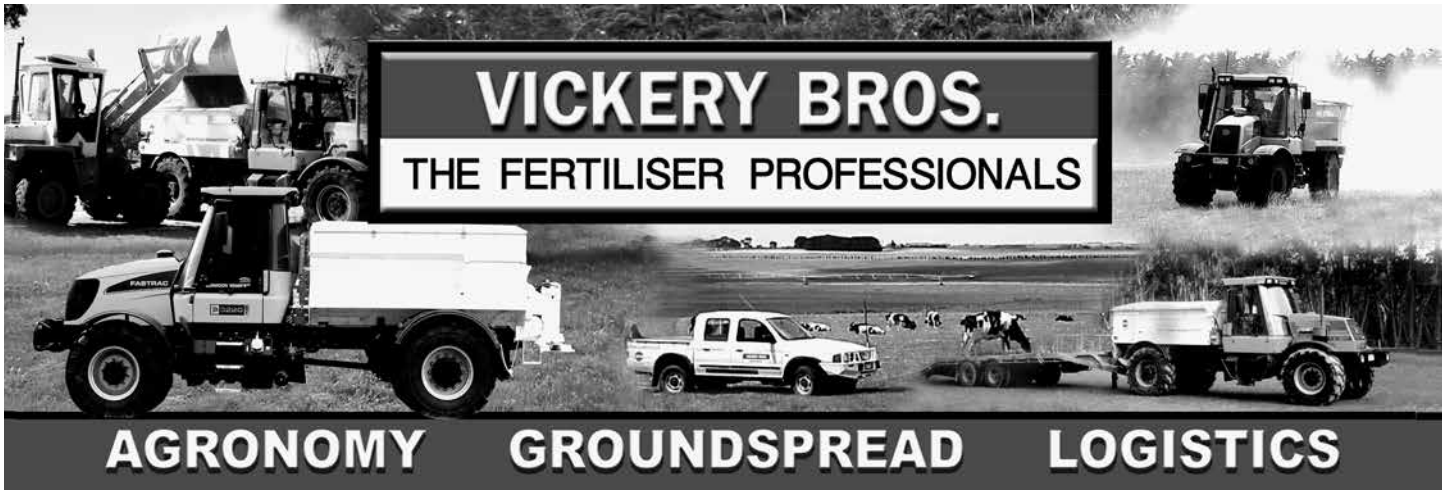

July 2007

WINTER NEWSLETTER

TAKING STOCK

By Geoff Robertson

The end of the financial year sees the close of a tough 12 months for most farming businesses. It is now the time to start the review process, taking stock of not only the financial health of the business but to asses the state of the other important physical resources; the land, pasture, stock and the key resource the decision making team. The state of these resources will dictate how well the enterprise will respond to future threats such as climate change and enable the achievement of future business goals.

The agronomic staff at Vickery Bros. are available to help asses your soil's health through soil and tissue testing and provide advice on appropriate soil nutrient levels, pasture species and grazing management for sustainable pastures. To assist in assessing the status of your pastures we will be carrying out several pasture walks over the next few weeks, these pasture walks will look at weed control the use of nitrogen to increase pasture availability and to discuss the suitability of various pasture species for profitable pastures.

As well as providing support through our own team of agronomists I would encourage clients to look at two programs being provided by RIST and the DPI.

Darren Gordan and other local facilitators provide an excellent program "life time ewe management- measure to manage" this program gives you the skills to achieve your production goals through better matching your pasture production and animal requirements. The "hands on" sessions focus on condition scoring, assessing feed on offer, and feed budgeting to ensure profitable outcomes. For further details contact Kerri Ross, program coordinator at RIST.

RIST in the near future will be offering a program that I feel will provide participants with the skills to tackle an issue that can be more devastating to a farming business than drought, the lack of a viable succession plan. The four stage program will begin with a free awareness workshop to introduce the succession planning concept. Tracey McDonnell, events coordinator at RIST can be contacted on 55730943 or 0405728040 for further details.

