values of the golf environment to the wider community;
- Develop a communication strategy that not only embraces those involved in golf but also other environmental groups (e.g. Australian Conservation Foundation and the organisations that regulate the environment);
- Foster research into the golf course environment including;
 - Indigenous flora and fauna.
 - Water quality.
 - Integrated Pest Management (IPM).
 - Energy management and greenhouse gases.
 - Waste management.
- Provide education programmes on the environmental management of Australian golf courses.
- Work with other environmental groups that relate to the golf course environment (e.g. Birds Australia, frog groups etc.).

At the first meeting of the foundation's advisory board the following research priorities where determined;

- Undertake a detailed review of the literature to compile the existing information that relates to golf courses and the environment and to identify the gaps in the information that will require further research.
- Initiate a pilot study on measuring the carbon footprint of Australian golf courses. It is proposed to undertake this study on a range of golf courses from heavily treed to links style in a variety of climates and with differing levels of resources.
- Undertake a survey of Australian golf courses to determine their contribution to Australia's green space in the urban environment. In particular, this would include determining areas and diversity of indigenous vegetation and fauna surveys.

GETTING BACK TO BASICS

As we travel around Australia and visit many different golf courses, it is interesting to note that many of the turf problems that occur relate to fundamental turf management principles. In particular, it concerns excessive organic matter accumulation and soil compaction.

With the demands for year round, high quality playing surfaces, the intensity of renovation programmes can often drop off, allowing thatch to accumulate and soil compaction to go unchecked. These problems are of particular concern on old greens or greens that have been constructed from finer textured soils.

ORGANIC MATTER ACCUMULATION

Excessive organic matter is often referred to as thatch or root mat and can be frustrating to the golfer as it leads to wet and soft surfaces, excessive ball marks, foot printing and inconsistent ball roll. For the golf course superintendent it can mean increased likelihood of disease, scalping of the turf and hydrophobic (water repellence) soil conditions developing over the dry season.

Along with the challenges it presents to the golfer and the superintendent, excessive organic matter can also have a dramatic negative impact on the function of the greens profile. Modern golf greens are built to strict specifications (or should be) with drainage being one of the most, if not the most important characteristic. However, after a green is constructed and planted, its characteristics can quickly change due to the accumulation of organic matter from roots and decaying plant material.

From the first moment following planting and during the grow-in phase with ample water and high fertility rates, turfgrasses begin to create organic matter. In fact, in many instances much of the organic matter accumulation can occur



in the first 12-18 months after planting. Many of the new bentgrass and bermudagrass hybrids, while providing superior surfaces, do have the tendency to be vigorous thatch producers (see Tables 1 and 2) which necessitates early thatch control.

The drainage rate of the sand used to construct a golf green is dependant on the amount of macropores (large spaces in the sand matrix) within the profile. The accumulation of organic matter fills and reduces the number of macropores and therefore reduces the drainage rate of the profile.

Research has consistently demonstrated that as the organic matter content in a sand mix increases to above 4-5 per cent (by weight), the number of larger soil pores (macropores) between sand particles decreases due to clogging by organic matter.

Not only is the amount of organic matter detrimental to a putting green profile, but in some cases it is the nature of the organic matter. Organic matter can occur in the sand layer as either mainly live roots or a more gel like substance as roots die. Roots naturally die during high stress periods of the year, such as during times of high temperatures, high humidity and low light intensity.

It is not just the lack of roots from root dieback that is the problem, but the creation of an excessively moist layer with very low oxygen in response to the rapid root dieback, resulting in the inability of the remaining roots to take up sufficient moisture for transpirational cooling.

Other symptoms that are witnessed with excessive accumulation of organic matter are increased moisture retention due to the reduction of macropores and the subsequent increase in small pores (micropores) which hold water. Declining root growth has also been seen and may well be attributed to either lack of oxygen or increased moisture retention in the top of the profile due to organic matter.

In addition to the accumulation of organic matter within the sand or soil matrix, there is also the formation of a layer of solid organic matter or root mat in older greens that is a concern. This mat layer can hold up to four to five times more water than the underlying sand and forms a perched water at the sand and organic layer interface. The root mat layer also has a lower infiltration rate that restricts water movement off the surface. The end result is a constantly wetter surface after rain and irrigation.

CONTROLLING ORGANIC MATTER ACCUMULATION

The traditional means of controlling organic matter accumulation when I started in the turf industry has been to scarify, hollow core and heavily top-dress twice a year. This process was very disruptive, recovery was often slow, provided an excellent seed bed for *Poa annua* and resulted in a layered profile where soil water movement is disrupted.

In research work by Nickson it was demonstrated that scarifying has very little effect in organic matter control and that regular sand dustings and coring is the most effective measure. With the new bentgrass and bermudagrass cultivars they have very slow lateral growth rates and are slow to recover form deep scarifying.

In terms of modern day greens management, organic matter control is best achieved by regular light sand dustings. Dusting provides a constant dilution of the organic matter and reduces the need for highly disruptive renovations.

A dusting program consisting of an application of 0.06-0.1 cubic metres of sand per 100m² of turf every 2-3 weeks in good growing conditions maintains a more consistent profile,

TABLE 1: MEAN THATCH DEPTH OF BENTGRASS CULTIVARS (AGCSA TRIALS, 2005)

Thatch depth (mm)												
Cultivar	9/10/01	8/05/02	27/2/03	21/01/04	30/9/04							
Penncross	12.0	7.3	12.7	12.7	18.7							
Egmont	10.0	9.0	11.0	17.3	21.0							
Penn A1	12.3	12.3	18.0	18.7	22.0							
Penn A4	12.0	10.0	16.0	18.7	22.7							
Penn G2	11.3	10.3	16.7	18.0	24.0							
Penn G6	13.0	9.0	17.3	17.0	21.7							
Cato	11.3	10.3	17.3	19.3	22.3							
Pennlinks	12.7	8.7	11.7	19.0	22.3							
L93	13.3	8.7	15.3	17.7	21.7							
Dominant	11.3	9.0	16.3	17.0	20.7							
SR7200	12.3	8.7	18.7	18.0	21.3							
LSD (P<0.05)	NS	2.5	NS	3.4	NS							

improved drainage and firmer and truer putting surfaces. The frequency of dusting relates to the rate of growth and during periods of slow growth the frequency is reduced.

It is noted that on golf courses that have been on a core aeration programme where 15-20 per cent of the surface area has been impacted each year, the putting surfaces are of the highest quality. The amount of area impacted will be a result of the frequency of operation, tine spacing and tine size. For example, using 12mm diameter tines with a spacing of 50mm x 50mm impacts about 5 per cent of the surface area. This can be quadrupled to nearly 20 per cent if done on a 25mm x 25mm spacing.

The greatest advantage of using hollow coring in any renovation programme is that it effectively removes 100 per cent of the organic accumulation with the tine diameter and breaks through any layers that may occur due to any disruptions in the dusting programme. Imported sand can then be placed in these core holes to provide an homogenous sand from the surface down to the rootzone. This also enables those core holes to remain open after the renovation period.

SOIL COMPACTION

All soils are subjected to compaction where the solid particles are rearranged and forced closer together which results in a loss of macroporosity (large pore spaces). With finer soil types, the fine silt and clay particles are forced in between the larger pore spaces and increase the clogging of the profile. Macroporosity is the primary means by which drainage occurs in soils and is responsible for gaseous exchange in the soil profile (i.e. soil aeration).

Large pore spaces are crucial for the development and health of the root system



with root growth ceasing at low oxygen levels. Root depth and density is difficult to maintain under the best of soil conditions with a natural decline in root mass occurring over time. Soil compaction further compounds this decline in root mass.

The move towards sands as the predominant soil type used in greens construction is largely in response to the older loamy sand (usually with less than 5 per cent silt plus clay) type greens failing over time as a result of compaction. The sands specified for greens construction naturally have a high macroporosity and greater resistance to compaction. However, it must be said that if there is a small departure (particularly in the fines fraction) from this specification the advantages of a sand profile can be lost.

As soils are compressed and there is a loss of macroporosity there is an increase in the small pore spaces (micropores) which are responsible for increasing moisture retention.

Soils that are compacted have;

All soils are subjected to compaction where the solid particles are rearranged and forced closer together which results in a loss of macroporosity

- A high bulk density (i.e. an increase in the proportion of solid particles compared to pore space):
- Reduced drainage rate;
- Increased moisture retention and are wetter; and
- Reduced oxygen movement into and carbon dioxide movement out of soils.

Compacted soils in golf greens are typically wetter in the wet months and due to a poor root system tend to move into moisture stress more quickly during the dry months. Root growth is also affected which is critical in maintaining a healthy turf that has the ability to tolerate various stresses related to heat, drought and disease.

CONTROLLING SOIL COMPACTION

Controlling and overcoming compaction is all about increasing the proportion of macropores with the methods employed to control compaction relating principally to the soil type.

On well maintained sand profiles, regular deep narrow tine aeration is all that is often required. With finer soil types and heavily compacted profiles, the amount of soil disruption needs to be increased in order to increase the macropores.

With any soil de-compaction programme, thought must be given to what will happen to any excess water once the profile is opened up. Greens that have little subsoil drainage can become waterlogged if they are opened up in late autumn or prior to rain. With any decompaction process it also needs to be undertaken at a time of the year when growth is strong and recovery is quick. 44

TABLE 2. QUANTITATIVE THATCH MEASUREMENTS (MM) FOR ALL MOWING TREATMENTS ON 23-24 JANUARY 2008 (QDPI&F AND AGCSA, 2008)

Cultivars	2.7mm cut (no roll)			3.5mm cu	3.5mm cut (no roll)			3.5mm cut & roll		
	1 Kg N	2 Kg N	4 Kg N	1 Kg N	2 Kg N	4 Kg N	1 Kg N	2 Kg N	4 Kg N	
Cynodon Hybrid:										
MiniVerde	20.8	19.5	20.8	16.5	20.8	18.0	20.5	17.8	17.5	
MS-Supreme	15.8	18.0	13.8	16.0	16.0	15.3	16.5	14.8	14.5	
Novotek	19.0	17.0	16.5	16.8	19.5	17.0	21.0	15.3	17.8	
Tifdwarf	13.5	13.3	12.5	12.0	11.8	13.0	13.0	15.8	12.8	
TifEagle	16.3	14.5	17.0	17.3	17.5	20.5	16.0	16.8	16.8	
Tifgreen	12.5	13.8	14.8	17.8	15.3	15.8	15.0	14.3	16.3	
LSD (P=0.05)	5.2	5.8	6.1	5.1	5.0	4.2	3.5	4.2	3.0	
Paspalum:										
Sea Isle 2000	17.5	17.8	17.5	19.3	18.8	20.0	20.3	18.3	16.8	
Sea Isle Supreme	17.0	15.3	19.5	17.5	18.5	17.8	17.8	21.5	19.8	
Velvetene	17.3	17.0	17.3	18.0	18.8	17.3	18.8	17.5	18.5	
LSD (P=0.05)	3.1	3.5	4.6	6.4	4.1	4.7	7.6	7.3	7.1	

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No 14 Jalan P10/19, Section 10, Selaman Industrial Park, 43650 Bandar Baru Bangi, Selangor, Malaysia +603-89211596 Over the past 18 months the AGCSA has been undertaking *Poa annua* trials at Commonwealth Golf Club and Bonnie Doon Golf Club.

AGCSA technical officer Andrew Peart has been heavily involved with project and in this instalment of Tech Talk reviews the findings to date and looks at how they compare with other research, in

particular with regards to pre-emergent control.

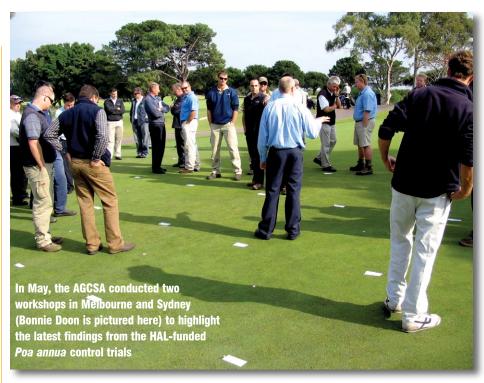
ith the completion of the AGCSA Accredited workshops held in Melbourne and Sydney during May, there were some interesting findings revealed regarding the current HAL-funded Poa annua control trials being undertaken by AGCSATech.

First, was the large variety of *Poa annua* biotypes observed in a sample taken from one of the putting greens, the susceptibility of these biotypes to commonly used post-emergent herbicides, and finally the results obtained with the use of pre-emergent herbicides, particularly bensulide, at the Commonwealth Golf Club trial site in Melbourne.

There were seven distinct biotypes observed in the trial green at Commonwealth Golf Club, however, none of them were classified as the true annual variety *Poa annua* ssp. Annua (see AGCSATech Update, Australian Turfgrass Management Volume 9.5 Sept-Oct 2007 for a full description of each type).

The true annual types are non-stoloniferous with a bunched growth habit and the ability to produce between 1000 and 2250 seeds in a season (McCarty, 1999). The concern for superintendents is that when these seeds ultimately germinate they can grow and tiller, sometimes unnoticed, and the first sign of their existence maybe when they produce a seedhead for the first time.

The perennial biotype (*Poa annua* ssp. *reptans*) is far more prostrate in growth habit and appears to have evolved on closely mown surfaces. While perennial types have the ability



Poa annua control measures

to form seedheads and flower, their spread appears to be more vegetative from stolon growth. It is these more perennial types that appear to dominate the sward later in the year when the true annual or more annual biotypes have died out.

SUSCEPTIBILITY OF BIOTYPES TO POST-EMERGENT HERBICIDES

Herbicide tolerance work conducted by the AGCSA on the seven biotypes (represented by the letter T in Figure 1) identified at Commonwealth Golf Club showed that no single biotype was susceptible to the point of outright kill when using herbicides containing the active ingredients endothal and propyzamide and the growth regulator paclobutrazol at the recommended label rate.

Propyzamide provided the greatest control, however, this chemical is not recommended for use on bentgrass greens, but was used to assess the susceptibility of all biotypes. The densest biotype of all, Type 1, had very little susceptibility to propyzamide as well as endothal and paclobutrazol.

Endothal had little effectiveness on any biotype after a single application, however, provided greater control with a follow up 34 days later. Possibly this effectiveness could well have been enhanced even with a follow up application being conducted earlier than this.

The effect of paclobutrazol on all biotypes was limited and reinforced the nature of the product as a growth regulator rather than an herbicide. Paclobutrazol is targeted towards a

transition of the sward population by retarding the growth of the *Poa annua* to give the bentgrass a competitive advantage. It was observed in both the AGCSA trial sites and speaking with superintendents that once applications of paclobutrazol are stopped there would appear to be an increase in the *Poa annua* population.

