

ALPACAS AUSTRALIA

SSUE 57 • SUMMER 2008

The official publication of the Australian Alpaca Association Ltd.

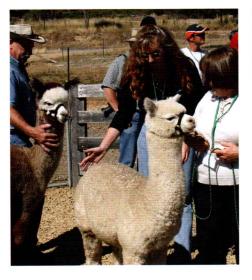
Inside this issue:

2008 National Show Results • Alpaca Dental • Dung Beetle R&D • Managing Risk

The very popular weekends for new alpaca breeders at Flowerdale Estate, are back in 2009. These "Introduction to Alpacas" workshops attract participants from all over Australia and New Zealand. The next workshop is on January 17 and 18.

The Program.

Workshops include classroom learning and hands-on sessions in the barn working with the alpacas. Participants learn the basics: halter training, chuckering, weighing, bodycondition-scoring, nutrition, mating, spit-offs, birthing, cria care, weaning, shearing, fibre classing, vaccinations, drenching, toenail trimming, business plans and record keeping.



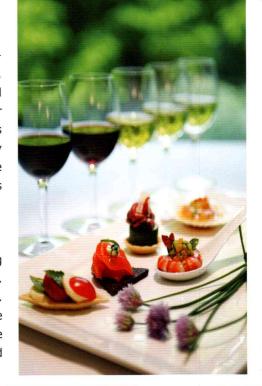
There are sessions on goal setting, genetic advancements (SRS and AGE data usage), selecting quality alpacas, farm plans, pasture improvement, herd development strategies, succeeding in the show ring and marketing alpacas.

The Venue.

Flowerdale Estate is an award-winning, retreat for up to 60 people. Stay in luxury accommodation and let the chefs tempt you with their delicious menus. These workshops have provided a wonderful opportunity for new breeders to network, socialize and have fun. Many lasting friendships have ensued from these weekends.

The Weekend Package.

Make it a special weekend? Learning and leisure. Relax in the heated pool. Play some tennis. Workout in the gym. Enjoy a sauna or challenge someone to a game of pool. At the end of the day, relax with a pre-dinner drink and a savoury or two.



WORKSHOPS FOR NEW BREEDERS.

The complete weekend price per couple is \$625. Singles are \$425. The package includes accommodation for Saturday night, Saturday and Sunday lunch, morning teas, Saturday night dinner, use of recreational facilities, workshop tuition and course materials.



Attendance numbers are limited and fill quickly. Complete details including the weekend program, directions and booking forms are on the website now at www.flowerdalealpacas.net

Or phone Jen on 03 9728 7000.





January Workshop
2009 begins with the first
workshop on January 17 & 18.
Sign up today.

FLOWERDALE ESTATE
ALPACAS



COVER
Photograph
by Cath Norman of
15th AAA Ltd.
National Show
Supreme Champion
Huacaya, Shanbrooke
Accoyo Prodigy ET.
See page 6.

PUBLISHER

Alpacas Australia is published by the
Australian Alpaca Association Ltd.
ABN 30 067 146 481 ACN 067 146 481
Unit 2, 613 Whitehorse Road
Mitcham, Victoria 3132, Australia
(PO Box 1076, Mitcham North, Victoria 3132)
Telephone +61 (0)3 9873 7700 Fax +61 (0)3 9873 7711
E-mail alpaca@alpaca.asn.au Internet www.alpaca.asn.au

EDITORIAL AND ADVERTISING

Sandra Wright, Australian Alpaca Association Ltd.
Unit 2, 613 Whitehorse Road
Mitcham, Victoria 3132 Australia
(PO Box 1076, Mitcham North, Victoria 3132)
Telephone +61 (0)3 9873 7700 Fax +61 (0)3 9873 7711
E-mail sandra@alpaca.asn.au Internet www.alpaca.asn.au

AUD \$7.70 : Australia

SUBSCRIPTION RATE (3 ISSUES)

AUD \$29.00 : Australia AUD \$45.00 : New Zealand AUD \$60.00 : International

CIRCULATION

2,900 for current issue

DESIGNED AND PRODUCED

by Garner Graphics

'Riverside' Lot 4, Inverary Road, Paddys River NSW 2577 Telephone +61 (0)2 4884 1222 Fax +61 (0)2 4884 1233 E-mail garnergraphics@bigpond.com

COPYRIGHT

All material appearing in *Alpacas Australia* is copyright.

Reproduction in whole or part is not permitted without the written permission of the publisher. It is the understanding of the AAA that any photographs submitted by contributors for use in any AAA publication will be free of copyright (unless otherwise stated) and therefore will be available for use by the AAA for industry promotion without the need for further permission.

LIABILIT

Views expressed by the contributors to this publication, and the advertisements appearing in this publication, are not necessarily endorsed by the Association. Every care is taken in compiling the contents of this publication, but the Association assumes no responsibility for the accuracy of information contained in the text or advertisements.

ISSN 1328-8318

ADVERTISERS

Alpaca Owners and Breeders Associatio	n inside back cover
Australian Alpaca Centre	26
Baarrooka	33
Ertoel Wheels	31
Flowerdale Estate Alpacas	inside front cover
Grand Flowerdale Alpacas	28+29
Mariah Hill Alpacas	22
Priestlaw Labradors	34
SRS® Alpacas International Pty. Ltd.	35
Tumi Alpacas	outside back cover

REGULAR FEATURES

2 President's Message
 5 Latest News from AAFL
 54 Upcoming Events
 3 Briefly Speaking
 50 Business Card Directory
 55 Order Form

3 Briefly Speaking 50 Business Card Directory 55 Order Form 4 Letters to the Editor 52 PacaPics 56 Advertising Details

RESEARCH AND DEVELOPMENT

24 Dung Beetles for Alpacas - an R&D Project

An initiative of the NSW Southern Region to identify effective species

ANIMAL HEALTH AND WELFARE

18 Uterine Prolapse

A breeder's experience

21 General Alpaca Dental Requirements

When alpaca teeth need to be trimmed

41 Summer Checklist Your Herd

Point form update

45 Protecting Livestock From Bushfires

Point form update

48 Poisonous Plant Profile

Castor Oil Plant

SHOWING AND JUDGING

6 15th AAA Ltd. National Show and Sale

Results and highlights

36 The Royals 2008

Highlights of the Adelaide, Queensland, Melbourne, Perth, Hobart and Launceston Royal Shows

46 Breeders Come Together For Showcase

2008 Victorian Alpaca Colourbration

FLEECE

42 Prescription Mating Helps Us To Get Better...

Breeding for quality fleece improvement

SURI

30 Breeding to Purity and Beyond in Suris

An update on the Purrumbete Suri Cross program

MARKETING

12 The Marketing Power of a Small Group

A group of breeders working together on a marketing campaign

INDUSTRY

14 Alpacas are Popular at Children's Animal Nursery

The Farmyard Nursery is introducing alpacas to city children

15 Managing Risk for Alpaca Business Owners and Managers

Gaining and keeping maximum control of your alpaca business

22 First Export to Canada in 14 Years

Mariah Hill Alpacas & Exports

23 Norway, a Growing Alpaca Country!

Australian alpacas introduced to Norway

32 A Critical Comparison of Alpaca MAP and Q-Alpaca

A breeder's account of the appropriateness of each

A Message from the President

On Pulling Teeth

Dentistry is perhaps the subject least likely to provoke feelings of ardour, excitement or enthusiasm amongst the population at large. Rather, it is regarded by most as something to be avoided at all costs, drawn upon only in times of crisis. And yet, there would be overwhelming consensus that it is an essential service, fundamental to the health of a modern, advanced community. Where dental services do not exist, dental disease and malnutrition are hallmarks of the ageing population, and frequently conspire to reduce life expectancy.

