

## A case study: North Otago downlands – farming for profit

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Rosebery is a 295 ha rolling downland North Otago property in the Airedale district, 10 km west of Oamaru. The proximity of the farm to the coast gives a shorter winter (100 days) than that generally experienced further inland. However, the same challenges experienced in coping with the seasonal variations are shared with other North Otago farmers. Having lived in this area for all of my 46 years, farming in family partnerships for 12 years, from 1969–1981, and since then with my wife Gail in our own right, I believe I have a reasonable level of awareness of farming a unit such as ours in this district. During these years we were to experience the typical ups and downs of most farmers of this period. The earlier years of partnership in an established unit were basically steady and relatively rewarding. The years of the 1980s with highly indebted full farm ownership achieved, SMP removal and two major periods of climatic extremes, subjected the farm to financial stress which without off-farm income would not have been economically viable.

This experience had a very negative effect on our farming, both at a personal level and across the whole farming operation. In short we adopted the old siege mentality: put away the cheque book and trimmed inputs, both minor and major (such as no fertiliser for 8 years), and generally the farm went into decline.

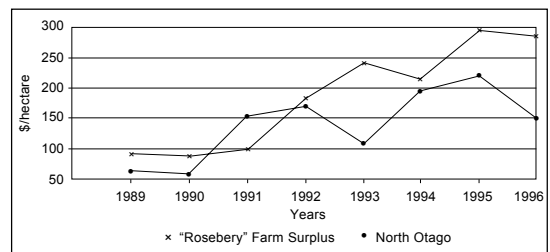
Following the two severe droughts of the late 1980s some strategies were considered and implemented. Regrassing using new cultivars of cocksfoot, tall fescue and the like was started. With much of the predominantly ryegrass-based pastures decimated, combined with declining fertility, there was much to be done and little capital to outlay and, probably worst of all, lack of confidence to address the urgent issues needed to restore the farm to full production.

In 1991 we were fortunate enough to be selected as the Meat Research and Development Council “Monitor Farm” for North Otago which we remained for the four years until 1995. During this time our farm surplus per hectare rose from \$100 to almost \$300, changing our whole attitude to farming and our returning self-confidence.

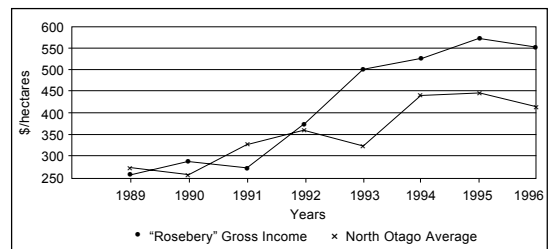
In this paper I will describe some of the simple basic things that give us confidence that Rosebery has a future as a profitable dryland farming operation.

The stock numbers on the property over the past winter have been:

**Figure 1** Economic farm surplus per hectare “Rosebery” compared with the North Otago average.



**Figure 2** Gross income per hectare “Rosebery” compared with the North Otago average.



### Rosebery Farm – 1995–1996 Season

1800	Breeding ewes		
420	Hoggets		
60	rams and killers		
45	Breeding cows		
15	Calves		
80	Goats		
50	Stags (share farmed)		
150	grazing dairy cows – 9 weeks		
Stocking rate (excluding cows)	2600	9.12	su/ha
Stocking rate (with cows)	2800	9.82	su/ha
North Otago average		8.5	su/ha

Our target production levels for this season are:

- Lambing percentage 145%
- Wool weights 5.3 kg/sheep stock unit
- Lamb weight 15 kg carcass weight

### Changes in farming system since 1991

From being in survival mode and a state of confused limbo we now have set targets and deliberate planning

in place to enable us to progress from an almost hopeless situation to a position of increasing financial and operational strength.

From a hit and miss, good luck rather than good management process of farming we now have an extensive monitoring programme and make use of this data to achieve our objectives each year.

After eight years of virtually no maintenance fertiliser we now have a full fertiliser application programme in place (320 kg/ha bi-annually of superphosphate), monitored annually with soil testing.

Our management system is now simpler. It is based on key times of the year for decision making, use of consultants and seeking all possible information to assist in the implementation of these decisions, and monitoring regularly to gauge the effectiveness of our planning.

From a “go with the flow” approach we now farm in a positive manner, enabling us to have some control over our direction and destiny rather than be continually influenced by outside events beyond our control.

Having a community group of 25 people successful in their own right visiting our farm every two months focussed us on the opportunities for improvement within our property. Some of the main philosophies that drive our farm system now are:

- maximise the amount of pasture grown every year,
- ensuring the profitable utilisation of all feed on the farm,
- keeping the focus of our business on profitability, and
- maintaining quality of life – enjoying our farming activity while ensuring opportunities are available in the future both on and off farm for all our family.

