



Goat monitoring project

MEAT & WOOL

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Why consider farming goats?

This information sheet outlines reasons why sheep, beef, dairy or deer farmers should consider integrating goats with their other livestock classes.

Goat gross margins (particularly fibre goats) are very competitive with those for sheep. This is especially given returns for lamb are low. Indirect benefits include a better ability to control pasture quality and weeds. Farming goats provides diversification and can be a good use of poorer quality dry matter.

The sheet goes on to include management advice for successfully farming goats. In particular, fencing options and animal health advice.

Three-year goat project shows returns

From 2004 to 2006, the National Goat Monitoring Project collected information on goat production and profitability on 16 farms. As a result, there is now a wealth of information on how to successfully farm goats in New Zealand.

Analysis of accounts show that during 2004 to 2006 fibre goats grossed between \$50 and \$60/stock unit as an average over all the survey farms. Some farms produced much higher than this. In two out of three years fibre goats grossed more than sheep and cattle per stock unit.

Meat goats returned less (grossing between \$7 and \$17/su) but it must be remembered that they eat poorer quality and cheaper feed.

Meat goat income did not match that of sheep or cattle when compared directly (2004 to 2006). However, given lower lamb prices in 2007/08 the difference in net profit between sheep and meat goats would be expected to be far closer.



Gary Boyle

Photo courtesy of Country-Wide Publications.

Example: \$1200/ha gross.

Goat Monitor Farmers Ann and Gary Boyle grossed \$43/goat in 2004/05, \$69 in 2005/06 and \$86 in 2006/07. Their South African angora goats grossed \$1200/ha (each goat counted as 0.7 stock unit and stocked at 14/hectare).

Best on hill country or finishing

The Goat Monitoring Farms were compared to Meat & Wool Farm Classes (2004 to 2006). Results showed that there was between \$30-\$132/ha net farm income advantage in having some goats on a Class Two farm (South Island hill country). It ranged up to a \$156/ha advantage for Class Four, Five or Six farms (North Island hill, intensive finishing and South Island finishing/breeding). Other classes (South Island high country and North Island hard hill) were worse off in net income terms from including goats during 2004-06.

Meat goat return best if eating poorer feed and weeds

It is hard to calculate the value of a goat as it largely depends on the value of the feed they are eating.

Meat goats are the most profitable if they eat poor quality grass and weeds. Gross returns from fibre goats are higher than meat goats but the feed cost is higher. This is because fibre goats (like Angora or Cashmere) should not be grazed among some types of weeds or seedhead that could contaminate the fleeces. They need to graze on pasture when fleeces are long.

Table A: Example feed costs and returns for meat goats, fibre goats and ewes

	MEAT GOAT (doe) 40KG (0.8su)	FIBRE GOAT (doe) 30KG (0.6su)	EWE 60KG (1.2su)
What they eat/day (kgDM/head)	1.2kg	0.9kg	1.8kg
Diet	70% weeds, 30% pasture	50% weeds 50% pasture	100% pasture
Average cost/year to feed	\$10.50	\$13.14	\$52.56
Gross return range 2004-2006 Goat project data	\$7-\$17	\$50- \$60	\$80
Return/year/head (gross less feed costs)	-\$3 to \$7	\$37 to \$47	\$27
Saving on weed/pest	\$5	\$5	-\$5
Total	\$2 to \$12	\$42 to \$52	\$22
Labour/head (minutes/year)	22	67	80*

* NZ estimate based on intensive sheep farming overseas figure of 90 minutes.

Assumes pasture worth \$0.08/kg DM and weeds are free (i.e. \$0). Assumes feed consumption based on liveweight x 3%.

Table A shows that fibre goats can outperform sheep, especially if they have a proportion of weeds in their diet. Meat goats can net a profit if they are restricted to eating weeds about 70% of the time.

Other benefits are cheaper weed control and less labour

Farms that ran either fibre or meat goats also spent half the amount on 'weeds and pests' that traditional sheep/beef farms did. This is a saving of around five dollars per stock unit. Meat goats needed less labour input than fibre goats (22 versus 67minutes/su/year). This is because meat goats are not shorn.



Meat goats: Boer

What to consider before venturing into goat farming:

(1) FENCING

Ensure that the boundary fence is goat proof. This helps maintain a good relationship with neighbours.

Best practise is a bulldozed line, with a nine wire post and batten fence. Barbed wire on the bottom can be used if erosion is a problem. Electricity is optional.

Once the boundary fence is secure, the property can then be broken into 'blocks'. Each block could contain a number of paddocks, with these blocks being goat proof to enable some rotation through the farm, enabling some control and management.



Goats tend to go under or through a fence, rather than go over.

Farmers in National Goat Monitoring Project have used three or four wire electric fencing for more subdivision with success. Introducing electric fencing systems while goats are young will educate them. Regular mobbing and movement (rotation) will help reduce the temptation to break through.

Goats tend to go under or through a fence before going over. Tight bottom wire is important, no more than 75mm from the ground.

Some examples of internal fencing include -

- Seven to eight wire post and batten (minimum three battens between posts).
- Eight to nine wire post with electric wires second bottom and top, with or without battens.
- Use of barbed wire along bottom.