For breeders of livestock, biosecurity is the equivalent of dentistry. We would rather there were no need for it, but grateful that it should exist in times of crisis. Our recent experiences with Equine Influenza and Hendra Virus have shaken the historical complacency of Australian breeders, and alerted them to the fact that Australia is no longer immune to the growing threat of epidemics seen in other parts of the world. The possible impact of global epidemics such as bird flu cannot easily be overstated, with potentially devastating social consequences. Tourism and global trade increasingly challenge the traditional concept of Fortress Australia, and substitute for it the more daunting concept of One World.

In that context, a major challenge to Australia's future biosecurity is considered inevitable to all bar Mary Poppins, and imminent by most informed commentators. The recent outbreaks of Mad Cow Disease, Foot and Mouth Disease (FMD) and Blue Tongue in Britain alone have served to alert us to the broad-reaching social consequences of animal disease, and have prompted a pre-emptive review of Australian biosecurity provisions.

It is in this context that the Australian alpaca industry finds itself absorbed into a maze of government organisations with mandates to regulate Australian livestock industries. One is Animal Health Australia, charged with formulating the Land Transport Standards which define the regulations governing livestock movements across Australia. Another is the Primary Industries Ministerial Council, a conjoint state and federal body, which has mandated the National Livestock Identification

System (NLIS), already implemented for cattle, sheep and goats, in evolution for pigs, and in planning for alpacas. It seeks to secure Australia-wide traceability of all Australian FMD-susceptible livestock in preparation for a future FMD event. This is not something for which the alpaca or any other livestock industry has volunteered, but something to which those industries have been conscripted.

Arguments as to whether or not this is a good thing; whether it will work; whether alpacas are truly FMD susceptible; whether it will incur unreasonable expense; or whether we can tolerate another layer of government and bureaucratic interference, will no doubt rage. All will be good opportunities to vent anger and frustration, to rail against politicians, and to exercise one's rhetorical skills, but these debates will count for nought.

NLIS is coming.

There exists a short interval during which time the industry may be able to influence the direction taken by NLIS in the alpaca industry, and modify its impact, but time is of the essence. Members of the AAA Ltd. have a duty to make themselves thoroughly familiar with the AAA Ltd. Board communiqué released in October, and relay their concerns and opinions to their Regional Presidents, to have them represented to the AAA Ltd. Board at AAA Ltd. Council level, and subsequently to industry regulators.

This process will be irksome to many, and infuriating to some. Respectfully, I can offer only that oft-repeated piece of contemporary advice: get over it. In considering the cost of NLIS, in terms of time, dollars, inconvenience and effort, try to remember the consequences for many alpaca breeders in the UK during the 2001 FMD outbreak, whose animals were slaughtered by decree, based solely on the accident of their geography and circumstance, and without any reference to infection. Compensation for those losses remains a matter of huge controversy.

The NLIS is the alpaca industry's dental check. Pulling teeth, with or without compensation, is something we and our alpacas all hope to avoid.

Dr Ian Davison, President

Briefly Speaking

AAA Ltd. National Alpaca Week

2-10 May 2009

National Alpaca Week has been formulated as a programme to assist AAA Regions and individual breeders to promote alpacas in their local areas during this nominated week, with a co-ordinated marketing approach supported by the AAA. All fourteen AAA Regions have committed to participate in Alpaca Week 2009.

The Industry Promotion Committee has provided templates in varying sizes for the Regions to use in their advertising campaigns. We envisage that Regions, individual breeders or groups of breeders will conduct open farm days, educational events, spinning and product displays during Alpaca Week. Street display posters will be available for providing directions outside properties and smaller posters for display in information kiosks or retailers.

The Committee has also produced a new A5 brochure which includes a reply coupon for potential newcomers to obtain a free enquiry kit containing an Introduction to Alpacas DVD and additional alpaca information. There are also revamped brochures on Most Frequently Asked Alpaca Questions and the children's colouring leaflet.

The theme for the event will be in keeping with the 2009 United Nations International Year of Natural Fibres, which will give the event an international flavour.

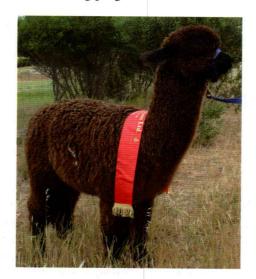
For any further information please contact your Regional President or Sandra Wright at the AAA National Office.

Spring is in the air - the story continues...

by Susan Haese > Yaringa Alpacas, SA

Many people have spoken to me at shows about Spring's story, which was published in the last issue of Alpacas Australia, and have enquired about her progress.

Spring has had a highly successful show career. From August to October, she has been to six shows and has amassed one third place ribbon, four second place ribbons (two of which were won at the AAA Ltd. National Show in Canberra and at the Royal Melbourne Show), before finally winning first place at her last show. Spring will now be shorn and go into our breeding program.



16th AAA Ltd. National Show & Sale

8-11 October 2009 Jubilee Pavilion Royal Adelaide Showgrounds Goodwood Rd, Wayville, SA

Planning is under way for the 2009 National Show and Sale which will be held in South Australia for the very first time. Accommodation packages at motels close to the showgrounds have already been organised and details will be announced early next year.

We hope to see an increase in the number of fleece entries in 2009. the International Year of Natural Fibres. The National Show is the perfect opportunity to showcase this wonderful fibre that we are growing.

Together with our finest animals and fleeces on show, there will be the usual alpaca craft section and the photography section. As well, the art section will make a welcome return to the program next year.

The Saturday night dinner will be at the Hilton Hotel where diners will have the choice of either LaViande or another main (TBA). A theme night is being considered - details will be advised closer to the time.

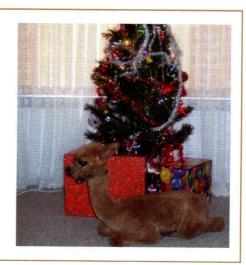
For further information please contact Sharon Warland on 08 8532 3029 or email sharon@waradenealpacas.com.au

Season's Greetings

The AAA Ltd. National Office will be closing for the Christmas/ New Year break on Tuesday 23 December 2008 and will re-open on Wednesday 7 January 2009.

Best wishes for a safe and happy holiday season from everyone at the Australian Alpaca Association Ltd. and Alpacas Australia magazine.

Photo by Lorraine Ivins, Glenoma Alpacas, NSW



Letters to the Editor

20 October 2008

As I have had enquiries about an article that was published in *Alpacas Australia* magazine, Issue 56, page 39, and have been fibre testing since 1988, I felt obliged to give an alternative opinion about some of what was written in the article.

The initial enquiries that I received were about replacing plastic bags with paper bags for storing samples. My advice is that I prefer plastic bags for storing samples, although we do receive some samples in paper bags. The Australian standards for storing samples for testing do not specify any material for storing the sample prior to measuring, but as the Australian Wool Testing Authority (AWTA) has been using plastic bags for the past 40 years for storing samples, you would have to presume they have the experience to select the best material.

