



# ALPACAS AUSTRALIA

The official publication of the Australian Alpaca Association Ltd

In this issue:

- Alpaca Export
- Felting
- Alpaca Dentistry





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Baarrooka Durango's Echo - 2013 Supreme Champion Suri



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Cover: 'The Aunts' courtesy Annalise Tomich from Bumble Hill Alpacas

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# President's Message

Given alpacas are a relatively young industry in Australia, it is important to remember where we started. First imported from South America in the late 1980's, in the 1990's alpacas were a curiosity, considered exotic and were expensive to purchase, with little or no option to select an animal for specific attributes.

Since 2000 there has been significant growth in animal numbers through breeding stock, and via further imports from USA, Chile, and Peru. The herd has seen improvements through selective breeding as a result of lessons learned:

- The hard way
- Through showing, as a benchmark of performance
- Through risk, investing money to develop product, process fibre, and selection of genetics
- Through experience



Our forebears established alpacas – and the AAA – to be positioned as a sustainable, viable industry through the establishment of the IAR, relationships with AHA, programs such as Q-Alpaca and AlpacaMAP, the availability of benchmarking tools - AGE, SRS, Showing, development of the Alpaca Fleece Co-operative (now AAFL). More recently we have developed a Quality Assurance program for the classing of alpaca fleece, administered by AWEX who are recognised for their experience and expertise in the Australian Wool industry; we have partnered with RIRDC to conduct research and development activities in the areas of alpaca health, fibre and genetics; and we have embarked on a campaign to inform and educate the public about the alpaca industry – AAA and what we do, the animals, the products and the opportunities that exist.

AAA has a total of five staff based at our office in Mitcham, Victoria, of whom two work full-time, and three work part-time. As a membership organisation we, the members, are the AAA. We rely on volunteer efforts to make decisions, implement, and communicate; ably assisted by a small office team who provide support for a myriad of activities. Across our industry there are a lot of views, personalities, and a diverse range of experience and backgrounds. Debate is good – it encourages new ideas, shares different perspectives and experiences, and promotes improvement. We need to respect the choices that others make. Globally, in agriculture, there is a demand for best management practice, sustainable farming that is environmentally responsible. We know we have an environmentally friendly product! Government support is there for agriculture that will contribute positive returns and boost economic performance – not to provide tax write-offs for hobby farmers!

What is important is that we maintain quality and continue to strive for improvement. Make sure you grow the best, and that you know what you can expect from your harvest - be that the fleece your animals will produce at shearing time, the progeny they will deliver at birthing time or the carcass weight they will provide when they are slaughtered for meat, along with the hide.

As an Australian agriculture industry, we may lack the years – even generations – of experience, but we certainly do not lack passion. Alpacas can be everywhere! My challenge to you is to make your choice, know where you want to be and support and encourage others in the industry who are doing the same. As a member of AAA you have a network of fellow members who share your passion and your experience, and the support of an organisation with a range of resources and objectives to further the alpaca industry in Australia and maintain our position as a global leader. Thank you for being part of the alpaca team.

Kind regards

Michelle Malt  
AAA President



# General Manager's Message

Operationally the National Office has been extraordinarily busy as they tackle all things member related, coming out of renewal period, year-end audit and are in the process of implementing a cloud based accounting solution for regional treasurers.

Your volunteer Board in conjunction with the office staff continues to look for ways to improve its services, member benefits and importantly, the growth of the industry.

Our core values are fundamental to everything we do and the office staff genuinely try to:

- Provide efficient, timely and welcoming service to all stakeholders;
- Treat all members and clients with fairness and equity, and
- Work in a united manner.

That said, I must remind members that while the National Office attempts to uphold the values of efficient and timely service we do operate with only 2 full time employees, (Kris and myself) and three part timers (Jo, Janette and Vicky).

The office is very optimistic with the Board signing off on the AAA Strategic Plan to 2016, and I direct you to the members section of the website for further details.

Key strategies we look forward to supporting the AAA Board to implement during the financial year include:

- Undertake a review of AAA's member service offerings including associated transaction fees, annual subscriptions and membership categories. Consider alternative member benefits such as reward programs, additional insurance options and member introduction incentives.
- Review AAA member communication mediums and strategies, including website, e-news, magazines and social media.
- Review and recommend changes to the charter, structure and current directions of reference panels to ensure alignment with AAA strategic direction from a governance and operational perspective, and to enable skilled and active participation and support.

The 2014 National Show and Sale being held at the Bendigo Showgrounds from 18 to 21 September is not far away. Refer to: - <http://www.nationalshow.com.au>

The AAA Annual General Meeting for financial year ending 30 June 2014 will be held at the National Show on Friday 19 September 2014 and we encourage all members to attend.

The Australian Fibre Showcase display is now officially circulating around the country. Should your region be interested in utilising it at an upcoming event please contact Office Manager Kris Brown to express interest.

Applications close on 30th September 2014 for the Richard Dixon Memorial Scholarship, valued at \$5,000, available to senior students of Veterinary Science furthering their education in South American Camelid medicine.

Members are encouraged to visit the AAA Facebook page. It is a quick and easy way to access all the latest AAA news, even if you are not a Facebook user you can still view the AAA Facebook page and remain up-to-date.

2015 is a big year ahead for the AAA and the industry as we celebrate 25 years of excellence. Your ongoing support as a valued AAA member is welcomed.

Regards

Craig Taberner  
AAA General Manager



# News & Views

## In July 2015 the Australian Alpaca Association Ltd will celebrate its 25th anniversary.

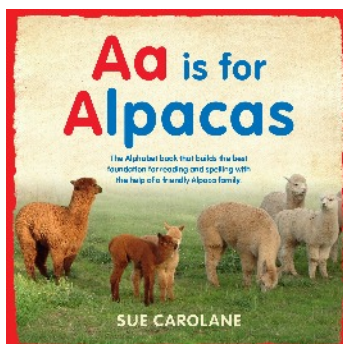
To celebrate this exciting time, a special version of our logo has been developed for official communications, regional and member use. '25 year' plans are in production now so remember to keep watch on your inbox for updates on the opportunities these plans will create for all members to join in the fun and help to launch Australian Alpaca to new levels of success



### Book Review

Aa is for Alpacas - Young Children - Educational  
Sue Carolane, JoJo Publishing \$16.99-\$24.99 AUD

If you are a parent or carer of young children and have been looking for an educationally appropriate alphabet book for young learners, look no further. *Aa is for Alpacas* is a perfect introduction to the world of alpacas for beginning readers.



The non-fiction approach uses photographs and informative text to introduce young children to the daily lives of nine playful alpacas living on an Australian alpaca farm. Using full page illustrated examples of each letter of the alphabet, author and speech pathologist Sue Carolane has carefully chosen short phrases with educationally correct letter-sound links. A lengthy parent section is provided in the

introduction to guide adults on how to ensure appropriate literacy skills are reinforced when sharing this book with young children.

*Aa is for Alpacas* will appeal to the Australian alpaca farming community and be a perfect gift for young animal lovers.

Reviewer: Jen Graham - Literacy and Numeracy Support Teacher; Education Queensland

## Vale Dr. Murray E. Fowler

It is with sadness that we advise members of the passing of Dr. Murray E. Fowler, Professor Emeritus at UC Davis School of Veterinary Medicine and widely recognized as the "father" of camelid medicine.

Dr. Fowler commenced at UC Davis School of Veterinary Medicine in 1958 and his first 10 years were devoted primarily to horses. In 1967 he volunteered to develop and teach courses on the medicine of non traditional animals, becoming the first person holding a faculty position in wild animal medicine at any veterinary school in the world. On the establishment of the Zoological program he began to see many camelids, since llamas, alpacas, and camels were popular zoo animals. As llamas and alpacas grew in popularity in the private sector, Dr. Fowler became the "go to" veterinarian for camelids. He was involved in the screening of alpacas for importation from South America, and in 1984 he conducted the first veterinary workshop in North America on llama and alpaca medicine. He made several visits to Australia in the early years, and in his autobiography stated: "One of the great satisfactions of my career has been teaching. Regarding llamas and alpacas, I have had the privilege of sharing information with owners, breeders, managers, and fellow veterinarians at numerous local, regional and national meetings."

Dr. Fowler was active in research, publishing over 200 articles, and was the author of numerous books including *Medicine and Surgery of South American Camelids*, with the Third Edition published in 2010. He remained active in teaching up to the time of his recent illness and he was widely known and appreciated for being an inspiring teacher with the wisdom of tremendous experience. He was kind and compassionate, with a twinkle in his eye and a wonderful sense of humour. His death is a tremendous loss for the camelid community, and although he will be missed by all, his legacy will live on and he will never be forgotten.

On behalf of AAA we offer our sincerest condolences to his wife, Audrey, and his family.

(AAA acknowledges our US counterpart, Alpaca Owners Association Inc, as the source of this information.)

## Vale Alan Breese

AAA would like to acknowledge the passing of Alan Breese from Victorian Central Region earlier this year. Alan was a very hardworking member and past president of the VCR and he will be missed by members of the Region and the wider alpaca community. We should like to offer our condolences to his widow Pam and to his extended family.





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# Alpaca Farming - business or pleasure?

Guidance on the Australian Taxation Office classification of your primary production activity

By Greg Rundle - 360Private Pty Ltd



The increasing demand for exposure to a rural lifestyle has seen an increase in 'hobby farming' activities. Here we investigate the potential taxation implications of these activities and considerations to be made when distinguishing between a business activity and an enjoyable (albeit challenging) pastime.

Australia's taxation system revolves around the concept of self-assessment. The onus is placed on the taxpayer to assess their personal affairs and comply with the relevant taxation laws accordingly. Whilst this system provides flexibility and increased efficiencies, there are numerous grey areas in taxation legislation which the average taxpayer can find difficult to navigate. The classification of income producing activities as a hobby or business is one such area.

Where a taxpayer determines that their activity constitutes a business of primary production, the money earned from the activity is generally assessable income for taxation purposes, with expenses incurred in earning the income allowable deductions. In financial periods where a loss arises, provided that the non-commercial loss rules are satisfied, a sole-trader or partner of a primary production partnership could utilise the loss against their other assessable income.

In contrast, if the primary production activity was classified as a hobby, the points mentioned prior do not apply. The transactions relating to this activity will generally have no taxation consequences.

So, how do you make a determination regarding your own activity? *Taxation Ruling 97/11* is a good place to start, but for those who prefer to count alpacas when falling asleep at night we have spared you the mind-numbing taxation language and have summarised the key concepts below.

The Australian Taxation Office (ATO) explains there are a number of factors to consider when determining whether you are running a business or a hobby, being:

- Does your activity have a significant commercial character?
- Is there more than just an intention to engage in business?
- Do you have the purpose of profit as well as the prospect that you will make a profit, even if you are unlikely to do so in the short term?
- Is there repetition and regularity to your activity?
- Is your business similar to other businesses in your industry and is the way you operate consistent with industry norms?
- What is the size, scale and permanency of your activity? Is it sufficient to allow you to make a sustainable profit?
- Is your activity planned, organised and carried on in a business-like manner?

The ATO suggests that as a start, significant commercial purpose or character could be evidenced by a documented business plan, advice sought from experienced farmers, analysis of land suitability, investigations into market sustainability or research into profitability based on market prospects.

An intention to engage in business involves taking action. The extent of activity will determine whether the business is carried on. If preparations are still being made then you may not have commenced business.

The prospect of a profit is considered an important factor by the ATO. Business activities are carried on for the purpose of profit on a continuous and repetitive basis. Whilst it is not necessary for a business activity to produce a profit, there should be a reasonable expectation of a profit being achievable and this could be evidenced by research or consultancy provided by experts. If the activity continued unprofitably, the taxpayer would need to show that other indicators of business were present that outweighed the objective view that the activity was inherently unprofitable.



TR 97/11 explains a feature of business is that similar sorts of activities are repeated on a regular basis. This repetition of activities helps to determine whether there is the carrying on of a business. Regular purchases, sales and seasonal variabilities would be present in the financial transactions recorded for alpaca farmers carrying on a business of primary production.

Operation in line with industry practices is a strong indication of business activity. The ATO would expect that the volumes of sales, types of customers, marketing methods, expenses incurred, capital invested and past experience of the operator would be similar to other businesses in the industry. A key point is that the activities should be compared with that of a keen amateur. Sales by an amateur may just be a way of continuing on with the activity rather than representing a commercial purpose.

Whilst a large operation would be suggestive of a primary production business, small scale transactions are not excluded from classification as a commercial activity. The case of JR Walker involved five Angora goats, two of which died. Despite the scale of operation being small, the court held that a goat breeding business was being carried on because of the profit making motive and the regularity of activities. Research had been undertaken by the taxpayer that showed profit could be made from the capital allocated to breeding stock.

Whether your activity is carried on in an organised business-like manner is another important consideration. The maintenance of business records and accounts, separate bank accounts, business premises, licences or a registered business name would all be suggestive of business activity.

Each taxpayer's activities must be considered separately from others when a determination between hobby and business is made. A single indicator may be all that is needed when making the determination regarding classification but generally all relevant indicators will be considered as part of the decision making process. The indicators provide general guidance rather than a conclusive test.

Where uncertainty exists regarding your activities, a Private Ruling can be obtained from the ATO. As part of this process the taxpayer will be required to provide information regarding the indicators and the ATO will then make the determination based on their consideration of this information. We suggest that you first contact our office as it may be possible to avoid this process through more rigorous investigation into the activity.

## Non-commercial Losses

In circumstances where an activity is classified as a primary production business, the legislation regarding non-commercial losses becomes relevant and important.

The non-commercial loss rules apply to individuals and partnerships. Basically, where the loss tests are passed the loss from the primary production activity will be available to reduce other assessable income.

Generally, you can offset a loss from your business activity against other income where your income for non-commercial loss purposes is less than \$250,000, and your business activity passes one of the following tests:

- The activity produced assessable income (turnover) of at least \$20,000.
- The business activity has produced a profit in three of the past five years (including the current year).
- The business uses real property (land and buildings) or an interest in real property worth at least \$500,000 on a continuing basis.
- The business uses other assets (machinery, equipment etc.) worth at least \$100,000 on a continuing basis.