Goats (if trained) can be held behind four wire electric. The key is to keep them moving and not to push them to eat all that is available. Goats can get entangled in netting fences. It is recommended that an earth wire be placed at the bottom (i.e. a 5th wire), as the 4th wire may get shorted out with growth

(2) FEEDING

Goats are browsers and are excellent at controlling blackberry, gorse, broom, ragwort, ground tutu, thistles and rushes. If weeds are an issue, grazing a meat goat is favourable over a fibre goat due to the risk of vegetable matter contamination in the fibre. In addition, meat goats tend to control weeds better.

Goats naturally eat from the top first i.e. the seed head. This provides better pasture quality for other classes of stock. It is important to give goats a variety of feed and some level of roughage is always required.



Fibre goats: Angora does and kids

(3) ANIMAL HEALTH

It is true that the parasites that affect goats also affect sheep. But there is no reason why these two stock types cannot be run together successfully. Having a good animal health plan in place is imperative.



Fibre goats: Angora

Some things you need to consider are:

- **Parasites.**

There are limited drenches available on the market specifically for goats. It is recommended that goats be drenched 1.5 times the sheep drench rate but this should be done in consultation with your vet. If higher doses are used this could affect withholding periods.

Manage pasture contamination through integrating goats with cattle. Strategic drench goats, as you would sheep and cattle, to reduce the chance of building resistance to drench. A drench resistance test (Faecal Egg Reduction Test) is advised.

As an example of good management, a Malvern farmer in the Goat Monitoring Project takes a Faecal Egg Count (FEC test) both before and after drenching. The goats are drenched, and then tested 7 to 10 days later for efficacy. Results show that with both double and triple drenches there is 100% efficacy. The trigger point for drenching is 500 to 700 eggs per gram (epg). A FECRT was undertaken on the lambs on the property who were grazing pasture previously grazed by does and kids.

For long term protection from resistance, a triple action drench is used on the goats, and double action drench for the lambs.

In the Goat Monitoring Project parasite control took the lions-share of the total animal health bill on meat goat farms. Minerals were the biggest spend on fibre goat farms.

- **Feet.**

Feet can be an issue in goats. The goat industry is currently being proactive with this trait being integrated

into a Buck Evaluation Scheme. It is important that culling for bad feet takes place to reduce the incidence of this (as was done in the sheep industry). The use of formalin or Zinc Sulphate (ZnSO₄) baths on a semi-regular basis may be something to consider, especially if in a wetter climate.

- **Minerals.**

Goats require a range of minerals and the type and level required depends on farm location. Many goat farmers use mineral blocks but doing an analysis of both soils and levels in goats and identifying deficiencies is worth it. Supplementary minerals may be required.

(4) MATCH TEMPERAMENT AND TYPE OF GOAT TO FARM

Consider the temperament of the goats and the type of farm they will be run on.

CASE STUDY: GOATS VITAL TOOL ON SQUIRE'S TOKOMARU FARM

Goats are great to control weeds and they bring in a handy income too. Malcolm, Wendy and Brendan Squire run 500 goats for both meat and cashgora fibre. The does wean 140% and wether progeny are worth around \$35/head at one year of age.

This makes a gross return of around \$50/doe for meat.

The Squires first farmed goats 30 years ago when the Young Farmers Club gave them seven as a joke. Now they have become indispensable for controlling gorse. What was once thick gorse that you couldn't walk through is now open enough for cows and calves to graze. The property also runs Perendale ewes.

The Boer-cross goats graze weeds and poorer pasture for most of the time as they are hardier. Single-carrying does even kid in the gorse block.

The Squires describe their goats as low input and a crucial part of their operation. The Squires were monitor farmers in the Meat & Wool, SFF and Boer Goat Breeders Association National Goat Monitoring project.

Brendan Squire, Tokomaru.

Photo courtesy of Country Wide Publications.



Buck Evaluation Scheme

This scheme was started 11 years ago by a group of Angora goat farmers who were concerned about foot problems in their goats. In 2007, Boer goats were included in the scheme. The aim of the scheme is to identify bucks who have good performance in traits like body weight, feet constitution, fleece weight and resistance to parasites. These top-performing genetics can then be used more widely in the goat herd.

Unshorn buck kids enter the scheme in February each year. They are all sent to one property where they are weighed and ear tagged on admission. Fibre goats are shorn and fleece weights taken. They are then foot scored monthly and any bad performers are sent home in May. The rest stay on until the end of October. The fibre sires are shorn for a second time in August.

There has been a huge improvement in reducing the incidence of footrot and improving body weight. The scheme is currently funded by participants and the Sustainable Farming Fund. It is run by a group including the scheme farmers, a scientist and Chairs of Mohair New Zealand and Boer Breeders Association.

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Acknowledgements & more information

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Other Information Sheets from Meat & Wool New Zealand cover information on fibre goats, meat goats and feral goats.

For copies phone Meat & Wool New Zealand on 0800 696 328 or visit www.meatandwoolnz.com

For more information on goats see –

- * Final Report (Goat Monitoring Project) 2008

- * Goat Pack

These are both available from Meat & Wool New Zealand.

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