

Products & Advice for Soil Regeneration & Animal Nutrition



Message from the Directors

Fortunately for us the Olympic Games only come around every four years. For those of you who have faced the day bleary eyed

after cheering on the world's best athletes to overcome physical and mental barriers... you'll know what we mean!

But the Aussie medal haul aside, the Olympic Games are an inspiration to us all and a celebration of humanity, participation, and peace, through the competition of sport.

So while you may not be able to conquer the tumble turn without sustaining concussion or have the pedal power of Olympic cycling champion Sara Carrigan...

...or if you thought fencing meant loads of barbed wire and your only "hurdling" experience involved a farm gate and feisty bull... then don't despair!

You can triumph and achieve great things by improving your soil fertility... helping you to go for a different type of "gold" with improved production and quality.

Just as our athletes have had to follow a program to achieve their goals, so to is there a program for you to follow to restore fertility to your soil.

Our program to improve soil fertility is simple. We call it the three **M**'s...

Minerals
Microbes
Mulch

However, while the concept is simple, there are many variables and considerations to make when putting this program into action.

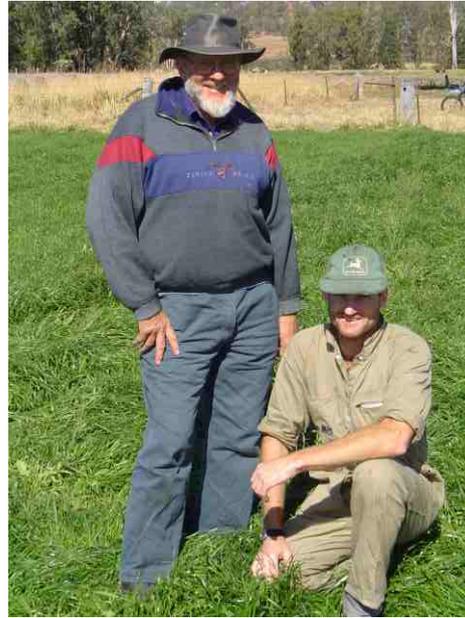
Athletes have the assistance of a personal trainer to help them to avoid the pitfalls and to ensure that they reach their full potential.

This is where our trained staff can assist you with practical information and advice to maximize the potential of your soil and help you to achieve your production goals.

So give us a call today on 1800 81 57 57 for answers to your animal nutrition and soil fertility concerns... we look forward to cheering you on!

Trevor and Wendy Zerner

Natra Min & Soil... a happy marriage



The Venz family run their Dairy Enterprise as well as a commercial beef herd (Charbrays) on 2100 acres at Beaudesert.

In addition, the Venzs also grow their own grain and hay, with approximately 350 acres under cultivation.

Rod and son Robert who were introduced to Natra Min seven years ago, both say they were "cautiously sceptical but open minded" about what benefits Natra Min could offer.

Their cultivation and flats were described as heavy black soil that was puggy and sometimes water logged.

Increased Production and Reduced Costs

After using Natra Min for seven years and despite an increased acreage under cultivation, Rod and Robert have enjoyed a reduction in fertilizer usage, significant savings in fuel and tractor usage, and increased production despite the dry years.

First Trials ...

"We first trialed Natra Min in 1997 on 6 acres of extremely heavy black clay soil at 200 kg/ha (no other fertilizer applied). The adjacent 7 acre paddock with the same soil type had our normal (NPKS) fertilizer at 200 kg/ha as a comparison.

Both were planted to corn for silage at the same time with the same moisture profile. The result was very noticeable with the Natra Min paddock significantly out performing the other with healthier plants that showed less moisture stress.

In total, the paddocks yielded an average of 25t/acre (dryland) with the contractor commenting on the increased yield where the Natra Min had been used. I wouldn't recommend using Natra Min alone on cropping all the time but this demonstrated to us its ability to get the soil working and to unlock Nitrogen reserves.

The following year when we put the offset disc plough in we were surprised by the dramatic improvement in soil structure. We then ordered a bulk load of 25 tonne, hired a bulk spreader and applied Natra Min to all of our irrigated cultivation.

When this ground was ploughed the next season the results again were a significant improvement. We then bought a mulcher and now return all residue and stubble to the soil which has also made an improvement".

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Natra Min & Soil... Reduced Fertilizer Usage... (continued from previous page)



“Initially we applied Natra Min to all of our cultivation at 2 bags/acre. Now we apply to each paddock as prepared or 2 bags/acre every second year. Since we've been using Natra Min we've halved the amount of fertilizer once used on our cultivation.

