

## FERTILISER PRICING 2012

By Geoff Robertson



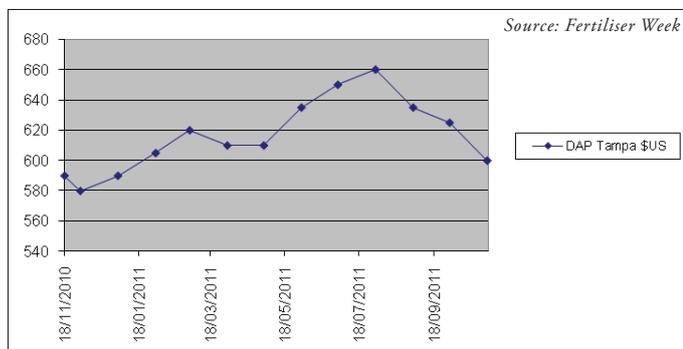
Each year fertiliser suppliers and retailers have to make decisions on the markets demand for nutrient to ensure it is sourced at a competitive price and is available when required. As production and shipping is planned months ahead this requires a fair bit of "guesstimation". The factors influencing price are global

supply and demand; the trading range of our dollar and domestic supply and demand. External factors such as the financial turmoil that is playing out in Europe also influences the global fertiliser trade.

### GLOBAL PRICING

#### DAP/MAP:

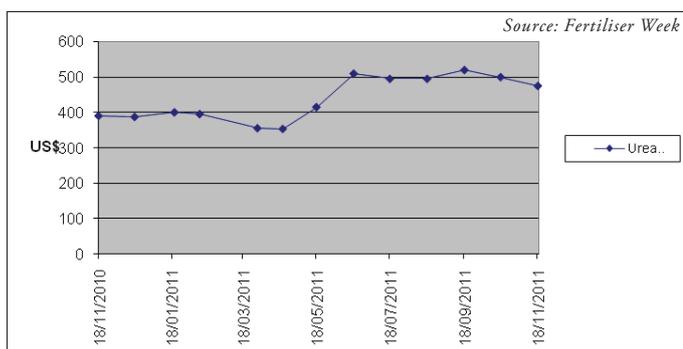
Movement in the global DAP price is influenced by the world wheat price; lower wheat returns to growers reduces the amount of fertiliser use at planting. Given estimates of high carryover of world wheat stocks it would be expected that DAP will continue to trade at these lower levels.



At this stage the expected trading range over the next few months would be \$550 to \$580 per tonne \$US ex Tampa Florida. This is the period when importers are committing to DAP and MAP for the coming planting season.

### UREA

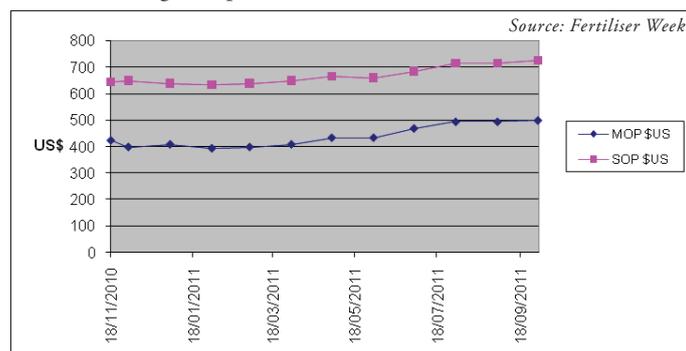
Lack of certainty regarding purchasing of urea by India has seen urea price drift lower.



Importers will start locking in requirements in the New Year. At this stage the expected trading range over the next few months would be \$430 to \$490 per tonne \$US ex The Middle East

### MOP

Potash Corp, Agrium and Mosaic market their potash globally through Campotex. Indications are they are pressuring for an increase in the global price.



At this stage the expected trading range over the next few months would be \$540 to \$600 per tonne \$US ex Canada East.

