



Trevor Zerner

Ag Solutions

A U S T R A L I A



Products & Advice for Soil Regeneration

Message from the Directors

As Ag Solutions celebrates 14 years of production, we would like to say thank you to the many farmers who have helped us by

sharing their success stories regarding the use of Natra Min through testimonials over the years.

Being "organic" fourteen years ago often gave the expectation to many people that we definitely had to be "hippies". NPK were seen as the priority and the importance of soil microbes was virtually unspoken.

Times have changed, and as we work with more farmers to improve soil health and animal nutrition, our focus becomes shared of the need to reduce reliance on chemicals for productivity.

Many farmers are experiencing the effects of declining soil fertility and the associated costs... increased tillage costs, increased pests and disease and higher fertilizer requirements to maintain production.

We have had many farmers who have experienced similar results to George Bennett's (see right of page) and their testimonials have certainly helped us to teach other farmers about the benefits of using Natra Min.

Low Chemical Farming... the way of the future
Plant, animal and human health are a reflection of soil fertility.

Providing advice to farmers on soil management for the past 14 years has provided us with a depth of experience and knowledge to support you to make the transition to low chemical farming practices.

With the help of Swedish Research Scientist, Thomas O'Brink, our products have been designed to work with nature to improve soil fertility... and subsequently, crop production.

Having both grown up on properties, Wendy and myself understand first hand the difficulties that accompany any agricultural enterprise. One thing that can't be controlled is the weather... however we have often seen how our soil and animal nutrition products have been instrumental in minimizing the detrimental effects that extreme weather conditions can have on crop and animal performance.

Our aim is to provide quality products and management advice to assist you in making the transition to low chemical farming practices.

We look forward to being of service to you.

Trevor & Wendy Zerner

Farming without Chemical Fertilizers... an ECONOMIC SUCCESS

NSW soybean grower George Bennett is reaping significant benefits through the use of soil testing and regular applications of Natra Min. "I've been using an annual application of Natra Min for 5 years or so, eliminating all other water soluble fertilizer" says George.

Prior to using Natra Min George farmed with black soil that he described as "hard and cloddy", having to resort to power harrows to make a seed bed for planting. George's farming practices also included using chemical fertilizers for planting and foliar sprays during the crop. Today, however, after just 5 years of growing crops with no chemical fertilizer and limited weed or pesticide sprays, George Bennett is in the process of converting to growing fully organic soybeans and barley, and is enjoying record levels of production.

To achieve optimum results, Ag Solutions initial advice was to gradually reduce the use of pre-plant chemical fertilizers. However, because George was already practicing crop rotation by growing soybeans in Summer and barley in Winter, he was keen to really test the merits of Natra Min and its ability to improve soil structure and hence crop yield. George therefore chose to use the product without any chemical fertilizers.

Despite very dry weather conditions, the first soybean crop planted using Natra Min yielded 1.4 tonne / acre with most farmers in the area harvesting less than one tonne/acre.



Soil was hard and lumpy in 1999



2004: Soft and friable soil again after using Natra Min

George Bennett has continued to see ongoing improvements in his soil each year, with crops showing less stress during dry conditions, producing good protein levels and yields as good or better than district averages. According to George, "contractors, agronomists and district farmers have certainly seen a difference in my soil and crops. Late last year I deep ripped followed by a scarifier to prepare for soybeans. The friability of the soil was very noticeable to other farmers who were having great difficulty with soil preparation, just like I used to have".

Improved soil condition allowed early planting...

"Because I had obtained a good seed bed after two passes with machinery I was able to plant on the first lot of rain in November, whereas most farmers still had to do a final pass prior to planting. This early planting helped my crop get away to a better start with good moisture levels in the soil."

Continued over page...

In this Edition

	Page
From the Directors	1
Farming without chemical fertilizers	1-2
AgSolutions expands its team	2
Effective & SAFE alternative to Urea for animal supplement	3
Win a Gold Coast Holiday!	4

Record Yield reflects soil improvement... (Continued from previous page)



2004 harvest: "The best yield I have ever had."

George Bennett's crop were subjected to the damaging effects of a hailstorm in late December, leaving in its wake what George described as a "field of soybean coleslaw". However, despite the initial devastation, crops recovered quickly.

Whilst the hail damage may have diminished the overall production, an average of 1.95 tonne per acre was achieved with a record yield of 2.5 tonne per acre in one area where there was no hail damage. George has also found that the improved crop health has resulted in less pests and disease.

Having already registered his property to grow organic produce, George Bennett's farm is currently in the "conversion" period. His soybeans have sold for \$500/tonne, with the average price for conventional growers being just \$450 per tonne. George remains more than satisfied with the performance of Natra Min and envisages a profitable farming future free of chemicals.

