



On-Farm Implementation of PROGRAZE™ and PROGRAZE™ PLUS

Malcolm Peake

"Bogo", Yass, NSW, 2582

Abstract: Our property is run using the principles learnt from PROGRAZE™ and PROGRAZE™ PLUS. Attending these courses has made me aware of the need to match my livestock needs to the pasture types available. Subdivision has become a major management tool, and our pastures are much better utilised than in the past, including problem grasses such as Yorkshire fog. I find I am in a much better position to make decisions about fertiliser use or matching stock to available pasture, and carrying capacity on the property has increased by about 40%. The ProPlus program is invaluable in simplifying the calculations required to manage my property successfully.

Bogo is a 1450 ha property running a Merino Stud and a commercial self-replacing fine/medium wool merino operation. Cattle have been run as well. The property is situated 20 km west of Yass in a 680 mm rainfall area. The pastures are mainly native or improved native.

I became involved in some pasture management issues during the early 90's and completed PROGRAZE in 1994. I now want to highlight some of the major changes that have occurred on "Bogo" as the result of using PROGRAZE. For ease of discussion I will split the changes into pasture and stock, but remember they are closely linked together.

Pasture

Management has changed from a set stocking to a flexible system (which includes rotational grazing and set stocking) aimed to meet animal and pasture requirements. Initially, temporary electric fencing was used to target "problem grasses" (e.g. fog grass and or rank phalaris). Over this period my attitude, and in fact the district attitude, to fog grass has changed. It has moved from being regarded as a weed to a pasture species which, with the right management, can provide useful summer feed.

Success in turning problem areas into productive units gave me the confidence to permanently subdivide paddocks. Permanent subdivision was essential if this success was to be sustained in these areas over ensuing years. The number of paddocks has gone from 20 to 38 and, at this stage, only one third of the property has been subdivided. There are still paddocks up to 180 ha which need splitting. New paddock size is variable but I am now prepared to go as small as 10-15 ha.

Prior to 1994 fertiliser application had been in the order of 125 kg/ha of single super on the most responsive country. In 1994 I realised there was no point fertilising to grow more pasture if I was not using what I was already producing. Therefore, in 1995 the money allocated for fertiliser was put into subdivisational fencing.

Improvements in pasture composition have been seen in all subdivided paddocks. There is more clover and ryegrass and some introduced perennials have reappeared. Subdivision and a change of grazing management in weaning paddocks have extended the spring growth, giving weaners a green pick for longer, and reducing the need for supplementary feeding.

Have these changes had any effect on carrying capacity? Prior to starting down this road the property was running 5,500 sheep (2000 ewes) and 60-70 cows plus followers through the winter period. Last winter we ran 7,500 sheep (2,500 ewes) and 100 cows and followers. As well the property is looking better, there has been no change in the amount of weeds and fertiliser usage has remained the same. The improvement has come from increased utilisation.

Stock

The following changes have been made:

- Flock sizes have increased. If this was not done, the improvement discussed in the pasture section would not have happened and could not be sustained.
- I am much more aware of stock requirements during the year and now match these with available pasture.

- Pastures are now managed to meet stock requirement benchmarks. *e.g.*
 - ◆ Lambing paddocks - aim for 800-1000 kg DM/ha at the start of lambing
 - ◆ During lactation - maintain spring growth around 1500-2000 kg DM/ha
 - ◆ Weaning paddocks - managed for herbage mass (1800 kg DM/ha) and low worm pastures.

Ewes are now scanned to help with fine tuning pasture allocation.

I'm more confident about how far I can push dry sheep in tight periods without causing major product quality problems.

So far, this has all sounded positive. However, there have been some minor problems, but every farm has them. The planning of these paddocks and stock changes across a whole farm is very difficult or near impossible to do in the mind and it takes too long to do the necessary calculations on paper. This is where the ProPlus program becomes invaluable.

The development of PROGRAZE PLUS was essential if we were to implement the changes we were making across the whole farm and get the maximum benefit from them. The ProPlus program gives me a good early indication of the likely outcomes of my management plans. It can't solve all the problems but it has identified which paddocks and flocks, and when, the problem will occur. I can then focus more on this area and period, and other areas of the property can be monitored at a lower frequency. I am more in control, because the information the program gives me allows me to pro-active.

This is very important on "Bogo" because the best lambing time for the property is starting mid August, when you take account of issues such as weather, joining, weaning time, etc. Therefore, the tightest period of feed corresponds to the last 6 weeks of pregnancy. Decisions have to be made up to 3 months before mid August if I am to achieve the pasture benchmarks I need. ProPlus allows me to view the whole farm ahead of time, under several differing scenarios if need be, and to make changes as the season progresses. This gives me confidence that all the stock will be okay, not just a few special mobs.

Other uses of the program are helping with fertiliser decisions, and calculating feed requirements for special groups of stock. For example, since I am not comfortable in running a trading operation to use surplus feed, what area do I need to fertilise given likely stock numbers? What area of summer-active pasture do I need to grow out over 300 ram lambs?

A major benefit of the program is the information it provides on paddock performance. The more I use the program the better the information I put in and the more confident I am in the output. Therefore the information from the program becomes more valuable to me. Also, PROGRAZE PLUS, just like PROGRAZE is valuable because of the group interaction that results from the meetings.

Is the effort worthwhile?

Most certainly. If we are to survive in the grazing industries, we have to improve productivity economically at the farm level. PROGRAZE and PROGRAZE PLUS provide the skills to grow and maintain productive pastures and effectively utilise that growth to produce quality products.