### DOMESTIC PRICING

Exchange Rate:

Our dollar is currently being driven by the financial turmoil that is occurring in Europe. Any negative sentiments will continue to see the dollar sold off. Market analysts are currently putting the AUS/USD trading range between 0.95 and 1.03.

### COMPETITION

Domestically, even given Impact fertilisers takeover of Hifert, the Australian fertiliser market is well serviced by suppliers ensuring good competition. This will tend to slow any price increases but see any fall in world prices being passed on relatively quickly.

Given the global market conditions discussed above we would suggest the following as budget retail pricing for the coming season. These prices include the addition of sea freight (45-65\$US) the importers handling and storage costs, interest, finance and a margin.

DAP/MAP: \$740 to \$790

Urea: \$560 to \$620

MOP: \$770 to \$845

### DECEMBER SUPER PRICING

Based on current world DAP pricing the equivalent domestic price of Super should be \$305 to \$325 per tonne. However early delivery incentives by local manufactures has the December super price well below this. We expect that this year's pasture market will be significantly stronger than the last two years this may require local manufactures to import super pushing prices to world parity.

We have secured some tonnage at the current lower price for immediate delivery and spreading. Due to Christmas shutdown at the works there will be limited days to enable despatch, additional storage costs will increase price by approximately \$7 per tonne.



## EDENHOPE SOIL NUTRIENT STATUS

By Bill Feely

Due to the extreme wet we have had over the last 18 months and below maintenance applications of some nutrients, significant trends have become evident in the 800 plus soil and tissue tests we have carried out this spring. The trend has been common in tests taken on lighter type soils irrespective of location and also reflects the mining of nutrients particularly potassium on clay and clay loam soils.

### PHOSPHORUS:

Phosphorus (P) is the key driver of productivity in our soil types and is therefore our first focus when looking at soil tests. P levels in soil tests conducted regularly on paddocks over the past 5 years showed that as long as maintenance P was applied there was no decrease in P levels. Soil testing on a dairy farm in the Coleraine area over the past 3 years with an Olsen P of 45 initially saw these fall to around 30mg/kg. Due to the fact that P isn't mobile through the soil this decrease can be attributed to mining. In some situations this mining has been appropriate as soil P levels were well above the level required for optimum production. This decline must be monitored and maintenance applications of P must resume before levels fall too far. Optimum P levels will vary from farm to farm depending on stocking rate and enterprise.

### POTASSIUM

Potassium (K) is mobile through the soil profile and given the constant wet conditions the levels will most likely decrease in the top soil. This situation has been worsened due to the reduction of K applications over the last three years particularly on dairies and hay paddocks. Soil tests taken at Edenhope and Heywood on sandy to sandy loam soils in the range 5.0-5.2 pH (water) regularly over the last 3 years showed K has decreased. The readings had deteriorated from 75 mg/kg to 55 mg/kg at Edenhope. At Heywood they had decreased from 75mg/kg to 45 mg/ka on paddocks that had been grazed and cut for silage. Furthermore the amount of K applied after the initial test taken was less than recommended consequently depleting the K bank even more.

It has also emerged from tests taken on relatively heavy soil types that there has been a gradual mining of K. Tests have been taken on paddocks that have been cut for silage and hay constantly over the past 3 years. The initial K levels were high at 350 mg/kg but over time as the cuts continued and no K was applied, the levels have come down to 160 mg/kg. Although this reading is still classified as adequate this shows just how quickly nutrients can be depleted when yields are substantial and more than one cut has been removed.

Overall there has been a tendency to ignore the K factor in the budget and as a consequence paddocks are now showing the symptoms of K deficiency such as Sorrel, Dandelion, Sweet Vernal and poor clover growth.

### SULPHUR:

Sulfur (S) is more mobile than K and as a result over the past 18 months levels have declined significantly. Most S levels in tests taken on sandy to sandy loam soils have decreased from

10 mg/kg to 4mg/kg. Generally the S applied to address any deficiency was adequate due to the use of single super which was adequate under "normal" rainfall. However even these S levels were compromised because of the severe wet. The upside to the S cycle is that as the season dry out there is a reasonable degree of mineralization. Granted it is hard to maintain S status on light soils using sulphate sulphur in these cases a mixture of sulphate sulphur and elemental sulphur should be considered. The elemental sulphur being slower to release and less inclined to leach on light soils.