On our Rye grass we used to apply 2 bags of Urea/acre at planting and have been able to reduce this to 1 bag. We plant with 2 bags of Natra Min and 1 bag of Urea. The savings in using less Urea more than covered the cost of applying Natra Min”.

SAFE and Effective...

Rod is also quick to point out that they used to lose cows with Nitrate poisoning when using 2 bags of Urea/acre but since using Natra Min they no longer have to contend with this problem.

“Our Rye always used to go yellow half way through the season and we'd then have to apply 2 bags/acre of sulphate of ammonia which we don't have to apply anymore. We still top dress the Rye after grazing and use a (NPKS) fertilizer every second year at 2 bags /acre for Rye and 1 bag/acre for corn.

Improved Soil Structure...

“The improved soil structure has been the biggest improvement for us here since using Natra Min. When I first spoke to AgSolutions I was aware of the benefits of soil conditioners such as Gypsum and that's why we first used Natra Min because it provided a broad spectrum of trace elements plus microbial benefits in addition to the benefits of a soil conditioner.”



In one section of the property, the soil was impossible to cultivate because the soil was so hard.

12 months after Natra Min was applied to this area, the discs penetrated 6 inches on the first pass.

“Prior to using Natra Min, we would have to work our ground with at least 5 passes of the tractor to prepare a seed bed. It used to take weeks to work our ground as the soil would come up in clods bigger than footballs and it was worse if it was too wet or too dry. We would deep rip, chisel twice and then off sets twice with harrows in tow. The black soil would block up the plough and we'd have to wait for rain to break up the clods. When it was hard the discs wouldn't penetrate they'd just skip across the ground.

Now we do it in two and sometimes one pass to prepare a seed bed. We can also direct drill our Rye which is something we could never do in the past. The time and money this has saved us is substantial. Now we have a bigger moisture window to work our ground and whether it's very moist or dry, it comes up beautifully. We can work the ground today and plant tomorrow.

Last year the corn silage was harvested when the ground was wet which we thought would cause problems, but it's worked up well again. The soil is more friable and is easier on the tractor. On the John Deere tractor we can plough two gears higher now in some areas which is very noticeable.

It took 12-18 months before we saw the major soil improvement - but no doubt there were other benefits before that we didn't notice.”

“We have also noticed a significant increase in worm activity evident by dozens of birds following the plough. Once you would never see a worm in our heavy black soils.”

Fuel Costs Halved...

“Back when diesel was around 60 cents a litre our fuel bill averaged about \$1200 each month. Now with diesel being around \$1 a litre our average fuel bill is around \$600 and we're working more ground now than before.”

Production Improvement...

“Prior to using Natra Min, Rye on our flats would be 12 to 15 inches high along the alluvial areas and down to 4 inches high and yellow in the heavy black areas. The corn would be stunted.

Since using Natra Min, our Rye and grain crops are even in height and colour and we no longer have a rust problem in the Rye grass.

Last year we wanted to expand our cultivation more. We had a 20 acre paddock that we had previously abandoned because it was too heavy and hard to work. We got the neighbour in with his heavier discs to go over it twice and then we worked it a further 2 times.

We applied NM at 200kg/ha and Urea at 100kg/ha and planted wheat. Due to the lack of rain we ended up grazing this off. Last week we ploughed this paddock with the offsets and harrows and the discs went in about 6 inches on the first pass and it's good enough to plant. The neighbour came over and asked what we had done - two things I said 'Natra Min and Mulch'.

Last season our dryland sorghum averaged 2.5t/acre with the best paddocks yielding 3t/acre. With our Lucerne we used to apply Sulphur, Potash, Super and a CK blend now we're just using Natra Min and on the 10 acres that we graze, the cows can't keep up.”

Improved moisture levels in soil...

“We have still managed to increase production despite the dry years when we've had less irrigation water available.

Due to the improvement in our soil we are able to have a more continuous feed supply with less time delay for planting and the added advantage of being able to direct drill for winter feed.

Our milk components have also increased over the last few years with a 4.2% Butterfat and 3.4% Protein. I know there are other factors affecting this but I'm also conscious of the correlation between healthier plants/pastures and animals.”

Conclusion

“Like we were, it's easy to be sceptical until you see the results at home. The important thing is, if your soil is in a shocking state don't expect immediate results as it takes time.

We've used Natra Min and Natra Min HI-Phos. We can now appreciate the visual difference in our soil but it took 12 months. Depending on your soil I think you need to experiment with Natra Min and your other fertilizers to see what works for your situation.

We've done a lot of soil tests over the years and used a lot of trial and error. Natra Min has provided a dramatic improvement in our soil structure and the reduction in tillage and fertilizer applications has resulted in massive savings in both time and money.”

