Camelid Connections™

MAGAZINE

IN THIS ISSUE

- Science, Worms & Poo
- AAA Spectacular Alpaca Show
- Reading Fleece Test Results
- Life Of A Cargo Llama
- Felting Workshop
- Knitfest

Issue 5 - September 2018

Made with Australian Alpaca Fleece

AUSTRALIAN ALPACA
CONNECTION

aaconnection.com.au

/australianalpacaconnection

@australianalpacaconnection

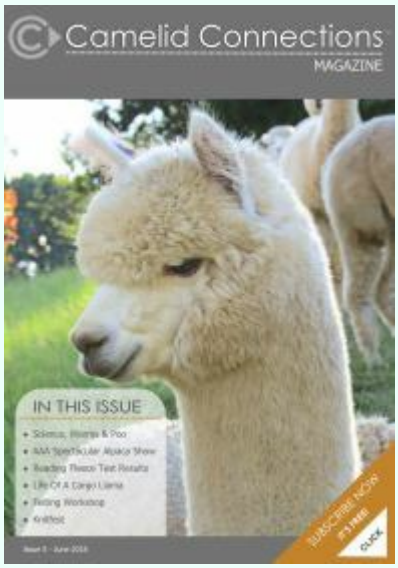
Publisher
Camelid Connections is published by Oak Grove Graphics
ABN 84 171 413 342

PO Box 4059, Candelo NSW 2550
Telephone +61 (0)2 6493 2036
Email: info@camelidconnections.com.au
Web: www.camelidconnections.com.au

Editor
Esme Graham Telephone: 0457 304 868
Email: esme@camelidconnections.com.au

Designer
Julie McClen telephone 02 6493 2036
Email: julie@camelidconnections.com.au

Designed and Produced
By Oak Grove Graphics
PO Box 4059, Candelo NSW 2550
Telephone +61 (0)2 6493 2036
info@oakgrovegraphics.com.au
www.oakgrovegraphics.com.au



Cover: Photo by Julie McClen of Oak Grove Alpacas NSW

Contents

Advertisers

Welcome to Camelid Connections

Many of our readers have been through an incredibly tough winter with the drought, and the early Spring rains haven't been widespread or heavy enough to give much hope for improved conditions in the near future. Feed for our alpacas is increasingly hard to find and the cost prohibitive. We can only hope that late Spring and Summer will bring some relief. When the rains come, keep in mind that animals that are down in condition may be more susceptible to worms than usual and we have a practical article from Dr Stephen Mullholland to help you control these problems.

Our "crafty" readers will be interested in two articles, one on Nuno felting and the other on Knitfest in Maleny in Queensland. These articles show how much interest there is these days in different forms of craft.

To those of you with young children or grandchildren we are featuring two new books for young children – "Macca The Alpaca" and "Alpacas With Maracas" both delightful stories with a message about bullying and friendships, ideal to put away in the cupboard ready for a Christmas gift. The author and publisher have given us a copy of each to give away so look for the information on page……. To see how you could win a copy.

Did you know that officially alpacas and llamas are not ruminants? Ever heard of a Tylopoda? Go to page 22 to learn more!

Don't forget to keep sending your photos for our "Camelid Capers" segment, there is a free business card advert for the winner each issue and these charming photos help to remind us how much we enjoy our furry friends. Please keep in mind that this magazine comes to you FREE courtesy of our advertisers so please look at their adverts and support them if you can.

Congratulations to the winners of our beautiful Sol Alpaca shawl, The Coat Route novels and Cutcare wound cream and thanks to our generous product donors.

See an advert that interests you?
CLICK on it to visit the advertisers web site.
By supporting our advertisers you keep this magazine FREE for you.

Meet The Team

Esme Graham - Editor

My husband and I have been breeding suri alpacas for the past 20 years, I have been heavily involved with both regional committees and the national board of the Australian Alpaca Association for a number of years.

My major interest has been in marketing and education and to this end I was editor of Alpacas Australia magazine for over six years.

I hope that the experience I have gained editing Alpacas Australia can be extended to educate and inform a wider range of alpaca and llama breeders who are not necessarily association members.

Julie McClen - Designer/Editor

A breeder of ultrafine Huacaya alpacas for over 17 years, 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


SOL
ALPACA
Breeze
LINE
Baby Alpaca & Bamboo
An Eco Friendly Blend
QVB level 2 Shop 44
455 George St.
Sydney, NSW 2000
Ph. (02)9283 0707
WHOLESALE & GENERAL
ENQUIRIES
info@solalpaca.net.au
Mob. 0478 957 959
THE BLOCK ARCADE, Shop 13
282-284 Collins Street
Melbourne, VIC 3000
Ph. (03)9650 8661
www.solalpaca.net.au

Beginners Felting Workshop

By Diane Boede - Wattle Grove Alpacas, Strath Creek

Workshop participants with their scarves

On a cold winters day in June, Wattle Grove Alpacas, held an on-farm Beginners Felting Workshop. The Workshop was to introduce participants to the art of felting and enable us to take home a finished scarf at the end of the day. The felting technique we learnt was Nuno Felting which is an Australian invention (I didn't know that)! Nuno felting is the art of merging alpaca fibre with cotton skrim, in our case (you can use other materials).

Six enthusiast beginners arrived in the morning, keen to learn and eager to start. We had time for a morning cuppa prior to commencing our workshop with our very skilled Instructor, Cheryl Cook. Cheryl has felted with alpaca for 15 years and has a very practical, calm, and easy to understand approach to felting.

We started off with a fun creative activity to music, to warm us up and get our mindset into the artistic mode. Our instructor then gave us each a template with a 15-minute timeframe to draw a design for our Nuno scarf.

The design template is used as a guide for us to follow, we didn't have to stick to it, some participants altered their design as the placement of the fleece onto the cotton made the design come to life.

The workshop was set up so we each had our own table, facing each other, with two gas heaters in the middle of the barn to keep the winter chill at bay. There were a couple of alpacas in the barn which added a nice authentic touch to the workshops atmosphere.

After placing a towel and some bubble wrap on our tables we each selected our cotton skrim, which had been dyed, there was plenty of colour choice. The cotton skrim was approximately 1 metre in length.

The next step was to use our alpaca fleece. I had prepared 50 grams of cria fleece in white and brown for each participant and our instructor brought along various colours of dyed alpaca fleece.

We were shown how to hold (not too tight) and pull the fleece, then how to place the alpaca fleece onto our cotton as per our hand drawn template design. As the fleece is laid out it needs to overlap by a third. Next came the dyed alpaca, this was so much fun and as I looked around the room at everyone's scarves I could see a variety of gorgeous designs and colour selections.

Our instructor then offered us the use of silk threads to add another dimension to our scarves. Silk itself doesn't felt, but the alpaca fibre will felt and hold it.

Next came the wetting down stage; after thoroughly wetting our scarf, we placed our second piece of bubble wrap on top of our scarf and began gentle rubbing with our hands. After gentle rubbing, we then rolled up our scarves and began rolling. Rolling and turn, rolling and turn, rolling and turn and so it goes until the fibres felt. Our instructor would check if our scarves were felted and no, they were not, so more rolling, rolling, rolling. This is where good body posture is important to ensure no muscular strains occur!

Voila! We then got to the final stage which I'll call rinse and throw (good for releasing any tension or aggression!) We rinsed in hot water then throw, yes, throw the scarf onto the table quite a few times. This causes the scarf to shrink in all directions and become solid, known as fulling.

Lastly, rinse off the soap and hang up our scarves to dry off and admire our work.

The day went at a good pace, there was no rushed feeling. We all finished our scarves before the scheduled time and our instructor then showed us, very briefly, how to make felted balls and some other felting techniques.

Based on the feedback from the participants it was a good, fun, creative day and everyone was keen to have another workshop in the future. So much so that we all discussed the projects we'd like to do and the felting techniques we'd like to try with our instructor at the next workshop.

JOIN the SMART FUTURE of Australian Alpaca

Learn and Promote:

Access Regional and National training and events

Network with other members in your area

Access members only online resources

Be informed:

Receive regular e-newsletters and vital industry information

Receive World of Alpacas/AAA magazine twice yearly

Membership options:

Annual membership from $50/year

Achieve Success:

Use the AAA's powerful new eAlpaca integrated registry and show system to do all your transactions, manage your herd and inform your breeding program and purchasing decisions

Enter your animals and fleeces in AAA shows nationwide

Further information at alpaca.asn.au

Australian Alpaca ASSOCIATION

Join online at ealpaca.com.au

Science, Worms, and Poo

By Stephen Mulholland, Ph.D.

Part 1

Science and Camelids (Llamas, alpacas and guanaco)

People who buy alpacas and llamas tend to be very concerned with the health and welfare of their furry companions. Books, magazines, the internet - all are trawled, looking for hints and tips. But it is beneficial to remember an old joke here, "Ask four breeders a question and you are likely to get five answers!"

Camelids remain a “new” type of stock/companion animal. Where veterinarians all learned about horses and dogs and cats (and other commonly held species) in school, it is only in recent years that camelid medicine has been added to the curriculum. Systematic studies are expensive, and the relatively small number of camelids has limited the ability or willingness of drug companies and universities to devote the resources to fully characterize these fascinating animals. Medicines are used off label, because there have never been studies specifically on camelids. But Veterinarians have done their best to apply knowledge from other ruminants, and to collect and information about what drugs and practices have worked, and what haven't. This accumulated wisdom is the basis for much of what we now consider "best practice."

But when you go out looking for information, how can you know what to trust? Which of those "five answers" is the right one? Are any of them the right answer? Here I think it is very useful to apply some of the rigorous intellectual techniques that we call “the scientific method." This is a means of asking questions such that the results you obtain are very likely to be correct. There are five key features to this method: Observation; Description where the information must be reliable, replicable and valid; Prediction, the information must be valid for the past, present, and future; Control, meaning you must fairly sample the range of possible occurrences; and falsifiability, the elimination of plausible alternatives while the theory remains open to disproof.

I will not get into an in-depth look on how the scientific method is applied, there are large books available on the subject. The question is, how do I know what sources of information I can trust?

Best - are published in a peer-reviewed journal. These require the methods used by the author to be stated, and the data and analysis to stand up to review by independent experts in the field. More recent studies are preferred, as mistakes, oversights, or incorrect-assumptions from work done years or decades ago should have been caught and corrected. There are published veterinary references from 10 years ago that we now know contains information that is wrong – potentially dangerously wrong. Use current sources.

Good - is written information that is done in a "scientific" manner. The author publishes the methods used to collect the information, the data is presented, and then the conclusions are drawn. This format allows you to see how the author reached their conclusions, and decide whether you agree or not.

The Rest - simply makes a statement, with no empirical evidence to back it up. They might be right, they might be wrong. Without data and attributed sources it is difficult to separate the wheat from the chaff.

The key is critical thinking.

Don't automatically trust what someone says just because they have 10 or 20 years of experience, or they have a string of letters after their name. Don't ignore them, simply remember that what they say may or may not be correct. Even a fact that has been "proven" might later be disproven, this is the essence of falsifiability, no matter how hard we try, even the best experiment can get it wrong.

Remember: Something I have told you, or will tell you, is wrong! But I don't know what it is! The goal is to always be expanding our knowledge and understanding, keeping our minds open, and being willing to freely admit when we have gotten something wrong. If you learned your “best practice” a decade ago, and haven't reviewed and refined it since, then it likely is far from “best” now!

Part 2

Worms in your Alpacas and Llamas

Camelids play host to at least 16 different species of major parasites (1), though some of these are thankfully not found in New Zealand. What I am going to discuss here are the internal parasites, the worms that live in the gut, muscles, and internal organs. Parasites of the abomasum (compartment 3 of the stomach), small intestine, and colon are the main problems we face daily. Thankfully these parasites share a feature - their reproductive strategy involves ejecting their eggs out the backside of the llama, where they hatch on the pasture and infect other llamas. These faecal eggs can be easily measured, and provide a great tool for detecting which llamas have a problem.

Internal parasites in camelids mostly follow a life cycle where adult worms produce thousands of eggs. These are excreted in the poo and fall onto the pasture where they hatch into larvae. These larvae go through multiple life cycle stages, until they are consumed by a passing llama and can start the cycle anew. Most (~95%) of the parasites on your farm exist as larvae on the pasture. Larvae can only migrate about 30cm from their original poo, so the concentrations of larvae will be highest right around the midden. When you push your alpacas so that they start grazing on or near the middens it raises their risk of ingesting too many parasites.

Most internal parasites are quite host specific, if the "wrong" species consumes the larvae, it will die. This provides a very useful pasture management tool, by "cross-grazing" with a non-compatible species, you can kill large number of larvae. Horses and cattle work well for this, doubly so because they will immediately target the long, lush grass around the midden. Sheep and goats are not a good choice, they share many parasites with llamas, and will just help to spread the worms away from the midden and all over the paddock.

Parasites have environmental preferences – In New Zealand you will find a different mix in Northland than in central Otago. I have been told by an Otago vet that she sees more Nematodirus in her area. Here on our farm in the Wellington area I see primarily Cooperia / Osterlagia / Trichstrongylus eggs (I don't know which, the eggs look nearly identical). I know up north there is a much greater risk of haemonchus contortus, the dreaded barber's pole worm.

It is important to remember that as alpacas travel around the country, so do their parasites. While it is generally true that haemonchus contortus cannot over-winter from Canterbury southwards, they can do quite well from Spring through into Autumn. It is possible for these quick-breeding parasites to go through multiple generations in that time. Don't be complacent! With animal movements and a changing climate, old assumptions about what is a threat may no longer hold true. (Note: Different countries, and different regions within a country, will have different mixes of parasites. You should talk to your local veterinarian to understand what risks your animals face.)

Of course the most pressing question is, "When do I have a problem?" Alpacas and Llamas are notoriously stoic, and just looking out your window at the herd is unlikely to help you spot problems early. Here are some commonly used techniques:

- Scouring. This is a real mixed bag. Heavy worm burdens can cause scouring. But so can a 24-48 hour "tummy bug". We have a girl who can have 850 eggs/gram in her poo (a really high level!), and still be dropping perfect pellets. Another started scouring but never had eggs that I could find, it turned out that she had cancer! So scouring is not the greatest indicator.

- Weight loss/ill thrift. This can be a much better indicator. Most worms cause a constant drain which will result in the animal being thinner. This might not mean "thin" (BCS 1 or 2), merely thinner than its companions. If you had a mob of geldings who were all BCS 5, and during your monthly check suddenly one has dropped to BCS 3 it would be worth checking for parasites.

- Sudden Death. This is an indication of a problem, but a bit late to do much about it. This can occur in severe cases of haemonchus contortus.

I find the Fecal Egg Count (FEC) to be a great tool, and you can do it yourself at home (more on that below). We have more than 50 camelids under our care, and I don't care to spend all my time counting eggs for all of them, so I use the FEC as a diagnostic tool to determine if a specific animal is having problems.

