

## CONSERVATION FOR PROFIT:

# BETTER PASTURE UTILISATION TO PRODUCE QUALITY LAMB

Robert Worner

"Stanley Park", Young, NSW, 2594

**Abstract.** Because of declining wool prices we have changed our enterprise mix to include more prime lambs. Our property consists of 50% good farming country, 35% average farming country and 15% grazing-only country. As part of our rotations, the cropping country is sown down to high quality pasture for varying lengths of time. We use chemicals extensively to rejuvenate run-down pastures, particularly to reduce weedy annual grasses. Grain supplements are used for ewes and weaners and we are experimenting with silage as a winter supplement for ewes. Production of quality lamb requires good planning, quality pastures and supplements, attention to animal health and breeding, and flexible management of pastures and stock.

The wool fiasco of recent times forced us and others to look at and pursue alternatives for our sheep enterprise. In our case, having had merino lambs go over the meat chain in the early 1970s, the relatively high returns for meat against wool in the 1990s was an incentive for us to look at this avenue again.

### Property details

The family property consists of 2200 hectares of which 1150 hectares are cropped. This year 500 hectares will be sown to canola, 450 hectares sown to wheat, 120 hectares sown to lupins and 80 hectares to oats for grain. 1050 hectares are grazed. Sheep numbers at the 1st June, 1994, consisted of 8500 grown sheep and 4400 weaners.

The country mainly consists of three types:

#### *Prime farming country (about 50%)*

This is strong red granite based country with a 700 mm rainfall. When this country is not being farmed it is sown to lucerne with white clover and subterranean clover at the following rates:

- lucerne: 2 kg/ha
- white clover: 0.25 kg/ha
- subclover: 4 kg/ha.

Depending upon the quality of the pasture, this country may remain in pasture 3 to 5 years after being cropped for up to 10 years repeatedly.

#### *Average farming country (about 35%)*

This country is farmed for 3 to 4 years repeatedly after which it is sown to perennial grasses and legumes for up to 10 to 15 years.

#### *Grazing-only country (about 15%)*

This is sown to perennial grasses. In the past it was mainly sown to phalaris (2 kg/hectare), with 0.25 kg haifa white clover and 4 kg of subterranean clover. Now it is sown to a mixture of phalaris and cocksfoot. Some of the phalaris pasture has been down for 40 years.

### Pasture manipulation and regeneration using chemicals

Over the past few years, we have increasingly used chemicals to maintain, rejuvenate and alter the pasture composition. For example Sprayseed and Simazine have been used in phalaris-based pasture to take out weeds such as vulpia and encourage clover growth by reducing phalaris domination. This also helps the establishment of white clover in existing phalaris pastures. In the lucerne based pastures, grass-only sprays such as Verdict are used to take out grasses, reduce grass seed problems with lambs and reduce disease hosts for later crops. Roundup has been used at low rates in mid-spring to take out barley grass and vulpia in white clover based pastures (pasture topping) with very little adverse effects on the white clover.

### Producing quality lamb

To produce quality lamb it is necessary to:

1. Forward plan with the aim of producing the optimum quality pasture, taking into account the various constraints one has to live with (eg. rainfall, soil, etc.).
2. Fully utilize the pasture by stock management to achieve near optimum profitable outcome.
3. Integrate animal health with management.

4. Select and breed animals wisely. An open mind is applied to ewe selection with the aim of selecting the most profitable individual sheep. Approximately equal weight is given to wool and body size. A large framed, well sprung, broad shouldered, open faced flock is our ideal.

### Ewe joining

Joining commences on the 1st April for 30 days. Mature ewes are joined at 1%, maidens at 2%. Through the winter, ewes are supplemented to maintain condition with oats, with the addition of lupins when necessary to maintain a balance between protein and energy. Dominant phalaris pastures in particular require more clover for extra protein to avoid breaks in the wool.

### Grazing procedures

Ewes are lambled down during September, mainly on the phalaris-based grazing country, but we try and move them onto legume-dominated pasture shortly after lamb marking, with the aim of keeping lamb growth rates at their maximum. Training of lambs to take supplementary feed (grain, oats) commences the week prior to weaning, which usually takes place when the oldest lamb is 12 weeks old. Lambs are weaned onto white clover/lucerne pasture.

### Fodder conservation

Fodder conservation is dominated by grain production, mainly oats and lupins. Hay has been tried over the years but we have not persevered with it. Silage is being evaluated at the moment, and it seems that it will have a role to play in supplementing ewes through the winter. However, weaners tend to waste too much of it. A mixture of 75% oats and 25% lupins (depending upon the protein levels of both grains) has proven to be the easiest and most efficient supplement for weaners to provide continuing high growth rates. Rarely do the feed requirements for weaners exceed 2 kg of oats and 0.5 kg of lupins per head per week.

### Production

Examples of our lambing performance are shown in Table 1. Lambing averages range between 125% to 150% with lambs marked from 105% to 120%. The effect of paddock type and ewe age on lambing can be seen in the Table.

### Conclusions

To produce quality lamb, all factors need to be well planned, and all management of a high standard. However, we try to maintain a flexible system so that we are not locked into any one outcome for the product we produce.

Table 1. Lambing performance of ewes in September, 1993.

Paddock	Ewe Age	Ewe No	Ewe Loss	%	Lambs Dropped	% Lambs	Lambs Lost	% of Ewes	% of Lambs	Lambs Marked	% Marked	Remarks
Park	6	334	11	3.0	499	149	81	24.0	16.0	418	125	Open
S/shed	6	200	14	7.0	284	142	65	32.5	22.0	219	110	Exposed
Stud	5	434	1	0.3	586	135	71	16.0	12.0	515	118	Timbered
Beanbah	5	325	4	1.2	454	140	88	27.0	19.0	366	113	Open
Drive	5	230	4	1.7	317	137	41	17.8	12.9	276	120	Sheltered <sup>1</sup>
Lane	4	600	8	1.3	765	127	100	16.6	13.1	665	111	Open
F Cottage	4	265	1	0.4	343	129	30	11.3	8.7	313	118	Timbered <sup>2</sup>
Lamb South	3	360	3	0.8	517	143	79	21.9	18.0	438	121	Open
Ram South	3	440	4	1.0	606	137	160	36.0	26.0	446	101	Open <sup>3</sup>
Ram North	3	233	0	0	319	137	34	14.5	11.0	285	122	Sheltered
Koral North	2	350	3	0.9	333	95	40	11.0	12.0	293	84	Open <sup>4</sup>
Koral South	2	365	4	1.0	398	109	82	22.0	20.0	316	86	Open
Gunible	S <sup>5</sup>	209	7	3.3	290	139	68	32.0	23.0	222	106	Timbered <sup>6</sup>
		4345	64	1.5	5711	131	939	21.6	16.0	4772	110	

<sup>1</sup> Sheltered by drive trees; <sup>2</sup> Lambled in lane; <sup>3</sup> Disturbance from neighbour's dogs; <sup>4</sup> Sheltered by road timber; <sup>5</sup> Selected ewes; <sup>6</sup> Aged ewes.