The tools that are now an essential part of our farm systems are:

- *Feed budgeting.* It is essential to know exactly how much feed there is in the farm system at any given time. Enables planning a season ahead.

*Key times:*

- February - shut up areas as surplus to feed dairy cows.
- April - fine tune programme and work out winter grassing plan and early spring strategy.
- October - plan areas required/available for supplementary feed conservation.

- *Stock weighing.* One of the most important tools on the farm is a set of scales. They enable you to check on the success or otherwise of your feeding level

and to check on progress towards set targets. I was caught out last spring by not checking hogget weights and assuming they were being fed enough. They weren't. I found out too late to rectify the shortfall and as a consequence they have been rather disappointing 2-tooths.

- *Animal health testing.* Drenching only when faecal egg counts show it is required has saved us much effort and expense, as has our initial drench test, which showed that some resistance was present, enabling us to institute a programme using those drench families with which we had no resistance problem.
- *Optigro testing,* to address trace element deficiencies, i.e., cobalt and selenium.
- *Fodder supplement testing,* for quality and yield, enabling us to ensure our level of nutrients fed to stock are adequate.
- *Scanning and ram harnesses* are essential tools to enable adequate feeding in the important pre-lambing period. Earliest multiple-bearing ewes get preferential feeding pre-lambing and more sheltered areas for lambing at a lower set-stocking density than later-mated and single-bearing ewes. Also flexibility of feeding when feed is short and better opportunities for higher lamb survival and growth rates.
- *Financial monitoring* is essential to keep an eye on progress through the year and make decisions and adjustments early so that targets are met or exceeded. Use of financial consultants to fine tune seasonal requirements to best meet targets keeps everyone aware of current situation with regular updates.
- *Farm map* with accurate paddock areas and records. I find it useful to have a map and notebook in my pocket for recording stock movements and comments on the spot for later reference. Virtually all planning and recording is greatly assisted by an effective farm map.
- *Target setting and reviewing with the advisory team.* Rated highly important is the time spent with our consultant and advisers in our planning meetings and discussions. Family members, financiers, accountant and farm service reps such as stock agent, seed and fertiliser companies, veterinarian, grazing stock owners, and weed spraying, silage making and seed drilling contractors are all involved.

To farm successfully in our dryland North Otago environment we need to farm to each season rather than fight against it. By having the farm fully fertilised, with Olsen P levels of 16–22, the pastures can respond immediately to moisture. Nitrogen fertiliser is used in the autumn if conditions are suitable.

Silage has emerged as the ideal supplement on Rosebery. It is harvested early (normally late November) to give optimum quality with maximum regrowth. Silage was used in autumn 1995 for flushing ewes owing to dry conditions. Hay would not allow this option. Surplus silage can be sold to dairy farmers. Our aim is to always have on hand a buffer of at least 300 tonnes of silage.

Dairy cows are our most flexible enterprise. In the past five winters, only last year had we inadequate pasture surplus to graze any cows. We have the system set up now so that once the cows leave in early August these paddocks are available at the end of the month with enough feed cover for lambing. We can also cope with a drier spring as our initial stocking rate is lowered with the cows leaving.

One of the key principles of dryland farming is to always have healthy stock in good condition. One of our real opportunities learnt has been to maximise lamb/hogget growth with optimum feeding in their first 12 months. If 2-tooths are close to 65 kg liveweight, the basis for a top productive lifetime performance is then in place, with the ability to cope with adverse conditions as well as utilising seasons of plenty. We are now focusing on having ewes in better condition at lambing (by allocating more greenfeed to ewes), with more available feed at lambing. At 1300 kg DM/ha with ewes milking at close to maximum, lamb growth rates will be higher, the aim being 300 grams/day till weaning.

Experience during the programme has proved that rotational grazing and always leaving good length pasture residue behind will increase the amount of pasture grown and reduce soil moisture loss.

Farming is all about doing the basics really well. In the North Otago environment timing can be everything, as you often do not get a second chance. We know that our farm system is now more robust and profitable.

Other necessities for reinvestment have to be considered, such as tractor replacement/upgrade, shelter belts/woodlots, and house and building maintenance. All these things have been largely neglected over the past decade.

### **Where to from here**

- Keep improving all production sectors, with emphasis on our core business – sheep. Better feeding; genetic advancement, aim at exceeding 150% lambing consistently.
- Remain flexible in stock policy. Dairy cows and deer; trading stock; supplement feeding.
- Continue debt reduction. Low indebtedness will give greater opportunity to assist our three sons with career options while ensuring satisfactory retirement for us.
- Maintain a high level of satisfaction and enjoyment in our farming business – keep it interesting and enjoyable as well as profitable.
- Expand other interest areas. These include the further development of a community-based wetland we have established, and forest remnant protection.
- Continued participation in farm training schemes giving opportunities to young people in the industry.