### COPPER:

The past wet winters have resulted in significant animal health problems unassociated with low copper levels. Low soil copper levels are being tackled on many farms. However there are still low copper levels evident particularly when paddocks have been over limed. This results in increased molybdenum levels which can reduce copper uptake by animals.

### MOLYBDENUM:

Typically low molybdenum levels are occurring on soils where "buckshot gravel" is present in the topsoil. Critical for legumes, when a low molybdenum level is corrected the increase in clover production is dramatic. Plant tissue testing is the only accurate way to measure trace elements.

### BORON:

Low boron levels are showing up on a significant number of tissue tests. While not impacting on yield, boron is important for seed set and it therefore needs to be included in pasture sowing mixes.

### SOIL pH AND ALUMINUM LEVELS:

Most soils tested showed a trend towards acidification. This is a normal process as a result of product removal and the movement of nitrogen through the soil profile. The most evident acidification occurred on the sandy to sandy loam soils with a pH (water) < 5.2. The Aluminum % in these soils also increased to > 6%. These were paddocks that had been limed between 5 -10 years ago and had gradually acidified to the extent that they now require lime again. In 4 instances samples tested showed a low pH, Aluminum % > 6% and a high Cal/Mag ratio. In this case Dolomite was recommended. Soil acidification is an area that should be assessed regularly, given the good clover years, which increases soil nitrogen levels; resulting in acidification and the high calcium removal particularly in hay paddocks.

### NUTRIENT AVAILABILITY:

Having optimum soil nutrient levels is only the start of efficient use of those nutrients. Appropriate grazing management and the correct pasture species for the soil type also have a great influence on nutrient uptake. Depending on the enterprise, ie dairying, cropping and beef sheep, it is wise to soil test regularly so as to keep abreast of the paddock fertility status to avoid potential production losses.



## COMBINATION PASTURES WALK. BESTWOOL BESTLAMB GLENELG GROUP.

By Sophie Leonard

On the 12th of October the Glenelg Bestwool BestLamb group held an open field day at “Netley”, “Kongbool” and “Nobbies”. There was a strong turnout with interest from a large area. The field day aimed to present a variety of pasture combinations that may be suitable for the area and to have an insight into the different species persistence and production input and outputs. Starting at Derek and Trish Brody’s property “Netley”. Derek and Trish have sown down a Phalaris, Lucerne and sub clover combination.

Paddock preparation included an oat crop in 2008 that had failed. In 2009 lime was spread at 2.5 tonne/ha. Spraying preparation included 2lts of Spray Seed, 400ml MCPA, 100ml Dimethoate and 80 lts water/ha. The paddock was direct drilled with Phalaris Holdfast GT at 4kg, with Sardi 7 Lucerne at 6kg, direct drilled at 12-15mm deep with 70 kg of MAP. The following autumn Trikala was spread at 6kg with 200kg of 3:1 super potash blend. The pasture has been both rotationally grazed and set stocked. There appears to be a good composition of the sown varieties over the higher areas of the paddock with noticeably more phalaris on the slopes.

No weed management has been required at this stage. Derek’s goal for the paddock is to finish x-bred and merino lambs over summer with this pasture composition.

The next property visited was at Jenny Johnston’s at “Kongbool”. Previously at Kongbool the pastures were unimproved. From 2005 to 2009 the paddocks were cropped with oats and canola lifting the Olsen P levels to an adequate range of 11-17mg/kg. A renovation crop of Quall Oats and Rye Corn was planted in late march for winter grazing. The pastures have all been limed at 2.5 t/ha and will be monitored via soil and tissue testing regularly from now on.