The easiest way is to look for the animal that stands out. Look at groups of animals that are under the same grazing and metabolic conditions (all geldings, or all females with cria at foot, or all yearling tui). Does one or two of them stand out by being thinner, lagging, or looking unhappy? If so, one good health check is to count the eggs in their poo!

There are limits to this, however. Only adult worms produce eggs, and it is possible for juvenile worms to make your camelid very sick. There are also some circumstances where adult worms can stop making eggs. Some species of parasites generate very few eggs, so a "low count" might come from an animal with lots of worms. Due to this variability it would be good to talk to your vet about what worms are common in your area, and learn about what you should be looking for. If you are doing your own counts it would probably be very helpful to split your initial samples - you do your own count on half, and send the other half to your vet for professional lab counting (I've been quoted rates of NZ $5-20 per sample, depending on the vet/lab, your results might be different depending where you are). This way you can ensure you are doing it correctly (you get the same count as the lab), and you will have the eggs professionally identified, and the vet can inform you as to the risks and proper treatment for those parasite species.

The other question is simply: how many eggs are too many? Seeing a few eggs (50 to 150 eggs per gram) in an otherwise fat and happy llama is no cause for panic. It is natural and normal for all camelids to have some parasites.

As a general rule, if I see any eggs in a thin animal, I will treat it with drench/wormer. If the parasites were the cause, the animal generally starts looking better within a week or two. (That being said we had one girl last winter we had to treat 4 times for worms, she got "behind the curve" and had a tough time during the cold weather which allowed the larvae to keep re-infesting her. Now that she is a healthy BCS 4 she is doing much better at staying worm free, and we have not had to drench her in more than 8 months.) If the animal is not looking better after drenching, then the worm infection might have been a secondary effect of whatever is making your animal sick/thin. (I must also confess that I don't always FEC before treating a thin animal with wormer/drench. The main girl-mob has about 45 animals, and it is very difficult to get them to "poo on command" so we can collect a fresh sample. While I could directly obtain a sample using a gloved, lubricated finger, that is a stress that neither I nor my alpacas/llamas want under normal circumstances.)

When it comes to effective parasite treatment, remember that prevention is always better than cure.

Limit the challenges - any animal can be overwhelmed if it eats too many larvae. Pushing them to eat down the middens raises the risk (though I know sometimes it cannot be avoided when feed gets short). Adult camelids when well-fed and stress-free can develop strong immunity to parasites. Cultivate practices that help this natural immunity (only drenching animals that need it, not over-stocking, providing adequate shelter from bad weather, arranging your herds to mitigate inter-animal strife and stress, etc.). Also, if it is practical, look into cross-grazing your paddocks with horses or cattle. If you have a friendly neighbour, this could be a good reciprocal arrangement, as your alpacas will do a good job vacuuming-up and killing all the horse and cattle specific parasites.

But eventually one of your alpacas will get wormy, and then it is time to pull out the drench (wormer). These chemicals, when used properly and sparingly, are a wonderful tool of animal health. Drench should only be given to animals when they need it, not blindly administered to the whole herd based on a calendar-based "to do list."

There are four families of drench available; Benzimidazoles (white drench), Levamisole (clear drench), and Macrocyclic Lactones (the "-ectins", e.g. Ivermectin). A fourth family was just recently premiered -- Monepantel, sold most commonly under the brand name “Zolvix”. The introduction of this drench was quite exciting, as it was the first new product in 30 years. The manufacturers thought that this drench would not succumb to drench resistance, but by 2013 the first cases of Zolvix resistance worms had already appeared in New Zealand. Just going to show how strong selective pressure combined with poor drench practices allowed evolution to sidestep another new wonder drug. Zolvix may be useful on your farm, especially if you have multiple-drench-resistance parasites on your farm, but it is not a miracle product, and must be used properly and responsibly.

Proper and responsible use is critical with all drenches. The really important part is to give enough! Under-drenching is one of the quickest ways to develop drench resistant worms. There are always some resistant worms in every population, our goal is to minimize the spread of resistance.

For the Benzimidazoles many vets recommend giving 1.5x the sheep dose, and for the Macrocyclic Lactones your alpaca should get double the sheep dose, based on the weight. Levamisole has a quite narrow safety margin, and I generally don't recommend it. You should not give more than the sheep-dose (based on weight again). I prefer injectable drenches, as I think it is less stressful for the camelid. There is also the problem that llamas and alpacas are quite good at spitting back up some unknown amount of oral drench, making it impossible to know just how much of a dose you delivered.

If you are using Dectomax, you should be administering 5 to 6 ml of drench to your average adult llama! (1 ml per 25 kg body weight) Most adult alpacas will want somewhere near 3ml (at least for NZ alpaca, where adult weight in at 70kg or so, with males sometimes 20 kg larger than that). The Macrocyclic Lactones have a huge safety margin (up to about 10x the sheep dose), so your llama is in no danger from a 6 ml dose (it would take quite a slip-up to accidentally inject 45ml!).

After you drench your camelid, you should put it back onto contaminated pasture. This may seem counter intuitive - why not put it on the "cleanest" pasture? Simple - after drenching the only worms remaining are the partially or completely drench-resistant ones. If you put the alpaca on a clean pasture, all of the eggs coming out in the poo will be resistant, and that pasture suddenly has a greatly increased population of resistant worms. When the alpaca is put back onto already-contaminated pasture, the resistant eggs get dropped among all the non-resistant ones, and the larvae that hatch can go on to breed with non-resistant mates, and hopefully dilute away the resistance genes.

Most of us drench, and simply hope it worked. But there is a simple test which measures drench effectiveness. Do a FEC before you drench, and again 10 days after you drench. You should see a 95%+ drop in worm numbers (which at the worm numbers we work with, means no eggs should be spotted 10 days post-drench). If your egg number don't drop, you had a problem with your drench (either resistance in the worms, or the drench was not administered properly).

If the worms go away (based on FEC), but the animal remains thin and sick, then the worms were not the (primary) problem! In that case the animal may have been wormy because another condition weakened it and left it vulnerable to infection, it is time to look for other causes. Talk to your vet.

Part 3

Faecal Egg Counts

Fun with poo! And a very useful animal management tool which we can all do at home without fancy equipment.

Poo is full of "stuff", the digestive debris that is a mix of well-chewed grass, bacteria, and other digestive by-products. How are we going to spot the eggs amongst all that other stuff? There is a simple solution- floatation! If we mix the poo into a solution with an appropriate specific gravity, then the eggs will float, and everything else will sink to the bottom.

The so-called "floatation method" is what I use, and is generally quite effective. Some alpaca breeders up north have moved to a version of this which also uses a centrifuge, as they find it is better for picking out haemonchus contortus (Barbers Pole Worm) eggs. If you want more information on the centrifuge technique, please email me. (Stephen@suncrow.com)

You will need:

- Fresh Poo
- A scale (accurate to 0.1 grams- I purchased a small hand-held scale for about $135. It was the most expensive bit of my setup. I have since discovered that there are some much lower prices available online.)
- A salt or sugar saturated solution (easily done by adding either table salt Sodium chloride, NaCl) or table sugar (Sucrose) to water until no more will dissolve. You should have about a cm of undisolved salt or sugar on the bottom of the jar when you are done. This solution will keep for some weeks in a cool, dark place.)
- A way to measure 28 ml of solution (medicine measuring cups available at pharmacies work well enough)
- A mixing vessel (mug, glass, beaker)
- An eye-dropper
- A counting slide (McMaster or other brands. They run about $50 to $75, but should last for years)
- A microscope capable of 100x magnification (new or used kids "educational" models available online for about $50 to $100, nice new bifocal ones are also available if your budget allows)

The method:

- Weigh out 2 grams of poo
- Mash the poo up in 28 ml float solution
- (Optional- drain through tea strainer to remove biggest "chunks")
- While constantly stirring take liquid from middle with eye-dropper
- Put mixed liquid into counting slide
- Wait 2 minutes
- Count both chambers (the boxed-area in the middle of the slide)
- Total eggs counted x 50 = eggs per gram (epg).

With your microscope you want to focus on the top of the chamber, where the eggs have floated above all the other "stuff" in the mix. The easiest way to do this is to look for air bubbles. These are bright-centred circles with a very dark edge. Air bubbles vary in size, and depending on your eyedropper-handling technique, you may have a lot of them. Once you find and focus on an air bubble you know you are focused at the correct depth in the sample, and you can start scanning for eggs. Most cheap microscopes do not have a moveable stage, so you will have to slowly and carefully move the slide back and forth so you can scan the whole area for eggs.

I should mention accuracy here. The goal is to perform each step as accurately as possible. But this isn't always easy when using somewhat improvised equipment. Inaccuracies add up, but for tests such as this they aren't the end of the world. For example, if you are using a measure cup for your 28 ml of floatation solution that is not very accurate, such that you get somewhere between 26 & 30 ml of floatation solution, then your final results will have an additional +/- 10%. So if you measure 3 eggs and then multiply 3 x 50 = 150 eggs per gram, then your results could be between 135 and 165 epg (i.e. 150 ± 10%). Likewise if your ability to weigh out the 2.0 grams of poo is not perfectly accurate, error will creep in there, too. (Issues of accuracy and precision can get quite complex in scientific studies. (continued pg38) For our purposes sticking to the method as closely as possible will give the best and most accurate results).

If the goal is to get a very accurate Faecal Egg Count Reduction Test so you can distinguish between 85% worm kill and 95% worm kill, then those inaccuracies will completely flummox your experiment. If your goal is simply to determine "does my llama have eggs in his poo?", then small (and even medium) sized errors are okay.

One good trick to check yourself (whether you are using accurate methods or not) is to collect a fresh sample and split it. Send half to a professional lab (usually through your vet), and test the other half yourself. See if the results compare.

Another good trick is to "over count". Instead of counting the 2 areas on the slide and multiplying by 50, count 4 sections and multiply by 25, or if you are very keen count 8 sections and multiply by 12.5. (This will require cleaning out your slide between counts, of course.) These over-counts can give you a much lower margin of error, and it the best way to measure worm egg levels animals with a very low count. (If the llama has less than 50 epg, then luck means that many times when you count you might get no eggs in either chamber, so the count reads as "zero" even though there are some eggs in the animal).

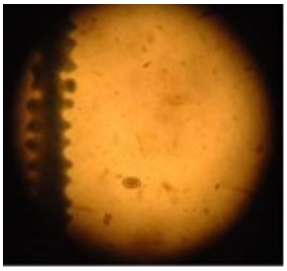
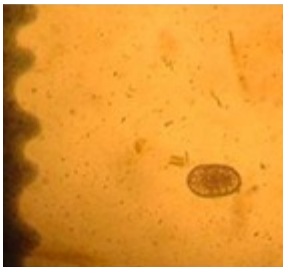
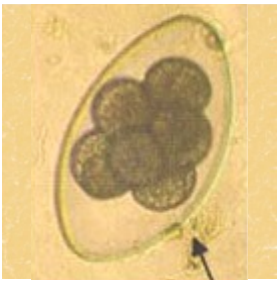


Image showing the field of view at 100X. Your microscope may have a slightly larger or smaller field of view. The oval structure is a haemonchus contortus egg. Below and left of the egg is a bit of plant-cell debris. The black stripe at left is a grid line on the counting slide.

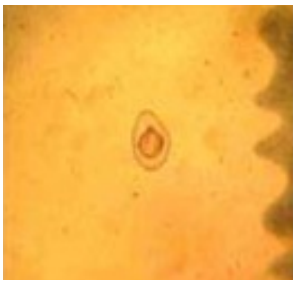


The same egg at 200X magnification.
Cooperia, Haemonchus, Osteragia, Trichostrongylus, Camelostrongylus, and Oesophagostomum eggs all look very similar and are all about 80 mm by 40 mm.

(1mm = 1 micrometer, or 1/1000th of a millimeter)



Nematodirus egg at 400X
Nematodirus eggs are large (200 mm by 90 mm) making them very easy to spot. This parasite is a low egg producer, so even low epg counts could indicate problems.



Coccidia oocyst at 200X
The organisms that cause coccidia are very small, and can be difficult for inexperienced uses to spot. (Eimeria llama 38 x 28 mm, Eimeria alpaca 26 x 21 mm) Coccidia also has only a short period during which large numbers of oocysts are produced, so it is probably better to talk to your veterinarian if you think that might be the problem.

(1) Veterinary Parasitology Reference Manual Fifth Edition, William J Foreyt, Blackwell Publishing, pp 115-120

Thanks to Mike Richardson for reading and commenting on an early draft of this document.
Printed NZLA Winter Magazine 2009. Updated 2018 by the author

Stephen Mulholland originally trained as a laboratory scientist, and holds a Ph.D. in Biochemistry and Molecular Biophysics. In 2003 he moved to NZ, purchased a small farm, and started raising alpaca. When the first of those animals died in 2004, Stephen began investigating the available information on camelid morbidity and mortality, and was disappointed with the results. In 2005 he began, with the assistance of the AANZ and the NZLA, to run health surveys of the llama and alpaca populations of NZ. To date he has collected more than 15,000 animal-years of data on their morbidity, mortality and management.

Stephen also works closely with the Animal Welfare Directorate of the Ministry for Primary Industries. He led the team which produced the final draft of the Code of Welfare: Llamas and Alpacas, presented that draft code to the National Animal Welfare Advisory Committee, and consulted with the ministry throughout the further development of the Code up to its launch in April 2013. As an offshoot of his work with MPI, Stephen joined the Johne's Management Limited consultant network in 2012 and now acts as a contact point for discussions involving the disease in camelids in NZ.

In 2013 he started a collaboration with Dr Kylie Munyard of Curtin University to study the genetic underpinnings of dwarfism in alpacas, and he is in talks with Massey University to launch an in-depth epidemiological analysis of the eight years of accumulated health survey data. Stephen has written dozens of articles for the trade magazines of the llama and alpaca associations. Keen to increase the general literacy of owners as to what they can do to improve animal welfare, improve management practices, and make better-informed breeding decisions, in June 2013 he founded a camelid health and welfare charitable trust with other interested llama and alpaca owners: www.camelidhealth.org He also works with, and helps do fund-raising for, local SPCA chapters.

Waratah Alpaca Fibre is a newly formed member owned Co-operative of Australian Alpaca Breeders (Huacaya & Suri) - all states, all herd sizes and all colours. Established in June 2018 and already successfully exporting raw fibre to China. Our clearing house is based in the Southern Highlands of NSW representing all Australian Alpaca Breeders wanting to sell their Fibre - Suri & Huacaya. Fleece markets will see your fleece sold both domestically and internationally.

Waratah Alpaca Fibre accepts fibre from Members and Non Members.

All Colours | All Micron Ranges, from Ultra-Sheer to Extra Strong | All your Fleece – Saddles, Pieces & Skirtings | All Year Round collections/drop offs points nation wide

Through collaborative farming Waratah Alpaca Fibre can provide Australian Alpaca Fibre producers strong reliable markets for the sale of their fibre - maximising grower returns back to where it belongs - directly to the Breeder.

