

Sheep for Profit [®] Newsletter

March 2010



CONTENTS

We don't want you think we have become greenies but whether we like or not the future of our farm produced food is very dependent on a whole lot of fuzzies. The sooner we get going the better off we should be.

- **Where to from here – an update on our progress with the Farm Quality Group strategy**
- **The power of a brand- an example of the silver lining that has arisen from an unlikely event.**
- **Weight loss in sale lambs**
- **Some thoughts on soil carbon and other things.**

Farm Quality Group - Where to from here?

In the April 2009 newsletter we indicated our intentions for taking Sheep for Profit into the future. A fair bit of water has gone under the bridge since then. We have learnt heaps, with the main one being that it will not be easy to develop our own brand of lamb unless we can define what our product really is.

That means we have to come up with something that shows the consumers why they should purchase our lamb.

Alec Jack is a beef farmer in the far north of New Zealand who spent 5 months overseas on a Nuffield scholarship studying animal welfare and environmental issues affecting the value of our pastoral products. Here are some of his thoughts.

"Foreign consumers want evidence their animal welfare, environmental and social expectations have been met from pasture to plate. Producers unable to provide such evidence run the risk of being denied access to these lucrative markets."

"Consumers want authentic products with honest labeling; backed up by trusted assurance schemes that have integrity to their auditing process (we can't mark our own homework).

Animal welfare is a component of added value. While it may not appear to provide a premium, the great value of affluent markets is often not acknowledged.

Farm assurance audits will increasingly become a core part of modern farming, as it is overseas, as

Young Rangī bought a donkey from a farmer for \$100. The farmer agreed to deliver the donkey the next day. The next day he drove up and said, "Sorry son, but I have some bad news. The donkey's died." Rangī replied, "Well then just give me my money back." The farmer said, "Can't do that. I've already spent it." Rangī said, "OK, then, just bring me the dead donkey." The farmer asked, "What are you going to do with him?" Rangī said, "I'm going to raffle him off." The farmer said, "You can't raffle a dead donkey!" Rangī said, "Sure I can. Watch me. I just won't tell anybody he's dead." A month later, the farmer met up with Rangī and asked, "What happened with that dead donkey?" Rangī said, "I raffled him off. I sold 500 tickets at two dollars a piece and made a profit of \$998." The farmer said, "Didn't anyone complain?" Rangī said, "Just the guy who won. So I gave him his two dollars back." Rangī now works for an unnamed organisation purchasing lambs from farmers.

consumers demand evidence that their animal welfare expectations are being met.”

Another article in the same journal is written by a Welsh Nuffield scholar who came to NZ to have a look at our sheep welfare. Overall he seemed impressed but:

“I was left with some concerns about the evidence available to support the claims made by NZ officials and farmers in relations to on-farm welfare surveillance and enforcement.”

And a third article written by an Animal Welfare Scientist about lamb consumption in the US:

“Recent survey results suggest many Americans actively avoid eating lamb and they identify “animal welfare concerns” as part of the reason.”

The author believed this was associated with *“what people know, or think they know, is that lamb is made out of lambs – and lambs are baby sheep. You know- those unweaned, bouncing, fleecy, big-eyed creatures of nursery rhymes and bassinet decorations. And eating baby animals seems, well, a bit cruel.”*

These have become key components of our intended strategy based around taking our current Sheep for Profit to a higher level where it will provide the trust and integrity to demonstrate to those consumers who want it that our lamb is produced under some of the highest levels of animal welfare in the world and we can demonstrate that (through the internet) by showing our monitoring information.

And we need to somehow educate those Americans (and presumably others) that our lamb is not a “baby” but an adolescent that has been raised on a family farm by farmers who believe that *“what is best for the animal is also best for both your family and the farmer. It’s that simple”*.

Well it won’t be that simple, but we have been working with an agency to help us develop a brand strategy.

It’s exciting stuff but definitely a challenge to see if we can position a group of farmers who want to have input and some control over their special product and to be able to develop a strong relationship with the people who purchase that product.

The power of a brand.

To have success in marketing a food product in any competitive environment takes vision, innovation, investment of time and money to develop a consumer facing brand or quality mark brand, and build a consumer facing quality assurance programme into the infrastructure behind the production of the product.