PRE-EMERGENT HERBICIDES

Bensulide (trade name Exporsan) and dithiopyr (trade name Dimension) have both been used as pre-emergent herbicides in the AGCSA trial. Dimension does not have turf registration for the control of *Poa annua* in bentgrass greens, however, has been used in these trials to assess its efficacy.

Results obtained to date indicate that bensulide has provided greater control when used in combination with paclobutrazol with or without ethephon compared to dithiopyr.

Research conducted by Watscke and Borger (2000) found that areas treated with Dimension had significantly less *Poa annua*, while those treated with bensulide were intermediate but tended to be less contaminated than areas not treated. This research was conducted on a green with less than 1 per cent *Poa annua* at the time of commencement compared with the AGCSA trial that had around 10 per cent *Poa* at the Commonwealth site and around 20 per cent at Bonnie Doon.

Hart (2004) conducted research between 1999 and 2001 with both bensulide and dimension on L-93 bentgrass to assess any damage to the bentgrass. Three different rates of Betasan (bensulide) and Dimension were used and assessed. In 1999 no herbicide treatment reduced creeping bentgrass cover or root mass one month after application.

In spring 2000 creeping bentgrass cover was unaffected by any treatment, but root mass was reduced when Betasan was applied at 22kg ai/ha (the highest rate) and when Dimension was applied at all rates. The two higher rates of Dimension (0.41 and 0.84kg ai/ha) applied in autumn 2000 reduced creeping bentgrass cover and root mass one month after treatment and the following spring. It was deduced from this research that Betasan may be used more safely than Dimension on creeping bentgrass greens in autumn.

Bensulide is well known for its root pruning of bentgrass but from the research work conducted by Hart (2004) it would appear that when applied at rates of 5.5 or 11.0kg ai/ha in either September or October (northern hemisphere) it had no negative effect on root mass. While actual root depths have not been measured in the AGCSA trials there were no visual signs of damaged root systems seen by occurrence of dry patch over summer.

While pre-emergent herbicides have shown to be successful in the control of *Poa annua* it can be assumed that the real effectiveness is either when applied to newly established greens with little *Poa annua* invasion or to the more annual types that rely on sexual reproduction (seed germination) to continue to thrive. As the shift to the more perennial types occurs the success of pre-emergent herbicides is likely to diminish.

In part it would appear as though successful *Poa annua* management is based around treating the *Poa* as early as possible. Kaminski et. al 2004 undertook a study to identify creeping bentgrass seedling tolerance to herbicides and paclobutrazol. Treatments were applied at two, four and seven weeks after germination. Bensulide applied at 8.4kg

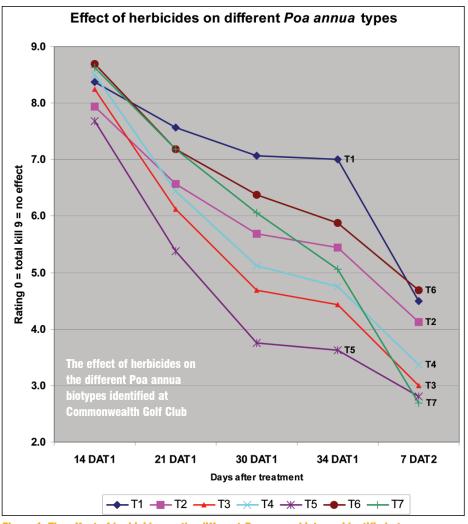


Figure 1. The effect of herbicides on the different *Poa annua* biotypes identified at Commonwealth Golf Club

ai/hectare was shown to be safe to apply two weeks after seedling emergence and this rate could be increased to 14kg ai/ha four weeks after seedling emergence.

It was also concluded that these applications may reduce annual bluegrass competition with creeping bentgrass seedlings, however, this work was not undertaken in this trial. Paclobutrazol applied at 0.13 kg ai/ha was safe to apply after four weeks and provided no loss of cover to the bentgrass.

CONCLUSION

Poa annua eradication in golf greens remains one of the most challenging tasks for a superintendent. The huge diversity of biotypes remains the greatest asset for Poa annua and controlling both annual and perennial types simultaneously, is not easy. As McCarty (1999) notes, Mother Nature has managed to stay a step ahead of science in the search for Poa control and it will be interesting to see if we can catch and pass her with new technologies. w

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AUSTRALIAN GOLF COURSE SUPERINTENDENTS' ASSOCIATION

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The Pulse

Being a superintendent in this day and age isn't without its challenges. Whether it is unreasonable demands and expectations from management and members, the increasing complexities and facets of the modern day manager's role, through to coping with job loss or striving for an ideal workhome life balance, it is no wonder that it can all get a bit too much sometimes. The Pulse asks four managers whether the role of a turf professional has become more 'stressful' in recent times and what strategies they employ to manage stress.



PETER GLIDDEN **Ex-Wangaratta Golf Club**



The whole concept of a 'tree change' seemed ideal when I applied for the job of superintendent at Wangaratta Golf Club. Trading in the suburbs, the traffic and the

stresses that go with it for a country lifestyle was just what the family needed. Or so I thought. The logistics of selling a house, packing and finding the ideal new home took six months and during that period I clocked up 1500km per week travelling back and forth between work and family.

No sooner had we settled in then the drought and the bush fires set in. Water restrictions kicked in at the beginning of December 2007 then water to the course was shut off totally on 29 December. We had some water in our dam but other than that we had to find enough to keep at least the greens alive until the rains came or we got our allocation back. We hand watered from 1000l units on the back of utes every night for four months, using over 40 volunteers. 10 water units and a 1968 fire truck which needs to be seen to be believed. We got through and the recovery of the course was quite amazing.

By the end of March we were back to Level 4 restrictions which gave us two hours a night of watering. The irrigation system was fired up again, but due to the amount of ground shift the 40-year-old asbestos pipes couldn't handle it and there were blowouts everywhere.

When all seemed to be getting back on track my 2IC decided to move on after 10 years and I was left as a one-man team for four months until the committee finally gave me another staff member. Unfortunately, against all requests, they employed an unqualified retired farmer who required full training.

Originally the committee were quite supportive but with a change in committee and a new president, sweeping changes were made and not for the better unfortunately. There was constant harassment and bullying and second guessing all the time. Verbal instructions from the committee, which went against my recommendations, were still expected to be carried out. When the outcome was not a positive one, as had been warned, then the problems began.

It was a difficult position to be in when the people giving the orders had no idea of turf management. Why employ a professional and then go against all their recommendations? The frustration and the grief at seeing all the hard work and improvements slipping away back into mediocrity were gutting.

Not long after my contract was terminated after just two years in the position. I am now living hand to mouth with casual work and the threat of losing the house is a very close reality. We relocated to Wangaratta in good faith and gave that job my all through some of the most difficult times that course has seen in the club's 100 year history. Apparently it was not good enough for the current committee.

I feel very strongly on this issue as there are many of us who have been subjected to this kind of treatment in the workplace. It has disillusioned me to the point I am considering work outside of the industry. It has had a negative effect on my home life, my wife's healthy and my golf game. Do you think there could be changes made to bring a level of accountability to these committee members? There's a question for the next Australian Turfgrass Conference forum!

Some people go fishing and stay off their golf course to relieve stress. I like to smash a golf ball or de-stress at home with my family, my wife and the many furry, feathered and scaly friends she has collected over the years. I tried to leave work at work and not bring it home with me, but that doesn't always happen, does it? www.



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ADAM ROBERTSON Kew Golf Club



I tend to agree that the modern day superintendent's role has become more stressful. We now have more external factors we need to manage but don't necessarily have control over.

Government policy, both local and state, can be a minefield and then there are all the different authorities with their governance controls and accountabilities. Add to that litigation and public liability responsibilities, environmental responsibility, adhering to occupational health and safety codes, endless reports, committee meetings and deadlines. How could you not feel more stressed taking into account each day all these issues in making decisions and managing the golf course.

Weather and water are two other major factors conspiring against turf managers. Once you think, plan and battle through all that, you still have to meet the expectations of the golfers. He or she isn't interested in the process; they are only interested in the outcomes. You're paid to do the worrying.

One of the strategies I used to help me balance my time and stress was to step away from traditional start and finish times. I do the hours that better suit me. The hours I work are all over the place, but flexibility allows me to do more family and personal things even though the number of working hours each week is still high. In regards to the staff, I tend to allow them to be flexible in shifting hours to suit individual needs as well, whether it be in taking RDO's and annual leave or working early or late. Not working them in unfavourable weather conditions can also be a small yet important factor. At the end of the day the work still gets done. It hasn't cost the club any more money and you have happy staff.

How do you set yourself up to survive? You adapt, and we have over a long period. I now don't know any different. $\rlap/$ $\rlap/$

JON PENBERTHY **Ex-Tewantin Noosa Golf Club**



The role of the superintendent has certainly developed greater responsibilities and the pressures associated with these can eventually lead to a build-up of concerns resulting

in increased stress. Over the years I have been involved in the industry I have seen the superintendent's role develop into a management position where any physical work on the course is seen as a welcome break.

The increasingly litigious nature of our society has seen the underlying pressures increase as there is now the background worry of the consequences to the superintendent unless he has all the correct procedures and processes in place and can prove it.

While everyone has some stress in their lives, it seems that when you are under high stress for long periods the end result is anxiety which leads to depression and in the worst cases suicide. A great deal of collateral damage occurs along the way to families and friends as well as to the individual.

In my opinion the need for a healthy work-life balance is crucial. There are plenty of examples of superintendents who put in long hours to produce a quality result who are surprised to find their efforts are not appreciated. Take regular holidays and work reasonable hours. As a superintendent I made sure my staff knew their efforts were appreciated and their opinions valued.

Communication is vital. If you are feeling over stressed, seek help. Let your club manager know and, as with all things nowadays, document everything. Speak with your doctor about how you are feeling and get a referral to a psychiatrist to discover better ways to think about problems and how to deal with them. When you are stressed your decision making can suffer so seeking help at least starts you on the road to recovery.

RYAN FURY **Eastlake Golf Club**



What could be so stressful about working on a golf course? A question I'm sure everyone has been asked, and they are genuinely shocked by your response – hot

summer afternoons with a westerly drying the greens out, pumps dropping out on the hottest days, no water, disease and pest pressures, disrespectful golfers, vandalism, board and member expectations, staff, OH&S, environmental issues; the list continues. All these issues trigger stress and in the future more issues will come to the fore and unfortunately the days of the laid back greenkeeper are very numbered if not gone completely.

The main strategy to reduce stress levels is probably the hardest thing – giving yourself a life outside of the golf course and being able to get the separation from the job. For me it's family and playing sport. It helps to have good family and support outside of your work. I am lucky to have a very supportive wife and young daughter who often come in to the course with me on the weekend to change holes or hand water.

Trying to surround yourself with good staff can prove to be stressful but if you get the mix right it will reduce your stress levels knowing the course is in good hands when you are not there. I am lucky to have two very good assistants who make my job a lot easier. My final tip would be to enjoy the cooler months when the stresses are reduced.

I think many superintendents have considered leaving the industry at times and many would never consider taking stress leave – it would be seen as being weak. However, superintendents under stress need to give themselves a break for a few days during the summer to help them overcome what has now become a very demanding and stressful vocation.



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The 2008 Open Championship returns to Royal Birkdale in 2008 following a 10 year preparation programme to extend and upgrade standards on the course. ATM looks at how these changes have made what was already a strong Open venue even more challenging.



oyal Birkdale, venue for this year's Open Championship, holds a special place in the history of Australian golf. It was there in 1954 that Australian golfing great Peter Thomson secured his first Open title and 11 years later it was also the scene for his fifth and final Open triumph.

The course, located in the northern English seaside town of Southport, has a proud history when it comes to the game's oldest and grandest major. In 1941 it played host to its first Open and this year's tournament will mark the ninth occasion the course has hosted the world's best players.

It has been a decade since The Open last visited Royal Birkdale's undulating links and back then it was American Mark O'Meara, who with a score of par triumphed over the weather and a play-off with Brian Watts to lift the Claret Jug.

As the spectator grandstands were being ripped down in the aftermath of that event, plans were already well underway for the course to host the tournament a decade later. With expectations of playing quality constantly rising from all quarters there was a need to extend and upgrade standards on all areas of the course which would pose new challenges for the new breed of professional.

Throughout the last 10 years the club has worked together with the UK's Sports Turf Research Institute, which acts as official agronomist to the R&A championship committee. Stuart Ormondroyd, head of turfgrass agronomy and assistant director at STRI has been working with Royal Birkdale course manager Chris Whittle and his team to institute a number of changes which will be visible when the pros tee off come 17 July.

ARCHITECTURAL CHANGES

The brief was not to increase the length of the

course unduly, so only 155 yards (142m) has been added, giving Royal Birkdale a total of 7173 yards (6559m). Instead, the accent has been more on strengthening the course and this has included one new green at the 17th plus 20 new hazards.

More specifically six new tees and the addition of 16 fairway bunkers have tightened up the tee shot making players consider a number of strategic options. This has been further enhanced by re-contouring of green surrounds through the introduction of mounding and swales, which promotes more imaginative recovery shots from around the green.

This is no more so demonstrated than at the 16th with a new Championship tee (adding 22 yards) into the prevailing wind tying in with re-contouring of the surround behind the green and tree removal, making the approach shot much more testing than in the past.

The same can be said of the 17th, which with the existing Championship tee at an angle to the previous sight line and against the boundary fence, has been strengthened through tighter fairway bunkering and mounding at both 310 and 320 yards (283m and 293m). The cross bunker has been moved left and mounding enhanced for the approach shot. There is also more penal bunkering around a contoured green. Positive changes have also been made to the 9th which is now a pronounced dogleg to the left.

"Reading the press release on course changes, it is interesting to muse on the fact that fairway bunkers on championship golf courses are now being placed at 300 to 320 yards when some of us can remember changes from 250 to 270 yards," says Ormondroyd.

Practice facilities have also received a revamp and, in addition to the existing practice putting green, the practice chipping green and



surround has been upgraded and two new raised practice tees built, one of which will be used for The Open. Overall access has also been improved to provide better viewing.

Public access and movement around the 1st tee area has also been improved and in conjunction with landscaping around the clubhouse, new car parking on a single level has been introduced as well as upgrading of the clubhouse complex.

ECOLOGY AND THE ENVIRONMENT

All visitors and players who witnessed the 1998 Championship will notice a major visual change to the general landscape as part of the dune restoration programme. Non-indigenous blocks of trees have been removed to good effect, especially on the 15th to 18th holes, which in turn opens up the views across the course and beyond, plus the enhanced visual feast for the spectator on what was already an excellent viewing course.

