

## **How is New Zealand Changing its Lamb Production Systems to Meet its Changing Markets? – Marc Jones**

Sheep farming and general livestock farming in Wales has suffered over the last few years and sheep numbers are declining. In comparison, New Zealand farmers have evolved from the removal of subsidies and are the leading exporters of lamb worldwide. Therefore New Zealand seemed the ideal place to research in order to identify the lamb production systems that have led and are continuing to lead to the success of New Zealand farmers.

A variety of farms were visited across both the North and South islands of New Zealand as well as three of the abattoirs in the country in order to assess the production systems used by New Zealand farmers.

New Zealand farmers have made massive changes to their farming techniques over the last decade in order to increase productivity. These changes have included developing new breeds that meet market requirements, increasing abattoir efficiency, enhancing sheep genotype and maintaining a grass and forage based system.

More and more New Zealand farmers are heading down the composite sheep route. This has enabled breeding for hardiness, longevity and ease of care, as well as breeding for the meat yield and conformation required by the abattoirs.

Abattoirs have increased their use of technology in the processing sector. This has included the use of robotics to increase efficiency, the switch from a human grading system to a computer based meat yielding system to allow more transparency from abattoir to abattoir, and the diversification of lines including increased weight ranges, the use of new markets, and working with chefs to produce meals using high value lamb.

Farmers have increased their use of performance recording in order to enhance sheep genotype. This has included the use of CT scanning to develop higher meat yields and higher premiums at abattoirs, and faecal egg counts along side tolerance EBV scores to reduce worm burdens. This has led to breeding for growth rates to finish lambs quicker off grass and reduce concentrate use, as well as breeding from ewes with good mothering ability and survivability, to enable sheep to produce two lambs each.

Maintaining a grass and forage based system has allowed farmers to reduce costs and labour. The use of winter forage crops to out winter breeding ewes has reduced labour and silage costs. Lambing later to allow ewes to lamb outside on good quality pasture has removed the need for concentrates. The use of good quality finishing pasture including grass/clover leys, chicory or red clover has enabled higher lamb growth rates, and the larger reliance on white clover in swards to produce nitrogen has reduced the need for artificial inputs.

These relatively simple and certainly achievable changes in production systems have led to a New Zealand industry that can survive without farm subsidies. Due to the similar climatic conditions seen in New Zealand and Wales, it is likely that the adoption of all or at least some of these production systems in Wales could enhance productivity in the same way that it has in New Zealand.

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## **Background to Scholarship Application.**

In the initial stages of application for the Hybu Cig Cymru scholarship, sheep farming and general livestock farming in Wales was declining and the future outlook was looking quite poor. It was felt that the scholarship would allow a fresh look at the sheep industry from a different perspective and a different country to see how they were dealing with similar problems. This would then allow new ideas to be generated or even different ways of thinking to be identified with the hope that these suggestions could be implemented and increase efficiencies and profitability on farms in Wales.

New Zealand appeared the ideal place to visit because they are the leading exporters of sheep meat in the world, with over 90% of their sheep meat going overseas, accounting for 38% of global supply. Of this 44% is exported into the European Union each year. They have also been farming without subsidies since the mid 1980's and this has led to them becoming very efficient and productive.

Looking at New Zealand's changing lamb production systems allowed focus to be made on the different farm systems around the country and how they went about producing and finishing their lambs. It also allowed the end product in the abattoir and what the supermarkets in the U.K. were importing from New Zealand to be considered. It was interesting to research what other markets New Zealand were targeting and what cuts they were exporting to the different global markets.



## **1. Sheep Breeds**

Traditionally the Romney has been the mainstay of the New Zealand sheep industry, with the Coopworth, Corriedale, Perendale and Merino making up the majority of the remaining sheep breeds.

In recent years there has been a change in the breeds of sheep kept on farms and more and more New Zealand farmers are heading down the composite sheep route. There has also been a much greater use of terminal sires such as the Suffolk, Texel and Suftex. Figure 1.1 shows more traditional 35kg lambs which are ready to be sent to the abattoir Canterbury Meat Packers. The dam is a Merino x Border Leicester and the terminal sire is a Polled Dorset.