Waratah Alpaca Fibre Co-Operative - What are you waiting for?

Email: mick@waratahalpacafibre.com.au | Tel: 0407 407 618 | www.waratahalpacafibre.com.au

The life of a CARGO LLAMA

By Keith Payne

As the Tiwanaku and Wari colonies settled and expanded in the Lake Titicaca basin (AD 500-1100) llama pastoralism basically included the herding of llamas for meat and cargo transport, contributing significantly towards economic development. Akqusa was a cargo llama of that period, so named for his colour – he was a darkish brown but with white underbelly and legs.

Akqusa's mother was a llama herded as a source of meat by the Aymara people in the outer region where today the boundaries of Peru and Bolivia come together. His father was a guanaco, wandering in search of a herd of females he might have a chance to contest for, but equally willing to gather a harem from chance meetings with pairs or small groups of wandering females. After Akqusa was weaned, his mother had been driven in a herd to a market in one of the nearby settlements, part of the WARI colony at that time, several centuries before the Inka began to piece together what would in time become the largest and most powerful empire ever seen in the Andes.

Akqusa was a strong llama with straight legs and a well muscled chest, but most importantly had demonstrated an inclination to stay together with the main group of llamas and a willingness to be handled by the herders. He had allowed the handlers to hold him for a costal to be placed on his back and fastened there by means of a strong rope braided from spun llama hairs. As a 3 year old, he had demonstrated an ability to join the main group of llamas being content to follow a delentaro (lead llama) while carrying a lightly loaded costal on journeys which often took several weeks to complete. He would graze as they travelled completing his feed at the end of a day's effort and his costal was removed, then settling for the night, part of the herd, facing inward with a longer llama rope draped across the backs and behind the necks of the outside animals. Early the next morning they would seek out their morning feed until the caravaneros gathered them for their costals to be again attached for the coming day's journey.

Once Akqusa had satisfied the caravaneros that he met their expectations of a cargo llama and had reached the prime age of 4 years, he had been gelded and promoted to become a full cargo llama, this next season to have his load increased to a full working weight of 50 to 65 lbs, depending upon the load to be carried, the duration and difficulty of the trail to be travelled.

Being gelded was a horrific experience for him. Three men had wrestled him to the ground and restrained him while a fourth had performed the operation with a sharp instrument, without anaesthetic. But once returned to his companions who were not alarmed, he became calmer, and in a few days had forgotten the incident.

The day before departing on a journey, Akqusa and each other cargo llama was fitted with a red ear tassel, had a red ocher paste applied to their body and neck and a specific nick was cut into an ear. The delentero were given special treatment to include a decorative bridle, a woven breast piece, specially toned bells and a small mast or flag affixed to their cargo. The ceremonies varied somewhat from handler to handler, but were in all cases elaborate and essential to ensure a successful journey. Several dogs of the Chiribaya shepherd type, similar in appearance to the golden retriever of today, would accompany the caravan, prized by the caravaneros and also part of ritual pre trip preparations.

Basic cargo which could include woven and braided products, llama dung and a variety of items to be traded on the route were carefully packed into the costals, basically a sack of woven llama fleece which was sewn shut, balanced and folded neatly over the back of the llama. Small blankets were folded and placed under the costal for comfort and protection of the llama's spine. The costal was held in place by a long braided llama rope which was wrapped around several times and secured with a knot.

The majority of llamas in caravans had the original llama double coat which tended to partially mat with use, providing an extra layer of comfort for the llama. In Akqusa's caravan were a couple of chaq'u longer fleeced llamas who's belly and leg hairs were trimmed to stop collection of dirt and mud and allow the costal to be secured without slipage during the journey.

Each morning the caravaneros would be up before light, releasing the llamas to allow them to feed and then prepare what would be their main meal of the day. Subsequently the llamas had their costals tied on, in some cases a couple would be simply hitched together and in other cases being held by one while another handler fitted the load. Once fitted, the costal would remain in place for the entire day, removed only at the end of the day's travel. It was common for up to 10% of the llamas not to carry a load, so that if a llama were to have difficulty, its costal could be transferred to a fresh llama. Several rest stops of 15-30 minutes would be taken during a day's progress.

At night the removed costals would be grouped to provide wind protection for the caravaneros. The woven saddle blankets would be utilised to keep them warm before being applied under the llama costals the following morning. The day schedule would be planned as carefully as possible to allow evening stops with friends and family along the route, in which case their stone corrals could be borrowed to house the llamas.

Daily progress would be determined by the difficulty of the track. Of course this varied significantly on a long journey and the llamas would often confront steep narrow uneven paths where single file was in order, wider well worn tracks where the llamas could fan out behind the delentero, difficult river crossings, steep descents down banks of loose stone, not to mention any number of obstacles which needed to be manoeuvered around or over. When crossing new territory, one handler would often lead the way for the delentero to follow, but in familiar country the delentero would lead the way, dutifully followed by the caravan. Individual llamas would never, ever attempt to take the lead position. In a large caravan the delentero would often have a couple of lieutenants who carried a different toned bell and each llama in the pack would generally respect a pecking order bringing a degree of harmony to the caravan.

Akqusa had found his spot near the middle of the caravan, but was always ready to move up a notch if a llama was replaced by the handlers or injured.

He enjoyed the trips, especially when heading through new territory. Once a year, he and several other larger boys would be selected for a trip to the salt mines. Here they had much heavier weights loaded on to a frame designed especially for this purpose, often the weight was 100 – 120 lbs, but it was a single day's travel to their destination and he would have a very light load to carry home the next day. He and the others prided themselves on their ability to transport this heavy awkward load for the handlers, often up and over steep slopes having slippery terrain underfoot.

Somehow he understood that llamas were naturally talented for this type of work, and he quickly learned that any llama not conformed to have a smooth pace would be at a disadvantage and these llamas did not last many years at this work. He had, over time, come to accept being herded, as he always had sufficient food to maintain health as well as gaining protection from the sometimes harsh weather, not to mention the threat from pumas and poachers. Such was the nature of domestication and the difference between himself and his father. And it is such traits that the handlers looked for in their selection of herd machos for mating purposes. A muscular physique, an effortless pace and a willingness to be herded.

Author's Note: Studying llama history is a very enjoyable pastime. I gained a lot from ARCHAEOLOGY OF ANDEAN PASTORALISM, Capriles/Tripcevich and GOLD OF THE ANDES, Ochoa, MacQuarrie and Portus but also numerous publications, articles and papers. Many thanks to all those who research and report on the fascinating history of the llama and its domestication

Facial Eczema in Llamas

A Synopsis

By Corey Regnerus – BVSc, BSc

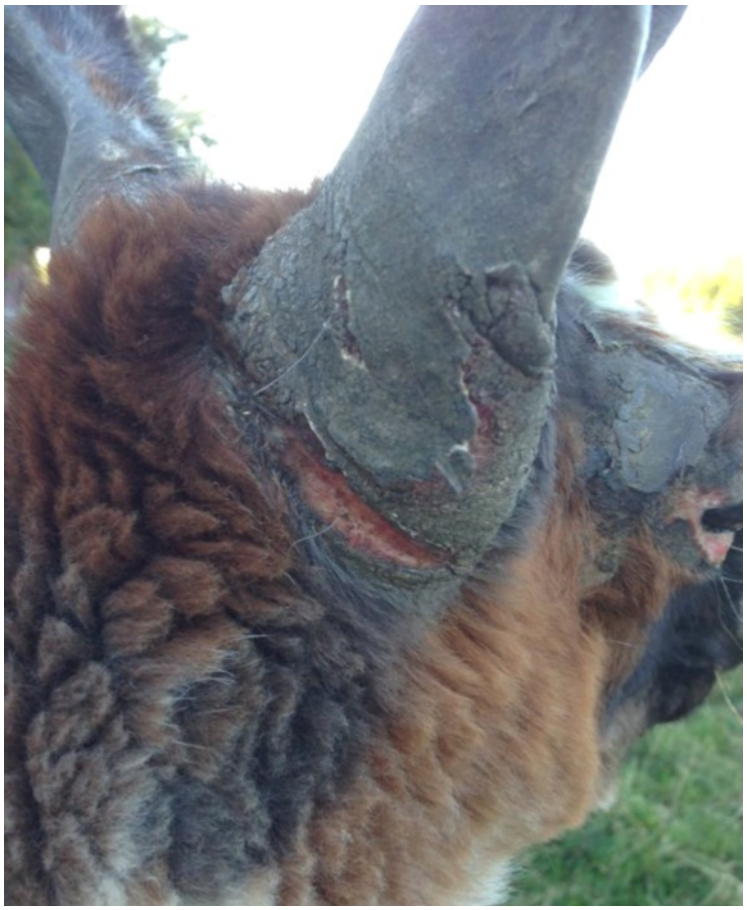
Facial eczema can be either acute, chronic or sub-clinical in our llamas, and they are susceptible to this disease.

Facial eczema is the end condition that we see, like this poor girl above. But how does it get to this point? And why do the vets say there is nothing you can do once it gets to this point? Let's have a quick look at the pathogenesis, or process of this disease.

The causative agent is a fungus called Pithomyces chartarum. This fungus survives on dead matter and leaf litter in our pastures. When this fugus spreads, it does so by producing fungal spores. These spores look like little hand grenades under the microscope. These spores contain a toxin called 'sporodesmin'.

When our animals consume this toxin, it damages the liver. This damage causes scar tissue to form in the liver, preventing the normal breakdown and excretion of the chlorophyll in the rest of the grasses they consume. This chlorphyll byproduct then circulates in their blood stream, and in areas with small vessels close to the skin, and surprisingly the sun still reacts with it, causing marked inflammation and swelling, giving rise to the swollen and peeling skin that we are used to seeing. Once this happens, there is no going back, only helping them get through the clinical signs. This is done by providing shade, feeding hay, zinc creams and anti-inflammatories from the vet. Year-on-year exposure will cause marked scarring of the liver, and ultimately results in liver failure, which is a life sentence from there. So in that case, prevention is key!

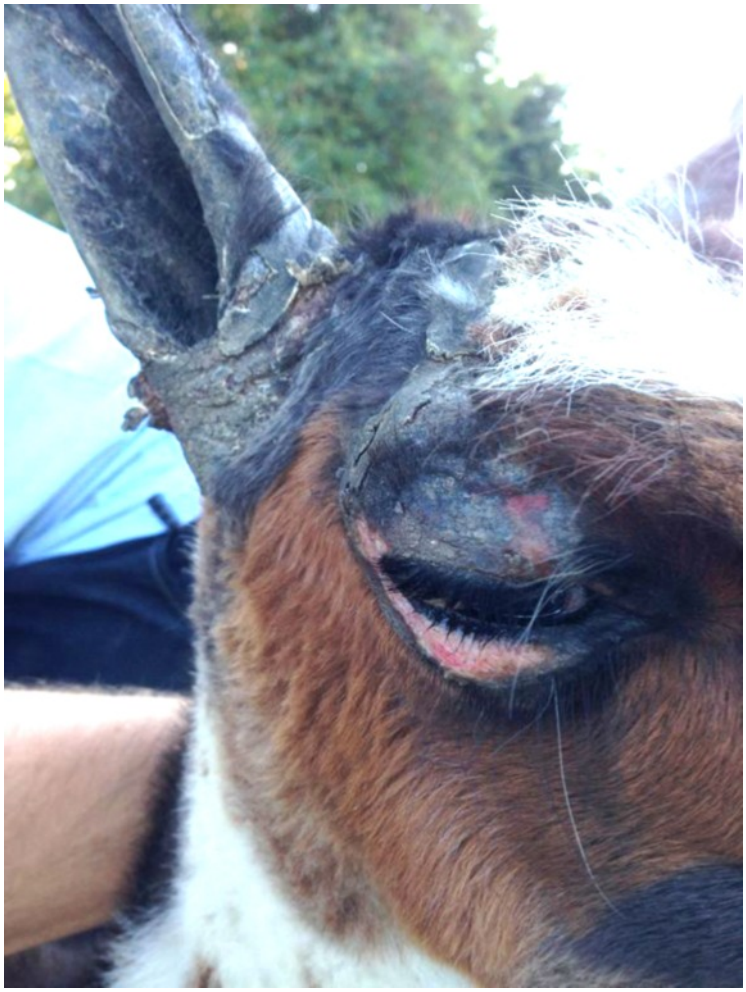
As mentioned, this is a fungus causing the disease. Fungi like to grow in warm and wet conditions. When the weather is conducive to this type of environment (e.g. Autumn, late Summer and possibly even late Spring), we need to make sure that we are providing protection for our paddock Pets.

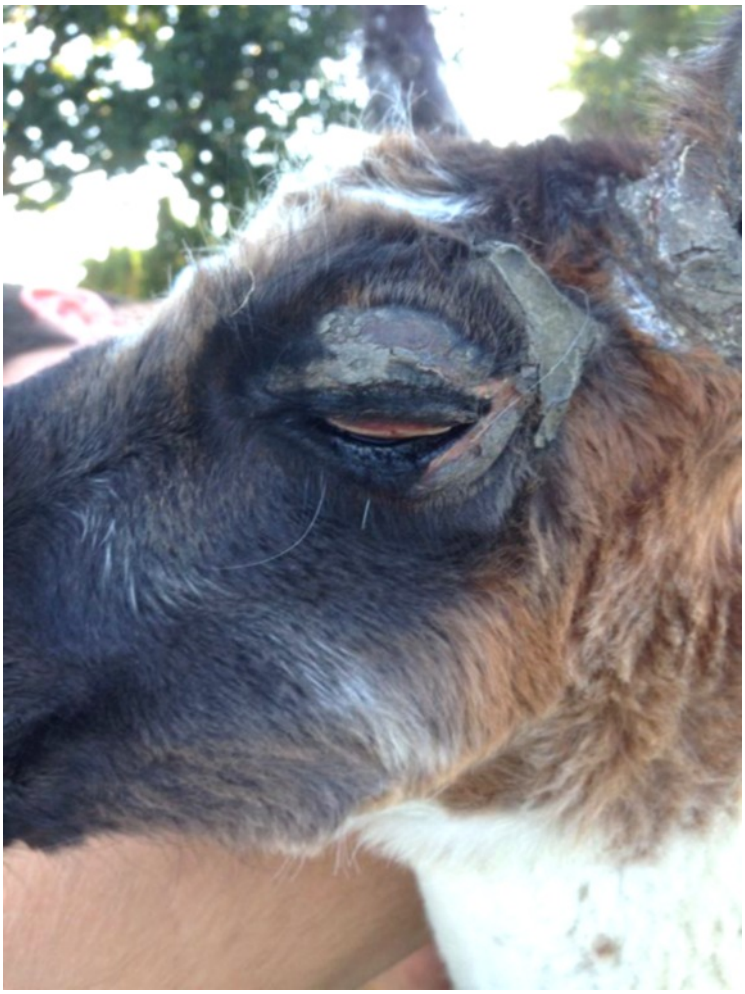


‘Spore Counting’ is the easiest way to know what is going on in your region, as well as on your own property. You can use regional reports from your farm supply stores, or your local vets to gauge the risk period (>20,000 spores) to know when to start supplementing zinc to protect the liver from damage. You can then collect grass samples from your paddocks and take into your local vet for evaluation to then know what is going on specifically on your property. It is best to collect grass samples first thing in the morning before the dew burns off, cut right to ground level, and a couple points across the paddock, enough to fill a bread bag.