NATRA MIN *Two products in ONE...*

Microbe Stimulant & Mineral Supply

Increased microbe activity in your soil will...

- Increase humus levels
- Increase nutrient availability
- Improve soil structure
- Increase water penetration and drainage
- Balance soil pH
- Reduce Chloride & Sodium levels

For your plants this means...

- Constant nutrient supply - less fertilizer required
- Healthier plants with reduced disease and pests

For you...

- Improved quality of produce
- Reduced costs



NATRA MIN BLENDS are now available with EXTRA Phosphorus, Calcium, Sulphur & Potassium

Soil testing for crop requirements...

Natra Min is available in five different blends to provide a range of elements for crop production. Regular soil tests were performed to determine the appropriate Natra Min blend required to meet nutritional requirements.

George has also applied Natra Min to his pasture and he noticed that "my cattle won't leave it alone where Natra Min has been applied."

George is very pleased with results in his soil and crop production, and summarised the benefits that he has experienced...

- ✓ Soil is friable helping to reduce tillage costs
- ✓ Better drainage in wet areas
- ✓ pH improvement - without the use of Lime
- ✓ Increased yields
- ✓ Improved protein levels in grain
- ✓ Less pests and disease problems

"Overall, using Natra Min has reduced my fertilizer costs and increased production and quality." *George Bennett*

Ag Solutions Australia... a family affair

For fourteen years Wendy and I have endeavored to cover all areas of our business from research and manufacture through to sales (not to mention the writing of newsletters).

Two years ago we welcomed our son in law, Andrew Williams and our daughter Julie to our management team.

With the support of Andrew and Julie as well as our capable staff, Ag Solutions has certainly grown and we constantly strive to improve our products and service to you.

This month, we are pleased to announce the appointment of our nephew, Gary Zerner to our team. Gary will take on the role of Sales Manager, initially working in the Darling Downs and new England regions.

Gary brings immense experience to the team, having recently worked for the DNR in the area of Weeds and Pest management in the Warwick, Blackall, and Emerald districts. Gary also holds an Associate Diploma of Applied Science Animal Production from the Gatton Agricultural College.

However, perhaps more pertinent is his working knowledge of farming, having been raised on his parents successful Ayrshire dairy stud and commercial beef property. This has given Gary an understanding for farmers and their need to deliver sustainable production despite changing weather conditions.

With Gary's assistance, we look forward to refining and improving our service to you.

Trevor Zerner

New kid on the block:

Ag Solutions is pleased to announce the appointment of Gary Zerner as Sales Manager.

As the latest recruit to join the expanding Ag Solutions team, Gary is for now immersed in a "block" of a different type... learning all about our mineral "Lick Blocks" and the benefits they can deliver!



Gary Zerner

Gary took time out, to answer a few probing questions

What is your favourite beverage?

For my parents' benefit I'm obliged to say the good old white frothy type!

Favourite movie?

Anything action or sporting oriented. Kind of like a Broncos game meets Gladiator?

Person you'd most like to meet.

Elle McPherson hang on, will my wife read this? Better put Tiger Woods ...with Elle as caddy!

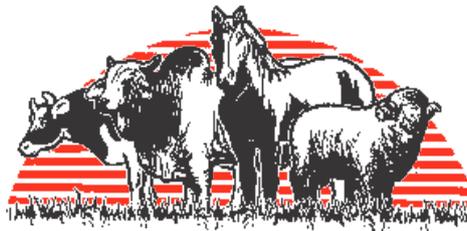
Most embarrassing moment?

Being dragged around the Brisbane Exhibition Grand Parade by a heifer on heat!

Best piece of advice you've ever been given?

Always maintain a sense of humour ... particularly when it comes to a Grand Parade!

Crop & animal health is a reflection of your soil fertility



Animal Nutrition Breakthrough...

A SAFE, ECONOMICAL & EFFECTIVE alternative to UREA

TRIALS: University of New England

Trials performed by Dr Lewis Kahn, at the University of New England have shown that Superior Mineral Supplement provides a SAFE, ECONOMICAL and EFFECTIVE alternative to the use of UREA for winter and drought feeding as well as a natural alternative to products commonly used as an acidosis preventative in grain rations.

Client testimonials relating to the use of these products have suggested benefits such as improved utilization of low quality feeds; reduced grazing pressure; prevention of acidosis during grain feeding; improved conception rates and improved animal health.

However, in an effort to validate these benefits, Dr Lewis Kahn (BRurSc, PhD Animal Science) was commissioned to conduct independent trials at the University of New England, Armidale.

