

ROGER DALRYMPLE

Farmer, Manawatu

Roger Dalrymple farms Waitatapia station, in partnership with his brother. It is a diverse 2500 hectare property on coastal Rangitikei soils. The farm involves forestry, cash cropping, lamb finishing, beef finishing, feed-lotting cattle and dairy heifer grazing. It also provides a Pre Export Isolation facility for dairy heifers going to China.

Roger also owns Agbits, a company developing and marketing the 'Flexifeeder' and 'Flexirigger', providing on-farm solutions for issues faced on a daily basis.

Understanding our feed and capturing its value

Every day farmers strive to make their business profitable and sustainable for the future, but are we capturing the full value of the feed we grow and sell? Roger will look at feed types and quality, and how this affects the bottom line. He'll also show true value on a dry matter basis, enabling maximum return from grass grown.

MONDAY 12 MAY

 **12.40pm** | Room 4

Farm solutions – thinking outside the square

Are you doing the same thing every year, getting the same result? We need to farm smarter and look for ways to improve profitability. Farms can be a lifestyle activity or run as a business - the choice is yours. Roger will look at solutions he's developed on farm, all resulting in improved profitability and helped reduce risk in the business. He'll cover supplementary feeding of animals and its profitability, lifting the lambing percentage, and methods to help reduce the risk in farming businesses.

MONDAY 12 MAY

 **3.20pm** | Room 5

Understanding our feed and capturing its value



What's for Dinner ?

- Every day I ask my wife - what are we having for dinner?
 - Immediately I will know if I will like it
 - If it is good for me
 - If I am going to put weight on or take it off.
 - We get this choice three times per day plus tip bits in between meals which are likely to be high quality.
- Feeding your stock is exactly the same

Do we think our animals are any different to ourselves?

- Will they ask what is for dinner - when they are shifted to a new paddock or Break ?
 - Will they like it ?
 - Am I going to put weight on or take it off ?
- Something to think about
- If you were an animal – would you eat all the good food first ?
 - Fencing, stocking rate, management
- Dairy farmers and tip bits

What I am going to talk about

- Who I am and what I do
- Look at what we feed our animals
- What our conserved feed is worth, based on Dry Matter and Metabolisable energy
- Calculating what our feed is worth when sold through animals
- Feed Budgeting
- Maths, Computers and XL

Who am I

- Farm a coastal sand country property in conjunction with my Brother, near Flockhouse – three properties totalling 2400Ha – 1000 ha irrigated
- Stock
 - We trade approximately 30,000 lambs
 - Graze 2000 Dairy heifers for Fonterra
 - Provide a Pre export Isolation facility for 4500 heifers going to China
 - Contract winter approximately 2000 steers for central north Island farming corporations
- Cropping
 - 150 ha of spring Barley
 - 500 ha of Maize grain
 - 50 ha Squash
 - 40 ha potatoes
 - 10 ha Onions
 - Fodder beet, Pasja, Plantain, and Rape
 - 400 ha of Forestry
- Agbits
 - Flexirigger
 - Flexifeeder

We are what we eat ?

- Our farm production will be based on how and what we feed our animals ?
- Average lambing 121 %
- Average lamb growth rate 120 grams per day
- What is the potential ?
- Hobby farmers, Dairy farming and Australians

Lifting our game

- Do you know the daily energy requirements of your stock
 - mega joules of metabolisable energy
- Do you know the quality of your feed ?
 - mega joules of metabolisable energy
- Feed budgeting
 - Do you do it
- Can you can answer yes to all three questions?

Digging deeper

- Are we feeding our animals the best diet ?
- TMR - total mixed ration
 - Full control
 - Quality - ME - Mega joules of Metabolisable energy
 - Protein in the diet
 - Starch in the diet
 - Roughage (NDF)
- Grass
 - Balanced diet but
 - Quality - ME – very difficult to maintain

Metabolisable Energy



What is it ?

- It is the amount of (Metabolisable) energy stored in 1 KG DM – that the body can use.
 - Highest value – 13 MJME/Kg DM
 - Lowest value – (wheat)straw – 6 MJME/Kg Dm
 - Clover, Ryegrass leaf, Ryegrass stem, dead material
 - Feed smart workshop
 - Tom Fraser - Agresearch
- How important is quality – ME
 - How fast does it pass through the rumen

ME Calculations

- How does our ME(quality) effect animal performance ?
 - two examples
- A 15 month Friesian heifer 330 Kgs requires;
- 83.6 MJ of ME to grow at .64 Kgs per day
- $83.6 \div 11.5 \text{ ME} = 7.3 \text{ Kgs DM@18\%DM- } 40.5 \text{ KG grass}$
- $83.6 \div 9 \text{ ME} = 9.3 \text{ Kgs DM - @18\% DM – } 51.6 \text{ Kg grass}$
- 22% difference