Luckily we have alpaca/llama pellets plus zinc available but this needs to be checked in your area as different manufacturers use different blends. Only supplement zinc during the risk periods, as prolonged exposure to zinc can inhibit copper absorption and cause its own problems. There was a small study done at Massey University last year seeing if sheep rumen capsules of zinc could be used safely and effectively, and results are still pending.

There are additional preventatives like fungicides that could be practical on smaller blocks, but quickly becomes unaffordable on larger ones. There is a good document from Beef and Lamb NZ highlighting the disease and preventative measures that can be implemented the same for our beloved camelids. Get in touch if you have any more questions: president@llamas.org.nz





Llamas & Alpacas are not: Ruminants

By Keith Payne

OK, If they are not ruminants, what are they?

When llamas were first introduced into my life, I was surprised when informed they are not true ruminants. So what are they, I asked? Answers to this varied from " they are called 'modified' or 'pseudo' ruminants", to "we just call them ruminants anyways, after all they have only one less stomach than a cow or a sheep".

Being a cantankerous type, this didn't sit well with me. Surely our llamas and alpacas deserved a bit more care than this!

So I learned about the suborder 'Tylopoda' which is distinct from the suborder Ruminantia. Our llamas and alpacas are Tylopoda!

But it still kept festering away in the back of my head, which continued to bounce questions at me :

How are they different from Ruminants?

Will their health care be different?

Are there different diet considerations?

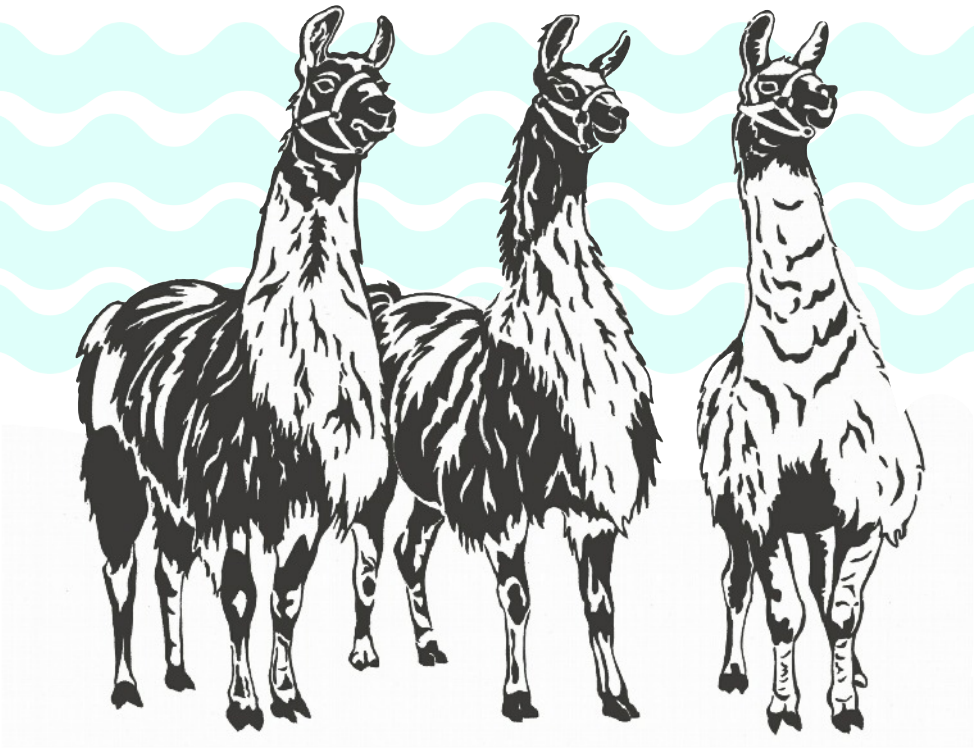
My vet talks about them as ruminants and is guided accordingly when discussing health issues with me. Is this correct?

And so I began to research the differences between a Tylopoda (specifically llama and alpaca) and a Ruminant.

There are many but here are a few of them:

Main Differences between Llamas, Alpacas and Ruminents

- Red blood cells are different size and shapes, llamas and alpacas have higher glucose levels
- Male ruminants usually have horns
- Ruminants have hooves and sole
- Llamas and alpacas have a split upper lip
- Ruminants have a cloven foot
- Most ruminants have dew claws
- Ruminants have four compartment stomachs and are susceptible to bloat, llamas and alpacas have three compartments and rarely get bloat.
- The llama in particular is able to live in health with a low protein diet
- Ruminants are spontaneous ovulators with an estrous cycle, llamas and alpacas are induced ovulators with a follicular wave cycle
- Llamas and alpacas do not lick their young or consume the placenta
- Ruminants are highly susceptible to TB, llamas and alpacas are minimally susceptible
- Ruminants are highly susceptible to foot and mouth, llamas and alpacas are mildly susceptible



and so on and on, but you will getting the drift here that our llamas and alpacas are actually quite a bit different from ruminants.

And so why is this even important? There are many reasons, but here are two of them:

Firstly we live in a world of government regulation and whenever there is cause to regulate ruminants, llamas and alpacas are classed as ruminants and accordingly caught up. Often totally unfairly. We don't want this;

Secondly for reason of dietary health. Ruminants benefit from having grains in their diet as a supplement. Llamas and alpacas do not, in fact grains as a regular supplement are dangerous for them. But many llama and alpaca owners take advice from well meaning people who do not know the difference between a ruminant and a tylopoda.

Of course grains are to a llama and alpaca like a Big Mac is to an 8 year old, they will fall over themselves to gobble what they can – but we owners need to know better.
Actually a study of the workings of your llama or alpaca's digestive system will convince you to donate any feed containing grain to the neighbour's sheep. Visit another neighbour's horse stable and enquire where they source

baled hay for their horses. Buy that for your llama or alpaca instead. If it is quality hay, it is all they will need (but you can still give them a little grain free treat from time to time).

The late Dr Murray Fowler published a paper in 2008 entitled "Camelids Are Not Ruminants" which contains a lot more technical information on the above subject.

You can 'Google it.

EDITORS NOTE: The opinions in this article are those of the author after research into information from Dr M Fowler and Dr C Cebra. Veterinary advice to us is that, particularly in times of drought, small amounts of feed containing grains would probably not be harmful however readers can do their own research.

COPING WITH DROUGHT

By the late R T Dixon B.V.Sc. (a well known and respected alpaca owner and veterinarian)

This article was originally published as a supplement to the Southern NSW AAA region magazine - The Yacca, issue 36, but considering current drought situation we felt the information is very relevant.

After months of drought-feeding my alpaca, I was feeling glum and downcast. Then I heard a voice that said 'Smile! Things could be worse': so I smiled, and they were !!

This prolonged drought is starting to bring home to members - and their alpaca - just what a prolonged drought entails. We think of this in terms of a shortage of water, and this may well be the most obvious shortfall. The more insidious shortage occurs following a failure of the seasonal rains responsible for a pasture that carries you through into the next favourable growing phase - usually Spring.

We are now experiencing a protein drought of two colours; depending on whether you have had a few showers of the wet stuff or not, you are experiencing a green drought or a brown one. In the green drought the pasture looks green, because of a small sparse shoot that is 90% water, so does not provide sufficient protein to fatten lambs or maintain late pregnant animals in adequate condition. The brown variety does not even have the green shoot, because gale-force winds rip the moisture from the soil before the stunted/ overgrazed grass can respond.

Alpaca are very canny critters. If energy and protein levels cannot be replenished by continuous grazing, they sit around for increasing periods, rather than mooch for the occasional gleaning. However, for an animal that is a continuous grazer, sitting around increases their stress level. Stress increases with high winds - they hunker down for prolonged periods. Dry cold such as -4 degree frost, or snow, does not seem to worry them, but rain and wind are the ultimate bad combination. I have already heard of alpaca losses under these conditions.

It is now too late to double your property size, plant forage crops, or even to sell off 'excess' stock (unless you can tap into a market in an area where the drought has ended and pasture is growing like the national debt!). However, you can very profitably do some nutritional sums which should enable you to decrease the stress level in your flock to the point where you - and your alpaca - come out in reasonably good shape.

If you have not already done your sums - or if you don't do them NOW, you can expect a lower percentage birth rate, due to mid and late term foetal loss; a decrease in fleece production, because your critters are putting energy into keeping warm and staying alive, rather than producing fleece; and a lowered conception rate when you re-commence mating in late Spring, because of lowered male and female fertility.

So, do not despair !! DO THE SUMS !!!

The following ground-rules apply:

1. It takes two or three times the protein and energy intake to restore a thin animal to good condition, compared to the intake required to keep a well-conditioned animal in that state.

2. Your property has a Dry Sheep Equivalent (DSE) rating. This is the number of wether sheep that can be run per acre or per hectare. On native pasture alpaca are some 30% more efficient than sheep, but on improved pasture the performance is equal. The DSE allows for lean times, not drought, and does not allow for the needs of pregnant or lambed ewes - or alpaca. If your DSE rating is 1/acre, and you are running 3 alpaca/ acre, you are now operating on a feed overdraft, and the interest charges are just as horrendous as any charged by the Fantastic Plastics. It is not time to get your feed account out of 'overdrawn' and into credit balance, however small.

3. If your pasture - or what's left of it - is native (Kangaroo Grass or Poa Tussock, you are looking at a protein content of 5% tops. If your pasture is Kikuyu or paspalum-based, the protein level may be down to just 3%. You therefore have not only a deficiency of Dry Matter for the critters to eat, but what they are eating doesn't contain enough protein and energy. You therefore have to supply some extra Dry Matter, such as hay, as well as some additional protein.

4. If your pasture is improved, and particularly if it contains clover or Microlaena, what is there may have a protein level of 10-12%, but there is still insufficient Dry Matter to keep the spitter's stomachs and intestines functioning efficiently. Provision of oaten, wheaten, or pasture hay that contains no clover may be sufficient to do the trick, but it is more likely that you will have to supply an extra protein source as well.

5. Alpaca wethers seem to be able to stay in good condition and produce fibre on an 8% protein intake. Weaners need something like 12-14% if they are going to go ahead; early and mid-pregnant mums should not drop below 12% if they are not going to jettison their cargo after 90 days, and milking mums deserve 14-16% if they are to maintain good milk production as well as a respectable Body Condition Score. Our males are maintaining good Body Condition Scores on the wether regime, but I would suggest raising the protein intake to 10% for at least three weeks before you expect them to be firing live rounds.

WAIT ! ! ! before rushing out and converting your feeding overdraft into a bank one, do two things:

A. Feel your animals and write down a Body Condition Score for each one. If you don't know how to do this, either phone the AAA National Office and ask for a copy of Alpacanote No. 4/03 - Body Condition Score (BCS) of alpacas or download the Alpacanote directly from the AAA website.

B. Decide if your paddock arrangements will allow you to run separate groups of wethers, weaners, tuis and early pregnant maidens, middle stage experienced mums, and last trimester and birthing mums, PLUS two or three yards or small paddocks for critters whose BSC indicates the need for extra supplementary feeding. Alternatively, if paddock numbers won't allow this kind of separation, you may consider running non-pregnant females and some wethers as one group, with other wethers being put with late pregnant and nursing mums, and the weaners and tuis being a third group. Be on the look-out for individuals in the groups being bullied away from hand-fed supplements, and always have a yard or three to accommodate the thinnies. Incidentally, are they thin because they have developed increased parasite ingestion through close grazing near poo-piles? Feeding worms is even more expensive than feeding stock and the worms produce no fleece, so have a worm check done of your flock, especially the thinnies.

Now that you know the overall condition of your flock, and what level of separation you can institute, you can consider which of the following scenarios is the least expensive and time-consuming for you, and the most stress-reducing for your animals.

Large Hay Bales

A large ROUND bale in each paddock is a good method of allowing each animal to eat what it needs. The rural press and most country local papers carry advertisements for supply of these. They are best laid on their side rather than on end, because the alpaca seem to like eating them from the centre outwards; the shell then collapses, and the 'shell' can then be used for garden mulch or compost. Because they can roll, you will need to position them against a fence, shed, or tree. They also come wrapped in a netting mesh which your cria love to mumble and try to eat, so do not leave any laying around after you remove the collapsed 'shell'.

A large SQUARE bale, 6ft x 3ft or even 8ft by 4ft is even heavier and more difficult to move. If you do not have the tractor to unload it/them from the delivery vehicle, these may not be a practical solution to your problems. If you have access to a tractor with a front end loader, and cover in which to store it/them this is a good source of dry matter and protein, but the individual 'biscuits' are 12-15cm thick which is heavy when multiplied by 3ft x 3ft and even heavier if 4ft x 4ft and such a biscuit can be very difficult to break into distributable portions. Watching a member attack such a biscuit with a chainsaw was a sight to behold!

Oaten or wheaten bales probably have a protein content of 8% unless it contains some clover or lucerne in which case the protein level may well be 10 or 12%. Buying such hay 'blind' is just that. It helps if a friend has bought some previously, so that you can ask an opinion, or better, see it for yourself; alternatively, ask whether the vendor has delivered THE SAME hay to someone locally, so that you can phone and ask to go and look at it first before placing a firm order.

Lucerne hay has a significantly higher protein content but alpaca, unlike cattle, are reluctant to eat the stalks, so you can end up with some very well mulched paddocks. You should ask about other grasses or weeds in the hay, as lucerne hay may contain a proportion of thistle, burr, or wild oats that will result in significant contamination of your property. Hence one look before purchase may save you a lot of problems in years to come.

Clover hay is very good in the protein stakes, and most alpacas will eat the stalks, so that the total consumption rate is much higher. It is rarely available as 'pure' clover hay; it usually comes as a mixture of clover and phalaris, or clover and pasture hay, so that the protein content is somewhat lower than the 18% you might expect. If it is not too contaminated with thistles or weeds, it is a good buy. Again, an inspection by you or a third person is recommended.

Small Hay Bales

These are getting hard to get because the machinery for making large bales is more economic to use, and the machinery for stacking them is also more efficient. Most large sheep and cattle operations have the equipment to unload, stack and handle them, which leaves me - and maybe you - one step closer to the dinosaur. At present there seems to be sufficient producers to keep us supplied but for how long is anybody's guess. In times of plenty they are sold by the tonne, but in times of drought they are sold by the bale. The average bale is 3-4ft long and 1.5 x 1.5ft square. They come as a series of biscuits some 10cm thick (sorry for the mixed units) but some operators adjust their balers to make 10-12cm biscuits. In times of plenty one can buy these bales of lucerne at a reasonable cost, but in these times you pay much more, depending how far down the selling chain you are buying. This refers to 'pure' lucerne hay - which may contain obvious thistle or wild oat contamination and should have some 18-25% protein. Oaten and wheaten hay is cheaper, but contains less protein, ie 8-10% depending on whether there is a clover component.

