Camelid Connections

MAGAZINE

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Issue 17 - September 2021

CAMELID CONNECTIONS

ADVERTISING RATES

Camelid Connections magazine offers you affordable advertising for your camelid related business, event or stud. Contact us to secure your advertising space in future publications.

- The affordable alternative for all your camelid related advertising
- All adverts have a hyperlink directly to your website or email - one click & potential customers can connect with you
- Camelid Connections magazine is a **FREE** online publication available as a subscription or download from our website
- Back issues will always be available online so your advert has a long 'shelf life'
- Camelid Connections offers readers a wide variety of quality articles of interest to attract a broad audience

Advertising Rates*

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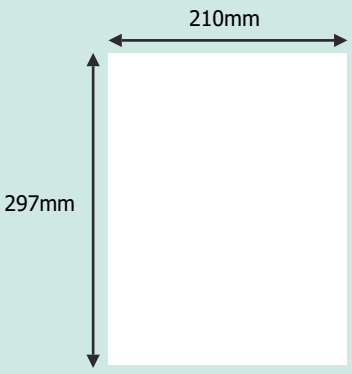

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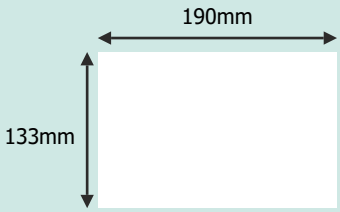

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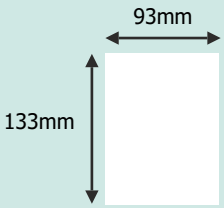

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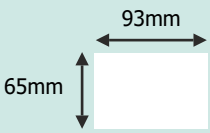

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- Camelid Connections magazine is a quarterly publication that commenced in September 2017
- Advertising needs to be provided as a PDF or JPG to specifications listed above.
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  Email: julie@camelidconnections.com.au

- Esmė Graham Editor Ph: 0457 304 868
  Email: esme@camelidconnections.com.au

www.camelidconnections.com.au

* We reserve the right to alter advertising specifications and publications rates and dates at any time.

Websites for Farmers

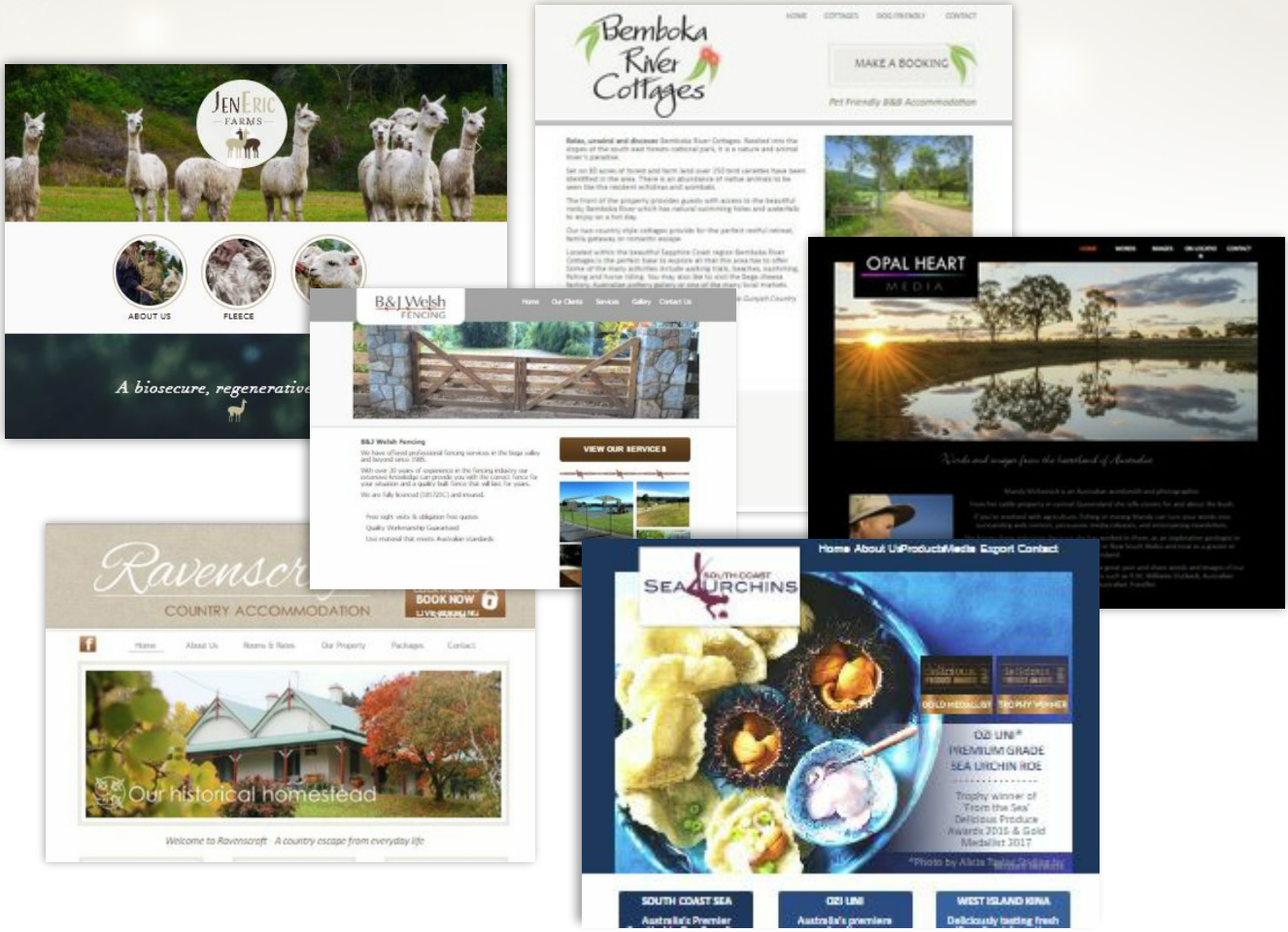
A website today is the basis of most business marketing - a website helps you sell your livestock, your produce or services to the widest audience possible.

WE KNOW & UNDERSTAND RURAL BUSINESSES

Here at Oak Grove Graphics we understand what it takes to make a great website for farmers, because we are also farmers as well as web designers! We offer you web site options to suit you, from easy self maintained sites to we do it all for you options, we design sites that are attractive, functional and individual like your business. From the land to the sea, if your business is rural we can help you promote your business locally or Australia wide.

AFFORDABLE PRICES

Our country prices are some of the best you will find anywhere. Contact us for a free no obligation quote and down to earth conversation about how we can help your business grow through marketing your business on the internet.



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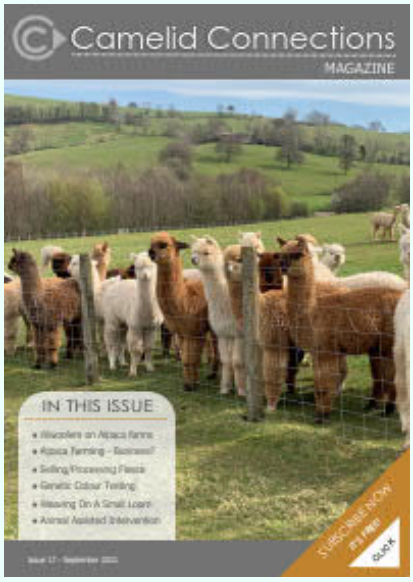

Cover Image: Courtesy of Beck Brow Alpacas UK

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Welcome to Camelid Connections

I wonder what is in store for us this Spring time? Along with all the upset caused by Covid the weather this past Winter has been really odd. Extreme wet weather in WA, cold and windy interspersed with extra warm days in other areas it's very difficult to plan for anything from planting crops, fertilising gardens, matings and even when we may be able to go on holidays! Let's hope that by the time Summer arrives we have had a good Spring and we are starting to see a more normal life.

Can you do with some help on your property? Have a look at our WOOFFERS article maybe this is for you or maybe you have some spare time and would like to go WOOFFing. Are you just starting out with alpacas? Perhaps our article on "Alpaca Farming – Business or Pleasure" can help you with a business plan.

Shearing is commencing around the country although I know shearers are having a hard time sorting out their itineraries with all the Covid lockdowns and patience is going to be needed to get everyone sorted out. We have an article to help you decide what to do with your fleece, and suggestions as to where you might send it. Please don't decide that lockdowns make life too difficult and you will put the fleece in your shed. We need the alpaca fleece business to keep moving ahead.

Maybe you are interested in learning the basics of weaving your own fleece so you may find the article by Elizabeth Paul will help you on your way or maybe reading about how alpacas can assist with mental health may be of interest to you.

Camelid Connections magazine is 4 years old! Our first issue was published in September of 2017 and has grown to now be one of the premier magazines in Australia for all camelid owners. Our subcriptions list has grown to well over 700 subscribers and we appreciate your support. If you haven't subscribed - it's totally free and we send you an email each time a new issue is published, plus from time to time we have subscriber exclusive discounts and competitions.

Congratulations to the WINNERS of the Macca The Alpaca book packs in our last issue!

J.Bishop from VIC, E. Forrest from QLD and J.Hansen also of QLD.

Meet The Team

Esme Graham - Editor

My husband and I have bred suri alpacas for over 20 years, I was heavily involved with both regional committees and the national board of the Australian Alpaca Association for a number of years and had the honour of being selected as a life member of the Association.

My major interest has been in marketing and education and to this end I was editor of Alpacas Australia magazine for six years and I hope that the experience I gained editing that publication can be extended to educate and inform a wider range of alpaca and llama breeders who are not necessarily association members but have a love of all things camelid.

Julie McClen - Designer/Editor

A breeder of ultrafine Huacaya alpacas for over 20 years at Oak Grove Alpacas, I have a passion for fine fibre and the genetic connection to the most diminutive and finest of the camelids - the wild Vicuna.

I strongly believe that education in any industry is the key to success, so with Camelid Connections we hope to provide interesting and informative articles to assist all camelid owners in getting the most out of their animals and businesses.

I also own Oak Grove Graphics a web and graphic design agency which is producing this magazine, and also allows me to connect with many different people in the camelid related world through my design and web work.
www.oakgrovegraphics.com.au

NEW QUAD BIKE REGULATIONS

By Kerri-Lynne Peachey (Farm Safety Research Officer - AgHealth Australia)

Time to act - get your bar fitted!

It has been legislated that as from 11th October all new and second hand quad bikes sold through dealers in Australia will have to have roll bars fitted.

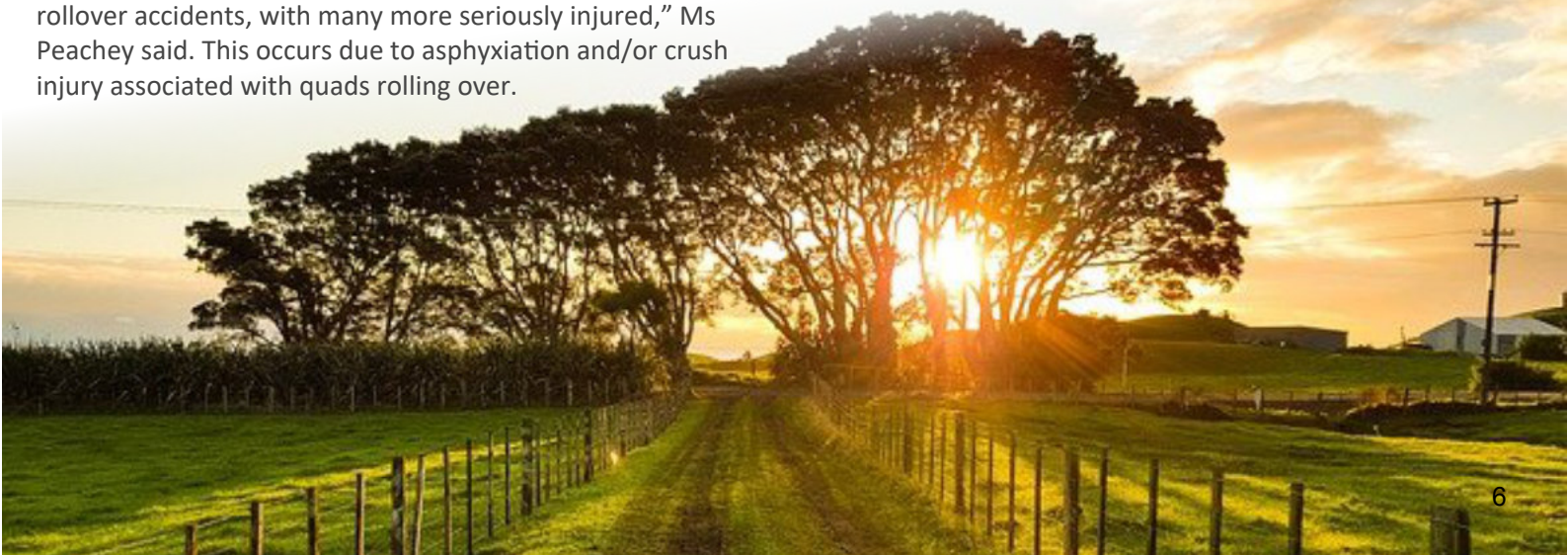
The concern world-wide continues over the number of deaths and serious injuries associated with the use of quads in agriculture and for recreational purposes.