Return on the effort to achieve the vision may take a very long time.

But the rewards do come and a neat case example is New Zealand King Salmon who are reaping the rewards for their vision, their brand and the story behind that brand - all because of the unlikely event of a volcanic eruption in Iceland.

New Zealand King Salmon Co Ltd has, within a couple of days, doubled its harvest to 10,000 extra fish and put on an extra processing shift to ensure they meet the demand- orders for salmon have gone through the roof since flight restrictions in Europe were put in place.

They produce around 7300mt of fish /year, very small compared to the total world production of 2 million tonnes. The NZ market takes 50% of the annual production, and they have customers in Australia, Japan, Nth America, South East Asia and the Pacific. The Asian customers have upped their orders substantially because they are unable to source fish from northern hemisphere suppliers affected by the flight restrictions in Europe.

They have 3 leading retail, food service and trade brands: Regal, Seasmoke and Southern Ocean. They monitor and protect the disease free purity of the waters in which they rear the salmon. This ensures they can deliver an absolutely safe, tasty nutritious product with a guarantee of quality and reliability demonstrated by traceability. This is great news in terms of sales but the biggest opportunity is that many more diners in those markets can now experience King salmon as opposed to the more common Atlantic salmon.

Not only is product being supplied, but the company has a plan to ensure that the customers and the diners note the fact the fish is from New Zealand and

also point out to them the superior taste, vibrant colour, firm texture and naturally high omega 3 content of New Zealand King salmon.

You can read their “story” on their website www.kingsalmon.co.nz.

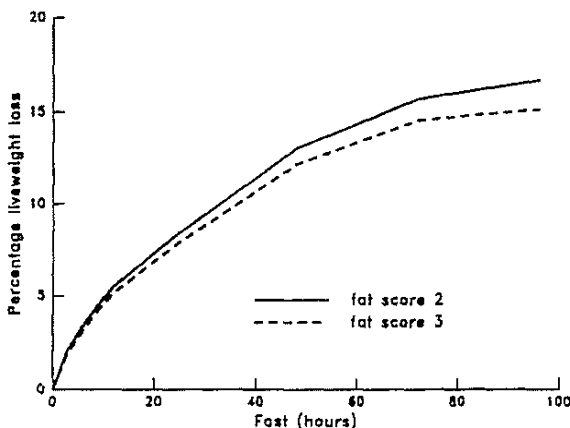
- These guys will “cream” it with this opportunity. This is a similar philosophy we have with our Sheep for Profit farmers- to have your systems in place to achieve a consistent performance and “cream” it in the good times and minimize the battering you take in the bad times.
- A neat “story” and a sound brand presence, albeit with small market share, will lead to more opportunity and more market share. This is the payback for the time and effort to make the vision a reality.

Such is the vision we have- to produce “the most carefully raised lamb in the world” with Farm Quality Group.

Weight loss in sale lambs

Several studies looking at the weight changes in lambs that have been off food and transported have shown very similar results. This is a summary of a study by Thompson et al (1987). The effect of fasting on live weight and carcass characteristics in lambs. Meat Science 20:293-309.

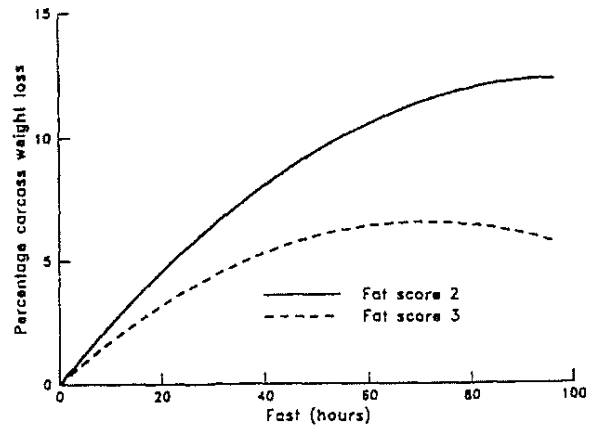
% Live weight loss in lambs off feed but access to water