My view is that a sealed plastic bag is preferred because it is the best way to ensure the fibre sample arrives in a condition closest to the fibre on the alpaca being tested. While I do not recommend breeders send wet samples, conditioning moisture content in the sample is the responsibility of the laboratory prior to measurement. My concern with paper is that many areas of Australia can have humidity much lower than the 65% Relative Humidity that is recommended for testing and the sample will dry out in a paper bag, hence potentially giving a false lower reading. The aim of any laboratory should be to obtain the correct result, NOT the lowest result.

The section of the article referring to SD used when selecting breeding stock concerned me and the writer's assertion that he opens up a Pandora's Box full of heated debate is true, because he is giving an opinion not from a genetics standpoint. While separation of SD of along fibre and between fibre information is in part correct and we at Micron Man can supply this information if required, I recommend that the overall SD has to be the main factor to look at for breeding selection. It is well known that paddock run sheep flocks exist that have minimum SD change due to environmental variability, and it is reasonable to assume that alpaca fleece could be bred for a similar end point. Imagine the situation explained earlier in the article for growing a superfine fleece with huge environmental effects blowing micron out, to a less valuable average fibre diameter, hence if only selecting for between fibre SD variability, is obviously ignoring other genetic effects.

Wayne Marshall Micron Man Pty. Ltd.,

PO Box 1423, Bibra Lake WA 6965 Phone: 08 9418 1733

Fax: 08 9494 2931

Email: micronman@iinet.net.au Web: http://www.micronman.com.au 27 October 2008

I read with interest the article written by Dr Pauleen Bennett, "Alpaca Owners' Beliefs About Alpacas" in the Summer 2007 edition of *Alpacas Australia*, and noted that more than 35% of respondents to the questionnaire agree or strongly agree that "most alpacas should have their teeth trimmed regularly". I am also aware of a number of alpaca owners and alpaca shearers who use angle-grinders indiscriminately on alpaca incisors and use pliers to snip (break) off their fighting teeth.

The Code of Accepted Farming Practice for the Welfare of Sheep in Victoria, Australia, states that "grinding, clipping or trimming of teeth must not be performed on sheep as a routine flock measure". Electric tooth grinding/trimming of sheep is now one of the prohibited procedures under the Prevention of Cruelty to Animals Act (1986) as sheep do not gain any measurable benefits in relation to grazing ability, growth or fleece production, and the procedure is painful.

The Australian Veterinary Association Policy on Sheep Dentistry states, "The Australian Veterinary Association (AVA) opposes tooth trimming, tooth clipping or tooth grinding in sheep. These procedures cannot be justified or recommended because they have not been shown to benefit the welfare or productivity of the animal." It is likely that these findings apply to alpacas as well, because both species are fore-gut fermenters and chew their cud.

I hope that breeders will seriously try to reduce (preferably cease) alpaca incisor modifications from welfare and ethical points of view. Breeders should aim to breed alpacas with 'good' mouths, where the incisors are aligned with the dental pad. The Across-herd Genetic Evaluation (AGE) addresses the issue under the trait name of 'Bite'. The Australian Alpaca Association Ltd. has addressed teeth in their recently revised Male Certification form as there is now a requirement for owners to declare that they have not modified the incisor teeth of the male which is being certified.

The filing down of 'fighting teeth' is a basic husbandry necessity to reduce trauma to other males and occasionally handlers. Sometimes, the grinding teeth at the back of the mouth (premolars/molars) need filing/removal if an alpaca is not able to grind feed (chew their cud) adequately to maintain body weight.

Jane Vaughan BVSc PhD MACVSc

Cria Genesis

PO Box 406, Ocean Grove Vic 3226

Ph/Fax: +61 3 5254 3365

Mobile: 0428 842 862 (0428 vicuña)

Email:vaughan@ava.com.au Web: www.criagenesis.cc

Latest News from AAFL



New General Manager at AAFL

AAFL has appointed Kaye Sutherland in the newly created position of General Manager. Hailing originally from New Zealand, Kaye grew up on a sheep farm in the far south of the South Island. A move to Auckland to manage an animal talent agency gave her a taste of city life so she headed across the Tasman to Sydney and so began a career in the rag trade. Kaye spent the next 20 years gaining experience in all sides of the industry; from owning stores and a small local manufacturing business making and wholesaling women's fast fashion in Sydney, to working with national and international brands such as Rip Curl and ASICS, as well as a stint with the multinational Sara Lee Corporation and a weekend market business.

In 2000 Kaye moved to the USA, where companies were struggling to find experienced staff in a then booming US economy. This enabled her to gain valuable experience in an international market. Furthermore, with four months of every year spent in Asia sourcing and researching the Asian markets, Kaye developed a broad understanding of the S.E. Asian market and cultures. In 2005 Kaye returned to Australia as she wished to be closer to her elderly parents in New Zealand. Before joining AAFL Kaye was a Divisional Manager at Frontline Stores Ltd., an unlisted public company providing retail services and support to independent retailers throughout Australia. Kaye is excited to be a part of the alpaca industry as she can combine her passion for natural fibres with experience gained in the clothing industry.

New Products from AAFL

Ladies v-neck cotton and alpaca jumpers are expected to arrive in Australia from Peru in early December 08. The colour palette is based on pastels: lemon, blue bell, pink and mint and also includes trusty black.

In stock we currently have Men's cotton and alpaca blend knitwear in crews, v-necks, polos and vests in black, charcoal, navy, red and corn blue, and lemon will be arriving early December 08 in a Men's v-neck jumper.

We have more reversible dufflecoats arriving at the end of February 09. The size range has been expanded to accommodate S to XXL and the colours will be charcoal/cherry, navy and green, brown and beige, black and purple and mid grey and pink.



We have been working on new developments in the suri shawls and there will also be three different tartan shawls produced for winter 09. In the brushed throws two new colour palettes are being developed and some new designs in the Natural Selection throw rugs will also be ready for winter 09.

Fleece news

As this goes to print many growers will be in the midst of shearing or just about to get under way. Some may have many questions about what to do with their fibre and when. We would like to use this opportunity to encourage anyone who has a question or concern relating to their fleece to contact the AAFL office.

At any time of the year we also encourage any grower who would like to visit the classing facility at Sunshine to contact AAFL to arrange a time.

For those growers who are about to shear please remember that fleece bags and packs, both new and second-hand are always available from AAFL. For interstate growers we are happy to post out bags and packs for you via Australia Post with the postage costs usually being very reasonable.

The free freight offer is already proving to be very popular, significantly reducing the transport costs for most growers. For a list of depots please contact either your FLO or the AAFL office for the details. Please remember that all bales being dropped off at depots as part of the free freight offer must be at least 110kg and must be accompanied by a shipping manifest form. The shipping manifest form is available from the AAFL web site or by contacting the office.

In conjunction with the free freight offer AAFL has also established an agreement with our insurance provider where all bales transported from the designated depots will be covered under AAFL's insurance policy. In the unlikely event that bales are lost or damaged once received at the depot, growers will be covered for the value of their fleece. If growers would like further information on this issue please contact the AAFL office.

Finally, due to the success of our Australian Alpaca Connection products and those products of our Strategic Partners, AAFL is always in need of fleece. We would like to encourage all growers to support the commercial side of their industry by supplying as much fleece as possible to AAFL. If you have any concerns about how to prepare your fibre for sale to AAFL please just contact the office. To make it easier for all breeders we have tried to make the preparation of fleece for sale as simple as possible as we understand that most breeders have limited experience handling fibre. However please remember that to achieve the best possible return the fibre needs to be presented in a saleable standard (again, reasonably simple!) as, like any product, the way it is presented can greatly affect its value.

