



Australian Fertiliser Services Association

# FERTILISER NEWS



Volume 39, No. 2  
**JULY 2018**

IN THIS EDITION

National Chairman’s Report	5
Tasmanian Report	7
Victorian Report	8
South Australian Report	10
Western Australian Report	13
New South Wales Report	15
Sulfur in Soils	16
Chain of Responsibility & reusable containers	18
Why change and competition are an important part of your business	20
Achieve Even Distribution of Micronutrients in the Field	22
Rural Commodities Wrap	24
Fertilizer Zn is not of Environmental Concern	26
Register now for Fertilizer 2018, October 9 - 11	28
Review your farm bulk fertilizer handling procedures	30
Australian Soil Fertility Manual– Reduced to \$55	30
Unloading Bulk Solid Fertilizer on Farm	32
Community - Georgia Watson	34

Cover image by:  
Macier 3 Photography  
[www.macier3photography.com](http://www.macier3photography.com)  
Frost on the farm gate – Sale, Gippsland VIC

2017/2018 OFFICE BEARERS

**CHAIRMAN:**  
Craig Swan,  
PO Box 339, Meningie, 5264  
08 8575 1851,  
0428 813 209,  
[craig@swanbrothers.com.au](mailto:craig@swanbrothers.com.au)

**COMPANY SECRETARY/TREASURER:**  
Neil Henry,  
PO Box 10, Glenthompson, 3293  
03 5577 4218,  
0418 562 570  
[henfert@bigpond.com](mailto:henfert@bigpond.com)

**DEPUTY CHAIR:**  
Noel Squires,  
03 97 42 6300,  
0419 891 886,  
[nsquires@bigpond.net.au](mailto:nsquires@bigpond.net.au)

**BOARD DIRECTORS:**  
Kim Bailey,  
08 9439 1688,  
0419 19 9275,  
[kim@baileysfertiliser.com.au](mailto:kim@baileysfertiliser.com.au)

Shane Dellavedova,  
03 5461 2888,  
0427 349 088,  
[dfs@iinet.net.au](mailto:dfs@iinet.net.au),

John Harrison,  
02 9624 6040,  
0427 894 352,  
[harrisonandassc@optusnet.com.au](mailto:harrisonandassc@optusnet.com.au),

Wendy Rowsell,  
03 5487 1269,  
0409 0963 346,  
[info@richriverseeds.com.au](mailto:info@richriverseeds.com.au),

Amy Wyer,  
02 4845 8288,  
0428 270 888,  
[amy@fertspread.com](mailto:amy@fertspread.com)

**EXECUTIVE OFFICER & FERTILISER NEWS EDITOR:**  
Krysteen McElroy,  
P O Box 884, Padthaway, 5271  
0408 655 108  
Email. [Bkmcelroy22@outlook.com](mailto:Bkmcelroy22@outlook.com)

**NEW SOUTH WALES**

**PRESIDENT:**  
Paul Wyer, PO Box 88, Gunning. 2581  
02 4845 8288, 0428 273 555,  
[paul@fertspread.com](mailto:paul@fertspread.com)

**VICE PRESIDENT:**  
Anton Barton,  
22-26 Twynham Street, Narrandera 2705  
02 6959 9911, 0418 367 326,  
[anton@bioag.com.au](mailto:anton@bioag.com.au)

**SECRETARY/ TREASURER:**  
Amy Wyer,  
P O Box 88, Gunning 2581  
02 48458 288, 0428 27 0888,  
[amy@fertspread.com](mailto:amy@fertspread.com)

**SOUTH AUSTRALIA**

**PRESIDENT:**  
Mark Rivett, PO Box 137, Lucindale. 5272  
0428 162 284, [rivett@rbm.com.au](mailto:rivett@rbm.com.au)

**VICE PRESIDENT:**  
Stephen Button,  
Office/Mobile: 0438 895 558  
Mobile: 0428 811 399,  
Email: [admin@agvancerural.com.au](mailto:admin@agvancerural.com.au)

**SECRETARY / TREASURER:**  
Neil Henry,  
PO Box 10, Glenthompson. 3293  
03 5577 4218, 0418 562 570,  
[henfert@bigpond.com](mailto:henfert@bigpond.com)

**TASMANIA**

**PRESIDENT:**  
Bill Earley,  
210 Weetah Road, Deloraine. 7304  
03 6362 3258, 0429 316 798,  
[earley2@bigpond.net.au](mailto:earley2@bigpond.net.au)

**VICE PRESIDENT:**  
Bruce McIntosh,  
PO Box 157, Sorell. 7172  
03 6265 2608, 0417 224 707,  
[bruce@quintransport.com.au](mailto:bruce@quintransport.com.au)

**SECRETARY / TREASURER:**  
Shona Murfet,  
PO Box 797, Kings Meadows 7249  
03 6391 8256,  
[admin@altracspreading.com.au](mailto:admin@altracspreading.com.au)

**VICTORIA**

**PRESIDENT:**  
Campbell Brumby,  
PO Box 7100, Geelong West. 3218  
03 5265 1105, 0419 889 757  
[campbellbrumby@auscommservices.com.au](mailto:campbellbrumby@auscommservices.com.au)

**VICE PRESIDENT:**  
David Bentley,  
9 Scouller Street, Birregurra. 3342  
0429 446 146.  
[davidbentley@wengfuaustralia.com](mailto:davidbentley@wengfuaustralia.com)

**SECRETARY/ TREASURER:**  
Neil Henry,  
P O Box 10, Glenthompson. 3293  
03 5577 4218, 0418 562 570,  
[henfert@bigpond.com](mailto:henfert@bigpond.com)

**WESTERN AUSTRALIA**

**PRESIDENT:**  
David Holdsworth,  
PO Box 14, Wyalkatchem. 6485  
08 9681 1117, 0427 918 904,  
[david@ddtransport.com.au](mailto:david@ddtransport.com.au)

**VICE PRESIDENT:**  
Kevin Spurr,  
PO Box 290, Wagin. 6315  
08 9861 1948, 0429 104 145,  
[bigk@westnet.com.au](mailto:bigk@westnet.com.au)

**SECRETARY:**  
To be advised.

**TREASURER:**  
Larry Marchant,  
PO Box 36, Trayning. 6488  
08 9683 1081, 0427 831 081,  
[martran@bbnet.com.au](mailto:martran@bbnet.com.au)

**ACCU-SPREAD ACCREDITATION – TESTING OFFICERS**

Kevin Beams, 0474 131 681  
[kbeams@iinet.net.au](mailto:kbeams@iinet.net.au)

Larry Marchant, 0427 831 081  
[martran3@bigpond.com](mailto:martran3@bigpond.com)

Russell Nichol, 0418 505 002  
[russell.nichol@bigpond.com](mailto:russell.nichol@bigpond.com)

Damien Wyer, 0428 273 444

Jarrad Keyte, 0429 163 743  
[jarrad.keyte.jke@hotmail.com](mailto:jarrad.keyte.jke@hotmail.com)

John Forrest  
Mobile: 0457766552  
[forrej@bigpond.com](mailto:forrej@bigpond.com)

**FERTCARE MANAGEMENT COMMITTEE**

**AFSA COMMITTEE MEMBERS:**  
Craig Swan,  
08 8575 1345, 0428 813 209,  
[craig@swanbrothers.com.au](mailto:craig@swanbrothers.com.au)

Shane Dellavedova,  
PO Box 157 Maryborough. 3465  
03 5461 2888, 0427 349 088,  
[dfs@iinet.net.au](mailto:dfs@iinet.net.au)

**FERTILIZER AUSTRALIA**

**EXECUTIVE OFFICER:**  
Nick Drew,  
Locked Bag 4396, Kingston. 2604  
02 6273 2422, 0411 410 903,  
[nick.drew@fertilizer.org.au](mailto:nick.drew@fertilizer.org.au)

**PROGRAM MANAGER:**  
Jeff Kraak, PO Box 775, Echuca. 3564  
0407 663 535,  
[jeff.kraak@fertilizer.org](mailto:jeff.kraak@fertilizer.org).

**ADCELL GROUP PRINTERS**

**MANAGER:**  
Abbey Sherwell,  
203 Malop Street, Geelong. 3220  
03 5202 9613, 0418 991 203,  
[abbey@adcellgroup.com.au](mailto:abbey@adcellgroup.com.au)

**ARTHUR J. GALLAGHER INSURANCE**

**MELBOURNE:**  
Jamie Lansdown,  
289 Wellington Parade South,  
East Melbourne. 3002.  
03 9412 1688, 0466 400 710,  
[Jamie.lansdown@ajg.com.au](mailto:Jamie.lansdown@ajg.com.au)



# NATIONAL CHAIRMANS REPORT

Craig Swan



Welcome to the 2018 Mid Year Report.

With the broadacre sowing season almost behind us we are looking to the skies for some much needed rain. The season so far has been kind to the high rainfall zones in the southern areas; although it has been very disappointing to the rest of the cropping and pasture areas. Let's hope that over the next few weeks this turns around.

As we are approaching the nitrogen season, Australia has enjoyed the lower end of the world nitrogen price cycle. This is the third year in a row Australia has benefited in this way. This has also been a huge advantage to our customers who, at the same time, have increased their nitrogen application rates.

In February we had the opportunity to work with Ali Uren from Kiikstart on Strategic Planning. Following our initial training with Ali, the AFSA Board has worked with her to facilitate a 2 day Business training session in every State.

The purpose of the training is to add value to AFSA members by providing a learning and skill building opportunity across all States for members and interested businesses.

The Board offered all States the opportunity to participate and to their credit South Australia and Victoria have agreed this is a fantastic opportunity for their members and they will host the Kiikstart training. However, there is still time for other States to get involved, therefore if you are interested please give me a call.

I have attended 2 Fertiliser Australia (FA) meetings in Melbourne this year. The FA Board have worked hard on many issues including importing regulations and procedures; and working with Government departments on sensitive area such as the Great Barrier Reef project.

Nick Drew has been the Executive Manager of FA for 17 years. Nick has resigned from this position effective at the end of 2018. The FA Corporate

Governance Committee will head up the recruitment and change over process of Nick's replacement.

On behalf of the AFSA we thank Nick for his support of the AFSA and wish him well on his next adventures.

I have just returned from the AFSA Board meeting in Melbourne where amongst other agenda items, the 2018-2019 budget was ratified. I would like to extend my thanks to the Board for giving their time with our Association.



## Daimler Trucks Laverton

When it comes to the serious business of fertiliser spreading, you need confidence and peace of mind that you have the right truck for the job.

From the light tare Atego 1630A 4x4, the rugged Arocs 1835AK to the legendary Unimog U430 and U530, Mercedes-Benz Special Trucks have the best option for your business.