Ecology management of rough also has seen removal of ivy-covered banks in the rough on the 5th and 6th holes which in turn has been replaced by native grasses. The overall theme is one of restoration of the native dune system and development of habitat improvement for fauna and flora, including initiatives such as extending the slack systems, which are already evident on holes such as the picturesque par 3 12th.

COME RAIN. WIND OR SHINE

As well as the above changes, any Open venue course must now be in peak condition regardless of the conditions. The weather has always played a big part in the Open Championship, whether it was the torrentially wet cold conditions that battered Carnoustie in 2007 or the severe drought at the time of The Open at Royal Liverpool in 2006.

Therefore, in addition to architectural changes the general course management programme over the last 10 years has included pipe drainage introduction into low lying areas of the 15th and 16th fairways, clearing of ditches and outlets plus sanding of fairways. This has been carried out to improve the dryness and firmness of areas that are susceptible to moisture retention.

On the other hand, encouragement of drought-resistant grasses on greens, green surrounds, tees and fairways in conjunction with a revised aeration and wetting agent programme will ensure the course can withstand hot dry conditions.

"Royal Birkdale has always been a strong Open venue and these gradual changes over 10 years are reaching maturity and have been designed so that the challenge can be maintained," says Ormondroyd. "Indeed the course will get the chance to challenge the world's best again when it plays host to the 2010 Women's British Open.

"The decision to increase staffing levels and machinery resources plus the tireless hard work of Chris and his team has enabled the club to deliver the course in enhanced condition for The Open Championship and for general play in non-championship years.

"Come rain, wind or shine Royal Birkdale is ready to meet the challenge of hosting its ninth Open Championship and everyone involved in the event is waiting in eager anticipation for July to arrive."

FUTURE OPEN CHAMPIONSHIP VENUES (2009-2012)

2009: Turnberry (Ailsa Course)2010: St Andrews (Old Course)2011: Royal St George's2012: Royal Lytham & St Annes



Thatch is a natural occurring accumulation of vegetative organic matter formed in grasses.

Dependent on maintenance practices, turf type, climate and soil conditions, the thickness of thatch varies. It can be of benefit and of hindrance to a turfgrass manager, the latter more so evident physically and visually, with the benefits often overlooked.



Warm-season thatch management

BY BRETT MORRIS

ith many facilities converting surfaces from cool-season turfgrass varieties over to warm-season stands, it brings with it some changes in how the turfgrass manager deals with the biomass production produced by their new surfaces.

While cool-season varieties are not thatch immune, warm-season turf varieties do require the manager to be a little more aggressive in their approach than what they currently may be used to. Understanding the processes involved in how thatch is produced and planning a course of action to deal with its production as it occurs, will help the manager control the thatch produced, eliminating many concerns which are normally associated with high thatch levels.

One of the most widely referenced definitions of thatch is provided by one of the turfgrass industry's foremost leaders. James B. Beard describes thatch as "an intermingled organic layer of dead and living shoots, stems and roots that develops between the zone of green vegetation and the soil surface" (Beard 1982)

The zone of green vegetation, or verdure, that Beard refers to does not contribute to the accumulation of thatch. Leaf blades are removed during mowing of areas, however, thatch is still produced on those surfaces continually. The leaf blade consists mainly of cellulose and hemi-cellulose which is relatively easily broken down by micro-organisms.

The intermingled organic layer that Beard refers to is a lot harder to break down than the

leaves due to the much higher presence of lignin within the profile. Lignin is highly decay resistant which makes up around 25 per cent of wood in trees.

Since lignin is resistant to microbial decomposition it actually plays an important part within the turfgrass plant giving it strength with higher quantities found within the root profile rather than in the stolons, rhizomes and sheaths. While some level of thatch accumulation is found through all turfgrass, attention is normally only paid on intensively managed turf. Beard (1973) writes, "Thatch generally implies an undesirable condition."

CONCERNS OF EXCESSIVE THATCH BUILD-UP

Thatch build-up creates a number of concerns for the turfgrass manager, particularly in a putting green environment. Foot and mower printing occur because of the soft conditions, while the sponginess can result in the mower scalping the verdure. A thick thatch can harbour pests and diseases, and shallow rooting normally occurs as the roots find the layering effect between the thatch and soil surface difficult to penetrate. Localised dry patch is a result of shallow rooting.

With the large build-up of organic matter within a thick layer, the surface can wear easily. The wear and drought stress on the plant can then trigger the introduction of diseases. While favourable temperatures, moisture and nutrient conditions can normally lead to disease incidence, thatch contributes to disease development. Fungi such as Helminthosporium can grow on thatch material and produce large numbers of spores, and parasites such as Fusarium, Pythium and Rhizoctonia can compete with other organisms when multiplying in thatch.

Turfgrass insects generally find refuge within the thatch layer with excessive levels of thatch providing protection and a suitable food source. Varying climatic conditions and thatch levels can then exert influence on pesticide movement through the profile to treat insects.

The evenness of both liquid and granular pesticides can be affected by a thick layer of thatch meaning that the product applied may not produce the results expected. Evenness is particularly important especially when applications of pre-emergent herbicides and insecticides are made, as surface contact with the targeted pest is vital in its control.

THATCH BREAKDOWN WITHIN THE SOIL PROFILE

Thatch is broken down by a variety of organisms found within the soil profile. They include fungi, bacteria such as *Pseudomonas* spp., actinomycetes, protozoa, nematodes, collembola, mites, enchytraeids and earthworms, to name several. Each plays a small part in thatch decomposition, and several are also involved in the process of nitrification.

To enhance micro-organism activity

within the soil, and subsequent organic matter breakdown, promoting a favourable environment is important. If you now have a newly established warm-season variety, preventing the accumulation of an excessive thatch layer will be of benefit to you long term. To aid in preventing excess amounts of organic matter, above ground and below ground conditioning have to be examined.

SOIL CONDITIONING

- Maintain pH between 6.0 to 7.0 to encourage microbial decomposition and earthworm activity, particularly in broad acre areas for the latter;
- Manage the amount of water applied carefully. Judicious use of irrigation reliant on evapotranspiration rates to promote required water content will avoid excess moisture logging within the profile and encourage sufficient oxygen levels;
- Apply a responsible and balanced fertiliser programme based on local climatic factors to encourage a healthy plant, not colour.

SURFACE CONDITIONING

 Conduct light, frequent verti-cutting throughout the main growing period to slightly open the surface and encourage the

- movement into the thatch of amendments such as sand:
- Brushing and/or use of in head groomers set equal to bench cutting height or below to stand the leaf and main growing points of the plant upright before cutting;
- Conduct light, frequent dusting to promote lower organic matter levels and healthy mat.

THATCH CONTROL

While it is inevitable that many facilities may not have the resources at their disposal to conduct a diligent preventative programme, if the turfgrass has been deemed to have an excessive thatch layer there are a number of measures available to aid in control.

VERTICAL MOWING

Verti-cutting, scarifying and dethatching are all terms to describe vertical mowing, the process of physically removing thatch from the soil profile using either heads attached to ride-on turfgrass mowers, walk-behind units, or tractor-mounted implements.

Dependent on the turfgrass area and thatch and mat layer accumulated, the depth of vertical mowing may range from 1mm down to 25mm. Verti-cutting or dethatching

can be carried out lightly (between -1mm to -3mm) as frequently as weekly on a vigorous growing golf green to aid in thatch control, and normally is followed by a light dusting of the green with sand allowing it to incorporate into the thatch profile.

Scarifying is generally termed as a more heavy duty removal of thatch. It can be carried out on greens, tees, fairways and roughs normally one to two times per year either side of the main growing season (i.e., for couch around late October and early February), to ensure enough adequate soil temperatures for recovery.

The disturbance caused by scarifying normally raises the thatch and verdure level slightly, resulting in scalping and discolouration of the turfgrass area. This result is unsightly for a golf course environment and usually takes several weeks to recover fully. If the procedure is too severe, then it is not uncommon to kill turfgrass plants. It is at this stage when the turfgrass is highly stressed that diseases may infect the plant easily, and colonising weed species may find little resistance to their germination.

AERATION

Aerifying or coring is the process of relieving



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compaction by introducing increased oxygen, nutrient and moisture levels into the soil by means of a hole forced through the soil profile. Tine sizes can range from 8mm up to 25mm in diameter, and dependant on the machine used, can penetrate the profile up to 12 inches deep.

Many of the micro-organisms responsible for thatch decomposition are aerobic, therefore thatch decomposition rates in compacted and saturated turfgrass soils are often slowed. While many support the returning of cores back into the green by dragging after aeration, the process itself does little to reduce thatch levels.

Research has shown that for aeration to be effective in controlling thatch, it needs to be carried out every three weeks on an actively growing stand (White and Dickens 1984). A similar conclusion was also reported by Carrow, Johnson et al. (1987), who stated that coring did not reduce thatch accumulation regardless of whether cores were removed or returned. To be effective, the process has to be conducted on a consistent, repetitive basis, one at the expense of the people using the surface.

Where aeration does have its benefits are in the aerobic improvements listed as well as penetrating through an already established layer. By penetrating through a thatch layer, the applied sand is then able to incorporate among the high organic presence allowing an initial dilution of the organic layer.

SCALPING

A process not frequently advocated but extremely effective, primarily on couchgrass varieties, is scalping, or simply mowing the majority of the thatch layer off. The height of cut utilised is normally half the height employed, and leaves a stalky surface open for improved topdressing infiltration from which new shoots generate. This process is most common in the United States before overseeding, but can be labour intensive.

TOPDRESSING

As useful as some of the points listed above are, the most effective means in controlling thatch is via topdressing, a practice dating back to the 19th century when Old Tom Morris started topdressing greens.

Old Tom spilt a wheelbarrow of sand on a green one day he was having trouble growing while working at Prestwick. After smoothing it out he noticed the way the turf responded, thereby realising the importance and bringing attention to the value of the practice. A common call of "Mair saund, Honeyman" to his assistant James Honeyman followed.



The practice of straight sand topdressing now is commonplace for the majority of turfgrass managers across the globe, and is described by Beard (1973) as the most effective means in the biological control of thatch. Advances in application technology and turfgrass research highlight the integral part topdressing plays in any maintenance programme.

Applied to a turf area, topdressing is the practice of applying a selected medium in a pre-determined layer of thickness. Generally in a golf green environment, the medium selected is of the same consistency and source as the medium selected for initial construction of the green. Topdressing mediums used for golf greens vary, however, the standard for most golf greens in recent years is fine sand.

Topdressing is applied to a golf green for a variety of reasons. These can be to correct a surface damaged or interrupted by ball marks or cultural practices such as coring or sodding, to improve infiltration of the green, or to aid in the biological control of thatch. It is applied based on the growth rate of the grass and is applied as evenly as possible, to ensure surface uniformity.

For most turfgrass managers, frequency



and depth of topdressing is something normally carried out based upon experience. Dependant on climate, location, fertility practices and turf type, some managers will lightly topdress, or dust, their playing surface as often as every 10 days throughout the main growing season.

Dusting is a term referred to when applying a very fine layer of topdressing medium. There is a need throughout the year to apply a thicker, or heavier, rate of topdressing to a putting green, such as overseeding or during other specialised works such as renovations. Renovation procedures such as scarifying and coring require an amount greater than that used for dusting to fill and smooth the damage incurred on the green.

The benefits of a topdressing programme are well noted from early articles such as White and Dickens (1984) who showed that topdressing four times per year reduced thatch across three types of couchgrass more than topdressing once per year. They concluded that topdressing was the most effective means in controlling thatch, and should reduce the need to aerify or verti-cut couchgrass greens in order to maintain an acceptable quality putting surface.

Carrow, Johnson et al. (1987) carried out a four-year study comparing the effects of coring, verti-cutting and topdressing on thatch control of Tifway couchgrass. They concluded that verti-cutting reduced thatch by 8 per cent when carried out twice per year and had adverse effects on the overall shoot density, while the coring treatment provided very little difference to the reduction in thatch.

The dense nature of TifEagle creates difficulties in sand being incorporated into the profile

The topdressing treatments maintained adequate shoot density and colour, and for the duration of the trial, topdressing reduced thatch for one or two applications annually by 44 or 62 per cent respectively at a depth of 6.4mm.

Couillard, Turgeon et al. (1997) noted a similar conclusion after studies carried out showed a dilution of thatch rather than decomposition due to topdressing with several mediums at varying frequencies when measuring organic matter content. The total organic matter content was 43 per cent lower in the top 5cm of the 100 per cent sand treatment when compared to the control, showing an improvement in thatch biodegradation.

HOW MUCH IS ENOUGH?

I was asked by a fellow superintendent recently how much sand to apply to his new warmseason green. My reply was to apply as much as you can without damaging your reels and upsetting the golfers on a regular basis. Light and frequent applications are the key.

In recent years, the practice of dusting before major tournaments has provided added benefits to playing surfaces by aiding not only in smoothness and ball roll, but gains in green speed. The dilution of the thatch layer and subsequent breakdown provides a thinner surface layer, therefore less friction is applied against the ball roll resulting in faster speed. This in turn provides a relief of such for the turfgrass manager in determining the height of cut on their managed surfaces.

Researchers have tried to put a figure on how much sand to apply to assist in the maintenance of thatch levels. This has come in conjunction with the release of the new range of hybrid couchgrasses for golf greens such as TifEagle.

One figure suggested was via Guertal and White (1998) who recommended an application of sand of 0.5mm in depth two to three times per month to maintain surface quality on the new couchgrasses. I'm sure the members would find it amusing to see the apprentice designated with the daily task of measuring sand depth with a ruler on a freshly dusted green. Or maybe they wouldn't...

With general opinion regarding the accumulation of thatch differing among the various studies carried out, the contrasting soil types, turf types, climatic factors, fertility inputs, and cultural practices (such as verticutting) all play an important role within each study. Much like most of the take home message from last year's Australian Turfgrass

Conference in Cairns, do what is best for you and your course.

The limited research into the new turf type varieties now available for use on putting greens strongly emphasises the need for topdressing as an integral part of their maintenance. The use of these varieties on warm-season putting greens in Australia is still in its infancy, with little detailed research carried out to fully understand their maintenance requirements.

As such, several clubs in the United States have found out the hard way, that by rushing to change to a new variety that the maintenance requirements have proved excessive, forcing them to revert back to original turf types used for several decades.

This does not by any means suggest that the new varieties are not what they are made to seem within the turfgrass industry. However, clubs contemplating a change to a new variety have many factors to take into consideration regarding their maintenance requirements. The dilution of organic matter content via means of topdressing provides clubs with the best form of managing the biomass production.