During spring this year a pasture combination of 2kg Australian Phalaris, 1kg Siroso, 5kg Lucerne, 1kg Tonic Plantain and 1kg of Vision Cocksfoot was sown with 100kg/ha of MAP. This pasture is still very immature and has had no issues with slugs or weeds as this stage.

This combination aims to provide a stock safe pasture for 12 months of the year eliminating any feed wedges whilst allowing an increase in the properties carrying capacity. Goals for “Kongbool” include maintaining pasture nutrition, run healthy sheep that produce sound superfine wool, while maintaining an easy to manage farm operation.

The final pasture was on one of Tim and Georgie Leeming’s blocks, “Nobbies”. This block was originally onion grass and annual grass weeds with low soil fertility. The group looked at two paddocks that Tim and Georgie had renovated to achieve a stocking rate of 16-17 DSE/ha. The first paddock “Duggens South” was sown down to 2kg Australian phalaris, 1kg Holdfast, 1kg Siroso, 6kg Aurora Lucerne, 3kg Trikala, and 3kg Leura Sub Clover. The paddock preparation included Roundup 1.5Lt/ha as a knockdown in Oct 2007, oats sown 2008 with 100kg/ha MAP in May. Harvested and then 2.5t/

ha lime and top dressed 150kg single super in Feb 2009. In May 2009 the pasture combination was sown with 125kg ha Complete MAP. Complete MAP having 5 units of sulphate and 5kg of elemental. Sulfur is very useful in sulfur deficient soils.



The next paddock was “Brendas”. This paddock had a similar combination of 2kg ha Australian phalaris, 1kg ha Siroso, 3 kg ha Aurora Lucerne and Sardi 7 as well as 1.5kg ha of plantain. Although sown at a lower rate the plantain has so far dominated, this may be due to selective grazing pressure, as shown in the attached photo, the phalaris has persisted by growing amongst the plantain plant where stock have heavily grazed on the surrounding phalaris lucerne and clover. This may be a difficult to manage when the plantain becomes reproductive as it may get bitter. Crash grazing is then required to get it down to a more palatable growth stage, putting pressure on the other pasture species.

Both combinations are part of the goal to maintain good winter growth and offer a safe summer feed rotation by reducing phalaris toxicity and bloat. This blend should also maintain late spring feed with the Leura, lucerne and plantain enabling lambs to be carried throughout December. Grazing management with this combination should be kept above 1000kg/ha feed on offer (FOO) during the growing season and periodically spelled throughout the summer and autumn.

The current fertiliser program consists of 180 -200 kg/ha of single super and a 7 – 10 year rotation of lime at 2.5tonne/ha. Tim and Georgie’s goals are to complete fencing to land classes, plumbing remainder of water and then sow down to perennial pasture, with 30% renovated to date and to minimize supplementary feeding of ewes over the summer months through establishing summer actives in there pastures.

The aim for the pasture composition monitoring is to compare each varieties persistence and to maintain as much FOO all year round for as long as possible. Plant counts will be carried out regularly to identify any species that may dominate or decrease. Early results look promising for the spring sowing of combination pasture including lucerne and plantain alongside the traditionally sown phalaris. More pasture walks will be held in the future for constructive monitoring.



## CROPPING ARTICLE 2ND HALF OF YEAR.

By James Stewart

As we approach the business end of the season. I thought it a good idea to reflect on the growing season. It has been close to an ideal finish. With mild temperatures, some spring rain and with adequate soil moisture, things have certainly improved. As we look back it seems to be as wet a year if not wetter than last year. Let's hope that doesn't continue.