For more information about these, or the wider range of Mercedes-Benz Trucks, contact our Mercedes-Benz Trucks Specialist Drew Halloran on 0466 327 480 or [dhalloran@dtlaverton.com.au](mailto:dhalloran@dtlaverton.com.au)



Mercedes-Benz

Trucks you can trust





# Insurance done right

Just as you need the perfect fertiliser mix for specific soils, you also need the right insurance plan for your business's unique risks.

Gallagher are experts at providing tailored insurance for the fertiliser services sector. That's why we're the proud insurance partner of AFSA – and have been for 30 years.



Our **Truckpac** policy is a perfect fit for many fertiliser businesses, but we can also manage all elements of your business insurance including:

- Business / property insurance
- Public liability
- Workers compensation
- Cyber insurance
- Management liability
- Business interruption
- Key person insurance

Arthur J. Gallagher & Co (Aus) Limited. Operates under AFSL No. 238312. Any advice provided in this document does not consider your objectives, financial situation or needs. You should consider if the insurance is suitable for you and read the Product Disclosure Statement (PDS) and Financial Services Guide (FSG) before buying the insurance. If you purchase this insurance, we may charge you a fee for our service to you. Ask us for more details before we provide you with any services on this product. PDS available on request. Our FSG is available on our website, [www.ajg.com.au](http://www.ajg.com.au). Arthur J. Gallagher & Co (Aus) Limited. ABN 34 005 543 920, Level 12, 80 Pacific Highway, North Sydney, NSW 2060.

If you'd like more info on our range of insurance products and services call us today on **1800 572 145** or visit [info.ajg.com.au/afsa](http://info.ajg.com.au/afsa)

# TASMANIAN REPORT

Bill Earley



Hi all,

Another few months have passed and boy things have been busy here in Tassie!

It's been a very dry stretch for us on the island so work has been unhindered by weather and resources have been stretched in all sectors of business, either within our own or down the line in the supply chain where product at times is short. This is a big indicator that workloads are stretched. I have spoken with several operators and we're all in the same boat, but I guess we're not waking up wondering what we are going to do. It's good for the pocket but hard on the head.

Most of our agricultural sectors are very positive at present; this is supporting our businesses and giving us positive growth and rewarding results going forward.

Our dairy industry has done a full turn around and milk prices are back on track where these guys and girls are making good returns. The sale of Murray Goulburn will see the new company strive hard to be competitive against its opposition and this will create much needed level competition which hopefully will return greater financial gains to our farmers in this sector.

Sheep/beef growers have reported excellent returns over the past twelve months and although late autumn prices have decreased it has still been a positive twelve month period.

The quiet achiever is wool. Prices are on the up and this money stream is coming back to its own and helping these producers look to a more positive outcome heading forward.

Vegie growers are looking at slightly better prices but yields have been average to above. The good dry growing season has seen growers able to monitor water onto crops helping with controlled results however, increased water usage will cut returns on crops somewhat and disease and pest issues attacking crops may also take the shine off returns.

Cereal and poppy crops enjoyed a reasonably fast harvest with minimal loss due to great harvesting conditions although returns have been just average to above.

The Tassie AFSA branch has been slack in its activities mainly due to my inability to dedicate the time it deserves. Workloads are becoming a bit

easier and starting to catch up so will extract a digit and get things organised for our local AGM, most likely for late August.

Nothing to report on OH&S going forward, but I will say; use good practises, good common sense and keep continually striving to keep training up at the forefront of all our businesses.

I had the opportunity to attend a 'Trucknology Day' with Westar Trucks in Brisbane organised by our local Tassie sales rep in Phil Salter. The day featured MAN road and off-road trucks, a crane truck and a double decker bus that could not be tipped over at any speed. The day was based around a new release on their new D38 560HP road truck, with emphasis on new truck sensor braking ability bringing fully laden trucks to a straight stop before hitting an obstacle. It also featured a vehicle ahead distance regulator which keeps trucks at a constant safe distance from ahead vehicles.



I saw a brilliant use for our spreaders when finished with and that was to put a camper on its back and take off with all the grey nomads. Overall, it was a very informative couple of days with a great bunch of Westar sales reps from all over Aus.

As we head toward the quieter months, it may be a good time to contact our local man in Kevin Beams to sort your spread testing. If you have machines in need of Accuspread testing, Kevin is very busy this time of year so it's a good idea to give him as much notice as possible.

Until we meet again, take care and remain safe.







# VICTORIAN REPORT

Campbell Brumby

Hello Members,  
We are nearly at the end of the financial year, and approaching the shortest day.

Winter has hit with full force this week with hail, snow and freezing conditions over much of Eastern Australia, but for many, not a lot of rainfall.

Seeding is all but finished with early sown crops that have had rain now getting an early application of nitrogen in the form of Urea, UAN and /or Urea SOA blends.

The lack of rainfall and pasture growth has seen grain and fodder prices rapidly escalate with any grade of hay now managing to find a home.

Speaking to a friend on the QLD Darling Downs they advised you can get \$400mt on farm for any form of wheat (even with a few weevils) from the feedlot in the area.

Northern NSW and QLD is getting to the point of being too late to salvage a winter crop but if they get big rains from here on, there will be a massive sorghum crop sown.

How quickly conditions can change, all those frosted crops that were dropped for hay late last spring and many sold for not much more than cost of production, could now be sold x 10 times over.

In the Western District a lot of growers are looking to hay production as a part of the rotation in an effort to combat ryegrass resistance, with some huge hay storage sheds being erected that reflects their long term commitment to this market.

The AFSA Board have come up with an initiative for members and are looking for interested participants for the following...

Stay warm and I hope you are getting the rainfall you need... Cheers.

## National Upskilling and Business Building for AFSA Members

### Executive Summary of Proposal

The aim of this program is to provide skill and capacity in the areas of doing business in a modern and competitive environment and doing so in a way that is creative.

This program has been designed to suit businesses of all sizes including single operator/owners and will be delivered over a two day period.

#### Day 1 – Refining day to day operations

The reality of an ever changing market and how to develop useable systems and processes to improve day to day operations

Making the most of people in your business and minimising waste

#### Day 2 – Putting it into Action

Planning for the future

Responding to the risks that can determine growth and future potential

#### Details

Two full days, including an informal evening dinner

12 – 20 participants per session

July – August - September (to be determined)

If you or someone within your business is interested in attending, please contact

Krysteen McElroy  
AFSA Executive Officer

**AUSTRALIAN FERTILISER SERVICES ASSOCIATION**

**Email:** bkmcelroy22@outlook.com **Mobile:** 0408 655 108

### 2018 Victorian Branch AGM.

A reminder for this years Victoria AGM being held at the The Dunkeld Royal Mail Hotel and at the Mt. Sturgeon Woolshed.

**Date** - 21st – 23rd August 2018... registrations are now open



# AFSA INVITE YOU TO THE 47<sup>TH</sup> VICTORIAN BRANCH AGM & CONFERENCE AT THE ROYAL MAIL HOTEL DUNKELD

21st - 23rd August 2018

## ACCOMMODATION

- Rooms available at Royal Mail Hotel & Mt Sturgeon Cottages
- Delegates to organise own accommodation

## CONFERENCE FEE

- \$155 per attendee
- Meals and Pre-dinner refreshments included in the registration fee

## SPONSORSHIP

The following sponsorship packages are available:

Platinum	\$2500 incl GST
(one available only)	
Gold	\$1300
Silver	\$700
Bronze	\$500

## PROGRAMME

### 21st August 2018

- Vic Branch Committee Mtg
- Registrations from 5.30pm
- Welcome Dinner at Parker Street Restaurant with guest speaker

### 22nd August 2018

- Vic Branch AGM at Mt Sturgeon Woolshed
- Partners tour of Royal Mail Hotel Vegie garden
- Industry speakers
- Networking Hour
- Delegates tour of Mt Sturgeon Homestead surrounds and Royal Mail Hotel Wine Cellar
- Evening meal with local guest speaker at Mt Sturgeon Woolshed

### 23rd August 2018

- Final goodbyes before heading home

## FOR ANY FURTHER INFORMATION AND TO BOOK YOUR SEAT

**Campbell Brumby**

[campbellbrumby@auscommservices.com.au](mailto:campbellbrumby@auscommservices.com.au)

0419 889 757

**Neil Henry**

[henfert@bigpond.com](mailto:henfert@bigpond.com)

0418 562 570

[www.afsa.net.au](http://www.afsa.net.au)

Please contact us if you are interested in showcasing your business in this way







# SOUTH AUSTRALIAN REPORT

Mark Rivett

Welcome from SA,  
It's always a hard report this time of year to write for me.  
Months on end without a day off, going around and around, looking at a GPS screen. The brains a little addled!  
It has, however given me a day off and a chance to have a quick run, a strum on the guitar, a bash on the drums and a yodel on the mic to try and get a few electrons shooting around the head of this space cadet (I reckon the neighbours will be escorting me back to the truck in the morning to make sure I don't inflict anymore pain on their ears!).  
Thanks to Heath Boseley, Steve Button and John Crossling for their input to get an overall picture of what's happening across the state.  
Welcome to Jerry Read from Read Spreading, Kingston SE, Brian and Anne

Lund from ABL Agriculture, Coonalpyn and Luke Clarke from Luke Clarke Contracting, Rendelsham. I look forward to catching up in the near future. I'm sure you will get a lot of benefit out of being a member of AFSA.  
The quality of fertiliser early in the year was excellent, but as happens every year when things become busy, it seems to drop off a cliff. It would be nice if a minimum standard was set!  
For all the seed salesman that sell wheatgrass and fescue seed, I'm taking you off my Christmas card list. Buggered if I can see the point in planting something that nothing seems to eat and shakes the sh#t out of the driver and machine.  
Lets hope with a change of government in SA, that the country regions see some injection of funding for the massive contribution they make to the state. We may need to become squeaky wheels to see any results, because of our lack of votes. Regardless, I would like to see all sides of

government work together for the good of everyone, instead of the childish blame game that dominates politics.  
The delaying of the annual heavy vehicle inspection in South Australia for some months will enable a better understanding of what it will mean to our industry. Hopefully we can be on top of things like our floatation tyres, etc, so we don't have problems at the time of inspection.  
I have an aim to get as many of our SA executive together for a face to face meeting to get their input for the future direction of AFSA in late July or early August. If any SA members have any issues they want to raise, please give me a call.  
To finish I'll give a shout out to a bloke who works for me, Mick, who nicknames himself "Sexy Fingers", because everything he touches he ----s. Keep your hands in your pockets Mick!  
Good luck to all.