Despite failing the tests above, primary producers have access to another concessional test which could allow for the application of losses against other income. This test means that losses will still be available where the business tests are failed, if:

- The business is a primary production business and your other assessable income is less than \$40,000.
- The loss is due to amounts claimed under the small business tax breaks allowed during the 2010 and 2011 financial years.

Furthermore, where any of the above points can not be satisfied, a taxpayer retains the ability to apply to the Commissioner of Taxation for discretion which will allow the loss to be claimed.

*Whilst due care has been taken in the compilation of this information and we believe that it is based on reliable, current and relevant information, we do not guarantee its absolute accuracy. Unless stated to the contrary, this document contains only general information and does not consider your relevant personal circumstances.*

*Greg Rundle is a director and senior adviser at 360Private Pty Ltd. As a chartered accountant and financial planner he specialises in providing advice to small and medium size organisations in the areas of taxation, structuring and high level business advice.*



# Do you have a cria kit?

With the majority of cria born in Spring or Autumn we thought a reminder of items to have available in your cria kit might be timely.

As with all births, either human or livestock, the majority of births are trouble free, but preparation for unexpected emergencies at birthing is also a prerequisite of good management.

## Prepare a Cria Kit well in advance

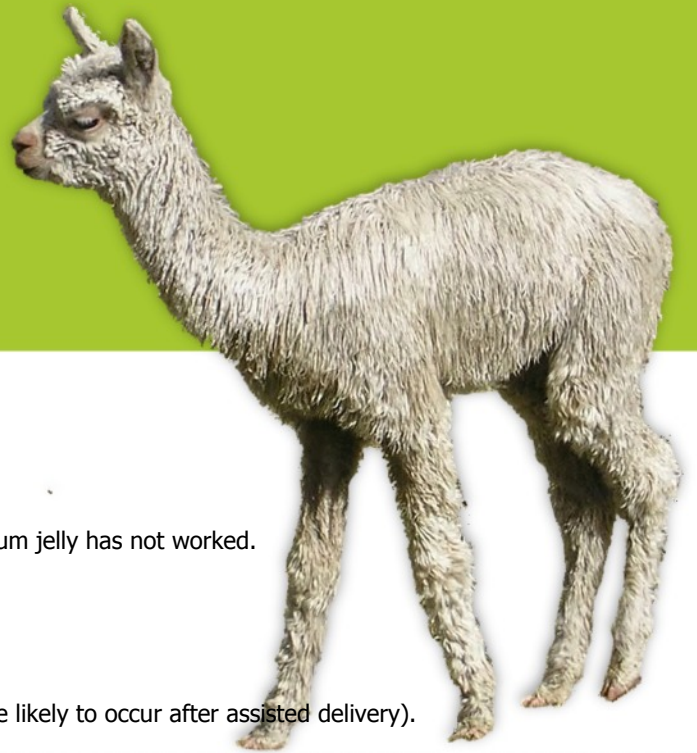
This may well become a life saving strategy!



## What do you need in a cria kit?

- **Thermometer** - A digital model that beeps when reading is complete .
- **Betadine Antiseptic** - 10% liquid can be sprayed onto navel and should be used if cria is likely to be brought into a shed or barn.
- **Bottles** - A kitten size pet nurser bottle for newborns, and a plastic water bottle for older cria are ideal. Be sure to sterilize before and after use .
- **Teats** - Marsupial teat used on 'pet nursers' are good for newborns who have little sucking ability. Flutter valve teat with a large hole cut works well from day two and fits a water bottle.
- **Cria Coat** - Be sure it does not cover tail of cria as this is a scent identification area for mother. Allow mother to smell coat prior to use on cria. Be careful any straps do not rub navel.
- **Bubble Wrap** - An excellent insulator to tuck around a premature cria.
- **Glucose Powder** - A source of 'instant energy'.
- **Frozen Plasma is preferred or alternatively Colostrum Replacer** - Vital treatment for cria who has not suckled colostrum. Powdered colostrum may assist if plasma is not available.
- **Milk Replacer powder** - Various brands available.





- **Electrolyte solution** - For treating dehydration and diarrhoea.
- **Petroleum Jelly** - To soften anus if cria is straining.
- **Microlax enema** - If cria is constipated after 3 days and petroleum jelly has not worked.
- **Accurate scales** - Important tool in monitoring progress.
- **Pen & Paper** - Keep records of EVERYTHING.
- **Surgical Clamp** - Use on umbilical cord if bleeding occurs. (More likely to occur after assisted delivery).
- **Dust proof container** - For storage of items. Ensures anything needed is in the one place.
- **Cria sized stomach tube** - Gastric lavage tube or a canine tube for medium dog is appropriate **FOR VETERINARY USE ONLY!** Have on hand in case vet does not have correct size.
- **Veterinarian's phone number and mobile** - For rapid assistance.





# Royal Melbourne Show 2014

By Fiona Martin - Convenor

## This year saw 270 animals from South Australia, New South Wales & Victoria entered for the Melbourne Royal

This was a 30% increase on the previous year for alpacas. Exhibitors and their animals started to arrive around 1.30pm on the Friday afternoon so as to beat the weather. The old saying that Victoria has four seasons in one day proved a problem for exercising the animals over the weekend.

This is the second year that the halter and fleece show have been stand alone shows. With the co-operation of the poultry show committee it was decided that both shows be held on this weekend to encourage the general public.

Youth Paraders ran a training camp on the Saturday and then on the Sunday they ran a Showmanship and Stockmanship competition to complete the weekend.

Due to issues beyond the control of AAA, fleece numbers were very low. Joanne Ham was judging fleece for the show and due to the small numbers it was decided to judge them on the Saturday morning.

The Supreme Suri Fleece was awarded to Kurrawa Alpacas while Gumbarwil Alpacas were awarded the Supreme Huacaya Fleece. Richard Hermon from Gumbarwil was also awarded the most successful fleece exhibitor. Our thanks to Joanne for her efforts.

*Supreme Champion Suri - Kurrawa Same Same But Different*



The RAS Victoria was moving from a paper based system to a computer system and glitches appeared right at the start so this was sorted out while the fleece was being judged and finally at 9.30am they were able to proceed with the halter judging.

The judges for this year's Melbourne Royal were Jude Anderson & Peter Kennedy and we should like to thank them for taking on this task and for their patience whilst problems were sorted out.

They commenced with judging the suris and awarded the Supreme Suri to Kurrawa Same Same but Different from Kurrawa Alpacas, Robert & Ann Clark.

Saturday afternoon until lunch time on Sunday saw strong competition for who would be awarded Supreme Huacaya. It was a very competitive field but the eventual winner was Windsong Valley Firedragon owned by EP Cambridge from South Australia.

Congratulations to all the exhibitors for making the trip to the Royal Melbourne show again this year. The halter side of the show is over but as the commercial side of the Royal Melbourne show is held late September the alpacas will have a presence at this time. The planning for the display is well and truly under way and here's hoping it is as successful as the halter side.

*Supreme Champion Huacaya - Windsong Valley Firedragon*





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# Alpacas weave their way into Turkey

Media Release by Green, Green, Grass Communications

In a major boost to the Australian alpaca industry, one of the country's leading breeders has signed a historic deal to export the world's first shipment of alpacas to Turkey.

A live consignment of high quality, fine fleece Australian alpaca has flown out of Sydney to become the genetically advanced breeding stock that will establish an alpaca industry in Turkey.

NSW Millpaca Stud breeder Ian Frith says his joint venture with the Turkish government is a vote of confidence in the Australian Alpaca industry as it further builds on its international reputation for producing much of the finest alpaca fleece in the world.

'The export to Turkey comes at a time when the commercial future of Australia's alpaca industry has never looked brighter,' Mr Frith said. "There is enormous potential in the partnership between the two countries."

"Turkey is one of the world's largest textile producers and as they start their own alpaca fibre industry with Australian genetics it opens up great opportunity for future supply of both Australian breeding stock and fibre to a whole new market.

"Alpaca fibre is in high demand on the international fashion scene and now we are connecting to a country that has the expertise in the production of fine, luxurious fabrics to the benefit of the Australian, and indeed, the world alpaca industry."

Ian Frith runs a herd of almost 2,000 alpaca on his property in Berry on the New South Wales South Coast and, as an industry leader in both fleece production and the emerging meat market, he is excited by the future.

"Our industry is consolidating more than two decades of world-leading innovation in fine fleece production and we are now moving towards farming the whole animal where meat, fleece and hide will create the commercial future of Australian alpaca," Mr Frith said.

"Turkey's long term interest is in both fleece and meat production and this first livestock from Millpaca will be under study at a state university to assess the animals for their adaptability and sustainability in Turkish agriculture."

"The Turkish government has invested \$100,000 in a state of the art facility to house the alpacas and their support in setting up every element of the venture has been tremendous."

President of the Australian Alpaca Association, Michelle Malt says that the Australian alpaca is in very positive times and opening up another new market in Turkey will add more strength to what, in agricultural terms, is still a very young industry.

"Turkey has chosen Australian genetics over those of the UK, Europe, the US and New Zealand and that makes us very proud of what our industry has achieved and what is ahead as our international reputation continues to grow."

The Millpaca white Huacaya-breed alpacas were accompanied on their flight to Turkey by an alpaca vet and a stud manager. Ian and his team will return at least twice a year to assist with husbandry, shearing, birthing, nutrition and all elements essential to the development of a healthy industry.

"It's a wonderful opportunity for the Australian Alpaca Industry, not only in recognising the excellent genetics and continual growth of our industry within Australia but in creating a new and uniquely close working relationship that will build business in both countries," Mr Frith said.

The first alpaca shipment of nine pregnant animals has arrived in Turkey with a further 250 females to follow in a few months time.

*Turkish representatives selecting alpacas in Australia*

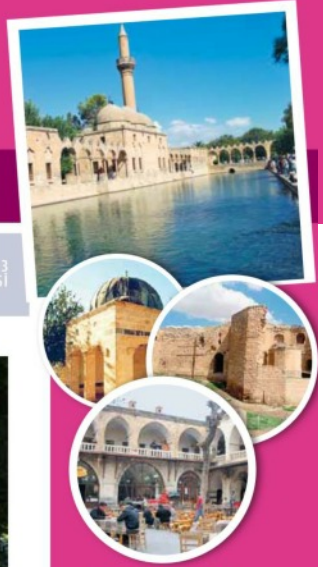




# ALEM

ZAMAN VICTORIA

28 EKİM 2013  
PAZARTESİ



GLOBAL ALPAKA ŞİRKETİ SAHİBİ IAN FRİTH, KAPILARINI ZAMAN'A AÇTI:

## Avustralya'nın Alpakaları

*Turkish newspaper announces Australian Alpaca imports*

### Turkey Quick Facts

Capital - Ankara  
Largest City - Istanbul  
Area - 783,562 km<sup>2</sup>  
Pop - 76,667,864

*The facility constructed in Turkey ready for the new imports.*



# WWOOF-ERS

## Willing Workers On Organic Farms

Willing Workers on Organic Farms is a worldwide organisation, widely recognised by its acronym WWOOF. And like many other things in popular culture, it has now become useable in its verb form.

Workers are called 'Wwoofers' who can 'go Wwoofing'. Some are backpackers who 'Wwoof' as a means of safely travelling cheaply and know that their hosts are accountable to the organisation and the mercy of its feedback system via an online forum.

The idea began in the UK over 40 years ago when a group offered their services on an organic farm in return for food and a bed. It quickly became popular and in 1981 Australia became one of the 55 countries that now run WWOOFing programs. The idea is simple; workers exchange between four to six hours per day working in whatever area the host requires help, and in return they are given food and accommodation. An annual subscription fee entitles hosts to register and be included in the WWOOF book, which lists over two and a half thousand properties in Australia. The book is the bible for the travelling WWOOFers who refer to it to seek hosts based on location, convenience, agricultural and other interests and their own areas of expertise. There is a tendency for the hosts to have a strong interest in organic farming and community groups such as Landcare and one of the rules is that guests are not to be expected to handle chemicals.

While most people will delight at the thought of free labour, it is essential that hosts consider the impact of (often young) people inhabiting their home the way a visiting relative or friend might. Meals are shared and so are the facilities. This includes the all-important internet facilities which are often limited for guest use due to the inaccessibility or expense in some of the more remote locations. And that can be surprising to the young urban-based guests.

Garry Ainsworth from WWOOF Australia works from their head office near Buchan at the foot of the Snow Mountains in Victoria using satellite internet. It is 100km to the nearest traffic light.

Garry cautions against simply matching the guest to a specific job that needs to be done. "Hosts need to be patient as many of the guests have never seen so much as a carrot growing in the ground! It takes a lot of commitment to be a host and my experience is that good hosts are the ones that treat the tricky guests well. If the task is more important than the relationship, that's where problems arise."



But anecdotally, the rewards outweigh the reserves. "Along with the goodwill comes the opportunity to interact with people of another culture who bring language and agricultural skills," says Garry. "I was at a sustainable field day near Bega and the event was being catered for by WWOOF hosts and there were a couple of young men helping. One was from Korea and the other was from Japan. Historically, the relationship between those two countries hasn't been good, but these two met at a property as WWOOFers and were enjoying learning about each other and eventually went travelling around Australia together."

Sometimes they bring just plain muscle. How many WWOOFers does it take to make an organic veggie garden wall? One to design it, one to help source the stone, one to help lay it, one to finish it and perhaps one to landscape it. No doubt this would take some amount of screening of the applicants, but it is the type of things that can be considered when interviewing.

The traveller makes contact through an initial enquiry usually by email, and the stay is booked in. Sometimes the visits are as short as three days or as long as a couple of weeks, however a local couple near us has been known to embrace the WWOOFers for many months when the situation gels. Sometimes they return seasonally. Skilled guests can be particularly handy if you find the right one to build that designer chicken coop, plant an organic veggie garden or help prick out 1500 baby Manna gums for the spring planting season. Don't be fooled into thinking you'll get free childcare though. Domestic chores and childcare are not part of the WWOOFing agenda. Some of the shared cooking exchanges however have been known to bring a welcome reprieve to the usual household menu and guests are not often averse to sharing their foreign language skills with host's children.



Many of the WWOOFers on a backpacking visa are not much more than kids themselves, and as such will require the appropriate level of 'care' at times from the host. The visa itself is not a problem though because the guests are not paid, they are not required to have a work permit.