To maintain farm profitability we need to be continually improving our productivity through greater knowledge gained via training and be open to the adoption of new technologies and ways of doing business.

Contents:

NEW AGRONOMIST

We welcome James Stewart to our Agronomy team. James has lived in the Western District for over 3 years, originally coming from Wangaratta where he grew up. His life is a very sporty one, ever since childhood, involving snow skiing, water skiing and predominately footy.

During his footy playing days in the North East, he helped run the family farm. A sheep and cropping enterprise at Bungeet. Whilst living at home James commuted to Dookie College where he studied Agricultural Science.

From here came the move to the big smoke, Melbourne - where his 3 year career with AWB began. James started in the National Call Centre as a Grower Services Officer before proceeding to an Area Service Manager. This position took him to all ends of Australia, from Lake Grace in Western Australia to Swan Hill.

After sitting at a desk for all this time, James decided it was time to get back out to where the grass grows. This bought him to Hamilton, where he has been a Sales Agronomist for Elders since 2003. The role at Elders was most diverse with daily routines involving merchandise sales from dog food to chemical, seed and fertiliser recommendations. But his main task was to organise clients fertiliser requirements, from pricing, logistics and spreading. In other words, follow through the entire process from beginning to end.

When moving to Hamilton James' partner Penny (now wife!) decided to come with him and they have recently become very proud parents of their first son Angus, 6 months old.

After living in many communities around Australia, they both agreed that this district was by far the most attractive to settle in. The people, the location, and the ever growing facilities – the Western District is a strong agricultural region that's worth being a part of.

This local strength and James' long term interest has reinforced his commitment to farming and fertiliser. James has been at both ends of the scale, when it comes to clients needs. He's spread his own fertiliser, traded

grain throughout WA and Victoria and more recently become involved in assisting producers to make input decisions that can result in more profitable and sustainable outcomes.

When he comes to visit your property, James will be keen to talk about pasture improvement programs and helping to increase your cropping yields.

It is a pleasure to be appointing James to the Agronomy team at Vickery Bros and he looks forward to meeting you soon.

WINTER NITROGEN STRATEGY

By Bruce Lewis

Agronomist

The soil's nitrogen status is likely to be higher than normal after the drought due to a couple of factors, however there will be situations and paddocks which will go against the trend. Surface soil tests this autumn have been showing higher than normal levels of available nitrogen. Soil nitrogen levels are likely to be higher for the following reasons;

- Fertiliser nitrogen applied late in 2006 is unlikely to be fully utilized due to inhibited plant growth from lack of rainfall.
- The heavy rainfall in January will have increased the level of nitrogen mineralization from soil organic matter. This is the soil process where soil organic matter is converted to plant available nitrogen by the microbial biomass present in soil. Soil moisture and temperature are factors which enhance this process.
- Another potential source of nitrogen may be accelerated mineralization when the drought breaks because the soil has been dry a long time. The later the break the less significant this effect will be due to falling soil temperatures.
- As most paddocks have low levels of dry matter cover there is little decaying plant material to tie up available nitrogen as plant material breaks down in the soil.
- Where there is little perennial grass or summer crops to utilize soil nitrogen the higher levels of nitrogen will remain in the soil.
- As nitrate nitrogen is very mobile in soils as soils wet up with winter rainfall the nitrogen will move down the soil profile with soil moisture or be taken up by plants.
- Soil tests this autumn have shown soil nitrate levels to be lower where pastures have extracted less moisture and nitrogen with summer crops or perennial grasses.