Feeding

Significant savings in wastage can be achieved if hay is fed in feeders. There are generally two types - those that are open and therefore designed to be used under some sort of roofing, and those that are covered, and can therefore be freestanding in a paddock. Like most solutions, the latter are more expensive but allow for more flexibility in use especially if you don't have sheds or shelters to put the open variety in. If you are feeding out by bales or individual biscuits, allow one biscuit (10cm thick) for every four alpaca each day; a bale contains 10-12 biscuits, so plan accordingly.

BIG HINT. These bales are just too long for comfortable handling, unless your arms are exceptionally long. Get a bale hook from your local produce store, borrow one from a friend, or best of all take a friend who can use a welder to look at one, and make one for you. The steel needs to be well tempered - the arch supports for the tonneaux on old Holden utes are ideal, but your friend will get the idea.

Extra Protein

If you have small numbers, or facilities to feed larger numbers in troughs, bowls or other containers, you can add to the protein of the lower 'quality' hays by supplying grains, protein meals or pellets. If using pellets, check on the protein content - some have 10- 12% protein, which is insufficient for milking mums but adequate for early and mid term mums, males, and of course wethers. Others have 14% protein - good for weaners, but still low for milking mums.

Enter the use of protein meals like LT Soy Meal (36% protein) or grains such as lupins (24-28% protein). If using lupins ensure that they are cracked - not whole - because alpaca digest them better. The added advantage of heat or chemically treated products such as LT Soy Meal is that a proportion of the protein is present as By-Pass protein - ie the protein does not have to be processed by bacteria or fungi in the first compartment stomach, but passes directly into the small intestine for immediate absorbtion which can be critical for weaners who need an uncomplicated protein 'fix'.

How do I vary the protein level I provide?

As an example, suppose you are feeding alpaca pellets with a 12% protein content, and you wish to provide your nursing mums with a 16% protein supplement using LT Soy Meal

(36% protein). Fill in the details in the Pearson Square as shown below:

Pellets (12%) 36 - 16 = 20 parts pellets (16%) The desired protein level LT Soy Meal (36%) 16 - 12 = 4 parts LT Soy 24 parts TOTAL You feed 20/24 parts (5/6) pellets and 4/24 (1/6) LT Soy Meal

You can use the Pearson Square to calculate the proportions of oaten/wheaten/white chaff (8% protein) and lucerne chaff (18-22% protein, depending on supplier), or cracked lupins (the little brown ones are 28% protein, or the fatter yellow ones are 24% protein) for giving a 10% protein supplement to stud males, or 14% to weaners, or 12% to early trimester females.

All right but how much per alpaca per day?

I calculate to feed a biscuit of hay (10cm thick) for four alpaca. Wethers and stud males get this once a day; nursing mums and weaners get this twice daily. If you are feeding bales at a time in covered racks, calculate on getting 10 such biscuits to a bale. Such a bale should suffice for 40 weaners or 20 nursing mums for a day; or, five nursing mums would have a four day supply of lucerne or clover hay, and six wethers should make it last a week.

In addition, I calculate to give a two litre measure of chaff/lupins/LT Soy Meal to each adult animal night and morning, in individual feeders. I am thus giving a higher total protein to the nursing mums by giving them lucerne hay twice daily, compared to the once daily supply for stud males and wethers.

This is intensive feeding, and can, I assure you, get onerous, but it does have the advantage of close quarters monitoring of animals twice daily, looking for signs of seeds in eyes (more common with hays containing seeds and awns) and evidence of individuals being pushed out of the way or hanging back. These animals may have to be transferred to the TLC (Tender Loving Care) yard or paddock. It is amazing how often a usually aloof animal will let you have a quick feel for body condition scoring while you are moving among them breaking up a biscuit of hay.

Relying on large round bales in the paddock is certainly less labour intensive, but does mean that you should attempt to yard and body condition score each mob about once a fortnight, to ensure they are not slipping backwards. You should also move among each group daily to check for watery squinting eyes indicative of seeds or awns in the eye (usually in the pouch of the lower lid) or head shaking with a floppy ear (hay or seed in the ear canal). Burrowing their heads into a bale of hay makes either of these happenings more likely.

Damp vs dry feeding

We dampen our chaff/lupins/Soy mix before feeding, because it is less likely to blow away and will not cause choke if a greedy-guts swallows a large mouthful before lunging for a second. If greedy - or very hungry - animals ingest a lot of dried pelleted food quickly the swelling inside the first compartment stomach can make them quite uncomfortable. Do not flood the feed but add just enough water to make the pellets or chaff stick together as a crumble. This will also prevent the LT Soy Meal from sinking to the bottom and will help it to coat the grain/pellets/chaff components.

Cobalt Supplement?

The crude protein you supply the critters does not get immediately absorbed in the stomach; it gets eaten by the bacteria and fungi and protozoa, which then die, pass into the intesntine, where they (and their protein) are digested and absorbed. These bacteria and fungi need Cobalt in order to function well and proliferate, and a Cobalt deficiency results in poor bacterial digestion and therefore poor utilisation of the crude protein you are supplying. The Cobalt is usually obtainable as a trace element in the natural diet, but if this is getting scarce, so the likelihood of a deficiency increases.

Cobalt Sulphate is a fairly expensive red powder. We use quarter of a teaspoon in enough food for 33 alpaca and for my money it is very good assurance that what I am feeding is being as efficiently utilised as possible.

Shelter

Another approach to reducing drought stress levels is to ensure that there is some shelter if it gets wet and windy. If your property is equipped with sheds or barns, you obviously have the solution to the problem - you shed your critters until the rain stops and the cold wind subsides - especially the latter. Shade is not necessarily shelter. A large gum tree is good for summer shade but very little use for wind protection. A makeshift and effective solution is to put up treated pine poles 6ft high and tack shade cloth to them. We find that the 70% shade cloth is a very efficient break and set up as a 12 x 12ft enclosure open to the east, with a 50% shade cloth roof, we have a shade/ wind break for all seasons that has been very useful in our recent 100 km plus winds.

Perhaps by the time you read this, the drought will have broken, and the hungry looks your critters give you will be a fading memory.

If the drought is still with us do the body condition scoring and nutrition sums now.

KNITFEST

By Esme Graham

For the third year in succession the pretty Sunshine Coast hinterland town of Maleny has hosted Knitfest.

Well supported by all the “crafty” people who live in this hinterland community it is organised by festival director Deborah Swain and a bunch of dedicated volunteers who help with organization, yarn bombing, and the many jobs associated with running such an event which supports and showcases the many talented Fibre Artists this country has to offer.

The event is also well supported by the local business community, the festival brings large crowds to the two day festival.

When I visited on the Saturday morning I was greeted at the entrance to the main street by yarn bombed cows and the whole main street was hung with knitted and crocheted bunting and yarn bombing wherever there was a suitable place to show it off. Even the local school children had decorated the front fence of the school with their craft.

Spread over two exhibition halls at the local primary school and the RSL hall the crowds moved between the two main venues to view the stalls which had an amazing range of handcrafts.

They could also join in the workshops and watch demonstrations and talks on subjects as varied as how to turn alpaca fleece into usable yarn to brioche knitting, cable knitting, sock knitting – in two easy lessons! If crocheting is your thing how about making a "mandalas" – a magic circle in the round! Maybe you would like to know how to dye wool using avocado pits and skins or spin boucle art yarn? All these and many more talks and workshops were on the two day programme.

Attracting a lot of attention was local identity Brianna Ahrenfeld, known as The Alpaca Lady who has been spinning for more than forty years. She started spinning merino fleece as her family were involved in the merino business and twenty years ago started spinning alpaca and, though not exactly popular with her family, has been spinning alpaca ever since and has taught many younger people the art of spinning.

The Qld Region of the Australian Alpaca Association ran their Colourbration Fleece Show in conjunction with Knitfest with participants given the option of putting their fleeces up for sale after the judging.

A courtesy bus was running between the Showgrounds where the fleeces were being judged and displayed and the other two venues and many people took the option to see a great display of over eighty fleeces from around Australia. Alpaca was represented by at least three members of the Alpaca Assoc who had interesting stalls with some great product for sale.

Ivory Park Alpacas had a pen of suri alpacas on show which as usual drew a great response from the crowds.

The large crowds, of mainly women but a surprising number of men, bears testimony to the popularity of arts and crafts which has shown a huge resurgence in popularity over the last few years.

WIN

Matt has given us a copy of each of his alpaca books to give away.

CLICK HERE TO ENTER*

** By entering you agree to join the Camelid Connections FREE subscribers list.*

Macca the Alpaca

MATT COSGROVE

BOOK REVIEWS

MACCA THE ALPACA

The first in a series of alpaca books for small children commencing kindy or preschool, Macca the Alpaca is a delightful book with brilliant illustrations with underlying messages on bullying which teaches resilience and provides openings to discuss ways to handle someone who is being unkind.

Macca is a small, kind, friendly alpaca who spends his days splashing in puddles and chasing butterflies who then runs into Harmer, a big, unkind, llama who is never, ever, friendly.

Read how Macca teaches that bullying llama a very important lesson.

Matt Cosgrove hails from Sydney, Australia. He has a first class honours Bachelor of Design in Visual Communication majoring in Illustration, received the University Medal for Academic Excellence and has worked in the publishing industry as an author, illustrator and designer for over twenty years.

His passion for the interplay between prose and pictures has seen some slight detours in his career path though—including Creative Director at Australia's number one fashion magazine Marie Claire, Lecturer in Comic Art at the University of Western Sydney, and a tragically short-lived stint as one of the guys who drew the animations for the television show, Burgo's CatchPhrase!

However, despite these dalliances, (Don't judge - he had a mortgage to pay!) his heart has always belonged only truly to books. As a child, his love for the medium was sparked by the brilliance, and naughtiness, of Roald Dahl (Matt could recite Revolting Rhymes by memory) and Raymond Briggs (Every single week Matt would re-borrow Fungus the Bogeyman from the school library).

If he didn't have a book in his hand, he had a pencil, practicing drawing. While other kids played with their Masters of the Universe figurines, Matt posed them in scenes and then sketched them. Now, as a father, Matt's work is heavily influenced by his children, simultaneously his most enthusiastic supporters and most ruthless critics.

ALPACAS WITH MARACAS

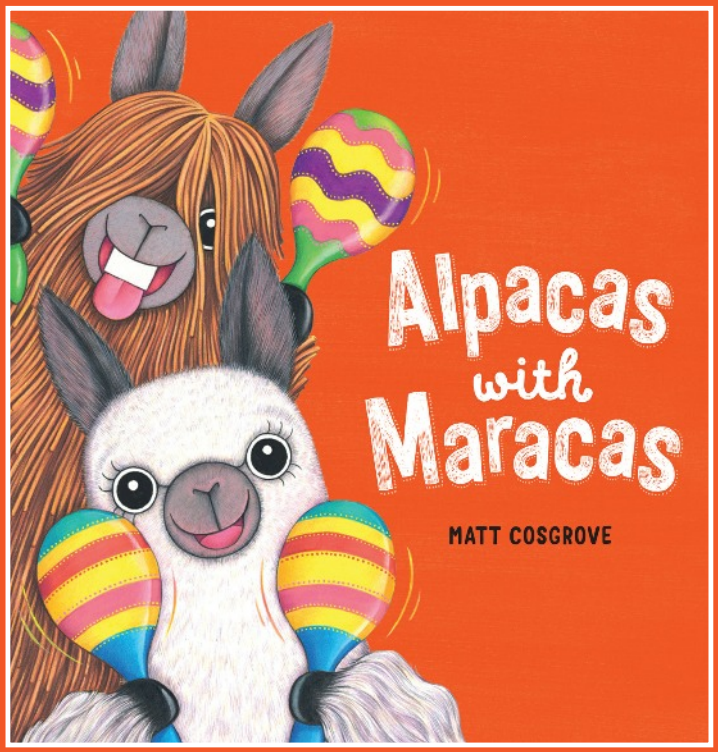
Macca and pal Al are the best of friends and LOVE spending time together. When there is an opportunity to enter a talent contest, they just can't resist.

But what will their act be? Will they shimmy and shake? Dance and prance? Whatever they choose, it will surely be a performance to remember! A delightful follow-up to Macca the Alpaca

Bright, comical illustrations. Simple, playful rhyming text—perfect for reading aloud to little ones. A cheerful tale that promotes friendly competitive behaviour along with the idea that having fun and 'giving your all' are as important as winning. Themes include: friendship, self-confidence, discovering your passion and sportsmanship.

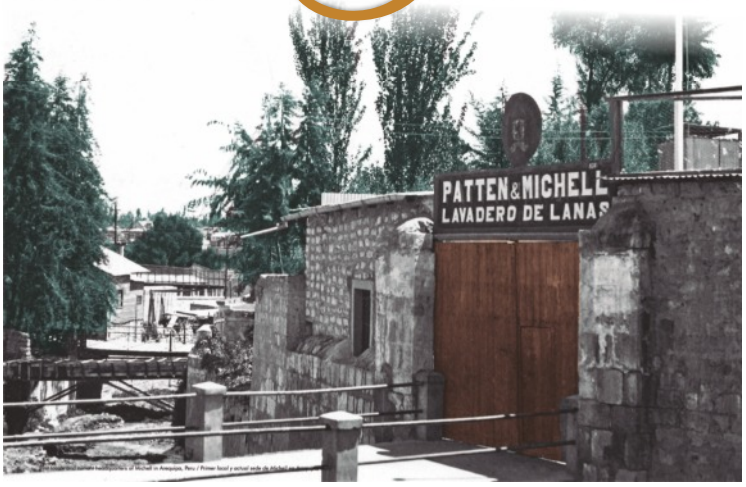
Look out for a third in the series, with a Christmas theme, later in the year.

The second book – Alpacas with Maracas – has been chosen for the Australian Library and Information Association's (ALIA) National Simultaneous Storytime next year. This will take place in May 2019 as part of Library & Information Week.