The idea of hosting a WWOOFer is to provide a learning environment for them while you enjoy the benefit of another pair of hands. That would be a pair of hands that are covered by insurance, which is included with the guest's WWOOF registration.

For an Australian youth, whether a teenager still at home, or an about-to-be-backpacker, the presence of a kindred soul can bring companionship and a cultural experience before embarking on their own journey. A friend recently welcomed a young Italian man who was travelling after completing his Masters in Business Administration in Milan. He loved cooking and the host family loved the surprising discovery of zucchini flowers in batter—an Italian delicacy, apparently. Who knows what he and the host's uni student son discussed on their foray from the host farm up to the top of Hanging Rock. Being the same age, perhaps they will stay in touch and perhaps not.

Either way, the family believes it is a great way for their kids to have some relaxed cultural interaction. It is also quite common for Australians to WWOOF in their own or others countries as a means of safe and affordable travel and a way to get off the beaten track.

Garry Ainsworth says that while WWOOF Australia does a certain amount of promotion, they never advertise for host families, because they don't need to, and he knows many of the hosts who are often among the 150 email enquiries that generally wait for him on a Monday morning. Many of those hosts are long time subscribers and some are as old as 70 who enjoy the interaction and are invigorated by the presence of a younger generation. Garry, a one time organic sheep farmer and commercial fisherman has now been Managing Director of WWOOF Australia for 17 years and says that Australia has the largest amount of host farms in the world.

Our range of experiences varies greatly and can include an urban backyard in St Kilda growing a permaculture garden or tomatoes on a balcony, to a 10,000 sq km cattle station. We also have a beautiful butterfly farm, mango farms and olive leaf tea. There are winegrowers, alpaca farmers, organic vegetables in Tasmania and on the NSW coast, and wildlife shelters in other parts of the country.

Generally, host families will either match the guests to the family's needs, or assess the guest's skills and interests and then provide an opportunity to use them. Likewise, it is important to be clear about your expectations and theirs. Things to consider are internet access, language difficulties and transport availability.

A recent incident where an advertiser promoted themselves as a WWOOF host, turned out to be fraudulent and so the WWOOF brand has now been trademarked to prevent unscrupulous behaviour and to ensure the security of guests; a responsibility that the organisation has always taken very seriously.

For a \$65 annual host registration fee hosts are included in the WWOOF Book. For an additional \$10 new hosts receive the book 'WWOOF hosting. A practical guide.'

Overall, you can be assured of some interesting and rewarding cultural exchanges and useful assistance for busy times on the farm.

For more information visit the Wwoofers Australia website  
<http://www.woof.com.au>







I find most WWOOFers are happy to help with the evening meal. One night we might have sushi, the next night pasta, the next paella. Some WWOOFers email home to get special family recipes. This helps with home sickness and makes them feel part of the "family". Accommodation for the WWOOFers is in my home and they have their own toilet, bathroom and recreation area.

At my farm we work in the mornings and again in the afternoon. During the day is free time. Some WWOOFers choose to study, others use their electronic devices, others visit the local restaurant for that special coffee or visit the supermarket, others simply relax, others go off to their part-time jobs.

I find that WWOOFers tell their friends about their experience and I do not have any difficulty always having enough WWOOFers. Usually I am booked ahead, sometimes three months in advance. I prefer the initial contact to be by email so that I can check my planner for vacancies. If I am uncertain about the person's language ability I phone them and speak with them. Because the animals' health is of prime importance, it is essential that they have a reasonable command of the language.

I have prepared a "WWOOFer Induction Folder" which sets out my expectations and contains a copy of the Department of Immigration's requirements for those wanting an extension on their visa.

I have found being a WWOOFer host a rewarding experience.

Dawn Perryman - Banyandah alpacas  
WWOOF Host QO 087

## WWOOFing – alpaca style

I purchased my first alpacas in 1994. The following year I enrolled at Sydney TAFE and undertook various rural courses. While doing the Organic Farming Certificate I was introduced to the WWOOF concept and while on field trips was able to talk to WWOOF hosts and WWOOF participants. When I moved to Traveston in Queensland I applied to be a WWOOF Host and welcomed my first WWOOFers in 2000. Since that day I have hosted hundreds of WWOOFers from every continent except South America and Africa. Often I will have WWOOFers from diverse cultures at the same time. I will not take WWOOFers for less than a week, as there is no value to me. I prefer longer stays and many work their 88 days, which are required for them to get an extension of another year on their visa.

I am close to Gympie and I take WWOOFers into town at least once a week, where they can use the internet at the Library for free, do their banking, personal shopping etc. Some of my WWOOFers have been able to get part-time work outside of their WWOOFing hours in some of Gympie's excellent restaurants or childminding.

The work is varied (WWOOFers HATE weeding). Some days we work with the alpacas, weighing, drenching, halter training, cria care. Other days it is "paddock management", which is vacuuming up the poo piles or grubbing out scotch thistles. Once a week it is vegetable garden maintenance work. WWOOFers help out at agricultural shows and displays, for example Goomeri Pumpkin Festival (where they led alpacas in the street parade) and Mary Poppins Festival. My farm is open to the public Wednesdays and weekends and the WWOOFers enjoy helping children (and adults) hand feed the alpacas.







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# Australian Designer Shines

Reviews of alpaca on display in Vancouver & London

## International Business & News

### **Eco-conscious Australian Designer Shines With Organically Certified Line in Canada for Vancouver Fashion Week**

Vancouver, Canada, (March 5th, 2014) breathtaking fashion label Green Embassy struck a positive cord at Vancouver Fashion Week on March 19th, 2014. They are an organically certified artisan clothing brand created by Australian Artist and Fashion Designer Zuhair Kuvan-Mills. Green Embassy is designed, knitted, spun, felted, stitched and embroidered from scratch at her sun-drenched farm in the Western Australian bush. Green Embassy addresses the lack of eco-consciousness missing in the fashion industry with timeless designs, luxury organically certified materials, traditional handmade techniques, and elaborate art into fashionable, wearable pieces. With a unique mission to provide women with one of a kind garments that are both high quality and sustainable, it is easy to see why Green Embassy is a highly coveted brand. Green Embassy presented their Haute Couture women's line of handmade, one of a kind pieces that retail between \$2,000 and \$15,000.

*Monique Tatum – International Business & News U.S.A Asia Europe Australia*

## Edward Quan Editor of StyleDrama

### **Vancouver Fashion Week: Haute couture wearable art by Green Embassy**

Artisan fashion designer Zuhair Kuvan-Mills ultra eco friendly label Green Embassy launched Vancouver Fashion Week Wednesday evening with her breathtaking haute couture art designs, one of the top style trends for spring summer. Green Embassy hits Vancouver Fashion Week with wearable art fashions.

"I think of fashion as an artist . . . the runway is my gallery" stated Zuhair Kuvan-Mills in a interview with StyleDrama. With a rather diverse background, she was trained in Turkey as a veterinarian surgeon, a former teacher in the UK and now an Australian contemporary artist.

Wearable art fashions were first introduced on the Paris and Milan runways for spring summer 2014 by Chanel, Dior and Prada, so we now include Green Embassy Australia's first internationally recognized organically certified fashion label on the cutting edge of this new style trend.





Titled Earth Series, she showcased 16 outfits on the runway at Vancouver Fashion Week as her one of a kind fashions are minimalist while dramatic and only uses 100% certified organic merino, silk and Australian alpaca raised on her own farm in Perth.

As a designer, Zuhail Kuvan-Mills has been heavily inspired by ancient textile making techniques such as hand spinning and knitted fibres, weaving, felting, stitching, embroidery to eco-dyed fabrics with Eucalyptus leaves.

"My hands have touched everything which makes every garment haute-couture and unlike any other," said Zuhail Kuvan-Mills.

What I loved about her wearable art pieces is that they are full of earthly abstract shapes and drawings, plus with the addition of tulle she brings a playful sexiness.

Made in Australia, Green Embassy brand offers high fashion, quality and sustainability.

*By - Edward Quan Editor of StyleDrama*

*Photos: Alex Mansour/Hot Pixel Photography*

## Marilyn R Wison – Raine Magazine NYC

**Green Embassy - was another collection that stood out for creating unique garments from unusual fabric - in this case wool felting.**

Turkish born artist/designer Zuhail Kuvan-Mills is the creative force behind this Australian label, each are hand-made and totally unique. She grew up with a love of nature and learned dressmaking from her mother and spinning/weaving from her grandmother. In 2004 she rediscovered her love of art and completed studies at the University of Creative Arts in London and Curtin University in WA. I love this description found on her website, "...a collectible artisan haute-couture label with higher meaning. In essence, her wearable pieces of art are individual prayers for sustainability on earth." The goal is to find that perfect balance between couture, sustainability and the concept of slow fashion.

I sat in awe during this show. There was something very organic about the way the textural fabrics and unique dye choices were combined and each is unique. Fabrics include 100% handmade organic Australian alpaca, merino, silk and recycled natural fibres. Each garment is crafted and hand dyed and knits are fashioned from hand-spun yarns. This is wearable art and I can only hope to have a garment from Green Embassy hanging in my closet one day. Kudos to the designer on a show that took my breath away.

*Marilyn R Wison – Raine Magazine NYC*





## Green Embassy Debuts Organic Art Line at EcoLuxe London Australian Designer Bursts on to London Fashion Scene With Coveted Handmade Textile Designs

Awe-inspiring clothing label, Green Embassy, debuted their line on 17 February at the EcoLuxe London event, a luxury sustainable fashion show held during London Fashion Week. Green Embassy is an artisan clothing label created by Australian Artist & Fashion Designer Zuhail Kuvan-Mills, and her work celebrates the spirit of sustainability. In a unique fusion of timeless textile sculptures, traditional handmade techniques, organically certified materials and luxury quality, these wearable art pieces elevate slow fashion to a whole new level. With a superb eco-conscious ethos, the line's sumptuous garments pay homage to the brilliance of nature, the community, and life as a whole. Green Embassy is designed, knitted, spun, felted, stitched and embroidered from scratch by artist, designer and earth ambassador Zuhail Kuvan-Mills at her sun-drenched farm in the Western Australian bush. This emerging 'organic aesthetic' brand offers multi-purpose garments which balance elegantly between sophistication, sustainability and contemporary slow fashion. Green Embassy will be presenting a Haute Couture women's line of handmade, one-of-a-kind pieces.

EcoLuxe London was launched in September 2010, created by designers Stamo and Elena Garcia in promotion of high-end, environmentally friendly fashion designers and brands. The event is not-for-profit, supporting and promoting luxury with an ethos. Their main event is a biannual showcase during London Fashion Week. The most recent show took place at Kingsway Hall, 66 Great Queen Street, WC2B 5BX Covent Garden and was by invite only. "It was an honour to be able to present for the EcoLuxe for London Fashion Week. It was their first luxury sustainable fashion show and to be a part of it is absolutely thrilling," states Kuvan-Mills. "Not only is my line organically certified, but my pieces are also one of a kind. When a woman purchases a piece from my line they know that there is none other like it. My hands created it from beginning to end. That is an amazing feeling for both the woman, and for Green Embassy as a whole."

As Australia's first internationally recognized organically certified fashion label, Green Embassy believes sustainability should be at the heart of the fashion and textile industry. The line focuses on modern, minimalist, functional and alluring garments for earth-friendly consumers, with Zuhail finding inspiration within the textile crafting traditions of ancient times and the vivid beauty of Western Australia's bush landscapes. Her commitment to sustainability, organic agriculture, art and slow fashion is expressed in each extraordinary textile piece as a labour of love. Using 100 per cent certified-organic Australian alpaca, merino, silk and organic natural fibres, Green Embassy's handmade collections are earthy yet sublime, authentic yet edgy. A signature Green Embassy piece involves flirting with earthy abstract shapes of drawings, natural prints, lush handmade fabrics and a sleek finishing line.

"We are a haute-couture label with higher meaning," continues Kuvan-Mills. "In essence we are presenting wearable pieces of art that are individual prayers for sustainability on earth."





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# Talking Teeth

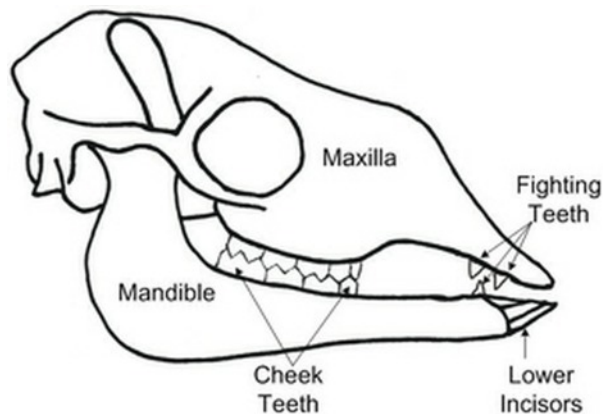
By Allison Quagliani - Alpaca Dental Services

Alpacas spend more than half of their lives eating and chewing. It is essential as their carers that we understand the basics of alpaca dental anatomy and the effects dental problems can have on the overall health and welfare of our alpacas.

This paper will provide an overview of alpaca dental anatomy, discuss the most common problems alpacas have with their teeth and provide owners with a guide to identifying individuals within their herds, that may need dental attention.

## Introduction

As in other animals, the mouth is the first stage of the digestive tract. A correctly balanced, well functioning mouth allows the alpaca to graze and chew both comfortably and efficiently - essential for the overall health and wellbeing of the animal. Good teeth play an important role in this process. Dental disorders are not only painful for the animal, (to which many humans can relate) but left untreated will have a detrimental effect in many areas including body weight, fibre quality and the ability to reproduce.



*Fig 1 Alpaca skull showing dental anatomy*

## Dental Anatomy

Alpacas have a total of 30-32 teeth comprising of six incisors, six fighting teeth and 18-20 cheek teeth (Fig 1). During their lifetime alpacas will have two sets of teeth. The first teeth, known as deciduous or baby teeth, are temporary and will be replaced between two and four years of age with permanent teeth.

## Incisors

The incisors are the six teeth in the lower jaw at the front of an alpaca's mouth (Fig 2). They are designed to fit snugly against the dental pad of the upper jaw. They are used to grasp and cut grass, leaves and shrubs.