It's always good to start on a positive note:

When sowing commenced back in the autumn most areas were extremely wet from huge amounts of summer and autumn rain keeping the soil profile full throughout the year. Given the potential for the coming season sowing Phosphorus applications were targeted at average to higher yields. There was an increase in the use of Nitrogen (N) to compensate for any N losses through leaching and the prospect of higher yields, the wet soil conditions did however make it harder to carry out Deep N testing later in the season to fine tune N management. Not only was moisture giving us all headaches with sowing, slugs and snails were also providing us with a new challenge. Clients that burnt stubbles, performed full cultivation and rolled after sowing had the best results with controlling slugs. In a lot of areas numbers were so high baiting wasn't having the effect that we all hoped. I have several clients that baited 3-4 times and still had to re-sow paddocks. Slugs and snails are still an issue to date. Keep an eye on it and let's hope for a hot dry summer to break the life cycle!!

Even through we experienced quite a dry winter with winter rainfall being below average the country stayed wet. Waterlogging can play a major role in crop yields. One approach to tackling this problem is opting for raised beds and even northern guys are planning to implement raised beds for the coming season. If wet seasons continue, returns on yields from raised beds will be very attractive.

The effects of water logging of soils can be detected in plant growth within just 3 days of the onset. Water logging reduces root penetration and growth. When these soils dry out which they have done this year; root systems are still confined to the surface soil because of earlier damage. These shallow roots cannot take up enough nutrients from drying soils, which in turn reduces production. With most clients now sowing with copper and zinc down the tube, trace element deficiency hasn't been as much of an issue even given the reduced root growth. It is important to assess if there are other subsoil limitations to root growth, soil tests carried out at 10-60cm give a better indicator of these conditions.

Soils finally started to dry out in late September early October. Country that wasn't sown in the autumn because of traffic ability was finally sown

to wheat, barley, perennial pastures and summer crops and a couple of my clients are trying some Taurus canola which will be very interesting.

Taurus canola is a dual purpose hybrid canola suited for grazing and grain production. Taurus is a very late maturing variety which can be used as an alternative to forage brassica's.

When October rolled around so did cereal diseases. With the wet summer we had just come out of, it was on the cards; so clients that had included fungicides with fertiliser at sowing were able to limit crop production losses. Stem rust appeared in wheat. Barley was also affected with spot form, net blotch and scald appearing. Fungicide sprays can't cure leaves that are affected with disease; it can only prevent it. As a result fungicide applications worked out to be cheap insurance for those that used them.

Coming into October/November we received small amounts of rainfall, and when it did come it came with a rush and it was very hit and miss. The mild weather has been great for finishing crops. Wheat crops that were close to being written off because of the wet 4 months ago, are now looking great with yields expected within the 4-5t/ha range. Unfortunately canola didn't rebound out of the wet as well as the cereals and good canola crops are few and far between. The few good canola crops that I have seen were sown very early, and a couple of those are clients that planted Taurus Canola.

The grain market has slowly declined over the previous months, but historically prices remain reasonable. Canola prices are very good considering it's not a drought year so selling at harvest time might be the go, especially with a large soybean crop in South America. The spread between high protein milling wheats and ASW and feed grades are quite significant and international wheat markets are driving the prices. Clients that did apply urea will more than likely benefit in this grain market.

All cereals still look good at this stage but yield potential more than likely will be reduced due to the wet months. If we look at the things in our favour, the spring has been very favourable to date, spring sown crops are all looking good, some diseases coming into barley which is very early for the growth stage.

As we approach harvest growers need to be mindful of how they are going to store and market their grain. It takes eight months to get to the end result so don't make marketing decisions on the weighbridge. There are many different options for selling grain (pools, contracts, cash silo prices, golden rewards) so make sure you are comparing apples with apples.

Hopefully we get some adequate finishing rain for late sown crops and happy harvesting.



## TRACE ELEMENTS

By Leighton Rees

In the local area recent cold wet winters have seen an increased occurrence of trace element deficiencies resulting in poor livestock performance.

In particular, areas with sandy soils will often have higher instances of trace element problems due to leaching.

As a rule if pastures are growing well trace element levels such as

copper will be adequate for livestock. However these levels can be affected when other trace elements such as molybdenum, iron and sulphur are in excess.

Cobalt is another trace element that is required in very small amounts, but is still beneficial for the production of vitamin B12. It is also required by the bacteria that fix nitrogen.