Phone: (03) 9311 0933 Email: info@aafl.com.au Web site: www.aafl.com.au

15th AAA Ltd. National Show and Sale

SHOWING AND JUDGING ARTICLE compiled by Sandra Wright > Australian Alpaca Association Ltd. PHOTOGRAPHY © Cath Norman

The Judges' summaries

From Natasha Clark and Jenny Jackson, Animal Section Judges

The AAA National Show 2008 was an enjoyable experience thanks to our convenor, ring steward, marshalling stewards, committee and all the workers behind the scenes who did such a wonderful job.

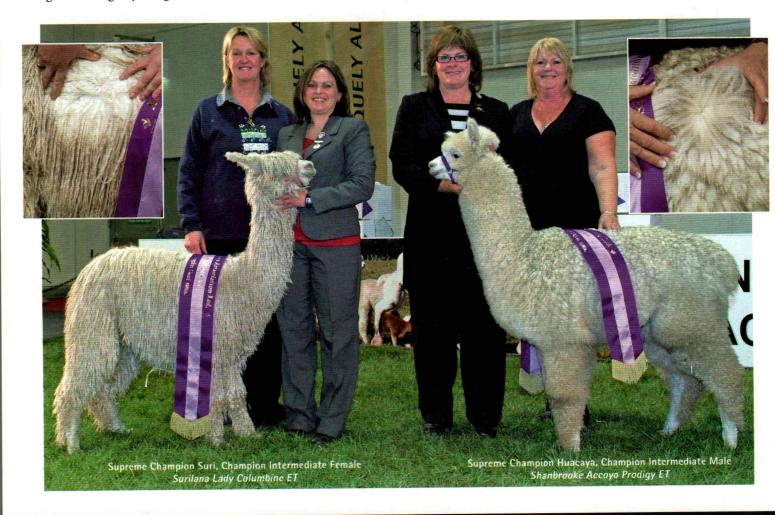
The Suri section was a pleasure to judge with the junior white females setting the standard with so much depth in that class. The high placing suris throughout the show were of good quality exhibiting lustre, density and independent lock structure. The Supreme Champion Suri was awarded to intermediate female, Surilana Lady Columbine ET. She caught our eye as an excellent example of the breed, exhibiting everything we were looking for in a champion.

In judging these classes we noticed that some exhibitors appeared to be using product on their suris that affected the handle of the fleeces in a negative way and we would advise against using anything on them.

Huacaya classes were represented with large numbers from all over Australia, which made our job very rewarding. We were extremely pleased with the quality that was being paraded before us and in the top placings there was very little separating them. Unfortunately, some huacayas appeared to have been washed which affected the alignment and the crimp of the fleece and we would also advise against this practice.

Our Supreme Champion Huacaya, Shanbrooke Accoyo *Prodigy ET* came from the white intermediate male class. This male was not over-prepared and was carrying an abundance of fleece with individual bundles that were highly aligned and growing a long staple.

The Supreme lineup was of the highest quality and all the exhibitors should be proud of the alpacas they are producing.



From Julie Bird, Fleece Section Judge

This year's National Fleece Show consisted of some 173 fleeces including 114 huacaya, 51 suri and 8 commercial fleeces which represents the largest National Fleece Show to date. Judging took place over one and a half days, assisted by an enthusiastic team of stewards under the capable guidance of David Rouse who was the Convenor of this part of the National Show.

The largest number of fleeces entered were in the white and light fawn classes however the coloured fleeces, while small in number, in comparison did exhibit high quality in brown, grey and black, notably with a Reserve Champion ribbon being awarded to a brown fleece in the 18-30 months huacaya category and a Reserve Champion being awarded to a black fleece in the 60 months and over huacaya category.

The Most Valuable Commercial Huacaya Fleece was won by Blackgate Lodge Sundance, exhibited by Blackgate Lodge, which zoomed to first place because it was the finest fleece in this category by quite a considerable margin as well as maintaining a good weight. The Supreme Champion Suri Fleece award was won by Samakien Supernova, exhibited by Samakien Alpacas. This was an outstanding junior fleece of extremely good length for 6 months growth and still not too long for commercial use. This fleece was soft and fine but extremely heavy and not matted like many other suri fleeces in the competition. Supreme Champion Huacaya Fleece was awarded to Forestglen Cavalier exhibited by Forestglen Alpacas and ultimately was also awarded the Bill Plunkett Perpetual Trophy for the Grand Champion Fleece. This was an exceptionally high quality fleece which spilled out over its box in abundance with a striking amount of character and style consistently over the whole fleece.

I thoroughly enjoyed the experience of judging the most prestigious AAA fleece show in Australia.



Supreme Champion Suri Fleece, Samakien Supernova



Supreme Champion Huacaya Fleece, Forestglen Cavalier



Most Valuable Commercial Huacava Fleece. Blackgate Lodge Sundance



Grand Champion Fleece, Forestglen Cavalier

From David Rouse, Fleece Section Convenor

The level of interest in the show results of the 2008 National Fleece Show is a clear indicator of a change in attitude by alpaca breeders to the value of a fleece show to the industry.

The individual score sheet and histogram displayed for each fleece provided a tangible benchmark for those breeders aiming to stay in touch with the advances that are being made across our industry in the quality and character of fleece now being produced.

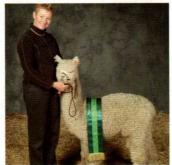
The role of the fleece show as an adjunct to an animal show is about to change. The tide is turning, I suggest, in the emphasis being placed on the value of the show ring animal as against the value of the fleece produced by that animal. After all, we are a fleece industry. Participating in an alpaca fleece show is inexpensive but more importantly participation is a sound management tool.

2009 has been decreed the "International Year of Natural Fibres" by the United Nations. This focus on natural fibre production will provide many and varied opportunities for members to exhibit their fleece. The AAA National Show to be held in Adelaide in October 2009 and the 2nd International Fleece Show at the World Alpaca Conference being held in Cleveland, Ohio, USA in June 2009 are both major events worthy of your participation.

NATIONAL HUACAYA CHAMPIONS



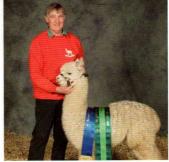
Champion Junior Female Ambersun Pink Diamond



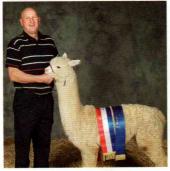
Res Champion Junior Female Andamooka Sarah Louise



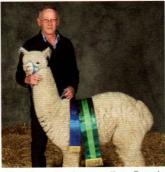
Champion Junior Male Blackgate Lodge Snowmaster



Res Champion Junior Male Blackgate Lodge Suntory



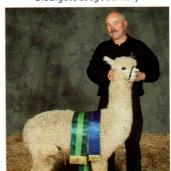
Champion Intermediate Female Adori Nakisha



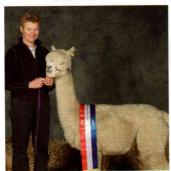
Res Champion Intermediate Female **Encantador Fantine**



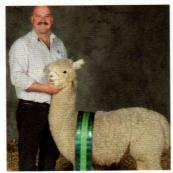
Champion Intermediate Male Shanbrooke Accoyo Prodigy ET



