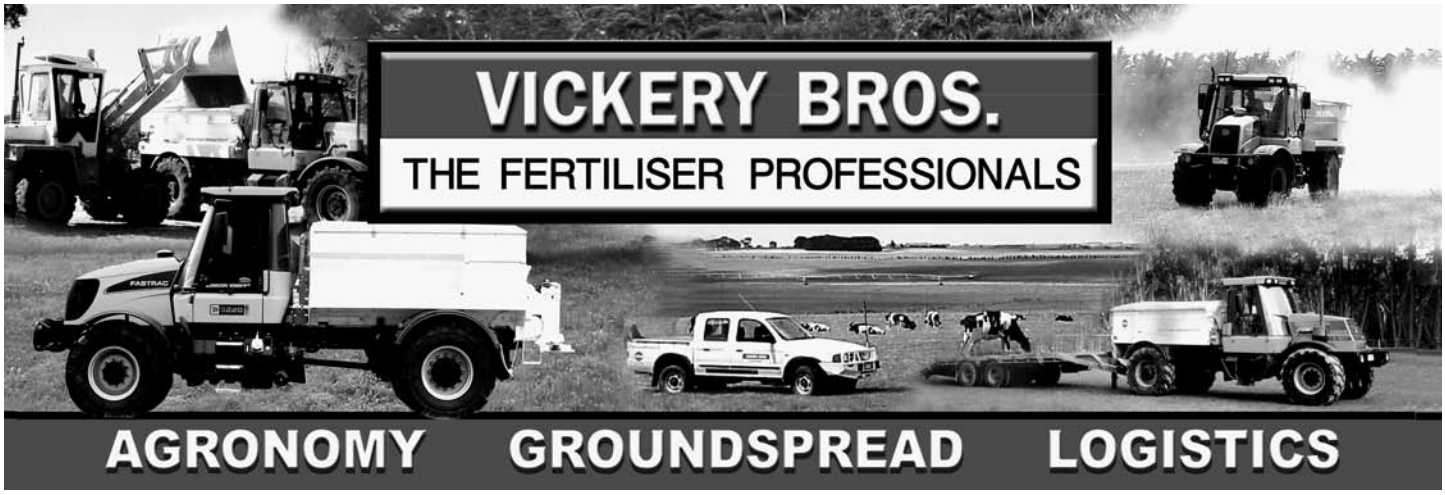

September 2008

SPRING NEWSLETTER

OVERVIEW

By Geoff Robertson

Good August rains –and the hope of some runoff to at least put some water in dams, has most areas going into spring well placed. Early winter has however been one of dramatic contrasts, within our region we had some clients having to continue containment area feeding well into winter due to a poor break and slow early winter pasture growth, while others close to the coast had the potential to cut silage in June.

Pasture growth through mid-winter has in most cases been adequate, pastures that where able to achieve leaf area above 1200kg/ha have grown very well, while pastures that had to be grazed shorter have struggled and now have a high burden of winter grass.

More crops

The increase in cropping is changing our landscape and this spring it will be the yellow flowers of canola not capeweed in a greater number of paddocks. While October rains will have a major influence on how the season turns out, at this stage most croppers are optimistic.

More are also making use of early sown cereals by grazing them prior to elongation, enabling pastures to be spelt to achieve good cover and hence better growth over winter.

Contents:

Drier conditions and higher potential returns from cropping should see this practice continue. I say potential returns because good yields are required to achieve a profitable crop, good yields are achieved through setting realistic target yields based on growing season rainfall and soil fertility and monitoring each stage of the crops growth to ensure a good outcome.

Surviving higher input costs

Any spending within the farming business wether it's the construction of a new set of yards the resowing of a pasture or the purchase of a new piece of equipment should be done because the future cashflow from that input will be greater than its cost.

The first step in the decision making process is to establish each of your enterprises cost of production and the factors that impact on those costs. While cutting spending will obviously reduce expenses, it can actual increase your cost of production and have a negative impact on profitability because fixed costs are spread over less kg or tonnes of production. An improved cost of production can be achieved by strategies that improve the efficient use of your resources such as.