Selenium on the other hand is not an essential nutrient for plants but is needed to maintain animal health and production.

## FACTORS AFFECTING NUTRITION IN LIVESTOCK

### Paddock characteristics

The soil levels of each trace element are very important as is pasture composition which effects availability of nutrient.

High clover content pastures are less efficient at taking up selenium than grass pastures but more efficient at taking up cobalt and copper.

Most cobalt is derived from ingested dirt which means that the underlying rock in the paddock is linked directly to any deficiency that your soils may have.

Liming paddocks generally causes a decrease in plant uptake of cobalt but has an increase effect on selenium and molybdenum uptake.

Poor paddock drainage can also have an effect by increasing cobalt and selenium uptake but can also reduce copper availability.

Rotational grazing will increase an animal's chance of correcting a trace element deficiency due to varying trace element levels in each paddock.

## SIGNS OF TRACE ELEMENT DEFICIENCIES IN SHEEP.

### Copper deficiency

- Steeliness or loss of crimp in wool
- Anaemia, scouring, infertility
- Bones breaking in lambs (fractures of ribs and limbs)
- Swayback in young lambs indicates deficiency during pregnancy.

A number of property owners this year have experienced production loss and animal health issues due to copper deficiency in lambs.

When the symptoms become noticeable it is generally too late to avoid a decrease in production.

### Cobalt deficiency

- Loss of appetite (failure to thrive)
- Lactation and wool production losses.
- Wool may be tender or broken.

### Selenium deficiency

- Reduced growth rates.
- White muscle disease ( can cause sudden death or lameness )
- Lower immune system ( more susceptible to worms and disease)

## SIGNS OF TRACE ELEMENT DEFICIENCIES IN CATTLE.

### Copper deficiency

- Loss of coat colour.
- Coat becomes rough.
- Loss of hair pigmentation around the eyes.
- Decreased milk production.
- Loss of fertility.
- Scouring.
- Sudden death may occur in adults.

### Selenium

- Suckling calves may develop nutritional myopathy (this usually effects the heart muscles)
- Sudden death from the above.

## DIAGNOSIS

Plant tissue and animal, either blood or tissue, tests are useful in detecting any emerging trace element problems. The timing of sampling and type of testing required will be dependent on the trace element that is suspected of being deficient.

## TREATMENTS

### Copper deficiency

The first thing to do to correct a suspected copper deficiency is to check pasture levels of copper and molybdenum. Do this using a tissue test and correct any imbalance as required. This can be done by adding copper coated products into your fertiliser mix. After correcting the deficiency maintain soil levels by using smaller applications annually rather than large amounts every 4-5 years.

An application of 1kg Cu per/ha would be recommended to correct a deficiency, this would cost approximately \$16 per/ha. Applications of 200g per/ha a year after this should be adequate to maintain levels.

Another alternative is copper bullets which cost around \$257 per 500 for sheep and \$737 per 100 for adult cattle. The most cost effective way of maintain copper levels will depend on stocking rate. Where animals are suffering a deficiency of Cu an injection is required which will last 2-3 months.

Increasing pasture clover content will also help with the availability of copper.

### Cobalt

Cobalt can be applied in fertiliser at a cost of \$8.50 per/ha. Alternately a foliar spray can be applied. Soil type will influence the appropriate application method.

Cobalt bullets are also an option and will cost around \$605 per 500 for sheep and \$395 per 100 for cattle.

You can select the areas of the farm you treat by choosing paddocks that are going to be stocking younger animals at higher concentrations.

### Selenium

Slow release fertilisers provide adequate selenium for grazing stock for 2 years and will cost about \$6 ha.

Pellets for sheep are around \$257 per 500, but the life of the pellet may only be 1-2 years which might not be adequate for lambs suckling mature ewes.

Selenium pellets for cattle will cost around \$303 per 100.

Care must be taken as selenium pellets and the application of fertiliser to pastures can lead to excessive tissue levels in sheep.