The Noble Alpaca Fibre

By Heather Woods



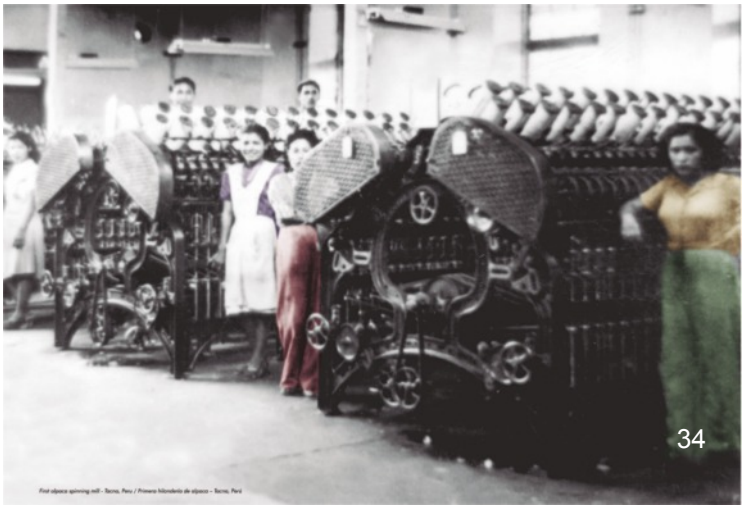
The Michell Group story

Frank W. Michell knew the alpaca was an Andean treasure when he landed in Peru in 1922. The Peruvian landscape was a sight to behold and huge herds of this strangely beautiful creature, the alpaca, covered entire mountains. They had a magnificent presence, regarded with the highest affection and utmost respect by the local people. He saw weavers spinning those elegant natural fibres and understood it was his calling to share that tradition with the world. In 1931, Mr Michell founded Michell & Co and was the first to export the noble alpaca hair in a professional and sustainable way. He implemented a combing and spinning plant, and, in the process created the global standards we see in the industry today. Standards that have helped shape the way alpaca fibre is processed, sold, and enjoyed by those who wear it.

The Michell Group is the largest alpaca textile conglomerate and has been responsibly leading the industry for over 85 years. It's their capacity to operate, from breeding magnificent creatures, right through to the sale of exquisite products displayed in warm and inviting stores, that makes them pioneers. With almost a century behind them and complete respect for all people, they're committed to transforming and commercialising what is a truly sophisticated fibre. A fibre that they genuinely love.

For the love of Sol Alpaca

After 70 years of unquestionable commitment, a new milestone was reached with the launch of Sol Alpaca in 2003. Its unique brand name and the innovative thematic store concepts mean visiting Sol alpaca stores is an experience. You feel the warmth, the embracing of colour and the notion of touching hope. It's a truly gentle reminder of the beauty in our world.



The fine haired vicuna, traditionally used to dress royalty, has a long history of beauty and grace in Peruvian culture. It's that same grace that is displayed in Sol Alpaca stores across Peru, Chile, and now in Sydney and Melbourne. They're able to share that love for the finest fibres in an exclusive collection of garments.

State of the art technology allows talented artists to develop those raw products into the final, premium quality product you see in stores.

The designer inspired by unity

Their foundations and operations are better for the exceptional talents of Iranian-born Australian designer Fariba Heydari, who fuses art and culture into every thread of the products from her design base in Sydney.

As a child, Fariba adored clothing. The colours, the fit, even cutting paper dresses for her dolls. At just 13, she'd already learned to sew and understood how to create, so it was an organic move that led her to Sol Alpaca.

Unable to return to Iran after studying in the UK, her Bahá'í family arrived in Arequipa, the centre of the Peruvian Alpaca industry. Soon she was part of the incipient alpaca manufacturing industry where she'd made a name for herself. When Sol Alpaca was formed, Fariba was approached for help creating a brand identity.

Fariba is attracted to the beauty of clothes - how they fit, how they feel. But working with expensive luxury fibres is about more than being 'creative'. You must know how to put things together, where to cut, which machine to use and how to enhance the qualities - how to make them really sing.

Her designs reflect Peruvian culture. But she is conscious that different cultures, when looked at closely, seem to have common sources of inspiration, using similar materials, lines and textile techniques. Attraction to colour is universal, it doesn't matter where you're from - put a nice pink anywhere in the world, and people are attracted to it.

But it's not just the clothes she's thinking of when designing, consideration is given to the craftmanship of all involved in the manufacturing process. She finds inspiration in the talents of the people that work with her and she observes cultures of the world trying to find that something that unites people.

Her experience of knowing the fibre and manipulating it with different techniques, creates the unique ability to truly 'see' alpaca in a design or not. But in her own humble eyes, it's a team effort when bringing the garments to life, where everyone plays their own special role.

Reading Fibre Test Results

By Paul Vallely

Monitoring objective fibre traits using fibre measurement makes a lot of sense. It allows fleece growers the opportunity to select alpacas that are likely to produce the more valuable fleeces. More importantly, it also provides an insight into the genetic potential of breeding stock to produce progeny capable of growing premium fleeces.

Fibre testing, however, can be like an ambush for the unwary. There is much misinformation as to what fibre test results mean and how they should be applied. The following is a short guide to help dispel some of these fibre testing myths.

How to Take a Fibre Sample

The main points to note regarding mid-side sampling are as follows::

1. Always use the same sample site. This will enable you to effectively compare results. The preferred and most commonly used site is the mid-side. The mid-side is located half way between the fore and hind leg and half way down the body mass. The left hand side of the alpaca is normally used for the mid-side as the right side is exposed to judges when showing.

2. To breed for reduction in variation of fibre diameter across the fleece, three sample sites may be used. In this case, the mid-side, the shoulder area and the pin-bone (hip) are recommended.

3. For OFDA2000 testing, the size of the fibre sample needs to be only the width of two fingers.

4. When cutting the sample from the alpaca, ensure the sample is taken as close to the skin as possible so that a complete test analysis can be conducted on the whole length of fibres.

5. Place the sample in a paper bag. If a plastic bag is used, the bag should not be sealed as condensation build-up can distort the fibre measurements. Record the alpaca's name and/or tag/IAR number on the bag,.

6. Send the samples to AAFT with any required documentation

Interpreting Test Results

So, now that you have got the results of a fleece test, what does it all mean? The following is a list of commonly used terms for fibre testing.

Micron: Unit of measurement for describing diameter of fibre. 1,000 microns = one millimetre. Fibre diameter is the single most important fibre trait with regard to commercial processing. It is also one of the most heritable fibre traits

Mic Dev: (Micron Deviation) The extent to which a sample deviates from the herd's average.

SD: (Standard Deviation of fibre diameter) A measurement to indicate the degree of variation in fibre diameter within a fibre sample.
One standard deviation is how far from the average you need to go to capture about two thirds of the sample. For example, a staple has an average diameter of 20.0 microns with a SD of 5.0 microns. In this case, about two thirds of the fibres in the staple are between 15.0 and 25.0 microns. The lower the SD, the less variation in fibre diameter. SD is the preferred measurement for determining fibre diameter variation on individual animals. Alpacas with low SD generally have a softer handle, greater tensile strength, and less variation over the fleece area.

CVD: (Coefficient of Variation of Diameter) Is the standard deviation expressed as a % of the sample's average. For example, if the average diameter is 20.0 microns with a SD of 5.0 microns, the CVD is 25.0%. (5/20 x 100)

CF: (Comfort Factor) Percent of fibres in a sample that are equal to or less than 30 microns. Fibres greater than 30 microns are generally responsible for the prickle sensation when worn next to the skin.

CEM: (Coarse Edge Micron) The distance (in microns) between the average diameter and the finest extremity of the coarsest 5% of fibres. This is commonly used to assess the influence of primary fibres within a sample.

<15%: The percent of fibres in a sample less than 15 microns.

CRV: (Fibre curvature) expressed in degrees/millimetre. Generally, higher curvature is associated with higher crimp frequency.

SF: Spin Fineness: Calculation using micron and CVD to represent the spinning quality.

Micron Profile: A graph showing the variation of fibre diameter along the staple (environmental influence on fibre growth). Can be used for analysing the nutritional intake over the growing season.

Histogram: A bar graph depicting the distribution of average fibre diameter of the individual fibres within the sample. On the vertical (y) axis of the graph is the micron of the fibre counts. On the horizontal (x) axis are a series of numbers which represent the frequency of distribution of those fibres counted.

SL: Staple length expressed in millimetres. Staple is another term for fibre bundle

Max Mic. The broadest point along the staple, expressed in microns.

Min Mic. The finest point along the staple, expressed in microns.

FPFT: (Finest point from the tip) Millimetres from the tip to the finest point in the staple. An indicator for the 'point of break'.

MFE: (Mean fibre ends) The average fibre diameter of the fibre ends [tip and base] expressed in microns.

Hauteur (predicted): The estimated length of fibres after scouring, carding and combing. As a rule, the two most important properties of wool for processors are diameter & hauteur.

Micron Blowout

Many growers lose faith in their animals once they receive a test report showing a high fibre diameter result. The fact is, the animal might be capable of producing superfine fleeces, however, it may have been subject to overfeeding.

During 2010, Australian Alpaca Fibre Testing conducted over 40 thousand alpaca fibre tests. The average micron for these tests was 25.1 microns. A high percentage of these tests were on samples from first or second fleeces. The average range in fibre diameter along the staple was 4.8 microns. This represents how much the fibre changed in diameter over the growing season. This variation is caused mainly by changes in nutritional intake.

High nutrition causes the fibre to broaden. Overfeeding high quality hay or grain has often been the cause of much anguish when the fibre test results are revealed.

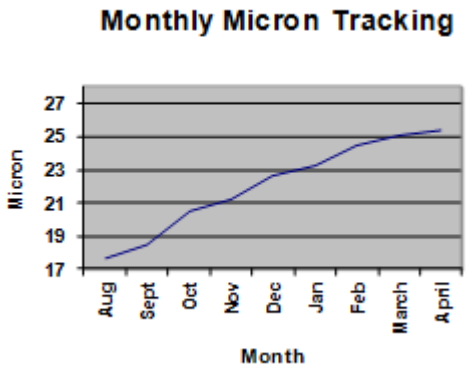
With many of the alpacas we tested, the fibre diameter blew out by more than 10 microns. In one year, an alpaca blew out by a staggering 19.2 microns – starting at 18.1, and finishing with 37.3 microns at the point of shearing.

A random selection of 100 test results from 2006 showed about 20% of fleeces to be under 20 microns at one point, but finished with an average fibre diameter of over 26 microns. If these fleeces met H1 grade as set by AAFL, then at under 20 microns they could have been valued at, say, $27 per kilo. The same fleeces would have been valued at possibly $4 per kilo with their eventual micron result.

If the fleeces had initially met the Ultrafine bale criteria, they might have enjoyed a price of $60 per kilo. In this scenario, the micron blow-out would have resulted in a drop in price of, say, $54 or almost 90%.

Obviously, feeding regimes for pregnant females or developing crias might require high nutrition irrespective of impact on fibre diameter. Furthermore, I'm not suggesting you keep your alpacas just one step away from needing life-support systems to survive. The message is to find the right balance.

Below: Micron Profile showing blow-out of 7 microns over 8 month period.



POINTS TO REMEMBER

- Fibre diameter is generally the most important trait for commercial processing. It is also one of the most heritable fibre traits allowing significant genetic gain over generations.
- To select breeding alpacas, SD (Standard Deviation) is as important as fibre diameter if breeding for quality fleeces.
- When reading fibre test results, look at the SD rather than the CV.
- When purchasing an alpaca, always ask for the SD. If the vender knows the micron, then they know the SD.
- Incorrect sampling technique can have a detrimental affect on the eventual test result.

Example of two sets of results including data, histograms and micron profiles.
Analysis of the results follows below the examples.

Analysis of Two Fibre Test Examples

Top Example (6B46)
The average fibre diameter is 15.8 micron. As can be seen with the histogram, most of the fibres are centred close to the mean diameter. Almost all fibres are between 9 microns and 28 microns, (range of 19 microns). This alpaca has very low variation of fibre diameter, and consequently has a low SD of 3.4 microns, (2/3 of fibres are between 12.4 microns and 19.2 microns). As all fibres are below 30 microns, the Comfort Factor is 100%.

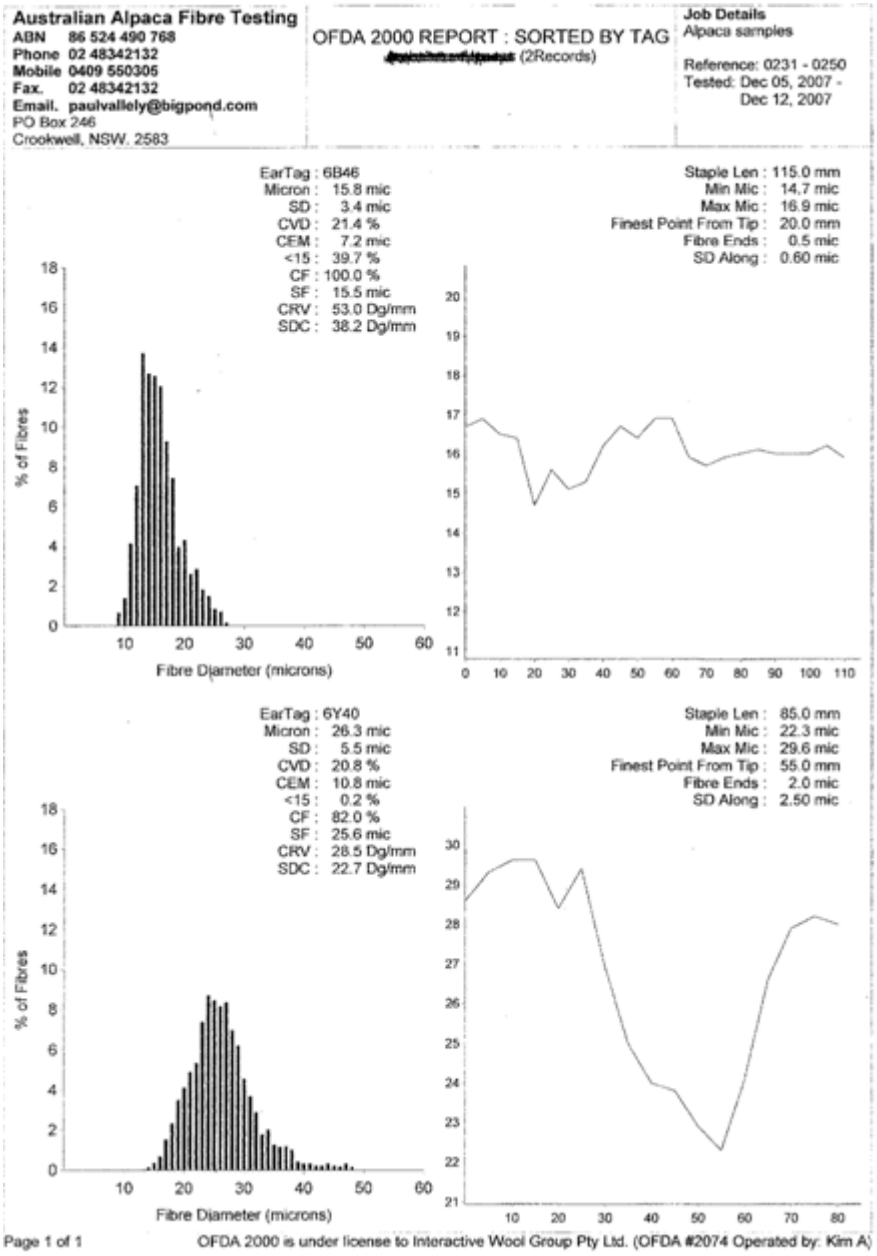
The micron profile shows a relatively flat profile indicating stable level of nutrition passing to the fibre follicles. The profile shows the average diameter of the fibre staple starting at almost 17 microns at last shearing (left side of profile), then finishing at about 16 microns when the sample was taken.