- Better matching of pasture species to seasonal rainfall and soil type
- Re fencing to land type to improve grazing management
- Changing lambing or calving time to better match pasture quality and quantity
- Leasing more land to spread management resource over larger area.
- Changing enterprise mix

Pasture productivity

For many years this region has been the centre for ongoing pasture systems research that has highlighted the main drivers of productivity to be soil fertility (primarily phosphorus) and stocking rate. The continued rise in fertiliser prices doesn't change the underlying process for deciding what fertiliser to use, how much to use and where to use it.

Soil and tissue testing

Develop a farm nutrient plan by dividing the farm into soil types and categorise individual paddocks based on the productivity of the pasture species present and potential growing season.

Carry out a soil and tissue testing program that will provide you with enough information to give an accurate view of your farms soil fertility. This may vary from 3 tests to 30 depending on soil testing history paddock sizes and range of soil types. This will dictate the type of fertiliser required to correct any deficiencies.

Budget constraints will mean it is even more critical that your fertiliser dollar is spent where you will achieve the best return. The amount of nutrient applied should be based on your target stocking rate or yield. If the fertiliser dollar will not stretch far enough to cover the whole property seek advice on which pastures or crops will be the most responsive.

SOWING PASTURES IN SPRING

by Harry Armstrong

Why?

Pasture renovation is usually undertaken in autumn. While this is still best practice in many cases, spring sowing can give outstanding results especially when establishing Phalaris, Fescue and late maturing Ryegrasses.

One of the main advantages with spring sowing is the improved weed control achieved. This is important when establishing varieties with lower seedling vigour such as Phalaris and Fescue. Inundation, waterlogging and weed competition are the main causes of failure in autumn sown pastures.

Waterlogging of autumn sown pastures during winter can delay or even prevent grazing until spring. New sown pastures require strategic grazing to assist with weed control and to encourage tillering of grasses and prevent shading of clovers.

Spring sowing avoids most of these potential causes of failure.

Spring sown pastures can provide some green feed over summer in their first year, but care needs to be taken not to overgraze them over summer.

Another major advantage of spring sowing is that it is done at a time of year when feed is plentiful. Not being able to graze autumn sown pastures during the critical feed shortfalls experienced in most winters can be very frustrating. Given that stocking rate is a key profit driver in grazing enterprises, any activity that has potential to reduce our stocking rates over winter ought to be scrutinized very critically.

How?

- As with any renovation exercise good planning and attention to detail are vital.
- Soil testing should have been done and fertility issues attended to.
- Weed control and moisture conservation are the keys to success when spring sowing pastures.
- Direct drilling is the preferred method as cultivated seed beds tend to lose too much moisture and make grazing more difficult.
- Plants can be pulled out if seed bed is too loose.
- Spraying with herbicides twice prior to sowing is not uncommon.
- First spraying should be around August, with the second just prior to seeding.
- If there is a significant amount of bent grass present, a summer crop should be considered.
- High rates of Roundup (4 L/ha) are required to deal with bent grass.
- Aim to sow seed into a moist but friable seed bed.
- Take care when sowing that the slot created is not "glazed or smeared". If this occurs, delay sowing until conditions dry out sufficiently.
- Sow 100kg/ha of DAP down the tube.
- Consider cross sowing to minimise gaps.
- Roll immediately post sowing if dry enough.
- Clovers can be included in mix, but in the case of sub clover you have to allow time for it to set some viable seed.
- Phalaris and Fescue can be sown together but don't mix them with ryegrass.
- Sowing rate for Fescue is 15-20kg/ha. Can add Phalaris at 2kg/ha.
- Sowing rate if sowing Phalaris only should be 4-5kg/ha.
- Closely monitor at seedling emergence for insect damage of any kind.
- Earthmite and Lucerne Fleas are very active right through spring and can decimate spring sown pastures.
- Crickets also need to be controlled if present in early summer.
- Slugs can cause complete failure of sown grasses and clovers in spring just as they can in autumn. Slugs are almost always present on clay soils. Slug baiting should be routine when sowing on these soils.

Timing?

Phalaris is in very short supply at present, so check availability prior to spraying out paddocks.

Spring sowing has been successful as late as November in the Hamilton region as long as complete weed control and adequate soil moisture retention has been achieved. Optimum sowing time will vary according to season, soil type, area etc, but typically between early August and early October in most years.

Sowing sub or white clover later than September is risky in most areas, but the risk varies greatly depending on the situation and variety. Generally the earlier clovers are sown the more seed they set.

Molybdenum (Sodium Molybdate) can be sprayed onto all resown pastures if required. Molybdenum is a vital trace element that is essential for successful clover nodulation and rhizobia activity.

