



Brown's
fertilisers
service

CHRISTMAS NEWS

SUMMER 2018

Merry Christmas and a Happy New Year from Brown's Fertilisers

It's hard to believe another year has already passed us by. I'd like to take this opportunity to firstly thank you, our partners and customers, for your ongoing support throughout the year. We are passionate about our industry and we love working with likeminded people.

In line with wanting to deliver the best service in the region, it's been a big year of investments for Brown's. We've updated most of our equipment across our sites: a new blending plant in Koo Wee Rup, two new spreader trucks and a new tractor spreader in Leongatha, an additional sidetipper, and new field bins for Maffra and Leongatha in addition to a number of site improvements across the business. We are now in the process of upgrading our Leongatha plant (watch out for more news on this early next year). Our Maffra site is growing well and we are now looking to expand the site. And finally, we have just expanded the Brown's business, taking over the former Rodwells spreading business in Merton, just near Mansfield. This is a really exciting acquisition for Brown's as we continue to expand our capabilities and offerings.

We've also been busy investing in our people and are lucky to have had Vicki Nink join us in Leongatha this year, bringing a wealth of experience; Katherine Bohn, a graduate agronomist, as we continue to develop the future of the industry; and James Ristrom, formerly of Hico, leading the Agronomy team.

As farmers are always looking to see how they can lift their productivity, we've been working hard in the background developing our technology offering this year. We're excited about some new developments and look forward to sharing these with you in the new year. We believe Brown's remains the leading agronomic advice service in Gippsland and we're working hard to make sure we can help you continuously improve your business, taking advantage of the latest technology developments.

Being a family owned business we take real pride in how we work with and look after our customers. We exist to provide you with great service and advice. I want to take this opportunity to thank our team at Brown's for all their hard work over the last 12 months and on behalf of the team, to wish you a fantastic Christmas and a very prosperous 2019. We will be with you to help make it so.

Cheers and Merry Christmas,

Conal Wills
General Manager

www.brownsfert.com.au

Agronomy – Phosphorus For My Pasture

Why apply phosphorus?

Within our farming systems phosphorus applications are used to replace nutrients that have been exported off farm through crop, milk, meat or wool. If this isn't addressed, then it will have a negative impact on maintaining nutrient level and pasture production.

If phosphorus usage has declined or soils have low phosphorus levels, then you will likely see:

- Slow response to rainfall
- Weeds being more competitive in pasture
- Unwanted species becoming more invasive (e.g. onion grass, bent grass) and other native grasses
- Less legume species, leading to nitrogen deficient pastures

How much phosphorus?

The first step to determine maintenance phosphorus requirement is to establish your stocking rate based on dry sheep equivalents (DSE/ha). DSE is an industry standard unit that is used to compare feed requirements of different classes of livestock, see Table 1. Phosphorus removal rate varies from 0.4 to 1.4 kg P/DSE/ha/year based on rainfall, topography and grazing system (rotational or set stock).

The average Gippsland stocking rate from the livestock monitor project was 18 DSE/ha. As a general statement our Gippsland climate (800mm + rainfall) the phosphorus removal rate is 1.0 kg P/DSE/ha/year. Therefore, running the Gippsland average of 18 DSE/ha means that maintenance should be 18 kg P/ha or equivalent to 205 kg of single super phosphate.

Table 2. The approximate amount of capital P (kg/ha) required to raise soil Olsen P (Dairy Soils & Fertiliser Manual).

Soil Type	PBI	Amount of P to raise Olsen P by 1 unit (kg/ha)
Sand	0 to 50	6
Sandy loam	51 to 100	8
Sandy clay loam	101 to 300	9
Silty clay loam	101 to 300	9
Clay loam	301 to 400	10
Clay loam	401 to 500	11
Volcanic clay	501 to 600	13
Peat	Over 600	15

The target is an Olsen P of 18 for this paddock. To increase 3 units a total of 27 kg/ha of P is needed as a capital application as well as the maintenance requirement. The capital application is equivalent to 305 kg/ha of single super. Remember that this capital application can be split across multiple years.