# CLARE VALLEY REPORT

Stephen Button

Three words best describe the year  
DRY DRY DRY  
To the 13th June 2018 Auburn receiving 58.3mm a record dry only compared to 1994 - 102.4mm for the same period. With

that, most seeding has been completed with most crops emerging except for black ground which is struggling. Spreading has been above average with more canola being grown this season. Land prices continue to increase with a sale in March of up to

\$19,513 p/ha with no improvements to be planted to vines in the near future.  
Till next time,  
Regards.

John Crossling

Well here we are racing towards the middle of the year, where has it gone? Here in the south east although dry it has been a good season. Being dry was certainly welcome to help get the products out onto the paddocks, but in the last month we have had a little bit of rain which has got both the livestock and cropping boys looking a little happier. As I am writing this we have just had our most significant rain of the year with amounts generally around the 50mm mark.  
We have been very busy and tonnages are

up for fertiliser, lime and gypsum, supply has been good with only one company running a little short on a certain product in the last month or so.  
Looking forward to urea season it is still a little uncertain to how much will be spread as there is less crop planted this year as some farmers swing back to livestock while there are good prices around. Both wool and lambs are going very well with no sign of going backwards any time soon.

On another front there has been some work started by SA AFSA to try and get fertiliser spreaders registered as a special purpose vehicle, although the process will no doubt be slow it will be worthwhile pursuing. At present it is still in its infancy but will help many in the industry if we can get it signed off on.  
With another season coming to the end the contractors can start to get a few weekends off to spend time with family and friends.  
Keep on spreading.

Heath Boseley

Rain where art thou, with No rain since November 2017, it has been a very dry time in the SA Mallee. Dry seeding was well and truly 2/3 the way though by the time we received 5mm of rain which was nearly cursed at that time as it made for not wet and not dry seeding. This posed many challenges as now we will see some very dirty crops in the coming months. Some more conventional farmers hung back and have now sown with a germination of weeds controlled and now 20+mm of rain this week these crops will be germinating well, with a good pre-seeding weed kill. So, can't wait till harvest to see the yield penalty either way, taking note of early crops with weed competition and chemical

control V's later sown, somewhat weeds free but delayed emergence and cold soils.  
Wind row burning was again a success this year in controlling weed numbers. This has become common place in the Mallee over the past few years, some have tried the Harrington Seed Destructor (HSD) with good success also, however due to the speed of the blades it has caused problems with bearings, Oil cooling and a few little teething problems, all that said it's an exciting non-chemical control option for the ever-increasing weed seed problem. The wind rows have caused a few problems also as the wind rips down them after burning

and erodes areas along the way, with direct seeding these then become an issue over the long term as they are there for many years as no tillage takes place to level them out. Either way its working on the problem weed seed bank, aiding farmers control their numbers. Has anyone else seen these problems and got any other resolution?  
As for spreading, its slow here at the moment, as we have only been doing bits and pieces on the little canola and hay that is grown in the Mallee, so we are hopeful of good follow up rains to apply N to some good looking cereal crops in the months to come.  
Thanks.



## WHY GROW WITH MACRO?

QUALITY FERTILISERS | COMPETITIVE PRICING | GLOBAL REACH | LOCAL FOCUS

Macrofertil is a one stop shop for fertiliser and crop protection products, whilst providing tailored finance options to suit individual circumstances.

We source quality fertilisers from reputable suppliers worldwide.

Macrofertil has storage facilities in WA, SA and VIC, with skilled Account Managers servicing your area.

**CONTACT US TODAY: 1800 649 122**



# Prime DSZ

(15-17.5-0-8 0.5%Zn)

## Transform your crops

Wengfu Prime DSZ is the ideal starter product for crops such as cereals and canola where the combination of high levels of N, P and S is required, along with a maintenance level of zinc.

A stable and uniform granule provides for excellent storage and handling.

Customer Service  
**1300 936 438**

**wengfuaustralia.com**



**WENGFU AUSTRALIA**

The Efficient Advantage

## WESTERN AUSTRALIAN REPORT

**Kevin Spurr**



Hello everybody

Greetings from West Australia.

As I write W.A has had a mixed seeding program across the state and some farmers are still in the process of finishing.

Some very powerful winds blew during May and in early June that wreaked havoc to seeded land in the south eastern parts of the wheat belt. Early crops that had grown were sandblasted and others had the seed and top soil blown away in some places. Farmers are replanting in some areas.

The previous year when so much rain fell in the summer months turned this year into a nervous time as farmers waited for the season to break though it wasn't forthcoming 'til just after the usual break of the season date, near after the 25th May.

Feed became very short and there was a scramble to secure hay and grain for the valuable livestock. At the moment conditions are favourable for most farmers excepting the south eastern area where they are still screaming for water.

Contractors are busy spreading the usual products at this time and lime has once again been busy. Urea is currently on the move in most places and as we speak, conditions are perfect to apply products in the paddock. Apparently the forecast is for a dryer than usual season so it will be interesting to see the outcome as we all know the heartache of boggy conditions.

While not being able to make the Accu-Spread field days during March in the

south west the reports were once again positive. Kelly Lavell did a great job to bring this to fruition and with Russell Nichol at the helm plenty of mileage was gained in the prominence of good spreading practices.

It's been smooth sailing on the Fertiliser front here in W.A with no supply and delivery issues delivery throughout the farming area to date. Prices have trended upwards with Urea stabilizing around \$460 up from around \$400 earlier.

It was great to have some fresh air in the form of Krysteen McElroy attend our AGM in March. Krysteen spoke about membership and what was happening across the country in respective states. She also provided really good input to our organization about methods going forward as a body.

David Holdsworth was elected our new President, a role he has previously held. We wish him the best endeavours there as David has many fingers in many fires with his work in other committees and organizations.

On a sad note we saw our long time and highly valued secretary Pam Clulow, retire from her role in AFSA WA. Pam we wish you and Les all the very best going forward and we thank you very much for your valuable contribution as a member and as a friend.

Till next time.





# COMSPREAD ENGINEERING

VIOLET TOWN, VICTORIA

## WE KNOW SPREADERS!



- ➔ **NEW Customised to requirements**
- ➔ **Refurbishment of any spreader available**
- ➔ **We know the industry as we work in the industry**

**Contact: Rick or Chris Button**

Office hours: 8am-5pm

[rick@comspreadengineering.com.au](mailto:rick@comspreadengineering.com.au)

**(03) 5798 1603**



Vol. 39 No. 2 July 2018

## NEW SOUTH WALES REPORT

**Paul Wyer**



Hi everyone,

After a very busy season and working up to the end of June, I can say that it has been a good year for fertiliser contractors in Southern NSW. Commodity prices are still holding well, especially wool, and this is having a big impact on how much fertiliser is being applied in our grazing areas.

However, it has been dry and this is starting to affect farmer spending. We are seeing customers put their fertiliser budgets towards stock feed as we head into a dry winter. We hope this changes moving into spring.

We have had small amounts of rain scattered over the last month which has resulted in pastures being wet on top and dry underneath, making paddocks very slippery. This has been a safety issue for us and drivers have had to take extra precautions in these conditions. The photo

of the John Deere and compost spreader shows what can happen in slippery conditions.

It has been a very cold winter for us but that is to be expected when your business is close to Canberra. We would like to reassure members however, that by the time the National Conference is held in Canberra in October, flowers will be blooming at Floriade and the Spring sun should be out.

NSW is looking forward to hosting the national get together. Things are progressing nicely with the help of Fertiliser Australia and it promises to be a fantastic event. Along with the conference, there will be a machinery field day where delegates will be able to test drive vehicles and see different machines being spread tested. I encourage all members to come along and not miss this event.

See you at the convention.



## Fertiliser News welcomes your input!

Please have all advertisements, articles, letters and photos supplied to the Editor by the following dates:

**July edition**  
Closing date (15th June)

**November edition**  
Closing date (15th October)

**March edition**  
Closing date (15th February)

Contact: **Krysteen McElroy (Editor)**  
0408 655 108 | [bkmcelroy22@outlook.com](mailto:bkmcelroy22@outlook.com)





# SULFUR IN SOILS

Prof. Mike McLaughlin

Sulfur (S) is one of the 17 elements essential for plant growth and the fourth most important after nitrogen (N), phosphorus (P) and potassium (K) in terms of amounts required by crops (Hopkins 1999).

It plays a key role in plant nutrition through its activity in photosynthesis and in the synthesis of amino acids and proteins. Both N and S are key elements in proteins and hence there is strong nutritional interaction between these elements for crop growth and crop quality.

Deficiencies of S have become more common in agricultural systems due to the stricter controls on atmospheric emissions of S, use of S-free high analysis fertilizers and increases in S removal by high-yielding hybrid crops. This factsheet describes how S behaves in soil, its uptake by plants and how we can increase crop production using S fertilizers.

## FORM AND BEHAVIOR OF S IN SOILS

Sulfur is present in all soils and is derived both from parent rock materials (e.g. sulfides and sulfates, which are common minerals in the earth's crust) and from the atmosphere (e.g. through deposition of S on soil from marine aerosols, industrial

gases or gases/particulates from volcanic eruptions) (Figure 1).

Despite the primary source of S in soil being mineral weathering, most of the S in productive agricultural soils is present in soil organic matter (OM). Each percent OM in the topsoil (6 inches or 15 cm) contains about 100 pounds of S per acre (112 kg per hectare). This is because the predominant inorganic form of S in soil pore water, i.e. sulfate ( $SO_4^{2-}$ ), is not strongly retained by soils against leaching, and hence moves through soil relatively easily, similar to N in the nitrate form. The S that is incorporated in organic matter is protected against leaching, again similar to N. In some soils that are waterlogged (e.g. rice paddies),

S may also be held against leaching as reduced insoluble sulfides (mostly associated with iron).