Rod & Libby, Robert & Wendy Venz

Feed Your Soil... and Your Soil will Feed Your Crop

Think Minerals 'n' Microbes.... think **NATRA MIN**

Whether we're talking about your soil or the digestive system of your animals the bottom line is minerals and microbes... both are essential for productivity. In our last newsletter our "Superior Vs Urea" trial results were a critical reminder that microbes need minerals and a balanced broad spectrum of minerals is the key.

Minerals... due to natural leaching, generations of farming practices including the widespread use of chemical fertilizers and sprays, almost all soils are mineral deficient, making it essential to re-mineralize your soil for optimum crop and animal production.

Up Close & Personal with Roger Newman (Ag Solutions' advisor for Northern NSW)



Unassuming Roger Newman describes himself as having simply graduated from the "school of hard knocks". However, as Ag Solutions' Advisor for the Grafton and north coast of NSW regions, his experience is in fact far more impressive and varied.

Roger's "education" includes a strong farming background, originating in Western NSW on a beef property, along with manager of a Hereford Stud in Margaret River, WA.

Today, Roger has come home to roost in NSW, dividing his time between operating his 600 acre beef property south of Grafton, and representing Ag Solutions, a position he has held for the past 5 years. Roger holds a Certificate 3 in Organic Agriculture and has experience in the retail industry, which he finds helpful when liaising with rural stores.

Determined to achieve maximum production levels from his own property, Roger launched a personal search to find a fertilizer that would restore his soil's fertility. So impressed by our products, Roger agreed to professionally represent Ag Solutions. That was 5 years ago and as they say, the rest is "history".

So, having spent many years working alongside Roger, we thought we knew him quite intimately. However, what we didn't know was...

Most embarrassing moment?

During my early years on a beef property I was mustering and drafting cows for the local vet to conduct pregnancy tests. All was going well until I drafted a steer, and presented it to the vet for testing!

Any regrets in life?

That I waited until the vet was well and truly up to his armpit before I told him I thought I'd made a mistake?

Ultimate dinner date?

What brave man wouldn't say "my wife"?

If you weren't working for Ag Solutions what would you be doing?

Immersed in self-sufficient farming.

Best advice you could offer

The only silly question is the one you never asked!

Best day of your life

There are 3 days that stand out. Without a doubt, witnessing the birth of my 3 beautiful daughters.

Microbes... because we don't see them, harvest them or sell them, soil microbes are often forgotten. There are several tonnes of living organisms in every acre of fertile soil... they range from single celled bacteria to earth worms and are the life of the soil.

As well as producing their own weight in humus every day, microbes convert minerals into plant available form. Soil humus can hold up to 15 tonne of Nitrogen per hectare and provides a reservoir for moisture.

You may have heard us talk about farming microbes... basically that's what your number one priority should be and the rest will follow.

Soil Microbes have numerous functions;

- ✓ Fix nitrogen from the air
- ✓ Decompose raw organic matter
- ✓ Release nutrient lock up
- ✓ Produce plant growth stimulants
- ✓ Protect roots from disease pathogens and nematodes
- ✓ Improve soil structure and improve root systems
- ✓ Detoxify soil
- ✓ Neutralize pH.

The key to "farming microbes" is providing a balanced environment for their function and survival. Minerals, Mulch, Moisture and Air are essential for microbes to thrive.

How can Natra Min help?

Natra Min provides a broad spectrum of minerals and is specifically formulated to stimulate both microbe and worm activity in your soil. Therefore, microbes are able to release the essential minerals supplied in Natra Min as well as helping to release locked up nutrients in your soil and to maximize the effectiveness of applied fertilizer.

Practical information and advice...

Give us a call and talk to us more on how to get started on a program to improve your soil fertility. We can either look at an existing soil test or alternatively arrange to have a soil test performed for you.

NATRA MIN

Natra Min blends are now available with EXTRA Phosphorus, Calcium, Sulphur & Potassium

Rural Stores...

Natra Min Mineral Soil Conditioner and our animal supplements, Superior (dry lick) and Mega Minerals Lick Blocks are available through your preferred Rural Store.



This means local convenience and allows you to use your existing store accounts. If your preferred store doesn't currently stock our soil or animal products let us know or ask them to contact us toll free on 1800 81 57 57.

Newsletter Subscription no longer required?