These trials have quantified and confirmed many of the benefits that farmers using Superior Mineral Supplement and Mega Minerals Lick Blocks have reported. (Mega Minerals Lick Blocks are based on Superior Mineral Supplement.)

Trial Details



Trial Objective: To determine the effectiveness of using Superior Mineral Supplement as an alternative to feeding Urea during dry weather and drought conditions.

Animals: 27 Hereford weaner steers with 3 pens (each with 3 animals) per diet. Average weight of stock: 285kg.

Location: Kirby Feedlot, University of New England.

Duration: The trial was conducted over two periods with period one being on low quality feed and period two being an even lower quality feed to simulate deepening drought conditions.

Period 1: Low Quality Feed (64 Days)

The cattle were fed a roughage mix of 80% Barley Chaff and 20% Lucerne Chaff with three pens receiving Superior Mineral Supplement (29 grams/day) and three receiving Urea (75grams/day) as a supplement. As a control, three pens received no supplement. During this period all cattle gained a marginal amount of weight.



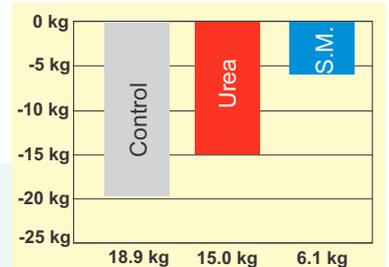
Period 2: Drought Feed Ration (49 Days)

To simulate deteriorating fodder quality as would be experienced during a drought, a reduction in the amount of lucerne from 20% to 5% of the ration was implemented in the second trial period. Three pens received Superior Mineral Supplement (44 grams/day) and three receiving Urea (94 grams/day) as a supplement. As a control, three pens received no supplement.

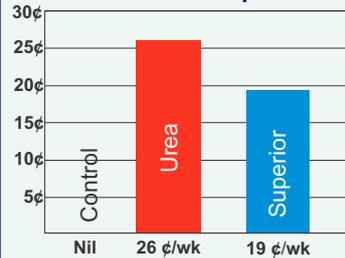
Over the course of the 49-day period, all cattle lost weight with the steers fed Superior Mineral Supplement having the lowest weight loss.

Average weight loss for total trial period (113 days)

Control - 18.9kg
Urea - 15.0kg
Superior - 6.1kg



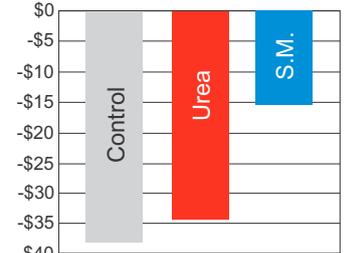
Cost of additives per week



While the differences in weight loss were not statistically significant, the reduced weight loss in animals using Superior Mineral Supplement is commercially important when cattle are experiencing prolonged exposure to low quality feeds.

Reduced weight loss = \$\$\$'s SAVED

Steers on Superior Mineral Supplement lost less weight than the animals on the control and urea rations. Using the sale price of \$2.00 / kg, the charts on the right show the substantial cost savings for the animals that were fed Superior.



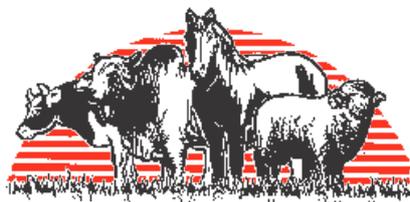
Net \$ loss/head

	Weight loss	Total cost of additives per head	Cost of weight loss (\$2 / kg sale price)	Net \$\$ loss per head
Control	-18.9 kg	Nil	\$37.80	-\$37.80
Urea	-15.0 kg	\$4.17	\$30.00	-\$34.17
Superior	-6.1 kg	\$3.12	\$12.20	-\$15.32

During Winter and drought conditions, reduced weight loss and lower costs for supplements = increased profits for YOU

Continued benefits...

Following the trials, the cattle were returned to pasture for two months. Animals that had been fed Superior Mineral Supplement during the trial period showed an increased weight gain of 67 grams / day compared to the control group.



A SAFE, ECONOMICAL & EFFECTIVE alternative to UREA (cont.)

I no longer have the worry of Urea poisoning...



"The balanced minerals in Superior Mineral Supplement and Mega Minerals Lick Blocks have reduced grazing demand with the stock being more content. My stock came through the 2002/03 drought in very good condition and have cycled well (95% calving rate...5% higher than in previous years).

I have not used urea as a supplement for over three years now and the digestion of fodder (fibre length in manure) is similar to when I fed urea."

Tim Wright, Grazier, Uralla

The importance of broad spectrum minerals...