"Already this year, three people have lost their lives in quad rollover accidents, with many more seriously injured," Ms Peachey said. This occurs due to asphyxiation and/or crush injury associated with quads rolling over.

With the impending safety standard for quads for retrofitting of OPDs to the existing fleet of quads, Peachey says, "assistance is available to farmers to make their quad safer through states work health and safety authorities for retro-fitment rebate schemes of operator protection devices, purchase helmets, upgrade to a side by side vehicle and training."

AgHealth Australia acknowledges quads are going to remain an important role in agriculture for many years to come. "'Therefore, I strongly urge farmers to have an operator protection device (OPD) fitted to their quad," Peachey says.

EDITORS NOTE: Grants for retrofitting may be available - contact your relevant state government work safe authority.



WWOOF

World Wide Opportunities on Organic Farms

Living and learning exchange

VOLUNTEER IN AUSTRALIA

Join other WWOOFers (volunteers) experiencing Australia with the locals.

What is WWOOFing?

Travelling Australia, volunteering for 4-6 hours per day while living and learning on an organic Host property. WWOOF is a worldwide movement linking volunteers with organic farmers and growers to promote cultural and educational experiences based on trust and non-monetary exchanges, helping to build a sustainable global community.

WWOOF Australia was established in 1981 and is 100% Australian owned and run. It is part of a worldwide WWOOF volunteer and cultural exchange movement.

Each country operates independently, with its own lists of WWOOFers and WWOOF hosts. Host profiles provide members with names, contact details, a description and map location of each host property with reviews and photos, as well as the skills you can learn and the kind of living arrangements and types of meals provided.

WWOOFers also set up their own profiles, tell hosts all about your skills and the things you are interested in learning, enthusiastic volunteers get the most out of the WWOOF program!

To preview hosts before joining, use the woofer website “list search” and you will be able to search hosts within each State and see their basic profiles, to give you an idea of the types of experiences you can look forward to as a member.

Hosts practice sustainable land care: organics, bio-dynamics or permaculture, regenerative agriculture and syntropic farming.

Choose the host that interests you, contact them and offer to help out. Volunteer for 4 to 6 hours each day (schedule of days and hours to be arranged with the Host prior to your arrival) and in return you will live with your host, often in their home. Your food will often have been grown on the property.

Leave the tourist trail and see the real Australia, visit unique places off the beaten track, meet the locals and save on travel expenses. WWOOFing allows you to add skills to your resume, travel and study online, job change, and welcomes you into a community who will teach you about organic farming principles and how to live a sustainable lifestyle.

BECOME A WWOOF HOST FARM

Get help on your Farm with access to Volunteer WWOOFers.

What’s in it FOR YOU?

- 4-6 hrs/day of help on your farm(Max 38 hrs/7days)
- Teach others your skills
- Show travellers the local secrets
- Access to WWOOFer volunteers
- Website and Mobile App membership

WWOOF Australia is a platform which connects WWOOFers (Volunteers) with Hosts from many different commercial or hobby farms and suburban growers who are using Organic, Biodynamic, Permaculture, Aquaponics, Syntropic and Regenerative practices & techniques just to name a few.

With the assistance of WWOOFers, hosts embrace the extra sets of hands when it comes to planting, harvesting, animal care and everyday tasks that come with living and producing off the land, and in return hosts can pass on their skills and knowledge to WWOOFers in the industry they are in.

Organic WWOOF Hosts Australia wide offer all meals, accommodation, and hands on learning experiences to WWOOFer volunteers, who live with hosts for short or long stays.

Use Code: CamelidConnections for 50% Discount on all memberships!

If you would like to know more, see wwoof.com.au

WOOFING AT MADISONS MOUNTAIN RETREAT

By Lynette Vint - WWOOF Australia

Madison's Mountain Retreat is one of WWOOF Australia's popular host farms which WWOOFers love to visit. Situated 75 kilometers from Sydney CBD, bordering the Wollemi and Blue Mountains National Parks. On their property you will find Alpacas, which they breed as well as goats and chickens, they have around 60 alpacas ranging in age from newborn to their eldest girl born in 2003 and still going strong!

MADISONS MOUNTAIN RETREAT

"We have been with WWOOF Australia for the past 8 years, a friend suggested WWOOF, but I thought we weren't eligible as we aren't certified organic, but after some research I realised we were eligible, as we were operating organically, and we haven't looked back since.

Having WWOOFers has been amazing for us here at Madison's Mountain Retreat, it makes such a difference with the extra sets of hands, and it has been so interesting learning about the different backgrounds of each WWOOFer.

I admit there have been funny situations where there've been language problems - like the young lady holding an alpaca for me, and when I asked her to use her elbow, she asked, "What is an elbow?". We stay connected with quite a few of our WWOOFers, and it is interesting to see what they have done in their lives. We had a great WWOOFer who was an architect from England. I casually asked if she could draw, as I believed architects are often artists too. She showed me some of her amazing work, and I asked if she would paint the side of our water tank, which she did. Absolutely beautiful!

A typical day for a WWOOFer on our property would be.

Morning

- Mix feed for the day, prepare feed buckets and clean up any spills in the shed.
- Feed the alpaca mums and bubs. Head count of the paddock. Check to see if any of the mums look like they are going into labour.
- Bottle feed if we have any babies that need bottles.
- Clean up the feed troughs from the previous day and keep for the afternoon feed for the goats.
- Collect fallen branches and pop on the firewood pile.
- Weed the gardens, weed the paddocks, rake the leaves, vacuum the poo from the paddocks (yes, we have a poo vacuum).

Afternoon

- Bottle feed if needed.
- Halter train young alpacas.
- Afternoon feed all paddocks. Head count and watch for unusual behavior. Check water troughs.

At the end of the day, the WWOOFers can swim in our pool, go for a bushwalk, relax with a book, and listen to the birds.

"The most rewarding part about being a WWOOF host is having the opportunity to share the birth of new Alpacas, their first suckle and first steps. Alpacas have their babies before noon in daylight, so we get to see most of the births. Life doesn't get any better than that."

Says Debbie Redelman
Owner & WWOOF Host

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:

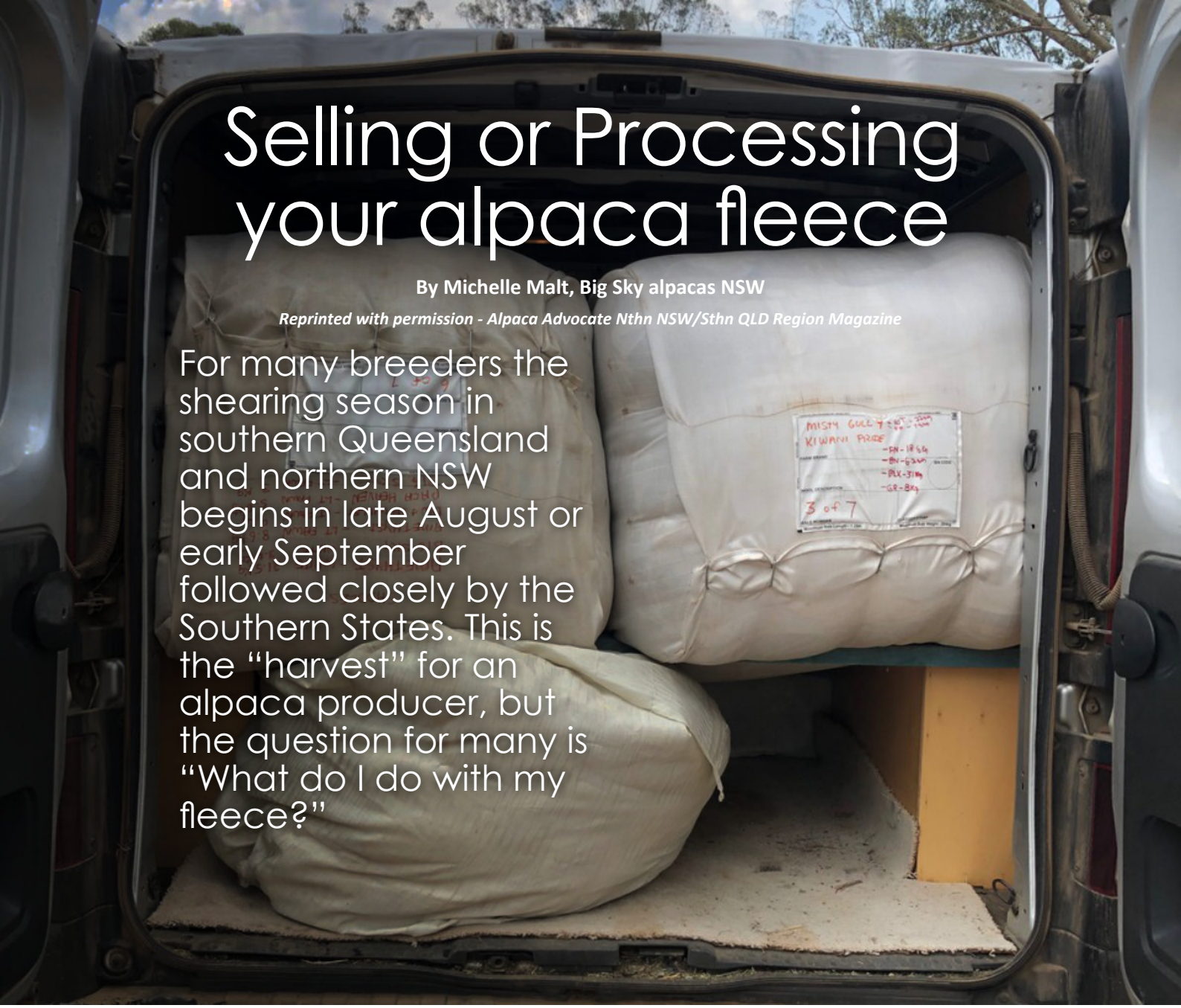
- The business is a primary production business and your other assessable income is less than $40,000.

Furthermore, where any of the above points cannot 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.

360Private

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.



Selling or Processing your alpaca fleece

By Michelle Malt, Big Sky alpacas NSW

Reprinted with permission - Alpaca Advocate Nthn NSW/Sthn QLD Region Magazine

For many breeders the shearing season in southern Queensland and northern NSW begins in late August or early September followed closely by the Southern States. This is the "harvest" for an alpaca producer, but the question for many is "What do I do with my fleece?"

If you want to get the best return, then you need to prepare your fleeces well. This includes your set-up on shearing day to minimise contamination and double handling of fleece. General information on shearing can be found on the Australian Alpaca Association website and there is a document called "Guidelines for Shearing Shed Set-Up and Fleece Preparation" available on the AAA members website, and some regions offer a hands-on workshop to assist members to understand what is best practice and how this can be established for their operation.

On shearing day you will need clean, clearly marked bags or fleece butts for your shorn fleece. Depending on the size of your herd and the range of fleece colours, you may choose to place all skirtings and pieces directly into a fleece butt, and all your saddles into another fleece butt, with each fleece (or colour) separated by paper. Alternatively, you might place your fleece saddles into large clear plastic fleece bags, with necks, legs/bellies, and hairy pieces being sorted into smaller clear plastic fleece bags. Soiled fleece, heavily contaminated fleece (ie lots of vegetation matter) and short pieces can be placed directly into garbage bags for disposal. If you are also giving vaccinations and trimming toenails during shearing then make sure toenail clippings are kept separate from fleeces, and dispose of used needles, syringes and vaccines correctly, otherwise these items may contaminate and de-value your fleeces.