Figure 1.1 Lambs Drafted for Slaughter

### **Reasons Behind the Change of Breed:**

Abattoirs traditionally graded lamb on weight and fat content across the rib alone, this led to the more traditional breeds being kept on to produce lambs for this market as conformation and meat yield was not an issue. The Alliance Group who process around 27% of New Zealand's lamb, started to base payments on a meat yield grading system from 2000. Farmers could then achieve a premium of \$8.00 a lamb if they hit the specification. As a consequence, the meatier breeds such as the composites started to appear and become more prominent. It is expected that Silver Fern Farms another big processor may go down this route in the next few years and the rate of increase of the composites could increase further.



Another aspect not mentioned is the value of wool. New Zealand still receives a much higher premium for their wool than the U.K. does. This has enabled them to keep more traditional breeds at the expense of meat yield. However in recent years the wool prices have been dropping and this has led to an increase of crossbred and composite sheep which give a poorer wool yield.

Figure 1.2 shows TEFRom composite ewes and lambs at grass. These are 50% Romney, 25% East Friesian and 25% Texel, and are now being bred as a pure breed.



Figure 1.2 TEFRom Composite ewes

### Summary

Sheep breeds in New Zealand have primarily been based on stability and easycare characteristics, but they have also been bred to target the markets the abattoirs want to hit. The Romney and Romney crosses of the North Island and north of the South Island have been produced just to hit weight grades and fat grades at the abattoirs. Therefore the lambs produced have not had the conformation expected of U.K finished lambs. These sheep have also got the benefit of producing higher quality wool which makes up for the premiums lost from conformation.

The composite has arisen through the need to produce meat yielding lambs, but has also combined the good characteristics of several breeds. The TEFRom was developed after visits to the U.K. by New Zealand farmers. They found the stratified system worked very well but they also felt it had the flaw of producing male lambs that are of poor conformation which are not required by the industry. By breeding the Welsh Mule you are left with the waste product of the male Welsh Mule which receives a reduced price at slaughter. By initially producing the composite this problem was overcome as the TEFRom produces ewe lambs for breeding and well muscled male lambs for slaughter. The TEFRom also has the benefits of having the best genes from three different breeds, with 200% scanning and milking ability coming from the East Friesian, muscling and parasite resistance from the Texel, and stability and strong constitution coming from the Romney.

## 2. Abattoirs

During the six weeks spent in New Zealand three abattoirs were visited. These were Canterbury Meat Packers, Silver Fern Farms and the Alliance Group. Picture 2.1 shows the locations of plants visited. Silver Fern Farms and Alliance Group are two very big abattoirs which slaughter two third's of New Zealand's lamb between them. Canterbury Meat Packers is much smaller in comparison. Alliance Group is located in the south of the south island with Silver Fern Farms covering all of the North Island and the northern half of the South Island, while Canterbury Meat Packers have locations across both islands.

