



# TOWARDS AN ALPACA MEAT INDUSTRY

*We have a great affection for our alpacas. They are intelligent, easy to manage and have a light environmental footprint. We farm alpacas because we like them or we wouldn't be doing it. But at the end of the day, they are animals and we are farmers and farmers are in business to profit from their farming activities. One aspect of alpaca farming that has great potential is alpaca meat.*

by **David & Heather Bridson**  
– *Elysian Alpacas*

At the end of the day dumping alpacas is little different from dumping roosters from the chook run down at the local metal dump. Dumping animals devalues the livestock of others. There is a strong suspicion among many that the welfare of the animals is also placed at risk.

The best course for the future is to expand on what we are already doing – developing markets for breeding animals and fibre, continuing to sell pets to responsible owners and producing value-added products such as cloth, garments and those made from felted fibre.

So far, we have not reached anything like the potential of the alpaca as a farm animal. True, some farmers have made a lot of money out of alpacas by breeding top quality animals and selling them. Others have made their fibre into value-added products and been successful in finding profitable markets for them. However, there are only relatively small numbers of alpaca farmers who are blazing the trail for the rest of us by realising the full potential of the alpaca as a farm animal. Tessa and Peter McKay from Mesa Mills and Mesa Meats are examples of this.

Photo courtesy of Mesa Meats.

The natural order is that animals and plants yield more than they need to reproduce themselves; there is redundancy built into the system to ensure its survival. For example, too much grass grows in spring and summer so we cut and store it as hay or silage in order to have sufficient feed in the winter. Farmers are people who manage the surplus production of plants and animals to make a living.

Alpacas are fundamentally no different in this respect from any other farm animal. They are intelligent. They are beautiful animals. But their over-production of fibre and offspring is what enables us to make an income from them.

Like all animals they produce more males than we can handle. And like all farm animals they reach the point where they are no longer able to produce viable offspring or quality fibre consistently. While alpacas are one of the most efficient converters of grass into protein eventually the interplay of climate and soil fertility makes it risky for us to try to carry increasing numbers of stock.

There are several ways that alpaca farmers manage this problem. One way is to dump them for rock bottom prices on Trade Me. This may make some farmers feel better about not having to kill them themselves. It may provide a quick way out of the industry for others.

## Alpaca as meat

Alpaca meat has plenty going for it. It has half the saturated fat of beef (around 3%) and a third less cholesterol than beef. The total fat content is low at around 6-7%. It has the lowest calories of any land-based meat (150 calories per 100 grams) and only about a third of those calories come from fat. [See Table 1]. If the animal is unstressed at slaughter it is tender and mild-flavoured. It takes on the flavour of any marinades and sauces well.

If I may illustrate from our own experience. All the alpacas I have killed have been two year old entire males. We do not have a cool room to hang slaughtered alpacas so we take them to Gary Krom from Kaimai Range Venison who hangs them in his cooler for 4-5 days. Gary charges us about \$125 to bone out and vacuum-pack the meat. We find the best combination for us is back steaks, fillet, rump and Denver

steaks, four seasoned rolled roasts, neck chops and mince or sausages. From a live weight of 70-75 kg we end up with about 30kg of meat (boned out). If we had to buy 30kg of beef of a similar quality we would be looking at around \$20 per kilogram. The value of that home-killed meat to us is in the order of \$600 from one animal (less the cost of the butchering).

The meat is tender and has a mild flavour. Neck chops can be tough so we cover them with water and cook them on low in our crock pot with garlic and a mix of root and other vegetables for 12 hours or until the meat is separating from the bone. At that point we dispose of the bones; the meat and vegetables can be eaten 'as is' or thickened and made into pies.

