



### Project Update:

(for more details go to [www.farmlink.com.au/gg.htm](http://www.farmlink.com.au/gg.htm))

#### R&D trials

##### a) grazing wheats

Guy McMullen and his team at NSW DPI have done a terrific job of co-ordinating measurements at the 4 grazing wheat sites this year. In addition to the 3 agronomy trials (Yerong Ck, Marrar & Harden), there is also a comprehensive grazing management site at Wallendbeen. This site is looking at the effect of high and low stocking rates, combined with early and late lock-up times, on DM production and grain recovery. A separate trial is looking at maximising lamb liveweight gains on grazing wheats through supplements including hay and Causmag (MgO).

##### b) short term pastures

Excellent establishment has been achieved in the short term pasture trials at Illabo & Henty where species will be measured for DM and recovery from (simulated) grazing. Treatments include: forage brassica, high density legumes, antas subclover, balansa clover, tetraploid ryegrass, highly winter active lucerne.

#### Focus Farms

Monthly monitoring (including water use, DM, etc) of the 5 Focus Farms at Coolamon, Tarcutta, Temora, Leeton and Lockhart is available in 'Focus Farm Facts' - see website details above.

#### G&G Seminar Series

Seminar Series No. 3 on Fodder Conservation is being planned for the week commencing 5th September - details to be confirmed.

#### G&G 'Farmwalk'

A short field day at the grazing management site at Wallendbeen will be held on Thursday, 25th August at 2.30pm, to discuss grazing wheat growth rates, lock-up times, etc.

*Grazing mgt site at Wallendbeen Aug 05: note ungrazed plots vs high stocking rate vs low stocking rate.*



### Grazing wheat growth rates 2005

Despite late emergence of many grazing wheat crops, growth rates started to pick up in the first few weeks of August with warm days and increasing day length.

Growth rates from the 2005 grazing wheat trials, representing a range of emergence dates, provide a good indication of what your own paddocks may be doing to assist in fodder budgets. However the trials have also shown that plant development is generally faster than last year and many crops will soon need to be de-stocked (if not already) to prevent significant yield loss from grazing out the developing head (see 'Stock Removal' next page).

### 2005 Wedgetail growth rates, G&G trials

(source: Guy McMullen, NSW DPI)

Site	Emergence	Growth Rate
Wallendbeen - ungrazed	April	100kg DM/day (3/8)
Wallendbeen - 15 lambs/ha	April	100kg DM/day (3/8)
Wallendbeen - 25 lambs/ha	April	40kg DM/day (3/8)
Yerong Ck - ungr	20th April	50kg DM/day (1/8)
Marrar - ungr	17th June	12kg DM/day (11/8)

### August fodder budget scenarios

(assuming G&G trial growth rate data)

1) **Wallendbeen** - sown & emerged in April. Assuming grazed down to 500kg DM/ha by end of July.

Aug grazing:

- grazing period: 1st - 20th Aug = 20 days
- feed available: 500kg (start) - 800kg\* (end) = -300kg DM/ha
- wheat growth rate: 50kg DM/ha/day x 20 days = 1000kg DM
- total avail. feed: (-300 + 1000) = 700kg DM/ha
- lamb intake: (1.25kg/hd/day x 20 days) = 25kg/hd
- stocking rate (700kg DM ÷ 25kg/hd) = 28 lambs/ha

\*note: specified 800kg DM/ha by end of Aug to prevent node (developing head) from being grazed out. In some cases, node may be higher, therefore may only to graze to 1000kg DM/ha, or remove sheep earlier. Regular monitoring is essential to prevent significant yield loss.

2) **Yerong Creek** - sown 13th Apr, emerged 18th Apr. Very slow growth until June rain. Assume grazing commenced 20th July, grazed down to 800kg DM/ha by end of July.

Aug grazing:

- grazing period: 1st - 20th Aug\* = 20 days
- feed available: 800kg (start) - 800kg\* (end) = 0kg DM/ha
- wheat growth rate: 50kg DM/ha/day x 20 days = 1000kg DM
- total avail. feed: (0 + 1000) = 1000kg DM/ha
- lamb intake: (1.25kg/hd/day x 20 days) = 25kg/hd
- stocking rate (1000kg DM ÷ 25kg/hd) = ~40 lambs/ha

\* assuming stock removed due to height of node - may be earlier.

3) **Marrar** - sown dry, emerged 17th June on rain. Assume quick graze commences 20th August if node not already present.

