



SHEEP AND BEEF

DROUGHT MANAGEMENT PACK

February 2010



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1 CURRENT SITUATION

Dry conditions have prevailed in Northland over the last four months with less than average monthly rainfall, resulting in low river and stream levels and extreme soil moisture deficits. These are now approaching the levels of the drought in 1982/83 and are occurring 4-6 weeks earlier than normal, with the possibility of two further hot dry months to come.

1.1 There IS an Extreme Dry Event

If the weather in February and March continues to be hot and dry, the situation will become severe and those sectors depending on land and water need to be putting plans in place to take action so the effects are minimised. .

1.2 It is likely that the dry will continue

The last major drought in Northland was in the 1982/83 season when the drought did not break until late April. If that were to happen this year there could be another 10-12 weeks of dry weather to come. This will require good and timely management decisions to minimize the impact.

1.3 Most farms have already destocked

Finishing and trading enterprises will likely have sold earlier than planned, and not bought in replacements.

Most breeding enterprises should be down to basic breeding stock and thinking about cutting deeper.

1.4 What next? –

Manage through the drought period, this involves:

- Considering the options**
- Planning and action to minimise losses**
- Ensure the business is in the best possible state to go forward for the recovery period**



2 WHY SHOULD WE BE CONCERNED?

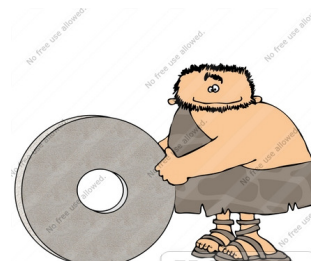
- Low rainfall since October has led to conditions similar to the 1982/83 drought – the severity for which was rated a 1 in 40-year drought event
- Moisture deficit and stream flows are approaching 1983 levels. These levels have been reached 4-6 weeks earlier than in an average year
- The El Nino weather pattern is still in effect
- The 1983 drought broke in late April- that's 3- months from now
- Crops and supplementary feed reserves are very low due to poor spring and early summer pasture growth rates
- Stock water is becoming an issue

3 LESSONS FROM PAST DROUGHTS

We don't have to re invent the wheel – experiences have been documented from previous droughts and can be found at the Meat and Wool website and the MAF website.

<http://www.meatandwoolnz.com/main.cfm?id=392>

<http://www.maf.govt.nz/mafnet/rural-nz/emergency-management/droughts/drought-recovery-strategies/htoc.htm>



These notes cover some main points from the information available, for further detail visit the websites or call one of the contact numbers.

One of the key lessons learnt from farmers' experience in previous drought situations has been making decisions early and setting dates to implement these decisions.

Making timely decisions has been an important factor in minimising impact and in speeding recovery following a drought. This in turn has a huge impact on farm income.

1.1 Business Management

- **Make Decisions Early**

Make decisions early and set dates to implement Decisions



- **Every farmer should have at least an informal response plan in their head**

Even if it is as simple as a series of planned steps. Some decisions may turn out to be wrong, but most will be right.

- **Recognition of a wrong decision will often reveal an opportunity.**

For example, quitting stock just before rain falls may be viewed as a wrong choice (although it was the right one to make at the time), but one which could open a raft of opportunities, such as buying in trading stock, taking on grazers, allowing pastures to recover, and improving the performance of the remaining stock .

- **Plan the whole winter**

It usually a waste of money to feed too many stock for a period until money runs low, then decide that some stock have to go. Matching feed demand with cash and feed supply, while maintaining flexibility, is a characteristic planning exercise of strong businesses. Making early decisions is more likely to result in better "per-head" performance and better profit than not making a decision until being forced to by circumstances, when no choices remain.

- **Update and Revise Plans Regularly**

Circumstances will change and so must the plan. The important thing is there is a plan and decisions are made from the best assessment of events at the time. As conditions get tougher, reviews should be more frequent.