Res Champion Intermediate Male Windsong Valley Snow Prince



Champion Adult Female Ambersun White Tulip



Res Champion Adult Female Ambersun Salvation



Champion Adult Male Banksia Park Pennant ET



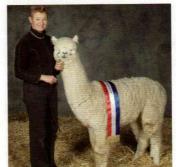
Res Champion Adult Male Softfoot Corroboree



Champion Senior Female Ambleside Sapphire



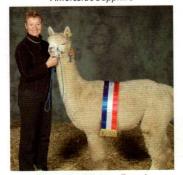
Res Champion Senior Female Eaglewood Courtney



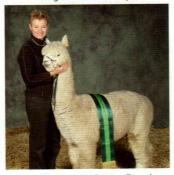
Champion Senior Male Ambersun El Salvador



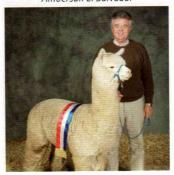
Res Champion Senior Male Elsendale Fernando



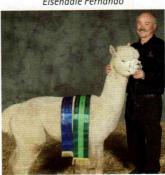
Champion Mature Female Ambersun Peruvian Impression



Res Champion Mature Female Ambersun Prelude



Champion Mature Male Camelot Tor



Res Champion Mature Male Windsong Valley Firedragon

NATIONAL SURI CHAMPIONS



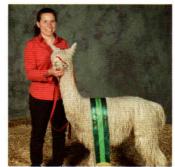
Champion Junior Female Surilana Bellita ET



Res Champion Junior Female Surilana Capriole



Champion Junior Male Surilana Illuminate ET



Res Champion Junior Male Bumble Hill CIA



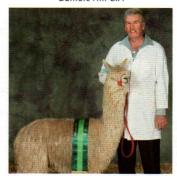
Champion Intermediate Female Surilana Lady Columbine ET



Res Champion Intermediate Female Pinjarra Moon Shine



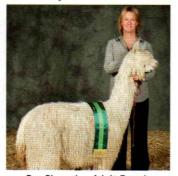
Champion Intermediate Male Surilana Mister Macusani ET



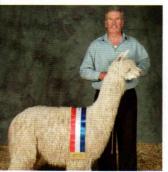
Res Champion Intermediate Male Pinjarra Nile River ET



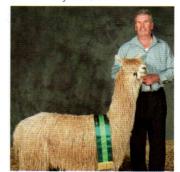
Champion Adult Female Serena Lodge Lady Sueanne



Res Champion Adult Female Surilana Missimo ET



Champion Adult Male Pinjarra Trickster ET



Res Champion Adult Male Pinjarra Quachano



Champion Senior Female Pucara Narrabeen ET



Res Champion Senior Female Pucara Kahuna's Ripcurl



Champion Senior Male ILR Lafite's Peruvian Encore



Res Champion Senior Male Canchones Totem





Sires Progeny Jolimont Warrior



Sires Progeny Surilana Bosisto



AVAILABLE ON THE AAA LTD. WEB SITE

www.alpaca.asn.au

From Heather Dunn, Alpaca Craft Section Judge

It was a great pleasure to be invited to judge the section that I helped to create about five years ago. The craft section adds another dimension to the National Show and I would encourage all breeders to participate to keep this section alive, either as an exhibitor or by spreading the word. Entries were down on the numbers received in the past, but it was still a challenge to judge them and tease out the champions. I was pleased with the finish and quality of workmanship of the ribbon winners and in the end it was a hard choice for the Supreme Champion. I look forward to seeing this section go from strength to strength.



Craft Display



Supreme Champion Alpaca Craft Exhibit by Helen Phillips



Champion Hand Spun Yarn Exhibit by Darrel Laughton



Champion Hand Weaving Exhibit by Annette O'Donoghue



Champion Felted Exhibit by Marilyn Nicholls

From Irene Garner, Alpaca Photography Section Judge

Congratulations to all winners and all those who participated. The message came through loud and clear that alpacas are an enjoyable subject to photograph. As with all photography, those pictures that stood out were the ones that captured a 'perfect moment' by way of interaction, lighting, mood and composition. I enjoy judging the entries that 'tell a story'.

I congratulate those who have given consideration to technical aspects such as detail in the fleeces (especially the darker colours), and focus in movement.



When judging the photographic exhibits the Champion Alpaca Photograph was awarded to Tim Toshack for his sharpness (precise focus) of detail, particularly that held in the highlights of the white fleece; his cropping; overall colour balance and naturally, capturing 'that moment in time'.

Champion Alpaca Photograph by Tim Toshack

The junior entries were a standout with the Champion Junior Photograph (by Brenna Fullard) showing outstanding technical and creative ability. Perhaps we should hand over our cameras to these budding photographers for our promotional photos!



Champion Junior Photograph by Brenna Fullard



Simply put, this was more than a Show...

From Paul Haslin, National Show Convenor

As the team gathered to prepare for the return of the National Show and Sale to Canberra it was uppermost in our minds that this pinnacle event of the alpaca year had to be more than just another show.

In drawing together the elements of all things alpaca that were represented over the four days careful consideration was given to how both exhibitors and visitors could be involved, entertained and informed throughout the event.

The combination of craft, photography and fleece displays allowed an insight into the interaction with alpacas and their purpose whilst the trade displays rounded out the presentation of end product.

Of course, for most of us, as breeders and competitors, the highlight was the alpaca judging, often viewed on the big screen over a cup of coffee, culminating in the final parade of all the magnificent champions and the presentation of the Supreme Championship awards.

Well done to all the exhibitors, the team of tireless stewards and volunteers and our hard working judges of all the various elements. The 15th National Show and Sale was indeed much more than a show.



Parade of Champions

Bidding from the floor, telephone and internet

From John Hay, National Auction Convenor

The torrential downpour on the day did little to dampen the enthusiasm of bidders. The auction comprised of 15 lots, all females of the highest quality. Following a rigorous selection process the auction animals represented the best available in Australia from a wide range of superior genetics. This year's event, in addition to bidding from the floor, included not only telephone bids but also, for the first time, bids via the internet. This enabled some spirited bidding from astute potential buyers in Europe, New Zealand and interstate.

Twelve alpacas were sold under the hammer, with the top price huacaya reaching \$56,000 plus GST. The top price for a suri was \$26,000 plus GST. The average price was \$21,542 plus GST with a gross figure for the auction of \$258,500 plus GST being realised. I think that given the local and international conditions, the results were very pleasing. We had anticipated that the financial conditions both locally and overseas might have had an adverse impact, but this proved not to be the case. The prices fetched confirm that the industry is buoyant and that discerning breeders are willing to invest in quality genetics. That four of the alpacas were purchased by an English breeder confirms that Australia's place in the world alpaca market is well regarded and that our genetics are much sought after.



Top price alpaca Lee Carrow Seventh Heaven with Trevor and Meddwyn Coleman and (centre) new owners Robert Gane and Peter Kennedy

The Marketing Power of a Small Group

MARKETING ARTICLE by Fiona Vanderbeek > Birrong Suri Alpacas, NSW



Start of a race at Rosehill Racecourse

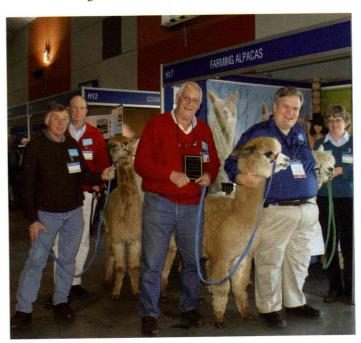
The Southern Highlands Alpaca Alliance (SHAA) was formed when a group of local breeders, who for many years had supported each other by sharing their experiences, decided to work together to promote the industry and encourage and educate new breeders. We clearly share a passion for alpacas, but within the group there is also a diversity of interests – huacaya and suri, white and colours – which we have used to our advantage in marketing the industry to potential newcomers.