Sodium Molybdate is available from Vickery Bros.

Many of the pastures we are renovating now have been resown during the last couple of decades and have had modern sub clover varieties successfully sown in them. What has happened is the perennial grasses have failed to persist and all that is required is to replace the grass component with a more suitable species or variety. So sowing clovers is often not required. If clovers are required they can easily be drilled into the pasture the following autumn.

Coming Events

Vickery Bros Cropping Field Day

Wednesday 10th Sept. 10am **"Cuyac"** Woolshed.
RSVP to Vickery Bros 55 752777.

Evergraze Road Show

Thursday 30th Sept. 10am to 3.30pm.
Henty Hall followed by farm visit to "Merino Downs"
Lucerne, what can it do for you? New grazing varieties.
Reg Hill (PGG Wrightsons)
RSVP to Anita Morant. Mob: 0427 329541

Animal Production Trial & Pasture Field Day

Looking at impact of toxic perennial ryegrass.
And also alternative deep rooted perennial grasses.
Tuesday 16th Sept. 12 noon BBQ lunch till 3pm.
Tim & Georgie Leemings
160 Armidale Rd, **Coojar**. CFA Map 387 D2. Vic Roads Map 54 D6.
RSVP to Stephen Pasture Seeds 53 358055
Contact agronomy team at Vickery Bros for more information on any of the above events.

NITROGEN TRIAL

by Jane Tossetti

There seems to be some confusion about new nitrogen products that have recently come onto the market. What are they? Where do they fit in your enterprise? Hard data makes decision making on what products to use a little easier. Hence a trial of 4 nitrogen products was done by Vickery Bros earlier this year.

All sites were chosen due to good fertility i.e. Olsen P >15, had an even sward of improved perennial species i.e. ryegrass, and few broadleaf weeds. A replicated randomised plot design had 2 applications of products 4 weeks apart at 40kg/ha N for each application i.e. 87kg/ha urea. Livestock were excluded from the trial areas. Plots were mown after measurements and calibration cuts were taken to determine actual dry matter (DM).

The trial is not completed and we will continue to take measurements from the sites over the next few weeks to check the longevity of all treatments. Entec is expected to continue to grow extra DM for 3 to 4 weeks longer than other treatments.

Analysis of data is done by Gavin Kearney.

Products in the trial

Urea: 46%N

Promoted by agronomists alike to be the cheapest form of N. Typical growth responses to urea applied in autumn are >10kg/ha DM falling below 10kg/ha DM in winter and climbing to 15- 45 kg/ha DM in mid spring. We would normally expect 6 weeks growth from an application of urea.

Easy N: 42.5%N (v/w)

Easy N is liquid nitrogen which can be applied using conventional boom sprays with either streaming or flat fan nozzles. Most of the N is absorbed by the soil; very little of the N is taken up via the leaves and can cause 'burning' in certain conditions. On these plots we applied Easy N with normal fan jets. The supplier indicates a reduction in volatilization rate compared to urea.

Easy N is suitable for application via overhead irrigation.

Entec: 46%N

Entec is urea coated by an ammonium stabiliser designed to slow down the activity of soil borne bacteria that convert ammonium nitrate into the plant available nitrate nitrogen. By slowing this process we extend the period that nitrogen is available for plant growth from the usual 6 week's growth with urea to 8-10 weeks from Entec. Entec can also be used to help reduce spikes of nitrate and lower the risk of poor responses to applied nitrogen due to nitrate leaching and waterlogging (denitrification).

Black urea: 46%N

Black Urea is coated with a blend of carbon sources. It is claimed to work by increasing microbial activity and exchange capacity around the granule, resulting in the nitrogen being held in the cation and organic forms longer, and thus reducing exposure to losses and improving nitrogen uptake. An increase in response over urea can be expected in situations where organic matter in the soil is less than 2%.

Trial data

Although the response varied between nitrogen products in August, all products had a significant response when compared to the control. Looking at the results from each site for Urea and Entec, these were consistently high at all sites although not always significantly different to the other nitrogen products, when compared to the control.