Cria are usually born with their front two incisors and by six months of age will have all six. These first incisors are deciduous teeth and they will be replaced commencing at around two years of age with permanent teeth. By the time the alpaca has reached three and a half years all six deciduous incisors will have been replaced.



*Fig 2 Incisors*



*Fig 3 Fighting Teeth of a Mature Male*



### Fighting teeth

The fighting teeth of an alpaca are located behind the incisors (Fig 3 and Fig 4). There are two in the top jaw and one in the bottom jaw on both sides of the mouth. These teeth are very sharp, curve towards the back of the mouth and are well designed to rip and tear. Males have well developed fighting teeth and can cause serious injuries to their paddock companions during fights for dominance.

Females usually have fighting teeth but they are much smaller than those of a male.

Fighting teeth erupt at around three years of age and should be trimmed to prevent serious injury to other alpacas.

### Cheek Teeth

At the back of the mouth in both the upper and lower jaws are the premolars and molars, usually referred to as the cheek teeth (Fig 4). The cheek teeth are arranged so the upper and lower arcades (rows of teeth) mesh together to produce an efficient grinding surface. These teeth do all the hard work grinding the food to a consistency suitable for swallowing.

### Occlusion and Malocclusion

The meeting together of the upper and lower teeth and the dental pad is referred to as occlusion. If the teeth do not occlude correctly then this is referred to as malocclusion. The teeth of an alpaca form and grow in the jawbones beneath the gums. These teeth erupt into the alpaca's mouth and wear away against the opposing



Fig 4 Skull Showing Cheek Teeth & Well Developed Fighting Teeth



teeth/dental

pad as the animal bites and chews. This process of continual wearing and eruption continues throughout the life of the alpaca until the teeth are worn out. Any uneven wear will cause a malocclusion and hamper the animals' ability to graze and chew correctly.

Malocclusions cause varying degrees of discomfort or pain to the animal. While times are good and food is plentiful the discomfort may not seem so obvious. When times are tougher, for example during times of drought, late pregnancy or lactation the effects of malocclusions become more pronounced.

### Incisor Malocclusions

Undershot jaw (Fig 5A and Fig 5B) is one of the easiest malocclusions to recognise as the lower incisors protrude beyond the dental pad. Overshot jaw (Fig 6) is when the dental pad protrudes beyond the lower incisors.

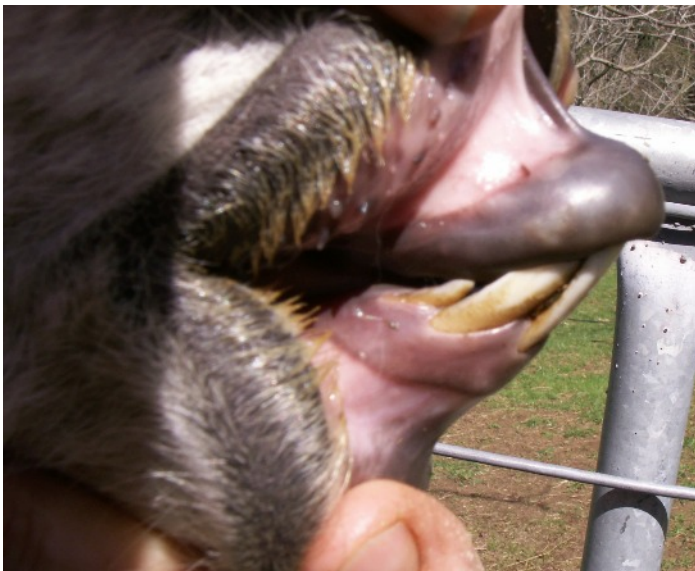


Fig 5A Undershot jaw front view





*Fig 5B Undershot jaw side view*



*Fig 6 Overshot jaw, side view*

### **Molar Malocclusions**

Between birth and four years of age an alpaca will replace its deciduous premolars and twelve permanent molars will also erupt at the back of its mouth, three on each side, in both the upper and lower jaws. As you can imagine this eruption pattern doesn't always go to plan.

In Fig 7 an overlong molar in the lower jaw has worn a gap between two of the top teeth. When this alpaca's mouth was closed the long tooth was gouging the gums and has also damaged the bone. When the upper and lower cheek teeth do not occlude correctly the unworn teeth become so long that they grow into the opposing gum and in extreme cases the bone is also damaged.

### **Recognising Malocclusions**

A dental abnormality will manifest itself with one or more visible signs. Regular observation of your alpacas will identify small problems before they become major challenges. Animal age,



*Fig 7 An overlong molar in the lower jaw*

conformation, seasonal conditions, diet and regional soil variations can all have an impact on dental health. Alpacas should chew evenly on both sides of their mouth without dropping food to the ground. Often loss of body condition is the first symptom owners become aware of. Some animals may show a reluctance to eat, dribbling, an abscess or swelling in the cheek area and obvious pain whilst chewing.

Swelling in the cheek area may be due to the holding of grass or hay in the side of the mouth referred to as quidding (Fig 8). Alpacas with overgrown or very sharp molars use this ball of food to protect their cheeks and gums from the pain incurred while chewing their food. The quid is not swallowed but spat out and you may find them on the ground in the area where the alpacas live.



*Fig 8A 'quid' held in the cheek area. A sign of serious tooth problems*



## Conclusion

A correctly functioning mouth is an integral part of alpaca health and well being. Malocclusions can have significant negative impacts but can usually be corrected to a degree sufficient to restore animal health.

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Alpaca Dental Services started providing dental care to the alpaca industry in January 2006. Today Allison travels extensively throughout her home state of Victoria attending to her many clients. Alison presented this paper at the recent AAA National Conference. [www.alpacadentist.com.au](http://www.alpacadentist.com.au)

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# Using 'Fibre Growth Profiles'

## to monitor fibre follicle development in alpacas

By Paul Vallely, Australian Alpaca Fibre Testing  
Australia and UK. May 2014

While many alpaca breeders have incorporated objective fibre measurement into their herd management strategies, 'Fibre Growth Profiles' are becoming popular for monitoring pre and post natal nutrition, particularly during the critical period of secondary follicle development in unborn crias.

'Fibre Growth Profiles' are linear graphs depicting variation in diameter along the fibres. This allows alpaca breeders to track nutritional intake of both the pregnant female and the cria in order to manage the development of secondary follicles, and thereby maximise potential for fibre density, fleece weight and fibre diameter.

### Follicle development in Alpacas

As many alpaca breeders would be aware, it is the primary follicles that produce fibres that tend to be the broadest and most problematic fibres found within fleeces. It would come as no surprise that we refer to these as primary fibres. Conversely, the secondary follicles produce the finer and more luxurious secondary fibres within fleeces.

While much of the research into skin follicle development revolves around the merino industry, some recent work has been completed that specifically relates to follicle development in alpacas. In the research paper titled 'Relationships between skin follicle characteristics and fibre properties of Suri and Huacaya alpacas and Peppin Merino Sheep (Ferguson et al, 2012)', it was shown that skin follicle characteristics in alpacas are similar to that of merino sheep. One noted difference, however, was that while follicle groups in merinos contained around 3 primary follicles surrounded by a cluster of secondary follicles, follicle groups in alpacas contained only one primary follicle, surrounded by (around 3 to 10) secondary follicles.

More importantly, the Ferguson et al study revealed a significant negative correlation between secondary follicle density and mean fibre diameter. In other words, the greater the number of secondary follicles, the lesser the mean fibre diameter. Presumably, this correlation is the result of the increase in the ratio of finer secondary fibres against the broader primary fibres. It is also reasonable to suggest that the greater number of secondary follicles, the higher the fleece weight.

To many breeders, this is the Holy Grail – more fleece of lower diameter. The question then becomes, how to increase the number of secondary follicles.

Interestingly, the research found suris had a significantly higher follicle density than huacayas.

It is clear through previous research as revealed in Dr Julio Sumar's paper 'What makes a champion' (Alpaca Western Extravaganza, 2004), increase in available nutrition to the unborn cria foetus maximises the chances of the foetus to achieve its genetic potential with regard to the number of follicles developed. Secondary follicles develop predominately from day 187 to day 217 during pregnancy, although further development and maintenance of secondary follicles can be an issue through to birth and up to 6 months after birth, although once a cria reaches about 70 days of age, secondary development has largely ceased, and will remain for the balance of its life.

I should stress at this stage that research concerning the timetable for follicle development in alpacas is lacking at the moment, however, Dr Sumar's comments on this point are worth taking on board.

From the Ferguson research and above comments of Dr Sumar, it can be taken that an increase in nutrition to the pregnant female during the latter half of pregnancy followed through to at least the second month after birth, will lead to an increase in the number of secondary follicles in the cria. Consequently, this should result in an increase in the overall fibre density or fleece weight, increase in secondary/primary fibre ratio and decrease in average fibre diameter for the lifetime of the cria.

To validate this finding, I refer to the 'Lifetime Ewe' project in the Australian merino industry whereby an identical feeding regime, albeit synchronised to merino skin follicle development, has recorded significant increase in fleece weights combined with decrease in average fibre diameter as well as increase in body weight for the life of the sheep (relative to similar sheep that had not been subject to the feeding regime).

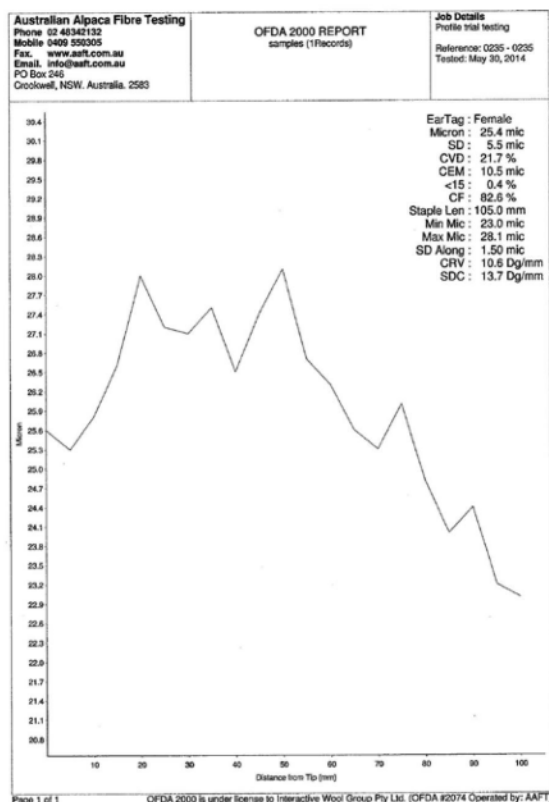
The one thing I should stress at this stage is that this improvement in fleece traits is confined to 'environmentally' influenced improvements rather than improving genetic potential. It will, however, enable the alpaca to maximise its genetic potential with regard to fleece traits.

### Tracking nutrition using 'Fibre Growth Profiles'

When using OFDA2000 fibre measurement technology, a linear graph is provided that reveals the variation in fibre diameter along the sampled fibres. The horizontal axis of the graph depicts length along the sample in millimetres, while the vertical axis



**Figure 1: Examples of Fibre Growth Profiles for two females bearing offspring**



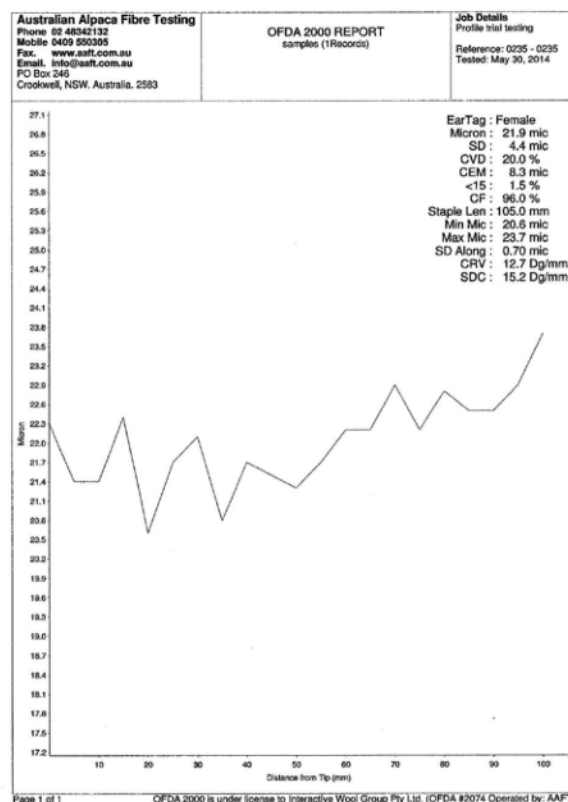
**Female A**

depicts fibre diameter. As the left side of the graph indicates the commencement of the growth period while the right side is the point where the fibre was cut from the alpaca, we read the graph from left to right.

By using the fibre growth profile, we are able to observe the variation in the amount of nutrition reaching the fibre follicles. If we observe the profile dropping, then this reflects a drop in nutrition such as experienced from internal parasite burden, disease and inferior feed conditions. If the profile is rising, then this reflects a rise in nutrition such as effective drenching or improvement in quantity and/or quality of feed.

**To illustrate the effect of using Fibre Growth Profiles for monitoring the availability of nutrition during the period of secondary follicle development, two sets of profiles are shown.**

The first set (figure 1) were derived from samples tested of two suri females, with samples taken approximately two months after their respective crias were born. The second set (figure 2) are



**Female B**

profiles derived from testing samples from two suri crias, taken approximately six months of age. In both cases, the date of testing could not be verified, and was based on information from the breeder. Cria A is the progeny of female A, while cria B is the progeny of female B.

In the case of female A, the Fibre Growth Profile shows a slight increase in nutrition at the commencement of the growing season (after shearing), then a significant decrease in nutrition which was a result of a deterioration in paddock feed quality. Insufficient supplementary feed was provided to offset the increased demands on the mother's nutritional requirements arising from the developing foetus. The decrease in nutrition occurred at the crucial period of half way through pregnancy and continued after birth up until the time of sampling.

From this, it can be assumed, the development of secondary fibres in the unborn foetus would have been significantly affected, resulting in less secondary follicles leading to lower fibre density, lower secondary to primary fibre ratio with consequent higher average fibre diameter relative to genetic potential.