❑ **Plan the Recovery**

Re-stocking when everyone else is doing the same will inevitably raise stock prices. Identify and explore other suitable options. For example, if stock prices are so high there is no profit for the coming year, an option may be to put the equivalent funds into a term investment and bring in grazers, make hay, or grow crop, for example.

Perhaps there are some non-farming options for the short term which are more profitable than buying stock at temporarily inflated prices.

❑ **Focus on Profitability**

Successful farmers, like other business operators, only have a few 'irons in the fire' which are profitable and well managed in their own right. The best option may be to exit any enterprises which are not. Concentrate on tax-paid cash, not on how much tax is paid.

❑ **Cut Losses quickly**

Strong businesses recognise 'a bird in the hand is worth four in the bush'. This may particularly apply when buying feed. Businesses will individually have a point at which it is better to cut losses and sell stock rather than continue buying feed. It is likely that strong businesses determine this point during the earliest stages of drought and before any feed is bought in.

1.2 Farm Management

❑ **Drought Indicator**

Some farmers picked it early – how?? Indicative weather patterns from September onwards, some have their own indicators.

Some farmers may have relaxed with the more favourable summer pasture growing conditions experienced in recent years. Historically it has been good management practice to destock to at last winter stocking levels by the end of January



❑ **Feed Budgeting**

Plan through to next spring. The balancing of livestock feed requirements with pasture availability is the basis of profitable pastoral farming. Successful farmers use feed budgeting to plan 2 to 6 months ahead, providing advance warning of feed deficits. Probably one of the most useful tools in the decision making process needed now, identifying trigger points for destocking.

❑ **Prioritise Stock for Destocking Early**

This is part of the plan, so farmers know in advance which stock will go when a trigger point is reached. For example, the order for many sheep farmers has been wether lambs, aged ewes, ewe lambs, ewe hoggets, mixed aged ewes, and finally two-tooths. The use of technology may help make this decision, for example, pregnancy scanning will allow removal of dry stock, and separation for reduced feeding of single-bearing sheep. Similarly with cattle, early pregnancy testing allows removal of empty cows.

❑ **Sell Stock Early**

In previous droughts, high income earners have preferred to sell stock rather than buying in feed or grazing-off. A study showed 65% of above average farmers surveyed sold capital ewes which in normal circumstances would not be sold. They prioritise, plan sales and carry them out at predetermined dates, always matching feed demand to supply to maximise profit.

❑ **Feed Stock as Well as Possible**

Concentrate on per-head performance to maximise profit in the medium term. Feeding the best stock well will produce better offspring, giving better growth rates of both trading and replacement stock, and therefore better future reproductive potential.– focus on per head performance because high performance stock will be more profitable in the coming months.

❑ **Focus on Maximising income rather than reducing costs**

The scope to improve profitability by reducing costs is limited as most farm costs are fixed. With good planning and management, the small amount of money available during difficult times can be targeted to achieve the best return on each dollar spent.

The result is a series of small improvements at low risk which together, over time, add up to a significant improvement. Top farmers spend relatively more on productive inputs, such as fertiliser, animal health, and weed and pest control.

1.3 Tax Management

Tax implications of reduction in stock numbers can be managed and should not be the criteria for decision making.

- ❑ Do a reasonably accurate work-out of the operating cash result for the year. If this is too hard, write down what has changed - i.e. lamb price down \$10, sold an extra 500 lambs, for example.
- ❑ Do a budget for the next financial year based on status quo, or get help from your accountant, bank manager or advisers to do this budget.
- ❑ Any provisional tax that has been paid can be refunded quickly if you file tax returns showing a reduced income, make an adverse event deposit and/or make a retrospective re-estimate.
- ❑ Note that the IRD allows “self assessed adverse events” for localised dry conditions, floods or severe incidences of stock disease.
- ❑ Talk to your accountant about making an Adverse Event Income Equalisation deposit. This allows you to sweep taxable income from selling extra stock (or not replacing traded stock) into the next financial year which is the year in which you would expect to make the loss after a drought.
- ❑ When you get your tax demand for the next tax year, have a good think about what your profit will look like as you can estimate at any point in the year, and re-estimate as things improve.
- ❑ It’s important to have a good grasp of what your true profits are. Tax is a secondary issue.
- ❑ Many of you with dependent children will become eligible for family assistance, and can apply for fortnightly payments if you produce an estimate of the “family income” for the tax year.