- At David & Rahel Bunge's property north of Coleraine there was an increase in DM from urea of 8kg/ha/day and entec of 8.3kg/ha/day.
- At Stewart and Kirsty Keightly's property at Condah there was an increase in DM from urea of 11.4kg/ha/day and entec of 10.5kg/ha/day.
- At Craig Howard's property at Gorae there was an increase in DM from urea of 12kgkg/ha/day and Entec of 11.2 DM/ha/day

No wonder dairy's use lots of nitrogen!

Howard August			
Products	**Kg/ha/DM increase over control**	**$/kg/N**	**$/kg/DM**
Urea	434.973	$1.80	$0.17
Easy N	265.188	$2.32	$0.35
Black	200.508	$2.06	$0.41
Entec	402.633	$2.09	$0.21

NB prices ex Coleraine at time of application. Data from 36 days growth.

Summary of trial so far

All nitrogen treatments grew more DM than the control treatments at all sites.

As can be seen from the table above, both Entec and urea performed well in terms of DM grown as well as $/kg/DM.

The Howard trial site (shown above) showed the biggest difference between the nitrogen treatments and the control plots but this was also reflected at the other sites. I must remind you that you should not instantly discount the other nitrogen based products trialled here as they do have their place.

Black urea's performance could be attributed to the soil carbon being well above the expected level for a response over urea.

Easy N liquid may have not responded as well as expected due to the wet conditions prevailing at the time of application and our use of conventional flat fan nozzles. Manufacturers recommend streaming nozzles be used.

Entec may not have had its chance to shine as no sites became waterlogged nor were they light soils prone to leaching.

As stated earlier the trial is still in progress as we are yet to measure the sites 10 weeks after the final treatments were applied. We should have these results later this month.

Let's consider the cost of feeding grain to stock in comparison to applying nitrogen to our better paddocks.

Based on the trial results obtained so far.

Grain at $330 at 95% DM therefore $346.5t/DM/1000kg = **34.6c**/kg/DM ex farm.

Extra grass from applying 40kg/ha N = **17c**/kg/DM ex Coleraine.

Farmers already applying nitrogen find it is much easier and cheaper 'to grow more grass' than to purchase and feed grain.

GREEN CHOP SORGHUM AT DRUMBORG

by Bill Feely

One of the hardest tasks confronting producers is being able to maintain high quality feed out of season. To overcome this predicament producers have to diversify and Drumborg beef producer Nigel Paulet is one of them. To run over 300 Angus breeding cows plus replacement heifers it's imperative that Nigel has a reliable source of high protein and energy feed. Nigel has been able to do this by planting sorghum in late November early December dependent on soil temperature and putting it into green chop. Having initially used silage, Nigel was confronted with issues in 2006 such as paddock variation and seedling damage by grasshoppers this prompted a change which resulted in the switch to green chop. By doing this he has increased the protein from 5.8 % to 16.4% and the energy from 7.3 Mj/kg DM to 9.8 Mj/kg DM. Nigel supplements the sorghum crop with hay cut on farm to supply feed for late autumn and early winter. As a result of this the rest of the farm has the chance to get away and set up a nice feed wedge going into winter. Nigel has kindly offered to write an article outlining his experiences with growing and harvesting sorghum.

ENSILING VS GREEN CHOPPING FOR FORAGE SORGHUM CROPS

by Nigel Paulet

My autumn calving beef herd always requires supplementary feeding during February, March, and April and longer if a feed wedge is planned for winter. During the past six summers I have grown forage sorghum as a summer crop to help fill this Summer-Autumn feed gap. After experimenting with various planting dates, rates, inputs and methods I have been able to consistently produce high yielding crops of approximately 15 tons of dry matter per hectare. In recent years forage sorghum has become an integral part of my fodder program as it provides valuable feed "out of season".

At first my sorghum crops were simply grazed as required and spelled to permit regrowth. However when I was able to consistently produce high yields I needed to explore methods of best utilising the crop. Initially I explored methods of ensiling, which is best performed at the early flowering stage of growth, or about 12 weeks after planting.

The 2003 crop was mowed, raked, rolled into round bales and wrapped for silage. This was not successful because raking contaminated the forage with soil and the stiff stalks easily perforated the plastic wrap.

The 2004 crop was mown with a 3 metre mower conditioner which had the capability of producing a single windrow from 2x3 metre passes. This eliminated the need to rake the forage and greatly improved the efficiency of pickup. A self loading wagon with an ability to chop was used to transport the crop to a bunker created in the side of a hill. This system worked well, with each load arriving at the bunker at around 20 minute intervals.