Having your fleeces tested will provide you with some valuable information about your fleece 'product', as well as your breeding program, and herd management. You can either collect samples for testing on shearing day, or two to three weeks beforehand. One benefit of having fleece samples tested prior to shearing is that it can help you decide the best order in which to shear your animals, and how to handle and sort your fleeces in the shearing shed. There is a list of companies who will test alpaca fleece located on the members section of the AAA. The cost will vary depending on the number of samples and the service provided, so I recommend that you contact the providers directly to establish the costs for your situation. Key information you will receive from fleece testing that can help you determine

what to do with your fleece, is the micron of the fleece and the length of the staple. It is important to bear in mind that this will only be accurate at the site where the sample was collected – most fleeces will have some variation in micron across the saddle, and fleece length will also vary, which is why it is important to skirt your fleeces so that you can maximise the value of the saddle fleece, and sort skirtings and other pieces separately. Some fleece buyers will ask you to provide a copy of the fleece test with the fleece, or to confirm that the fleeces have been tested and that the results are available.

A comprehensive list of fleece buyers and processors is available for members under the 'Alpaca Resources' section of the AAA website (https://alpaca.asn.au/). If you have decided that you want to have your fleece processed there are a range of options for you to consider – do you want to blend different fleeces together, do you want to be able to identify each ball of yarn by the animal it came from, what ply/blend do you want and what size ball or skein?

Each processor will be able to guide you on what options are likely to provide you with the best result, and the costs involved. Check out a few different processors to see what they offer, and what their turnaround time will be – many of them are kept busy processing fleece, so you may have to wait several months to receive the processed product. Remember that you will be charged based on the weight of the fleece you send them, but that there will be some loss (due to dust, vegetation matter, breakages, etc) during the cleaning and processing. Again, most processors will be able to give you an indication of the average loss in weight, but if your fleece is well prepared when you send it for processing you are improving your likelihood of a good return per kilogram.

The opportunities for producers to sell their fleece have increased considerably in recent years and there are buyers for most fleece types in Australia, who each have their own pricing, preparation and acceptance requirements. Fleece is generally sold on consignment, meaning that the buyer will offer bales of fleece with consistent characteristics – eg colour, micron range, and length - to the market, or in response to a specific request from a processor. In order to create bales they may be required to consolidate fleece from a number of growers to provide a suitable quantity of fleece. The grower will be paid for the fleece they have contributed after the sale has been completed. It may take some time for certain classes of fleece to be sold, or for a buyer to collect a sufficient quantity of fleece to offer to the market. Depending on the destination of the raw fleece, for example if it is to be sent overseas for processing, then there can be delays while export permits and transport is arranged. In these cases, the grower may have to wait for some time after the fleece has been delivered to the buyer to receive payment.

When consigning fleece to a buyer you will be asked to complete a consignment form detailing the type and quantity of fleece included. An example of the information recorded on a fleece consignment sheet is shown below:

Colour description *	Saddle		Skirtings	
	Weight (kgs)	No. Bags	Weight (kgs)	No. Bags
White				
Light fawn				
Fawn				
Brown				
Dark Brown				
Brown Black				
Grey				
Dark Grey				
Rose Grey				
Black				
Total				

Total Wool bales/cartons: Weight: kgs

* refer to AAA Code of Practice for Colour Combinations

Generally, a copy of the consignment sheet is included with the fleece in the bag or fleece butt, and a separate copy also sent to the fleece buyer. The grower will also keep a copy for their own records, so that when they are contacted by the fleece buyer to provide an invoice for the fleece that has been sold, they can compare this to the consignment sheet to identify what fleece has been sold, and what is still outstanding. As mentioned above, some types of fleece may sell more readily than others, either due to demand for a specific line of fleece, such as skirtings; or because the fleece buyer can more easily offer bales of certain lines of fleece, because it is available in greater quantities particularly when classed by criteria such as micron range, and length. These 'complete' lots can be offered to the market more readily than smaller quantities.

It is the practice of most fleece buyers to contact the grower when their fleece has been sold and request the grower provide them with an invoice for payment. They will provide the grower with the details of the fleece that has been sold, including the quantity of fleece and the price per kg. On receipt of the invoice they will organise payment for the fleece that has been sold.

Ultimately it is up to individual growers to make their own enquiries and decisions as to the most appropriate destination for their product; and to keep records about what fleece has been sent where, and to reconcile the payment/s received against the product consigned.

Boston Fine Fibres

Fine Fleece - Fine Fibre – Fine Yarn

We create luxurious artisan yarns from local fleeces right here on our farm. Our boutique-milled products are created in an eco-friendly friendly environment using solar power and rain water harvested directly from our rooftop. No harsh detergents or dyes are used during processing.

Specialists in processing single saddles and small batches, we provide the full range of quality alpaca products to small breeders and local crafters.
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The Scotch Group

The Scotch Group is an alpaca fleece collection Company committed to collecting all fleece, both Huacaya and Suri of all microns and colours with the purpose of selling fleece and developing end product to benefit ALL Australian alpaca breeders.

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www.theuneke.com
Contact Ian Preuss
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Phone: 03 – 9311 0933
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AAA offers
Colour Coat DNA Test

The Australian Alpaca Association can offer easy access for a new genetic test which can help identify the genetic colour pattern found in the coat of alpacas. This can be individual test just for coat colour, or it can be bundled with parentage verification, or sire certification.

What a great opportunity Australian alpaca producers have! We are so lucky to have world leading research undertaken in Australia. It sits us in good stead to continue to be genetic seed stock suppliers for the world.

DNA test for identifying colour in alpacas to help breeders better predict breeding outcomes. The colour coat testing has huge benefits for alpaca producers. It allows breeding programs to make calculated breeding decisions, with the potential to maximise genetic gain. Historically, it has not been uncommon to see white and fawn males used in darker coloured breeding programs. With genetic testing, it shortcuts the time consuming process of progeny testing, and rules out the unreliability of analysing the pedigree with the associated guess work.

This is of interest to alpaca breeders of all colours – while an alpaca may look like one colour, it might actually be something else! You can learn how to identify homozygous for the "white" allele and then breed to ensure progeny from white and fawn alpaca will be white. White breeding programs can also be advanced more reliably with the application of this same testing. Alpaca that present currently with a result of "aA ee" may be solid white, but have the potential of producing coloured offspring if they are mated with a white alpaca of the same genotype.

Coat colour in alpacas is a complex trait, involving two main genes responsible for base coat colour (ASIP and MC1R), and an as yet unknown number involved with pattern. Alpaca fleece has 22 natural shades that ranges from black to white, grey, fawn to champagne. Breeding for a specific coat colour can be a complex process.

The 'classic grey' phenotype can be problematic in breeding due to its association with the blue eye white phenotype and associated possible health defects. Classic grey can be hidden or cryptic on white or light backgrounds.

With the release of the Alpaca Coat test, breeders have the opportunity to test their white or light fawn animals, those with uncertain patterns or mutations or animals they wish to determine the base coat colour to deduce common progeny colours. The test also identifies animals with 'cryptic grey' coat patterns that are generally too pale to see.

Example of Results: Breeders will receive a grey/non-grey status for tested animals, as well as a base coat phenotype for the following colours:

W	White	White fibre, Dark skin
PSW	Pink Skinned White	White Fibre, Pink skin
F	Fawn	Fawn Fibre, Dark skin
CF	Clear Fawn	Fawn fibre, Pink skin
BB	Bay/Brown	Red/Brown body fibre, Black fibre on extremities, Black skin
CH	Chestnut	Red/Brown fibre, Pink to Red/ Brown
B	Black	Black fibre and skin

To have your alpacas tested, you can contact the AAA at info@alpaca.asn.au or buy the kit in the AAA shop.

Alpaca Colour Test Update

By Kylie Munyard

Since the alpaca colour DNA tests were first offered in 2020, 1138 tests have been completed (as at July 2021). These tests were on animals from Australia, France, Belgium, UK and Canada. Feedback from breeders is that the test is useful because the results are: uncovering cryptic or hidden greys in their white and light fawn herds, identifying recessive carriers of black, and finding animals that can't produce the colours they want. This knowledge means that they are able to include, or remove, these animals from their breeding program, to accelerate their breeding goals. The ideal time to collect samples from your animals is at ear tagging, either using a blood card or a tissue sample unit. If you would like to find the closest laboratory to you that is offering this test, please contact Neogen on (07) 3736 2134 or via email: naa-lab@neogen.com

Youth Groups

Australian Alpaca Association

Tas alpaca youth practice Paraders Workshop on 8 August

Of course, the show just doesn't start on the day of bump in, there are many weeks Youth Groups give our young members (under 26 years old) a space to engage, grow and have fun.

A combination of show events, competitions, workshops, and youth camps giving our youth members opportunities to further develop their husbandry and handling skills and knowledge in judging fleece and animal conformation.

They organise events and training for youth by youth, with support from the wider membership. The AAA acknowledges their importance and aims to build these groups in each state. Currently all states have youth activities and members but not all have a formal Youth Group.

How do you start a youth group?

The minimum number of members to start a Youth Group is 5 members. Youth Group members may be any Member (Full, Joint, Associate, Family or Youth member including student of an Educational Member organisation) of the Company under 26 years of age. Mentor members (aged over 25) may be elected by the Youth Group to shadow Youth Committee roles or Youth Executive roles. These roles are included to provide stability year on year as members of the Youth Group change, or are too busy to administer the group, and the opportunity for direct guidance from members with more experience.

AAA currently has two established youth groups, but we are working hard to get groups up and running in each state!

The NSW Alpaca Youth Group is the first established and longest-running alpaca youth group in Australia. Since 2012 the NSW Alpaca Youth Committee has been working to encourage and develop youth involvement to create a brighter future for the Australian alpaca industry.

The NSW Youth Group is dedicated to equipping its members with the tools to become hard-working, enthusiastic and knowledgeable members of the alpaca industry. We cater to all experience levels and interests – from first-time Young Parader participants to stimulating members' interests in meat and fleece production, general farm practice, and all aspects of animal husbandry. Check out what they are doing on Facebook - www.facebook.com/NSWAlpacaYouth

The Tasmanian Alpaca Youth Group is the newest youth group in Australia. The group is working to encourage and develop youth involvement in alpacas in Tasmania to create a brighter future for the Australian alpaca industry. Check out what they are doing on Facebook -

Facebook: https://www.facebook.com/TasAlpacaYouth/

So why Alpaca Youth?

Well, to begin, it's fun for the members, the parents of those members, and the AAA members who are variously their teachers and mentors. It is an inclusive, not exclusive, way for kids to engage in the alpaca industry. For those studs embracing the role of mentorship, the kids are extra hands on farm and at shows, ambassadors for the studs (as well as the industry), and frequently establish their own herds as daughter studs of the mentor stud.

For the AAA, it draws in new memberships from mums, dads and their kids, as well as from those schools which take on alpacas as a part of their school agriculture programme. Furthermore, the requirement that all alpacas shown be registered with the AAA brings in new registrations of both animals and studs. The natural progression and evolution from alpaca youth to alpaca adults means that we have a process of succession in place, drawing upon experienced and knowledgeable breeders to take office at regional and national levels. As adults, these owners and breeders will be both buyers and producers, contributing to the growth and development of the industry.

None of this is new, of course. The horse, sheep and cattle industries were early to recognise the importance of succession, and have long since established their own youth groups and competitions to underpin their more mature industries.

Tas alpaca youth practice Paraders Workshop on 8 August

Learning all about how to care for an alpaca and how to correctly put a halter on - first Alpaca Education Workshop run by TAYE in June

Australian Alpaca
ASSOCIATION

Why become a member?

As a member of the AAA you'll have access to:

- specific member-only resources
- a broad support network of more than 1,200 members, who share your passion for alpacas
- experts who understand the industry and are dedicated to exploring opportunities and helping you succeed
- the tools and resources you need to develop your herd to its greatest potential and enjoy the many benefits of these unique animals.

With a range of membership categories to suit your interests and stage in the industry, join today and enjoy all that membership of the AAA has to offer. Visit **www.ealpaca.com.au/join**.

