

Putting the tools into practice – Wool

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“Weatherall”, Coolac, NSW



‘Weatherall’ is a 920 hectare (2300ac) property located near Coolac, 20km north of Gundagai. It receives an average annual rainfall of 660mm (26”), distributed evenly throughout the year. The growing season occurs between April to November when temperatures are cooler and temperate pastures can utilise rainfall. Soil types range from red basalt to light clay loam. Soil pH ranges from mildly acidic (5.3 CaCl₂) to highly acidic (4.4 CaCl₂). The topography extends from creek flats through to steep rocky slopes.

The main enterprise on “Weatherall” is fine wool production. The current flock size is approximately 7000 sheep, with 2500 to 3000 ewes joined annually. The winter DSE rating has been maintained at 11 DSE/ha over past three years.

Feed base

“Weatherall” has a good base of native perennial grasses such as ‘hill’ wallaby grass, which is predominant on the steeper country. Annual grasses and sub clover are more prevalent on the better soils.

A Caldw direct drill has been used to sow improved perennial pastures on 240ha (600ac) over the last three years. The best establishment results have been achieved with direct drilling the pasture on it’s own, following a spring fallow the previous year. Cereal cropping was used for weed control in preparation for pasture sowing, although it was found to be costly and not always necessary. The improved pastures include lucerne/clover, lucerne/phalaris, phalaris/cockfoot/subclover and chicory. Tetila ryegrass is used for sod seeding into lucerne pastures to boost winter feed production.

Australian phalaris and sub clover provide the major pasture base through late autumn, winter and spring, being well suited to continuous heavy grazing by merino sheep. Phalaris pastures are the benchmark in this environment, provided they are managed to their potential with hard spring grazing and regular fertiliser. However, we are still constantly working toward finding the right pasture for the local soils.

Feed gap

The familiar feed gap (or ‘autumn feed squeeze’), typical of the area, occurs each year. Improved perennial pastures are the key to reducing this feed hole. Supplementary feeding with grain or hay is seen as the last option when pasture conditions are poor. De-stocking is the first option during dry times, with lupin or oats used when conditions are severely poor.

Native pastures are allowed to carryover into autumn to ease pressure on improved pastures at the break. Alternatively, stocking rates are significantly increased on improved pastures through spring to utilise the spring flush and spell native pastures for autumn.

Inputs

Higher fertiliser rates and lime are used to maximise pasture growth. Fertiliser is applied to match stocking rate on an individual paddock basis. For example, improved pastures may receive 220kg/ha of single super, compared with native pastures which may only get 120kg/ha. As a rule of thumb, 1kg P is applied per DSE/ha. For example, a paddock carrying 15 DSE/ha will receive 15kg P/ha, or 170 kg/ha single super.

Lime is applied at 2.5 t/ha prior to establishing a perennial pasture to lift soil pH and allow acid sensitive species such as lucerne to be included in the mix. Lucerne is essential for high quality feed through the drier months of the year when summer storms can be readily converted to dry matter.

Pasture Utilisation

Pasture utilisation goes hand in hand with pasture improvement. Flock structure has been manipulated to improve utilisation of the spring pasture flush. This includes running 50% ewes and 50% wethers to allow flexibility with sheep numbers.

With lambing occurring in September, stocking rates are doubled to coincide with the period of highest pasture growth, thereby allowing cost efficient pasture utilisation. Stocking rates are lowest in late autumn/winter when pasture production is most limited.

Pasture and livestock are constantly monitored with dry matter and fat score assessments in an effort to maximise production of both.

Farm output

The merino flock has been gradually building up over the past four years as other enterprises (including cattle, cereal cropping and cross bred lambs) are discarded. Stocking rates have been continually increasing as pasture productivity and utilisation improves.

In 1999/2000, 226 bales of wool (40,883 kg) were produced off 8719 sheep, and 344 tonnes of wheat and 80 tonnes of triticale were harvested. In 2000/2001, the cropping phase has been replaced with perennial pastures in an effort to push stocking rates up. With the increase in wool production, we are also aiming to improve wool quality to realise better prices and greater profitability.

Management system

The property is corporately owned with a working manager (Charlie) permanently employed. Casual labour is employed at peak times such as shearing, crutching and fencing. Contractors are used for shearing, crutching, dipping and hay baling.

Management is based on confidence in my own experience in managing a grazing system in this region. Being observant and aware of what is happening with pasture and stock well being is particularly important. Regular observations include:

- Soil tests
- Pastures assessment (Prograze system, eg. stick method, etc)
- Controlled grazing to benefit pastures
- Read literature, Holmes Sackett & Associates, NSW Agriculture, Natural Resources & Environment – Victoria.
- Professional Agronomists
- Neighbours and other farmers' experience.

Future challenges

Profitability

Our immediate challenge is to improve profitability – today agriculture is challenged by scale of operation with commodity prices continually falling. Increasing profit in any production system requires a goal to expand and lift its scale of operation to reduce costs of production. Consequently, we are looking at lifting stocking rates with greater use of fertilisers and lime to achieve better pasture growth and greater response to rainfall.

Weaner health

Wet summers are causing worm problems in weaners, despite receiving two summer drenches. We are now looking at a pre-lambing drench followed by two summer drenches. Weaner health is essential in a spring lambing operation. Providing green feed through summer and autumn, in the form of high quality lucerne and chicory pastures, has improved survival percentages after the first 12 months.

Managing the system

Managing any grazing system can be difficult and complex. I try to keep it simple. Start with the soil: Is it good? If not, can it be improved? If it can't be improved, how can it be used? These same principles can also be applied to pastures and livestock.

My experience tells me you have to work with nature, not fight it. If there are weeds, you can replace them with something else. On the other hand, if something wants to grow, encourage it. Too many farmers today are fighting nature, costing them money and often ending in failure.

A Merino wool enterprise can be pushed hard, provided key areas such as weaner management receive attention. Healthy merinos go a long way on little, but if merino sheep were easy there wouldn't be a beef industry...

Calendar of operations - "Weatherall", Coolac
 Feed Curve - phalaris/sub, lucerne/sub, native grass