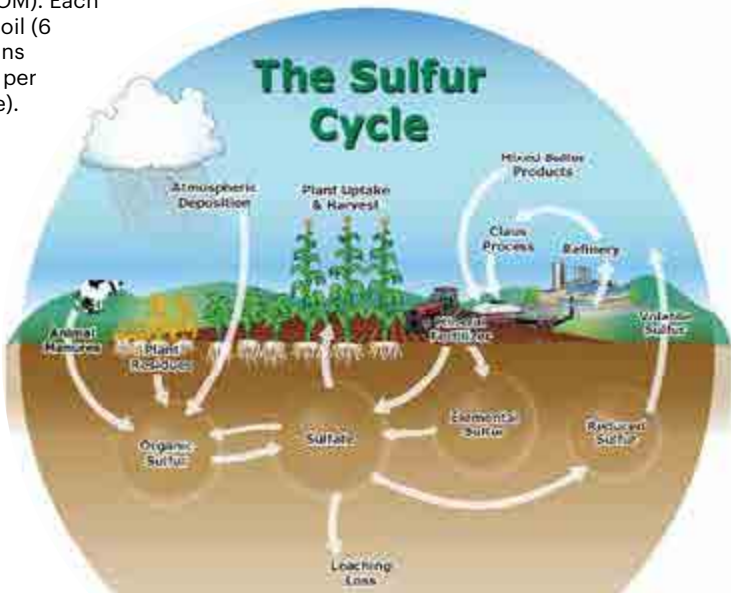


Figure 1. The S cycle in agricultural systems (IPNI)

## PLANT UPTAKE OF S FROM SOIL

For healthy growth, plants require S at a concentration of between 0.1% to 0.5% of their dry weight (Marschner 2012). High yielding crops therefore take up significant amounts of S from soil and product harvesting removes significant amounts of S from the system (Table 1).

Other losses of S can occur via leaching below the root zone, or by temporary immobilization of S in soil OM (Figure 2). Leaching can be a significant loss mechanism in light textured soils in higher rainfall environments, or when significant rainfall is common after fertilizer addition and before planting (e.g. fall applications) (Devine and Holmes 1964).

Plants take up S predominantly from soil as a sulfate ion via the soil pore water. Hence in unfertilized soils, the supply of S to plants is closely tied to the dynamics of mineralization and immobilization of soil OM. Soils high in OM will have a high potential to supply S to plants if temperature and soil moisture conditions are favourable (20-30OC, 68-86OF). On the other hand low OM soils will have a higher likelihood of S deficiency. Mineralization of S from soil OM is greater at higher soil temperatures and higher soil moisture. Enhancement of S supply from soil can be achieved by fertilization.

## SULFUR FERTILIZERS

The most common S fertilizers are based on addition of sulfate to soil (e.g. gypsum, ammonium sulfate, potassium sulfate), as sulfate is the form in which plant roots take up S (Table 2).

Fertilizers based on elemental S or thiosulfates must first be oxidized to sulfate for plant uptake, and this process relies on microbial activity in soil. Like mineralization of soil organic S, oxidation of elemental S and thiosulfate requires microbial activity and hence is more rapid in warm moist soils with high OM content.

Oxidation reactions of elemental S are also faster in alkaline soils than in acidic soils (Germida and Janzen 1993). Elemental S fertilizers can therefore be regarded as slow-release sources of S for crops (less prone to leaching), while sulfate-based fertilizers are fast release fertilizers (more prone to leaching). Models have been produced which can predict the rate of oxidation of elemental S based on soil temperature, moisture, pH and OM content (McCaskill and Blair 1989).

## SOIL AND TISSUE TESTING TO PREDICT RESPONSES TO FERTILIZER S

Like N, pre-plant soil testing to predict fertilizer responses is difficult for S given that sulfate is mobile in the profile (hence testing to depth is often required) and is produced during the crop growth cycle by mineralization of organic S (hence

Table 1. Yield, S uptake and S removal from selected plants.

Crop	Yield (tonnes/ha) (and lb/acre)	Crop S uptake (kg/ha) (and lb/acre)	S removal in grain or fodder (kg/ha) (and lb/acre)
Corn	12.0 (10,706)	26 (23)	15 (13)
Soybean	4.0 (3,569)	22 (20)	12 (11)
Wheat	5.0 (4,461)	20 (18)	8 (7)
Alfalfa (hay)	6.0 (5,353)	14 (12)	14 (12)

Calculations based on data from Bender et al. (2013); Kaiser and Kim (2013); Nuttall (1985); Rasmussen et al. (1975).

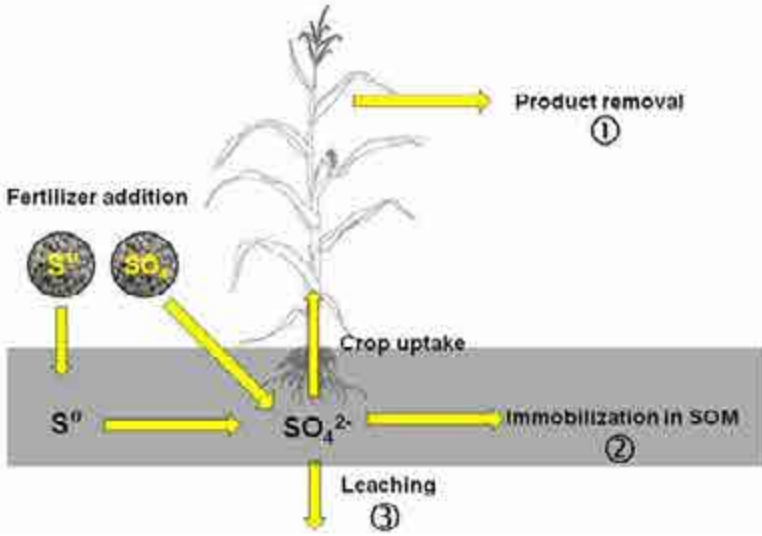


Figure 2. Fate of fertilizer S, added as either elemental S (S0) or sulfate (SO42-) in soil. The major pathways of loss for soil sulfate from soil are crop removal (1), immobilization in soil organic matter (SOM) (2) and leaching (3).

predictions of potential mineralization are needed).

No one soil test procedure has proven effective across all environments but the most commonly used tests are monocalcium phosphate, calcium chloride and Mehlich-III.

Deficiencies of S in plants can be seen visually and confirmed by plant analysis – generally younger leaves are pale green to yellow in colour (Figure 3).

Deficiency of S can sometimes be confused with N deficiency so it is best to confirm using tissue analysis. Plants with tissue S less than 0.12% and a N:S ratio greater than 20:1 are most likely S deficient, although critical values should be checked for your crop/stage of growth.

\*This study was published by the University of Adelaide.

## CONTACT:

Prof. Mike McLaughlin,  
Fertilizer Technology Research  
Centre Adelaide University,  
School of Agriculture Food and Wine  
Phone: +61 8 8313 8433  
Email: michael.mclaughlin@adelaide.edu.au



Figure 3. Photo of S deficiency in corn (source: IPNI).





# CHAIN OF RESPONSIBILITY & REUSABLE CONTAINERS

## Freight containers

The Heavy Vehicle National Law (HVNL) sets out the obligations for operators, drivers, consignors and consignees about the handling of freight containers and the requirements for container weight declarations (CWD). Safety risks of transporting overweight loads.

## Transporting overweight containers:

- Accelerates road wear
- Causes damage to infrastructure
- Can result in longer braking distances and vehicle instability
- Can affect performance and handling.

All of these factors can also increase the risk of a crash, putting the safety of drivers and other road users at risk. Inefficient practices such as repeated weighing of containers also occurs. Where conflicting weights are recorded, confusion is created. Unreliable weight information makes it very difficult for drivers to comply with the law.

## Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 830:1981 and the following apply:

## Freight Container

Article of transport equipment

- a. Of a permanent character and accordingly strong enough to be suitable for repeated use;

- b. Specially designed to facilitate the carriage of goods by one or more modes of transport, without intermediate reloading;
- c. Fitted with devices permitting its ready handling, particularly its transfer from one mode of transport to another;
- d. So designed as to be easy to fill and empty;
- e. Having an internal volume of 1m3 (35,3ft3) or more

**Note 1 to entry:** The term “freight container” does not include vehicles or conventional packing.

**Note:** Definition extracted from AS3711.1 – Freight containers: Handling and securing.

## What might constitute a freight container?

Could these be containers under the definition and caught by the NHVR?

- Field bins/Stork bins
- Grouper
- Spreader
- Ground Operated Tarp
- Half Height Containers
- Side Flippers

Are there other modes of moving fertiliser that could be classified as containers under the definition?

## Labelling of a freight container?

Some of the key labelling requirements for a freight container include:

- Container number
- Container owner
- Max weight inc container weight
- Weight of container
- Max weight and volume that can be packed

It is most likely that some or all of these would apply to the fertiliser freight containers (eg field bins)

## Container weight declarations

### What is a CWD and what does it look like?

A CWD is a written declaration of the weight of a container and its contents. It may be either in hard copy or electronic form, or a placard attached to the freight container. It may consist of one or more documents in different formats – for example a sheet of paper and an email - but in any case, it must be able to be produced in its entirety, to an authorised officer, upon request.

### What information must it include?

Although there is no specific form for a CWD, it must include the following information:

- weight of the container including its contents (you may estimate the mass, however subject to the reasonable steps defence, you may be liable if your estimation is incorrect)
- container number and other details necessary to identify the container

- name and residential address or business name and address in Australia of the responsible entity for the freight container
- date of declaration.

## When is a CWD required?

A complying CWD is required when transporting a consigned freight container on a road using a heavy vehicle. The requirement for a complying CWD is not dependent on whether the freight container is empty or loaded.

A complying container weight declaration is not required for a freight container that has been modified so it is no longer fit for use in multi-modal transport or its primary use would no longer be for the transport of freight (E.g. modified for use as a storage shed, portable office, portable plant equipment, etc.).

A party in the chain of responsibility may be liable if the CWD is inaccurate, false or misleading.

## What is each party's responsibility?

### Consignor

The consignor (importer, freight forwarder, shipping agent etc.) must prepare a complying CWD and provide a copy for the road transport operator or driver before the container can be transported by road. For imported containers, the consignor is the person who imports the container into Australia.

### Operators

An operator who arranges for a freight container to be transported must make sure the driver is given a complying CWD before commencing the journey. If another carrier transports the

container further, the operator must provide a CWD to that carrier before the container is received.

### Drivers

A driver must not drive a vehicle loaded with a freight container unless they have a complying CWD for the container. While on the road, drivers must keep a copy of the CWD in or about the vehicle at all times.

### Consignee

A consignee must not encourage or reward a breach of mass, dimension or load restraint requirements. A consignee will be regarded as participating in the breach if they knew or could reasonably have known that a complying CWD was not provided, or that information about the container's weight and contents was false or misleading.

### Responsible Entity

*responsible entity*, for a freight container, means—

1. the person who, in Australia, consigned the container for road transport using a heavy vehicle; or
2. if there is no person as described in paragraph (a)—the person who, in Australia, for a consignor, arranged for the container's road transport using a heavy vehicle; or
3. if there is no person as described in paragraph (a) or (b)—the person who, in Australia, physically offered the container for road transport using a heavy vehicle.

A responsible entity must not permit an operator or driver to transport a container unless they have been provided with a complying container weight declaration that is not false or misleading.