Building a successful and sustainable alpaca industry in Australia

www.alpaca.asn.au

Stay connected

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An Unlikely Killer

By Liz Coles, Longueville Park Alpacas, Palmvale NSW

PROFILE

Every now and then we are fortunate to breed an animal that has everything a true black breeder is looking for - great genetics, excellent conformation, fleece statistics with a micron of 19.0u, SD 3.0, CF 99.8%, a gentle temperament and impressive show results. This was Minkara, five months pregnant and the future of Longueville Park's breeding program.

HISTORY

It was 7.30 on a Saturday morning as the animals were being fed and moved to their day paddock when Minkara was found lying on her side, rolling and in obvious distress. Gently moved her to the house paddock, checked her thoroughly. Temperature 38 HR 78 and some abdominal tenderness. At 9.00am she was given a pain killer Flumav 1.0ml (Veterinary approval) and after 30 minutes she was alert, up grazing, drinking and had passed urine and pellets.

5.30pm she was down again and in pain – the Flumav injection was repeated but with minimal response. 6.00pm Taken in to the Vets where an ultrasound was taken with no obvious problems, FEC was negative and she remained alert. An intravenous injection of Buscapan (muscle relaxant) was given and she was brought home and confined in a small paddock with a friend for company. The ulcer regime was commenced comprising 2 Carafate tablets and 1 Losec tablet crushed and diluted in 20 mls of water and given orally twice a day. She was also commenced on intramuscular antibiotics.

The following day (Sunday) she was miserable, did not eat or drink and there was no output. In an attempt to hydrate her and stimulate her gut she was given 200mls "Lectade" orally every 2 hours. Her pain levels appeared to be slightly less than the previous day so no further analgesia was given.

Monday her condition was deteriorating and she was taken to Tamborine Mountain Veterinary Surgery for urgent assessment. Whilst her overall appearance did not indicate the severity of her illness her temperature was now 36 which in hindsight is indicative of the beginning of organ failure. An ultrasound was inconclusive so under sedation abdominal x-rays were taken which revealed a very small perfectly round foreign body about the size of a 5 cent piece which was moving through the bowel. This object did not account for the degree of pain she was experiencing. Blood was taken and sent to a specialised laboratory for accurate assessment for camelid blood profiles but a report was not anticipated for 12 -24 hours. In an attempt to get her bowels working she was given 180 mls Tympanyl (a paraffin based laxative) with 200mls "Lectade" via a stomach tube.

OUTCOME

After a 2 hour drive home Minkara was again confined with her "mate" but now was in severe pain, rolling, groaning and arching her neck – she died at 8.30pm. This girl was unwell for 50 hours and again demonstrates the stoicism they show in the face of a life threatening incident.

In compliance with the Q Alpaca protocol a post mortem was performed which revealed severe pancreatitis which certainly accounted for her severe intractable pain. The blood results from the previous day indicated a slight degree of infection but as a specific test for pancreatic disease was not indicated at the time there was no laboratory profile. The foreign body was not located. Notwithstanding, this alpaca could not have been saved as pancreatitis in any mammal is difficult to treat and the outcome is usually fatal.

THE PANCREAS

The alpaca pancreas is approximately 15-20cms long and 3-6cms wide and according to Murray E. Fowler 'Medicine and Surgery of South American Camelids' page 355, "There have been no reports in the literature of pancreatitis in camelids"!

This photo of Minkara's pancreas shows that one end has much more normal looking tissue and the other end is necrotic and inflammed. Missing is the very reactive, inflammed fat that surrounded the organ in situ

LESSONS LEARNT

The benefit of performing a post mortem again reinforces the value of confirming the cause of death and we know that no matter what intervention was undertaken the outcome would be the same. We can all learn from this.

Acknowledgements.

Our sincere thanks and appreciation for the professional care and compassion given by Dr Joan Gibbons, Murwillumbah Veterinary Clinic and Dr Andrew Paxton- Hall, Tamborine Mountain Veterinary Surgery in their valiant efforts to try to save Minkara

Out & About – with Llamas

Llama makes wonderful companions and adore being out and about with their owners. These larger Camelids are quick to learn and easily trained to halter and panniers. They love to be out socializing with their human friends.

Trekking and camping are made easy when your llama carries your tents and supplies. A picnic at the beach? Why not? Some just love the camera; weddings and P.R are just their style. Many are trained carefully to bond with cats and dogs. Carting with llama is fun pass time. Beautiful companions in the paddock or on an adventure, llama are sure to bring a smile to everyone they pass. Its true a little llama love goes a long way!

This is how members of the Vic/S.A./Tas./N.Z Branch of the Llama Association of Australasia have been enjoying their llama this year.

For more details on Llama events.
Contact Belinda follyfarm@iprimus.com.au

Photos above & below courtesy: Mel Semmler South Australia

Photo courtesy: Cheryl Crosbie

Photo above & inset courtesy:Follyfarm

Photo above courtesy: Follyfarm | Photo top right courtesy J&L Kirkhope

Photo above courtesy: Follyfarm | Photo top right courtesy J&L Kirkhope

Photo above Courtesy: My Scandi Style Photography | Photo inset courtesy of Mark Brindley

A study assessing colostral and serum immunoglobulin G in alpacas - using Brix refractometry and total serum protein

By Amber O'Neill, Jane Vaughan, Chris Petzel, Joanne Connolly and Randi Rotne Charles Sturt University Honours program

Passive transfer of immunity involves the absorption of maternal immunoglobulins across the intestinal wall into the bloodstream of neonates, providing protection against systemic diseases until the neonate is able to develop its own active immune response. A failure of passive transfer occurs when inadequate immunoglobulins are absorbed across the gastrointestinal tract of a neonate within the first days of life, predisposing to sepsis, diarrhoea and other infections.

Assessment of passive transfer of immunity is a critical practice implemented commonly in the dairy and equine fields. This study compared direct and indirect methods of measuring immunoglobulin G concentration in colostrum and serum of alpacas during the first week of life to determine if on-farms tools were accurate. Direct IgG concentration was measured using radial immunodiffusion assays, whilst indirect IgG concentration was measured using optical and digital Brix refractometry and total serum protein.

The main objective of this study was to determine if Brix refractometry and total serum protein were accurate compared to radial immunodiffusion when measuring colostral and serum IgG in alpacas. Radial immunodiffusion is expensive, time-consuming and poorly available compared to cheap, easily accessible alternatives like Brix refractometry and total serum protein. The study also aimed to determine if colostral and serum IgG concentrations in alpacas were correlated.

Alpacas were recruited from a farm in the eastern Riverina district of New South Wales and were Suri breed. Colostrum was collected from the hembra within 24 h of parturition by the owners and whole blood collected from cria by the investigators between 1 and 7 days of age. Clinical examination of each hembra and cria prior to sample collection occurred to ensure dehydration was not a contributing factor to high IgG concentration and that all were healthy. Direct IgG concentration was determined following the manufacturer's instructions on the radial immunodiffusion assay kits and was indirectly estimated using Brix refractometry for total solids and clinical refractometry for total serum protein.There was a strong correlation between optical and digital Brix refractometry, and colostral IgG concentration determined by RID with statistical significance ($p < 0.05$). Optical and digital Brix refractometers showed high sensitivity for detecting high- and low-quality colostrum, and for detecting adequate and inadequate transfer of immunity. There was a moderate correlation between serum IgG concentration determined by RID and optical and digital Brix refractometry, and serum IgG

Figure 1 Cria blood collection. Each cria was placed into cush position and wrapped in a towel to allow safe and easy handling. Blood was collected from the right jugular vein at the distal third of the neck.

Figure 2 Radial immunodiffusion assay with the pale green rings correlated to colostrum and serum IgG concentration. This test is considered gold standard although results take 24-48 hours, test plates are expensive and difficult to access.

concentration determined by RID and total serum protein, with no statistical significance ($p > 0.05$). There was a moderate correlation between cria age and serum IgG concentration, although cria weight, and dam age and parity showed no significant correlation with colostral or serum IgG concentrations. A moderate correlation between colostral and serum IgG concentration was found.

Optical and digital Brix refractometry for colostral IgG estimation and optical and digital Brix refractometry and total serum protein for serum IgG estimation are reliable, accurate and easy-to-use tools that can be used on-farm to detect a failure of passive transfer. This means Brix refractometry and total serum protein can be used on-farm to assess colostrum quality and passive transfer of immunity to improve survivability of cria.

Further research with greater sample numbers is required to determine the reference intervals for these tools.

A Brix refractometer is a hand-held tool that can be used by breeders on-farm to ensure colostrum quality is adequate, and to ensure passive transfer of immunity has occurred. Your veterinarian can help with sourcing a refractometer for use on your farm.

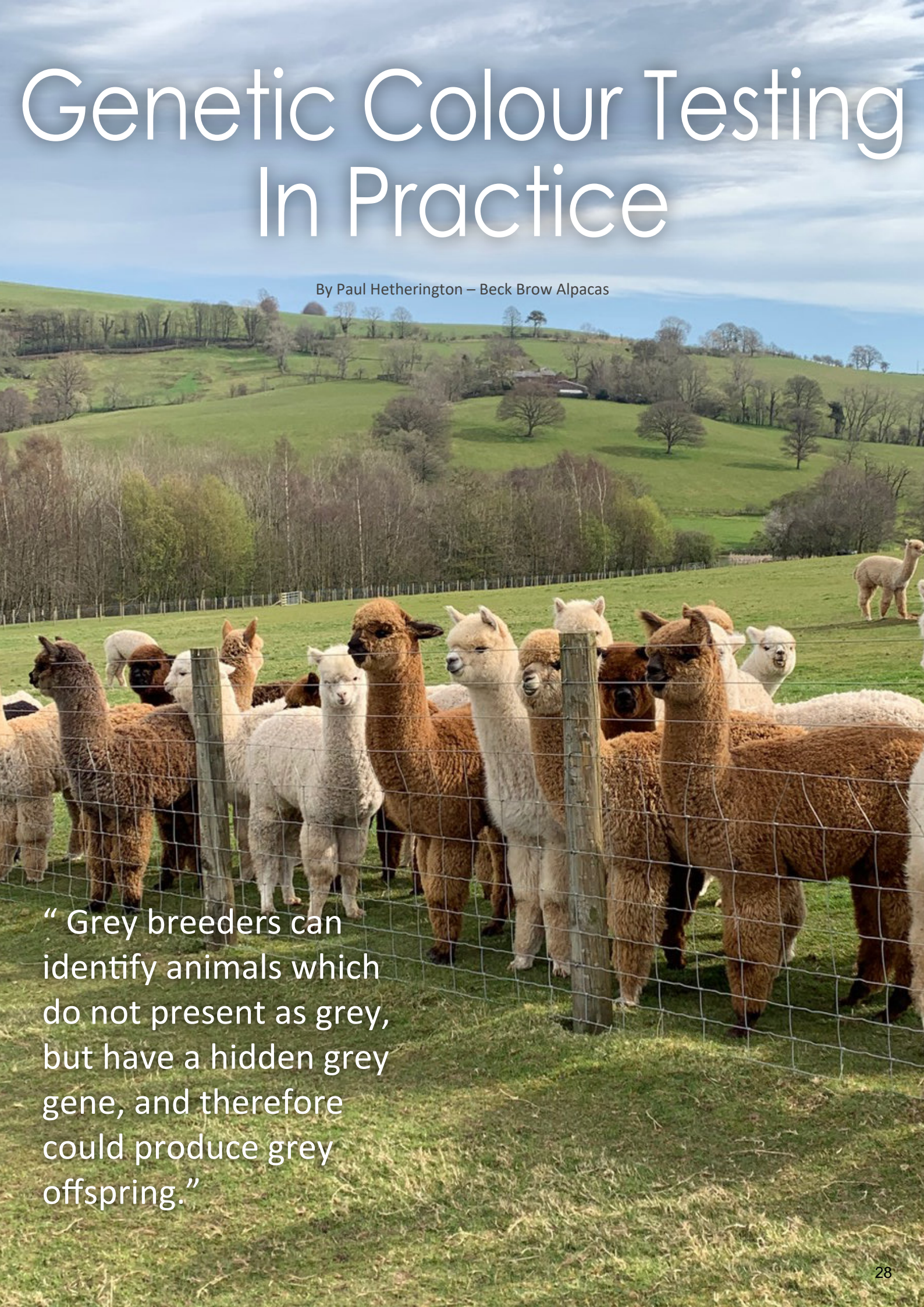
Figure 3 Digital Brix refractometer (left) and optical Brix refractometer (right) were used as indirect methods of assessing colostral and serum IgG. These methods are simple, quick and readily accessible.