Having run two successful on-farm new breeders' workshops (Alpaca Basics and Alpaca Plus) we embarked in 2008 on a phased recruitment and marketing campaign which shows what a group of breeders working together can achieve with relatively little financial outlay.

The campaign began with the decision to take a stand at the NSW Country Week Expo¹ held at Rosehill Racecourse in August, in the belief that this is the sort of public exposure required to raise the profile of alpacas, whilst not necessarily benefiting any one stud or group of breeders. This was the most expensive element of the campaign, but by sharing the cost between the five participating studs it was felt to be a worthwhile expenditure.

Whilst the stand itself was relatively simple – banners, fleece, product and printed literature – the point of difference between ours and all other exhibitors was the presence of four alpacas, penned just outside the exhibition hall on the lawn and directly in front of the racecourse itself.

With two huacaya and two suri in a range of colours on display on each of the three days, the stand not only attracted many visitors but was also the recipient of the award for Best Exhibit in the government and commercial sector.



Best Exhibit Award presentation (I-r)Paul Haslin, Ian Vanderbeek, Mark Garner, Peter Bailey (CEO of Country Week Expo), Fran Haslin

In addition, the appeal of the animals ensured that a journalist from *The Land* newspaper took great interest and subsequently published a piece in their *Farming Small Areas* magazine.

The leaflet which we had designed and printed for this event not only gave basic information about alpaca farming, but also promoted an Alpaca Trail where each of the five studs would be open to the public on a Sunday in September. This was a free of charge event with a mud map to identify each farm and show their proximity to each other.

In the time between the Expo and Alpaca Trail Day a variety of free forms of promotion of the trail were utilised:

- > a press release sent to the local paper, resulting in a farm visit from a journalist who published a full page article with photographs
- > placing an event listing on the two tourist office web sites covering the trail area
- > leaflets dropped at local village shops, produce stores and vets
- > placing an event listing on the local ABC radio web site, which prompted the breakfast show presenter to make contact and undertake a phone interview three days prior to the event

The Alpaca Trail Day involved each stud in nothing more complex than penning some animals and displaying fleeces, product and printed literature, including promotion of the next Alpaca Basics and Plus weekend, to be held in November. The Trail was open from 10am-4pm and each stud had visitors throughout the day, in numbers far exceeding expectation.

Each visitor was asked to complete a Visitors' Book entry, allowing subsequent analysis of numbers attending and which studs were visited by each individual or group. This information also allows subsequent compilation of a useful mailing list for future alpaca events.

Visitor Analysis

- > A total of 25 groups, representing about 50 people, took part in the Trail Day.
- > It was considered by the stud owners that only three visiting groups (each of whom attended only one stud) were purely tourists or people looking for a day out. All others were considered definitely interested in getting alpacas at some point in the future.
- > The majority of those attending the Trail Day had heard of it through the ABC Radio interview or the articles in *The Land* and the local newspaper.
- Within two days of the Trail Day, confirmed applications were being received from potential new breeders wishing to attend the Alpaca Basics and Plus on-farm seminars.

Conclusions

Although the SHAA has held several previous seminars, pen sales and auctions this was the first time a staged campaign such as this had been organised.

It is no longer the case that alpaca breeders can sit back and wait for purchasers to knock on their farm gate. The type of marketing campaign undertaken by SHAA was not aimed at 'quick-fix sales' to uneducated new owners who would subsequently run a high risk of becoming disillusioned with the industry. Rather, we are aiming to identify people looking at setting up their first farming enterprise and considering alpacas as a possibility.

The no-commitment Trail Day offered an opportunity for such people to look around farms ranging in size from 30 to 300 acres and with 30 to 300 alpacas, and to ask their first questions of us as breeders.

Those who remain keen at this stage we hope will then attend the hands-on seminars (with a nominal course fee which covers costs of food and printed materials only) – some will attend both days over the one weekend; others will elect to undertake the first basic day of instruction, then return in six or twelve months to undertake the second, more advanced day.

Recommendations

- > Breeders should seek to work together with others in their area to undertake local promotion and events at a moderate cost to each stud.
- Do not expect immediate results in terms of animals sold – this is about long-term relationship building and the introduction of well-informed new breeders to our industry.
- > Running a staged campaign, with events at approximately two month intervals, keeps potential new breeders interested and stimulated to learn more.
- > This sort of campaign need not be expensive very often the best form of advertising is that for which you do not pay. Seek every opportunity to promote the breed through local media such as press, radio and information web sites.

Note

1 NSW Country Week Expo is a NSW Government sponsored event that is designed to encourage decentralisation by attracting city people to move to the country. The major exhibitors at these Expos include Shire Councils and business organisations located in the various country regions. Similar events, but under different names, are conducted in all of the three eastern States.

Alpacas are Popular at Children's Animal Nursery

INDUSTRY ARTICLE by Sonia Owens > The Farmyard Nursery, Canberra

Two young alpacas, *Glenhaven Tisha* and *Glenhaven Miffy* are proving to be star attractions with children (and adults) who visit The Farmyard Nursery, a new venue in Canberra that hosts school excursions and children's birthday parties.



(I-r) Luka Wakefield and Zac Mayes with Tisha

Located on Mugga Lowline Stud, a working cattle property in the heart of Canberra, The Farmyard Nursery is the Owens family's answer to helping the property through the drought that has seen the family hand feeding their Australian Lowline cattle for the past seven years.

The Farmyard Nursery has been designed to provide city children with an opportunity to experience a glimpse into life on a country farm. Since opening its doors in February 2008 over 1,000 children have visited the Nursery where they learn in a fun, hands-on environment about farm animals and the products they produce.

The alpacas, or 'the girls' as *Tisha* and *Miffy* are affectionately known, joined the Nursery as bottle-fed crias and with daily handling have developed into friendly and affectionate members of the Nursery family.

When not in the barn for an excursion or party they roam happily in a paddock with a variety of other animals, an Anglo Nubian goat, four sheep, a Lowline cow and calf and two Lowline heifers. In the evenings the alpacas can often be seen frolicking with the lambs.

The girls are always curious and interested to meet new additions to the Nursery and have even been seen giving the bunnies (located in the adjoining pen) a kiss on the nose!

Children and adults who visit the Nursery are instantly attracted to *Tisha* and *Miffy* who respond with hums and kisses to their noses that result in squeals of delight. Children who are at first hesitant in approaching the girls soon lose their apprehension, and when they understand not to pat the alpacas on their heads, can be seen enjoying touching their lovely soft coats.

The Owens family has operated and managed its Australian Lowline cattle stud for over 15 years and has a wealth of experience in animal handling and management. In recent years they have also provided a hands-on, work experience facility in cattle handling and husbandry for Veterinary students from Sydney University and for local high schools. The Farmyard Nursery is proving to be an exciting addition to the educational side of their business.