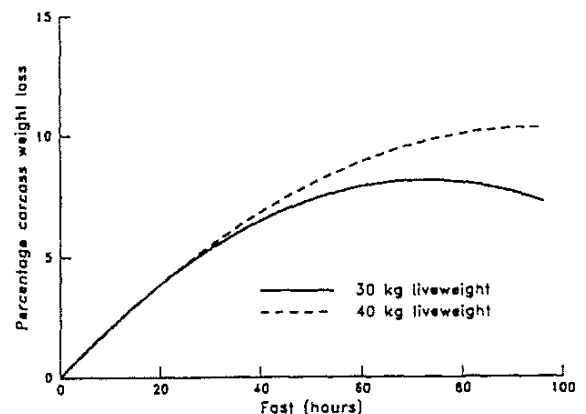
The major component of live weight loss is associated with gut fill. The more in the gut - the faster the weight loss. The rate of liveweight loss (expressed as

a percentage of initial liveweight) was greater in the initial stages of the fast and was greater in the leaner lambs.

% Carcass weight loss in lambs off feed but access to water



The difference between lean and fat lambs starts straight away, and gets bigger over time.



No difference up to about 30 hours but after that heavier lambs lose carcass weight more quickly

Transport

Transported lambs lost live weight at 0.196%/hour compared to 0.96% in lambs that were off food but had access to water. If the transported lambs have access to water after transport they can quickly regain most of the added live weight loss.

Transport for 6 hours did not have any impact on hot carcass weight, or carcass characteristics, compared with lambs which had been fasted for a similar period of time.

Soil carbon

There seems to be a fair bit of interest in soil carbon as a possible saviour to whatever the ETS is going to throw at us.

A paper at the recent Grasslands Conference highlights that this issue is just another of the many confused issues that surround the greenhouse gas (GHG) emissions debate.

The problem for NZ is that most of the GHG's come from agriculture and very little is known about how we can measure them and carbon.

If soil carbon does become an off-set to GHG emissions it is likely that it will be based on being able to show that it has been increasing since 1990. Only problem is no-one knows what it was in 1990 and it is very complex to measure!

The drivers of soil carbon changes are not well understood, but it is thought that grazing management, fertiliser and pasture species may be implicated. NZ tends to already have soil carbon levels higher than many other countries which may make out position a major liability if we need to demonstrate an increase.

Our main GHG emissions are methane from our ruminants and nitrous oxide from our soil. These emissions are being off-set to some degree by trees planted since 1990 on land that did not already have trees. At the moment it would appear farmers have three options – decrease stock numbers, plant more trees or a combination of both.

A recent re-analysis of national soil carbon level data shows it has been changing – going down on dairy pastures and up on sheep and beef hill country. But neither the drivers nor the time-frames for these changes are known.

For those who think the pasture above the ground is our saviour – research suggests root material is more effective than leaf litter. Root litter tends to stay in the soil compared with most of the leaf litter moving into the atmosphere as carbon dioxide.

The flow of carbon through grazed pasture is huge. Photosynthesis converts carbon dioxide in the atmosphere into carbohydrates in the plant. But

nearly ½ of the carbon taken up by the plants ends back in the atmosphere again as carbon dioxide. And ½ of what stays in the plant dies in unharvested plant material and this is what gets back into the soil. So about ¼ of the total carbon flow ends up in the animals and about 70% of that is released back into the atmosphere as carbon dioxide.

It is thought that leaf area is a key factor – more leaf = more carbon in the soil. Hence, increased stocking rates should decrease carbon flow into the soil.

Factors that increase plant growth (e.g. fertiliser, higher residuals) should increase soil carbon. Generally we plan to grow more grass so it can be eaten and turned into meat and wool.

In the short term, there is very little we can do at the farm level apart from replacing stock with trees.

We may have something in place that with a bit more innovation we could turn into a marketing tool. The alternative to reducing GHG emissions is to show we are using less per unit output. The GHG emissions are basically a function of how much pasture is eaten.

Taking a 28kg lamb to 37kg at 75g/day will use 184kgDM of low quality pasture compared to only 80kgDM of very good pasture for a lamb doing 200g/day.

There isn't such a large opportunity in the ewe flock. At the same weaning weight of 30kg lifting the lambing performance by 20% would reduce the pasture eaten per kg lamb sold at weaning by about 1kgDM/ewe.

Sheep for Profit farmers can easily demonstrate this data on an annual basis.

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