Unfortunately poor sealing of the bunker resulted in a considerable deterioration in feed value as indicated in Table 1. Nevertheless the silage was fed as a valuable part ration 10 months later during a period of extreme fodder shortage without any apparent adverse effects.

The 2005 crop was harvested by a precision chop machine equipped with a 6 metre direct cut front. Two 32 cubic metre wagons were used to transport the forage to the bunker. Harvest proceeded very quickly and efficiently with a load arriving every 6 minutes. The forage was cut to a short 25 mm length and was easy to compact. It was also easy to extract forage from the bunker with a front end loader bucket.

Unfortunately the short length of cut also resulted in losses when fed onto the ground. Storage losses were not determined but considered minimal as the bunker was carefully sealed and feeding of the silage commenced within 3 weeks of harvest to meet the feed demand. Table 2 summarises the 2005 harvest.

The 2006 crop was not as even as in previous years due to paddock irregularities and seedling attack by grasshoppers. The costs of ensiling and storage prompted me to explore harvesting the crop and feeding immediately on an as required basis (green chop).

Harvest commenced when the majority of the crop was at a height of 0.8-1metre when there is a minimal risk of Prussic Acid poisoning. Harvest was performed using a trailed New Holland double chop flail type forage harvester. Cutting height was set to about 150mm to encourage regrowth. A feed out wagon modified by adding a cage to its top to capture the harvested forage was towed behind the harvester. When full, I disconnected the wagon and towed it to the feeding area with a second tractor, a one man operation.

Table 3 shows that the total yield per hectare was less than in previous years because harvesting commenced at an immature stage and less crop growth. However there was evidence of more regrowth which was grazed after the entire crop was removed.

The target feed value for supplementing my cows and calves is 11% protein and 9MJ/kg DM energy.

Table 3 also shows that the protein level in the green chop varied from a high of 16.4% to a low of 9.7% as the crop matured. However for almost 3 weeks of harvest the protein level is more than adequate for my class of livestock, making the green chopped forage sorghum an excellent food source for this period. Good quality legume and grass hay added to forage harvested later would boost the protein levels and ensure that the target feed value is met.

It was interesting to note that the energy content of the green chop varied little throughout this study.

This project also illustrates the need to match the planted area to the expected feed requirements so that the best quality feed can be harvested. This can only be achieved by planning well in advance.

In the last two years, multiple plantings at different intervals (2-3 weeks) and on different sites (high or low ground) has resulted in crops with staggered maturation, allowing high value feed to be harvested over an extended period.

I have also been able to extend the feeding period, and reduce the chance of metabolic disorders with an early harvested crop, by placing a large square bale of straw or hay in the feedout wagon prior to adding the greenchopped sorghum. The feeds are blended as they are fed onto the ground.

I have found that when green chopping it is important to ensure that tow hitches are all at the same height to expedite hooking up the wagon. The harvesting could be simplified by having the wagon towed alongside the forager (eliminating hitching/unhitching) but

this requires an additional driver. Table 4 highlights some of the advantages and disadvantages of green chopping

Conclusion

My experience with green chopping forage sorghum has found it to be a practical alternative to ensiling which eliminates double handling and storage losses. An additional benefit is that the early harvested crop has a high feed value which easily meets my feed quality target. The only significant disadvantage is some reduction in overall harvest yield.

2004 crop summary

Planted 19/11/03 Harvested 16/2/04
Yield - 75 cubic metre per hectare (cut with mower-conditioner then chopped with self loading wagon)
Cost $3.30/cubic metre

Feed test:

At harvest	When fed, after 10 months storage in poorly sealed bunker
Dry matter 23.7%	19.2%
Protein 9.3%	5.8%
Energy 8.5 MJ/kg DM	7.3 MJ/kg DM

2005 crop summary

Planted 16/12/04 Harvested 19/3/05
Yield 65 cubic metres per hectare (precision chopped)
Cost $4.60/cubic metre

Feed test:

At harvest
Dry matter 19.0%
Protein 10.8%
Energy 7.3 MJ/kg DM

2006 crop summary

Planted 23/12/05 Harvest commenced 6/3/06
Yield 45 cubic metres per hectare (green chopped with double chop forager)
17 minutes to harvest 12 cubic metres at "comfortable" pace

Feed test:

At harvest	Week 0	Week 1	Week 2	Week 3
Dry matter	21%	18.9%	19.2%	23.7%
Protein	12.4%	16.4%	11.7%	9.7%
Energy	9.5MJ/kg DM	9.8	9.5	9.5

Benefits of green chop

- No double handling
- Storage losses eliminated
- Very good quality feed for a period
- More regrowth
- Can utilise existing feed out wagon
- Multiple mobs can utilise crop
- No crop soiling

Disadvantages of green chop

- Lower overall harvest quantity
- Harvest process spread over longer period
- Requires ownership of harvester

Transport Industry Big Changes 29th September 2008

New road transport Heavy Vehicle Driver Fatigue laws are to commence on 29th September 2008 replacing all current legislation. The new legislation will apply to a truck with a gross vehicle mass (GVM) of over 12 tonne or a combination, if total of the GVM is over 12 tonne. Farmers will need to make themselves aware of the new laws as this concerns livestock cartage, grain removal/received, fertiliser delivery etc.(Farm operated truck drivers or outside truck drivers.)

This change will require heavy vehicle operators to comply with one of the following three options:

- Standard Hours (12 working hours a day)
- Basic Fatigue Management (up to 14hrs work with accreditation)
- Advanced fatigue Management (accredited risk management approach)

The hours, rest breaks and continuous stationary rest time has changed and is different for each option. Under these new laws everyone in the supply chain will have a responsibility to prevent driver fatigue and ensure driver are able to comply with the legal work/rest hours.

Who are the parties in the supply chain:

- The employer of a driver
- The prime contractor of a driver
- The operator of a vehicle
- The scheduler of goods or passengers for transport by the vehicle and also the scheduler of its driver
- Both the consignor and consignee of the goods transported by the vehicle
- The loading manager; the person who supervises loading or unloading or manages premises where regular loading or unloading occurs
- The loader and unloader of the goods carried by the vehicle

From 29th September log books will be replaced with a work diary. Non compliance penalties for drivers and parties in the supply chain have increased significantly. With all this in mind, if you have any dealing with transport it would be in your best interest to be well informed before the new laws are implemented.

For more information on Heavy Vehicle Fatigue Reform :
National Transport Commission - www.ntc.gov.au
VicRoads - www.vicroads.vic.gov.au

Silage and Hay Production

Tissue testing of clover in late August can provide a good indicator of potassium response in hay paddocks.

Consider level of nutrient removed in hay production, particularly with lucerne when planning hay fertiliser program.

Annual grass control can be achieved through silage production.

Media Release from WestVic Dairy

Between now and the end of 2008 the south-west's dairy industry will develop a new vision and direction to guide it through to 2020. We have called this plan 'Down the Track: Dairy 2020'.

In developing this new plan, we want to collect your ideas and opinions and incorporate them into several workshops.

The workshops will focus on:
- People – November 3 at Port Fairy
- Natural resources and infrastructure – November 5 at Terang
- Capital and markets - November 7 at Colac

The findings of these workshops will be set into the new plan at a two-day Regional Dairy Summit on November 27-28 at a venue yet to be confirmed.

We are trying to spread the net as far as possible. If you can help please let your ambassador know or register your interest with Barbara Collins at WestVic Dairy on 03 55922477 or by email at **info@westvicdairy.com.au**

CROPPING OVERVIEW

by James Stewart

In the five years that I have been in this region several things have changed. Our typical wet winters are becoming less of an issue. Seasons have become warmer and dryer with pasture persistence becoming an issue for certain species. Stock water has become a concern as the dryer seasons have resulted in minimal surface runoff into dams. Then in turn stock numbers have reduced and cropping ground has close to doubled in size over the past 2-3 years. And this year has been no different!

As another dry year (2007) was felt for our fellow farmers in the typical crop growing areas of northern Victoria, the western district received great growing season rainfall which in turn resulted in good yield, along with grain prices at record highs for harvest. A good year was had by grain growers in the region.

This year we have seen more country go under crop as gross margins appear quite attractive for grain. The start of 2008 was very dry and warm with very little summer rainfall. Spreaders were kept very busy spreading lime and gypsum for the coming season cropping program.

Lime was predominantly used for new cropping ground that was coming out of years of pasture where soil pH and aluminium levels were an issue. Gypsum was required for some heavy clay paddocks with high sodium levels, but it was mainly applied to provide sulphur for the canola crops.