1.4 Buffering Businesses for the Future

These steps cannot be taken immediately, but are important facts to examine with advisers and partners during times of relatively less stress so you are prepared for the next challenge.



❑ **Financial buffer**

Aim to establish a financial buffer of 10-20% of Gross Farm Income (GFI), once debt servicing has come down below 20% of GFI. Remove this buffer from working capital into, for example, a term deposit - this forces better cash-flow management.

❑ **Structure of business**

Is the current structure of the farm business the most appropriate to minimise tax, maximise flexibility and be in a position to obtain available assistance for support of the farm family? Investigate options with trusted advisers.

❑ **Type of business**

Good business people recognise the separation between property investment, food and fibre production, and lifestyle, and weigh up the returns to each activity separately when making long-term strategic decisions on what business they should be in.

4 HUMAN FACTORS

- ❑ Gracious with People, Ruthless with money!!
- ❑ Motivation and Determination- keep interested, minimise losses, take advantage of good times, be positive
- ❑ Decision making – plan and act but remain flexible as the situation changes
- ❑ Spouse/partner should be closely involved in decision making
- ❑ Keep Talking – family, friends, neighbours, rural support people, anyone who will listen... A problem shared is a problem halved. Everyone has the same problems now!
- ❑ Seek Information – listen to advice then make up your own mind
- ❑ Work Smart and Hard- realise that planning, discipline and goal setting are just as important as hard work.

4.1 Warning Signs for farmers and family

- ❑ Less than total frankness with family and financiers
- ❑ Lack of job satisfaction
- ❑ Siege mentality – staying inside the gate
- ❑ Financial ratios to gross or net farm income becoming or continuing to be at unacceptable levels.



4.2 Warning signs to be recognised by outsiders

- ❑ Withdrawal and reluctance to plan medium to long term
- ❑ Low job satisfaction and absence of decision making
- ❑ Behavioural changes of children at school
- ❑ Siege mentality – staying inside the gate avoiding social contact
- ❑ Watch out for your friends and neighbours

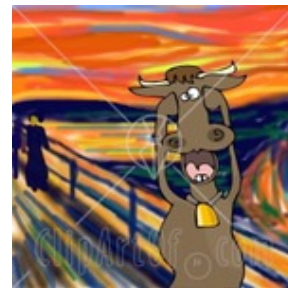


5 ANIMAL WELFARE

Animal welfare can become a serious issue under drought conditions with shortages of feed and water and the need to transport stock.

5.1 Five basic animal welfare requirements

- ❑ Freedom from thirst, hunger and malnutrition
- ❑ Provision of appropriate comfort and shelter
- ❑ The prevention or rapid diagnosis and treatment of injury, disease or infestation with parasites
- ❑ Freedom from distress
- ❑ Ability to display normal patterns of behaviour



5.2 Stock Movements

- ❑ Minimise stock movements on farm, don't leave stock in yards for extended periods.
- ❑ Transportation – only fit and healthy animals should be selected for travel – they must be able to bear weight on all limbs, check with your agent of receiver of stock to avoid animal welfare issues and potential bad publicity and penalties.
- ❑ Often stock are grazed in other regions during drought periods and then returned once the farm has recovered. This practice opens the farm up to disease and particularly serious diseases like Tb. Please be sure to check Tb status of farms where stock are grazed.

5.3 Disease

- ❑ Climatic extremes place livestock under considerable stress
- ❑ Animals become more vulnerable to the effects of disease

- ❑ An animal in poor condition performs poorly – becomes a liability instead of an asset.
- ❑ Animal health issues can arise when the drought breaks- FE, worm burdens.



5.4 Water

Lack of stock water can be the most serious issue for livestock in a drought.