Timing of application

Timing of phosphorus application doesn't influence nutrient availability. Minimal moisture, such as a light dew, is all that is required to release phosphorus from the granule to the soil. Early phosphorus applications during summer can be more beneficial as this ensures that the phosphorus is available prior to the autumn break, ready for very start of the growing season.

Table 1. Dry sheep equivalents (DSE) for different classes of beef cattle (in part from McLaren 1997 & Ag VIC).

Stock class	Beef cattle British breeds		
	DSE at specified liveweights		
Yearling	300 kg	350 kg	
Gaining 0.25 kg/day	7	8	
Gaining 0.75 kg/day	10	11	
Mature cattle	400 kg	500 kg	600 kg
Dry cows, steers (store)	7	8	9
Gaining 0.25 kg/day	8	9	10
Bullocks (store)	8	9	10
Gaining 0.75 kg/day	12	14	16
Pregnant cow, last 3 months	9	11	13
Cow with 0-3 month calf	14	18	22
Cow with 4-6 month calf	18	22	26
Cow with 7-10 month calf	22	25	28

Now how do I improve my Olsen P level?

Soil type is a major influence on solubility of phosphorus and how it is buffered against change. On every soil report there is an index called the Phosphorus Buffering index (PBI). This index helps us determine how much extra phosphorus is required to lift 1 Olsen P unit (Table 2). The higher the PBI reading the more phosphorus is required.

Example: A soil test shows an Olsen P of 15 and a PBI value of 220 on a silty clay loam. From table 2, to lift 1 Olsen P unit 9 kg/ha of P is required.

2018 Customer Profile – Peter & Deanne Sykes

Location: Longford

Enterprise: Beef - Stud Hereford, Poll Hereford and Angus

Farm size: 487 hectares including 80ha under pivot irrigation and 324ha of leased land

Peter and Deanne Sykes are passionate breeders of pedigree beef genetics, their name synonymous with the Hereford breed.

Mawarra Herefords was established by Peter's parents in 1963. Originally based in Gelantipy, the farm moved to its current location in Longford in 2002.

"It was a bit of a blank canvas when we purchased it," Deanne says.

The Sykes developed the irrigation system, paddock and laneway structure and have made capital improvements over time.

Three soil types run across their Longford property; stratic rudosols (sandy country), grey vertosols (clay loam) and black tenosols (river flats).

Hereford, Poll Hereford and now Angus cattle are run across 487 hectares at Longford, South of Sale complemented by a further 324ha in higher rainfall areas of Gippsland, on long term lease and agistment.

Of the 487ha, 80 ha is under three centre-pivot irrigators currently sown to lucerne, annual and Italian ryegrass as well as sorghum as a summer crop. After three failed springs, all harvested hay and silage has been grown under irrigation.

"Our average rainfall is meant to be 24 inches. We've been here 16 years and we've only achieved that on approximately three occasions," says Deanne. "In this current year we've had 150 -165mm at the house. We've averaged 295 - 325mm in the time we've been here."



The Sykes family agreed to be the site of one of the Brown's Fertilisers soil probes which captures data on rainfall, soil moisture and soil temperature. Since it was installed in June, only 152mm rainfall has been recorded with the largest daily total of 17.4mm falling on November 21st. Soil temperature has ranged from as low as 4degC in mid-July to 24degC recorded in December. The paddock chosen for the probe was sown to a perennial pasture of fescue, phalaris and cocksfoot this autumn.

"Brown's have supported us through the poor seasons we've been experiencing and we've been able to maximise the grass through the poor seasons, thanks to their advice and knowledge and them being mindful too of cash flow restrictions that occur in a farming enterprise."

"We've found Brett (Agronomist) and Rags (Spreader Driver) to be genuinely interested in our business and they work with us to achieve the best results, whether under irrigation or dryland."