# WHY CHANGE AND COMPETITION ARE AN IMPORTANT PART OF YOUR BUSINESS

Krysteen McElroy

**Change:** an act or process through which something becomes different.

**Competition:** the person or people over whom one is attempting to establish one's supremacy or superiority; the opposition.

Does your business still work with practices that were inherited from a world where communication was not instantaneous and potentially one party had more or better information than the other?

There are many competitive pressures on business today and the fertiliser services industry is no different to any other business attempting to grow and prosper in today's economic environment. With the vast amount of computing power available, our customers are rapidly overcoming the lack of available information that gave businesses an advantage over customers.

The changing social and technology landscape means that some traditional ways of approaching business might no longer be suitable.

This means that it is now a good time to think about your habitual business practices and to ensure that you are not doing things that worked in the past but maybe do not work now.

Take any business or industry and you will be able to find differences between them in the terms of size, structure, distribution channels, customer needs and wants, growth and the alternatives for the consumer. These are the differences that lead to competition and the need for a business change to manage the threats this can bring.

**How can you analyse the nature of competition and identify exactly what the threats are?**

You will need to look at the:

**Threat of new competition** - This can come from unexpected and non-traditional sources, which means that keeping an eye on the emerging trends in the industry is important

**Threat of substitute products or services** - this threat is even more important, with technology trends moving so quickly it is easy for a good or service to become obsolete.

**Bargaining power of customers** - this is a major emerging threat to traditional business models. Consumers are increasingly well-armed with information about products and competitors.

**Bargaining power of suppliers** - be clear as to the grounds you compete upon.

**Intensity of competitive rivalry** - this threat continues to remain strong. Traditional rivals are still in markets but there are new entrants and new products or services competing for the same dollars.

**So how do you manage the threats and competition to your business? Does it mean there is a need to change?**

**Define your brand** - This is not your logo – this is about what your business stands for. No two businesses are alike just as no two customers are alike, hence the need for branding.

You will need to ask yourself - What's different about my business in comparison to other businesses in the industry? What do I want to be known for?

**Choose a Competitive Advantage** - There are 3 key areas to focus on when choosing a competitive advantage;

- ✓ **Quality:** you can offer a superior quality product or service.
- ✓ **Price:** you can offer the lowest prices
- ✓ **Service:** you can offer an unforgettable customer service.

**Look after your existing customers** - Do you know that it costs 20 times more to get a new customer than it costs to keep an old customer? Customers are very expensive to attract and that is why it is important to focus on existing and return customers.

This will mean placing more emphasis on building an enduring relationship with your existing customers rather than on just making a sale. There is nothing more powerful than having a strong communication link between you and your customers. It is the cheapest but most effective tactic against intense competition.

**Communicate 'WITH' and 'TO' your Customers**

If you are not talking with and to your customers, someone else is. This is a very vital element in your response to competition. Talking 'to' your customers is what is known as advertising and talking 'with' your customers is what is known as market research.

Talking to your customers is a good thing, but talking with your customers is a great thing.

Why? Talking with them helps you better understand them which in turn helps you serve them better.

**Excite your Customers**

Innovation brings excitement to the marketplace and customers like excitement. People no longer have to deal with a business that isn't innovating – because they can always find someone who is.

Innovation gives the marketplace something exciting to talk about. And there is nothing that drives a business faster than word of mouth advertising. If you can find a way to get your customers excited enough to talk about your business/service as a result of the innovative things you consistently come up with, then you've got an edge over the competition.

**What does all this mean for your business?**

To stay competitive in today's environment warrants not only the skill and desire to adapt to change but also the foresight to anticipate it.

The solution is to never get to comfortable and always seek out new ways to do the same thing better or offer something innovative.

If you believe that your business is stable and relatively predictable, you may be better off sticking to what you believe are your traditional sources of advantage.

HOWEVER, if your competitive reality is uncertain and rapidly changing, you will need a dynamic and sustainable way to stay ahead.

Your survival may depend on changing your business so that you can exploit your competitive advantage – be it quality, price, service or potentially all three.

**Why competition is a good thing.....**

Without competition, it's easy to lose focus on your core business and your core customers and start expanding into areas that don't serve your best customers.

Competition forces you and your business to figure out how to be different from your competition and how you can focus on your customers.

In the long-term, competition will help you build a better business.

## Fully Constructed Steel Weighbridges



### Why choose steel?

- ✓ competitively priced
- ✓ fast and easy to install
- ✓ rugged construction
- ✓ longer lasting

### Servicing customers throughout Australia.

- 9m, 20m, 28m Weighbridges
- Custom Weighbridges
- Mobile Weighbridges
- Weighbridge Kits
- Platform Scales
- Weighing Devices
- Axle Weighers



Formerly Griffith Elder (Aust)

call for a quote  
send us an email  
visit our website

**1300 464 447**  
**sales@gendio.com.au**  
**www.gendio.com.au**

Fully licensed and approved for trade





# ACHIEVE EVEN DISTRIBUTION OF MICRONUTRIENTS IN THE FIELD

Tanuki Pty Ltd

It is well known that micronutrient deficiencies occur in agricultural land across Australia and New Zealand. Zinc and Copper deficiencies are particularly common and depending on the region other micronutrient deficiencies may also impact crop yield.

Even distribution of micronutrients in the field can be a challenge due to the small percentage that is typically used in a fertiliser blend. For instance, a dry blend of urea and zinc sulphate monohydrate may only have one percent zinc or less.

The issue of even distribution can be solved by applying a micronutrient coating to every fertiliser granule. Many fertiliser suppliers throughout Australia (and overseas) are able to apply Glaze liquid micronutrient coatings using their standard blending equipment.

Farmers can currently choose from Zinc, Copper, Boron and Molybdenum coatings, with Cobalt, Manganese, Magnesium and Sulphur coatings to be released in the future. It is also possible to combine micronutrient coatings.

Glaze can be applied to single superphosphate, MAP, DAP, MicroEssentials ZS, Urea, MOP, SOA and NPK compounds. The use of Glaze coated fertiliser granules does not require changes to application equipment.

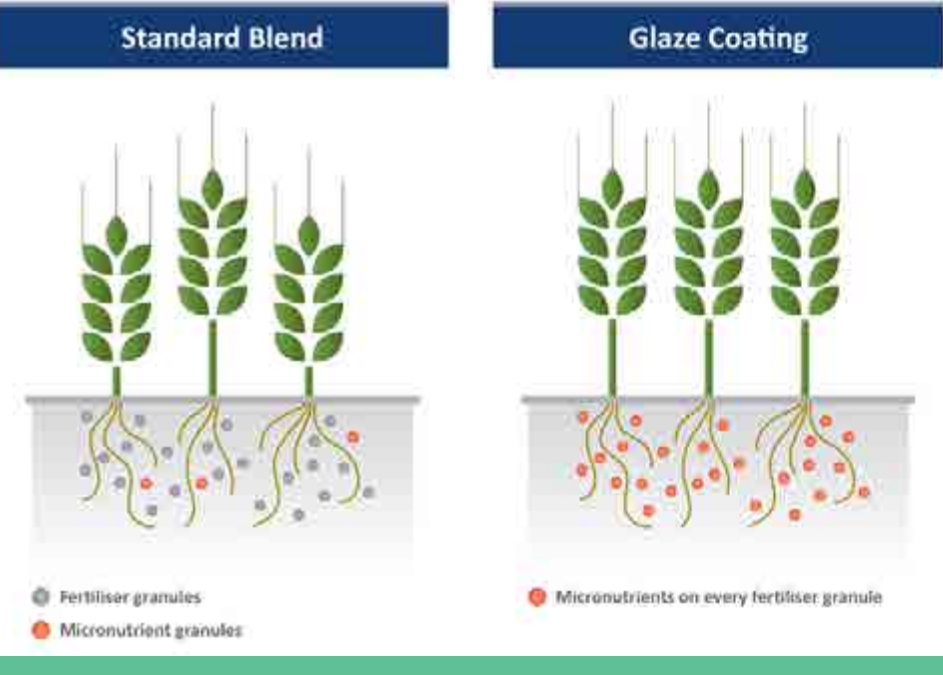
The integration of Glaze coating systems into regional blending systems has been positively received. The ability to customise

job lots on a just-in-time basis has satisfied growers, agronomists and dealers alike. A significant benefit for dealers is the simplified and versatile inventory control and stock management, reducing fertiliser segregation.

Glaze coatings have the additional benefit of suppressing dust that is typically present in

granular fertiliser. If fertiliser is particularly dusty, the specially formulated Glaze Dust Suppressant product can be used.

The Glaze product range is manufactured in Australia and New Zealand by FerTec Ltd, a joint venture between Tanuki Pty Ltd and Southstar Ltd. [www.fertec.com.au](http://www.fertec.com.au)



# Word about **BBE** is SPREADING



- BBE** proudly manufacture engineered solutions for dry fertiliser spreading:
- Truck Spreaders • Tractor Spreaders • 3Pt Linkage Spreaders • Side-tippers
  - TAG Trailers • Trailing Spreaders • Bin Trucks • Bin Trailers • Field Bins

**Our pledge:**

**Design collaboratively**

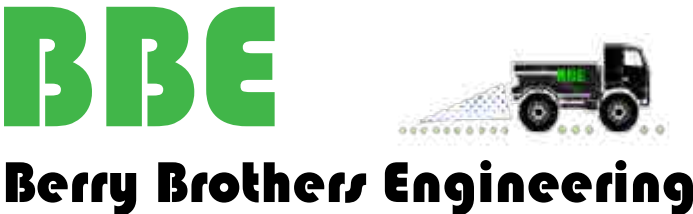
**Quality build; built to last**

**Responsive service & support**

**BBE** keeps you spreading

**Contact:** Paul Berry 0488 442 798

**Located:** 45—49 Main South Road  
Drouin, Vic 3818





# RURAL COMMODITIES WRAP

JUNE 2018

### KEY POINTS

Weather conditions across most of the country remain very challenging. With a good deal of planting already done and the rest looking for the break, grain growers need good rain soon. It is probably too late for much pasture growth until spring, and with little grain in storage domestic grain prices continue to surge. ASW indicative cash prices have reached low \$300s in Victoria and mid-high \$300s in Queensland. Conversely, cattle prices have been much weaker, with EYCI now at 466c/kg – the lowest level since May 2015. These countervailing price forces are reflected The NAB Rural

Commodities Index, which gained 3.1% month on month in May amid an 11.4% surge in wheat but a 5.6% drop in cattle. Elsewhere, horticultural, dairy, wool and cotton prices were higher and lamb has proven resilient in the face of the dry. Wool has been an especially strong performer, with the latest auction seeing EMI top 2,027c/kg. A good winter would go a long way to reviving confidence for grain and cattle producers, although the latest BoM outlook is for below average winter rainfall across New South Wales, South Australia, Victoria and southern Queensland. Fingers crossed.