- ❑ Sheep, cattle and deer must have access to good quality water to maintain body weight
- ❑ Cattle and Deer require access to water at all times
- ❑ Sheep should have access to water every 24 hours in hot weather

5.5 Feed

- ❑ **Is there enough feed for today**

Calculate daily feed demand and compare with the ration currently provided – weigh stock, increase feeding to maintenance levels if they are



losing weight

- ❑ **Is there enough feed for the month**

If the daily feed rations times 30 days, exceeds the reserves on hand – destock further or buy more feed,

- ❑ **Is there enough feed for the winter**

A feed budget is needed on a monthly basis to ensure that pasture cover is built up for lambing and calving. If there is a shortfall, solutions must be found

- ❑ **“What if”**

Run some what if scenarios eg. Rain March 1st ? Rain April 1st? Rain April 21st? Develop options for various scenarios

6 FINANCIAL IMPLICATIONS

There will be financial implications from the drought situation from loss of income and additional costs.



6.1 End of June Bank Balance

Calculate the end of June Bank Balance using costs of feed needed to be bought, stock needed to be sold as well as the other ongoing costs.

6.2 Budget for the Next Year

Do next years budget based on basic assumptions of prices and expected stock numbers. Run some what if scenarios. Allow for costs of restocking and look at all options for generating extra income. Discuss options with advisers and get assistance to complete these functions if they seem a pain in the #\$\$%!

6.3 Financial Arrangements

- ❑ With completed budgets and cash flows you will know what financial arrangements you are likely to need over the next 12-18 months
- ❑ Review the situation- are the medium and long term goals going to be met? Is the situation viable? A serious question but one that should be asked.
- ❑ Talk to your banker and secure agreement with the bank regarding the financing of the rest of this year and the next. The old American mid west saying “Keep skunks and bankers at a distance” only applies to skunks. !
- ❑ Get stuck in and do it!

7 SIX GUIDING PRINCIPLES

This list of six principles is derived from the experiences of past droughts and is a useful starting point for decision making.



- 7.1 It is usually more economic to sell stock than buy feed. This needs to be re considered if you are down to less than minimum adult capital stock numbers
- 7.2 Don't feed any animals that will not be in productive condition next spring eg low liveweight ewes
- 7.3 It is more important to maximise income after the drought than minimise costs during the drought – losing weight on cows and ewes now by under feeding will cost far more in lost production next season
- 7.4 It is vital do to some scenario analysis – consider the big “what ifs” Solutions need to be identified for these and implemented as necessary. Complementary to this is to keep reviewing the plans and considering alternative options.
- 7.5 Use the destocking of the drought as an opportunity to consider future stocking policies and structural options. Eg changing sheep breeds.
- 7.6 Monitor the condition of pastures and stock regularly. In particular knowing body weight of stock- weights are usually over estimated if not measured.



8 SUPPLEMENTARY FEEDING

Supplementary may be an option or become a necessity.

8.1 Supplementary Feeding Questions

- ❑ **What?**
Hay, baleage, silage, Palm Kernel Extract (PKE), meal, grazing off – what is available.

❑ **What is the cost?**

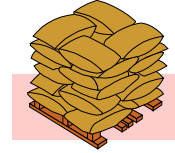
Costs should ideally be worked out on cents per megajoules of metabolisable energy or for a rule of thumb, cents per kilogram of dry matter.

❑ **Which stock to feed?**

Flushing ewes? Replacement stock? Capital stock?...

❑ **How much to feed?**

A whole ration is needed including estimates of intake from pasture to target weight gains or maintenance. Weighing of stock is necessary to ensure feeding levels achieve targets. What is the most cost effective option to achieve the desired goals?



8.2 Purchasing supplements

- ❑ There is variability in the feed value of conserved feeds. Meal and PKE have analysed energy/feed value
- ❑ Grazing off can be a cheaper option than buying supplements, IF it is available and is of a quality that will meet your goals in terms of liveweight gain or maintenance.