In the case of female B, the Fibre Growth Profile shows a gradual increase occurred over the entire growing period. The female was fed a high energy/protein supplement at an increasing level to offset the increased demands from the developing foetus and period of lactation. As can be seen from the profile, the increased rate of supplementary feed was slightly more than what was required, however, this is desirable as too much weight gain during pregnancy may lead to birthing problems.

From this, it can be assumed the development of the secondary follicles benefited from the increased nutrition, and as a consequence, allowed a higher fibre density, higher secondary to primary fibre ratio, and low average fibre diameter relative to genetic potential.

As previously mentioned, cria A was the progeny of female A. In the case of this cria's Fibre Growth Profile, the left edge of the graph depicts commencement of fibre growth in the unborn foetus. In the case of cria A, there is no evidence of an increase in nutrition reaching the foetus from the female. The slight spike in the profile near the end of the season was probably due to a spring burst after birth, although the precise point of birth on the profile is not known.

The assumptions made from observing female A's profile, appear to be validated in cria A's profile in that secondary follicle development is likely to have been negatively affected through poor nutrition.

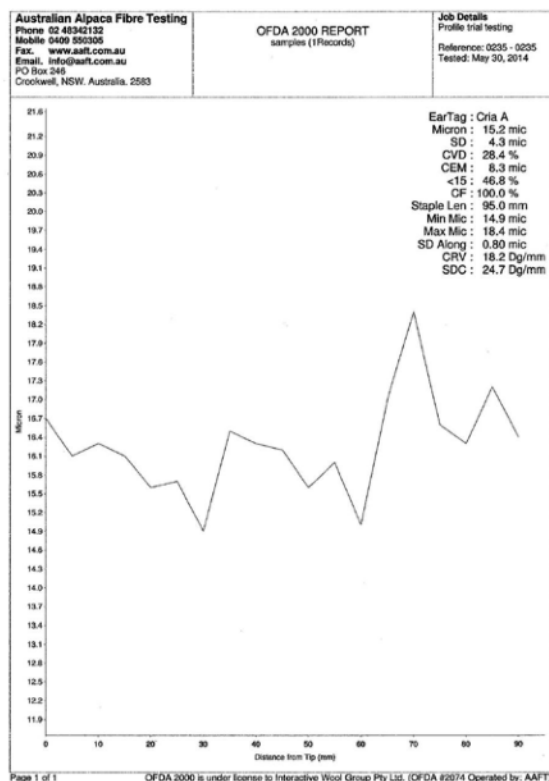
On the other hand, cria B's Fibre Growth Profile shows a typical rise in nutrition as a result of enriched nourishment from a female receiving adequate nutrition. It should be noted that a rise of over 10 microns during the first year of fibre growth is not uncommon. Clearly, this cria is likely to benefit from high numbers of secondary follicles leading to high fibre density, high secondary to primary fibre ratio and lower average fibre diameter relative to genetic potential.

It is worth noting that some breeders who use profile tracking have observed acceptable profiles of females through the pre and post natal period, yet the profile of the cria during this period has not shown the typical increase in nutrition. In this case, it appears the female has difficulties with passing nutrition to the cria, which is obviously an issue worth addressing.

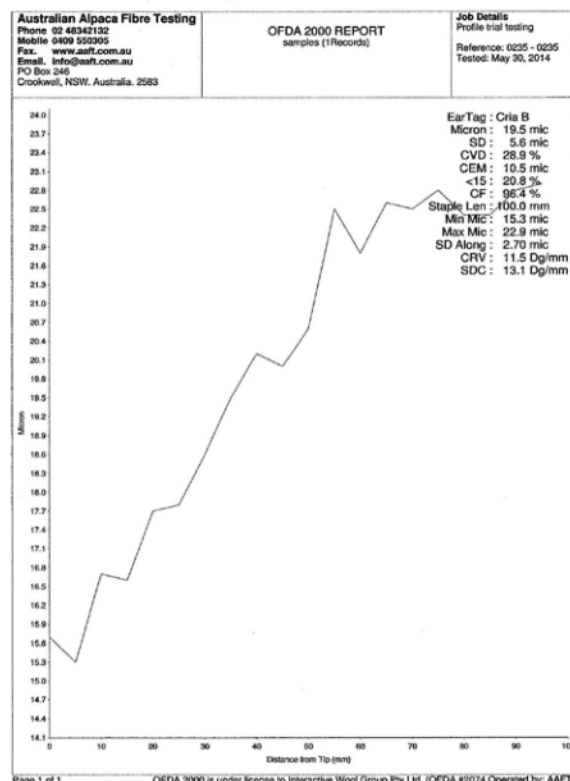
## What are the benefits?

It needs to be remembered that tracking Fibre Growth Profiles provides an historical account. If a problem is identified such as a sharp drop in nutrition, then largely, the damage is done. The benefit of monitoring profiles, particularly concerning evidence of nutrition that might affect follicle development is that it allows critical issues to be resolved for future impact such as adjusting levels of suitable feed. In the examples above, the owner of female/cria A had been made aware that pre and post natal nutrition was significantly lacking, and that their alpacas were being denied the ability to achieve anywhere near their genetic potential for fleece traits. Anecdotal evidence suggests the breeder's fleece data have improved, although insufficient time has lapsed to make valid conclusions.

**Figure 2: Examples of Fibre Growth Profiles for two crias**



**Cria A**



**Cria B**



A further benefit of tracking profiles with crias is that it places the micron and SD into a perspective. A cria might have a higher than expected micron due to the influence of very high nutrition from the female, or conversely, be low due to lack of nutrition. Also, the SD might be unexpectedly high due to the 'environmental' influence from significant variation along the fibre due to dramatic increases in the profile. All these issues are observable from the Fibre Growth Profile.

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*The author discloses a commercial interest in the above subject matter (as owner of Australian Alpaca Fibre Testing), and encourages alpaca breeders to pursue their own independent enquiries before adopting the practices outlined in the paper.*

*Comments to the Editor on this topic are welcome.*

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# Diseases Of The Newborn Cria

## Part 2 - Abnormalities, deformities, infection & diarrhoea

Professor Andrew Dart BVSc, PhD, Dip ECVS. Dip ACVS

### **Congenital abnormalities**

Without doubt, there appears to be a high number of different congenital abnormalities (abnormalities identified at birth) many of which lead to the death or direct need to euthanase the cria. These include but are not confined to choanal atresia (blockage of the nasal airways), atria ani (failure to form an anus), multiple forms of heart abnormalities, multiple manifestations of a failure of the reproductive tract of females to form properly, failure of the head to form properly (one eye, crooked nose, overbite, under bite, shortening of the face) and various skeletal abnormalities the most common of which include crooked legs, laxity of the tendons, contracture of the tendons, luxating knee caps, extra digits, spinal abnormalities amongst others.

It is very important to distinguish congenital abnormalities from heritable abnormalities. Congenital abnormalities are present at birth and while some of these can be heritable others may be due to external factors affecting the animal during pregnancy such as toxic plants, illness, viral or bacterial infections, trauma etc that are one off factors. Heritable abnormalities suggest that the parents' genes have combined to cause a defect in the DNA of the cria. Heritable causes are hard to prove particularly in animals that breed one newborn a year. Furthermore it does not have to be a straightforward inheritance it can be linked to the sex of the cria, it may only be seen in every 2nd or 3rd generation or even less frequency or one parent may be responsible for expression of the defect while in other cases it might require the two specific parents to express the defect amongst other scenarios. It could also be some combination of all or any of these. Often people assume that terrible congenital defects must be heritable but until that is proven through DNA testing or suspected through repeated matings it may not be the case.

It is interesting talking to many alpaca owners who say they have never or rarely see congenital abnormalities. It is important to know these are out there and everyone who is breeding is experiencing some of these conditions. It is not surprising that breeders are not advertising these experiences. I believe the reason we are experiencing so many congenital abnormalities is that, for many generations, small herds kept by villagers isolated by the terrain in the mountains of South America have led to a lot of inbreeding. Inbreeding will cause an increase in genetic flaws and expression of these abnormalities. More recently we have seen many of these animals brought down from the mountains into large herds and exported all over the world so the genetic pool has rapidly increased and diversified. As a result many of these abnormalities are becoming diluted by the broader genetic pool. Furthermore the fact many of these conditions are fatal is contributing to a loss of these flawed genetics from the gene pool. I believe over time many, if not most, of these abnormalities will naturally disappear.

On that basis I believe we should not be overly concerned about the higher incidence of the abnormalities compared to the more domesticated herd species and allow nature to take its course.

### **Angular limb deformities**

Crias naturally have a slight valgus (the cannon bone angles outward from the knee) deviation of the legs. However, at times, this deviation at the knee and the fetlock may be excessive putting unacceptable pressures on the joints causing arthritis. In these cases crias may benefit from surgical correction. There have been a number of descriptions of the appropriate approach to this technique in crias. It has largely been extrapolated from the same procedures performed in other species. From experience the surgical technique of periosteal stripping is unreliable in correcting these deformities. We strongly recommend the insertion of screws and wires across the growth plate to slow the growth on one side of the bone and allow the other side to catch up. With this procedure removal of the hardware once the leg is straight enough is necessary but it produces reliable results.



*A cria with angular limb deformity at the level of the carpus. Radiographs show the deviation to be at the level of the distal growth plate of the radius.*





### Tendon contracture and laxity

Tendon contracture is not uncommon in a lot of species with long and well evolved distal extremities. Tendon contracture commonly affects the fetlock or lower joints, of any, or all of the 4 limbs. We have defined tendon contracture into types 1 -3. Type 1 is where there is mild contracture, the cria can get up and down and nurse and the weight of the alpaca on the contracted tendons will naturally stretch the tendons without assistance over time. These crias need gentle exercise to naturally stretch the musculotendinous unit as the cria develops. Type 2 contracture is more severe than type 1 where treatment is required to help straighten the tendons. In these crias with manual stretching the limbs it is possible to straighten the limbs into a more normal position but splints need to be applied to maintain the limbs in this position. With splints the weight of the animal will work to straighten the limbs. These crias generally respond very well and very quickly and are usually able to get up and nurse with assistance once the splints are placed. Type 3 contracture is severe and the limbs cannot be manually straightened even under anaesthesia. Splints are usually ineffective in these animals and only surgical resection of the contracted structures is likely to offer a possible treatment option.

Some veterinarians will attempt treatment with high dose (30 mg/kg) of oxytetracycline as a single or consecutive daily doses for up to 3 days. This is administered intravenously and is believed to bind calcium and relax the musculotendinous unit. This treatment has been used in foals although descriptions of the technique and the underlying rationale for treatment are scarce. Its success rate in foals has not been documented and it is unclear how well this might work in alpacas however some veterinarians claim good success. It should be noted oxytetracycline is toxic to the kidneys and at these high doses in dehydrated or sick animals may cause renal failure. The drug is not registered for use in alpacas at the normal (10 mg/kg) or the elevated (30 mg/kg) dose.

In crias with type 1 and 2 contracture we pad and bandage the legs and use PVC pipe as a splint. Padding limits the development of pressure sores. Where there is fetlock contracture alone it is necessary to place some support distally behind the pastern region to maintain the distal digit in an extended position. The splints can be left on for 24 hours then removed, the response reassessed and refitted if necessary. If the knee joint is involved the splints should be extended up to the mid forearm.

Crias with tendon laxity are less common. These crias should be stall confined and let out into a larger area for 1-2 hours at a time. Light exercise will usually increase the muscle tone and these crias will strengthen up over several days. It is important to restrict exercise and keep a close watch on these crias because initially after being allowed exercise they will appear to improve but as they become fatigued with too much exercise the laxity may get worse.

Similarly avoid putting the crias out in hot sun where they will fatigue more quickly. Intermittent and regular exercise is the key to getting a quick response.

### Infected joints

Localisation of infection in joints is not as common in camelids compared to some other species but may occur where bacteria are being released into the blood from another site of infection such as the intestine, lung or umbilicus. In these cases it is essential that the origin of the bacteria be localised and treated to prevent the ongoing release of the bacteria into the blood and onto the joints.



*The most reliable way to treat angular limb deformities is to place screws either side of the growth plate in the distal radius and apply a figure of 8 wire between the two screws. This slows growth on this side of the bone and allows the leg to straighten. These screws and wire should be removed once the desired level of correction is realised.*

The joints should be flushed with a sterile solution to remove infection then treated with an antibiotic injected into the joint. The same antibiotics should be used systemically as injectable agents. I believe giving these antibiotics intravenously through a catheter is preferable to giving them into the muscle because these crias are small, have a small muscle mass. Repeated injections into the muscle are painful.

Furthermore it is easier to get stable and more effective systemic concentrations of antibiotics if they are given into the vein. In some crias the joint flush may need to be repeated or the joints may require further injection with antibiotic to maintain high concentrations and resolve the infection. If caught early these crias will respond favourably.

### **Diarrhoea**

Diarrhoea is a risk for all newborns. It is particularly critical because newborns can become severely dehydrated very quickly. Crias with failure of passive transfer and low antibody levels are at greater risk for any infection including intestinal infections. In crias that remain bright and alert, are nursing well and have minimal changes in a blood analysis, the diarrhoea may run a natural course and not require treatment. However in most cases crias rapidly become dehydrated and depressed and then refuse to nurse compounding the situation. These crias will also end up with bacteria in the blood stream (septicaemia). These bacteria may localise at other sites such as the joints causing additional problems. Crias with severe diarrhoea need injectable antibiotics and fluid therapy. Oral fluid therapy is usually insufficient to replace the fluid loss, the ongoing fluid loss and maintenance needs. These crias respond very well to intravenous fluids administered through a catheter. This is a more cost effective and sensible way of approaching treatment and more likely to resulting good outcomes.

An indwelling catheter will also facilitate the use of antibiotics intravenously which are a lot more effective and lost less painful than intramuscular injections. Many veterinarians will use various oral medications to treat the crias and slow down the diarrhoea. This in my opinion is unnecessary. The diarrhoea is a body mechanism to get rid of bacteria and other factors that might be contributing to the diarrhoea and to the crias illness so to try and slow the diarrhoea or delay the passage of bacteria and toxic products is not natural and nor is it in the best interests of the animal. With fluid therapy and antibiotics, the intestine will rapidly return to normal and the diarrhoea will stop naturally. During treatment I prefer to leave the cria on the dam because the dam's milk is full of antibodies and nutrients which will assist the recovery.