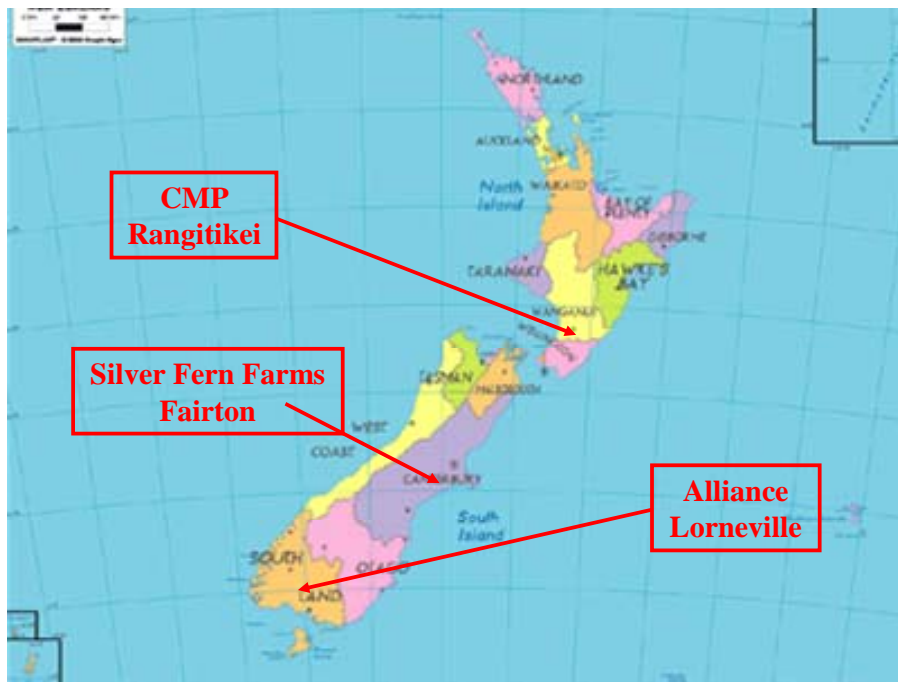


Figure 2.1 Map of New Zealand & Abattoir Location

### Canterbury Meat Packers – (Shane Gurkin, Procurement Manager Lamb)

Canterbury Meat Packers (CMP) is a small abattoir, which allows them to supply lambs 12 months a year. They were able to take advantage of the earlier lambs in drier areas and the later lambs in the upland country, which are sold as store lambs and finished by specialist finishing farms. This allows them to process 30,000 lambs a week, which are all exported to the U.K. to Tesco and Waitrose. Processing lamb for 12 months of the year allows the abattoir to be very efficient. This is a real benefit as some of the bigger abattoirs have to shut down for six months of the year due to them only receiving lambs during the grass growing season. CMP look for farmers to produce 18kg carcasses, with the majority of lambs being a Romney crossed with a terminal sire. The lambs are classified on a weight and fat basis only; therefore the lambs are not as blocky as those seen in the U.K. and breeds tended to be Romney's crossed with terminal sires.

### Silver Fern Farms – (Rupert Curd, Farmer Director)

Silver Fern Farms is a huge farmer owned co-operative which is responsible for processing around 8.5 million lambs per year, they have 24 sites which are located across both islands. Their biggest problem is the sheer size of the company. Since New Zealand lamb is based purely on a grass and forage based system the abattoir can only run for a 6 month season as lamb supply runs out when grazing is poor. This has the knock on effect of having to lay staff off for six months of the year and has led to huge efficiency problems. Therefore the company has been looking into extending the season to nine months to allow greater efficiencies. The main way of doing this has been to increase the weights of lamb supplied to the company. Therefore they have opened a higher weight specification where farmers can sell lamb at 19-23 kg as well as the current 17-19 kg's. This has allowed them to gradually extend the season.

The increased weight of carcass has also allowed the firm to use and develop robotic cutting machines to process the larger legs of lamb. Figure 2.2 shows a robotic arm de-boning a leg of lamb. Again it is hoped this will reduce costs, but also allow the processed product to be sent chilled to the U.K. and used in ready cooked meals. This allows a greater return on the cuts compared to the lower end product of frozen joints.



Figure 2.2 Robotic Arm De-boning

Alliance Group – (Murray Behrent, Group Livestock Manager)

Alliance Group is again a huge farmer owned co-operative and processes around 7 million lambs annually. The majority of which are exported as they control 15% of the global sheep meat trade.

Alliance again has the similar problem of a six month processing season, but they have looked to increase efficiencies by having fewer abattoirs and processing facilities. They currently have 9 processing plants which are mainly based on the South Island, compared to Silver Fern Farms 24.

Alliance is currently the only abattoir which bases its prices to farmers on a meat yield grading system. This could be clearly seen on the farms in Southland where the majority of flocks had a Texel and Suffolk influence which have a higher meat yield. The company is aiming for farmers to produce a killing out percentage above 50%. This then allows the company to become more efficient as they can retrieve more meat off each carcass. Farmers who hit the yield grading spec were receiving a \$5.25 bonus with farmers who were hitting the top grades receiving a further \$3.00. At the time farmers were receiving \$85.00 a lamb (£34). Figure 2.3 shows one of the meat yield scanners at Alliance Group.

Alliance is also looking to grow the Chinese and Asian markets, as they felt that this would be a huge market in the future. Currently low value cuts were being sent to China and the profit margins were not very high. Therefore they had started to employ chefs to go over to China's top restaurants and show them how to cook the high value cuts of lamb. They could see that in the next 10 years they could grow the market hugely, cutting down their reliance on the E.U. export trade.