8.3 Feeding supplements

- ❑ Feeding supplements will involve a change in diet. They should be introduced slowly to livestock to enable the digestive system to adapt.
- ❑ Practical ways have been devised by farmers elsewhere to feed out supplements such as meal and PKE to maximise utilisation.
- ❑ Identify supplement specific issues- eg with PKE there must be adequate stock water available- seek advice



9 PASTURE MANAGEMENT IN DROUGHTS

Careful management of pastures during a drought period will speed their recovery after the drought breaks and may eliminate the need to regrass.

9.1 Pasture Agronomy

- ❑ While the drought is on the clover and ryegrass plants are in hibernation, root reserves are staying static as there is no growth.
- ❑ Grazing damage is mainly from hoof damage and, as the soils are so hard, there is little root damage.
- ❑ The critical point to understand about managing pastures through the dry is that they have their energy reserves above the ground.
- ❑ Look after the best pastures by: Leaving some cover on them - this does not mean rank growth, but 2-3cm length. Don't bare the pastures out if at all possible.

9.2 Management During The Drought

- ❑ Decrease feed demand through destocking.
- ❑ Look after good permanent pastures, leave 2-3 cm cover
- ❑ Sacrifice poor paddocks, or those due for renovation, and feed out supplements to stock on these.
- ❑ Monitor for pests – crickets are already showing signs of a damaging infestation.



9.3 Management After Rain

- ❑ After rain, don't restock recovering pastures too early. Allow time for pastures to build up cover and reserves before grazing them – this may be 4-6 weeks.
- ❑ Don't graze the new shoots. Wait until you have good ground cover.
- ❑ Feed supplements to allow pastures to recover.
- ❑ Rotational graze-don't set stock.
- ❑ From spelling paddocks, you can maximise grass growth



10 OTHER MANAGEMENT TOOLS

There are many other management tools available to mitigate the effects of a drought on farm businesses. Below are some examples with technical information attached.

10.1 Delaying mating

Delaying mating of ewes may be an option- there are advantages (ewes may be gaining weight) and disadvantages (later lambing and weaning). Prime consideration is whether or not a ewe will get in lamb.

10.2 Fertiliser Management

Lower pasture growth means fewer nutrients taken from the soil. Do not despair if there is not enough cash for fertiliser. The choice maybe between buying feed for livestock or fertiliser.

10.3 Early Weaning Calves

Calves can be successfully weaned above 120kg liveweight

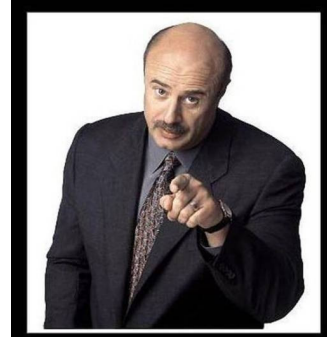
11 ROUND UP

Good judgment comes from experience, and a lotta that comes from bad judgment.

Some decisions you take may be wrong as it turns out (eg selling capital stock the week before it rains) but that decision was made on the information available at the time.

Above all, be realistic and if you feel you need help in any areas – there are people there to give it.

Don't hesitate you are entitled to it.



FOR ANY ENQUIRIES:

Agfirst: Bob Thomson: 0274 500 809; email: bob.thomsom@agfirst.co.nz

Gareth Baynham: 0274 420 556; email: gareth.baynham@agfirst.co.nz

Meat&Wool NZ, Northland:

Malcolm McCallum: 027 2315680, email: malcolm.mccallum@meatandwoolnz.com

(contact also to get on the M&W E-diary mailing list to get regular information.)

Rural Support Trust Northland

Helen Moodie, Co-ordinator: 021 354 605

Rural Support Trust Helpline: 0800 778 667

LINKS TO WEBSITES

<http://www.meatandwoolnz.com/main.cfm?id=392>

<http://www.maf.govt.nz/mafnet/rural-nz/emergency-management/droughts/drought-recovery-strategies/httoc.htm>

www.nrc.govt.nz/drought

http://www.enterprisenorthland.co.nz/dev_groups/pastoral/index.htm