### **Localisation of infection in the bones**

There is an unusual manifestation of disease in the alpaca whereby areas of bones die due to lack of blood supply. This is not a disease that features in other species. It occurs most commonly in younger animals and is unusually associated with hot painful region in one limb causing lameness. There may or more commonly may not be a draining wound. On radiographs these areas show a bone sequestrum (isolated piece of bone) separated from the main bone with or without signs of infection. More recently we have identified a similar disease process involving the flat bones of the pelvis.

There have been few reports in the literature on this disease process yet it is being seen quite commonly according to veterinarians seeing alpacas. At this stage it is difficult to determine whether the

disease represents a primary infection of the bone associated with bacteria in the blood isolating in these bones or whether bacteria are opportunistic and become involved later after the bone dies. Animals with this disease do not all have a history of having a separate site of infection such as the umbilicus or a history of pneumonia or diarrhoea where the bacteria may spread into the blood stream and on to the bone. However it is worth noting that we do not find the source of infections in some cases of joint infection, where we know it is caused by isolation of bacteria from another site in the body.

Irrespective of the cause, by the time the signs become apparent, medical treatment with antibiotics and pain relieving drugs is almost always unsuccessful and the condition progresses until the bone fractures or fails. The treatment of choice is surgical debridement. Some veterinarians are reluctant to take such an aggressive approach but delaying surgical debridement and removal of the dead bone offers a worse prognosis. We have had remarkable success with surgical treatment.



### **Conclusions**

Crias are susceptible to many of the problems faced by the newborns of other species. The ingestion of sufficient colostrum containing adequate antibodies goes a long way to ensuring young crias are healthy until they develop their own immune response. The absorption of antibodies can be evaluated by various techniques but most simply the measurement of blood protein concentrations will give a reasonable estimate along with observing the nursing behaviour of the cria following birth. In cases where there is concern the antibody levels are low then commercially available plasma is available and provides a reliable transfer of immunity. Where problems do develop in the cria early intervention is money well spent. It can often avoid more expensive treatment later or at worse death of the cria.



# Confinement Of Alpacas

## Fat or Unfit?

By Dr George Jackson - Banksia Park Alpacas WA

### Caesarian in alpacas should be a very uncommon event

Over the years I have become increasingly aware of alpacas requiring assisted deliveries and caesarians. This problem appears to be an Australia wide phenomenon.

A few years ago some West Australian breeders became concerned that the problem may be caused by the animals eating kikuyu (a common perennial grass/lawn used in WA.) because it contains oxalates which bind calcium.

Calcium is important for muscle contractions and low levels of calcium may be implicated in uterine inertia (uterine muscles become exhausted and simply stop contracting) predisposing to dystocia and related birthing problems. The thought process is logical but I feel the bigger picture is being missed as many studs which feed an abundance of kikuyu do not appear to be having a problem.

What many of the breeders who are having problems have in common, are animals that are being very well fed and kept in small yards and/or being placed in sheds at night. Properties where the animals are being run in larger paddocks and receive plenty of exercise do not seem to be experiencing the same level of problems.

It is a well known fact that animals that are "fat" or "unfit" will have a greater incidence of birthing problems. I am convinced that this is a major contributing factor in many of the cases involving birthing difficulties. The birthing process is a very physical and exhausting process and a good level of fitness is required or the animal will simply become exhausted, stop contracting and assistance will be required. Fat deposits in the pelvic canal can also cause narrowing of the pelvic outlet making the birthing process more difficult. The pregnant female being able to walk and move freely also helps the final positioning of the cria and will reduce the incidence of mal-presentation.



The last few weeks of the pregnancy can become very uncomfortable for the female and it is not uncommon for even the most experienced breeders to wonder whether the birthing process has begun. Many uncomfortable females that are left, but well supervised, will settle down and deliver a normal cria maybe a week later. If the discomfort continues then please call a vet or experienced breeder.

Another consideration for the greater number of caesarians being performed is that many vets, sometimes with limited alpaca experience, are being asked whether a caesarian is required. Sometimes this is a difficult decision and the wide variation in due dates does little to help. Vets may well err on the side of performing a caesarian, rather than advising against it. The benefit of hindsight is a wonderful thing.

Enthusiastic breeders who quote stocking rates of over 20 alpacas to the hectare (greater than 9 per acre) are being unrealistic in their expectations of both the health of the alpacas and the health of the land on which they are running. Pasture and soil degradation also becomes a major issue when animals are held in small paddocks for extended times. Without rotational grazing strategies, such stocking rates are highly undesirable. Alpacas kept in small paddocks or paddocks that are overstocked face a number of problems including a build up of parasites such as coccidia and worms. It is especially important that birthing takes place in a clean, parasite free paddock.

Alpacas have evolved as extensive grazing animals and they 'work' better when allowed to graze extensively. Alpacas can be successfully farmed under intensive grazing situations including rotational grazing but the level of management needs to be higher and may not be suited to some alpaca properties or inexperienced owners.

### Recommendations:

- Endeavour to maintain your alpacas in a 'non-fat' state and ensure exercise to maintain a reasonable level of fitness.
- Body scoring of your animals is essential to help establish whether or not their body condition is appropriate to their reproductive state. (Refer to the Alpaca Fact Sheet on Body Condition Scoring)
- Do not leave it until late pregnancy to start reducing your animals feed intake. If weight reduction is required it should have been achieved before the animal has reached the last few months of pregnancy. This is not the time for animals to lose weight.
- Place feed and water at opposite corners of paddocks to encourage some exercise.
- Let animals out to graze in laneways.



# Blackall Wool Scour

Australia's last remaining wool scour has been recognised with an Engineering Heritage National Marker. Queensland Governor Penelope Wensley presented the award.

Built in 1908 the Blackall wool scour was, at the time, a state of the art facility used to prepare wool for market.

Engineering historian, Brian McGrath says "its primary role was to remove the lanolin, sweat residue, dust and the dirt from the fleece. The scoured wool would attract better prices for the grower." The steam powered wool washing plant is the only one of its kind left in Australia.

"Its major significance lies in the fact that it was, in its era, a quite up to date example of mechanical, electrical and chemical engineering technology. It is the only wool scour of its type remaining in Australia today."

In 2014, the wool scour is now a tourist attraction, however it still works as it did in 1908. Mr McGrath says the Blackall community is to be thanked for maintaining the historic machinery.

"It lay idle until 1989 when the good folk of Blackall decided the wool scour was worth preserving."

It was then that the Blackall Wool scour Association was formed to take over the plant and of course today we have it back in an operational condition.

The wool scour operated commercially under steam power from 1908 until 1978, bringing huge economic benefit to Blackall over those 70 years.

Christine Campbell is from Norwood station west of Blackall, she says the wool scour was always a busy place.

"The scour was very important because in its early days it was a mechanical shearing shed.

"Generally at that time people only had hand shears so the scour and the shearing shed became a centre for sheep.

"It provided a lot of employment for the district."

She says the community saw preserving the wool scour as a tourism opportunity as it provides a unique experience of travelling back in time.

"You cannot experience this anywhere else.

"I think people saw it as the past of what was then, a thriving wool industry.

"It was such an important part of Blackall's history."

*Printed courtesy of ABC Rural - Qld Country Hour  
www.abc.net.au/rural – Reporters Lydia Burton & Chrissy Arthur*





# Why is My Alpaca Doing That?

## The Flehmen Response

By Helen Jessop

Standing over a poo pile, the alpaca lowers his head toward the ground and then throws it back, mouth open, nostrils flared. This is called the flehmen (pronounced flaymen) response, and is a common behaviour in many mammals, including sheep, horses, cats, goats and elephants, to name just a few, in addition to camelids. Why do they do it?

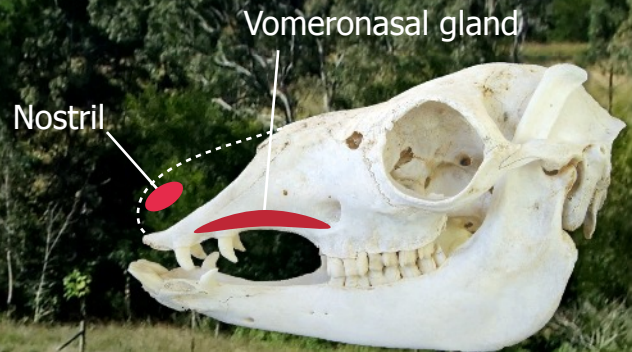
The flehmen response allows the animal to pick up important scents in the environment. In the case of a predator, such as a cat, it helps them identify the presence of competitors, mates or prey. Alpacas use it to gather information about other alpacas - from sniffing at the poo pile, an alpaca can tell how long ago it was used and gather information about the animals who used it. Males do it to identify the reproductive state of females or territory information. Sometimes you will see a female alpaca doing it too, such as after sniffing another female's rear end when she is giving birth.

How does it work? Odours can be air-borne or moisture-borne. We get information about air-borne odours, such as the scent of a flower, via olfactory (sense of smell) receptor cells in the nasal passage. Pheromones and hormones excreted from the genital regions or urine of animals are moisture-borne and require a different receptor. Lying above the roof of the mouth and within the main nasal chamber is a specialised group of sensory cells, forming an organ called the vomeronasal gland or Jacobson's organ.

The flehmen response involves the animal sniffing in the odour then raising its head while wrinkling its nose, lifting or curling its lips and holding its breath for a moment. This behaviour effectively directs the odour to the vomeronasal gland.

And if you're wondering if humans have a vomeronasal gland too, there is evidence to indicate we did once upon a time and there may be vestigial signs of it, but science suggests it is not effectively used by humans.

*Reprinted courtesy of the Tasmanian Region magazine – The Spitting Image*





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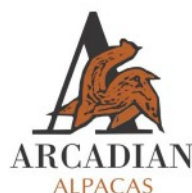
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ABC reporter Marlina Whop meets Tonka from Joy Lee's Joda Alpacas at Cawarral near Rockhampton. Marlina was researching an article on the growth of the alpaca industry in Central Qld. for ABC TV



Our AAA Showcase & interactive display made it's rural debut at the Mudgee Small Farm Field Days and was a huge draw card for the many thousands who attended the popular event.



Patrick and Valentino being admired by Year 8 college students from Gawler & District College. "The boys" were donated to the school by Sue & Trevor Drogemuller from South Australia in order to promote alpacas to the wider school community and foster the development of upcoming alpaca enthusiasts.



Alpacas recently partied on at the home of Nova breakfast session boss KJ as part of a fun radio event that got alpacas out into the community and on to the lips of many on the high rating breakfast program. Thanks to Prada and Caesar and their owners we even secured a cash donation for regional coffers.



# From Paddock to Product: Felting

By Sian Rickards

Felt making is an almost primeval craft. It is the oldest fabric ever discovered and ancient examples have been found in many parts of the world. Felt can be strong, thick and water resistant or fine and whispery soft.

Basically, felt is a fabric made by forcing fibres to matt and tangle into either flat sheets or three dimensional shapes which can be used in a huge range of ways, from garments to hats and from rugs, throws and blankets to tents. It can also be used in purely decorative ways. Felting has processes that are soothing, gentle and soft as a baby's kiss and stages that are full of energy and enthusiasm. At the end of a day of felting, I always feel as if I have been reborn. You don't need to be an artist to create some beautiful things with felt. It is always fun and often surprising.

I have decided to show a number of the processes involved in creating felt by making a simple nuno felted scarf. The use of fine silk enables you to add a further 'wispy'ness' to the garment without losing strength; however felt can be made with pure fibre from a number of different types of animals, either as a stand-alone or a blended process. It is not uncommon to use fine strands of silk fibre blended into the felt or simply whispered onto the garment during the laying out and felting process. I, of course, will be using pure alpaca and I am laying it on a silk georgette base for my scarf.

## Preparing the Fibre for Felting

I begin with raw fleece from my own alpacas, unwashed. I love the natural colours but for the purposes of this article, I am including a dyeing process so that readers can choose their own approach. Beautiful results can be achieved either way. I have Huacaya alpacas and am not sure how all this would work with Suris. I imagine you could get some lovely results if you used the curls as part of your embellishment.

I don't wash the fleece first as the picking, carding, dyeing and felting will clean and wash the fleece as it is processed and I like to keep the number of chemical stages down to a loud roar. This is a personal preference but there is no harm in washing the fibre first.

The micron and the number of layers you use will determine the thickness, coarseness and stiffness of the end product. For example, llama or camel fleece may be used to make tents or tough floor mats while fine micron alpaca may be used to make

soft fine articles of clothing such as scarves, wraps, dresses or skirts. Somewhere in between you may find a place for the higher micron alpaca for items of clothing such as coats or hats. I am using a 19 or 20 micron fibre in the scarf as it is to be felted on fine silk and I don't want to lose too much of the 'wispy'ness' of the silk. The fibre needs to be between 50 and 70 mm in length; too short and it will pill, too long and it is not as easy to felt.

## Skirting

Once the fleece saddle is removed from the alpaca, the first part of the process towards usable fibre production is to skirt the fleece. Remember, this is not skirting for a show fleece; you want to end up with as much usable and reasonably vegetable-matter-free fibre as possible. It does not need to be neat and have the staples neatly lined up at the end of this process; you want nice clean open fibre. This is when you remove the worst of the paddock from the fibre and also enables you to discard the 'skirt' around the edge of the fleece where there is more likely to be a batch of straight coarse hair and a lot of dirt. You also need to remove very dirty and badly contaminated fibre at this stage and allow the short lengths and second cuts to fall away.

It is not a bad idea to place the fleece between two old fly screens and bash it thoroughly. This will remove a lot of the dust and grit. I also bounce my fleece around on my homemade skirting table and bash it thoroughly. Once you have removed the contaminated and coarse fibre, rip the fibre open and shake it over your skirting table pick out any large chunks of VM and any second cuts which have not yet fallen away. If you do this well enough you can leave out the picking stage all together. It is important to begin with a clean skirting table and a clean work area so that your fibres don't become mixed or contaminated by other colours. Once skirted, your fleece can be stored in plastic bags which have been punched with holes to prevent condensation and sweating.