The results indicate this sample is from a superior animal, capable of producing premium ultrafine fibre.

Bottom Example (6Y40)
The average fibre diameter is 26.3 microns. The histogram shows high variation of diameter of individual fibres, ranging from 13 microns to 48 microns, giving a range of 35 microns. For this reason the SD is 5.5 microns, (2/3 of the fibres are between 20.8 microns and 31.8 microns). Note that the CV is 20.8%, which is lower than the above alpaca at 21.4%. The reason for this is the difference in fibre diameter.

The comfort factor is 82%, meaning 18% of fibres are greater than 30 microns. The fibre from this alpaca would likely have a prickle feel if worn next to the skin.

The micron profile shows the level of nutrition falling dramatically about half way through the growing season, before rebounding to almost its initial diameter. This might be a result of worm infestation, dry conditions or ill health followed by a return to lush or healthy conditions. The fibre would likely be tender at the finest point on the profile. This alpaca would be regarded as producing inferior fleece by commercial standards.



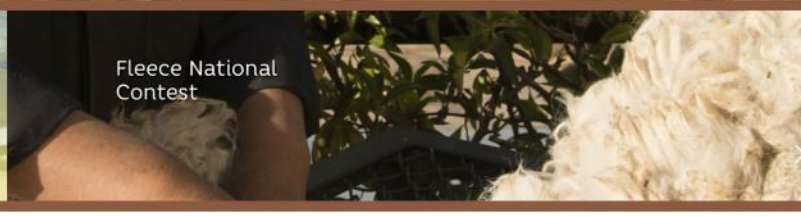
ALPACA fiesta 2018

Alpaca Fiesta is the most important Alpaca festival worldwide.
It's objective is to spread and promote Alpaca in the global textile market.

Alpaca Fiesta takes place in the Arequipa - Peru, and brings together breeders, researchers, companies and institutions linked to the world of alpaca in a festive and highly competitive environment.

Alpaca Fiesta takes place every 4 years. This year Alpaca Fiesta's 6th edition will go from the 22nd to 27th of October 2018, and it has been reinvented once again, to give all assistants a renewed atmosphere and new business opportunities, as well as offering visitors innovative experiences that allow them to live and enjoy the Alpaca Fiesta.

Alpaca Fiesta includes activities for the entire alpaca value chain; from the aging stage, going through the stages of industrial transformation, to the processes of clothing and fashion.



For more information in Australia contact Australian Alpaca Fleece Ltd. (AAFL) at:

AUSTRALIAN ALPACA

Phone: 03 9311 0933
Email: alpacafiesta2018@aafl.com.au
www.alpacafiestaperu.com/en
www.aafl.com.au

THE DANGER OF LABELS

A conversation with Nancy Novice and Two Different Trainers

By Marty McGee Bennett - Camelid Dynamics

One of the most powerful lessons I gained from my studies in animal behavior is how crucial it is to focus on the behavior instead of our human interpretation of the behavior.

When I field questions about behavioural problems, owners want to create explanations for the problem… complicated stories about how the animal was raised, how he was treated by other animals or whether or not he was abused by humans. These stories are full of labels - words like obnoxious, dominant, stubborn, happy, sad, lonely- that we use to describe what we think is going on.

Labels are problematic for a couple of reasons:

1) Labels give us a false understanding of the problem when we have only just given it name

2) Labels create self-fulfilling prophecies causing the owner to get what they expect. Additionally these labels are often handed down to the next owner trapping the animal in a box NOT of his own making.

3) Our interpretation or misinterpretation of the label can lead us down the wrong path when we try to change the behaviour, perpetuating ineffective and unfair training methodologies like "I'll show him who's boss!"

This article describes two different conversations between an owner and a trainer. "Nancy Novice" and "Tough Tom" the trainer who is trapped along with the Nancy in label land. They are discussing how to approach a problem Nancy is having with Juniper her alpaca (or llama).

Nancy: My sweet adorable "Juniper" who has always been so "friendly" jumped on my husband and knocked him down yesterday.

Tom: He is being a disrespectful brat.

Nancy: Well when he was little he was affectionate and loving. I would cuddle him and he followed me around like a dog. He is the perfect Public Relations animal everyone that visits the farm loves him and he is a wonderful ambassador for camelids. But he seems to hate my husband.

Tom: You treated him like a pet instead of a barn animal. He is jealous of you and is feeling competitive with your husband and is trying to dominate him.

Nancy: How do you know he is feeling dominant

Tom: Because he jumps on your husband

Nancy: What do I do now?

Tom: You will have to show him who is boss.
Nancy: How do I do that?

Tom: Don't let him get away with anything.

Nancy: Ok thank-you I will talk to my husband and we will be sure take your advice!

Notice that the trainer says the animal is dominant because he jumps but also explains WHY he jumps because he is dominant. This kind of circular logic entraps every one involved--the trainer, the owner and most of all the animal.

There's hardly a word within this conversation that is descriptive of behaviour, with the exception of the behaviour that prompted the call - that the animal jumped on someone. Even Nancy's description "jumping on my husband" begs

clarification. “Jumped on my husband” could be describing something as benign as becoming excited at feeding time and bumping up against a person to running across the field at full tilt and slamming forcefully into someone.

Nothing in the conversation gives any clue as to the conditions that may have contributed to the behaviour or even what the behaviour actually was. The words: sweet, adorable, disrespectful, brat, affectionate, loving, cuddle, “like a dog”, Public Relations Animal, ambassador, hate, pet, barn animal, jealous, competitive, dominate are all labels that we use to describe what we THINK IS going on. In order to be meaningful at all, both parties in the conversation would need to understand the definition of the labels being used.
For example lets look at the word “brat”.
Nancy’s definition of the word “brat” is: An animal that is resistant to wearing a halter and won’t follow politely on a lead.

Tom’s definition of a “brat” is an animal that follows you around all the time, pulling at your clothes and getting in the way all the time.

Nancy’s interpretation of showing Juniper who is boss is to wag her finger at him and say no very strongly when he “misbehaves” (yet another label). When Tom tells Nancy to be the boss he thinks he is telling her to tie Juniper to a post and leave him there for several hours.

Not only are these two people not communicating anything meaningful to each other, when the conversation is over they have no idea what the training plan is either!

What follows next is another conversation with another trainer.

Nancy addresses the behavioural issue with some clarity and focus.

Nancy: My sweet adorable "Juniper" who has always been so "friendly" jumped on my husband and knocked him down yesterday.

Pete: Can you tell me more about what happened? Do your best to tell me the exact circumstances before he jumped on your husband and exactly what Juniper did and what your husband did when Juniper jumped on him?

Nancy: Well my husband was feeding the animals and Juniper is always right next to you when you feed. It was the first really cold day of the year and all the animals were very excited when my husband brought the hay out. They crowded around and a number of the animals were jumping around. Juniper hit my husband really hard on the back and he really didn’t see it coming. My husband was too shocked to do anything but yell NO!

Pete: Describe Junipers behaviour in other ways and at other times. Does he behave differently than your other animals?

Nancy: Right from the beginning he was more interested in people and would follow us around. We began feeding him carrots out of our hands and we taught him some tricks too. He began pulling on our clothes and we taught him to take off my husbands hat. Everyone who visits the farm loves him and feeds him by hand too.

Pete: When you feed him by hand do you reach out with your hand or keep your hands close to your body?

Nancy: well I really haven’t thought about that but now that you ask I guess we like Juniper to come close to us so we feed him right up close to our body.

Pete: Ok I think I understand what probably happened and how we might change things to prevent anymore problems. My guess is that Juniper’s unusual behaviour as a young animal was reinforced by the hand feeding. Hand feeding up close to your body communicated to him that being right next to you is fine. With a large animal it is important for the animal to understand where his edges end and yours begin. When we lure them very close to us and then make it attractive to stay there we are teaching the animal that is ok to be that close. He couldn’t possibly know that doing something as normal as leaping around is dangerous when you are close to a human. All he knows is what you taught him - that being close is good. I bet you haven’t raised large livestock before. I bet Juniper is the first alpaca that you have raised from a baby. I will go one more I bet that he was the only baby you had at the time. Am I right?

Nancy: I am glad I didn’t take the bet! You are psychic! Yes! The only other animals we have are our two mini poodles, Juniper is our first baby and he was the only baby we had that year!

Pete: When you raise an animal from a tiny baby it is hard to imagine that they are going to become so big! Or that the cute things that they do might become a problem. What happens is that the behaviour that was once perfectly acceptable in a 30 pound animal becomes dangerous when the animal is 190 pounds or bigger.

In addition to the lessons from Positive Pete we could all take a lesson from Sergeant Friday of Dragnet whose famous line was, “Just the facts ma’am.” Focusing on the behaviour, changes the description from: “my llama or alpaca is happy,” to: “my llama or alpaca is quiet, is ruminating and doesn’t offer to get up when I walk close by,” or from: “my baby

llama or alpaca is friendly or loves me," to: "my baby llama or alpaca runs up to me in the field and presses his body against mine."

Describing the behaviour itself and not what we think the behaviour means is called operationalizing it. Developing the discipline to think and speak this way will help you solve, and more importantly, prevent behavioural problems.

For example, labelling an animal as "dominant" is a common practice in our industry. In fact, as an industry we have gone one better and created a super label, the Berserk Male Syndrome. This label makes it seem as if the animal was either born with this malady or caught the problem like a cold. Someone hearing about an animal with the Berserk Male Syndrome might easily assume that humans had nothing to do with it.

Many years ago I offered a different take on the Berserk Male Syndrome. I proposed we call it the Novice Handler Syndrome instead. "Friendly" baby camelids that run up to you in the field and lean on you might seem pretty innocuous. But a 200-pound llama or stud male alpaca charging up to you at full tilt and "leaning" on you without slowing down is a big problem. Encouraging behaviour in a young animal that will become inappropriate simply because of the ultimate size of the adult animal has nothing to do with love or dominance. Novice handlers do not have the prior experience to understand that what looks like a pretty light in the distance is really the headlight of an oncoming train.

Alpaca Spectacular!

Bendigo 2018

By Paul Haslin

They came from far and wide to celebrate the success of the Australian alpaca industry.

On Wednesday 22nd of August the floats, vans and trucks of studs large and small made their way from Victoria, New South Wales, South Australia, Western Australia, Queensland and Tasmania. Indeed, a truly National event.

They arrived in Bendigo to find the stage set for an event exceeding expectation. The spacious and well-appointed pavilion was ready, after days of effort put in by tireless volunteers and months of meticulous preparation by the organisers.

The fleece section of the show had been previously judged and the excellent display of the winners was a focal point of the pavilion, thanks to Pauline Glasser and her merry team. Adjacent to the enticing trade stands was the Product, Photography and Art display and competition, organised and overseen by Bronwyn Munn. The photos that had been the subject of interested viewing over previous weeks on the Spectacular Facebook site, were now to be judged by popular opinion.

By Thursday morning, the pens were filled, the inspections completed, the traders ready and Snappa and Wicked Coffee were serving a well-earned hot breakfast to the exhibitors.

Our judges, Molly Gardner and Angela Preuss, took their places in the twin show rings and the National Colour Championships were underway. For two days they worked their way through the selection of the best in the classes and came together at the end of each half-day session to award the Supreme Colour Championship sashes.

At the conclusion of this section of judging, some of the other elements of the Spectacular came into play. An informative presentation by Drs Jane Vaughan and Harun Rashid brought us up to date with the research on worm control in alpacas – an excellent prelude to dinner!

National Supreme Grand Champion Huacaya - EP Cambridge Connoisseur

National Supreme Grand Champion Suri - Marquez Luciano

The Spectacular dinner was catered and served in excellent style by Snappa and his crew as the attendees enjoyed a breathtaking performance by the very talented singer and harpist, Alana Conway. Music and conversation filled the evening until everyone retired to prepare for the next round of judging.

Saturday saw the judges join forces to award the age championship sashes, culminating in the presentation of the Grand Champions and the National Supreme Grand Champions. This, after careful calculation by the Chief Stewards (with the back-up of 'phone a friend' – thank you Lyn Dickson!) to ensure that the correctly qualifying alpacas were brought forward. Lyn, like many others across Australia and around the world, was following the event on the live stream broadcast, which reflected the judge-eye view enjoyed by the audience on the big screen over the show rings.

With all the beautiful ceramic alpacas duly distributed, we turned our attention to the National Auction – and learned that buyers have decided that selection and purchase by private negotiation at the pens is now the much preferred way to go. Although the auction was disappointing, reports of private sales indicate that, despite drought and export restrictions, the demand for quality breeding stock remains high and the Spectacular did its job in bringing the buyers and sellers together.

Whilst the judging was proceeding during the day in the main ring, the Young Paraders showed their skills in the ring beside them and shared the limelight on the big screen. Sunday morning saw the youth again at their best with performances by a group of Young Judges that showed that the future of judging resources is very bright. The main show ring was the stage for presentation of 40 groups of progeny, demonstrating the strength of the genetic pool in Australian alpaca.

Then, with trophies and ribbons packed and alpacas loaded, the exhibitors, traders and visitors wended their weary but satisfied way home. By the end of Monday, the pavilion was returned to its ghostly emptiness and this convenor was headed home and into retirement.

I must close by thanking the willing workers who made the show run in such an efficient fashion, both in the show ring and behind the scenes. Events like this don't just happen, they are the product of much preparation and the input of many skills and, of course, dollars. It is impossible to list all the willing hands without risk of offending by omission, but we owe them all a big thank you.

The funding for the 2018 Spectacular was provide by the generosity of many breeders at various levels of contribution, headlined by our Gold and Silver Sponsors. Many thanks to EP Cambridge, Alpha Centauri, Storybook, Precision and Bedrock for their generous support as well as the many other kind contributors.

A Different Perspective

By Richard & Dianne Gear, Bundaberg, Qld.

As newcomers to the world of alpacas, Dianne & I were amazed at the different shapes, sizes & colours of the animals at the Alpaca Spectacular in Bendigo. Our first experience with alpacas was in 2015 when we travelled from Bundaberg to Elysion Alpacas at Canyonleigh to help out while their caretakers were on holidays & fell in love with their alpacas. We enjoyed working with them so much that we ended up staying for 8 months, even learning to halter train the crias which still gives us a real buzz. We also made two new great friends in Paul & Fran.

This year, we spent 3 months with them & were invited to help out at the Spectacular & see our very first alpaca show. We thought it must have been something big by the amount of work that had gone into the preparation.