Richard Dixon Scholarship

In recognition of services to the alpaca industry by the late Dr Richard Dixon, the AAA offers a scholarship to senior veterinary students. The development scholarship honours the late Richard Dixon who is widely recognised for his vision and commitment to improving alpaca health and for establishing so many of the founding veterinary practices in the Australian alpaca industry including Q-Alpaca. Submissions close 15 October 2021. For more information please see the AAA website.

Genetic Colour Testing In Practice

By Paul Hetherington – Beck Brow Alpacas



" Grey breeders can identify animals which do not present as grey, but have a hidden grey gene, and therefore could produce grey offspring."

My wife Barbara and I own and manage Beck Brow Alpacas in the UK.

Beck Brow is a 50 acre farm situated in the Eden valley which is nestled between the English Lake District and the Pennine hills in the North West of England.

We purchased our first three breeding females in 2008. These females have now evolved into a herd of around 200. The herd comprises of mainly Huacaya with a small number of Suri. Beck Brow Alpacas don't specialise in any one colour but focuses on the quality of the herd and seek on-going improvement with every generation bred.

The strategy of mixing the best of Australian and New Zealand genetics with the best of those in the UK has resulted in a highly regarded herd.

Barbara qualified as a British Alpaca Society judge in 2017 and has judged in the UK and Europe.

Last year we listened to a Zoom seminar by Kylie Munyard from Curtin University in Australia on genetic colour testing for alpacas. Following that we decided to test a sample of our herd to see if the results were useful or not. This is an overview of the principles of the test and a summary of some of our results.

I am not a geneticist so I apologise to all geneticists if I don't use the exact terminology but I will try and explain the theory and results in a way that makes sense to me and hopefully everyone who is reading this.

First to the theory:

There are two main types of genes that control colour, one that is denoted a or A, which defines the base colour, and one denoted e or E which either allows or prevents the production of black pigment.

An alpaca has two of each gene type so the possible options are aa aA AA and ee eE EE. Any of the three a/A options can exist with any of the three e/E options which gives a total of nine possible combinations. One of each pair of genes is passed on during the mating process.

The aA type actually has four possibilities: A will produce white to fawn, A^b will produce a brown body with black extremities, a^t will produce a black body with tan on the undersides, a will produce black. Only the sequence for the black a gene has been decoded. The specific sequences for white, fawn and brown have not been decoded yet.

EE combination will allow all black pigment to pass, and therefore allows the base colour to present, while ee will supress all black pigment and so will lighten the base colour. My feeling from our results is that Ee will partially supress black pigment.

Animals with an aa combination are genetically black. Animals with ee combination will be pink skinned.

Grey and appaloosa are patterns, not colours, and sit on top of the base colour. For example a silver grey alpaca is a black alpaca with the grey pattern gene, a rose grey is any other colour with the grey pattern gene. An alpaca with the grey gene has a 50% chance of passing this on to its progeny.

A blue-eyed white is a combination of the grey gene and a currently unidentified white spot gene.

Secondly to our results:

We took 25 samples and achieved 23 results. The non results were presumably down to incorrect sampling. The little skin pricker that is supplied with the testing kit does not work on alpacas, we used a needle in the edge of the ear and even then it sometimes took a little while for any blood to appear.

Interestingly 16 animals had the ee combination which supresses all black pigment, 10 had the aa combination, so were genetically black, even though no animals presenting as black were tested. This points to the fact that a significant percentage of our animals are genetically darker in colour than they look.

The following table is an example of some of our results.

Number	Genotype	Predicted Coat Colour	Actual Colour	Grey
1	Ee aa	Black	Brown	N
2	Ee aa	Black	Brown	N
3	ee aa	White,Fawn	Light Fawn	N
4	ee aa	White,Fawn	Light Fawn	N
5	EE AA	White,Fawn, Brown	Dark Fawn	N
6	ee AA	White,Fawn, Chestnut	White	N
7	ee AA	White,Fawn, Chestnut	White	N
8	Ee Aa	White,Fawn, Brown	Beige	N
9	Ee Aa	White,Fawn, Brown	Dark Fawn	N
10	ee Aa	White,Fawn, Chestnut	White	Y
11	ee aa	White,Fawn	Beige	Y

Animals 1 and 2 were predicted to be black but presented as brown. This might suggest the Ee combination has some level of colour suppression.

With all the other animals the presented colour was within the predicted colour range.

Animals 3 and 4 are genetically black with full pigment suppression and presented as light fawn.

Comparing 5 to 6 and 7, all are AA but 5 has no pigment suppression and presents as dark fawn while 6 and 7 have full pigment suppression and present as white. Number 5 is guaranteed to put E forward on mating so the resulting cria will always allow some pigment through.

Comparing 8 and 9, both have the Ee Aa genes and present as beige and dark fawn. This is within the predicted base colour range.

Animal 10 presents as white and has produced a blue eyed white cria. This was unexpected at the time but is explained now by the fact it is a hidden grey.

Animal 11 is the daughter of animal 10 and is also a hidden grey. Interestingly she has a lot of dark fibres through her fleece which was unexpected but can now be explained by the grey gene. Knowing she is grey will influence the choice of male she is put to.

All animals with at least one A and ee presented as white.

So can the results be useful?

They will allow you to identify hidden greys. This will help to avoid grey on grey matings that will have a 25% chance of resulting in a lost embryo (the so called lethal gene where both parents pass on the grey gene). They will also reduce the chances of getting a blue eyed white.

By knowing which genes your males and females have you can work out which combinations the resulting offspring could have. By matching sires and dams you can improve your odds of getting the colour you want although the range of possible colours is quite large given that the individual genes for white, fawn, and brown have not been identified yet.

I think the test will be especially useful for black breeders, as you can see which animals have the a gene and could produce black and the E gene which allows black pigment. Grey breeders can identify animals which do not present as grey, but have a hidden grey gene, and therefore could produce grey offspring.

Animals with aa will always have a chance of producing black, animals with Aa will have 50% chance of passing on the black gene and animals with AA will never produce a black.

In practice it seems like EE will allow base colour to present, Ee will allow some colour to present, and ee will block all black pigment.


Genetically grey

The test will undoubtably become more useful as more of the A colour sequences are decoded and we can distinguish between white, fawn and brown.

Really the question is, given that you know the colour genetics of the parents, can you accurately predict the colour of the offspring. We have changed a couple of mating decisions for this year based on our results so it will be interesting to find out in a years time if our predictions are correct. Nothing is ever quick with alpacas!

Article reprinted with permission from the BAS alpaca Magazine.


Two genetically black males

WEAVING ON A SMALL LOOM

By Elizabeth Paul - June 2021

Introduction

Weaving is one of the oldest crafts known to humans. Weaving consists of placing a number of strands of material in one direction (called the warp) picking up a warp thread and passing another strand (called the weft) at right angles over and then under alternate warp strands to form a flat, non stretching interlocking mesh. Any material that is, or can be turned into long strands, threads or strips, can be used to make a piece of woven material, which is stronger than the individual strands may have been. It's easy to tear paper into long strips, but a little harder to tear the mesh woven from those strips.

Looms

Weaving frames are called looms. The use of a loom facilitates putting tension on the warp threads, which in turn makes it easier to pick up those threads and insert shuttles, flat pieces of wood, wound with the weft thread through and across the warp. At the most basic level, the warp threads can be tied to eg. a rock or tree, with the weaver tying the warp behind them and leaning back to create tension. This creates a flat warp where the threads are still picked up by the fingers to pass the shuttle through. A beater is used to press the last weft row further down the warp. This method is called a backstrap loom, and may still be in use amongst indigenous weavers today. Square or rectangular wooden frames such as those used for tapestry weaving define the size of the piece, but for longer or larger pieces, a more advanced loom which has rollers to wind up lengths of warp is required. A further useful addition is a shaft or reed, which holds string or wire loops called heddles, through which the warp threads are passed. The shaft can then be lifted or lowered, lifting a whole group of threads, creating the space required for the shuttle, (called the shed space) and making the process faster. After that, a loom can be bigger with more shafts and heddles to create more intricate patterns, or be power driven, but the form of weaving is still the same.

I am not recommending any one loom over another, however I was taught weaving on a 4 shaft hardwood table loom, which required a separate warping board. I currently use a rigid heddle Ashford SampleIt loom, the smallest in their range, having downsized from the 50 cm rigid heddle loom. These looms are warped up directly on the loom without the need for warping boards. They come with instructions, however I have added the following comments on points which I have found to work better for me.

Yarn Notes

I use only alpaca yarns. All my 8 ply is processed and machine spun by Fibre Naturally Mill. Machine spun alpaca yarn may have had water soluble conditioner added to assist in control as it passes through the machinery. The conditioner washes out with the first wash, and the yarn will also puff up. If I intend to use this yarn for knitting, I wash it first in the skein. For weaving it is more advantageous to use it as is, and then wash the piece afterwards, as the puffing up will close up gaps between threads.

The three W's

In my view, weaving takes place in three stages, warping, weaving and washing.

1. Warping

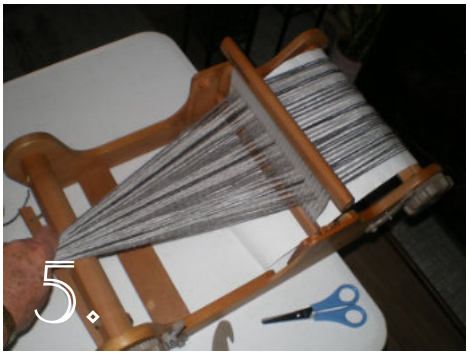
This is the most critical stage, as if the warp is not evenly and tightly tensioned the piece will not be smooth and even when finished. This may not matter so much when using a bulky or novelty yarn for the weft, however I make a point of getting the warp as even and tight as possible for every piece. Regardless of the weft, the warp threads are 8 ply machine spun alpaca yarn as it is strong (can't break threads by hand) and can have good tension put on it.

The loom and its warping peg are clamped to separate tables by however much length is required. It has a rigid plastic reed which doubles as a beater, with slots and holes (the heddles), and a plastic hook to pass the threads through the slots on the way to the peg. There are 30 slots but I generally don't use the first or last slots, as on this small loom I have found these threads tend to slip off the rolled warp when weaving. The first thread is tied with a KNOT to the back bar and threaded through the second slot, taken once around the peg and back to the bar. That constitutes one pair of threads (called ends) in the same slot, one of which will later be threaded through the hole. If using the same colour again,

the thread is passed under the bar and threaded through the next slot. If a different colour is used, the first thread must be cut and tied on again with a knot, and the new colour started in the same way. See Pic 1: Warp on Back Roller. I let the warp sag a little between the loom and the peg, as trying to pull the warp too tightly at this stage will make the small clamps spring off. I have marked the centre of the heddle for easy reference, and warp from left to right, mainly because of the position of best light in my house. However as I weave from right to left, I may have to think of my pattern in reverse when warping.

It is important to check that all slots are filled before rolling up the warp, as if one is missed there will be a gap in the weaving. If the warp is mostly one colour, then it is relatively simple to insert the missing thread, by lifting the warp threads off the peg down to the gap, tying on the missing thread, going round the peg back to the loom and then replacing the other warp threads in sequence. However if the missing thread is part of an intricate pattern, then it might be necessary to actually cut the warp threads off at the back bar after the gap, and rethread in accordance with the pattern. I save any pieces that I cut off as they are useful for weft stripes. Errors in counting threads may not be noticeable until after weaving has commenced, and is then too late to rectify. See Pic 2: Error in Pattern. Of the two central stripes in this scarf, one has 2 threads less than the other.

Having tied the warp at the peg (I do not cut the threads yet) and a few inches away, with BOWS, see Pic 3: Warp on Peg, I lift the warp off the peg and place it on the table. See Pic 4: Warp on Table. I wind the warp by firmly holding it close to the front of the loom and gently turning the roller back. See Pic 5: Rolling Warp. I keep an even tension on the section being rolled, ignoring the warp still behind me on the table. Note the sheet of copy paper inserted under the reed and up to the roller. This is a fiddly operation, as I have to let go of the warp for each sheet, but rolling the sheets in helps to separate the warp threads, and also later on gives me a marker as to how much I have woven at a time when the paper comes off (and the sheets can be reused many times). Once the warp is rolled up it is ready for the next stage, threading the holes. See Pic 6: Rolled up warp.100gm of weight.