## Picking

The next stage is a personal preference. I like to run the fibre through a picker to open it up more and make it easier to remove the rest of the paddock and the last of the second cuts from the fibre. Some people feel this rips the fibre too much and not everyone will have access to a picker. Mine was made by Petlyn Fibre Products here in Australia.

The picker has a curved cradle-like base with sharp, curved teeth pointing upwards and a rocker with teeth pointing downwards. The rocker section brushes against the cradle allowing the opposing teeth to grab the fleece and tease it open. It then shoots the opened fluffy fleece out of the other side and into a





*Picker*

waiting basket. If you don't have a picker, you can achieve a similar result by standing over your skirting table. Take hands full of fleece and simply pull it apart over and over, allowing the dirt, grass seeds and shortcuts still entangled in the fibre to just drop away. Really pull it open and rip it up. It can be quite cathartic.

## Carding

Once you have picked the fibre as clean as you can, you need to card the fibre. Carding is the process that takes the now messy and probably slightly tangled fibres and aligns them into neat bundles ready to lay out for felt or to spin or process in any manner you please.

A drum carder is probably the quickest manual method of carding. An alternative method is to use two carding brushes and pull the fibre between them. This is very slow work and I prefer to use the drum carder.



*Drum Carder*



*Removing fleece from carder*

I have an Ashfords 12 inch drum carder so I get quite a nice wide batt. When using a carder, it is important to lay the fibres carefully and finely onto the intake plate ready to be pulled between the two drum brushes. If you get impatient and put big wads of fibre onto your plate, you will end up with as much fibre on your smaller intake roller as on the main large drum and the outcome is a lot of waste and clean up. Be patient and you will get a much nicer result.

I spend quite a lot of time picking my fleece with my fingers as I place it on the intake plate. I pull out any guard hairs I spot and the remaining VM from the fleece as I lay it on the plate. This can be a slow process but again, the more care I take at this stage, the more usable fleece I have at the end.

I find that if you can get the light right, you can spot the guard hairs because they tend to be shinier and of course generally straighter and stiffer than the soft fibre you want for felting. You will find that the straighter the fibre, the harder it is to felt. You will end up with a very hairy looking fabric if you don't get as much straight hair out as you can at this stage. Finer slightly crimped primary fibre is not really an issue. Sometimes you see it better after dyeing as it often won't take the dye as well as the good fibre.

I often run my fibre through the carder two or three times to get it nicely clean and smooth. I have a packing brush which helps to pack the fibre down on the carding drum and make it smoother. I also have a burnishing brush with fine metal bristles, which does the same thing probably a little better. I got it online from Nanny's Spin on Things. To use the brush, I hold it firmly against the fibre and roll the drum away from the brush pressing firmly. You will soon know if you are holding it upside down as it will try to pull the fibre off the drum instead of smoothing it firmly onto the drum.

When you have a nice drum full of fleece, you need to pull it off the carder by running the awl along the metal groove on the drum. The awl is a sharp pointed needle like implement which is usually supplied with the carder. You will begin to open up the batt to remove it from the drum. Don't cut it. If you cut it, you will end up with some short pieces of fibre and you won't get a

nice even piece of felt. If you have too little fibre on the drum, it is much harder to remove the batt, so ensure that you have a full packed down drum and the fibre will stick together and pull off more easily; a bit like bluetack. The drum will roll as you gently pull the bat off the needles. You can use the awl to tease the stubborn fibres away from the drum but be careful not to damage the drum or bend the needles as the awl is sharp and strong.

If I am dyeing, I card the fibre a second time after it has been dyed. Ensure that you clean the carder properly between colours as you will get colour contamination if you do not. You can also have some fun blending colours at this stage. Once I have a nice wide batt of the colour or colours I require, I remove it from my carder and pull it into about six strips of fibre. This makes a nice size to fit into my hand for laying out my felt.

## Dyeing the Fibre

Alpaca fibre comes in so many lovely natural colours that you may never want to dye any fibre, however sometimes some non-alpaca colours are fun to add into the mix and it is really easy to get a lovely range. I use the Kraft Kolour Landscape dyes. They are designed to be used on animal fibre including silk. This means I can use the same dye on both my silk fabric and my fleece.

You will need: rubber gloves, a trestle table covered in a plastic drop sheet, your dyes, boiling water, a plastic microwave steamer available from any large supermarket and some wetting agent, which is also available from Kraft Kolour. Alpaca is fairly water resistant. The wetting agent simply helps the dye to penetrate the fleece more thoroughly. I also have squirting bottles to apply the dye if I am doing spiral dyeing or multi-colours on the same piece of fleece.

Dyeing is best done in an area which doesn't mind a few spills, possibly out of doors or alternatively you can lay drop sheets. I usually pull the fibre batt into several strips to make it less likely to felt up in one big mess during the dyeing process.

To make the dye use 1 fairly heaped teaspoon of dye powder to 500 ml boiling water or enough water to cover your fleece. This will dye approximately 50 grams of fleece. Ensure the dye mix is well dissolved and add a couple of drops of wetting agent. If you are dyeing your fleece all one colour, remove the steamer tray and pour the dye into a microwave steamer. Completely submerge the fleece in the dye bath. Squeeze it down very gently into the dye until the air is all removed and the fibre is completely covered. Place the lid on the container with the vent open and microwave it on high for two minutes. I allow it to cool slightly, to avoid burning the fleece, then repeat the process three or four times to set the dye fully. You can reuse the dye bath until it is exhausted. The colours may become a little paler but that just gives you some colour tone variation which can be lovely on a felted object. Allow the fibre to cool naturally so that sudden temperature changes don't cause the fibres to start to felt prematurely. Rinse thoroughly until the water runs clear. Again, squeeze gently in the water without sudden temperature changes or undue friction.

If you want to play with multi colours, squirt the dye directly on to strips of fleece wetted with water and a few drops of wetting agent. You can apply multi colours all at once along the length of the fibre strip or you can steam set each colour between



*Dyeing Equipment*

applications of different colours. It may be useful to use some cling wrap to contain the mess while you work on it and to assist you to massage the dye gently into the fibre. Remember the more friction you apply, the more likely it is to felt and we are not ready to felt the fibre yet so just gently squeeze the dye into the fleece. When the dye is properly soaked into the fibre, remove the cling wrap and place the strips of fibre on the steamer tray in the plastic microwave steamer. You will need some water in the bottom of the steamer but ensure that it does not reach above the tray or it will dilute your dye colour. Microwave in 2 minute stages 3 or 4 times before rinsing.

You can also dye the felt after the felting process is completed. Use common sense when working with chemicals and hot water. Steam can burn you as you open the lid so be cautious and wear rubber gloves. Read the instructions regarding first aid before you begin and act quickly if you get any dye in your eyes or mouth.

## Dyeing silk scarf

I began with 2.5 metres of natural coloured or white silk georgette. You can use a variety of different fabrics such as silk, fine cotton muslin or even fine nylon. Silk works really well and is surprisingly not as expensive as you might think.

I like to dye simple, random colour washes. Wet the silk to allow the dyes to blur and move within the fabric. Lay it out on the plastic covered trestle table. For larger items, you may want to use two trestle tables end to end or side by side. Using about a 2cm diameter paint brush, daub the dye in wide strokes all over the fabric leaving some white space for your second colour. Place the scarf in a microwave steamer with water just below the base of the steamer tray and microwave for four minutes. Rinse the scarf until the water runs clear and place it back on the trestle table while still wet.

Repeat the process with the second colour filling most of the white space and overlapping a little or a lot as desired, to get some interesting colour blends. Consider the combination of the two colours when doing this as the blending will obviously create new colours. Microwave in the steamer for a further four minutes then rinse again until the water runs clear. Hang the scarf to dry.





*Dyeing a scarf*

### **The Felting Process**

Huacaya alpaca fibres are coated in cuticle which forms scales which can be seen under a microscope. When the fibre is exposed to alkaline soap and heat, the scales open up. If the fibre is allowed to cool slowly and is not agitated, it is likely that it will not change much. However, with agitation of any sort, the scales on the fibres hook around each other and pull the fibres closer together and they begin to matt into a tangle reducing the amount of air between fibres. This is felting. Rapid temperature changes accelerate the felting process. It happens if you place a woollen jumper into the washing machine where it is exposed to friction and rapid temperature changes. Suddenly your favourite jumper is only good for Barbie.

In order to create a flat piece of felt, you need something to create friction. There is a huge range of options for this. Some of the larger heavier items such as coats or rugs may be rolled inside old bamboo blinds. The easiest and most available option is to use bubble wrap. With bubble wrap you can roll up your item and create friction by constant rolling back and forth or you can rub the fibre into the bubble wrap under a sheet of net or muslin or even a plastic drop sheet. You need to be careful not to felt the net onto the fibre, so you need to lift it often to keep it separate. Another option is to use portable washboards or massage tools. You can get hand washboards designed specifically for felting. I got mine from Heart



*Ready to start felting*

Felt Silks and they save a lot of shoulder work with heavy rolling. In order to create three dimensional felt, you need to place a 'resist' between layers of fibre to enable your object to felt with a hollow core. This adds a whole new dimension to felting, quite literally. Hats, bags, shoes, boots, ornaments, clothing etc. can all be made in this way. Items of clothing can be made entirely seamlessly ie. absolutely no sewing. This is more advanced felting and is not covered in this article.

### **Laying out the Fibre**

You will need a piece of bubble wrap slightly larger than your scarf, detergent (I use eco-friendly washing detergent), water, a squirty bottle, a pool noodle to roll your project round at various stages, lots of old towels to mop up, enough fine net to cover the scarf (I use bridal veil tulle), enough fleece to cover the scarf and any embellishments of choice. I use different colours of fibre for decoration and wisps of silk fibres to add interesting effects. Work in an area where there is no breeze and where it doesn't matter if it gets wet!

Lay the bubble wrap out on your trestle table. Lay the now dried and pressed silk scarf out on your bubble wrap with the bubbles facing up. Take your length of fibre pulled from the original batt taken from the carding machine. Hold it near the end from which you are going to pull your first bunch of fibre. Hold it firmly enough to stop the length of fibre from pulling out of your hand but not so tightly that a little bundle of fleece can't be pulled off the length of fibre. Tug a tuft of fibre about as wide as the length of your thumb, from the length of fibre and lay it down in one corner of the silk scarf. Repeat this all along one edge of the scarf then repeat a second row and a third row until the entire scarf is covered. You can either do this all in one colour or blend in various colours or make patterns.



*Laying out the fibre*

For the scarf I am demonstrating, I put down a patchy layer of the pale orange colour and then filled the spaces with the red colour. To introduce a design element, I placed the yellow fibre into lines and swirls on top and added little wisps of red, silk fibre. For objects made without the silk fabric to lend it strength, you will need to lay out several layers in alternating directions. Thus when you have spread out the first layer in one direction, you need to lay out the second layer at 90 degrees to the first layer and the third layer at 90 degrees to the second layer. Sometimes you will need as much as five layers to make a firm sheet of felt.





## Wetting and Prefelting the Scarf

At this point its handy to have some help, so you don't mess up your design while laying the net. Take the net and completely cover your project. Now you can wet down the fibre without it moving all over the place.

At this point with some pure felt projects, you would use very hot soapy water. I like to use cold soapy water for nuno felting as you want the fibres to felt onto the silk scarf before they felt too firmly onto each other. If you use very hot water, there is a risk that the fibres will matt together too firmly before pulling through and felting to the silk. With the very fine slightly open silk georgette, it felts very easily to the silk but why waste energy heating water before you need to.

Wearing gloves gently press the soapy water into the fibre until it is all wet. Now gently rub the soapy water all over the net gently massaging the surface all over. The bubbles in the soap help to make it nice and slippery and the bubbles on the bubble wrap help to massage the fibres to start the felting process. Do this for about five minutes.

These times are approximate as each felting process differs slightly depending on the exact nature of the fibres. Gently lift the net off the fibre covered scarf. The fibres will have started to reach a pre felted stage.

At this point, I like to turn the scarf over so that the fleece faces down and the silk faces up. To do this, I place the pool noodle at one end of the scarf and roll the whole thing up over the pool noodle. It is then quite easy to unroll it upside down on the bubble wrap.

Now place the net back over the scarf and repeat the massaging motion getting more and more firm with the massaging and rubbing. This probably needs to be done for about 20 minutes. I use my finger tips or a hand wash board at this stage. Check periodically to ensure that the net is not felting to the scarf. You should be able to pinch the felt and it should all stay together firmly. If it pulls away from the silk it is not yet properly felted.

*At Left: Laying out the fibre sequence*

*Below: Wetting the fibre*







*Laying the netting on top of the fibre*



*Rubbing the fibre through the netting*

## Rolling

It may be necessary to roll the project in the bubble wrap to finish the process. If you have used hand washboards, this step may not be necessary. In order to roll the scarf, remove the net and simply roll the whole project up, bubble wrap included, over your pool noodle. Using your hands and forearms, roll the bundle back and forth. Open it all up, roll it up again from the opposite end and repeat the process four or five times. You will develop a feel for the amount of friction you need to apply to reach the level of felting each project requires.



## Fulling

The final stage requires heat. This will make the felt firmer and set it nicely. If you have been working a project with hot water you may go straight to the fulling stage but for this project I popped my wet scarf into the microwave steamer and microwaved it on high for one minute. This made it hot. I then squeezed it and massaged it a bit, then opened it up, checked it, heated it again and then began the fulling stage.

Fulling seems to gently bash a little more air out of the project and encourages the final felting stages. Fulling can be gentle or quite rough depending on how dense you want your felt to be at the end. For delicate silks, I simply squeeze and drop the scarf onto the trestle table 20 to 30 times. You can drop or chuck it down firmly. For some larger heavier projects, you may want to throw the project onto a clean floor quite vigorously. Finally rinse the whole thing in alternating hot and cold water and add a teaspoonful of vinegar to the last rinse to stop the felting process going any further. Mild acidity discourages felting and mild alkalinity encourages it.

Lay the scarf on a flat surface and pull it into the shape you want, teasing out the edges if you want a bit of an organic finish. Allow to dry and enjoy!