Pasture responses to Nitrogen this Autumn/Winter

Pasture responses to nitrogen are likely to be sporadic initially until the available pool of available soil nitrogen is taken up by plants or leached out of the root zone. Pastures with perennial species that responded to the January rain will be more likely to give predictable nitrogen responses. Many paddocks have carried a green "pick" for the last 3 months using some of the mineralized N. Paddocks following summer crops, llucerne or paddocks with significant summer weeds will also have lower soil nitrogen levels. Due to the high cost of supplementary feed during the drought nitrogen fertiliser may still be the most economic feed source, even at lower levels of response. Where extra feed is required apply nitrogen 4 weeks after break to capitalize on good soil temperature. (paddocks that have produced feed may require nitrogen earlier)

- Calculate winter stocking rate and daily pasture growth rates required.
- Estimate nitrogen required to meet target growth rates.

Nitrogen budgets for crops

For the above reasons the nitrogen required to grow a high yielding crop this year may be less than a normal year. However measuring soil nitrate nitrogen to 60cm is the surest way to determine how much soil nitrogen is available for crops. Intensively cropped paddocks are still likely to require significant nitrogen applications. To determine a nitrogen program a nitrogen budget should be developed;

- Determine a target yield and protein to estimate total nitrogen required.
- Soil test to determine available nitrogen in the soil
- Estimate mineralization of nitrogen in the soil during the crop phase.
- Apply nitrogen to achieve 70% of target yield at planting and monitor crop for further nitrogen applications as the season progresses based on revised target yields.

Retirement to full time farming?

Bruce has decided to focus his energies on full time farming at Cavendish and to practice what he has been preaching for the last six years with Vickery Bros. We would like to thank Bruce for his valued contribution to our business and for the agronomic support he has provided local farm business's.

"Growing More Grass Pasture Walks"

This is your chance to see how Urea in partnership with Gibberellic Acid may help to increase dry matter production during winter on your property.

Speakers will present from 1pm on:

- The results of the Winter Pasture growth trials
- Pasture weed Control
- Pasture species to match the growing season.

Please RSVP to James the day before the field walk on (M) 0427 752 773

Coleraine
Friday 13th July 1.00pm
Belfield's Rd
Map 430B near #27
RSVP James Stewart
0427 752 773

Portland
Monday 16th July 1.00pm
Amor's Rd,
Gorae West
Map 507F near fire shed
RSVP Bill Feely
0409 427 963

Macarthur
Thursday 19th July 1.00pm
394 Myamyn Condah Rd
Map 473 F32
RSVP Harry Armstrong
0417 052 095

OPPORTUNITY CROPPING

By Jane Wilkinson
Sales Agronomist

Due to the failed spring many farmers are running less stock than normal. A decision may be to replenish hay and silage reserves, but this may still lead to an excess of poor quality feed later on in the year and lower farm profitability. With this in mind, there may be a place in the enterprise to drop paddocks from the grazing rotation and allow them to be opportunistically cropped.

Also completely bare areas such as a sacrifice or containment paddocks on the break many run into issues with reduced ground cover and have a higher potential for weeds.

The farming businesses has the potential for bigger gains by renovating paddocks via cropping rotations or by drilling in a grazing cereal rather than disregarding the paddock for a year.

Key Points to Highlight

- **Do your home work on the crop you intend to sow.**
  - Residual herbicides can dramatically affect establishment and yield. Limited moisture may increase time of degradation of chemicals. As always it is best to check with your chemical representative. For example a period of up to 34 months can be recommended as a pre-cropping interval for canola for some herbicides on light textured soils.
  - Which weeds, diseases and insects that may be detrimental to the crop you are intending to sow. Many canola crops have been partly wiped out due to lack of pre-sowing monitoring for slugs and post-sowing monitoring for Red Legged Earth Mite. Root disease and rusts in cereals can occur as a result of a "green bridge" through summer.
- **Soil Preparation**
  - A soil test is the best tool in determining limiting nutrients and hostile soil conditions.
  - Soil cultivation may be necessary to level the paddock. It is best to pre-spread lime or gypsum, cultivating it in to maximise efficacy in the first year. The most economic placement of fertiliser is down the tube as this increases concentration of nutrients where they are of most benefit.
  - Aim to apply at least 15kg/ha of phosphorus and some starter nitrogen at sowing, good responses to copper and zinc are being observed and can be applied at this time.
- **Seed quality**
  - You tend to get what you pay for. How long has it been stored? What seed borne disease could you be bringing on farm? What weeds?
  - To enable a good sowing rate without using excess seed, a seed germination test should be carried out. This will enable optimum plants per m^2. Use the table to determine plants/m2 and calculate sowing rate with the germination percentage.
  - Optimum plants/m2