When ready to thread the holes, I untie the bows holding the warp threads and lay them out on the table, then starting from the left, I take each loop and extend it tight to cut it in half. When they are all cut, starting again from the left, I bring a pair forward making sure they are not crossed behind the reed, then thread the left hand one of the pair through its hole with the threading hook. I check that all threads are a pair, one in the hole on the left of the one in a slot. I pull all the threads firmly forward, and trim the longest ones to match the shortest one, then adjust the front bar to allow for easy tying up. Note: I do not cut any thread in weaving until I am very sure of what I am cutting and why.

I tie up each pair of threads, rather than a bunch, because I get better tension. I start with the centre pair of threads, passing both under the front bar, tying an overhand knot and then a bow, like tying a shoe lace. I then work outwards tying a few pairs on each side alternately. When all the pairs are tied on the bar, I tighten the warp a bit with the roller, and then retie each pair starting again from the centre, undoing the bow, tightening the knot and retying the bow to improve the tension. The 2 end pairs must be tied last and tight as they will form the selvedges of the piece. Sometimes it has been necessary to retie the warp a third time.

The finished warp weighs about 75gm of 8 ply, and is about 10 cm wide and 2.5m long. The finished scarf in 8 ply weighs about 150-160gm and is about 2.4m long. Using thicker handspun or novelty yarns as wefts could add another 30-100gm of weight.

2. Weaving

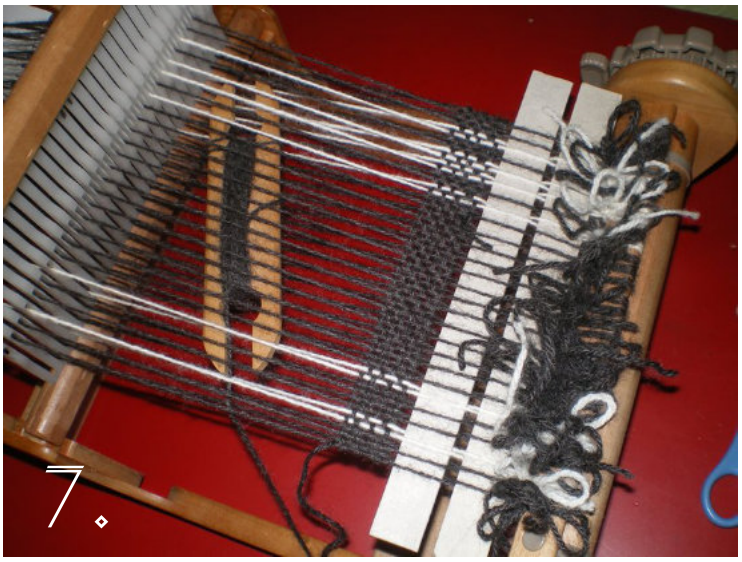
The first task is to wind the shuttles.

The small shuttles will hold up to about 50 gm of 8 ply. If using different colours I don't fill them to that extent, but if using handspun the bigger shuttles will hold up to a 100gm ball for a continuous weft.

The second task is to insert the "shed sticks", which can be pieces of flat wood, cardboard or sheets of copy paper folded over several times to form a "stick". When the reed is in the resting position, the warp is flat. To open the shed space between the threads the reed is either pushed down or pulled up. There must be a little give in the warp to enable moving the reed.

On this loom the reed is pushed down, the first shed stick inserted in the space, the reed is beaten to the first stick, then returned, pulled up to insert the second shed stick, beaten again and pushed down again to start. Using the shed sticks provides a stop for the reed when beating, and also allows a check on the evenness of the warp threads going across.

See Pic 7: Shed Sticks.



Note: Beating is the action of moving the reed (held vertically) towards the front of the loom until it hits either the shed stick, or the last row of yarn to beat it evenly into place. On non-rigid heddle looms, the heddle groups are lifted with eg. toggles or side levers or even foot pedals on a floor loom, and the beater is a separate stick inserted into the shed space with each weft row. Most importantly, the beating is NOT HARD, it is more a flick of the wrist to tap the weft thread into place. Beating hard will compress the weft thread and turn the piece into hard fabric, and when washed it will be even harder. The piece is stretched through the warp, and the woven area should have gaps. When it is removed from the loom it will spring back and the openings will close up a bit, depending on the yarn itself. Sheeps' wool is springier than alpaca, cotton thread is not springy at all and is beaten harder. Learn to not beat hard.

The First Row

Instruction booklets advise the use of some waste yarn for several rows. I have dispensed with this, largely because I warp pairs of threads, not bunches, and therefore can start weaving my scarf straight away once the shed sticks are inserted. I let out a few lengths of yarn on the first colour, and with the reed down pass the shuttle between the warp threads, making sure the shuttle point does not catch or lift a lower warp, until the thread is all the way through and there is a couple of cm of yarn tail on the right.

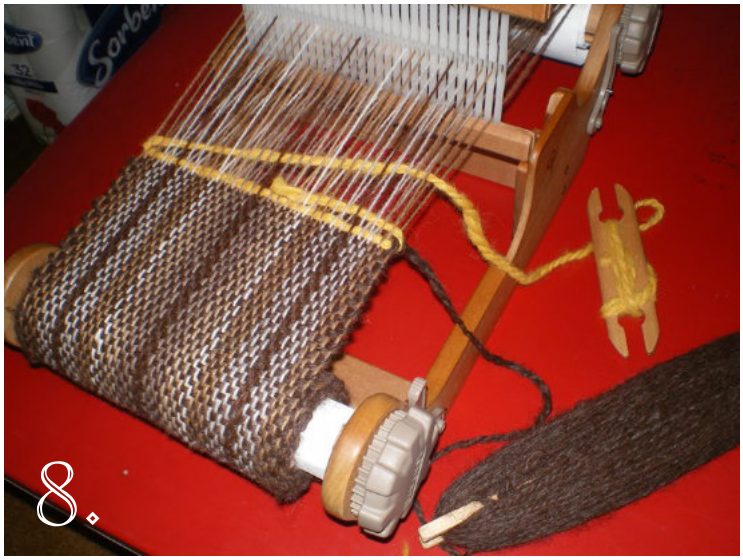
After beating this row I lift the reed up, and fold the yarn tail end in over the outside thread. Pass the shuttle back, leaving the weft thread at about 40 deg angle across the warp, then hold the left hand warp thread together with the yarn where it bends, so as not to pull that side in tightly, and tap it down. With practice the selvedges will be reasonably even. Occasionally I grip both sides of the woven area and pull apart, just to ensure that I haven't woven it too tightly. Learn not to pull weft yarn tightly.

As weaving progresses eventually the reed must be put back into the rest position to release some more warp from the back roller to the front, while also winding on the woven area

on the front roller. To unwind the woven bit to see how it looks, the reed must be in the rest position. Then the woven bit can be wound back onto the roller, keeping it even, and the warp retightened again. The warp needs to be tightened to roughly the same tension each time, and the selvedge threads checked to make sure they have not slipped off.

Changing Colours

To change colours for a 2 rows x 2 rows stripe, the brown shuttle is placed on the right, the yellow shuttle is passed as above, tapped down, and the tail of yellow folded around the brown thread. See Pic 8: Colour Change. I pull a bit of yarn end out between threads so that it stick up in the weave, in a few rows that end can be carefully snipped off. In fact it is much easier to cut the ends off while the scarf is stretched out, than leaving them till it is off the loom. I hold the tuft up a bit with one hand and carefully cut with small scissors, ensuring I do not cut down towards the scarf. To use brown next, the yellow shuttle is placed forwards and over brown , so that the brown thread picks up the end of yellow for a neat finish. This can really only be done for a 2 x 2 stripe. To use a third colour requires finishing one of the first 2 colours to start again. Do not try to drag yarn up over more than 2 rows. See Pic 9: Finished Stripes.



Finishing

Enough room must be left at the other end, to allow for eg. a last block of pattern plus long strands of warp for a fringe. The last end of weft thread is tapped in and the reed put into the rest position. The warp threads are cut off behind the reed, as close as possible to the bar to allow for fringe length.

Cutting in front of the reed and too close to the woven piece will not leave enough for a fringe as the warp threads will spring back and shorten.

I braid my ends while the scarf is still on the loom, to get tension. I braid usually in groups of three, creating interest in the braids by using two different colours if I have stripes in the warp. Depending on the number of threads, I might have to do a couple with only 2 by twisting them, or 4 as a braid with two threads in the middle. All braids are finished with a knot by pulling all the ends at once through a loop.

The scarf can be then be unrolled to the start and the front bar bows untied. These threads will be longer and may need a bit of trimming to avoid tangling. I use a couple of heavy books over the scarf end on a firm table to get a good tension, and have the braided beside it to match the braids.

The loose ends of the first and final rows may need to be tucked in with a darning needle, the fringes trimmed to match in length and the scarf checked for any other loose ends which may have been missed along the way.

3. Washing

I wash all alpaca items in net bags to support the wet fibre. I use warm to quite warm water with a drop or two of shampoo, press the item down and leave for a while, then rinse and spin the water out in the spin cycle of the washing machine.

I never press or rub wet alpaca between towels or let it hang wet without spinning. The item can then be shaken out and air dried. I fold a scarf in half and then whip it to straighten the threads, then hang it over the line with the net bag underneath.

Once dry I steam press scarves with a damp cloth and steam iron, and air again. Alpaca must be thoroughly dried before storing.

10.

Patterns

I make up my own patterns depending on what colours I have. Obviously, to make symmetrical patterns the warp colours must match on either side of the centre. See Pic 10: Check Patterns. For an asymmetrical pattern such as a tartan look, I prefer having the larger stripes or more complex part of the pattern on the right as I weave from right to left. Also I prefer to change colours on the right, rather than in the middle of the scarf. See Pic 11: Tartan Patterns.

Warp stripes are simple, using one colour for the weft. I might add a few small weft stripes at the start to accent the long stripes. See Pic 12: Stripes. The white scarf has an 8 ply warp and thick white handspun as a continuous weft, which has created a bubbly look. The brown scarf has a 2 x 2 weft of brown and rosegrey. The black scarf in the centre has a warp with black yarn to the peg, white yarn tied on there and brought back, for every pair, with a 2 x 2 black and white weft.