Denver steaks<sup>1</sup> are a versatile meat, with a slightly stronger flavour than the finer cuts (such as back, fillet and rump steaks). They are great for kebabs or

can be cubed and used in stir fries. Another alternative is to slice thinly, marinate and barbeque them or use them in Asian dishes. We like a Korean bulgogi marinade. We make a finely textured and flavoursome alpaca burger using our own fresh herbs from the garden, a bit of flour and garlic, some tomato purée and 2-3 of our own eggs.

It is delicious meat. However, I do not know yet whether there is a decline in meat quality as animals age. Those who have tried it say not. If this is the case, then it is most fortunate for a potential alpaca meat industry.

Alpaca meat is a product that we can be proud of and which I have no doubt at all is a commercially viable prospect.

## Where to from here?

The laws around home killing animals for meat in New Zealand mean that only the animal's owner and family can eat it – it is illegal to sell, trade, or barter meat to anyone else.<sup>2</sup> It cannot be served to paying customers, raffled or donated for use as a prize. Home-kill can only be undertaken by the animal's owner by killing it on his/her own property, or by hiring a listed home-kill or recreational catch service provider instead.

There are only two abattoirs in New Zealand licenced to kill alpacas – one in Feilding and the other in Ashburton. There are another five pet food abattoirs. My view, and one shared by others I have talked to, is that freight costs and stress on the animals may rule out transport of alpacas for all but those within a reasonable distance of existing abattoirs.

Growth in national alpaca numbers has increased by about 3,000 between 2012 and 2015. However, the more animals we have the faster the growth – in other words, increase in stock numbers is likely to follow an exponential growth pattern until such time as the market is saturated and rate of culling matches rate of reproduction. Existing abattoirs are asking for 200 animals to be killed at a time to make it worthwhile switching their killing chains from other livestock to alpacas.

We do not know how many alpacas are available for slaughter in any one year. However, making an assumption that there are 5,000 animals available each year for killing, that these animals are evenly distributed in both islands and killing takes place for 6 months of

Table 1  
Comparative Meat Nutritional Values

100g Sample	Calories	Fat (g)	Cholesterol (mg)	Protein (mg)
Pink Salmon	138	5.75	39	20
<b>Alpaca</b>	<b>150</b>	<b>5.7</b>	<b>60</b>	<b>23</b>
Venison	159	3.3	66	25
Turkey (light)	154	3.45	68	29
Buffalo	179	9	71	25
Chicken Breast	159	3.42	83	31
Lamb Leg Roast	213	7.62	83	25
Beef Bot. Round	214	9.76	92	31
Pork Shoulder	219	10.64	101	29
Veal Cutlet	213	10.35	125	26

Source: [http://lean-too.com/home1\\_files/Page392.htm](http://lean-too.com/home1_files/Page392.htm)

Table 2  
Alpaca Numbers in New Zealand, 2015

	Huacaya	Suri	Total
Registered Females	10,952	1,769	12,721
Registered Males	5,766	974	6,740
Registered Wethers*	452	37	489
<b>Total Registered</b>	<b>17,170</b>	<b>2,800</b>	<b>19,970</b>
Estimated Unregistered Males	5,258	826	6,084
<b>Total Estimate</b>	<b>22,428</b>	<b>3,626</b>	<b>26,054</b>

\*Estimate only – updated figures unavailable  
Source: New Zealand Alpaca Association

1 Denver steaks are cut from the chuck or shoulder of the animal. They are cut in a different way from traditional chuck or blade steak which makes the meat more tender.  
2 Refer to: <http://www.foodsafety.govt.nz/elibrary/consumer/Homekill-brochure-2012-web.pdf>  
<http://www.foodsafety.govt.nz/elibrary/industry/homekill-brochure-2012.pdf>

Table 3  
New Zealand Meat Consumption Per Capita

NEW ZEALAND MEAT CONSUMPTION		
Year Ended September 2009		
	KG PER CAPITA	%
Lamb	7.5	8%
Mutton	2.8	4%
Beef and Veal	28.0	31%
Poultry	31.3	35%
Pig Meat	19.6	22%
<b>TOTAL</b>	<b>89.2</b>	<b>100%</b>

Source: New Zealand Alpaca Association  
<http://www.fedfarm.org.nz/files/2012-Compendium-of-New-Zealand-farm-facts.pdf>

the year, then there would be sufficient animals to supply two abattoirs in each island provided that the infrastructure and markets are in place.