Figure 2.3 Meat Yield Scanner/Computer



## Summary

The abattoirs highlighted the importance of bringing technology into the processing sector. Alliance's meat yielding system was based on a computer scanning the carcass. This allowed results to be fed directly back to the farmer and allow the farmer to breed for the specific traits required based on yield of meat. Silver Fern Farms introduction of robotics also had great benefits to the industry. If these robotics could be fully developed they would have the potential to increase efficiency and reduce labour costs considerably.

Alliance are looking to develop new markets in China. They are looking to send chefs over to China to teach restaurants how to cook the higher value cuts. They are staking a lot on China and feel that in a few years it will develop into a huge market.

The marketing for all three abattoirs highlighted how important it is to develop different markets. Canterbury meat packers are able to tap into specific markets with suppliers in the U.K. as they are able to process lamb for 12 months of the year. This gives them a huge advantage over Alliance and Silver Fern Farms. However Silver Fern Farms are looking to increase carcass sizes to allow them to process the leg joints and use them as a chilled meat to go into ready made meals. This allows them to add value considerably as frozen leg joints are a lower value product.

## **3. Genetics**

Genetics have been extensively used to help increase the genetic gains of New Zealand's flock. The majority of this has been done using the SilAce system which is the equivalent of Signet in the U.K. The main emphasis has been on four key areas;

- Survivability and Mothering ability
- Growth Rates
- Meat Yield
- Faecal Egg Counts

These traits are used in two main indexes the Terminal sire index and the Dual purpose index for replacement ewes.

The key issue in New Zealand has been about producing easy care breeding ewes which are able to lamb outside unaided and produce two lambs. This has been achieved by culling out breeding ewes which have had assistance at lambing. As a consequence the New Zealand Suffolk and Texel have smaller shoulders to enable easier lambing. Unless performance recording is taking place it is quite normal for New Zealand shepherds to check sheep only once a day at lambing.

Growth rates have been another key aspect for the New Zealand farmer. Sheep have been bred to excel on forage based diets. They have chosen compact efficient graziers which are able to grow quickly on grass. The quicker shepherds are able to fatten lambs, the more grass there is available for breeding ewes later in the year. Breeding values are taken from 8 and 21 week weights which have allowed for rams with higher growth rates to be selected for breeding. Mount Linton station has seen average weaning weights increase by 1.5kg since they started performance recording growth rates.

Meat yield has become more prominent in recent years in New Zealand due to the introduction of payment on meat yield by abattoir Alliance Group. Many stud breeders in New Zealand have been able to assess rams for meat yield by using a CT scanner. Many farmers, since using this technology, have seen meat yield increase from 45% to over 50% and this has enabled an extra \$5.00 premium per lamb to be created.

New Zealand farmers have also been able to develop on the easy care principle by using rams which produce lower faecal egg counts. Shepherds at the Mount Linton Station have been able to do this by taking faeces samples to identify lambs with lower egg counts but they have also looked to 'dag score' the lambs for the amount of faeces left on the lamb fleece from scouring. This has also allowed them to link families genetically for tolerance to internal parasites. The station now worms their stud lambs once compared to the four times they worm their commercial flock.

These key issues linked together with other breeding tools such as gene markers for foot rot has enabled the New Zealand farmer to reduce their workload and inevitably increase their sheep numbers and production levels. A single shepherd in New Zealand is able to look after 2,000 ewes comfortably. With family farms with one or two workers keeping up to 10,000 breeding sheep.

### Summary

Genetics and performance recording is a huge tool which the Welsh farmer is not fully utilising. Essentially the principle of easy care sheep production could be incorporated into the Welsh flock by using some of the points mentioned above. This would allow the Welsh industry to become a lot more efficient when combined with growth rates. Although easy care is often mentioned in the farming press, so is low input, low output. This is not the case with New Zealand as many farmers are selling over 1.5 lambs per ewe and lambing outside. Stocking rates are also often higher than our own, and this is one of the major contributors to profitable sheep farming.

The importance of meat yield and CT scanning can also clearly be seen. For producers who are selling the majority of their lambs through abattoirs clear premiums can be sought. Essentially this allows farmers to hit the desired markets if abattoirs are willing to base prices on meat yield.