So off to the show! When first we walked into that massive, empty building, we couldn't imagine what it would look like until everything came together. The pens, the straw, the display stands, the ring, the backdrop, the big screen - what a transformation! To us, everything just seemed to fall into place with very few hiccups, thanks to so many dedicated & enthusiastic people. When the animals started to arrive, we were like two kids at Christmas with the huge variety of alpacas - what colours will we see next? In our wildest dreams we couldn't imagine the variety of colours that there were. We were impressed with the judges who were so particular about the part they played especially when it was difficult to separate two animals for a ribbon.

We really loved the ceramic alpacas that were earned as trophies & we heard a lot of positive comments from the recipients. What I found impressive was the large number of young people involved, it is a good sign for the future of the alpaca industry.

As alpaca lovers and not alpaca breeders, it was really nice to meet a lot of friendly people who we had only known through Facebook.

Right : Junior Judges
Below: Young Paraders competitors
Champion Junior Judge was TARYAN KOTSIAKOS and the Reserve Champion was HANNAH HAUPT

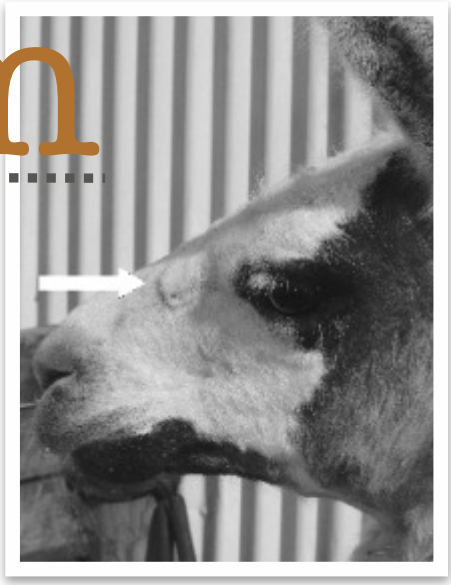
By the time the show finished, we were almost alpaca showed out, but for our first one, we were over the moon. We would like to congratulate Paul for his planning and persistence in getting all the numerous little details correct so that they made the overall event come together so successfully.

We also wish to thank Fran, Keryn & John for helping the show run so smoothly & answering all of our questions, of which there were many, and helping us to understand what was happening.

As someone said to me, it was a job well done & done very well!

Ringworm

My experiences Julie Insley - NZ



Usually located on the head, base of ears and feet

What is Ringworm (Dermatophytosis)

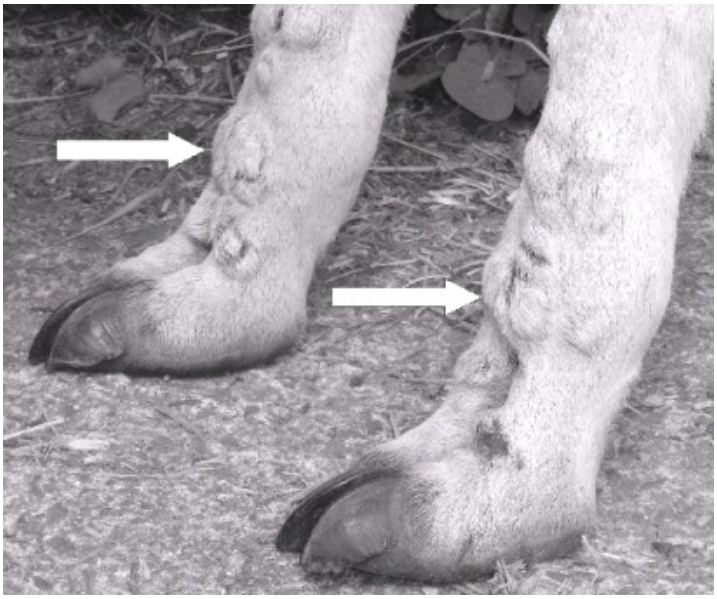
Two dermatophytes have been isolated from llamas.

Trichophyton verrucosum is the common cause of ringworm and T. mentagrophytes var. mentagrophytes. These are fungi that grow in the hair and hair follicle, not an actual worm or parasite.

Diagnosis - Your vet can confirm diagnosis with a culture or a microscopic exam.

Spread - By direct and indirect contact. Skin and hair that falls off while infected may remain viable for years attached to barn walls, fence posts, trees, feed dishes, halters and brushes.

Treatment - It can be easily treated with topical Betadine or Iodine applied to the area. Diluted Cooper Sulphate can be sprayed on. You can also use human antibiotic creams such as Daktarin or Bactroban as they work well. I have also heard that dabbing on tea tree oil will work. If it does not respond within a few weeks seek Veterinarian help to ensure it is not Mud Fever or Mange. It is contagious to other animals and people - wash your hands well after treatment.



Observations - Virtually every llama that has come to my property from the South Island has gotten ringworm at some time, this usually occurs about eight weeks after they arrive. All llamas born here get it at a few month old. They all only appear to get it one time. Younger llamas appear to get it more severely than older llamas. The Llamas appear unfazed by the condition and there have never been any long-term effects.

Clinical signs are lesions with raised, crusty, circular patches that turn into bald spot. As indicated by the white arrows in photo above right. The llama may be trying to rub or scratch them. Bottom photo taken 16 days later than top photo, note the scabs have started lifting off. One month later the hair was grown back.

Editors Note: This may not be prevalent in Australia but is worth looking out for when examining any skin disorders.

Photos courtesy Peter Webster
Reference: Medical and Surgery of South American Camelids
By Dr Murray Fowler pages 156-8

ALPACA EVENTS

Australian Alpaca Association

Strathalbyn Show
01-Oct-2018
Venue: Coronation Road, Strathalbyn
Show Convenor: Susan Haese
Mobile: 0148 846 271
Email: susan@yaringaalpacas.com.au

Seymour Show
06-Oct-2018 -6:00 am
Seymour Showgrounds
Seymour Show - Halter & Fleece Show
Convenors: Rod & Ann Sales
Email: rodannsales@gmail.com

Sale Alpaca Show
13-Oct-2018
Convenors:
Jen McDavittmcdavitt@merungle.com.au
Jenny Milesmilestead@dcsi.net.au

North Coast National Lismore Show
18-Oct-2018 - 20-Oct-2018
Contact: Lorraine Binskin - Mobile: 0402 943 763

Focus on Growing your Business
27-Oct-2018 - 28-Oct-2018
Educational seminars
Venue: TBC
Contact: Paula Leeson - 07 5482 9497
pphj@skymesh.com.au

Bangalow Show
16-Nov-2018 - 17-Nov-2018
Contact: Lorraine Binskin - Mobile: 0402 943 763

LUSTRE & LUXURY SURI SHOWCASE

Expressions of interest - The VER together with VYTEC have been invited to be part of the Lilydale Alpaca Show on Sunday 18th November 2018.

We will be holding a halter show with other activities and demonstrations to showcase suri.

We are seeking from you:
1. Expressions of interest in entering the halter show.
2. Your ideas for demonstrations and activities.
3. If you can offer a demonstration, activity or products for display/sale.

Contact ver.president@gmail.com or phone Louise Lazarus on 0431 039 719 by Sept 10th 2018.

LLAMA EVENTS

Kyneton Daffodil Festival Grand Parade Sunday, 9th September

National AGM and Conference 26th – 28th October 2018

Llama Association of Australasia (LAA) Hosted by the Victorian Branch LAA

We look forward to welcoming you to the wonderful RACV Goldfields Resort for a fantastic weekend of guest speakers, local attractions, food and drink amidst a great social atmosphere. Catch up with fellow llama enthusiasts from around the country. More information – www.llama.asn.au

Clunes Show
Saturday, 17th November Clunes Showground

New Zealand Alpaca Association

2018 National Alpaca Show
05 Oct - 07 Oct
Judge - Amanda Van Den Bosch (Breed), Peter Kennedy (Fleece) | Closing Date 24th August 2018.....

Ellesmere Show - 13 Oct

Hawkes Bay Show - 19 Oct

Rangiora Show - 20 Oct

Waikato A&P Show - 25 Oct - 28 Oct

Ashburton Show - 27 Oct

Manawatu Show - 03 Nov - 04 Nov

Canterbury Show - 14 Nov - 16 Nov

Egmont A&P at Hawera - 17 Nov

Nelson Show- 24 Nov - 25 Nov

South Otago Show- 24 Nov

Services Directory

FLEECE BUYERS

Australian Alpaca Fleece Ltd.
Unit 2, 114 Fairbairn Road,
Sunshine West Vic 3020
Phone: 03 9311 0933
Website: www.aafl.com.au
We are the oldest and largest Australian Alpaca Fibre buyer. AAFL buys Huacaya and Suri in all qualities, quantities, colours and grades. Contact us for our free freight program. AAFL receives your fleece every business day of the year from 9am to 5 pm.

FLEECE PROCESSORS

Australian Alpaca Fleece Ltd.
Unit 2, 114 Fairbairn Road,
Sunshine West Vic 3020
Phone: 03 9311 0933
Website: www.aafl.com.au
We are the largest supplier of Alpaca materials in Australia. Scoured Alpaca, Alpaca Tops and Yarns, in all qualities and a large variety of colour from naturals to fashion colours.

Boston Fine Fibres
Contact: Tanya Boston
Mobile: 0417 497 940
Email: ttboston@bigpond.com
Website: www.bostonfinefibres.com.au
Your fleece will be processed with the utmost care to produce top quality products in our Eco friendly facility. We process elite fleece into rovings, batts, felt or yarn in your choice of 2,4,8,10 ply. Bulky and rug yarn also available. Yarn is available in skeins, cones, balls.

DENTAL SERVICES

Alpaca Dental Services
Contact: Allison Quagliani
Ph. 0427 654 330
Email: allison@alpacadentist.com.au
Website: www.alpacadentist.com.au
Dental care for the specific needs of alpacas. Check my website for further information.

PRODUCT FOR SALE

Australian Alpaca Fleece Ltd.
Unit 2, 114 Fairbairn Road,
Sunshine West Vic 3020
Phone: 03 9311 0933
Website: www.aafl.com.au
Australian Alpaca Fleece Ltd. (AAFL) Distributes in Australian a complete variety of Alpaca made garments under its Australian brand, Australian Alpaca Connection and also is the exclusive distributor in Australia and New Zealand of the internationally recognised Alpaca fashion brand, KUNA.

Stevley Park Suris
Contact: Lesley on 0417 506 855
Website: www.stevleypark.com.au
Felted: Soaps - Scarves - Glasses cases - Tote Bags - Throws Baby Blankets
Knitted: Soft Toys - Mittens - Beanies - Scarves

Pfeiffer Park Alpacas
295 Artillery Road
North Rockhampton, Qld 4702
Phone: 0409 129 953
Email: pfeiffer01@bigpond.com
Website: www.ppalpacas.com.au
Visit our online store to see our large range of clothing, yarn and accessories.

FLEECE TESTING

AAFT
Contact: Paul Vallely
Ph: 61 2 4834 2132
Email: info@aaft.com.au
Website: www.aaft.com.au
Australia's only fibre testing laboratory dedicated to alpaca breeders.

Micronman
Contact: Wayne Marshall
Ph: 08 9418 1733
Email: micronman3@gmail.com
Website: www.micronman.com.au
Prompt service histogram with every test. Using OFDA2000 (profile) and OFDA100 (modulation) Fully accredited.

Camelid Capers

Send us your camelid photos depicting fun, unusual and unexpected moments along with a clever caption.

Each issue the winner will receive a free business card size advertisement in our next issue.

This issues winner combines a couple of contortionist cria!

Winner
Snuggle Bunnies

Photo by Sophia Eagleson - Sotaycam Alpacas NSW

Reflections

Photo by Jan Rendall, Babazeeka Alpacas NSW

OHHH! That feels SOOO good!

Photo by Jan Rendall, Babazeeka Alpacas NSW

Please send your photos as .jpg images to julie@camelidconnections.com.au

Not all photos submitted will be used for the current issue, however they may be used in a later edition of Camelid Connections Magazine. By submitting a photo you are giving Camelid Connections permission to reproduce this image in any of its publications and you confirm you have permission to use the image which is free of any copyright.

Love you nanny!

Photo by Alison Welch - Westwind Alpacas VIC

Looks like you are 50% me & 50% dad!

Photo by Jan Rendall - Babazeeka Alpacas NSW

When you're only five and a half months old and the adults crowd you out … think different!

Photo by Kathryn Wheeler - Torran Fibres

Happy hour at the (hay) bar

Photo by Kathryn Wheeler - Torran Fibres

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

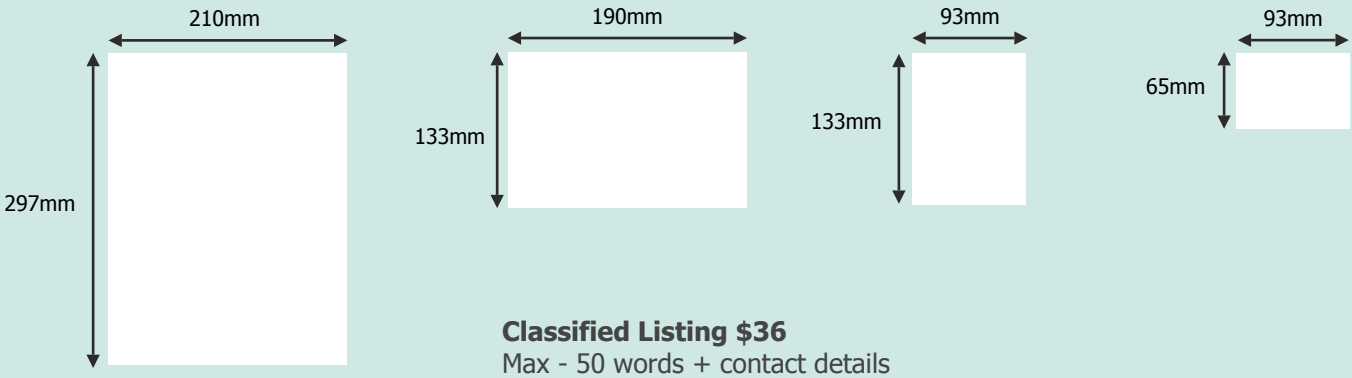
Advertising Rates*

Full A4 Page $360
(210mm x 297mm
No bleed required)

Half Page $185
(190mm x 133mm)

Quarter Page $95
(93mm x 133mm)

Business Card $55
(93mm x 65mm)



Classified Listing $36
Max - 50 words + contact details

- Package rates for prepaid advertisements in 3 issues of Camelid Connections receive a 10% discount.
- Double page spread receives a 25% discount (no additonal discounts apply)
- Inside front cover and opposite page attract a 10% loading.
- Camelid Connections magazine will be a quarterly publication commencing in September 2017*
- Advertising needs to be provided as a PDF or JPG to specifications listed above.
- Other advert configurations considered - ask us for a quote

To book advertising or for further details contact either:

- Julie McClen - Graphic Designer Ph: 02 6493 2036
  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.

www.camelidconnections.com.au

If Camelids are your thing - we have you covered!

Interesting, informative articles & relevant advertising

ALPACAS | LLAMAS | VICUNAS | GUANACOS | CAMELS