I examined the thatch control requirements using topdressing on TifEagle in 2004. Over the course of the study it was determined that the optimum frequency of topdressing



was every fortnight, resulting in a low organic matter percentage and healthy mat based on loss on ignition figures.

A concern with the new ultradwarfs is their high shoot density which is actually resistant to the incorporation of sand (see photo page 78). Many alternatives have been examined by superintendents, from verti-cutting after dusting to force the sand into the profile (every mechanic's dream), to the use of flymo's to blow the sand under force into the profile. I tried this when I was superintendent at Brisbane Golf Club but understandably it is quite labour intensive.

Smaller clubs contemplating conversion to one of the newer warm-season varieties for their putting green use should consider their judgement carefully. Within my research I examined a monthly topdressing treatment with the reasoning for assessing the performance of TifEagle under constraints normally experienced at small budget facilities.

It is very likely that over the course of the next decade or so that many smaller clubs will convert their greens to a newer variety to remain competitive within the industry, without fully understanding the long-term effects that will be experienced if they do not manage those new varieties effectively.

The monthly treatment was to simulate the standard 'working bee', whereby volunteers may come in and assist the superintendent carry out a standard agronomic practice merely taken for granted at a larger club on a weekly or fortnightly basis.

The results showed that there was no significant difference between a monthly treatment and the control which had no topdressing applied. In short, it doesn't work.

Golf clubs considering replacing their current putting greens surfaces with a newer variety such as TifEagle would certainly have to assess their operational budgeting considerations as the distinct layering and organic matter build-up experienced will result in a real deterioration in quality over an extended period of time. The heavy application of sand irregularly can also result in layering within the profile.

SUMMARY

Controlling thatch in warm-season grasses can be a simplified procedure providing diligent maintenance practices and programmes are undertaken.

I feel personally that many turfgrass managers over-complicate at times what are the fundamental basics in successful turfgrass management. Snake oils promoting spray on thatch reduction have been found ineffective in past research projects.

For effective thatch control in your profile keep the following points in mind:

- Maintain the pH between 6.0 to 7.0;
- Maintain stable fertility rates applying no more than 2.5 to 3.0kg actual nitrogen/100m² per year;
- Maintain adequate moisture levels within the soil profile and ensure that saturation does not occur which reduces oxygen levels;
- Verti-cut and groom your surfaces lightly on a frequent basis when favourable growing conditions are present; and

Dust your surfaces lightly and frequently.

Straight sand topdressing is universally recognised as the most effective means in controlling thatch. By diluting the organic matter content within the profile, a more favourable environment is created for microorganism activity, and subsequent thatch breakdown.

From a maintenance perspective, light dusting is the least disruptive maintenance procedure in thatch control. If your resources are limited, at least try and achieve this to aid in control.

THATCH MANAGEMENT - PRACTICAL SCENARIOS

To assist in displaying some of the scenarios faced by the turfgrass manager, some practical examples follow.

SCENARIO 1

The ideal, healthy growing profile

The turfgrass manager should always strive for a healthy organic layer, one which is diluted by sand applied frequently which provides a favourable environment for micro-organism activity and subsequent breakdown.



SCENARIO 2

Older greens and organic layer build-up

In some cases, particularly older greens, a layer of organic matter can accumulate if there has not been an intensive management programme put in place (see photo below). In this case, three layers can be noted. The 'A' layer is the result of the author commencing an intensive thatch reduction programme resulting in a dilution of the dark organic layer 'B' by means of periodic verti-cutting and dusting. Layer 'C' is the interface between the organic layer and the soil surface, in this case native sand around 80 feet deep.

The interaction of organic layer 'B' to the applied sand 'A' and the native sand 'C,' results in a natural breakdown and formation of a mat layer. In this profile, a programme of scarification followed by topdressing which exposes the organic layer to sand incorporation is the best form of remedy, as evident by layer 'A'.



SCENARIO 3

The instant layer of thatch.

This photo (see photo below) shows the difficulty experienced if the turfgrass manager is faced with a thatch layering concern in their respective playing surface. This scenario is most commonly experienced when a surface is laid with sod, thereby introducing an instant layer of thatch.

When sand is spread over the surface during grow-in it simply buries the thatch layer 'B' creating an initial layer 'A' over the top. Layer 'B' is now completely devoid of any sand within it other than the interface between both layers 'A' and 'C'. In this case, a programme of continued aeration and topdressing is the best course of curative action as the tines will break through layer 'B' allowing incorporation of sand within it.



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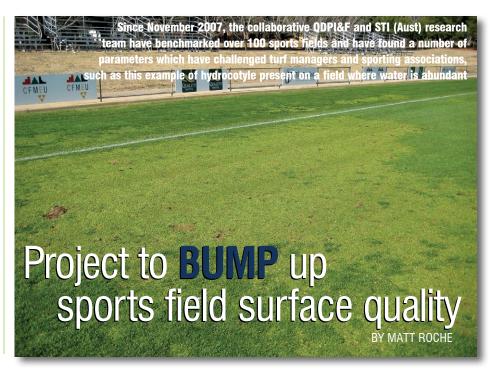


vww.truturf.com 07 5594 7199 cales@truturf.com In 2007 the QDPI&F and STI
(Aust.) began a two-year project
to help improve the knowledge and
capability of providing enhanced
playing conditions of communitybased sports grounds. QDPI&F
research scientist Matt Roche looks
at the project which to date has
benchmarked over 100 sports fields
across the country.

he halfway point of the winter sporting calendar generally coincides with a high level of pressure on a large majority of community based sports fields around the country. Changes in society, including population growth, higher housing density, reduced green space, changes in sport and recreational patterns and significant pressures on water supplies, have further strained sports field resources.

Whether a sports field is being utilised by junior rugby league matches or senior Australian Football League (AFL) teams, it is necessary to have it in a condition that offers adequate quality and, most importantly, safety.

Achieving improved accessibility, safety and quality of playing surfaces requires a clear understanding of the factors affecting the performance of the surface. These include



appropriate varietal selection, irrigation use, method of construction, levels of use and maintenance. This understanding is obtained by the process of defining, measuring and benchmarking.

To improve the knowledge and capability to meet user group needs, a two-year collaborative project is being undertaken by the Sports Turf Institute (Aust.) and the Queensland Department of Primary Industries and Fisheries (QDPI&F) Turf Research group, which started in June 2007.

The Horticulture Australia Limited-funded trial 'Best Use Modelling for Sustainable Australian Sports Field Surfaces' (shortened to 'Best Use Modelling Project' or BUMP) was initiated by Keith McAuliffe, executive officer of the Sports Turf Institute (STI), following similar work conducted in New Zealand in conjunction with eight regional councils.

To date discussions and/or preliminary works have been undertaken with several Australian local government authorities. A memorandum of understanding has been put in place between STI (Aust.) and Parks and Leisure Australia (PLA) to secure full national coverage and to have their input into the marketing and data collection components of the project. The linkage will also assist in providing a two-way flow of information between government authorities and researchers.

Long-term, the collected information and data will provide all parties with a greater understanding of today's sports field usage patterns and management requirements, assisting in future planning.

The concept of best use modelling for sports surfaces offers significant benefits to sports field owners/managers and the turf production industry. The Australia-wide collaborative project aims to:

- Provide participating organisations (councils, sports clubs and schools) with an audit report from an independent expert outlining and benchmarking current sports field characteristics and documenting limitations to performance (accessibility, quality and safety);
- Produce a summary report on the cost benefit analysis of various sports field development options (e.g. suitable turf selection, rootzone amelioration and irrigation systems) including the expected usage capabilities of each option;
- Derive a self-assessment tool to guide councils in determining best management practices and optimal allocation of resources for upgrading or maintaining playing surfaces;



- Clearly define measurable customer requirements, which can be used as a basis for (and drive) the turf industry's product development programme; and
- Develop a national database using the recorded information on sports field performance.

At participating sites a history is collected and surface quality benchmarking is conducted. The history contains detailed information about the construction, management, maintenance and usage of each of the sports fields selected for inclusion. The benchmarking study is run by research and technical staff from STI (Aust.) and QDPI&F Turf Research. The range of tests undertaken to date includes measuring:

- Water infiltration (using an infiltrometer) to assist in identifying trends and variances (such as the impact of organic matter or soil compaction within the soil profile);
- Ground hardness (using a Clegg Impact Soil Tester) indicating the shock absorbency of the turf/soil surface;
- Visual soil compaction assessment, texture analysis (between horizons), thatch and rooting depth, and mottles assessment (using a 50mm soil sampler) to determine if there is an oxidation-reduction process occurring within the profile;



As part of the programme, the rootzone is assessed at predetermined locations

- Species composition e.g. turf and weeds present (with a 0.25m² quadrant);
- Percentage soil moisture (using a Theta moisture probe) highlighting irrigation or construction issues; and
- Vertical penetration and transitional shear resistance of the turf surface (using a Going Stick).

The series of benchmarking tests are conducted at pre-determined locations across a field depending on what sport is being played. Different test locations are selected for different sports due to their field usage patterns.

Since November 2007, the research team has benchmarked over 100 sports fields in

various states and territories across Australia. To date STI (Aust.) and QDPI&F Turf Research staff have observed a number of sports surface parameters which have challenged turf managers and sporting associations.

Commonly, high usage, poor irrigation uniformity, unfavourable species composition and compaction are problems at single and multi-use venues, impacting on the quality and safety of surfaces. On the positive side, many of these problems can be corrected over time, providing sufficient support, education and much-needed resources are available.

A study such as BUMP delivers the opportunity for an independent group to be involved in identifying the strengths and weaknesses of each field tested. This will enable the organisations involved to change their practices to get the best out of their facilities. In doing so, they will be providing their local community not only with sustainable sports fields, but with the opportunity for a healthy active future.

For further information or for an opportunity to have your council, organisation or sporting club involved in the pilot study, please contact either Keith McAuliffe (kmc30745@bigpond. net.au), STI (Aust.), or Matt Roche (Matt. Roche@dpi.qld.gov.au), QDPI&F. W





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anctuary Lakes Golf Club has a short but colourful history which began with the purchase of the Cheetham Salt Works in Melbourne's western suburbs by a group of Malaysian and Honk Kong investors. Inspired by resort communities in the US and Malaysia, the vision was to create one of Melbourne's premier residential addresses with the focal point being a championship golf course designed by Greg Norman.

The Sanctuary Lakes site is located on the former site of the Cheetham Salt Works where large-scale industrial production of salt supplied Melbourne for nearly 100 years. About half the site suffered mild to severe environmental degradation because of the salt harvesting, while the other half evolved into a distinctive wetlands environment through the draining of disused water.

These wetlands encouraged a variety of indigenous plant life, which in turn attracted bird life, including rare migratory species such as sharp-tailed sandpipers from Northern Siberia, double-banded plovers from the mountains of New Zealand, red neck stints from Siberia and Alaska and little curlews from China and Siberia.

In recognition of its environmental significance as a breeding habitat for these rare birds the wetlands are now protected under international covenants.

The golf course site was transformed into a links style golf course with undulating fairways accented with dramatic bunkering and wild roughs on what was flat and featureless land. Taking inspiration from the adjoining Cheetham wetlands, Norman used a series of small lakes, creeks and wetlands winding through the course to provide further golfing tests as well as enhancing the spectacular views.

A switch to a biologically based fertiliser and disease control regimen has literally paid dividends for Melbourne's Sanctuary Lakes Golf Club and superintendent Peter Jans.



Peter Jans, general manager of course operations, has been at the course since its inception. Drawn to Sanctuary Lakes by its environmentally friendly stance, Jans relied on chemical fungicides as the backbone of his disease management programme for several years, despite uneasiness about their long-term effects on the course and environment.

Twelve years ago, after comparing the ever-rising costs of his fungicide programme with less-than-stellar results, Jans made the switch to a predominantly organic, biologically-based fertiliser and disease control regimen. The results, according to Jans, have been spectacular.

A TWO-PRONGED APPROACH

Jans took a two-pronged approach to making Sanctuary Lakes' greens and fairways as

flawless and disease-free as possible. His first step was to change his fertiliser regimen to address salt-related issues. He switched from a traditional granular fertiliser to a low-salt, slow-release (methylene urea), homogenous fertiliser and enhanced the fertiliser programme by adding a calcium-rich liquid product as well as a product high in humic and L-amino acids.

Jans was pleased with the ease with which the liquid products could be applied through a boom, and appreciated that foliar feeding reduced nutrient loss from volatilisation and leaching. Perhaps more important, he appreciated how the organic products revitalised the course's soil, which was naturally high in salt and had been further degraded by the use of high salt granular fertilisers.

High salt levels can damage a soil's structure, leading to soil compaction and reduced water and oxygen penetration. Unless proactively managed, salt accumulates in the soil, and over time it can cause water to move out of, instead of into, a turf's root cells, lead to burning and stunted growth.

In high sodium soils, individual soil particles repel each other, resulting in poor soil structure. When calcium is added, the sodium in the soil is replaced, causing soil particles to flocculate, or aggregate together. This creates a more porous soil, and allows the sodium to naturally leach out of the root zone with rainfall and irrigation. The addition of calcium further improves soil condition by improving the soil's cation exchange capacity, and by increasing the activity of beneficial soil organisms.

Granulated lime and gypsum are commonly used sources of calcium, but Jans chose a chelated calcium product in a liquid formulation. The product he uses is a 100 per

cent soluble calcium and nitrogen complex that can be tank-mixed with other products and which allows for immediate uptake through both leaves and root tissue.

The second part of Jans' approach to disease management was to move away from his reliance on synthetic broad-spectrum fungicides to a near-complete reliance on bacteria-based biological fungicides. Since making the move, Sanctuary Lakes' fungicide expense dropped from \$21,500 for the 1999-2000 fiscal year, to an average of \$3200 for each fiscal year since.

"In terms of the course's day-to-day playability and my being able to sleep better at night, this new fungicide programme has been a god-send," says Jans. "Not having to spend as much time and money on disease control has enabled me to spend more time on other projects. Plus, I feel a lot better about what I'm doing - or not doing - to the environment."

The Sanctuary Lakes course has Providence (SR 1019) bentgrass greens and Santa ana couch fairways, surrounds and tees. Prior to the new fertiliser and fungicide programme, the course experienced recurring problems with fusarium, rhizoctonia, pythium and fairy ring. The fusarium, rhizoctonia and pythium problems have now virtually disappeared, and fairy ring as become an occasional, rather than a near-constant, problem.

The biological fungicide that Jans uses is based on a patented strain of Bacillus subtilis, a naturally-occurring, beneficial microorganism that is found across the globe in everything from pine needles in Australia to estuaries in the southern United States. The bacillus is not harmful to beneficial insects, and has no detrimental effects on the environment.