For more information go to www.farmyardnursery.com.au



Managing Risk for Alpaca Business Owners and Managers

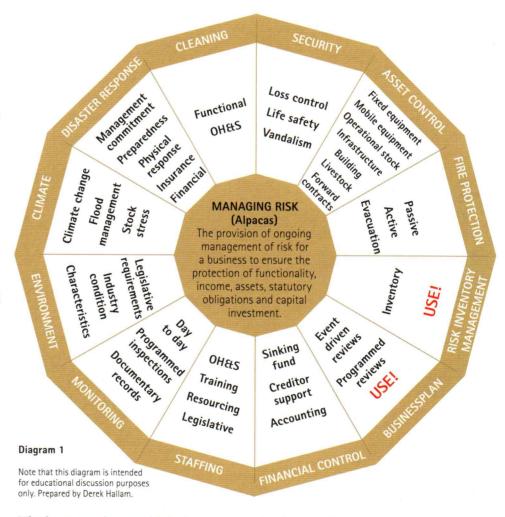
INDUSTRY ARTICLE by Derek Hallam > Facilities and Project Manager, NSW

Whether you call it Risk Management, Business Continuity or some other term, managing risk is an essential element in the management of any business enterprise and must be an integral part of a business plan. For various reasons many people do not like to face it, or think they can deal with issues as they arise. Anyway let me take you through it in a practical way, including a couple of brief examples on breeding and gates, and see if you agree with me that it is an essential tool for business.

The objective of risk management is quite simple; if you know the risk of something adverse happening, you can prevent it: brave, brave words!!! How you second guess the future, to most people, is as difficult as identifying the colour of your next cria. However, if you take it in the proverbial bite sized chunks and in a structured manner, you will be surprised at how many risks you can in fact provide controls for. Nevertheless it is very important to understand that total removal of risk is impossible and we are always into mitigation to some extent.

Recognising this, and if we understand our business fundamentals and the particular risk we are dealing with, we will be in a position to respond to the potentially adverse effects in a controlled way minimizing the effect. If the business owner / manager responds in a planned way this will help them retain control of the situation and help calm and motivate those who implement the response. Having been in the position of having to take control of disaster situations from those who should have been handling it, I have seen the damage to their longer term authority and their own self esteem.

Looking at the extent of understanding of the business I suggest that the most important aspects for virtually any business, from the viewpoint of risk management, are: capitalization, debt, cash flow, assets and operational management.



The business plan would deal with these (and should provide for continuous monitoring to ensure the overall business status at any one time can be understood).

With this knowledge of the business we can move to identifying the aspects under which to consider risks. Diagram 1 shows, listed under primary headings, those I consider relevant to alpaca breeding and fleece

businesses. The extent may seem somewhat daunting but this aspect of risk management is not time consuming and is a wonderful aid to understanding your operations.

This stage, and all subsequent ones, depend on value judgments based on our experience and analytical abilities and if you can get others whose experience and approach you respect to participate so much the better.

The steps that we need to go through are straightforward (in theory if not in practice) and a little flow chart should make this clear except for the stage, "How important is it to take action NOW?" (See Diagram 2) So let's have a look at that aspect bearing in mind my previous comments that we are using our best value judgment.

Identify the category of risk

Identify the risk

What is the LIKELIHOOD of it occurring?

What would be the CONSEQUENCES of it occurring?

How important is it to take action NOW?

What MITIGATION can be achieved?

What risk does this leave?

Diagram 2

In assessing the likelihood and consequences it is probably best to stick with 'low', 'medium' and 'high' ratings and a little matrix is useful. Diagram 3 shows this.

	LIKELIHOOD			
ES		Low (1)	Moderate (2)	High (3)
UENC	Low (1)	2	3	4
CONSEQUENCES	Moderate(3)	4	5	6
CO	High(5)	6	7	8

Diagram 3

Thinking about the likelihood and the consequences it should be possible to identify an appropriate risk box ranging from a 'Low-Low' (I can sleep well) to a 'High-High' (Uh Oh!). This is where it requires some serious thought and a very consistent approach. Bear in mind this is individual business oriented and as such does not require us to meet some externally defined scale. We set our own standards for defining the high, moderate and low and as long as we are consistent we are fine.

I have shown four colours in the matrix which I consider equate to the following levels of action:

Bright red: Like, do it NOW guys!

Dark red: Plan for it NOW and implement it accordingly

Orange: Monitor and decide action at the next review

Green: Monitor and reconsider at the next review

This is a very convenient point to suggest that the management of risk component of the business plan should be reviewed twice a year, or if major changes are made to the business.

So now we know what the risks are, and have defined how important it is to address each one, it is time to look at mitigation. This stage will probably be the most difficult because inevitably there will need to be some trade off between identified risks and other aspects of the business. Whilst others can provide advice, ultimately the decisions must lie with us (or maybe the paid manager should you be so lucky as to be able to afford one). Most importantly we can make a careful and conscious decision and be aware of what risks this may leave us with; it is all about having control in our hands.

On a very practical note, how do we record this process?

When I was at the University of Sydney I participated in a major project to ascertain the risks associated with the many and varied museums and galleries.

For this I developed a computer program to achieve consistency however, in our case, we have no need to do this and I suggest that a hand written document is fine. Keep this in a loose leaf folder with sections structured as I show in diagram 4 but do nicely type the cover and section divider headings. (The logic behind this is that if you need to show this to anyone, for example an OH&S inspector or insurance broker, the structure shows nice and formal whilst the content shows an active working tool).

Updating should always leave the original information, crossed through, and do not forget the value of sketches and photographs to clarify aspects.

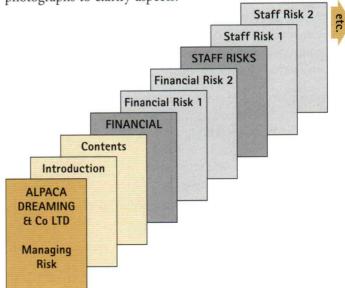


Diagram 4

Examples come from a recent 'caretaking' spell on a property with a rather nice breeding herd of 80 or so alpacas. The first comes from discussions I had with two well established breeders about fleece quality and marketing and gives an indication how risk identification can begin. Below are some notes I made at the time:

- > Change in fibre quality of the life of the animal.
- > Change in fibre quality over the calendar year.
- > High degree of variability between animals.

- > Breeding cycle is relatively open.
- > Colour selection is difficult without 'line' breeding.
- > Short history of breeding.
- > Small scale of the industry and low industry fibre output.
- > Genetic profile due shortly.
- > Natural instinct to roll.
- > Unstable processing facilities.

In thinking of the risks involved with fleeces the following came to mind initially:

- > Am I sure if I am primarily a breeder or fleece producer, or both?
- > Have I projected into my business plan the natural change in fibre characteristics over time?
- > Do I know the genetics of my current animals to enable optimal breeding?
- > Am I monitoring fleece changes both short term and long term and reviewing against my business plan projections?
- > Am I confident I have 'read' the market, both short and long term, against my projected output?

This is by no means a complete consideration but you can see from the list above that specific risks can be identified, for example:

Risk – what happens if the stud male I have used for the past three years shows a serious genetic defect, say heart problems?

Risk – what do I do if my fleeces only give 22 micron fibre for three years instead of my projected seven years?

Anyway, on a lighter note, an example on gates which shows how it could be put on paper.

