



### 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

Grazing management is the continued focus of this year's grazing wheat trials. The main trial is located at Marrar in a paddock of Wedgetail. Treatments are similar to last year, with high and low stocking rates of lambs combined with early and late lock-up times. Cattle were also to be included in this trial, however due to the late break there will be insufficient dry matter.

Last year's supplement treatments are also being repeated to see if the magnesium response was site/year specific, or if the results can be achieved again. The supplement treatments are being broken down into their components, including magnesium, calcium and salt.

Two additional trial sites have been sown at Ganmain and Eurongilly to further investigate the impact of grazing on water use and consequent yield of grazing wheats. Also included in these trials are several potential dual purpose canolas.

##### b) short term pastures

Dry matter and feed quality measurements are continuing in the short term pasture trials this year to assess their productivity in the 2nd year. The forage brassica, ryegrass and grazing wheat plots have been re-sown.

#### Focus Farms

Monthly monitoring (including water use, growth rates, feed quality, etc) of the 5 Focus Farms at Coolamon, Tarcutta, Temora, Leeton and Lockhart is available in the new & improved 'Focus Farm Facts' - see [www.farmlink.com.au/gg.htm](http://www.farmlink.com.au/gg.htm).

#### G&G Seminar Series

The G&G Seminar Series for 2006 kicked off with the Supplementary Feeding Seminar in Cootamundra. This was well attended by over 70 people to hear some excellent speakers. The seminar was followed by another series of Fodder Budgeting Workshops at Cowra, Temora and The Rock in the 1st week of August. Next will be 2 Fodder Conservation Seminars in early September.

### Supplementary Feeding Seminar

Over 70 people attended the Supplementary Feeding Seminar in Cootamundra earlier this month. The agenda allowed for much lively discussion, which together with 3 excellent presentations, resulted in a very successful day. Below are some of the main points:



**Supplementary fed???** Some of the younger attendees at the seminar. 1 to r: Tom (& Lou) Beck, Charlie (& Kirrily) Condon, Samuel (& Elissa) Drew

#### Overview of supplementary feeding

(Phil Graham, NSW DPI Yass)

- animal welfare over-rides economics

#### low rainfall years:

- fix lambing dates so they coincide with periods of peak pasture growth, ie. spring. (Grazing wheats don't always provide autumn feed...)
- pasture species have an impact - although clean lucerne paddocks benefit cropping enterprises, they don't provide much feed during winter
- if you're supplementary feeding *every year* then you need to review your system
- aim for condition score 3 at joining - studies have shown that 1 improvement in fat score at joining (~6kg LW) = 8 extra lambs at marking

#### feeding processes:

- Grazfeed (computer program) is very useful for working out supplementary feed requirements
- lick-feeders - save time & labour; are excellent for production feeding, but less so for maintenance feeding (minimum supply is

200g/day)

- lime & salt are essential when feeding grain (maximum 1.5% lime + 0.5% salt); add magnesium for grazing cereals.

#### key point:

- "make the most of spring pastures to put condition on stock because it costs too much to recover condition in autumn"



David Sackett presenting at the seminar

#### Supplementary feeding for profit

(David Sackett, Holmes Sackett & Associates)

##### benchmarking shows:

- spending up to \$3-7/DSE on feed
- spring stocking rate is typically 30-50% higher than autumn (good target)
- gross margins are highest for Aug/Sept lambing, followed by Jun/Jul, then Apr/May

##### joining:

- feeding to achieve *maximum* fertility may not provide the greatest returns; feeding for *optimum* fertility can give greater \$/ha
- a rising plane of nutrition at joining is not important - *absolute* liveweight is
- it is more efficient to *prevent* weight loss before joining by feeding small amounts earlier, rather than feeding for weight *gain*.

##### lambing:

- Lifetime Wool project shows that small lambs (less than 4kg) have a much higher death rate, particularly in Merinos - directly related to ewe condition at lambing
- project results showed ewes that *maintained* weight prior to lambing were more profitable than those that lost weight, or lost & gained weight - better production from both ewe and lamb
- when autumn lambing, ewes need to be in a higher condition score at joining than spring lambing

##### lamb finishing:

- expect conversion ratio of 7kg grain for 1kg liveweight gain
- returns are marginal - sensitive to grain prices

- better returns from buying in lambs and adding value, eg:

Assume	LW	Cost	Sale Value	Diff'nce
lambs buy in (@ \$1.20)	30kg	\$36.00	\$43.50	\$7.50
kg added (@ \$1.50)	15kg	\$21.75	\$22.50	\$0.75
<b>total value</b>	<b>45kg</b>	<b>\$57.75</b>	<b>\$66.00</b>	<b>\$8.25</b>

#### Whole farm feeding

(Rob Hart, Waerawi Farming Company)

##### overview:

- 2000ha crop, 450ha pasture
- sheep enterprise:
  - ▶ 90kg/ha lamb (DW) @ \$3.20/kg
  - ▶ 500 cull ewes
  - ▶ 10 DSE/ha (July '06)
  - ▶ August lambing
  - ▶ target > \$350/ha net return

##### supplementary feed:

- focussed on 'condensed feeding', ie. grain/silage fed in ~5ha paddocks to:
  - ▶ spell pastures in autumn (allows 1000 - 1500kg DM/ha for lambs in August)
  - ▶ keep ewes at FS 3
  - ▶ minimise energy loss
  - ▶ save topsoil
- lambs & pregnant ewes fed barley grain @ 12.6 MJ energy (\$150/t)
- lactating ewes & lambs fed cereal hay @ 10.4 MJ energy (\$120/t)
- pregnant ewes on stubble fed pea/wheat silage @ 9.8MJ energy (\$60/t)

##### summary:

- profits do exist for the meat market
- benefits to cropping phase are hard to measure
- more potential exists in the stock enterprise than cropping, but:
- you have to enjoy it!