ME calculations

- A 65 kilo ewe with twin lambs requires 35MJ ME
- $35 \div 11.5 = 3.04$ Kg DM - @18%DM-16.8 Kg grass
- $35 \div 9 = 3.8$ Kg DM - @18% DM – 21 KG grass
- 20% difference
- What does this mean?
- Can they physically eat enough grass ?
 - Quality is number 1
 - \$1.17 per kg DM return

Filling a feed Deficit

- Plan and feed budget
 - Don't get caught when everyone else gets caught – expensive feed gets more expensive
- Know the value and quality of supplements
 - Home grown is always cheapest
 - Conserved feed is expensive
 - Waste
- Up skill yourself on
 - Dry matter - DM
 - Metabolisable energy - ME
 - Protein
 - Starch
 - Roughage
 - Neutral Digestible Fibre NDF
 - Feed tests
- Animal feed Demand
 - Learn it – understand it – eat think and drink it - its your business
- Crops - Need to be well planned – cheap quality DM
 - Fodder beet
 - Swedes and kale
 - Winter Oats

Feed value based on DM

- 350 Kg Hay bale – 85% DM = 297KgsDm
 - \$78 current market in paddock plus \$15 cartage
 - $\$93 \div 297 = 31\text{cents per KgDM}$
- 650 Kg Baledge bale – 35% DM = 227 Kgs DM
 - \$80 current market in Paddock plus \$15 cartage
 - $\$95 \div 227 = 42\text{ cents per Kg DM}$
- Pit silage – 27 cents per Kg DM – in the stack
- Maize silage – 34 cents per Kg DM – in the stack
- Maize grain – \$450 per tonne – 86% Dm – 52 cents per Kg DM – on farm
- Palm kernel - \$360 per tonne – 90% Dm – 40 cents per Kg DM – on farm

Lets add the energy factor ME

- 350 Kg Hay bale – 85% DM = 297KgsDm
 - $83.6 \div 8\text{Me} = 10.45 \text{ Kgs} \times 31\text{¢ per kg Dm} = \underline{\$3.23}$
- 650 Kg Baledge bale – 35% DM = 227 Kgs DM
 - $83.6 \div 10.5\text{Me} = 7.9 \text{ Kgs} \times 42\text{¢ per kg Dm} = \underline{\$3.32}$
- Pit silage – 27 cents per Kg DM
 - $83.6 \div 11.5\text{Me} = 7.3\text{KgDm} \times 27\text{¢ per Kg Dm} = \underline{\$1.97}$
- Maize silage – 34 cents per Kg DM
 - $83.6 \div 12.5\text{Me} = 6.7\text{KgDm} \times 34\text{¢ per Kg Dm} = \underline{\$2.27}$
- Maize grain – \$420 per tonne – 86% Dm – 52 cents per Kg DM
 - $83.6 \div 13.5\text{Me} = 6.2 \text{ KgDm} \times 52\text{¢ per kg Dm} = \underline{\$3.2}$
- Palm kernel - \$325 per tonne – 90% Dm – 40 cents per Kg DM
 - $83.6 \div 11\text{Me} = 7.6 \text{ Kg Dm} \times 40\text{¢ per Kg Dm} = \underline{\$3.4}$

What does this all mean ?

- When purchasing feed use the ME value x percentage of Dry Matter
 - Do not buy expensive rubbish

Valuing our feed when sold through animals

- How do we do it ?
 - Set a period of time - purchase to sale, 1 year
 - Establish what the average weight is for the animal over the time period
 - Find out what the feed demand is based on the weight and performance required
 - How accurate do I have to be ?
 - I use my feed budget demand – not actuals
 - Be consistent when comparing different stock class

Why do the numbers

- It identifies your key business driver – where you really make your money
- Remember – it is the grass (Dm) you grow that you sell through your animals
- Why would you farm an animal that returns lower than another stock class ?
 - Dairy farmers are selling their grass through their cows for between 37-40cents per Kg Dm – nett return, depending on their cost structure

Feed budgeting – Why do it ?

- Farm mission statement / Farm Goal
- We aim to grow as much Grass (DM) as possible and harvest it to sell for as much money as possible.
 - If you can do that you will be a very successful farmer and have a profitable and sustainable business
- The only way to do this is to feed budget

Why do it

- Your aim is to match your animal demand with your feed supply
- On our farm
 - We have identified our key drivers
 - We aim to use as much of our feed as we can through our highest returning enterprise.
- Doing a feed budget allows you to plan
 - For feed deficits – buy when feed is cheap, plant a crop to carry feed forward.
 - Feed surpluses
 - Set critical dates and feed covers required for your farm money maker.

Computers and XL

- A lot of farmers tell you.....
- If you are not doing the numbers.....
- Train your self
 - Heaps of information
 - You tube
 - Beef and Lamb
 - Tom Fraser
- It is your business
 - up skill your self
 - Learn it – eat it think it and breath it.

That's Me

The end