Bacteria-based biofungicides work in several ways. When applied to the soil or to a foliar surface, the beneficial bacilli in these biofungicides literally crowd out the diseasecausing microbes. The beneficial bacilli in the biofungicides also attack and kill pathogens, usually by puncturing the pathogens' cell walls or by producing antibiotics that disable the pathogens. Because of these multiple modes of action and the nature of the bacillus, there is little risk that pathogens will develop a resistance to the biofungicides.

In addition, biological fungicides produce biostimulants and auxin-like substances that increase overall plant health and make turf more able to withstand stress of any kind.

Biological fungicides also can be used effectively in combination with traditional fungicides, if need be. At Sanctuary Lakes,

Jans has tank-mixed both to ward off stubborn recurrences of fairy ring. By applying such a mixture by knapsack to infected areas monthly throughout the summer, Jans has negated any damage by the disease to the turf, and has ensured a uniform, even playing surface.

Other turf managers have noted the synergy achieved when biological and traditional fungicides are combined. Golf course managers who tank-mix a biofungicide and a reduced amount of a chemical fungicide often attain levels of disease control that equal or exceed those attained when the chemical is used at full-strength. At the same time, the managers reap the benefits of reduced chemical costs and lower toxicities.

Jans appreciates the results and reduced costs associated with his new turf care programme, and he likes how it meshes well with this overall turf management philosophy. Jans likes to draw analogies between turf and the human body.

"The way I look at it, if I'm taking care of my body or taking care of the course's greens and fairways, the closer I can stay to nature, the better off I'll be. Going organic, balancing nutritional needs, avoiding poisonous chemicals - all of it just makes sense." 44







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AGIC delegation gets Canberra hearing

delegation representing the Australian Golf Industry Council (AGIC) has meet with Federal Government water planning officials in Canberra to put forward the industry's blueprint for improving water management.

In May Scott Petersen, Daryl Sellar (both AGCSA) and Paddy Handbury (Golf Course Owners Association) met with Steve Costello, manager of the Water Security Plan for Towns and Cities Programme (Department of the Environment, Water, Heritage and the Arts).

The AGIC's concept and approach of improving the industry through a unique water management initiative was well received and from the meeting Sellar will be putting together a formal submission to the Federal Government which is due in September.

With the change in Federal Government last year there, the Community Water Grants Scheme has been shelved indefinitely and in its place a two-tiered mechanism now exists. As part of this the golf industry has the opportunity to lodge applications under the Federal Government's new \$1 billion grant scheme if it can identify major infrastructure or projects that provide a benefit to a group of courses and surrounding community.

"It was a very productive meeting and it has given the AGIC a better understanding of what approach we need to take in order to get the sort of funding we are after," says Sellar.

"What we have walked away with is an invitation to put forward a submission to the Federal Government outlining our funding request and how we would propose to demonstrate the management of those funds.

In May the Australian Golf
Industry Council met with Federal
Government representatives to look
at ways in which to secure its water
resources going forward. In what
proved to be a highly productive
meeting the AGIC will now put
forward a submission with the aim
of demonstrating how industry wide
water initiatives can benefit the
wider community.



But, most importantly, we now also need to demonstrate how the concept of the golf industry managing and developing its own water management initiative can also have benefits for the wider community.

"There was no objection on their behalf to the fact that the golf industry could use some funding to improve efficiencies for its own good. They were quite understanding of that and were aware of the environmental, social and economic benefits that golf provides.

"They commented that the approach we were taking to develop an industry water management approach was somewhat unique and therefore didn't quite fit into the current government grants scheme. As such they have asked us to go away and put forward a submission outlining what the community benefits would come from this industry wide initiative.

"In essence what they are saying is that if the Federal Government gives a golf course \$500,000 in funds to build a new dam or harvest stormwater, how is that going to benefit the community as well – whether it's a local school being able to use some of that water to irrigate their playing fields or local residents being able to use the water for their lawns."

From the meeting Sellar has been tasked with putting together the submission and is currently compiling a list of various projects around the country that have been undertaken or are about to be undertaken by golf clubs that have brought or will bring significant benefits to the surrounding community.

"We can already demonstrate that the likes of stormwater harvesting, utilising recycled water, even within just the golf course environs, is having major community benefits," says Sellar. "But one of the hurdles we will need to overcome is the perception that the water golf clubs store within their boundaries is for private use only and not for the benefit of anyone else."

Sellar is now trying to gather as much information as possible to put the submission together and is calling on superintendents and golf clubs that have undertaken or are about to undertake major water initiative projects to come forward.

"We are looking at getting together as much information on these sorts of projects and also to identify community areas that would benefit from infrastructure investment. finding out where the major water treatment facilities are and finding out how much recycled water golf courses in their vicinity would use," says Sellar.

"If any superintendent or club is aware of recycled water plants being upgraded or any additional infrastructure being put in place, we would like to know about that too because we want to be in on the ground floor in regards to planning. It could also be desalination or stormwater harvesting; any of those sort of recycling initiatives we would like to know about."

Sellar is aiming to have a draft submission completed by the end of July. If you have any information which you may think be of interest in regards to this submission, contact Daryl Sellar through the AGCSA on (03) 9548 8600 or email daryl@agcsa.com.au 👑

PENNANT HILLS OFFICIALLY OPENS PLANT

ennant Hills Golf Club officially revealed its fully operational sewer mining plant to the public at a special event attended by the NSW Minister for Water on 30 May. The first golf course in Australia to harness membrane technology, Pennant Hills is also the first non-government body to implement this type of water reclamation scheme.

The new wastewater treatment plant is capable of delivering 550 kilolitres of Class A water per day, resulting in an additional 100 megalitres per year, every year, over the 30 year life of the design.

The project began in February 2007 when Pennant Hills, recognising the need to deliver a Class A water alternative, awarded the design and installation of the sewer mining system and the associated membrane bioreactor (MBR) water recycling plant to Water Technology Australia. Prior to this, Pennant Hills Golf Club had signed an access agreement with Sydney Water to allow the tapping of an existing sewer main on the course.

"Using an MBR treatment process over a conventional multi-step tertiary process, we've been able to minimise our plant footprint which enabled the plant to be located in an inconspicuous location using existing land contours, central to the golf course," says Water Technology Australia manager Gerry Moore.

"Water reclamation is an increasingly urgent issue particularly for golf courses. New South Wales golf courses have been using various treatments over the last 25 years but this provides the highest quality water used in a commercial golf club application."

The project has already won a number of environmental awards including the 2008 Sustainability Green Globe Award from the New South Wales Department of Environment and Climate Change.

"It was no easy task completing the works while the course remained open and we endured 93 days of rain instead to the forecast 12 days," says acting Pennant Hills manager Kieran Semple. "However, we're extremely proud to be the first golf course with this type of water treatment system and believe that it will set a new standard in water reclamation for golf courses.



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Turf tech associations gather momentum

he Victorian Turf Technicians Association has had a busy start to 2008 with three meetings held around Melbourne in the first half of the year.

The first meeting was held at the Woodlands Golf Club in Braeside and was sponsored by Husqvarna. Regional product specialist Paul Oostendorp gave the group of Victorian technicians an informative talk on the company's products and direction that it wants to take within the turf Industry.

Following the presentation the techs were introduced to a wide array of equipment including chainsaws, whippersnippers, blower vacs, hedge trimmers and zero turn outfront rough mowers. All were available for demonstration and the group enjoyed putting the different pieces of equipment through their paces at the Woodlands maintenance facility.

Following the Husqvarna presentation the VTETA meeting discussed the 24th Australian Turfgrass Conference including the finalising of the turf technicians programme (see the last edition of Australian Turfgrass Management for a full rundown on the turf technician's stream that will be offered at Melbourne).

The second and third VTETA meetings happened within a week of each other. On 27 May members gathered at the BOC facility in Dandenong for a training day. BOC industrial products manager Rod Bamford hosted the day which was attended by 15 turf technicians from Melbourne and Mornington Peninsula golf clubs.

During the day's proceedings Rod took small groups at a time into a demonstration welding bay where they were shown different techniques and activities available within





ATM looks at a number of training days held recently by the Victorian

Turf Equipment Technicians

Association, and looks at the formation of the Queensland Turf Equipment Technicians Association.



the welding industry. Activities included the different types of arc welding, MIG, TIG and Oxy. Attendees were also able to tour the BOC facility.

The day proved to be a great success and the VTETA is looking at organising another training day later in the year for those that missed out.

A week after the BOC day, the VTETA held its second official meeting for the year at AG Power in Lilydale. Under very cold and foggy conditions and after a much-needed cup of coffee Ralph Hymus and Grant Storey gave an introduction about AG Power's background.

Following this the technicians were given a



tour of the facility before Bill Stevens, national territory manager for Jacobson, gave an insight into the new products available in the turf industry. A number of Jacobsen mowers were on display so the group was able have a good look at them and ask questions.

Following this, technical support expert Ray Grech talked about the updated modifications on various machines before the group headed out to the workshop to do some hands on training, including hydraulic testing on various machines. Other testing during the hands-on session included fault diagnosis on electrical controllers.

Final presentation on the day was by Justin Poole from Polaris, who gave an insight into the Polaris product range of ATV's and utility vehicles available to the turf market.

QUEENSLANDERS FORMALISE ASSOCIATION

While the Victorian association has had a full calendar to date, the fledgling Queensland TETA held its first meeting at Toro's Brisbane headquarters in April with nearly 40 technicians from a variety of Brisbane, Sunshine Coast and the Gold Coast golf clubs turning up.

Toro Commercial's national sales manager for golf Robert Rein kicked the meeting off and expressed his support for the formation of the Queensland TETA association. He then introduced members of the Toro team including Craig Johnston, Gary Price, Grant Woodcock and Steve Timms.

Robert then handed to Craig Johnston who gave a presentation on products and support available from Toro, which also entailed access to the Toro website. Comprehensive topics included maintenance right through to training operators and workplace health and safety features

A key part of any tech day is the ability to trial different pieces of equipment

Gary Price then examined some interesting theories and facts regarding the maintenance and upkeep of cylinder reels in varying turf environments. This included specifications and reasoning behind reel operations, with issues such as backlapping, grinding theory and techniques and new technologies. He also explained some of the new Toro reel functions and deck improvements. Question and answer times were made available throughout these sessions and were beneficial to all technicians who attended.

Following the presentations the technicians split into two with one group touring the Toro workshop facility, while the other group visited the reel grinding bay for some practical demonstrations.

At the end of the day, a meeting was held where it was decided to formalise the Queensland TETA, joining the likes of the Victorian and NSW associations. A committee comprising Phil Newton (Horton Park Golf Club), Steve Kippin (Brookwater Golf Club) and Dylon Higgins (Hyatt Coolum) was chosen and they have since set about prioritising how to progress the newly formed association.

For more information about the QTETA or how to join the association, contact Phil Newton on philnewton@people.net.au 🔟

TETA STATE CONTACTS AND UPCOMING EVENTS



NSWTETA

Membership enquiries Sam Olah M: 0418 296 111 E: s-m-s@bigpond.com Next Meeting: 19 August, Annual General Meeting sponsored by PJC Sportsturf

VTFT

Membership enquiries John Phelan M: 0412 121 111 E: john@vteta.info

OTFTA

Contact Phil Newton philnewton@people.net.au

Next event: The 24th Australian Turfgrass Conference and Trade Exhibition may just be a few weeks away but there is still plenty of time left to register for the dedicated turf technicians stream which will form part of the education sessions offered in Melbourne. The tech stream will include presentations from all the major companies, including Toro, John Deere, Castrol, Foley Grinders, BOC Briggs and Stratton, as well as a tour of the PowerTurf facility and MCG workshop. To register contact the AGCSA on (03) 9548 8600 or download a registration from the AGCSA website www.agcsa.com.au



It has been a big 12 months for South Australian superintendent Andy Blacker. Not only was he promoted to president of the SAGCSA, but he also took over the superintendent posting at Adelaide Shores.



Full Name: Andrew Ross Blacker.

Nickname: Bolle.

Age: 39.

Family: Wife Cathi, and sons Jacob (7) and

Sam (3).

Years as a superintendent: 8. Years as an AGCSA member: 11.

Previous clubs: Thaxted Park (11 years as a greenkeeper, three years as assistant and eight years as superintendent).

Current club: Adelaide Shores (nine months). Number of staff: 10 (on the Golf Park).

Course specs: The Golf Park comprises two 18-hole golf courses (Patawalonga Course and Executive 60 Course), 72ha in total with 68ha actively maintained. Westward Ho Golf Club leases the clubhouse and is based on site (600 members). Both courses are public access seven days per week and combined total 100.000+ rounds per annum.

- Patawalonga Course: 5947m par 72; bent/ Poa greens (SR1019, SR1020, Crenshaw); kikuyu fairways and rough, Santa ana and kikuyu tees; 65000+ rounds per annum.
- Executive 60 Course: 3294m par 60; bent/Poa greens; kikuyu fairways, tees and rough; 35,000+ rounds per annum.

Turf qualifications: Certificate III, IV and V in

Congratulations on your recent appointment at Adelaide Shores. What prompted the move from Thaxted Park?

After 22 really enjoyable years at Thaxted Park the time felt right for a change. I was keen for some new challenges and Adelaide Shores had some exciting opportunities on offer. I hit the ground running at Adelaide Shores as they had just started a major redevelopment of the pro shop, practice facility and associated landscape. This included the construction of a 1500m² putting green. With that project

Adelaide Shores Golf Park

successfully completed I have had a chance to settle in and everyone at Adelaide Shores have been very welcoming.

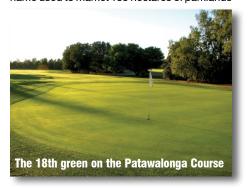
What have been some of the main challenges, both professionally and personally, that you have had to deal with in making the move?

After spending nearly quarter of a century at Thaxted Park I really was part of the furniture. The move to Adelaide Shores removed me from my comfort zone. I found the first few weeks quite surreal. To go from knowing almost everything about a workplace to a situation where everything is foreign is a great leveller and I relied heavily on Adelaide Shores employees to help me settle in.

Other challenges have been the transition from an 18-hole members course that averaged 30,000+ rounds a year to a 36-hole complex that averages 100,000+ rounds per year. Dealing with the extra traffic has taken some adjustment as has adjusting to the scale of capital works happening on site.

Adelaide Shores is a unique set up. Can you outline the facility and what new challenges it will present you as a superintendent?