"They take the time to understand what we're trying to achieve and work with us to maximise potential of what we can yield - especially considering our property is run very intensively. Because we prepare 80-100 sale bulls, it very heavily restricts the grazing rotations. We have to separate mobs of bulls; it's not a standard grazing property. Brown's take time to understand how our operation works and their level of knowledge is exemplary – they're always available and reliable."

WEEKLY UPDATE TEXT MESSAGE

Have you registered for our weekly, local soil temperature and rainfall update with additional agronomic information?

Contact: Vicki on 0400 879 818 for Leongatha area
Alexander on 0409 406 234 for Koo Wee Rup area
Brett on 0427 220 127 for Maffra area



2018 Customer Profile Continued...

FAMILY FOCUS

Peter and Deanne's children are the third generation in the family-oriented business. Deanne says their children are all involved at one level or another.

"Logan is full time in an assistant manager role, Brandon is involved in genetic acquisition and Taylah is part time on the farm," Deanne explains.

"A big thing for our business is all of our children are interested. Given the next generation is coming of age, we're looking at expanding the business to be able to accommodate them," Deanne says.

The Sykes have recently expanded their business, acquiring foundation Angus females.

"We saw an opportunity in Gippsland and we have a number of clients who use both breeds (Whiteface and Angus) in their production systems – and we're keen to offer both at the same farm gate. In doing so, it allows us to expand as the business needs to and to have the capacity to support additional family members."

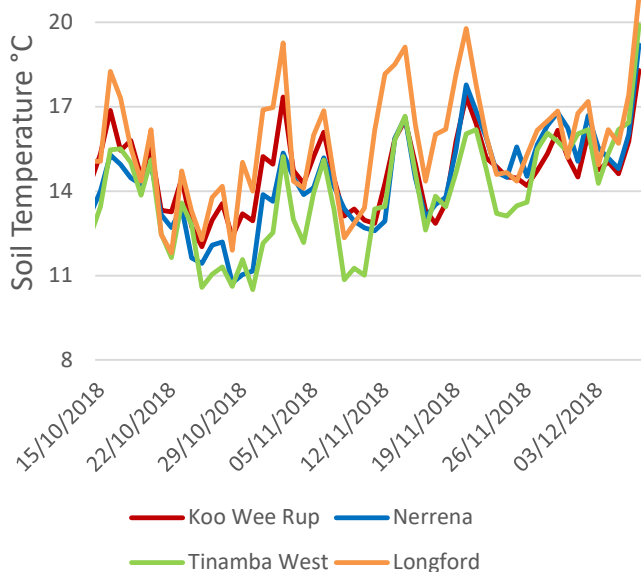
Mawarra is run exclusively as a stud operation, preparing 80-100 bulls for their annual sale as well as Wodonga National Show & Sale, where they've been successful at the top end of the sale for many years.

"We focus solely on providing leading, world class genetics," Deanne explains.

"Minus the recent addition of the Angus, we try to keep the breeding herd around 350 head and we have approximately 40 recipient dams for our regular ET (embryo transfer) programs."

"It's a family business and I'd say we're a strong team because our skills complement each other," adds Deanne.

Soil temperatures by area 15 Oct to 07 Dec



Monthly Rainfall Totals (mm)

Month	Koo Wee Rup	Nerrena	Tinamba West	Longford
September	28.8	64.2	8.4	22.2
October	36.4	27.8	104.6	21.8
November	121.8	80.2	113.4	48.4
December*	17.8	11	14.6	9.8

*December data is until 7th of the month.

Average Monthly Soil Temperature (°C)

Month	Koo Wee Rup	Nerrena	Tinamba West	Longford
September	9.68	9.57	8.01	8.63
October	13.20	12.46	12.05	13.77
November	14.83	14.77	14.00	16.02
December*	15.57	16.07	16.33	17.02

*December data is until 7th of the month.



Dairy Expo Esky Winner!

The winners of the 2018 Browns Esky competition was the McCauley family of Corafield Farms & Jaileigh Dairies.

Pictured is Hailie and Jeff with their daughter Evie and agronomist Alexander Mapleson. Dairy farmers from Cora Lynn the McCauley's are currently milking 750 cows.

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