### PRICE UPDATE

The NAB Rural Commodities Index gained 3.1% month on month in May after falling 2.8% in April. On a year on year basis, the index was down 4.4% in May. The monthly gain reflects strong grain, horticultural, dairy, wool and cotton prices. The AUD remains perhaps higher than many producers would like, although we don't expect major downside from here (75c by the end of 2018).

On a state basis, cattle-heavy Queensland was the weakest performer, down 0.2%. New South Wales was up 2.0%, while Victoria and Tasmania were up 4.1% and 3.8% respectively. South Australia was up 5.2%, while grain dependent Western Australia rose 5.2%. The index tracks 28 commodities weighted by the relative size of each commodity in the Australian agricultural sector.

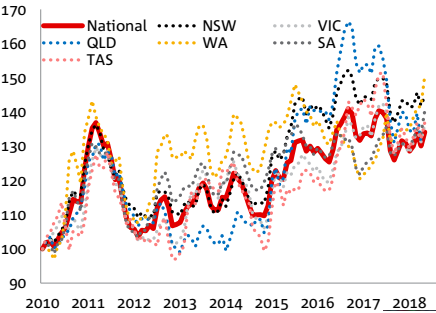
### MONTHLY PRICE CHANGES

AUD Prices

	March	April	May
Wheat	▲ 2.4%	▲ 2.7%	▲ 11.4%
Beef	▲ 4.2%	▼ 7.3%	▼ 5.6%
Dairy	▲ 2.1%	▲ 1.9%	▲ 7.5%
Lamb	▼ 1.6%	▼ 3.4%	▲ 2.2%
Wool	▼ 1.1%	▲ 1.0%	▲ 6.5%
Sugar	▼ 4.2%	▼ 6.8%	▲ 2.3%
Cotton	▲ 5.8%	▲ 1.1%	▲ 4.3%

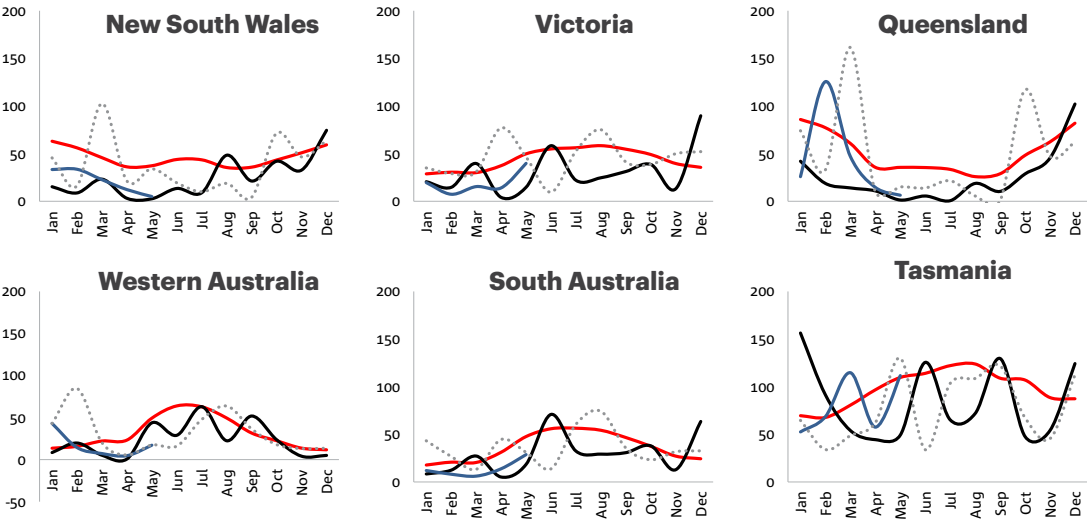
### NAB RURAL COMMODITIES INDEX

January 2010 = 100



Source: NAB Group Economics, ABARES, Meat and Livestock Australia, Australian Pork, Ausmarket Consultants, Australian Pork, Ausmarket Consultants, Australian Bureau of Statistics, Bloomberg and Profarmer.

### MONTHLY AVERAGE RAINFALL IN WHEAT REGIONS (MM)



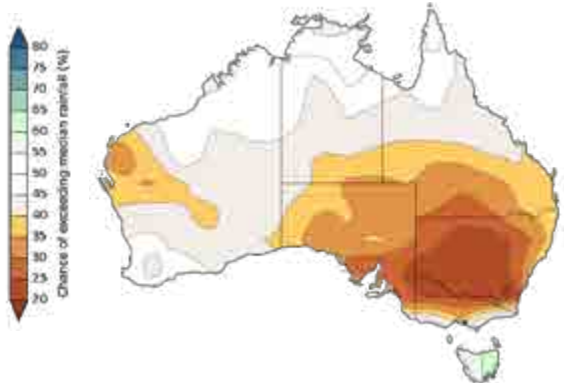
— Long run average 1900-01 to 2013-14  
— 1902 drought — 2018 YTD  
..... 2017

Source: Bureau of Meteorology and NAB Group Economics

### SEASONAL CONDITIONS

#### THREE MONTH RAINFALL OUTLOOK

June to August 2018



Probably the best comment we have about the Bureau of Meteorology's latest three month outlook is that we very much hope it proves to be wrong. Most of New South Wales, along with the Mallee, is rated at only a 20-25% chance of exceeding median rainfall and the outlook for the rest of Victoria, South Australia and southern and western Queensland isn't much better. There is better news for the Western Australian wheatbelt, which is closer to neutral, and for Tasmania, which could see above average falls.

### OUTLOOK FOR PRICES AND PRODUCTION

#### Prices

Dry weather continues to be the major driver of elevated grain prices, amid low eastern Australian stockpiles and no new supply on the horizon until late this year at the earliest. The dry conditions are likely to dampen cattle prices further if the latest Bureau of Meteorology outlook is borne out. Wool has reached incredible levels and these may prove difficult to sustain, although prices are likely to be elevated for some time. US-China trade tensions have once again resurfaced, although it is too early to assess the full impact for agriculture.

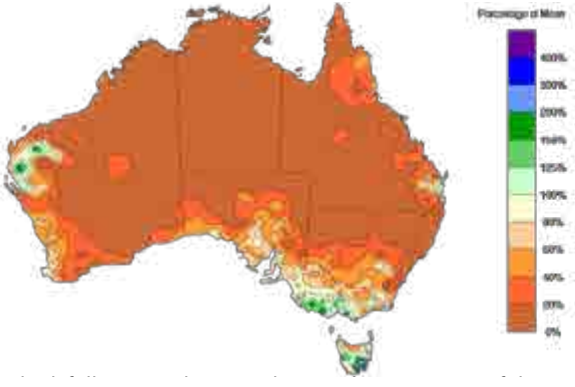
#### Production

Looking at 2018-19 winter cropping season, the lack autumn rainfall across many cropping regions will become a major issue for yields if winter disappoints. However, our model currently points to only somewhat below average production, but only if last season's area planted remains constant and we see average rainfall for the remainder of the season. The dry weather will likely see a further tick-up in cattle slaughter if it continues, but with wool prices so good, sheep and lamb could see less of an increase.

Source: NAB Group Economics, ABARES, Meat and Livestock Australia, Australian Pork, Ausmarket Consultants, Australian Bureau of Statistics, Bloomberg and Profarmer

#### RAINFALL – MAY 2018

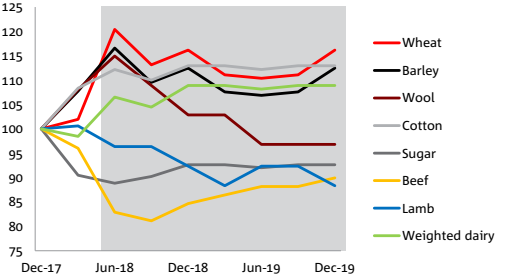
Percentage of long run mean



The outlook follows another very dry month across most of the country in May. Apart from the Gascoyne, a small part of south-east Queensland, about half of Victoria and most of Tasmania, the rest of the country saw well below average rainfall. The rains received have been enough to get the crop going in the south-east, although conditions go south north of Central West New South Wales.

### INDEX OF PRICE FORECASTS FOR RURAL COMMODITIES

AUD index value, December quarter 2017 = 100



### PRODUCTION OUTLOOK (ABARES MARCH 2018)

Financial year production estimates, Australia

	2016-17	2017-18	% change
Wheat (million tonnes)	34.4	21.2	▼ 38.2%
Beef (kt)	2,069	2,227	▲ 7.6%
Dairy (milk, ML)	9,015	9,250	▲ 2.6%
Lamb and mutton (kt)	669	710	▲ 6.1%
Wool	414	424	▲ 2.4%
Sugar (kt)	4,804	4,700	▼ 2.2%
Cotton (lint, kt)	891	995	▲ 11.7%



# FERTILIZER ZN IS NOT OF ENVIRONMENTAL CONCERN

Prof. Mike McLaughlin

**Zinc (Zn) is an essential element for both crops and humans, and many soils around the world are potentially Zn deficient (Alloway 2008)**

Zinc is one of the key factors affecting human health in developing countries and UNICEF has a program of Zn supplementation of child diets to overcome these deficiencies either directly by dietary intervention (adding Zn compound powders directly to foods) or through biofortification (enhancing Zn concentrations in food crops by breeding and/or fertilization) (Brown et al. 2009; Hotz 2009).

Deficiency of Zn in soil can therefore adversely affect not only crop production through reduced yields, but also affect the health of humans eating food produced from those soils because they do not consume enough Zn. Hence many farmers now require (and request) Zn-enriched fertilizers for use in crop production.

## ADDITIONS OF ZINC TO SOILS IN FERTILIZERS

Rates of Zn addition to soil through fertilization vary from >1kg Zn/ha (0.9 lbs/ac) up to 25kg Zn/ha (22/3lbs/ac) depending on the crop type and soil and environmental conditions (Alloway 2008).

In very efficient soils these rates may need to be re-applied for several years until the available Zn status in soil has increased, and then rates of Zn application can be reduced, or the frequency of Zn application reduced.

MESZ contains 1% Zn, so a typical application of MESZ to corn in the mid-US (100 lbs P2O5/acre or ~49 kg P/ha) would add ~2.5 kg Zn/ha (2.5 lb Zn/ac). For comparison, the addition of 5 tonnes of animal manure or sewage biosolids to soil could easily add (1.5–10.0 kg Zn/ha, ~1.5–10.0 lbs Zn/ac) or more (Benke et al. 2008).