Adelaide Shores is a unique golfing site within South Australia. Adelaide Shores is the brand name used to market 135 hectares of parklands



on Adelaide's coast between the Adelaide Airport and the sand dunes of West Beach. The West Beach Trust (operating as Adelaide Shores) is a statutory authority created under the West Beach Recreation Reserve Act 1987. Adelaide Shores has been empowered by the SA Government to manage the West Beach Recreation Reserve precinct.

The reserve area incorporates a holiday village, caravan resort, boat haven, two 18-hole golf courses, baseball and various sporting fields, dog and pony clubs, a skate park, streetscapes and the control and management responsibility of the sand dunes and beach to low tide. Adelaide Shores leases 22 hectares from Adelaide Airport Limited which accommodates the Executive 60 course. Adelaide Shores employs around 140 people including 85 full-time equivalents. Adelaide Shores has around 500,000 thousand visitors per year and has a combined operating and capital budget of around \$14 million per annum.

With Adelaide Shores being a part of State Government there is high emphasis on standards, procedures and policies. This means I spend a fair amount of time in my office assisting in the development of these systems. Part of my role is to assist in the development of an environmental management system (EMS) which is really enjoyable. E-par forms part of this system, however, due to the uniqueness of the site we are developing a broader all encompassing EMS covering the whole organisation. Adelaide Shores is very good at involving staff at all levels to help with strategic planning, risk management and marketing.

Some of the on-course challenges have been managing the back nine on the Patawalonga Course which is constructed on a landfill site and has some interesting soil combinations including dredged material from the Patawalonga waterway. The irrigation system requires control system and sprinkler upgrades and much of my initial time has been invested into irrigation auditing and improvements.

Outline some of the work that you have planned there in the coming years.

The back nine on the Patawalonga Course will receive the most attention in the short term, including a major overhaul of the 13th fairway. The greens surrounds on the Patawalonga Course will be converted to Santa ana couch to help combat kikuyu invasion. To improve irrigation efficiency we are updating our irrigation control system.

Adelaide Shores is also purchasing a GPS unit with the aim of building a database of relevant infrastructure which will include irrigation, turf areas/shapes, underground services, trees and shrubs, buildings and roads. Other projects include the updating of course furniture and signage, tree planting and the construction of couch and bent nurseries.

Water is obviously a critical issue around the country at present. How is Adelaide Shores faring?

Adelaide Shores uses reclaimed water for irrigation with Class A used on the accommodation grounds and the reserves and Class B on the golf park. Historically, reclaimed water has been a reliable and cost effective water source for us, however, prices have been slowly increasing. Use of Class B on the golf park comes with the normal issues associated with this type of water – excessive nutrients and growth, excessive thatch, salt accumulation, public health issues and restrictions on watering times.

However, at least we have access to a regular water supply that is not bound by the current SA Water restrictions that apply to potable water. This is a luxury that a lot of SA clubs do not have and I am well aware of the plight of clubs that do not have a secure water source so I feel very fortunate. Adelaide Shores is also investigating an Aquifer Storage and Recovery scheme which, if successful, will allow us to inject and harvest around 450 megalitres per annum.

What do you think will be the most challenging aspects of the job there?

Time management is going to be a personal challenge. Finding the right balance between administrative duties and managing the golf park team will be important as will utilising the skills of the team. I am really fortunate to have

such a great team to work with and all of the golf park team contribute to our planning and success. Other challenges include enhancing the natural environment and raising the profile of Adelaide Shores within the golfing community. Having a good work/life balance is important as well.

As well as taking over at Adelaide Shores, you were recently made president of the SAGCSA. How did that come about?

I fell into the role after only being on committee for nine months. Peter Harfield, Daryl Sellar and Ivan Swinstead all stepped down in a short space of time meaning we needed a president, vice-president and secretary. After a bit of ducking and weaving I was eventually persuaded to take on the presidency role.

I am pleased to say after a little period of uncertainty the SAGCSA committee has managed to rebuild with Stuart Gillespie (vice-president) and Digby Grayston (secretary) coming onboard to complement the ever-capable Mal Grundy (meetings co-ordinator), Sam Sherriff (membership officer) and Gary Day (treasurer). I have enjoyed my time on the committee and thoroughly recommend it.

What are some of the big issues facing SA superintendents at present?

Like much of Australia, South Australia is experiencing extreme water shortages, in particular within the River Murray system. The

OFF THE COURSE

Favourite movie? Anything with Chevy Chase in it is usually good value. Fletch is right up there.

If you could be any musician, who would you be? I'd love to be able to play guitar so I will go with Carlos Santana.

Food you could not live without? Pizza
Favourite sporting team? Adelaide Crows,
the Norwood Redlegs, and the Happy Valley
Snakes footy side who Jacob plays for.
Sporting team you despise? Anything

black and white as a rule – you can throw teal into that mix as well.

Dream car? I love my Volvo 240 GL. It's a bit of a contradiction I know, but it is so ugly I kind of like it.

Irritations? Negative people.

What book are you reading now? A short history of the world.

Favourite golfer? Craig Parry.

Golf handicap? I'd rather not talk about it.
What do you do to get away from it all?
I love camping/fishing especially in remote locations.

SAGCSA has been proactive throughout this period and in July last year we initiated an online water survey.

The aim was to obtain as much information as possible so that we could demonstrate the golf course industry's ability to manage water extremely well. We were also able to show that clubs have put a significant amount of funding into irrigation improvements and monitoring systems. The survey also gave a clear picture on just how much the drought was affecting clubs with staff cuts and a reduction in income very evident. The survey will become a very useful tool when talks are held with relevant authorities to try and secure water and funding for the industry.

What advice would give a superintendent moving to a new club?

Don't have any preconceptions of the new work site, be yourself, and if you don't know the answer don't be scared to admit it. Involving the existing staff early and communicating with them worked well for me.

Best part about being a superintendent?

Growing up on a farm I have always had an affinity with the land. The best part of my job is still having that connection with the natural environment. I also enjoy the day-to-day challenges this line of work presents.

Favourite spot on your course?

The third green on the Patawalonga Course which is almost directly under the flight path of the Adelaide Airport main runway. The skill it must take to land a machine that big in a strong crosswind is amazing.

Most embarrassing moment as a super?

Losing control of the dual cab just after taking over as superintendent at Thaxted and feeling pretty sick as I slid down a grassy bank, eventually uprooting a small gum tree and nearly writing off the utility. The following phone call to the GM was equally embarrassing.

Worst excuse from a staff member?

I noticed a particular staff member's machine parked up outside of the clubhouse for around half an hour one day. On investigating I found this particular little winner in the middle of his work day (not during a scheduled break) parked on a stool at the bar, smoke in one hand, drink in the other, happily chatting to the barman. I approached him for a reasonable explanation and he happily informed me that it was okay because he was having his "staffy" which apparently was his free drink and ensuing break that he was entitled to. Best not to mention what happened next.

LEADING TURFGRASS RESEARCH SCIENTIST RETIRES

ne of Australia's leading turfgrass research scientists, Associate Professor David Aldous, has recently retired from the University of Melbourne after a 35-year association with the turfgrass industry. Dr Aldous's retirement comes just months after another of the industry's foremost researchers Dr Don Loch announced that he would be scaling back his involvement at the Redlands Research Station in Queensland.

Dr Aldous's career in the turf industry began following graduation from the University of Sydney in 1971. His first appointment was at the Queensland Agricultural College (now the University of Queensland-Gatton Campus) in 1972 where he started the first elective in turf management as part of the Bachelor of Applied Science (Horticulture) programme. In the same year he started Queensland's first turf and greenkeeping course which initially ran at the Ithaca Technical College, and wrote that state's first turf and greenkeeping correspondence course.

In 1975 Dr Aldous elected to start postgraduate studies, initially at Cornell University in New York State where he completed his MS and PhD studies at Cornell University and Michigan State University respectively. The title of his MS programme was "The effect of supraoptimal temperature on carbohydrate, nitrogen, phosphorus and potassium levels in three Kentucky bluegrasses", while his PhD program was titled "Regulation of bud growth in Kentucky bluegrass (Poa pratensis L.) as influenced by temperature, ethylene and kinetin". He remains today one of the few postgraduates in Australia that has undertaken both higher degrees in turfgrass physiology and ecology.

In 1978 Dr Aldous was appointed senior lecturer in amenity horticulture at Massey University in New Zealand and worked with the NZ Sports Turf Institute in introducing sports turf management into the University sector as well as undertaking early research in this area.

Dr Aldous was appointed to the then principal lecturer position in environmental horticulture at the University of Melbourne's-Burnley Campus in 1981. Early in this appointment Dr Aldous progressed the Certificate in Turf and Greenkeeping, working closely with the turf and greenkeeping industry. This Certificate is still retained today in Victoria's education and training suite of courses available to the turfgrass industry.

An Associate Diploma in Applied Science (Turf) and a Graduate Diploma in Applied Science (Turfgrass Science and Management)



followed which complemented the turf management elective subjects in the then Bachelor of Applied Science (Horticulture) programme established at the Burnley campus.

Dr Aldous has also been a supervisor and/ or co supervisor of a MD, and a number of PhD's and Masters theses as well as supervisor of many honours projects in environmental horticulture. Much of the content in these programmes, electives and projects has been as a result of working in close cooperation with a wide number and range of industry representatives over that period of time.

In the research arena, Dr Aldous initiated a visiting scientist scheme which saw a number of senior North American turfgrass scientists visit Australia over the last five years. 2002 saw the first of these visiting scientist positions take place with the appointment of Associate Professor David Huff (Department of Crop and Soil Sciences, Penn. State University) who worked on "Turfgrass Breeding and the Genetics of *Poa annua*".

In 2003 Professor Brian Holl, from the College of Agriculture, University of British Columbia, Canada) came and worked on issues to do with "Organic Amendments on Microbial Community Activity in Sand-Based Greens". He was followed by Associate Professor Sowmya Mitra (Department of Horticulture & Plant/Soil Science, Californian Polytechnic) who in 2004 worked on "Wetting Agents and Turfgrass".

In 2005 Associate Professor Kenneth B. Marcum from the Department of Applied Biological Sciences, Arizona State University – East Campus, Arizona, worked on "Turfgrass salinity and control", and in 2006 Professor

John Haydu, from the Department of Food and Resource Economics, University of Florida, worked on a project entitled "Economic Analysis of the Australian Turfgrass Industry".

Many of these visiting scientists contributed to a number of national turf conferences, such as the AGCSA's Australian Turfgrass Conference, as well as other industry seminars.

Dr Aldous has also been chief investigator on a number of key projects, the investors of which include the Australian Football League, Australian Football League Players Association, and Horticulture Australia Ltd. as well as a number of university grants. Since 2000 he Aldous has generated in excess of \$100,000 in research funding to service a number of turfrelated projects.

Dr Aldous has also authored, or co-authored, and delivered a number of refereed papers at conferences and congresses and has been instrumental in writing textbooks on turfgrass management. One entitled the International Turf Management Handbook was published in 1999 and crafted in association with 20 national and international turfgrass scientists. Another text was Sports Turf and Amenity Grasses – A manual for use and identification, co-authored with lan Chivers.

Dr Aldous has achieved a number of awards in recent years, namely the Australian Award in Park and Recreation Administration (1995), Innovation and Best Practice Award, Parks and Leisure Australia (2002) and the Frank Stewart Award in 2005. Dr Aldous has retired to Queensland but hopes to work in with the research, teaching and extension agencies in that state, and retains the position of Honorary Principal Fellow and Associate Professor with the University of Melbourne.

NSWGCSA VACANCY AS WARWICK DEPARTS MUIRFIELD

There has been plenty of movement within the industry in recent times and kicking off this edition's update we head to Sydney where the NSWGCSA is on the hunt for a new committee member following Mark Warwick's decision to step down as superintendent of Muirfield Golf Club.

After seven years in the job, during which time he had undertaken some major works to improve the northern suburbs course, Warwick has decided to be his own boss and is in the process of starting up a sports turf renovation business called Environmental Turf Services. "I don't know which will be more stressful, but I'll find out shortly," Warwick told ATM.

Warwick's departure means there will be a vacancy on the NSWGCSA Board at the upcoming AGM. Warwick has been on the committee for the past three years as secretary.

Elsewhere in NSW, former Howlong Golf Club superintendent Aaron Miller has left the Murray region and headed to the south coast where he has accepted the position at Tura Beach Country Club. Miller was superintendent at Howlong for six years and before that was a senior turf technician for Scotch Grange on the Moonah Course at The National Golf Club on Victoria's Mornington Peninsula. Miller replaces Peter George who has moved into a family irrigation business in the Bega region.



In Victoria, Keysborough
Golf Club superintendent
Brett Chivers has
welcomed former
Kingston Heath 3IC
Rodney Ferry as his new
assistant, while further
north at Green Acres Golf

Club Mathew Poultney has been promoted from assistant to superintendent.

Poultney, the former assistant at Freeway Golf Club, has taken over the top job from Tim Pierce who after 19 years as superintendent has shifted to take over at RACV Healesville Country Club. Robert Hall, who was the VGCSA Apprentice of the Year in 2007 and finalist in the 2007 AGCSA Graduate of the Year Award, has been rewarded for his excellent year by being elevated to Green Acres assistant.

In the Sunshine State, Brendan Clark has left

Mossman Golf Club after a short stint to move south to Indooroopilly Golf Club. Clark, who also served a short stint as superintendent at Mt Isa Golf Club, joins the 36-hole Brisbane course as assistant to superintendent Charlie Gifford. Clark replaces former 2IC Gus McPhedran who has returned to New Zealand.

Meanwhile, Shane Bisseker has decided on a move away from the golf industry, stepping down as superintendent at Helensvale Golf Club on the Gold Coast. The former Darwin Golf Club superintendent has relocated to a parks and gardens coordinator position with the Tablelands Regional Council.

Heading west and in South Australia there continues to be plenty of movement. Following Andy Blacker's decision to move to Adelaide Shores a little under a year ago, his former Thaxted Park 2IC Jason Churchill, who was promoted to superintendent, has decided to follow his former boss and is now assistant at Adelaide Shores.

That has paved the way for Mike Bosley to take charge at Thaxted, while James Hyde has slotted into the Thaxted 2IC position, moving from the superintendent position at Carramar Golf Course in WA.



STAND 35

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TORO TO UNVEIL NEW GROUNDSMASTER RANGE IN MELBOURNE

Toro will launch the latest edition to its popular Groundsmaster range of mowers at the upcoming 24th Australian Turfgrass Conference trade exhibition in Melbourne – the GM5900 and GM5910.

An upgrade of the already successful Groundsmaster 580, the new 16" machines are new from the ground up and feature a series of benefits designed to make the job safer, easier, more economical and kinder to the environment.