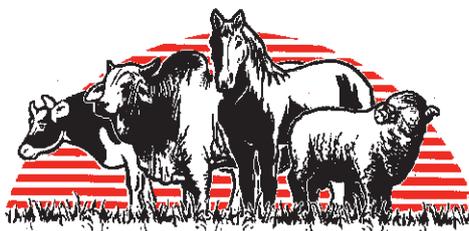
You have been sent this newsletter because you expressed an interest in receiving information from Ag Solutions. To cancel your subscription please call toll free 1800 81 57 57.



Winner of Gold Coast Getaway!

Fred Faulkner, Casino

Congratulations Fred, we hope that you enjoy your stay at the Gold Coast compliments of Legends Hotel



NATURAL, ECONOMICAL & EFFECTIVE alternatives to Eskalin (antibiotic) and Rumensin (ionophore)

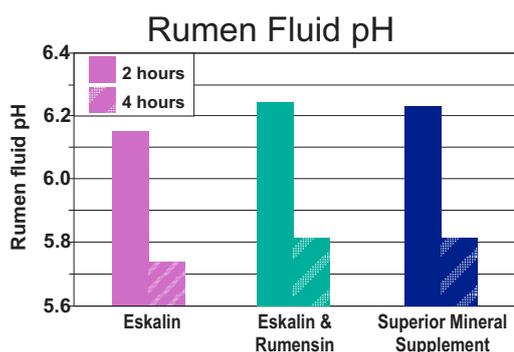
A New Acidosis Preventative for Grain Feeding

Trials - Grain Feeding

Dr Lewis Kahn - University of New England, Armidale

Trial Objective: To evaluate the use of Superior Mineral Supplement as an acidosis preventative and to evaluate growth performance of feedlot steers.

Results in Brief: *(more details in our next newsletter)*



- ▶ These studies indicated that supplementation with Superior Mineral Supplement provided equivalent animal health protection and growth performance, compared to the antibiotic, Eskalin and the ionophore, Rumensin, when animals were fed the high grain diet used in this research.
- ▶ No evidence of any animal health problems (eg acidosis) were evident. Feed intake was also unaffected by supplementation.
- ▶ Growth rates were not significantly different for the various supplements/additives and carcass grading suggested that animals fed Superior Mineral Supplements performed better than those fed eskalin.

For more details, please give us a call on 1800 81 57 57

MINERALS... Essential for animal health, production & reproduction

Superior Mineral Supplement and Mega Minerals lick blocks are a source of broad spectrum minerals - providing animals with vital macro, trace and ultra trace elements... naturally. These minerals have been proven to be an effective alternative to the use of Urea

for drought feeding as well as an acidosis preventative for grain feeding. Provision of minerals year round can also assist to eliminate clinical and sub-clinical deficiencies, helping your stock to reach optimum fertility and performance.



Heifers show improved health... with Mega Minerals Lick Blocks

Warwick farmer and cattleman, Henry Watson, is no novice when it comes to beef cattle, yet despite decades of experience even Henry was at a loss recently as to why his line of heifers were losing condition.

With six heifers having died over a period of 2 months DPI veterinarian Ross Newman had inspected the cattle and performed autopsies but no definite diagnosis was made.

Internal parasites were ruled out and the heifers had all been drenched and treated for lice, yet still the cattle failed to improve.

It seemed that there was no reason to explain the deaths or lack of thrift in surviving animals. The remainder of the mob were looking like they'd already endured winter, yet winter had only just begun.

The amount and quality of feed in the paddock was some of the best in the area with a good body of green pick still available and growing. Frost had not yet taken its toll on the pasture.

At the age of 70, Henry has had experience in supplementing cattle in various parts of Australia and has used most blocks. Desperate to see some improvement in the condition of his cattle, Henry decided to try Ag Solutions' Mega Minerals lick blocks as they provide a broad spectrum of minerals and trace elements.

Here's what Henry had to say:

"I decided to give the Mega Minerals lick blocks a go and at first I was concerned they weren't eating enough. These heifers were bought in several months before and we had no idea what was wrong with them. They were drenched and treated for lice and I was concerned how they were going to survive through winter.

In my younger days, after Gatton College, I worked with a vet and also at the Belmont Research Station, so I've always been interested in genetics and supplementation.

I've had them on the Mega Minerals lick blocks for over two months now and I'm very impressed with the results. The heifers are in better condition now in the middle of July than back in May when things were a lot better.

The biggest thing I've noticed is how cheap these blocks work out. I've done a few calculations and reckon it's cost me about 33 cents/head/week which is economical. My neighbour is spending about \$1.20 using a commercial wet lick.

My heifers have actually gained condition and have improved in their coat. Four have now calved and the younger line are cycling. The heifers seem strong despite no rain and less feed in the paddock. One heifer even missed being drenched and she's improved like the others which confirmed the results for me."

Henry Watson