The break came early which was a good, but was it the break? As we all remember it was very much a stagnated start with top soil drying out before the next follow up rain arrived. This did not help with germination especially in the early sown canola crops.

Cereals that where sown a little deeper than canola didn't seem to run into the same problem. Canola crops in the region have big variations in growth stages due to the stagnated break. One particular area suffered an outbreak of Bronze Field Beetles and False Wireworm Beetles. Some canola crops had to be sprayed several times.

The plant counts that I did around the different areas were overall quite good. Cereals ranged from 140 to 230. 140 is a little on the low side, which can be rectified with a light rate of urea at early tillering. This helps the plant tiller out more, compensating for the low plant numbers. While canola ranged from 30 at the lowest, up to just under 100 in one particular paddock which can be a little on the high side.

As we entered the colder months of the year (June, July) all areas were looking quite good. Frosts where minimal, and we weren't over indulged by moisture which can be a problem for some areas which would be hard to believe for some people reading this article. Things can turn around pretty quickly and they did. For the whole month of August it was hard to find a spray day with wet windy days. And on the few occasions when the whether did fine up enough for spraying paddocks were to wet. Waterlogging has occurred in several areas, and topdressing of urea had to be applied by plane. This still applies to this day after good rains last weekend in most areas.

As Vickery Bros are witnessing first hand the amount of country coming out of pasture and into a cropping rotation we thought it might be a good idea to run a information day for those that are new to the cropping business.

On Wednesday 10th of September Vickery Bros are running a cropping information day starting at 10am at Cuyac Woolshed. See separate Cropping Information notice.

James Stewart checking crops for insect damage.

Silage & Hay Fertiliser

Avoid the rush and organise your fertiliser requirements for silage & hay paddocks now. The agronomic staff at Vickery Bros can blend products to suit your specific nutrient and yield targets.

Cropping Field Day

When:	Wednesday 10th September 2008
Where:	"Cuyac" Woolshed Fire Map Reference - 386 D28
What time:	10 am
Guest Speakers:	Geoff Robertson – Gross Margins Steve Holden (DPI Hamilton) – Paddock Selection and Varieties Phil Jobling (Nufarm) – Chemical Requirements Jane Tosetti – Crop Nutrient Requirements and Soil Testing Ryan Milgate – Farmers Perspective (Costing) Crop walk to follow....
Why:	Information day for those who are new to the cropping game. **BBQ Lunch Supplied**
RSVP:	Monday 8th September 2008. Ph: 55 752777

Pasture Reminders

- Soil and tissue test in spring to determine current soil fertility levels to begin nutrient planning process.
- Carry out feed budget and monitor pasture levels to achieve 3000 kg of dry matter going into summer.
- If extra feed is required consider application of nitrogen on suitable paddocks mid to late September.
- If run off has not occurred by the end of August consider the opportunity to begin topping dams up from creeks or rivers if allowable.
- Earthmite and Lucerne Fleas are very active at this time of year. Control of these pests now can pay big dividends in extra pasture production not only in new sown and hay paddocks but also in established grazing paddocks.

WINTER PRODUCTION FROM SUMMER-ACTIVE PERENNIALS AT THE HAMILTON EVERGRAZE SITE

The pastures of south-west Victoria have traditionally been based on summer-dormant perennial grasses and annual clovers. This inevitably leads to poor quality pastures in summer-early autumn and limits animal production options. The DPI Hamilton EverGraze experiment is examining the potential to incorporate summer-active perennial pastures into grazing management systems for year round high quality pastures and higher animal production levels.

An important part of the EverGraze philosophy is to grow pasture species on the most suitable soil type. The summer-active species under evaluation are Lucerne (cv. Sardi 7), Tall Fescue (cv. Quantum), Kikuyu (cv. Whittet) and Chicory (cv. Grasslands Puna). The Lucerne and Chicory are being grown on the well drained crests, the Tall Fescue and Kikuyu are grown on the winter-wet flats and the perennial ryegrass (different cultivars) is grown on the crests, slopes and flats. Each was sown with Subterranean Clover in 2004-2005 and has been rotationally grazed with Merino sheep or Angus cattle for two years.

An early prediction was that the summer-active treatments species would not be productive in winter – this has certainly been a common experience in the past. We have seen impressive summer production from these species in the experiment (Lawson et al., 2007), particularly when useful rain has been received (e.g. up to 2.5 t DM of pasture produced following 90 mm on 19-20 January 2007). An unexpected bonus, however, has been the winter production from the Lucerne and Tall Fescue pastures in particular compared to the Perennial Ryegrass (cv. Avalon) pastures.