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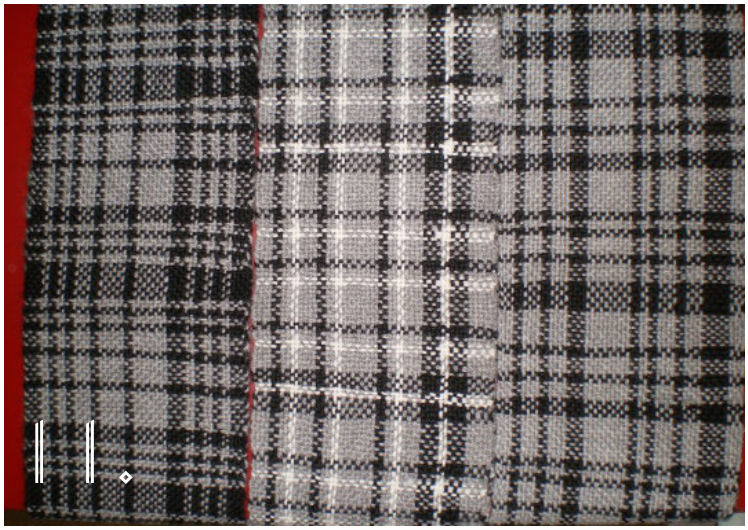
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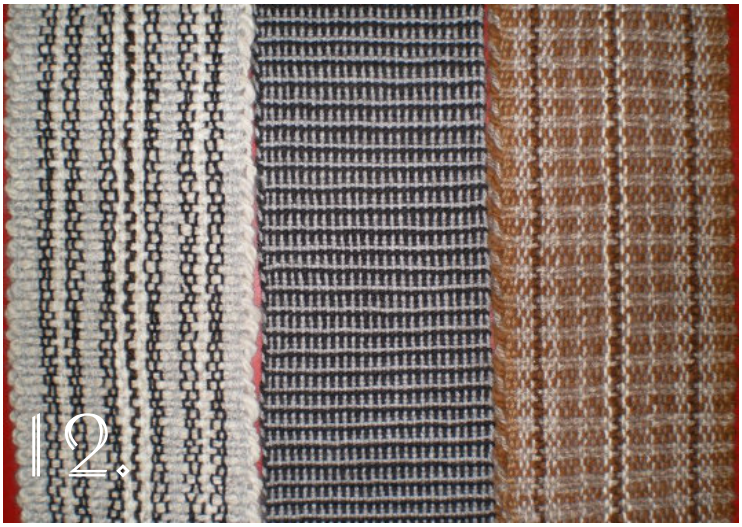
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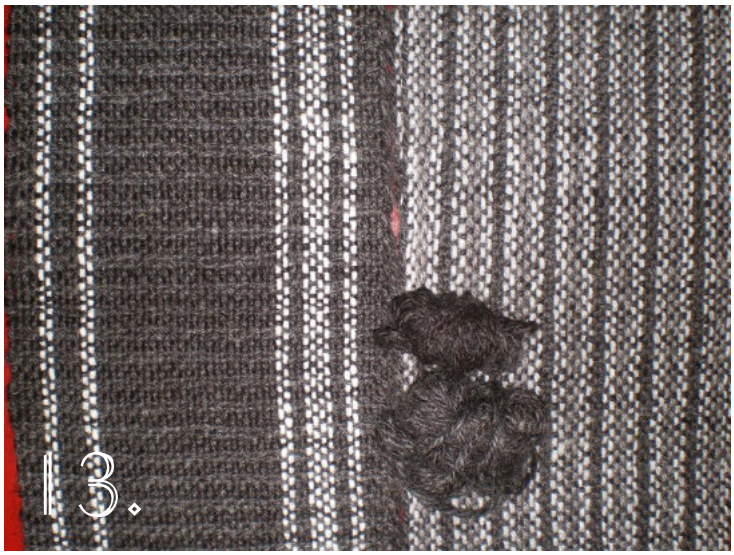
Handspun yarn can vary in colour from the same fleece. See Pic 13: Dark Weft. For the dark scarf I have used a charcoal grey 8 ply warp and a 2 x 2 weft with two slightly different shades spun from the same fleece. This blurs the difference between the balls, like knitting 2 rows from two different dyelots of the same colour. The lighter scarf has more white in the warp but exactly the same dark grey weft. Note how the white is accentuated and the dark grey “disappears” with this combination. This effect is useful in using up large amounts of one colour without having too many scarves looking the same.

For the shadow scarves, I have used several shades in the warp, starting with the palest shade on the left and moving to the darkest shade on the right, then weaving the same number of rows in reverse starting with the darkest on the right. See Pic 14: Shadow Scarf Ends. The dark scarf has more squares of colour and the fawn scarf has stripes, but from a distance the effect in both is patches of colour. See Pic 15: Shadow Scarves.

Finally although I use natural alpaca colours almost exclusively, I recently used a 90 gm ball of thick handspun alpaca dyed green (using peach leaves, from my vegetable dyeing phase 10 years ago) for the weft. The scarf warp is palest fawn 8 ply, with black 8 ply and thinner white handspun stripes. Although the green yarn looks bulky it compressed down and looks much flatter than the previous white handspun scarf. The green scarf is 2.4m long and 156 gm weight. There was enough green left over to add a bit of Fair Isle to the beanie (offwhite handspun) and the mittens (8 ply fawn). See Pic 16: Green Set.


15.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16.

ANIMAL ASSISTED INTERVENTIONS

By Julei McClen - Camelid Connections & Maria Marchant - Alpaca Kisses

Chai gets a hug at Westmead Children's Hospital - Alpaca Kisses

With the whole world living in the strangest of times, and all that has been happening with covid - especially it's affects on metal health that are now coming to the fore, I started thinking about how our animals, specifically our camelids have a positive effect on our well being.

For an insight into how alpacas are being used to interact with people, and what benefits these interactions have shown, I reached out to Maria of Alpaca Kisses for some insight on this topic.

Alpaca Kisses (a boutique business in the Hawkesbury, founded by Maria Marchant) facilitates one-on-one, fence-free, at-venue interactions with exquisitely presented, event-trained alpacas. Her alpacas are superb social catalysts and have mastered the art of posing for selfies and adding that special touch of fun and nature to special occasions.

Maria suspects a lot of people have a special spot for animals in their heart. Often, animals have been a significant part of a person's life, or they wish that they were. The bulk of Maria's work is associated with facilitating alpaca/guest interactions during the Cocktail Hour of weddings. However, Maria finds that her most rewarding gigs are those where there is a remedial/therapeutic component to the interaction service.

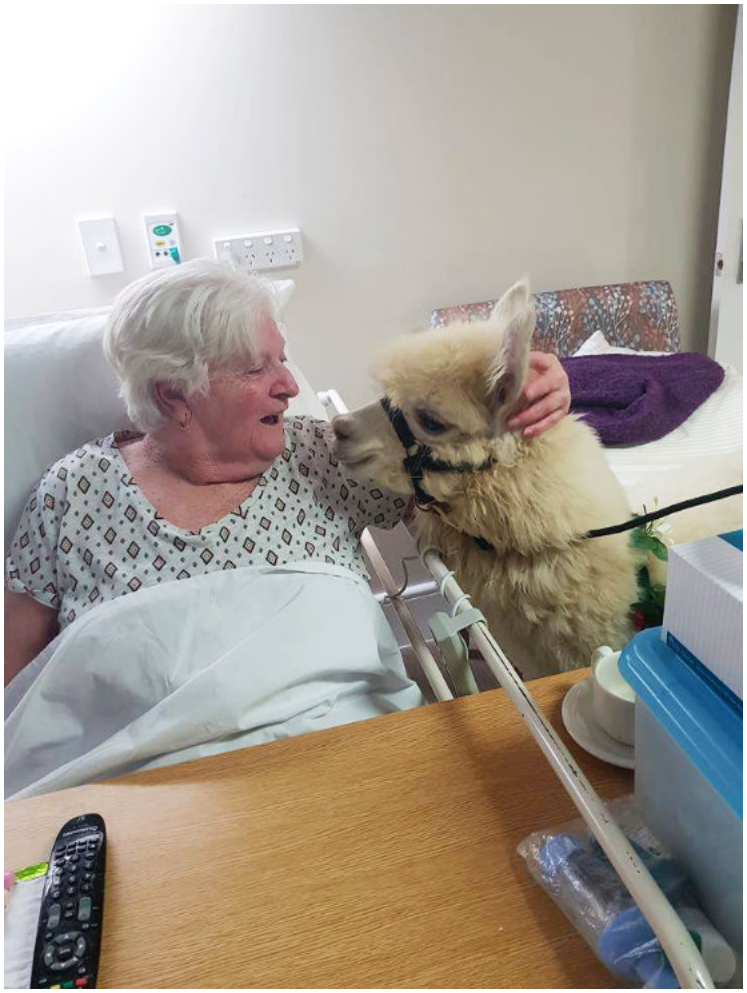
This is how the NSW Ministry of Health defines Animal Assisted Interventions.

"AAI involves therapeutic processes that intentionally include or involve animals as part of the process (Krug, Serpell, 2006). Animal-Assisted Therapy, Animal-Assisted Activities, and service animals (eg Guide Dogs or Assistance Dogs) are examples of animal assisted interventions that involve animals with specific characteristics and become fundamental to a person's treatment".

Alpaca assisted therapy can be a unique and powerful addition to the care plan of an aged care facility, mental health facility, adult's hospital, children's hospital or similar facility.

Research has demonstrated that animal assisted therapy can positively affect the health and wellbeing of patients and residents.

A visit from an alpaca or two throughout the year to a care facility can also provide a welcome and curious distraction for family members and staff. It can help emphasise the 'humanity' of residents and in turn reinvigorate staff satisfaction, morale and the quality of their ongoing care to patients and residents.



Co. says g'day whilst doing the rounds of the rooms

Maria has a team of alpaacs selected specificially for their calm nature and desire to intereact with people in a respectful way. These alpacas need to thrive on the attention they receive and adapt to the interactions with people of all ages and needs.

Maria's alpacas have spread joy through facilities such as Aged Care Centres, Community Service Centres, Funeral Services, highly stressed CBD Office Towers, and the Westmead Children's Hospital.

During such incursions it is not unusual to witness incredibly moving moments when residents who are known to be generally withdrawn and uncommunicative with their peers and carers, to spontaneously start talking openly to an alpaca. Maria feels alpacas are remarkably sensitive animals who are gentle, very smart and seem to have an uncanny ability to 'tune-into' people, to 'read' them and to interact accordingly.

Author of The Power of the Heart, Baptist de Pape noted that animals and nature are known to open our hearts, calm us, and reduce blood pressure and stress. Internationally recognised animal communicator Trisha McCagh saw animals as the bridge between us and the beauty of all that is natural and that they show us what's missing in our lives, and how to love ourselves more completely and unconditionally.

“Nature is cheaper than therapy”

McCagh concluded that they (animals) connect us back to who we are, and to the purpose of why we're here. A feeling first expressed by American naturalist and nature essayist John Burroughs when he indicated that he goes to nature to be soothed and healed, and to have his senses put in order. Perhaps author M.P. Zarrella summarises it best when he says “nature is cheaper than therapy”.

The NSW Ministry of Health defines Animal Assisted Interventions as involving therapeutic processes that intentionally include or involve animals as part of the process (Krug, Serpell, 2006). Animal-Assisted Therapy, Animal-Assisted Activities, and service animals (eg Guide Dogs or Assistance Dogs) are examples of animal assisted interventions that involve animals with specific characteristics and become fundamental to a person's treatment.

Office staff on the 25th Floor, Sydney CBD get a Corporate Recharge surprise from Alpaca Kisses

Maria believes her alpacas can be quite a unique and powerful tool for Diversional Therapist or a Recreation Officer at a Nursing Home, Disability Service, Care Facility or busy workplace. Her friendly alpacas can wander through most venues (be they indoors and outdoors) gently greeting all those who care to be met. Their persona provides a welcome distraction that seems to melt stress and 're-centre' people - allowing a return to work, rest, therapy or rehabilitation with renewed vigour, calm, and focus.

Maria has received many testimonials that attest to the positive influence her alpacas have on people.

"We had Co (an alpaca) visit our office, which was great therapy for our team! In a stressful work environment and daily routine of work, having a beautiful animal like Co visit our office was wonderful! It helped to ‘ground’ us remember the simple and important things in life. It helped our team to refocus and be more productive.

We also had Co attend a children’s Christmas party, which was one of the best things we did! Maria and Co’s gentle nature attracted the joy and excitement of the children (and adults) at the event.

Acting Program Manager / Wesley Dalmar / Hawkesbury - Wesley Mission

Such an incursion can also provide a welcome and curious distraction for family members and staff. Such incursions have the potential to help re-emphasise the 'humanity' of residents and in turn reinvigorate staff satisfaction, morale, and the quality of their ongoing care to patients and residents.

"Thank you again for such a lovely visit today. You brought such joy to our Hospital, we are extremely grateful. It has continued to be the talk of town with people who couldn't get there wanting to see photos. Our patients just loved it.".

Public Relations Officer / The Children's Hospital – Westmead

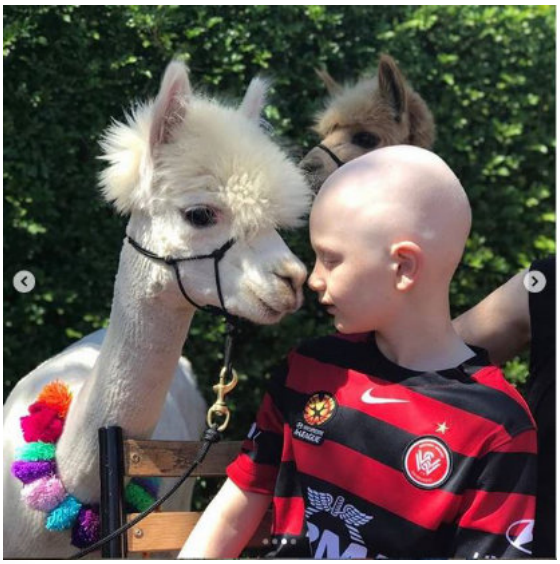
A few times a year Alpaca Kisses is engaged by a corporate client to 'recharge' the workplace. Alpaca Kisses alpacas will wander through the workplace, visit the water cooler and do a 'cleanse'. Their persona and friendliness will provide a brief distraction that will melt away workplace stress and clear the mind. Maria says a 'kiss' from an alpaca is like a 're-boot'. One's head is lifted, the days stress rolls away, the head clears, and the focus re- sharpens.