## WHAT IS THE FATE OF FERTILIZER ZN ADDED TO SOIL?

Fertilizer Zn added to soil does not diffuse far from the point of application (Hettiarachchi et al. 2008), as most soils bind Zn very strongly and this reduces movement of fertilizer Zn (Figure 2) from the granule (or fluid injection point). Binding of Zn in soil is predominantly governed by soil pH (Sauvé et al. 2000; Tiller and Hodgson 1962), with alkaline soils binding Zn more strongly (hence alkaline soils are more prone to be Zn deficient and require Zn fertilization).

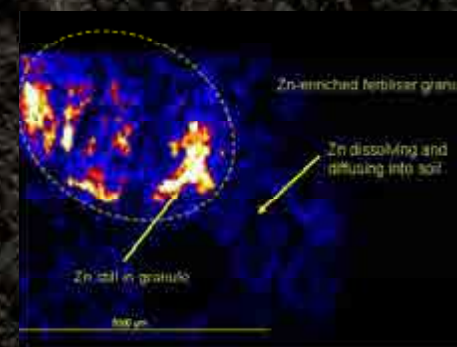


Figure 2. Map of Zn concentrations in soil around a Zn-enriched fertiliser granule 5 weeks after application to soil (Hettiarachchi et al. 2008, used with permission of the Soil Science Society of America).

Zinc that diffuses into the soil can either be taken up by crop plants (and the Zn removed in produce) or may be lost from soil by leaching - in the soils most likely to require fertilizer Zn addition (alkaline/calcareous soils) leaching losses are minimal. Losses of Zn through runoff will generally be small as Zn binds so strongly to soil particles (Brümmer et al. 1983).

Any Zn added in excess of crop removals and leaching will accumulate over time in soil building up the total Zn concentrations, and the available Zn concentrations. Once available Zn is built up to a specific level (dependent on soil and crop type and climatic conditions), further addition of Zn will not be required for several years (Brennan 2001) as the soil becomes "non-responsive" to Zn fertilizer.

## ZINC TOXICITY IN SOIL

If Zn accumulates to high enough concentrations in soil, it may cause toxicity to plants or to soil microorganisms (Chaney 1993). This phenomenon was first

observed in soils contaminated with runoff from galvanized structures (Millikan 1947) and is most commonly observed only in contaminated urban/industrial soils or where wastes have been applied to land e.g. biosolids (Chaudri et al. 1993). Much research has been conducted to set "safe" levels for Zn in soil, and naturally these are not single values across all soils but vary (due to variable ability of soil to bind Zn) depending on soil pH and other soil properties (e.g. cation exchange capacity (CEC)) (Smolders et al. 2004; Smolders et al. 2009; Warne et al. 2008).

## COULD FERTILIZER ZN EVER CAUSE TOXICITY IN SOILS?

This is highly unlikely for several reasons:

- 1) Amounts of Zn added to soil in fertilizers are very small;
- 2) Zinc is removed in agricultural produce and as Zn concentrations in soil increase, so too does the Zn concentrations in produce removed from the land (which is good for human and animal nutrition); and
- 3) Fertilizer Zn has residual value i.e. once Zn levels in soil have been increased through repeated application of Zn fertilizers, there is no need for farmers to continually add more Zn to soils and applications are often reduced in frequency or rate to match crop removals.

A simple model of fertilizer Zn behaviour in soil was developed to model inputs in fertilizer, crop offtake and losses through leaching to predict forward for the next 1000 years. This model also calculates the maximum concentration in soil likely to lead to toxicity to compare to soil concentrations resultant from fertiliser addition. Note the model does not include the likely reduction in Zn inputs once Zn concentrations in soils have increased to sufficiency levels (point 3 above). Normally farmers would not apply Zn if the extractable Zn concentrations in soil reach sufficiency levels. Naturally, accumulation of Zn depends on fertilizer management regime, crop type, soil type, etc. Results for a typical corn cropping system in midwestern USA are presented in Figure 3.

It is evident from Figure 3 that, even assuming farmers do not reduce the rate or frequency of Zn applications as Zn concentrations and availability in soil increase over time (which they normally would), it takes many centuries for Zn concentrations in soil to increase significantly, and soil Zn concentrations

do not exceed toxicity thresholds at "equilibrium" under this scenario.

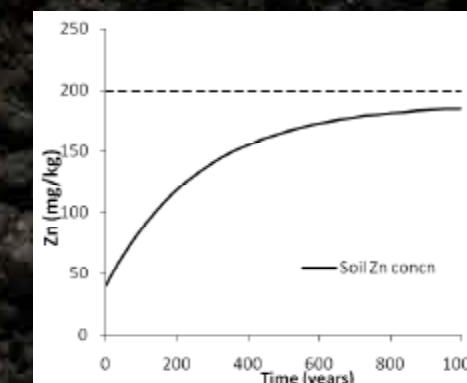


Figure 3. Predicted increase in Zn concentrations in soil in relation to the concentration expected to cause toxicity. Assumptions for each yearly cycle are: addition of fertilizer Zn of 2 kg/ha (2 lb/ac, equivalent to >200 lbs MESZ/ac), atmospheric deposition of 1 g Zn/ha (0.035 ounces/ha), corn yield of 10 t/ha (160 bushels/ac), and deep drainage of 300 mm (11.8 inches); and for the soil properties: soil pH 6.0, CEC 15 cmolc/kg (sandy loam soil), and initial total soil Zn concentration of 40 mg/kg. Partitioning of Zn between soil and soil solution according to the relationship determined by (Degryse et al. 2009), toxicity thresholds for plants determined according to soil pH and CEC (Warne et al. 2008) and toxicity thresholds for nitrifying bacteria determined according to soil pH (Broos et al. 2007).

Other scenarios can be assessed using the model. The modelling results are confirmed by results from a long-term field trial where up to 900 kg Zn/ha (~900 lbs/ac) was cumulatively added to a neutral (pH 7.0) silty clay soil over a period of 19 years (Payne et al. 1988).

Yields of corn and silage were unaffected even though soil Zn concentrations reached >250 mg/kg. Movement of Zn to depth was minimal also. Given that normal rates of Zn application are ~1-2 lbs/ac/yr, this trial confirms that in the long-term (500-1000 years) there is a low risk of fertiliser Zn posing environmental problems.

*\*This study was published by the University of Adelaide.*

## CONTACT:

**Prof. Mike McLaughlin,**  
Fertilizer Technology Research  
Centre Adelaide University,  
School of Agriculture Food and Wine  
**Phone:** +61 8 8313 8433  
**Email:** michael.mclaughlin@adelaide.edu.au



# REGISTER NOW FOR FERTILIZER 2018, OCTOBER 9 - 11

Jeff Kraak

With most speakers confirmed for Fertilizer 2018, the program promises to be great value for those operating in the fertilizer supply chain. To register, head to [www.fertilizer.org.au](http://www.fertilizer.org.au) and click on coming events before the end of the financial year.

The conference begins with a welcome reception at the National Museum on Tuesday evening providing an excellent opportunity to catch up with others in your field, interact with businesses serving the industry and meet new people.

Those involved in fertilizer sales, end use advice, contract application and logistics will all benefit from Wednesdays line up of speakers. In the economics markets and policy session, hear from **Gavin Chong** from Argus Media who will discuss fertilizer markets. The Queensland Department of Environment and Heritage Protection will provide an update on moves to strengthen reef regulation. **John Gilbert** from the National Heavy Vehicle Regulator will provide a summarise the new Primary Duty Laws. **Nick Drew** will give an overview of the Fertilizer Australia strategy survey and the revised strategy.

**Chris Rijkssen**, General Manager of Yara Pilbara Fertilisers will outline the organisations plans for a revolutionary solar ammonia plant. This presentation promises to give interesting insights into new technologies impacting on nitrogen fertilizer manufacture.

Need to better understand Blockchain – the new digitised approach to managing supply chains? You won’t want to miss **Wes Lefroy** from Rabobank’s perspective.

**Greg Griffith** from Family Business Australia will address common issues family businesses face in leading and growing their business. Corporate

delegates will also gain suggestions on interacting with family businesses.

Wondering what is the value of Fertcare and industry associations? How does this help when things go badly wrong? **Rod Abbot** from Korumburra Lime & Spreading will share his perspective.

The soil and plant nutrition session will address topics including, pasture fertilizers and more profit from nitrogen.

Fertilizer 2018 will feature a Machinery Field Day to be held on Thursday at the Sutton Road Driver Training Centre. This hands-on day will focus on the latest logistic and precision agriculture equipment associated with fertilizer and soil amendment products. A feature of the day will be a presentation and demonstration of remote sensing technologies from the More Profit from Nitrogen project which can aid improved fertilizer application.



We are pleased to welcome the involvement of Incitec Pivot Fertilisers as the major Conference Sponsor and Daimler Trucks Huntingwood as the major Machinery Field Day Sponsor. Our thanks also extend to the other sponsors who are helping to make Fertilizer 2018 an exciting and valuable event. A limited number of sponsorship opportunities still exist.

The conference is to be held at Hotel Realm which is located within a short walk from Parliament House, Lake Burley Griffin, dining and entertainment spots such as Manuka and Kingston. Floriade, Australia’s premium flower show and celebration of spring will be running while the conference is happening. There are plenty of other attractions in Canberra, so you might want to consider extending your stay.

Fertilizer 2018 is a joint initiative between the AFSA NSW branch and Fertilizer Australia. We look forward to welcoming you on October 9.

## AUSTRALIAN FERTILISER SERVICES ASSOCIATION



### 46TH ANNUAL GENERAL MEETING

Notice is hereby given that the 46th Annual General Meeting of the Australian Fertiliser Services Association will be held at the Realm Hotel, 18 National Circuit, Barton ACT on October 9th 2018 commencing at 2pm (followed by Member’s Forum)

The matters before the AGM are to

- to confirm the minutes of the last preceding AGM and of any special general meeting held since that meeting;
- to receive from the Board reports on the activities of the Company during the last preceding financial year and of planned future activities; and
- to elect Three (3) directors of the Association for the ensuing year

Rule 19.5 of the Constitution states;

- (a) Except if the nature of the business proposed to be dealt with at a general meeting requires a special resolution of the Company, the Secretary must, at least twenty eight (28) days before the date fixed for the holding of the general meeting, give a notice to each Member specifying the place, date and time of the meeting and the nature of the business proposed to be transacted at the meeting.
- (b) A Member desiring to bring any business before a general meeting may give notice in writing of that business to the Secretary who must include that business in the next notice calling a general meeting given after receipt of the notice from the Member.