Figure 1 presents the mean monthly growth rates from the Lucerne, Tall Fescue and Perennial Ryegrass pastures from May 2006 to March 2008. In each of the two winter periods the Lucerne and Tall Fescue pastures grew at between 40 and 70 kg/ha/day – a similar rate to that of the Perennial Ryegrass pastures.

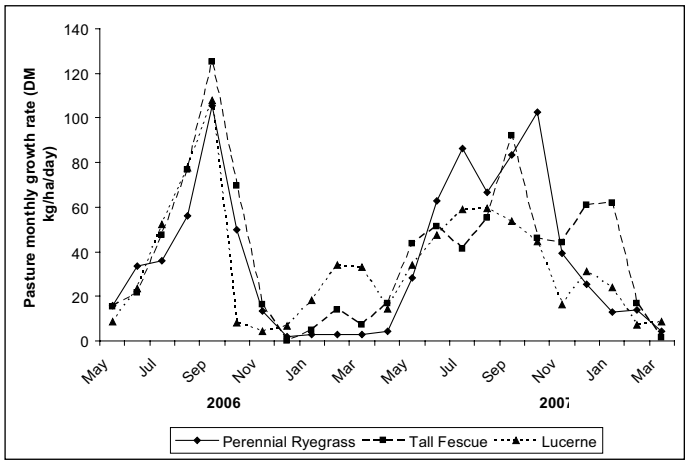

Figure 1. Mean monthly growth rates of pastures based on Perennial Ryegrass, Tall Fescue or Lucerne in the Hamilton EverGraze experiment.

Table 1 presents the growth from Lucerne, Tall Fescue and Perennial Ryegrass pastures for May-September in each year. Total growth from the Tall Fescue and Lucerne pastures was comparable to that from Perennial Ryegrass pasture during the period.

Table 1. Pasture growth (DM t/ha)

			May-Sep	
Dry matter	Cultivar	Aspect	2006	2007
Perennial Ryegrass	Fitzroy	Crest	6.74	7.34
Perennial Ryegrass	Avalon	Slope	7.23	9.91
Perennial Ryegrass	Banquet	Flat	4.59	5.95
Tall Fescue	Quantum	Flat	8.74	8.63
Lucerne	Sardi 7	Crest	8.24	7.72
Chicory	Grasslands Puna	Crest	5.87	5.49
Kikuyu	Whittet	Flat	5.49	7.62

The growth measured is that of the pasture as a whole and typically includes Subterranean Clover, annual grass weeds, capeweed etc. Botanical composition data for June in each year is presented in Table 2. In all cases except the Fitzroy and Avalon Perennial Ryegrass in 2007, the bulk of the growth came from the main species of interest.

Table 2. Botanical composition of the EverGraze pastures in June 2006 and June 2007.

			Component percentage	
Species	Cultivar	Component	2006	2007
Perennial Ryegrass	Fitzroy	Ryegrass	72	48
		Clover	14	16
		Weeds	14	36
Perennial Ryegrass	Avalon	Ryegrass	71	43
		Clover	16	17
		Weeds	14	40
Perennial Ryegrass	Banquet	Ryegrass	67	66
		Clover	16	14
		Weeds	17	20
Tall Fescue	Quantum	Fescue	58	57
		Clover	22	12
		Weeds	20	31
Lucerne	Sardi 7	Lucerne	62	56
		Clover	4	3
		Weeds	34	42
Chicory	Grasslands	Chicory	52	69
	Puna	Clover	12	14
		Weeds	37	17
Kikuyu	Whittet	Kikuyu	51	56
		Clover	33	18
		Weeds	16	27

In conclusion, it is not necessarily the case that producers trade off winter production when growing summer-active pasture species. The cool-season production from summer-active Lucerne and Tall Fescue can be comparable to that from Perennial Ryegrass. It is however, important to consider cultivar differences and to understand the soil type and grazing management requirements to get the best out of them.

Reference:

Lawson, A, Clark, S, McKenzie, F, Holmes, J and O'Brien, B. (2007). EverGraze 2. Pasture responses in a dry year. Proceedings of the 48th Grasslands Society of Southern Australia conference. p. 101.

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