Featuring the latest technology and safety features, the two new models are easier to operate and are considerably lighter than their predecessors, making them more fuel-efficient. Both new models also feature a more ergonomic control hub in their interior cabins, and a significant decrease in noise levels.

Both models boast a new engine – the 110hp Cummins turbo charged diesel engine (governed to 99hp) – which offers more horsepower than the GM850, fewer emissions and is more fuel-efficient. The extra grunt combines with increased manoeuverability and standard 4WD on both models to let operators mow through a variety of cutting conditions.



Other new features include a factory installed air conditioned cabin system; less hydraulic leakage points; air-ride seat suspension; rear-mount radiator with reversing hydraulic fan; extended service intervals and minimal daily service points; message centre display for instant critical

machine information, trouble shooting and safety; and electronic engine fuel delivery system.

For more information about the new Groundsmaster GM5900 and GM 5910 and how they could benefit your facility, contact Toro Australia on 1800 356 372.

GUIDING HAND FROM SCOTTS

Staying with new product launches at the upcoming Melbourne conference, Scotts Australia will be releasing its new Scotts Turf Solutions Guide. The comprehensive guide outlines the Scotts range of products and also provides tips and tools for turf industry practitioners.

"Scotts is dedicated to the turf industry and our extensive research allows us to integrate global knowledge into local needs," says Scotts Australia's David Westall. "The turf industry plays an intrinsic role in our product development and improvement and by being involved and listening to industry input we aim to develop precisely the right products and services."

Superintendents and turf managers can request a free copy of the guide in advance of the conference by emailing Carlene Khoury at carlene.khoury@scotts.com

NEW ETP AND HYDRO-PLAN HQS

Victoria-based Endeavour Turf Products (ETP) and Hydro-Plan Brisbane have shifted head offices recently. ETP has moved into new premises in the Melbourne suburb of Cheltenham, while Hydro-Plan has set up new headquarters in Salisbury.

"With last year's rapid expansion of the business nationally, the need for a larger office function and laboratory service has required the relocation to a modern facility in Victoria's famous sandbelt region," says ETP's Grant Greenway. "This new facility will allow for a greater response to our customers' technical and product demands nationally in addition to some laboratory services."

The new ETP Head Office location is 19 Hamlet Street, Cheltenham. ETP's contact details remain the same. Hydro-Plan Brisbane has relocated to 286 Lillian Avenue, Salisbury. Hydro-Plan's new contact details are: ph (07) 3274 1440 and fax (07) 3274 1448.

RAIN BIRD ROTOR GETS MARK OF APPROVAL FOR EFFICIENCY

Rain Bird Australia's 5000 PRS series rotor has become the first gear driven rotor in Australia to be awarded the Smart Approved WaterMark, a distinction reserved for products that make significant savings in water usage.

The 5000 PRS gear driven rotor combines Rain Bird's award-winning Rain Curtain nozzle technology with an in-stem pressure regulator (PRS) which maintains a constant optimum pressure of 45psi at the nozzle, irrespective of inlet pressure, thereby preventing the misting

and fogging caused by higher pressures. This results in water savings while providing a uniform spray and maximum coverage.

In tests, the 5000 PRS has proved to be 3.8 times more reliable than its nearest US competitor and is backed by an industry-leading five-year warranty. The self-aligning nozzles can be interchanged and spray patterns adjusted to suit a particular location.

For more information about the 5000 PRS series rotor, visit www.rainbird.com.au

HUNTER LAUNCHES NEW LANDSCAPE DRIP LINE

Hunter Industries has added to its line of water-efficient products with the rollout of its new Professional Landscape Drip Line. The new product helps apply water slowly and evenly, thus giving plant materials consistent distribution. With application rates that enable water to soak in gradually below the surface, the product removes issues such as runoff, pattern distortion from wind, and water wasted on hardscapes.

The product features in-line pressure-compensating emitters with a built-in check valve, available in both 76m and 300m coils and works well with the company's Drip Zone Control Kits.

Other products include the Root Zone Watering System (RZWS) with its patented StrataRoot System which delivers water where it is needed – at the roots. The RZWS is ideal for young plants and trees, using both nearthe-surface and deep root watering, thereby encouraging deep root growth.

For further information on these Hunter products visit www.hunterindustries.com

INITIATE HEALTHY GROWTH



Bayer Environmental Science has developed a new product which not only helps promote the growth of saplings but also provides long-term insect control. Called Initiator, it combines a systemic insecticide – Imidacloprid – with a balanced fertiliser. These are delivered in a small tablet, which is placed at the root of the sapling at the time of planting, providing up to two years of insect protection.

"Initiator has also proven to stimulate growth and improve the overall health of trees, thus increasing plant health and development speed," says Bayer's Paul Jackson. "The Initiator tablet allows for insect control without the traditional need for spraying. It is ideal for use at planting and can also be used for insect control in established trees."

For more information regarding Initiator please contact paul.jackson1@ bayercropscience.com

JOHN DEERE CUTS NEW PATH

John Deere has expanded its line of professional turf equipment with the introduction of the range of new TerrainCut trim mowers and PrecisionCut fairway mowers, both of which will be on display at the upcoming 24th Australian Turfgrass Conference in Melbourne.

The new TerrainCut rotary mower line includes the 8800 rough mower and 7400 trim and surrounds mower. Both machines

are designed to maximise operator comfort and ease of use while also providing better hill-climbing and traction capabilities with John Deere's GRIP all-wheel drive traction system.

"As with all of our products, the TerrainCut mowers are based not only on our own research but on customer feedback as well," says John Deere golf and turf product manager Rene Lubbers. "Through outlets such as our annual John Deere feedback event, superintendents tell us what they need and what they want. Our new Width-on-Demand function and the redesign of the operator station are just two examples of features that were developed in direct response to that feedback."

Standard on both machines, the GRIP system ensures that hydraulic traction power is maintained at all times. Wheel slip is minimised by diverting hydraulic flow from wheels that slip to wheels with grip.

Both mowers follow the terrain contours easily thanks to a double-yoke mounting system. Once the decks are in the mowing position, the double-yoke system allows the decks a full range of motion independent of the hydraulic lift system. The 8800 is comprised of five 21" rotary mowers across an 88" cutting span. A double-acting steering cylinder is also included to help equalise turning efforts.

For flexibility and productivity, the 7400 offers three 27" decks and its patented Width-on-Demand feature, allowing the operator to select a 68" or 74" cutting width. The cutting units overlap to ensure accurate cutting on slopes and tight turns at the 68" width of cut, and can be increased to a 74" width of cut for wide open areas. Additionally, the Reach system allows operators to shift either the front right or left decks a maximum of 15 inches outside the front tyres for trimming around bunkers or hazards.

The new PrecisionCut reel mowers comprise four models – the 7500, 7700, 8500 and 8700 – and have again come about through customer input. Innovations include more precise steering and a best-in-class hydraulic down-pressure system.

With more power but less noise and emissions, the 7000 series offers a 37.1hp engine, while the 8000 series features a 43.1hp

engine. The 7500 and 8500 models feature 22" standard bedknife-to-reel cutting units with 5" diameter reels, a fixed front roller and adjustable reel roller for less aggressiveness at lower cutting heights.

The 7700 and 8700 mowers utilise 22" ESP cutting units with 7" diameter reels. They feature reel-to-bedknife adjustment, adjustable front and rear rollers and a patented Rotate-for-Service (RFS) system to easily complete adjustments.

All cutting units feature a patented rearattaching point for the cutting unit yokes, placing force on the rear roller for a more consistent cut height. Two pressure-sensing, flow-compensating backlapping valves also enhance the quality of cut by allowing for reel speed adjustments to meet any course condition.

All four mowers feature a servo-controlled hydrostatic drive system that provides increased flow to the traction system for more power and better traction in either two-wheel or all-wheel drive. They also feature a double-acting steering cylinder that equalises right and left pressure – like a riding greens mower – making it easier for operators to hold a straight line to achieve superior striping and enhance fairway finish.

For more information on the new TerrainCut and PrecisionCut range, visit the John Deere website www.johndeere.com. au or freecall 1800 800 981 in Australia or 0800 303 100 in New Zealand to contact your local John Deere Golf and Turf dealer.





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BEST SELLERS FOR 2007/2008

Turf Managers Handbook for Golf Course Construction and Grow-In – B. Charles
Destructive Turfgrass Insects, Biology, Diagnosis and Control – Daniel A. Potter
Discovering Donald Ross-The Architect & His Golf Courses – Bradley S. Klein
Growing Media for Ornamental Plants and Turf – 3rd Edition – K. Handreck, N. Black
Golf Course Management & Construction – Environmental Issues – James Balogh and W. Walker
Golf Course Irrigation System – Design and Drainage – Edward Pira
Keepers of the Green – A History of Golf Course Management – Bob Labbance
Turf Managers Handbook for Golf Course Construction, Renovation and Grow-In – B. Charles
Turf Management for Golf Courses – James B. Beard
Turfgrass Soil Fertility & Chemical Problems – R. N. Carrow, Waddington & Rieke

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Postage: \$9.90 for first book and \$1.10 for every book after.

Open - Inside the Ropes at Bethpage Black

By John Feinstein

BACK BAY BOOKS 2002

he US Open is widely regarded in golfing circles as the game's toughest major, setting new levels when it comes to course maintenance and presentation. Long penal rough, narrow fairways and lightning fast greens mean that course maintenance is a huge component when it comes to preparing such a venue.

Just what goes into getting a course ready to host the US Open is quite mind-boggling and delegates at the upcoming 24th Australian Turfgrass Conference will get to hear first-hand from one individual who knows more than most about what is involved. One of this year's conference keynote speakers, Tim Moraghan, will regale delegates with tales of his role as the USGA's director of championship agronomy, a position which saw him play a major role in getting US Open venues prepared every June for some 20 years.

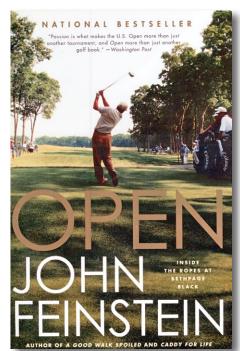
It is therefore rather apt that this edition's review is on a book which examines in detail what goes on behind the scenes preparing a course for a US Open, including the role that Moraghan plays. Written by highly respected US sports writer John Feinstein, 'Open' takes an intriguing look "inside the ropes" of the 2002 US Open staged at Bethpage Black, the first true public access course to host the event.

Feinstein, who has penned a number of golf related books including the best-seller 'A Good Walk Spoiled', examines all facets of preparations, from the major planning involved up to five years out from the tournament, agronomic issues and course alterations, right through to the heightened security arrangements surrounding the event (the tournament was the first of the US-based majors to be played following September 11).

Feinstein expertly explores the relationships between the key players involved in getting Bethpage from a well-respected public access facility to one that would uphold the traditions as being a challenging venue for one of the most challenging tournaments on the planet.

Of interest to superintendents and turf managers is the way Feinstein pays particular attention to the role that Bethpage course superintendent Craig Currier plays and his relationship with the likes of Moraghan. Feinstein has nothing but praise for the work these two gentlemen do, in particular Currier and his crew who in the years, months, days and hours leading up to the tournament put in a huge amount of effort to prove the many naysayers wrong.

One of the most delightful parts of the book comes in the closing pages where Feinstein recalls Currier's speech to the maintenance



staff following the conclusion of the final round. After congratulating his crew on a fine job, which understandably raises the roof of the shed, Currier then gets down on one knee and proposes to his partner! You can imagine the response that got from the crew. As Feinstein comments, "... the cheering in the maintenance barn sounded every bit as loud as it had been at the 17th green a few hours earlier..." (when eventual fifth placed Scott Hoch, resplendent in a shirt with the American flag on the front, scored a hole-in-one). W

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y the time this edition of Australian Turfgrass Management goes to print the Globe/Toro Cup will have been held. This event has a long history in South Australia and is a great opportunity for greenkeepers, superintendents and industry folk to get together in a relaxed golfing format. The current sponsors do a great job of planning and running the day.

This year's Cup is being hosted by the Riverside Golf Club and one would expect host superintendent Stuart Gillespie's crew to be around the mark utilising their extensive local knowledge. It is a great day and more than anything else it is an opportunity to catch up with peers and form those all important networks.

With a lot of focus these days on record keeping, staff management and reporting, it is really pleasing to see the AGCSA committed to providing its members with HR support. Many

golf clubs and superintendents do not have the resources to develop HR systems on their own. Having the HR and Best Practice Service available with templates to use and training provided is a real bonus for our industry.

This service should not be seen solely as a push to have every golf club using the systems provided by the AGCSA but rather as a tool to measure your club's performance against. I am sure that some clubs have very good systems in place which have been developed by their organisation and I would urge these clubs to provide feedback on the tools being offered by the AGCSA and to make suggestions on other information that could be provided.

The general managers/superintendents conference will be held in August this year and is likely to be held at Victor Harbour. Details will be confirmed soon. I would welcome any feedback on the value of this conference and suggestions for future content.

I am pleased to announce that the South Australian Graduate of the Year is Scott Murray who recently completed his traineeship and Certificate III in Horticulture at Willunga Golf Club. Congratulations go to Scott, who will be giving a short presentation at this year's AGM. Please join me on the day in congratulating him on his achievements.

In closing, it is great to have finally received some decent rainfall. A four day period in mid-May produced 30-90mm in metropolitan areas and good rainfalls in most country centres. This has, one would hope, signalled that winter is upon us and we can finally shut down irrigation systems for a few months.

Speaking of rain, the Melbourne Australian Turfgrass Conference is just around the corner. I look forward to seeing you there.

> ANDREW BLACKER PRESIDENT, SAGCSA

n behalf of the VGCSA committee and members I would like to thank Glenn Davie who has stepped down as vice-president at our recent AGM at Royal Melbourne Golf Club. Serving on the committee for the past five years, Glenn has made a huge contribution in the area of sponsorship, as well as his roles as treasurer and vice-president.

The best thing about being on the VGCSA committee is the friendships you develop over time and I feel I can call on Glenn whether it's on a personal or professional level. Once again Glenn, thanks for your time and effort.