Selenium can also be used in vaccines at lamb marking but is only a short term option.

## CONCLUSION

Farmers need to adopt practices which give regular feedback on paddocks and their available trace elements e.g. regular tissue testing. Aim for high quality pastures and avoid grazing short pastures over winter.

Increase clover content in pastures which you think may be susceptible to copper and cobalt deficiencies.

Increase grass content in pastures that you think may be low in selenium levels.

For high risk areas develop a trace element supplementation program. This may need to be continued due to the fact that once a trace element deficiency has been found it is likely to occur again.

### References

Department of Agriculture. Trace element deficiencies in sheep and cattle, Tony Griggs.

Trace elements and livestock, David Rendell.



## MANAGING NEWLY ACQUIRED PROPERTIES

By Harry Armstrong

Expanding a farming enterprise via the purchase of adjoining or close by land is a normal part of a long term strategy for many farming families.

Howard & Mark Templeton at Tahara, just south of Coleraine are one family who have taken on new land successfully a few times over the last few decades.

Templeton's are currently running around 7300 predominantly Coopworth ewes and calving down around 320 cows as well as growing some crops. The crops are used mainly as a pasture renovation tool, with some grain being kept for stock feed.

Renovated paddocks are on average carrying 10 XB ewes/ha. This equates to around 22 DSE/ha. These paddocks receive an annual application of 18kg/P/ha. Which is just over 200kg/ha of Single Super or equivalent. The aim is to keep the Olson P level in these paddocks somewhere in the mid teens. Results from research done at the DPI Long Term Phosphate Experiment in Hamilton indicate that this stocking rate and fertiliser application is both profitable and sustainable in the long term.

A recent conversation with Mark Templeton highlighted what to do and where to start once a new property has been acquired.

Soil testing is the first job to establish the underlying fertility requirements. The number of tests done is determined by the size and soil types of the new block.

Some fencing is often required to incorporate the new land into the existing enterprise. Often this is achieved with some laneways and gates. Water must also be considered at this stage. Major subdivisional fencing is usually done a few years down the track once wet areas and the likes have been identified.

Mark indicated the most important goal is to get the new farm up to the same level of productivity and stock carry capacity as the home farm as soon as possible.

New farms often have low fertility and little if any perennial grasses, so the first step is to spray out existing pasture in early spring, plough and sow a summer crop. Soil tests will indicate how much capital fertiliser is required and whether lime or gypsum will need to be applied. The summer crop phase is an ideal opportunity to get these issues addressed.

Targets for soil fertility are pH in water of 5.8 or higher, Phosphorus Olson P in mid teens, potassium (K) at 200mg/kg. For phalaris to thrive getting the Aluminium % as low as possible is probably more important than the actual pH.

As Mark pointed out the summer crops are the start of the pasture renovation program, but are utilized primarily to grow out ewe lambs to joining weight.

Autumn the following year sees these summer crops sown to cereals. Cereals allow the use of chemicals to control onion grass if it is still a problem. Canola has also been sown in some of the better drained paddocks.

Mark & Howard have a pretty standard pasture sowing mix which is 5kg/ha Phalaris (50% Holdfast & 50% Australian 2) & 10kg/ha sub clover (50% Leura & 50% Trikala).

While they have had success sowing phalaris in the spring they are currently resowing mostly in Autumn. The main advantage is the ability to sow sub clover at the same time as the phalaris. Sowing Sub Clover is generally not possible in spring. The disadvantage with autumn is the paddock is out of production for most of the winter, but by late spring it provides almost as much feed as a summer crop, which again can be used to get ewe lambs up to joining weight.

Herbicides such as Dual Gold applied immediately post sowing to control toad rush and poa (winter grass) have made sowing phalaris and clover in autumn much less risky.

To sum up, the Templeton's philosophy is quite simple, as Howard said: "It's not rocket science, you get rid of the weeds, you get the fertility right and you sow, and be prepared to maintain productive long term pastures".