5,000 animals would yield around 150,000 kilograms of boned meat. This represents 0.04% of New Zealand's annual meat consumption. To provide just 1% we would need around 120,000 alpaca carcasses. This represents 24 times the quantity of animals that may currently be available.

Initially promotion of alpaca meat as a healthy alternative to beef and lamb seems like a promising way forward for the local market. However, there is astronomical potential for alpaca meat internationally. The OECD projects that up to 2022, 80% of the demand for meat production will come from developing countries.<sup>3</sup>

We suggest meeting with those interested in working together on a trial - or perhaps a number of trials - in different parts of the country. We would need to negotiate a deal with a local abattoir, then support them through the registration process. We would then need to keep them supplied with a throughput of stock on a regular enough basis to make it viable for them. Finally we would need to develop markets for alpaca meat and hides.

Those of us who have been involved in working together with other alpaca farmers to market our products are finding that united we stand, divided we fall. For inspiration we need look

no further than our own domestic deer industry. It was 1969 that the first licence was granted to establish a deer farm in New Zealand. Within 20 years (1989) New Zealand had half the world's population of farmed deer at 1.6 million animals.<sup>4</sup> The systems developed in New Zealand to capture deer in the wild and graze them on farms today lead the world. However, the biggest impediments to growth of the industry were not technological. They were bureaucracy and red tape.

While total deer numbers have reduced since then to about 1.1 million animals, in 2014 New Zealand exported over 16 million tonnes of venison having a value close to \$181 million. Including velvet, hides/leather and other products the total export value of the deer industry was \$241 million.<sup>5</sup> The pioneers of the deer industry succeeded because they believed in their product, were innovative and were determined to work together to achieve a world-beating result.

According to the Ministry of Primary Industries the first alpacas were imported into New Zealand for farming in 1986.<sup>6</sup> Ours is a youthful farming industry but with enormous promise. The biggest impediment to the development of a profitable alpaca farm industry in New Zealand in my view is not bureaucracy and red tape. It is our lack of belief in - and failure to work together to develop the place of - alpacas as a credible and profitable farm animal.

## About the authors

David and Heather Bridson own Elysian Alpacas, about 25 minutes west of Tauranga. Currently they have 56 huacaya alpacas on 17 acres. They both have full-time jobs. David has his own business providing help and support to other businesses, schools and not-for-profit organisations and Heather is an accountant for a local company. They have four children ranging in age from 22 to 31. Heather's passion for alpaca fibre came out of her craft interests in spinning, weaving, dyeing and felting. Elysian Alpacas now sells a range of hand-crafted alpaca products including knitwear, quilts, felted goods and carded dyed fibre for spinning and felting. Increasingly, David and Heather can be heard going into raptures about alpaca meat and are keen to see alpacas become a credible and viable farming option.

To increase the momentum amid the groundswell of interest in this opportunity we are happy to act as a point of contact for those of you who are interested.

Our contact details are:  
[info@elysianalpacas.co.nz](mailto:info@elysianalpacas.co.nz)

We are looking forward to hearing from you so that we can work together to develop a credible, commercially viable and sustainable alpaca farming industry.

3 OECD/UNFAO <http://www.fao.org/docrep/018/i3333e/i3333e.pdf>

4 <http://www.teara.govt.nz/en/deer-and-deer-farming/page-3>

5 <http://www.deernz.org/about-deer-industry/nz-deer-industry/deer-industry-statistics/glance-industry-statistics#.VONt1fmUeSo>

6 <https://www.mpi.govt.nz/document-vault/3853>