Aug grazing:

- grazing period: 20th - 30th Aug\* = 10 days
- feed available: 800kg (start) - 800kg\* (end) = 0kg DM/ha
- wheat growth rate: 15kg DM/ha/day x 10 days = 150kg DM
- total avail. feed: (0 + 150) = 150kg DM/ha
- lamb intake: (1.25kg/hd/day x 10 days) = 12.5kg/hd
- stocking rate (150kg DM ÷ 12.5kg/hd) = ~12 lambs/ha

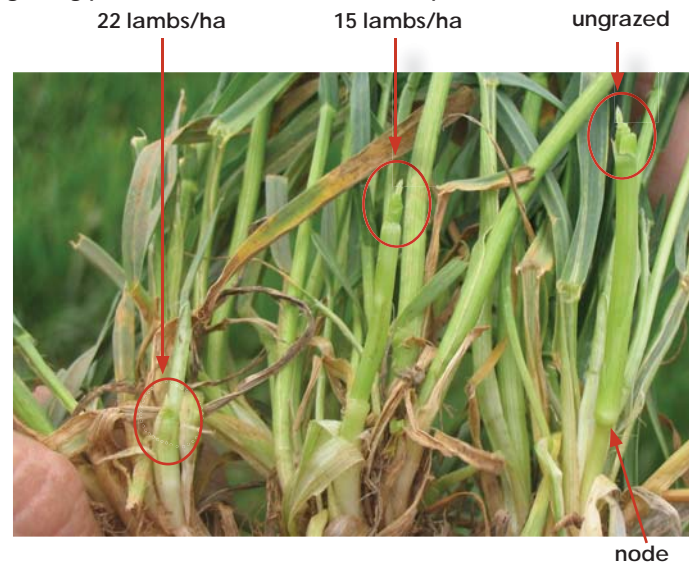
\* assuming stock removed due to height of node - may be earlier.

### Stock removal

With all fodder budget scenarios, specifying when stock should be removed is difficult as the date will depend on the position of the node (developing head). Node development varies with factors such as sowing date, temperature, daylength and grazing pressure. Some may choose to remove stock when the 1st node appears, others may choose to reduce grazing pressure so only the top leaves are grazed, avoiding the node while it is still close to the bottom of the main stem (although node development tends to be quicker under low stocking rates). Either way, close monitoring is required.

To detect presence of the 1st node, run your fingers along the main stem from the base upwards. The node will feel like a small bump. To see the developing head, carefully slice the stem open from the node upwards to reveal the tip of the head (see figure 1 below).

Figure 1 - developing head (Wedgetail) on 3rd August under 3 grazing pressures - Wallendbeen, sown Apr 05.



## G&G Seminar Series - points of interest

### 1) Lambing ewe nutrition seminar:

A comprehensive overview of diseases and nutrition issues was provided by Geoff Duddy and Tony Morton at the seminar. Of particular interest to many growers was the use of Causmag to supplement restriction of magnesium intake when grazing cereal crops. Low magnesium intake can cause Grass Tetany, with symptoms including excitability, convulsions and death. This can be prevented by providing Causmag @ 6g/hd/day, added to grain. Alternatively, a loose lick of 1 part Causmag, 1 part stocklime and 2 parts salt can be used, or Grass Tetany blocks.

### 2) Fodder Budgeting workshops:

A major talking point at the workshops was how to estimate grazing wheat dry matter (DM), with visual estimations difficult due to different plant densities and row spacings. One of the aims of the grazing wheat trials is to develop some guidelines for estimating DM, with the development of photo standards. However preliminary data sets from the trials suggest a good relationship between plant height and DM, where 1cm height = ~100kg DM/ha (at 22cm row spacing & 150 plants/m<sup>2</sup>).



### Grasslands Conference, Ballarat - Winterstar ryegrass

Greg Condon represented the Grain & Graze Steering Committee at the Grassland Society of Southern Australia's conference at Ballarat in June. Short term pastures featured on the agenda, which are a focus of the Murrumbidgee Grain & Graze project.

Charles de Fegely from Ararat, Vic. described his system where he farms in a 5-7 month growing season with 60% permanent phalaris/sub pasture, 30% wheat/canola and 10% Italian ryegrass (Winterstar)/sub. Stocking rates are 9-12 ewes/ha, lambing in August to achieve 19kg lambs in 120 days. These are sold in Dec/Jan with no supplementary feeding. Features of the Winterstar ryegrass/sub pasture include:

- sown into grass free wheat stubble - Winterstar dominant Yr 1, subclover dominant Yr 2, canola direct drilled Yr 3
- Winterstar highly digestible, stays green late into spring
- usually runs minimum of 20 lambs/ha for 3-4 mths
- high stocking rates don't allow ryegrass seed set - makes ideal weaning pasture for merinos (also low worm burden)
- merinos achieve 30kg LW by January, doing over 300g/hd/day, BUT...
- ryegrass doesn't overcome winter feed gap (less of an issue with August lambing)
- needs to be re-sown annually - costs ~\$150/ha to produce 7-8t DM/ha (\$18/t DM @ 100% utilisation)
- ideal for spring lambing enterprises where high growth rates are required at low cost in late spring-early summer (minimises grain feeding over summer). Complements perennial pastures to maintain high stocking rates.

a full report of the conference can be found at:  
[www.farmlink.com.au/gg.htm](http://www.farmlink.com.au/gg.htm)