Figure 3.1 shows Robin and Grant Cambell's TEFRom ewes. The TEFRom breed is a composite of Texel, East Fresian and Romney; it has three Rams in the top 20 dual purpose index for New Zealand.



Figure 3.1 TEFRom Ewes

#### **4. Grass and Forage Based Systems**

New Zealand's beef and sheep farms have been renowned for their grass and forage based systems for many years. Their ability to produce and finish large numbers of livestock efficiently from these systems is second to none. One of the most interesting systems incorporated throughout much of the South Island is the use of swedes to winter in-lamb ewes on. The system involves the sheep being wintered for 2½ months pre-lambing on the swedes before being moved onto high quality grazing 3-4 weeks pre-lambing. The system does not use concentrates at all and also reduces the work load as sheep are lambed outside. The system allows a higher stocking rate in the winter months without the need of housing; it also removes the need to feed concentrates to in-lamb ewes. Appendix 1 shows a brief case study showing the potential use of swedes in Wales.

White clover and grass swards are the mainstay of the New Zealand sheep production system. Farmers use very little nitrogen and are reliant on the white clover to provide nitrogen for the grass swards. Swards often contained 50% clover as shown in Figure 4.1.





Figure 4.1 Ryegrass/white Clover Sward

Farmers in New Zealand finish their lambs in a number of different ways. In Southland, where the climate is similar to that of Wales, farmers were happy to finish lambs on grass/clover leys, and live weight gains could be as high as 300 grams a day. Figure 4.2 shows a clover sward where 30-35kg lambs have just been turned onto for finishing.



Figure 4.2 – Clover Sward (Ben & Donna Todhunter, Cleardale).

In other places, where the climate is a lot drier, farmers are more inclined to use forage crops such as Chicory and Lucerne. This is mainly to do with their longer tap roots and ability to deal better with drought conditions. Although the crops have to be replaced every few years and lambs had to initially adapt to the diets, benefits are achieved from growth rates of up to 400 grams a day. The key message is that by achieving higher growth rates, lambs are on farm for less time, therefore eating less valuable fodder which the sheep could be utilising. Figure 4.3 shows Romney lambs grazing chicory for finishing at Holmes and Michael Warren's farm in Featherston, North Island.



Figure 4.3 Lambs Grazing Chicory

### Summary

Grass/clover leys and forage crops are a key way of reducing costs. The New Zealander's are a prime example of showing what can be done without the use of concentrates. If Welsh farmers can adopt some of the ideas the following may be possible:

- No housing costs and associated feed and bedding costs.
- Less labour input due to outside lambing and grazing of fodder crops.
- Greater lamb growth rates, therefore reducing the time lambs are kept on farm and allowing more fodder for other stock.
- Less fertiliser use due to highly productive grass/clover leys.



## **Conclusion**

Sheep farming in Wales has suffered over the last few years and overall sheep numbers are declining. New Zealand is the world leader in lamb production and exportation; they have developed lamb production systems that are both effective and labour saving. The climate in New Zealand, in particular on the South island, is similar to that of Wales, therefore it may be possible to implement some of these production systems in Wales in order to increase productivity and in turn sheep numbers.

New Zealand farmers have made several key changes to their farming techniques over the last decade, these have included developing new breeds to meet market requirements, increasing the efficiency of abattoirs, enhancing sheep genotype and maintaining a grass and forage based production system.

New Zealand farmers have moved towards breeding composite ewes that produce well muscled lambs that are ideal for slaughter. In addition to this composite ewes have 200% scanning and high milk yield that comes from the East Friesian input, parasite resistance and conformation that comes from the Texel input and the strength and stability of the Romney.

Abattoirs in New Zealand have increased their use of technology in the slaughter process. Alliance's meat yielding system is based on computer scanning of carcasses to assess suitability for slaughter. Silver Fern farms are using robotic cutting machines to process larger cuts of meat in order to reduce labour costs and time. Canterbury Meat Packers are slaughtering lambs 12 months of the year instead of the usual six, through using early lambs from drier areas and later lambs from upland country. These changes have led to the development of new markets and vastly increased the diversity of lamb available for export.

Farmers in New Zealand have used breeding practices to enhance sheep genotype, this has led to the production of sheep with good survival and mothering abilities, excellent growth rates, high meat yields and low faecal egg counts. This easy care system means that farmers can lamb outside, reduce workloads and increase productivity.