With Glenn stepping down the VGCSA has welcomed Nathan Bennett on to the committee. Nathan is the passionate superintendent at The Sands, Torquay and I hope that all members will support him and the rest of the committee over the coming year. The full VGCSA committee is:

President: Michael Freeman (Huntingdale Golf Club)

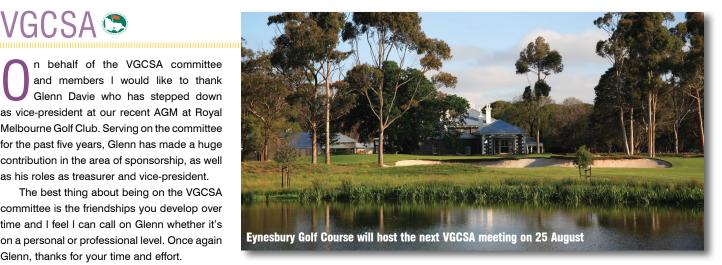
Vice-president: Brett Chivers (Keysborough Golf Club)

Treasurer: Peter Jans (Sanctuary Lakes and Sandhurst)

Secretary: Jeremy Cutajar (Ringwood and Dorset Golf Clubs)

Committee: Trevor Uren (Devil Bend Golf Club), Colin Foster (Patterson River Country Club), Colin Morrison (Flinders Golf Club), Nathan Bennett (The Sands, Torquay).

A healthy field of 84 teed off at Royal



Melbourne in an early shotgun start. The field enjoyed the architectural beauty of Australia's number one course and all the talk after the golf was the beauty of the West Course layout. One can only imagine how difficult it would have been to build the course with only man and horse power those many years ago. Many thanks to superintendent Jim Porter and his staff for the presentation of the course.

Winner of the Powell Trophy for 2008 was Michael Grant from Kooringal Golf Club who shot a par 72 to head home Rod Tatt from Cranbourne Golf Club who posted 75. The Toro Cup was also won by Michael (38 points) with the President's Shield going to Alan Phillips. Many thanks to our sponsor Toro for supporting the day.

The VGCSA Apprentice of the Year Award winner was also announced at the meeting with this year's recipient being Rhys Whitling from Safety Beach Country Club. Rhys will go on to represent Victoria in the final of AGCSA Graduate of the Year Award which will be announced at the 24th Australian Turforass Conference in Melbourne. Other nominees were Matt Young (Drouin Golf Club) and Kate Torgenson (Peninsula Country Golf Club).

The next VGCSA meeting will be at Eynesbury Golf Course, sponsored by Scanoz, on Monday 25 August. The focus of the morning education session will be on soil and tissue testing with Phil Ford.

Eynesbury superintendent Garry Collins will then talk through the development stages of the course, with golf to follow in the afternoon. The VGCSA committee looks forward to seeing you all there.

NSWGCSA

n April the NSWGCSA held its annual Rube Walkerden day at Killara Golf Club. It was a very special day as all life members and some long-standing superintendents were invited.

Fortunately, most could attend the day, however, we received apologies from Steve Fryer, Albert Wallace, Harry Smith, Pat Henry and John Marsden. I would like to thank Peter McMaugh, Geoff Hatton, Reg McLaren, Wayne Marland, Bob Chessel, Billy Hopkins and John Simpson for attending. It was great to see many old faces who have had so much involvement in our industry. Geoff Hatton spoke briefly about our life members and how much passion there is in our industry.

Congratulations to Trevor Ridge (Sawtell Golf Club) who won the Rube Walkerden Trophy. Thanks must go to our sponsors on the day – Maxwell and Kemp, Dad and Dave Turf Supplies, Bayer Environmental Science, Golf Shapes and Patons Fertilizers. I would also like to thank Billy Hopkins and Killara Golf Club for their hospitality on the day.

The assistant superintendent day was held in early May and was also a great success. This looks likely to become an annual event.



Attending the recent NSWGCSA Rube Walkerden Trophy were (from left) Reg McLaren, John Simpson, Geoff Hatton, Peter McMaugh, Wayne Marland, Bob Chessel and Billy Hopkins.

The aim of this day is to help assistants prepare for what may lie ahead. Thanks to Globe Australia for sponsoring the event and Castle Hill Country Club for hosting the day.

I would also like to congratulate Christopher Thompson from Maclean Golf Club who has been named the NSWGCSA Apprentice of the Year. Christopher will be attending the Australian Turfgrass Conference in Melbourne to represent NSW in the AGCSA Graduate of the Year Award for 2008. Good luck and make us proud.

I would also like to acknowledge the other finalists – Ian Thompson, Morgan Westmorland, Richard McGuiness, Timothy White and Michael Brauer – and thank Shaun Probert for organising the awards.

Thank you to all the companies which have recently renewed their advertising. The newsletter is now going out to over 300 clubs in NSW and is a great advertising tool.

ANDY HUGILL PRESIDENT, NSWGCSA



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he drought is still a worry for most superintendents around the Apple Isle, in particular the south and east coasts. Hobart has recorded just 7mm for May and most areas have registered below 50mm for the autumn period. This is on top of well below average readings of 118mm for the first five months of the year. Let's hope winter brings some welcome rainfall.

The seminar that was organised in the south of the state recently had to be cancelled due to a lack of attendees. This was very disappointing due to the time of year and the important topics that had been scheduled for the day. The topics were efficient spray applications, chemical storage, EPA and Hobart City Council. If anyone has any suggestions to help encourage larger numbers at these education days please feel free to give

Barnbougle Dunes superintendent Phil Hill says that work is about to start on the new second 18 holes at a cost of \$10-12 million. The course designers Bill Coore and Dave Axland were on site at the end of May with work Construction of the second course at Barnbougle Dunes is due to start this month



expected to have started in June. Axland was reportedly to have said that there was more variety on the site than any course he had seen in a 20-year career designing golf courses. Phil is also looking for 10-20 new staff for the start of works, with the business eventually expected to employ up to 100 people.

Staff movements around the state include Paul Darnell who is the new superintendent at Port Sorell, Malcolm Godfrey at North West Bay, Tom Crawford at Riverside, Steve Crosswell at Orford and Kurt Wheeler at Greens Beach. We wish these superintendents all the best for the future and we hope to see you at Port Sorell in August.

he recent cooler weather has given the chance for many turf managers throughout the district to stand back and take stock of requirements for the impending spring weather. Although it has been a relatively mild autumn and winter to date, rainfall has been below average leaving many water storage areas well below capacity.

This is cause for some concern for many in the area who rely heavily on onsite water storage facilities. Unfortunately there is not much that can be done that has not already been implemented and we can only hope for decent falls to come.

Although it is still too early to obtain stats from the recently held TGAA ACT seminar it is evident from early feedback that it was hugely successful. There were a high number of delegates from all parts of the east coast and it seems that any topic related to irrigation water usage and management is highly popular. As soon as assessments from the seminar are evaluated the results will be available.

The TGAA ACT would again like to thank all the speakers, sponsors and supporters without which seminars such as this would not be possible. We would also like to thank all members and delegates who attended the seminar and showed their support. We only hope that we can provide a service that is responsive to your needs.

Now that the 2008 seminar is over, the hard work organising the next one begins. Remember the TGAA ACT seminars are dependent on feedback from people within the industry. So to allow us to tailor a seminar to your needs and expectations, we need your thoughts and ideas.

Some more recent news likely to affect local turf managers is the review and remodeling of training packages. Data from a recent survey carried out within local industry should give a good indication of what the real requirements are for education and training. Let's hope that any revised edition will be an improvement on previous curriculum.

There is also a government plan to relocate the Canberra School of Horticulture from the Weston campus to the north side of Canberra at the Bruce campus. There is a general consensus that this would be a great loss, due to the already existing and established grounds and gardens in Weston.

> JUSTIN A. K. HASLAM COMMITTEE, TGAA ACT



he first official event of the Sports Turf Association, formerly trading as TGAA NSW, was the Sydney Sports Turf Seminar held on 15 May. This was also the launch of the new name to our members and at the same time the new website was up and running. The new look has been received well and we will continue to build a strong association for our members.

We will once again take our seminar on the road to the north coast of NSW, Hunter Valley area, and hold our Regional Sports Turf Seminar on 19 August at Kurri Kurri TAFE.

Speakers for the day will include AGCSA Claude Crockford Environmental Award finalist Kenton Boyd (Magenta Shores Golf Course), Rob Cooper (Living Turf), Steve Harris (The Vintage Golf Course), Andre Wyzenbeek (John Morris Scientific) and former TAFE teacher Graeme Scobie. The day will also include machinery demonstrations on the grounds at the TAFF.

For further information on STA and our events call (02) 8883 4688 or go to www. sportsturf.asn.au

ur association hosted the 2008 TAFE Turf Awards Dinner at the WACA in April. The event was a tremendous success, with 75 people attending, including the graduating students and partners, TAFE lecturers, and sponsors from the turf industry. All graduating turf apprentices and students from Challenger TAFE were awarded their certificates. The following individual awards were presented.

Lecturers Award (Sponsored by Lawn Doctor): Cory Pausin, Seaview Golf Club.

Best Apprentice Bowling Greenkeeper (Sponsored by WABGA): Russell Quinlan, Carlisle Lathlain Bowling Club.

Best Full-Time Student (Sponsored by Baileys Fertilisers): Robert Thompson, UWA Sports Park.

Best Turf Management Apprentice (Sponsored by Bayer): Dayne Whalan, Christ Church Grammar School.

Best Indentured Apprentice (Sponsored by GCSAWA): Luke Hoglin, Wanneroo Golf Club.

It is great to see the calibre of young people coming through in the turf industry, especially after so much negative feeling in

recent times about the labour shortage and the decline in the number of people undertaking

I'd like to make a special mention of Robert Thompson from UWA Sports Park. He was awarded the best full-time student, after persevering through some very difficult circumstances in obtaining a work visa after moving from the UK.

The issue with obtaining visas for skilled workers in the turf industry is something that the association would like to take up on behalf of members. We are in a situation with the number of qualified people leaving our industry that the government should be making it easier for suitably qualified foreign workers to take up iobs here.

Our first event of the year was the President's Breakfast at Kings Park in February. There was also a tremendous response to our field day in May, with 47 people visiting Baileys Fertilisers and the Lark Hill Sporting Complex. Our AGM is scheduled for the 16 July at Wembley Golf Complex.

> PETER RUSCOE PRESIDENT. TGAA WA

ost parts of Queensland have received good rainfall for late May and early June. Unfortunately the Brisbane catchment and Toowoomba didn't receive as much, leaving the Brisbane water supply at below 40 per cent and Toowoomba at around 20 per cent.

Over the past couple of months, our two field days have had great educational value. This showed with more than 60 in attendance at each day and the information was very well received by those who participated. Thank you to Nuturf and Globe for sponsoring these days.

We also ran our annual Northern Rivers Day at Mullimbimby Golf Club and although it was a wet and miserable day, 48 braved the conditions after lunch to tackle the course, with the team from Byron Bay coming out on top. Thank you to all GCSAQ sponsors for supporting us on this day.

The 24th Australian Turfgrass Conference is almost upon us and I look forward to catching up with you all then.

ROD COOK PRESIDENT, GCSAQ



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GCSAWA 🍕

hearty welcome from the West. Autumnwinter rains have been well up for the year to date with irrigation systems idle since early May, with the occasional light application to greens required in some areas.

First, I would like to congratulate Luke Hoglin from Wanneroo Golf Club for being awarded the GCSAWA Best Indentured Apprentice for 2008. Luke adds his name to an impressive list of graduates who have previously won this award and we wish him the best with his nomination as the AGCSA Graduate of the Year, I would also like to congratulate Darren Morfitt in his new position as superintendent at Collie Golf Club.

The GCSAWA education day at Burswood was well attended with Dean Scullion presenting the latest from e-par with a quick run through of the system and Daryl Sellar from the AGCSA giving an informative interactive HR session. A special thank you must go to Rain Bird Australia for sponsoring the day with Scott Johnstone and Wayne Brown giving a brief update.

The annual Management Challenge held at Mt. Lawley Golf Club was won again by the host team for the third consecutive year, clearly showing their home ground advantage (there is no doubt another venue will be required next year for a more competitive day!). Second was Lake Karrinyup Country Club followed by Bunbury Golf Club.

This event is an important one for our association and is aimed at getting the superintendent, manger, president, captain, or other committee held position together for a great game of golf which helps in forming good relationships between the major stake holders within each club.



By all reports WA will have a large contingent of members at the 24th Australian Turfgrass Conference in Melbourne. From all indications this will again be a huge gathering with many events, seminars and functions planned. We wish all attendees a safe trip, and an informative and entertaining conference.

The Vines Resort has been booked for our 2008 AGM and Toro Cup on 19 August so ensure you come along. We will have two vacancies on the GCSAWA committee. so if you would like to have an input and contribute to our state association and industry in WA, contact myself or any other committee member and let us know you are interested. Nomination forms will be sent out with the flyer and minutes from previous years.

A special mention must go to Geoff Kirk who will be in his 20th consecutive year on our association, showing his commitment to

our industry and also his dedication to our association in WA. No words can explain our gratitude or respect for Geoff. His input and workload throughout the years is nothing short of amazing and on behalf of the GCSAWA we thank Geoff for his efforts in the past and future

Good news on the tournament front with The Vines again being named to host the 2009 Johnnie Walker Classic. I am glad to see an international tournament back in WA and we wish Dion and the boys all the best with the upcoming preparation and event.

I look forward to catching up with state and national members in Melbourne and in WA throughout the year.

> DARREN WILSON PRESIDENT. GCSAWA



warm winter welcome to everyone. The new TGAA VIC website will be operational by the end of June 2008 and will have a new look with easy to access links to a variety of turf related sites.

The 24th Australian Turforass Conference and Trade Exhibition will be at the Melbourne Convention Centre from the 21-25 July. This conference is shaping up to be an extremely informative one for all the turf related information streams.

As the year is coming to a close for Victorian TGAA activities, we will conclude the year with the conference. The Cricket Wicket Seminar has been incorporated into the conference to

cater for our interstate and overseas guests and our Annual General Meeting will be held on the Thursday of conference week.

Every member should be now receiving Australian Turfgrass Management Journal and Golf and Sports Turf. We are working on Turfcraft magazine for all members also. We are also attempting to break down any old barriers that may have existed from olden days between our association and any other turf association.

We held some great seminars this year and again many thanks must go to the 2007-08 committee for their fantastic efforts for the last year. They have achieved a lot of positives for

the future of our great association. I would also like to thank Sue Bailey for her tireless efforts and great patience thought the year since taking over the administration role.

If you haven't heard, the Victorian Turf Grass Association now has a new home -5/35-37 Kitchen Rd, Dandenong South, VIC 3175. Phone (03) 9791 6900 or fax (03) 9791 6055. When you have a chance, stop by for a visit. Thanks again for a great year.

ROBERT SUNDBLOM PRESIDENT TGAA VIC

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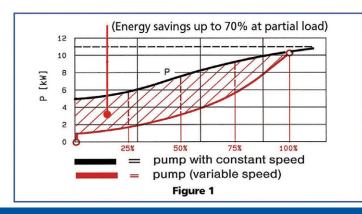
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Brendan Graham, A&M Watering

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