Lickfeeder in 'condensed feeding' paddock at Hart's

**Focus Farms - July growth rates**

Data collection on the Focus Farms is now into its 2nd year, with **Craig Muir** (NSW DPI) taking over the task. Data collected monthly on the 5 farms includes dry matter (DM), growth rates, feed quality, ground cover & water use - and is compiled in 'Focus Farm Facts', one for each farm. These are available at [www.farmlink.com.au/gg.htm](http://www.farmlink.com.au/gg.htm), or can be E-mailed directly (please advise if you would like this).

The data is useful for fodder budgeting or working out supplementary feed requirements, as growth rate and feed quality data can provide estimates for your own farm. The following table shows DM and growth rates for July on each of the Focus Farms:

**Table 1: July pasture data - Focus Farms**

Pdk DM (kg/ha) & growth rate (kg DM/ha/day)		Coolamon 18th Jul	Euroley Bridge 6th Jul	Sebastopol 26th Jul	Tarcutta 14th Jul	Tootool 20th Jul
annual	DM (green)	1070 (390)	1100 (130)	1140 (900)	130 (90)	1950 (40)
	growth rate	16	5	15	10	1
lucerne	DM (green)	660 (200)	720 (110)	2240 (1040)	1320 (1100)	1830 (1610)
	growth rate	14	4	21	8	21
native	DM (green)	1930 (390)	1400 (50)	2020 (1620)	1360 (770)	2090 (60)
	growth rate	5	2	20	1	2
grazing wheat	DM (green)	70 (70)	40 (40)	20 (20)	20 (20)	250 (250)
	growth rate	2	1	0.5	1	7

**Fodder budget examples - Focus Farms**

(assuming July pasture data in Table 1)

**1) Coolamon - annual pasture**

► *How many weaned lambs\* can I run for 20 days?*

\*25kg LW lambs; assume grazed down to 800kg DM/ha:

- grazing period: 18th Jul - 7th Aug = 20 days
- feed available: 1070kg (start) - 800kg (end) = 270kg DM/ha
- pasture growth rate: 16kg DM/ha/day x 20 days = 320kg DM/ha
- total avail. feed: (270 + 320) = 590kg DM/ha
- lamb\* intake: (1.1kg/hd/day x 20 days) = 28kg/hd

→ **stocking rate** (590kg DM ÷ 28kg/hd) = **21 lambs/ha**

**2) Sebastopol - lucerne pasture**

► *How long will it last running 15 lactating ewes\*/ha?*

\*60kg ewes with singles; assume grazed down to 1500kg DM/ha:

- start grazing: 26th July
- stop grazing: 1500kg DM/ha
- feed available: 2240kg (start) - 1500kg (end) = 740kg DM/ha
- pasture growth rate: 21kg DM/ha/day
- stocking rate: 15 lactating ewes/ha
- ewe\* & lamb intake: (2.6 kg/hd/day x 15) = 39 kg /ha/day
- change in DM: (21kg - 39kg) = -18kg DM/ha/day

→ **DM lasts for:** (740kg ÷ 18kg) = **41 days\*\***

\*\* note lucerne survives best under rotational grazing but can be set stocked in winter where annual species are present

**GrazFeed runs to calculate feed requirements - Focus Farms**

(assuming July pasture data in Table 1. Green pasture at 75% digestible, dead pasture at 35% digestible.)

**3) Coolamon - annual pasture (as in '1' left).**

► *What weight gains could be expected from these weaned lambs (25kg LW)?*

**Weight gains of weaned lambs on Coolamon annual pasture**

Supplement fed (kg) 80% barley, 20% lupins	Weight gain (g/hd)	Supplement cost (c/hd)
nil	68	0
0.5	170	9
1.0	281	18

→ **supplementary feed if targeting higher weight gains**

► *What if I run lactating ewes (with singles) on this annual pasture?*

**Weight gains of lactating ewes on Coolamon annual pasture**

Supplement fed (kg) 80% barley, 20% lupins	Weight gain (g/hd)		Supplement cost (c/hd)
	ewe	lamb	
nil	-179	272	0
0.5	-100	304	9
1.0	-8	332	18

→ **the level of ewe weight loss on this pasture without supplementation may be acceptable in the short term (assuming ewes were at CS 3 at lambing)**

**4) Sebastopol - lucerne (as in '2' left).**

► *What weight gains could be expected from these lactating ewes (with singles)?*

**Weight gains of lactating ewes on Sebastopol lucerne**

Supplement fed (kg) 80% barley, 20% lupins	Weight gain (g/hd)		Supplement cost (c/hd)
	ewe	lamb	
nil	38	347	0
0.5	112	362	9
1.0	181	362	18

→ **no supplementation required**

► *What if I run weaned lambs on this lucerne pasture?*

**Weight gains of weaned lambs on Sebastopol lucerne**

Supplement fed (kg) 80% barley, 20% lupins	Weight gain (g/hd)	Supplement cost (c/hd)
nil	220	0
0.5	312	9
1.0	312	18

→ **no supplementation required**

To receive monthly copies of 'Focus Farm Facts', please E-mail [craig.muir@dpi.nsw.gov.au](mailto:craig.muir@dpi.nsw.gov.au) specifying which location(s) you would like to receive