Howard (left) & Mark Templeton (right)



## HEYWOOD RYEGRASS TRIAL

By Bill Feely

In April this year a ryegrass trial was established at Greg Leaver's dairy farm 5 kms East of Heywood in conjunction with Andrew Allsop from Notmans Seeds. Average annual rainfall at the site is 825mm and soil status is a pH(water) of 5.7, Olsen phosphorus level of 15mg/kg, Potash 150 mg/kg and Sulfur (s) 10 mg/kg.

Due to the extensive number of cultivars that are available on the market at present for annual, Italian and perennial ryegrass, it was decided to trial various cultivars that we believe will be suited to the 650-850 mm rainfall and compare yields. The aim of the trial is to see which cultivars will persist and yield over the next 4 years.

The trial consists of 4 replicates in plot sizes of 10m X 1m. In the annuals there are 4 cultivars, Italians 6 cultivars and 14 cultivars in the perennials. Measurement of plots has been undertaken by an electronic pasture probe and then mowed by hand mowers to a pasture height of 6cms.

After two cuts the following observations and results have been obtained.

Zoom has produced roughly 500kg/ha DM more than the other 3 cultivars over the 2 cuts. It has been a standout with the next best being Adrenaline, Sultan and then Winterstar.

### OBSERVATIONS:

**Annuals: Sultan, Winterstar, Adrenaline and Zoom**

Zoom has produced roughly 500kg/ha DM more than the other 3 cultivars over the 2 cuts. It has been a standout with the next best being Adrenaline, Sultan and then Winterstar.

**Italians 2-4 year: Sonik, Surge, Accelerate, Crusader, Maverick and Nourish.**

The best performing Italian over the 2 cuts has been Surge and then in order of yield Accelerate, Crusader, Sonik, Nourish and Maverick. Overall there has been no significant difference between these lines.

**Perennials minimum 4 years: Kingston, Nui, Helix, Extreme AR 37, Abermagic, Alto, Revolution AR1, Matrix, Ultra AR 1, One 50, Halo AR 37, Banquet 2, Base AR 37, Bealey Nea 2.**

The best performing cultivars in the perennials so far have been Helix (+6), Matrix (+23), Banquet 2 (+20), Ultra AR 1 (+17), Kingston (-3) and Alto (+14). The poorest performing cultivars have been Abermagic and Revolution AR 1. The difference has been significant in that Helix has produced 1-1.2 t DM/ha more than Abermagic. Given that Helix has provided exceptional winter feed. However from now we would expect that the later heading varieties will kick in. Having said that Matrix, Banquet 2 and Ultra Ar1 are all late heading. Would anticipate that there will be other cultivars that emerge over the next cut.

### LATEST EDITION FASTRAC 3230



This tractor combination is world first; designed by Vickery Bros and modified in Aust after concerns by Geoff that tractor safety, with machine fatigue issues, lack of stability on hill country; and low manufacturer carrying capacity was making it virtually impossible to buy a vehicle that could operate in "self destruct mode" all day and still be safe and economical to operate.

Initial trials have exceeded expectations, with every fertiliser contractor in Aust and JCB (U.K.) eagerly awaiting a full seasons maintainence data. We are confident that this configuration will give us the safety and performance required to operate in this very harsh environment.

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For healthy soils.

**Agronomy Team**

Bill Feely	0409 427 963	James Stewart	0427 752 773
Leighton Rees	0437 752 707	Harry Armstrong	0417 052 095
Sophie Leonard	0409 868 132		

**Depots**

Coleraine 03 5575 2777 Heywood 03 5527 1777 Edenhope 03 5585 1975  
 Mount Gambier 0408 646 220 Frances 0418 330 267 Casterton 03 5575 2777

- December delivery savings on Super
- Nitrogen on summer crops
- Establish farm nutrient plan
- Ensure fertiliser dump sites graded

**SEASONAL REMINDERS**

If undeliverable return to:  
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 Coleraine VIC 3315

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