In response to the pandemic restrictions Maria and her team have started promoting a video call service. So, if you are over it! Need a pep up? ...a break from the mundane. Need to escape the four walls and 'go-country'. Need time-out from your two-legged co- workers, customers, or house mates? Need to have a serious chat with an all-ears non-judging alpaca - then book in for a 10min 'alpacaccino'. Go put the kettle on, make a cuppa, practice a few humming noises, and invite one of our alpacas to give you a video call. To date Maria has made video calls to clients as far away as Germany and Switzerland.

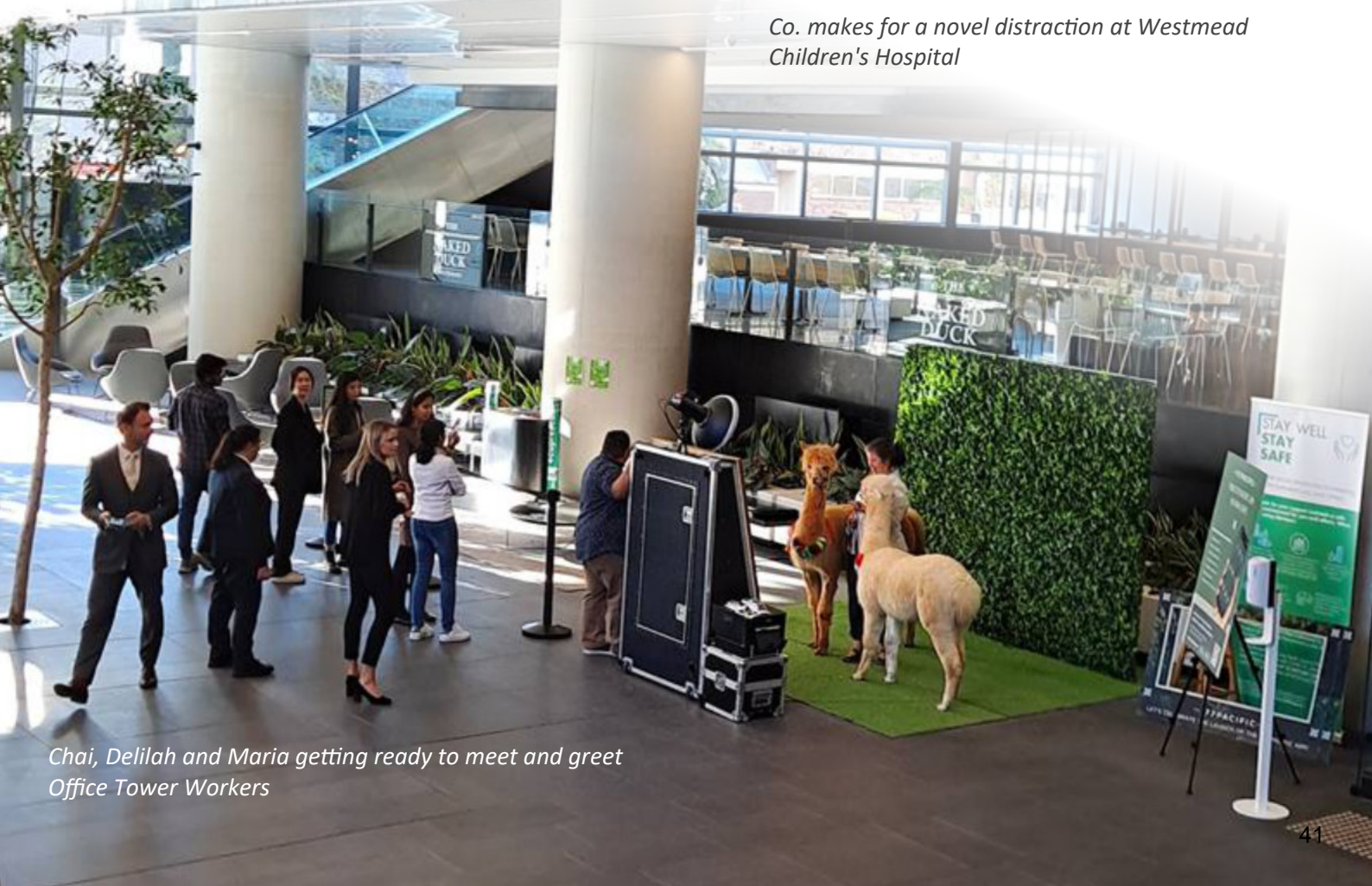
Maria believes that sometimes (in the right hands and under professional guidance, when needed) a little touch of nature, a distraction, a calming influence, an impartial, non- judging, non-threatening, all listening, large eyed, gently smiling, curious, friendly, vulnerable entity can be just the stimulus needed to bump an ordinary or down day into an awe inspiring and soul lifting one.

Maria is fully committed to the alpacas in her care and to the quality of people's experience of them. Maria loves animals and she loves people and feels she is privileged and blessed to be able to provide a service that facilitates safe and memorable moments between two loves of her life.

For further details - www.alpacakisses.com



Co. makes for a novel distraction at Westmead Children's Hospital



Chai, Delilah and Maria getting ready to meet and greet Office Tower Workers

5-in-1 Vaccine

Vaccinating alpacas against clostridial diseases

By Jane Vaughan BVSc PhD MACVSc

Background

5-in-1 vaccine protects against 5 different but related bacteria known collectively as clostridial diseases. These bacteria can cause sudden death in your alpacas. They are identified individually as:

1. Tetanus (Clostridium tetani) – animals often found dead soon after shearing/castration/dog bite wounds/where inadequate disinfection of castration equipment used or castration performed in unhygienic conditions (dirty yards, wet weather).

2. Pulpy kidney/enterotoxaemia (Clostridium perfringens Type D) – sudden death in multiple livestock being fed large quantities of highly digestible carbohydrate (think lush pastures, cereal grain and cereal grain-based pellets). Often affects the largest weaners in a mob.

3. Black leg (Clostridium chauvoei) – caused by infection of wounds from shearing cuts/rough handling in yards/females following difficult birth/navel infection soon after birth/ castration. Infection causes local inflammation (red and swollen tissue), gas under the skin, blood poisoning and rapid death.

4. Black's disease/infectious necrotic hepatitis (Clostridium novyi Type B) – spores lie dormant in the liver and can be activated by migrating liver fluke, leading to toxin production and sudden death.

5. Malignant oedema (Clostridium novyi Type A, Clostridium sordelli, Clostridium septicum, Clostridium chauvoei) – often associated with fighting/infected wounds from shearing/ castration/difficult birth/dog bites, leading to blood poisoning and death.

The bacteria are often concentrated around yards and in and around dung piles, and spores can survive in soil for many years.

How does the vaccine work?

Efficacy of 5-in-1 vaccination relies on the administration of 2 doses of vaccine, injected under the skin 4-6 weeks apart to produce active immunity. The first dose is known as the priming dose and it stimulates the immune system of youralpaca to produce antibodies against the diseases in the vaccine. The second dose is known as the booster dose because after this second dose is given, the immune system recognises the recently given vaccine and produces more antibodies for a more prolonged time, as depicted in Figure 1.

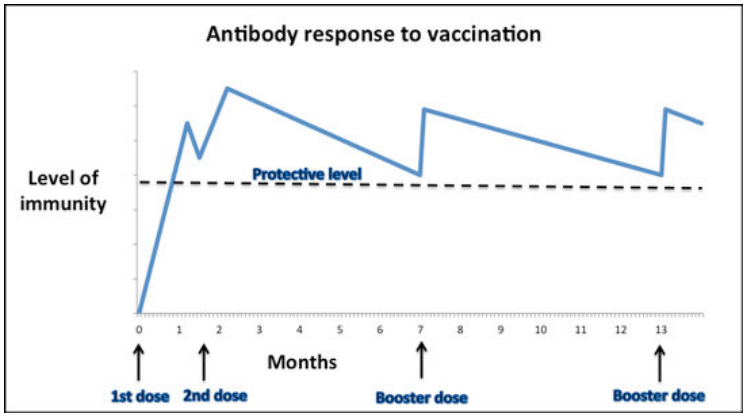


Figure 1. Antibody response to vaccination.

A booster dose every 6 months thereafter is required to maintain a protective level of antibodies in your alpacas. Timing of injection of this twice yearly booster in your females should include a booster 4-6 weeks prior to parturition, so that antibodies produced by the female enter the first milk or colostrum, and are drunk by the neonate in the first 12 hours of life. The antibodies are absorbed across the gut wall, enter the blood stream and circulate around the body, thus providing protection to the cria against clostridial diseases for approximately 8-12 weeks. This is known as passive immunity because the neonate did not make the antibodies itself.

How to use the vaccine?

Read the instructions that come with the 5-in-1 vaccine and look after the vaccine so it maintains its efficacy. Take an esky and cold brick with you when you buy the vaccine so you can keep it cool and out of direct sunlight after purchase en route to placing it in the fridge when you get home. On the day/s of use, carry the vaccine in an esky containing a cold brick to the yards and place the vaccine back in the esky during breaks such as lunch to maximise life and efficacy of the vaccine. At the end of the day, remember to put the vaccine back in the fridge and not leave the pack/s hooked on a nail in the

woolshed or rattling around in the back of your vehicle. Write the date you opened the vaccine on the plastic container. Vaccine should ideally be discarded 30 days after opening. Vaccine that was opened last season should not be used this season!

1. Crias should be vaccinated at 8 weeks to provide a priming dose, when the protection from mother's milk is starting to decline.

2. Crias should be vaccinated again 4-6 weeks later to provide a booster dose thus ensuring maximal effect of vaccine.

3. Pregnant females should be vaccinated 4-6 weeks pre-parturition to ensure high concentrations of clostridial antibodies in the colostrum.

4. Twice yearly vaccination of all stock prior to high-risk periods (e.g. start of grain feeding).

5. ANY new stock onto the property: Vaccinate twice, 4-6 weeks apart to ensure been boostered properly, then as per home-grown livestock.

What's in 6-in-1 and 7-in-1 vaccines?

6-in-1 vaccine is designed for use in sheep, goats and alpacas and protects against the 5 clostridial diseases discussed above, and another bacterial disease known as cheesy gland/CLA/caseous lymphadenitis (Corynebacterium ovis). The organism is picked up by animals that have not been vaccinated, through shearing cuts/infected combs and cutters/dipping after shearing/close yarding. Infection leads to abscess formation in lymph nodes around the body and carcass condemnation at the meat works. Vaccinate according to manufacturers directions and avoid dipping for lice until shearing wounds have healed.

7-in-1 vaccine protects against the 5 clostridial diseases discussed above, and 2 types of leptospirosis. The latter 2 organisms can affect cattle, sheep, goats and alpacas and is spread by urine from infected animals contaminating pastures, water and feed. Humans can also be infected. Clinical signs of leptospirosis include abortions, reduced milk output, red urine, ill-thrift and may cause death.

Speak to your veterinarian about using 6-in-1 and 7-in-1 vaccines in your alpaca herd.

Summary

Vaccinating your stock correctly against clostridial diseases is a cheap and effective way to prevent many of the causes of sudden death in all ages of stock in your herd. It is imperative that livestock receive a booster dose 4-6 weeks after the priming injection, followed up by an annual booster timed appropriately (females 4-6 weeks before giving birth, other stock prior to going onto grain/pellet supplements).

Figure 2. Site of subcutaneous injection in alpacas in front of the shoulder blade

Websites with more information on clostridial diseases include:

http://www.mla.com.au/Livestock-production/Animal-health-welfare-and-biosecurity/Diseases/Infectious/Clostridial-diseases

http://www.mla.com.au/Livestock-production/Animal-health-welfare-and-biosecurity/Husbandry/Vaccinating

http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0004/179860/sheep-vaccination-programs.pdf

http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/111250/beef-cattle-vaccines.pdf

NO PRODUCTS ARE REGISTERED FOR USE IN ALPACAS. CONSULT YOUR VETERINARIAN AND ALWAYS READ THE LABEL BEFORE USING ANY OF THE PRODUCTS MENTIONED. NEVER USE ANY PRODUCT IN ALPACAS THAT IS NOT REGISTERED FOR USE IN FOOD PRODUCING ANIMALS.