# REVIEW YOUR FARM BULK FERTILIZER HANDLING PROCEDURES

Jeff Kraak

Unfortunately a number of human and animal fatalities, near misses and roadside spills associated with handling fertilizer on farm have happened this year across Australia. We were saddened to hear about the death of a truck driver delivering bulk fertilizer on farm. The truck came in contact with powerlines whilst dumping fertilizer in the paddock. A spreader driver has also died when the truck rolled while applying fertilizer on a farm.

This is a timely reminder to all involved in transporting and applying fertilizer to help ensure we and those we work with all return home safely to our loved ones at the end of the day.

It also comes at a time when the National Heavy Vehicle Regulator's changes to the Primary Duty Laws are set to come into effect. Everyone who handles fertilizer has a duty of care to pass on and record relevant information. This includes manufacturers, distributors, carriers and farmers. These changes will have implications for everyone associated with fertilizer and other products throughout Australia.

For a summary of the key aspects covered in the Fertcare® A Transport Module training, refer to page ???. These points can be used as a guide to help deliver bulk solid fertilizer on farm safely for people, products and the environment. Businesses are encouraged

to develop or review their own work procedures, checklists, and other systems based on the information.

Are there people in your business who would benefit from Fertcare A training? [www.fertcare.com.au](http://www.fertcare.com.au)



# AUSTRALIAN SOIL FERTILITY MANUAL – REDUCED TO \$55

Jeff Kraak

The Australian Soil Fertility Manual has been prepared to help fertilizer dealers, extension workers, consultants, teachers and others concerned with the profitable and environmentally safe use of plant nutrients to give sound agronomic advice to farmers and graziers.

Not all agricultural advisers are trained

agronomists. This manual will not turn an untrained person into a trained one. But it will provide a working knowledge of agronomic terms, soil-plant relationships and principles of fertilizer use, in its broadest context. It will guide you towards a fuller knowledge about soil fertility.

This manual can be used as a self-study

guide. Much of it is basic to crop and pasture production systems. It can be used as a supplementary university textbook, for soil fertility workshops or extended short courses about soils and fertilizers.

To order your copy contact Monique Thomson E: [monique.thomson@fertilizer.org.au](mailto:monique.thomson@fertilizer.org.au) P: (02) 6273 2422



Innovation that starts from the ground up.

Nathan Bennett  
Birregurra, VIC

At Incitec Pivot Fertilisers we are always looking to develop innovative ways to help Australian farmers realise their soil's potential. LabSTREAM®, Fertshed® and our trace element coatings are just three examples of the innovative approach we adopt to help our farmers to achieve the incremental increases in productivity that you are looking for.

**Talk with your local advisor to fully understand what is best for your soil and what steps you can take to realise its potential.**



Incitec Pivot Fertilisers is a registered trademark of Incitec Fertilisers Limited ABN 56 103 709 155. Incitec Pivot Fertilisers is a business of Incitec Pivot Limited ABN 42 004 080 264. LabSTREAM and Fertshed are registered trademarks of Incitec Pivot Limited. Fertcare is a registered trademark of Australian Fertiliser Services Association, Inc.

[incitecpivotfertilisers.com.au](http://incitecpivotfertilisers.com.au)



# UNLOADING BULK SOLID FERTILIZER ON FARM

Jeff Kraak

Below is a summary of the key aspects covered in the Fertcare® A Transport Module training. These can be used as a guide to help deliver bulk solid fertilizer on farm safely for people, products and the environment.

Several businesses are often involved in organising bulk fertilizer farm deliveries e.g. manufacturer, dealer, carrier and farmer. To manage the risks, each person in the supply chain needs to take appropriate responsibility for gathering and passing on relevant information.

Businesses are encouraged to develop or review their own work procedures, checklists, and other systems based on the information below.

**Access considerations:**

- ☐ Check the proposed route is appropriate for the vehicle i.e. vehicle permits / B-Double access, bridge & road load limits, height restrictions etc
- ☐ Check farm road conditions are suitable i.e. road base and width, land slopes, creek crossing, ditches, overhead obstructions (e.g. trees & powerlines) or too wet and warning notices.
- ☐ Inform the delivery driver of all safety and environment concerns
- ☐ Confirm with customer delivery date, estimated time of arrival and location to discharge.

**Unloading considerations:**

- ☐ Check the ground is flat and suitable for tipping
- ☐ Check the ground under the rear trailer wheels is firm and stable
- ☐ Check the unloading area is free from overhead obstacles e.g. powerlines, trees, buildings
- ☐ Check the truck has adequate space to unhitch trailers and maneuver
- ☐ Is the area free from livestock, fencing, irrigation, troughs etc?

- ☐ Check weather and wind conditions to ensure they are suitable
- ☐ Check to see if the load has shifted during transit and is still suitably positioned for tipping
- ☐ Position chocks at the rear wheels prior to tipping into conveyors if required
- ☐ Release relevant tailgate / hatches before tipping
- ☐ Check if the load is “sticking / holding up” on one side during tipping
- ☐ Check no one is standing in a position where the tipper could fall on them while unloading
- ☐ Avoid driving through fertilizer spills

**Considerations when dumping fertilizer on the ground:**

- ☐ No long grass or rocks
- ☐ Clear of obstructions e.g. fences
- ☐ Not near a watercourse (even if currently dry)
- ☐ Not a low spot or high ground
- ☐ Site run off – where will storm water go?
- ☐ Cover the dump site with a tarp soon after unloading if requested

**Considerations when unloading into conveying equipment:**

- ☐ Check the conveying equipment is appropriate for fertilizer, in good working order and safe to use e.g. guards in place etc
- ☐ If fertilizer is going into a silo, is the silo suitable? (refer to Australian Standards AS 3773 – Bulk Solids Containers Safety Requirements and AS 3774 - Loads on Bulk Solids Containers)
- ☐ Control the fertilizer flow rate out of the tipper to ensure the conveyor does not overflow
- ☐ Contain spills and clean up promptly

**Considerations after the load has been tipped:**

- ☐ Remove residual fertilizer from the tipper, tarps, truck body and wheels etc before leaving the unloading site
- ☐ If the fertilizer has been treated with chemicals e.g. fungicide, follow the pesticide label instructions for cleaning i.e. wash the tipper with water and / or appropriate food grade cleaning solutions before loading food products e.g. grain
- ☐ Check the tipper is in a suitable condition for the next load i.e. avoiding cross contamination
- ☐ Appropriately dispose of residual fertilizer, dust and rinse water
- ☐ How will the farmer receive the fertilizer label and associated paperwork?

**Would you benefit from Fertcare training?**  
[www.fertcare.com.au](http://www.fertcare.com.au)

Fertilizer Australia and AFSA provides this information in good faith but does not guarantee that complying with the information will ensure that all regulatory obligations will be met by the user. Ultimately responsibility for compliance with all legislation and licensing sits with the user of the information.



“Look up and Live”



## Sibelco® Ag Lime

Great crops start with great soil

High quality agricultural limestone to help improve soil quality and grow better crops.



Sibelco Ag lime is an essential tool to address soil acidity and help grow better crops.

“We need lime to reduce soil acidity and help grow better crops.”

“We put the lime down just prior to canola in the cropping phase and then rotate the paddock to wheat.”

“Sibelco Aglime is a pretty good product. I don't see why you wouldn't use it for the price and for what it does for your soil.”

**Tristram Rodham, Uranquinty, NSW**


For more information visit [www.sibelco.com.au](http://www.sibelco.com.au) or contact your State Sales Representatives on:

**QLD** Danny Leacy 0438 679 544 | **VIC & TAS** Nicholas Bond 0428 419 651 | **NSW** Warren Mirtschen 0427 065 688


# HAVING TROUBLE STANDING OUT?

We can **design** it, **print** it, **film** it & make it **digital**


[www.adcellgroup.com.au](http://www.adcellgroup.com.au)




**10% OFF**  
FOR FERTILISER NEWS READERS  
\*Conditions apply




creative. marketing. digital. web. media. print.



Wall2Wall [www.wall2wall.com.au](http://www.wall2wall.com.au)



EAGLECREATIVE







# COMMUNITY

Georgia Watson

Georgia Watson is currently employed by Riordans and in her 12 months with the company has moved from grain into fertiliser, driving a loader at the Corio site.

Georgia also has a passion for Football and is currently striving to cement her spot in the VFL Women's competition after making her debut with Geelong.

An off-season injury for the Colac Imperials footballer delayed the new Cat's debut in her first season on their list, but her dominant form with the Imperials AFL Barwon team was difficult for selectors to ignore.

Watson had her first VFL Women's outing in the Cats round six win against reigning premier Darebin and said the past week had been a bit of a whirlwind since coach Paul Hood announced she would play before Thursday training session.

'It's all been pretty surreal, but playing at this level is something I've always wanted to do so to get out there and play was a good feeling'.

'We communicate with our coaches quite a bit, I try to speak to Hoody a fair bit about what I can improve and what I can do to get better and stronger.

He just said to keep doing what I'd been doing. I'd been named emergency a couple of weeks before I debuted so I knew I was getting closer'.

'I was included in the initial squad on Wednesday night, then on Thursday before training they read out the side and congratulated myself and a couple

of other girls who were playing their first games'.

Watson, who has booted 12 goals for the ladder leading Imperials, played as a forward for the Cats and said the VFL 'was a very, very big step up' from AFL Barwons Division Two competition, where she currently plays with the Imperials.

'It was such fast-paced football, the intensity is something I'll have to adjust to with more games played' she said

'I felt like I went okay, maybe a little quiet, but adjusting to the high intensity and standard might take a game or two.'

The undefeated Cats have a bye this weekend, but Watson hoped to secure her spot the team's next game, a top of the table clash with competition newcomer NT on Thursday July 7.

'The goal now is to hold my spot in the side and to keep improving with each game' Watson said.

*\*main article first appeared in the Colac Herald by Ben Martin*

*\*additional content by Abbey Sherwell*



# SPREADERS ARE OUR BUSINESS

AUSTRALIAN DESIGNED • AUSTRALIAN BUILT • AUSTRALIAN BACK UP & SUPPORT





# glaze fertiliser coating



**Glaze evenly coats every granule**

**glaze**  
COPPER

Glaze is a fertiliser coating designed to directly coat micronutrient onto fertiliser granules using batch or continuous flow blending and handling systems.

**glaze**  
ZINC

- Fast uniform coating of granular fertiliser

**glaze**  
MOLY

- Enhanced dust suppression of the coated granular fertiliser

**glaze**  
BORON

- Ready to use liquid suspension that is easy to measure and apply

**glaze**  
MULTI

- Dust free application

**glaze**  
DS

**Contact: Steve Phillips**  
**0477 626 677**  
**[www.tanuki.com.au](http://www.tanuki.com.au)**