Farmers have also looked at their forage and grass system and considered different finishing crops in order to maximise growth rates of lambs. In the South Island, where the climate is similar to that of Wales, farmers use swedes to winter the in-lamb ewes and then put them onto high quality swards three weeks prior to lambing. This means that there is no need for winter housing, or concentrate feeds so both cost and labour is reduced. Farmers then finish their lambs on grass/clover leys or use chicory and lucerne in drier areas. These are highly productive leys which require no concentrate use for finishing lambs and very little fertiliser use, therefore labour and costs are reduced.

New Zealand farmers have really developed their farming techniques over the last 25 years and they are now using highly efficient systems that have reduced cost, reduced labour and increased productivity which has enabled them to have a surplus of stock that is exported worldwide. If Welsh farmers were to implement some of these systems there is the potential to massively improve the productivity of farming in Wales.

## **Swedes Case study**

Out wintering on swedes & lambing outside

v

In wintering on silage & lambing inside.

Swedes are a high energy, high yielding winter forage crop which are used throughout New Zealand to keep in lamb ewes in mid-late pregnancy. They allow the farm to maintain a higher stocking level during the winter period than would be expected if sheep were kept on grass through the winter months. Table 1 below shows the yield and feed data of a potential swede crop.

**Table 1 - Yield & Feed Data**

Average Dry Matter Yield	7 t/ha
Average Fresh Yield	70-80 t/ha
Dry Matter	9-13%
Crude Protein	10-11%
D Value	82 D
Metabolisable Energy	12.8 - 13.1 MJ/kg DM

Swedes are used in New Zealand to keep the in lamb ewes on for approximately 2½ months. In Wales that would mean putting sheep on the crop from the start of January to Mid March. The high energy crop would keep the sheep in good condition. Sheep would then be moved off the swedes around 3½ weeks pre-lambing and put on good quality spring grass at 3½ sheep to the acre. They would be looking for at least 1,500 kg of dry matter per ha (around 6 cm cover). The potential costs of swedes are shown below in Table 2. Although they show a high cost per acre, 20 acres can keep 1,300 sheep for 2½ months. While around 60 acres of second cut silage would be needed to keep the sheep during a housed winter using the current home farming system. This would also allow a further 40 acres to be grazed during the July/August time for finishing lambs.

**Table 2 – Potential Costs of Swede Crop**

	£/Per acre	£/Per Hectare
Direct drilling	17	43
Seed (1kg/acre)	33	82
Fertiliser 17:17:17 (3 cwt/acre)	83	206
Fertiliser Spreading	4	10
Glyphosphate Spray	8	20
Spraying	4	11
	<b>151</b>	<b>372</b>

### **Positives of the Swede System:**

- No housing
- No bedding costs
- No silage requirement
- No Concentrates
- Reduced Labour
- Extra grazing from swards previously used for silage.

### **Negatives of the Swede System:**

- Later lambing & consequent lower lamb prices
- Lower survivability at lambing if weather turns for the worse
- Time swedes are in the ground (June to March)
- More lambs left on farm during late autumn

The swede system does have its negative aspects and lower lamb survival and lower lamb prices due to later outside lambing will have its effect on gross margins. But with reduced concentrate usage and forage costs several thousand pounds should be saved. The current labour bill of £3,500 on the home farm would also be hoped to be halved using the swede system. This is shown in the two gross margins in Table 3.

### **On Going Farm Trial**

This sheep production system will be trialled at Trefnant Hall farm, Welshpool where 150 Lleyn breeding ewes will be purchased and kept on 2½ - 3 acres of swedes. If the trial goes well, it is hoped that the swede acreage and ewe numbers will be increased and the system perfected.



### Assumptions for Gross Margin.

- Indoor Lambing Gross Margin taken from current 08 home farming system.
- Outdoor lambing % reduced by 10% and lamb price by £5 per lamb.
- Concentrates reduced to £5 per head for outdoor lambing.
- Sundries reduced due to less bedding.