Crop Type	Plants m2
Wheat	190-210
Barley	160-180
Oats	180-200
Triticale	200-220
Canola	50-80

Seeding Rate = $\frac{\text{Plants/m2 x seed wt (grams per 1000 seeds)}}{\text{expected establishment (\%)}}$

Eg. $\frac{\text{200 plants/m2 x 40}}{90} = 89\text{kg/ha}$

- **Guidelines for Calculating yield potential**
  - The following formulae will calculate the yield potential for any given annual rainfall.
    Wheat: Yield (kg/Ha) = (Growing season rainfall (mm) - 110) x 20
    Barley: Yield (kg/Ha) = (Growing season rainfall (mm) - 90) x 20
    Grain legumes: Yield (kg/Ha) = (Growing season rainfall (mm) - 130) x 15
    Oilseeds: Yield (kg/Ha) = (Growing season rainfall (mm) - 110) x 15
    Multiply this by the percentage of yield potential you think is realistic for you to achieve according to soil type, depth, fertility and disease levels.
    Cereals - 75% (x 0.75)
    Pulses - 60% (x 0.6)
    Canola - 65% (x 0.65)
    NB. "Growing Season Rainfall' in the Western District tends to be April until November, whereas our customers in the Francis region may find it is April through to October.
- **Nitrogen management**
  - Carry out deep N tests to asses soil nitrogen reserves
  - Establish nitrogen budget and timing of application based on target yields and protein levels
  - Monitor plant numbers, tillers and soil moisture levels to adjust yield potential as the season progresses and adjust nitrogen program to suit

Grazing cereals

It pays to be aware whether the cereal cultivar you are sowing responds well to grazing. Studies have shown a bigger gross margin with a similar if not better yield, with less screenings if grazing cereals are grazed. Make sure the plants are well established with good root systems. You can check this by mimicking a grazing animal using your thumb and index finger to break off the leaves. If the roots stay put, get the stock on. Keep checking the growth stage of the cereal. It is wise to cut open a few main stems of different plants across the paddock. If the node (a bump) is about 1cm from the basal node (where the roots closest to the surface are) immediately remove stock or you will incur a yield penalty. An application of urea post grazing is recommended due to the large removal of protein in the grazed component.

Jane will be touring Europe for the next eight weeks.
To organise a crop inspection contact James Stewart on 0427 752 773.

RYEGRASS DECLINE

Drought conditions have seriously depleted ryegrass populations in pastures throughout the entire region this year.

Vickery Bros. agronomists have noted that even when pastures have been correctly grazed, and even entirely rested over summer, in many cases there is still significant decline in plant numbers.

Sod seeding ryegrass back into these areas is worthwhile in terms of getting some productivity back into these paddocks quickly.

However, some thought ought to be given to whether ryegrass is the most appropriate species to resow back into many of these areas.

Lucerne, Chicory, Plantain, Phalaris, Cocksfoot and Fescue are just some of the alternative species that need to be considered when assessing ryegrass depleted pastures over the next few seasons.

Matching species and production systems to suit the varied soil types and environments present on our farms is critical.

Contact the professional team at Vickery Bros.
Making it easy to grow more grass.

Agronomy Team

Geoff Robertson	0408 794552
Bill Feely	0409 427963
Harry Armstrong	0417 052095
Jane Wilkinson	0437 752707
James Stewart	0427 752773

Depots

Coleraine	03 55752777
Heywood	03 55271777
Edenhope	03 55851975

If undeliverable return
to
Vickery Bros. Pty. Ltd.
105 Whyte Street
Coleraine VIC 3315

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