The thing to remember with felting is that there are no wrong ways to do things. This is just my method. You will devise methods that work for you. The main ingredients are rapid temperature change, alkalinity and friction and the willingness to give it a go. You can apply them in all sorts of creative ways.



*Above: Fulling*

*Below: Finished scarf*







# Echoview Fibre Mill

## Knitting a Community Together

By Mandy Gardner

Drive far enough down Jupiter Road in Weaverville, North Carolina, USA and you'll come to a solar panel decked building with an artfully rusted steel roof. The sleek cypress sided facility looks new and yet somehow captures the look of weather beaten barns in surrounding fields. This is Echoview Fibre Mill.

Echoview offers skirting, scouring, carding, roving, spinning and all the other traditional fibre processing services. But more than that, the mill has become the beating heart of a growing local fibre movement that includes farmers, traditional crafters, artists, and supporters of the North Carolina textiles industry.

The mill's architecture tells the age-old story of fibre processing, with textured materials chosen to reflect staple lengths and cypress boards recalling the tender body of a freshly shorn alpaca. Inside that rustic coat of wood and steel you'll find space age green technologies. Geothermal heat pumps regulate the mill's indoor climate, and the sun's rays, captured by a 76kw solar PV system, supply its power. The design is so ecologically friendly that Echoview has earned the distinction of being the first US mill of its kind to earn LEED certification.

Walk in the glass front door and you'll find a cheery, light drenched space of polished concrete, wide glass windows and white walls. The retail store in the front lobby sells gorgeous house made yarn and roving, traditional crafting supplies as well as exquisite clothing and crafts handmade by local artisans.

Climb the metal staircase to the second floor. Look down through the long bank of glass windows, and you'll get a bird's eye view of the mill's main workroom down below. You can watch carefully separated raw fleece (they track each batch to make sure you get back only your own material) transformed to skeins of yarn or barrels of roving.

So why has this mill become so important to the fibre community here? To understand, first you have to know that Echoview was designed to fulfill this role. Part of Echoview's mission statement is, "Our goal for the fibre mill is to serve as a quality environmentally sustainable crossroads for the fibre industry and community, bringing together fibre artists and fibre producing farms throughout the region."

Before building the mill, owner Julie Jensen became a fibre producer when Echoview Farm acquired a few angora goats and alpacas. She took a course in fibre production at Gaston Community College and learned what a valuable role a mill could play. Local fibre farmers would no longer have to ship their fleeces far away for processing. Fibre arts classes could be taught directly at the mill. The retail store would supply high quality local yarn to crafters and professional fibre artists. Meeting space and classrooms were designed in the mill's building. When meetings and classes and the retail store began bringing people together, Echoview began to fulfill its mission to become a fertile ground for collaborations.

Many have been inspired and excited by the mill's mission. In fact, Echoview was singled out in Robert Newton's documentary, 'Still Standing: The Real Story of the NC Textile Industry' as proof of the reinvention and reinvigoration of the textiles industry in North Carolina. In the film, Newton called Echoview "the future (of the) great spirit of entrepreneurship...that built the great textiles industry of the south."

Another local group that champions the growing local textiles movement is Local Cloth, a non-profit organization whose own mission is to, "sustain a thriving local textile economy and bring locally grown and made fibre products to consumers within and beyond the Blue Ridge." I asked Local Cloth representative Judi Jetson to estimate what impact Echoview has had on WNC's local fibre economy. "It's huge," she said.



Before the mill was built, Jetson and a group of fellow spinners, weavers and textile artists got together to brainstorm about creating a "regional supply chain" for fibre arts. Jetson said that when they talked about what was missing, "What jumped out immediately was fibre processing." The Mill is now filling that gap, and in doing so is playing an important role in regional economic development. She is most excited about the partnerships and unique regional fibre blends that Echoview will make possible in the future.

Local fibre arts teacher, and former alpaca farmer, Jean Castle agrees. She called Echoview "instrumental," to the local fibre arts community. With a hint of pride in her voice she said, "Now when we buy something that says local it means it was grown, extruded, manufactured and processed here." By helping create a demand for local yarn, she thinks that Echoview is, "helping our local producers have a market." After years of watching farms go out of business, or turn to meat production, she is now seeing an influx of new fibre producers in this region.

Above all, Castle is thrilled to see Echoview helping to preserve traditional fibre arts knowledge. "A whole generation has grown up not knowing these skills," she said, talking about fibre arts like crochet, knitting, felting, spinning and weaving. As a consequence, she said, "We were losing those skills." But, judging by the changing demographics of the students who attend her classes, she is relieved to see things are changing. "Now the kids are interested," she said. "It used to be little old ladies."

Castle does her part to keep fibre arts alive by teaching. This past summer she taught crochet at Echoview's popular day camp for girls. Forty-five lucky girls got to attend the second annual camp this July. Campers split their time between the farm and the mill learning fibre arts as well as lessons in cooking, beekeeping, caring for fibre animals, and other skills.

Last year's camp was such a success that they didn't have to do any advertising to fill all the spots for this summer. I visited one sunny day and talked to a few of the campers. After a morning class in jewellery making, the girls all sported chunky necklaces and bracelets. Their beads glittered as they intently made God's eyes by winding vividly coloured yarn around wooden sticks.

Twins Sawyer Taylor Arnold, Hadley Taylor Arnold, and their friend Jenny Nieman, all of whom were twelve years old, told me their favourite camp activities so far had been beekeeping, making friendship bracelets and crochet. "You can actually make this stuff at home," Sawyer enthused. Hadley joined in, "They show us how to do it step by step."



Jenny talked briefly on the subject of boredom, and said words that any parent would want to hear, "When I was younger and didn't have this (camp) I would go play video games. Now I go outside." I asked the girls how they thought they might use the knowledge they learned at the camp in the future. Sawyer said, "It would be helpful if any of us started a business."

"What kind of business?" I asked.

Their answers were: opening a fibre mill, beekeeping, and farming. Hadley said, "I have always wanted to live on a farm and this makes me even more excited and prepared."

All three girls plan on becoming camp counsellors. Beyond that, who knows what these enthusiastic young women will accomplish in the future with the skills they are learning now?

What we do know is that lots of people have high hopes for the future Echoview Fibre Mill is helping to build. Vicki Bennett, a nationally recognized felting artist and teacher, told me that she, "would like to see more families where all the socks are knitted at home, that are not coming from overseas." But she hopes even that will evolve into something much greater. "I think that starts with something as simple as people knitting all their own socks and hats and mittens...then that goes to sweaters and then that goes to artful garments and fashion, true fashion."



Bennett was one of the mill's first customers. She and her husband moved to WNC around the same time that the mill opened and she was thrilled at the thought of being involved in the felting process, "from the barn to the finished product." That involvement has paid unexpected dividends in her work. She feels that by developing a good relationship with the mill, she has become "a more discerning judge" of the qualities she wants in her fibre.

She has also seen positive changes for the WNC fibre arts community because of the mill's presence here. She has started to see crossover between traditional fibre farmers and "sophisticated fibre artists." In her view, Echoview is, "bringing people together who wouldn't previously have crossed paths." She suggests that these collaborations are beneficial for everyone. "It pulls together the skill sets," she said.

One of the collaborative projects made possible by Echoview is a new yarn developed by Lisa Mackey, owner of local yarn shop Friends and Fiberworks. Echoview Fiber Mill is custom blending a yarn for Mackey from a mix of alpaca, Finn Dorset, angora and mohair raised entirely in Western North Carolina. "We want to promote local growers," she said.

Mackey does not yet have a final name for her yarn yet, but right now she is leaning towards Pride. "Because mountain people just have pride in their animals and their fibre and we want the best for our animals but we want them to be the best too." Mackey is a well-known figure in local fibre arts circles. As a former farmer (she used to raise herds of Leicester and Romney Sheep) and a current yarn shop owner she knows almost everyone in the community, from growers to hobbyists. When I asked her to describe the mill's impact on growers she said, "it is the best thing ever."

She heaps praise on the quality of the work they do, saying, "Their whole facility out there is top notch." She is thrilled to be able to produce such a high quality local yarn, and noted that demand has been growing for just such a product. Until now they have only been able to offer more expensive hand spun yarns. The mill gives Friends and Fiberworks the opportunity to offer a more affordable locally spun yarn that will help support local fibre producers.

She has also noticed that a lot of the demand for local yarn has come from younger fibre artists. Like Jean Castle, Mackey has noticed how many younger people are interested in fibre arts now. Now, most of her spinning students are in their 30s or younger. "They are real savvy these young girls. They have it going on," she said. Mackey has seen a dedication to technique that she admires in the younger generation of crafters, a change she attributes to better information access through the Internet and social media. "They can look stuff up so much easier than we could. I had to wait for spin group" to learn firsthand. "Now they have You-Tube."

Young people learning how to raise fibre animals, and the skills of weaving, spinning and knitting are earning more than knowledge, suggests fibre artist Vicki Bennett. She observes that when you have hands on experiences, "producing your own bare necessities in life...what it takes to grow your own food, what it takes to raise your own fibre animals, what it takes to turn that into something functional and wearable," you get more than a skill set. Having these experiences "enriches your life... it's more full and more well rounded and more aware."



From improving the quality of fibre arts products available in the area to improving the quality of life, Echoview Fibre Mill has become more than a mill, it has become the place that knits together the fibre arts community of Western North Carolina.

#### About the Author

Mandy Gardner is Head Writer for JB Media Group in Asheville, North Carolina. A former migrant farm worker and long distance backpacker, Mandy graduated from the University of North Carolina Asheville, where she studied creative writing.

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# Pet Therapy

How Animals And Humans Heal Each Other



Those of us who own pets know they make us happy. But a growing body of scientific research is showing that our pets can also make us healthy, or healthier. That helps explain the increasing use of animals - dogs and cats mostly, but also birds, fish and even horses - in settings ranging from hospitals and nursing homes to schools, jails and mental institutions.

The use of pets in medical settings actually dates back more than 150 years, says Aubrey Fine, a clinical psychologist and professor at California State Polytechnic University. "One of the things that's always been known is that the animals help a clinician go under the radar of a child's consciousness, because the child is much more at ease and seems to be much more willing to reveal," he says.

More recently, says Rebecca Johnson, a nurse who heads the Research Centre for Human/Animal Interaction at the University of Missouri College of Veterinary Medicine, studies have been focusing on the fact that interacting with animals can increase people's level of the hormone oxytocin.

But Johnson says it may also have longer-term human health benefits. "Oxytocin has some powerful effects for us in the body's ability to be in a state of readiness to heal, and also to grow new cells, so it predisposes us to an environment in our own bodies where we can be healthier."

The National Institutes of Health, with funding from pet food giant Mars Inc., has created a federal research program to study human-animal interaction. The program, operated through the National Institute for Child Health and Human Development, offers scientists research grants to study the impact of animals on child development, in physical and psychological therapeutic

treatments, and on the effects of animals on public health, including their ability to reduce or prevent disease. Johnson says it's critical to establish the scientific foundation for the premise that animals are good for people, even if that seems obvious.

"The last thing we want is for an entire field to be based on warm fuzzy feelings and not on scientific data," she says. "So it's very important that now the NIH is focused on this ... and it is helping scientists across the country like myself to be able to do our research."

*Taken from Health News .NPR (National Public Radio) March 2012*

*Wesley Mission resident enjoying meeting an alpaca*





## Pet Therapy With Alpacas

By Nils Lantzke

### HONEYCOMB

Honeycomb the alpaca was born near Captains Flat NSW in October 2003. It is believed that his mother died one or two days afterwards. I have always wondered if this is the reason why he is so sympathetic to people who are grieving. Sometimes at the Hospice (Clare Holland House) in Canberra he would gently approach a crying patient or relative, rest his chin on their chest and gaze up into their face with his beautiful dark brown eyes. They knew that somehow he understood their pain.

At times Honeycomb would lie alongside a patient's bed in order to protect them, just as if they were one of the tiny orphaned lambs who came to stay with us. Patients often bonded strongly with Honeycomb and eagerly awaited his next visit. On quite a number of occasions people have said to me "I thought my Mum/Dad was hallucinating when they told me a big golden alpaca had visited them". Sometimes when a patient died their family would request Honeycomb's presence at the funeral of their loved ones. Honeycomb has also attended funerals for stillborn human babies and also for a young man who committed suicide. Always he has brought comfort to those folk overwhelmed by grief.

While still a baby, he was invited to Companion House, a place where survivors of torture are assisted back into the community. On this occasion he met a man from Peru who had undergone immense suffering in his own country. Whilst the staff members and I stood back, this man knelt down and put his arms around baby Honeycomb's neck and spoke softly to him in Spanish. It was quite remarkable that all those present experienced bad sinus simultaneously.

So many tender moments over the years and yet Honeycomb retains his alpha male status to this day by sheer force of will.

Although officially retired now, Honeycomb still lies down with the lambs.

*Honeycomb waiting to start work*



### FORREST GUMP

Technically, young Forrest Gump is a llapaca, being three quarters llama and one quarter alpaca, however in appearance he is a llama.

He was welcomed into our family at two months of age. As a result of some serious health issues, Forrest came dangerously close to death, but with a lot of massage and the use of some wonderful essential oils, he recovered. His owner acknowledged my efforts by giving him to me as a gift.

Along with his little female alpaca friend Mimosa, he attended a camp for blind people on the outskirts of Canberra. They have also made visits to Cranley Special School, the ACT Hospice and recently attended a party for brain injured children and their families. At Christmas they raised money for SIDS and KIDS.

Recently Forrest visited a nursing home and with the residents seated in the recreation room, he greeted all of them with either a kiss on the cheek or a nuzzle of their hand. My friend Elizabeth who was in the final stages of cancer, was seated in a wheelchair off to one side. Forrest Gump, who had never met her before, paid a great deal of attention to her, humming repeatedly and showering her face with kisses. Later she said to me "Do you think he knows I'm on the way out?" Elizabeth died just a week later.

A short while ago Forrest met a young girl with Down Syndrome. Initially she was very nervous of him, however soon she had her arms around his neck and was laughing. It is occurrences like this that make me very proud of my boy.

*Residents of Wesley Mission Brisbane's Parkview enjoy 'alpaca therapy'*







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