**Table 3 - Gross Margins for Different Systems**

		Indoor Lambing silage	Outdoor Lambing Swedes
		<b>Per Ewe</b>	
<b>Sales</b>	Lambs	87.40	76.51
	Cull Ewes	6.89	6.89
	Wool	1.07	1.07
<b>Replacements</b>	Yearlings/Ewes	21.00	21.00
	Rams	3.63	3.63
<b>TOTAL OUTPUT</b>		<b>70.74</b>	<b>59.85</b>
<b>Feed Costs</b>		17.91	5
<b>Vet &amp; Med</b>		2.49	2.49
<b>Other Costs</b>	Market fees	4.86	4.86
	Shearing	1.11	1.11
	Sundries	3.00	2.50
<b>TOTAL COSTS</b>		<b>29.38</b>	<b>15.97</b>
<b>GROSS MARGIN</b>		<b>41.36</b>	<b>43.88</b>
<b>Forage Costs</b>		<b>3.9</b>	<b>2.88</b>
<b>MARGIN AFTER FORAGE COSTS</b>		<b>37.46</b>	<b>41.00</b>
<b>GROSS MARGIN FOR 1,300 SHEEP</b>		<b>48,698</b>	<b>53,300</b>



## Visits While In New Zealand

## Appendix 2

Date	People	Details
12/01/2009	Ross & Louisa Gordon, Taihape	1,000 acre holding with 2,100 Romney Sheep and 600 replacements bred as yearlings. Also had 100 breeding Cattle.
12/01/2009	Canterbury Meat Packers – Rangitikei	Chilled lamb processing facility in the North Island, built 2005. Processes 30,000 lambs a week all through the year.
13/01/2009	Daniel Gordon (Aged 25). Rotokawa, Whangaehu	Had just taken over an 800 acre holding as farm manger
13/01/2009	Dr David Hume, Agresearch, Massey	Grassland and Endophytes expert
14/01/2009	Michael and Holmes Warren, Turahgahui,	Very big Romney stud breeders with over 8,000 sheep
16/01/2009	Meat and Wool New Zealand – Nick Beeby,	Manager – Emerging Markets & Strategic Projects
17/01/2009	Malcolm and Miriam Taylor, Corrie Downs,	Romney Sheep farmer and previous chair of NSA, he has also done a scholarship in the U.K. looking at eye muscle scanning.
18/01/2009	Ben & Donna Todhunter, Cleardale	Sheep farmer, 4,400 Merino cross Leicester sheep. Had previously completed a Nuffield scholarship looking into conservation.
20/01/2009	Meat & Wool New Zealand - Gary Walton	South Island Regional Supervisor for Meat & Wool New Zealand.
20/01/2009	Jon Hickford, Lincoln University	Associate Professor in animal breeding and genetics
21/01/2009	Matt & Katie Iremonger, Mount Benja, Huruni	Young couple who have just started share farming on 6,000 acres
22/01/2009	Rupert Curd, Ashburton	– Silver Fern Farms Director
23/01/2009	Canterbury Meat Packers – Ashburton	Followed Ben Todhunter's lambs through the meat plant and processing plant.
23/01/2009	5 star beef lot, Ashburton	20,000 Aberdeen Angus Cattle are finished and sold to Japan
25/01/2009	Russell & Jeanette Emmerson, Forest Range	20,000 super fine wool Merinos, stock gathered with helicopter. Produces super fine wool (13 microns) to sell for Italian suits and bed linen
26/01/2009	Robin, Grant & Linley Cambell, Winton	Developed his own composite breed, the TEFRom and has also been chair of NSA
28/01/2009	Richard & Trudy Slea, Wairaki Station	16,000 Romneys, next door to Mount Linton. Had excellent growth rates off grass/clover leys.
29/01/2009	Geoff & Ailsa Neilson, Mosgiel	Retired farmer, sits on boards responsible for disease eradication. Johnes disease, Ovis.
30/01/2009	Alliance Group, Invercargil	Alliance Group – Murray Behrent, Group Livestock Manager & John Rabbit, Marketing Manager
02/02/2009	Russel, Pam and Andrew Welsh, Riverton	Big Romney and TEFRom breeders
03/02/2009	Vaughan Templeton, Riverton	Converted from beef and sheep to 800 dairy cows
03/02/2009	Mount Linton Station - Ceri Lewis	Huge station with over 50,000 sheep and around 1,000 Aberdeen Angus cattle