There are 104 mineral elements known to exist in the earth's crust. Many of these are present in minute quantities, however, their importance and role in both animal and soil nutrition is often underestimated.

With optimum soil fertility and good weather conditions animals should obtain an adequate uptake and balance of these macro, trace and ultra trace minerals from the pastures they graze.

Lack of minerals in pasture may be the result of...

- soil demineralization over decades of farming
- winter or drought conditions
- over use of specific nutrients
- lush pasture during wet conditions

Recognizing mineral deficiencies...

While the symptoms of gross deficiencies or excesses are obvious and easily diagnosed by veterinarians or experienced stockmen, the major practical problems are often subclinical deficiencies.

The symptoms may be vague unthriftiness or lowered performance, often seasonal in nature. They are so common and widespread that the slightly lowered production or reproduction rates are often considered normal.

Superior Mineral Supplement is a source of broad spectrum earth and sea minerals - providing animals with vital macro, trace and ultra trace elements... naturally.

TAKE THE WORRY OUT OF WINTER SUPPLEMENTS

Superior and Mega Minerals Lick Blocks provide you with a SAFE, economical and effective alternative to Urea

AgSolutions

A U S T R A L I A

8 Wadell Road Gympie 4570

CALL NOW for answers to your animal nutrition and soil fertility questions.

Freecall: 1800 81 57 57 Fax 07 5482 8044 email: info@agsolutions.com.au

Win a Gold Coast Getaway!



Natra Min is an outstanding mineral soil conditioner ... and just what your soil needs to help it feel rejuvenated. But while your soil is being reconditioned, we're giving you the chance to recharge your batteries with a Gold Coast escape!

To celebrate the continued success of Natra Min, Ag Solutions is offering you the chance to **win 2 nights accommodation at the superb Legends Hotel on the Gold Coast.**

Legends Hotel Gold Coast has recently undergone a \$4 million refurbishment, which includes a fresh, new colour scheme, along with new bedspreads, bed heads, cushions and chairs in all rooms. As well as this, in all Studio rooms and spa suites, a modern kitchen with European appliances has been installed offering extra flexibility for guests. Conveniently located in the heart of Surfers Paradise, Legends Gold Coast is only 100m to patrolled beaches and a two-minute stroll to the main shopping and restaurant precinct.

The property boasts a variety of finely appointed, air-conditioned guest rooms, studio apartments and luxury spa suites. Facilities include Fables steak & seafood restaurant, Tales bar, outdoor heated swimming pool, gymnasium, sauna, steam room and guest laundry.

Talk to us about your soil and animal nutrition requirements OR purchase any Ag Solutions product (if purchasing from a rural store, please let us know by calling 1800 81 57 57) prior to 31 August and you will go in the draw to win ...

2 nights accommodation in a Studio Room including a bottle of Australian wine upon arrival.

Prize will be drawn on 31 August, and is valid for 6 months, subject to availability. And if you aren't lucky enough to secure the prize ... Legends Hotel is offering Ag Solutions customers an unbeatable getaway rate of just \$105* per room per night. For Reservations please call 1800 683 866 or e-mail relax@legendshotel.com.au.

* Per room per night based on a minimum 2 night stay. One night stays are available on application. Valid to 24 December 2004 & Subject to availability. Saturday Night Surcharge of \$30.00 may apply. 1-2 Guests, 3rd person rate available. **Please quote Ag Solutions Customers rate at time of booking.**

Acidosis preventative for GRAIN FEEDING....

Positive results have also been obtained for trials performed to evaluate the effectiveness of Superior Mineral Supplement as an acidosis preventative.

In comparison with the use of the antibiotic Eskalin and the ionophore, Rumensin, Superior Mineral Supplement proved to be a cost effective alternative for acidosis prevention and weight gain. These trials have just been completed and the details will be in our next newsletter. In the meantime, if you would like more information on the use of Superior for grain feeding, please give us a call on 1800 81 57 57.

Suitable for all animals...

Superior mineral supplement can be fed as a dry lick or is suited for mixing with grain or feed mixes such as dairy, feedlot, piggery and poultry rations. For the convenience of a lick block, Mega Minerals lick blocks are based on Superior mineral supplement.

Rate Changes

Due to an unforeseen rise in the cost of raw materials used to manufacture our quality products, the price of mineral fertilizers and animal supplements will increase as of 1 August 2004. This nominal increase is necessary to ensure our valued clients continue to receive only quality products. Our advice for regenerative agriculture will of course remain complimentary. Thank you again for your patronage.

To find out more about Natra-Min and details of your local stockist, please call our toll-free number now on 1800 81 57 57 or contact us at 07 5482 8044.