Whilst caretaking I did the unthinkable and left not one gate but two open! OK so it was raining and howling a gale but I was simply careless and suddenly two paddocks of alpacas became one. After getting them under control and in one place it suddenly hit me – where was the young male in the adjacent paddock? Well actually I had a paddock with some 40 females and their crias and one unexpectedly happy young boy – was he ever!

Diagram 5 shows what I think might deal with me, the caretaker, typed only for clarity in a narrow column. Incidentally WWW? used below simply means "Who? What? When?

Now, to be fair, my friend who owns the place I was looking after had pretty much covered the above WWW? and, as such, the event was largely mitigated by what I had been told or experienced and the outcome was largely my embarrassment.

ALPACA DEAMING & Co Unlimited

MANAGEMENT OF RISK - DATABASE

Category: STAFFING

Risk: TEMPORARY STAFF

Elements: Limited knowledge of property

Limited knowledge of stock

Inexperience

Lack of commitment

Limited contact with manager

(Leave space for extras)

ANALYSIS

STAFFING / TEMPORARY STAFF / LIMITED KNOWLEDGE OF PROPERTY

- · Can lead to stock moved to the wrong area
 - Moderate likelihood low consequences
 - (assumes same sex)
 - WWW? Ensure paddocks are named and 'mud map' of property available.
 - Ensure sub-grouping of stock is clearly defined.
 - Remind yourself that you have developed an instinctive understanding over time that others will not have.

(Always a bit of spare space)

STAFFING / TEMPORARY STAFF / INEXPERIENCE

- Lack of understanding of the speed, strength and cunning of animals.
- Moderate likelihood moderate consequences
 - WWW? Involve staff with some activity to practically demonstrate animal behaviour – not as a 'training' exercise but 'for real'.
 - Ensure first aid needs are clearly identified particularly ensuring all staff have means of contact if injured.

Diagram 5

By way of closing let me reinforce that this is all about us, as owners or delegated managers, gaining and keeping maximum control of a business and along the way maintaining our legal and moral obligations to ourselves, our family and the wider community. It is also about having clear records of our management of risk to help us when things go badly wrong, to show that we really have tried hard, and demonstrate management savvy when looking for cheaper insurance or capital.

About the author: Derek Hallam has spent many years managing operations for large Government and semi government organisations, particularly using management plans incorporating risk profiling to improve performance and accountability and reduce costs. Since retirement he has been bitten by the alpaca bug!

Uterine Prolapse

ANIMAL HEALTH AND WELFARE ARTICLE by Linda Blake > Southern Alpacas Stud, New Zealand PHOTOGRAPHY by Pagan Hayes

A female alpaca who prolapses her uterus can go on to have a normal healthy breeding life, if you take immediate steps to assist her and protect her uterus from dirt and trauma.

A prolapse occurs because the dam keeps pushing after the cria is out. Her uterus then follows the cria. Uterine prolapses are not common in alpaca: in twenty years alpaca breeding here at Southern Alpacas Stud we have seen and/or been involved in only four uterine prolapses.

"My alpaca has birthed her cria and passed her placenta, and now another one is coming out," is the general gist of the phone calls we have received.

This cannot be discounted if twins are involved. A placenta is usually seen as a smooth object, but the inside is textured and red. A prolapsing uterus can look like a placenta that has turned inside out. The placenta may still be attached to the uterus.

1. STOP. Keep your alpaca still.

The uterus is attached at the vulval opening only and it is a heavy weight dragging out of her insides. Try to keep the alpaca calm and in one place to prevent damage to her uterus. The uterus needs to be supported if the alpaca is moved. Call the vet urgently (and more people to help).

2. Protect the uterus. Keep it clean.

This is the inside of the uterus you are seeing - protect it for her future birthings. It needs to be kept moist and clean. If the placenta is still attached, treat it as part of the uterus.

Wrap or cover the uterus with a clean sheet of preferably non-absorbing material, e.g. plastic. Second best is a clean sheet or tablecloth. Do not use pressure.

> If she sits, put a tarpaulin or plastic or something clean and non-absorbing under her to keep the uterus off the ground. Elevate the uterus to the level of the vagina if you can, but not at the cost of keeping the alpaca quiet and still.

> If you have to move the alpaca, you must support the uterus. This is possible by encasing the uterus in a clean plastic rubbish bag, and using strong adhesive tape under the bag and then looped around the alpaca's chest, stuck to the fleece. This helps support the weight and keeps the uterus up off the ground.

3. The uterus will be re-inserted by the vet.

Putting a large uterus back through the small vulva opening requires dexterity and people to hold the alpaca. In the case that I am writing about the owners held and comforted the alpaca at the front and a neighbouring alpaca owner who is also a nurse, assisted the vet, supporting the uterus. The new cria sat kushed, oblivious to the drama.

These photos are of a female who had a normal birth, with no intervention, and no oxytocin. However her previous birth, when she was a first time birther, was difficult as she is obese and she had a lot of internal intervention to get that first cria out.



Restraining the alpaca



Supporting and inspecting the uterus (new cria kushed in the background)



Pushing the prolapse back inside

The alpaca should be comfortable and quiet during the procedure, so a light to moderate sedation may be required at this stage. This will prevent unnecessary movement and straining. An epidural anaesthetic is often not necessary in alpacas.

The uterus is then cleaned with tepid saline and very dilute iodine, the latter only if necessary. This is to reduce the inflammatory response from the uterine lining. Anti-inflammatory treatment (which includes pain relief as well) will be started to reduce swelling caused by the prolapse and the compromised circulation of the uterus, and to reduce inflammation of the uterus.

If the placenta is strongly attached it is better to leave it than to tear it away from the uterus. Proper medication to treat a retained placenta is indicated.

The re-insertion can be done with the alpaca standing, or lying, depending on the circumstances. The main thing is to have the alpaca comfortable and QUIET. On a smaller alpaca than this large one pictured, the hind quarters were elevated to have some gravity assistance for the uterus insertion.

Lubricate the vulval lips and perineum area well to reduce friction. The uterus is massaged back through the vagina, using copious amount of lubricant, and keeping the hands as flat as possible, to avoid perforating the uterus.

The uterus needs to be fully everted carefully. It is important that the horns of the uterus are back in position, which may require the vet to fully insert their arm.



Almost back inside



Checking the positioning internally



Vulva sewn up to retain the uterus and allow urination

4. The uterus must be kept inside.

The uterus normally doesn't come out again after proper re-positioning. Stitching together the vulva will keep the uterus in. In the photo you'll see the bead to stop the stitches pulling through. A gap is left for urination.

If one suspects that the uterus is trying to come out again, as evidenced by uterine tissue in the vagina, or maybe straining against the sutures, then this should be checked by a vet. A female with a uterus prolapsing inside the vagina through the cervix will not be able to get pregnant.

Antibiotics are administered. Oxytocin is given to assist contracting of the uterus to avoid prolapsing.

Clean the female's backside, trimming back the bloody fibre and washing off the blood, to minimize infection and fly attack.

5. Remove the stitches a few days later.

You'll be surprised how quickly the inflammation will go down. Your alpaca should look remarkably normal by the time the stitches are removed by the vet from 2-4 days later.



All finished and ready to walk back to the paddock

6. Mate again.

It is recommended to wait at least three weeks before mating, because of the inflammation. It is advisable to inspect the cervix and vagina to make sure everything is in its proper position and healthy before attempting to mate. Flush if infection is suspected – if the cervix is open and/or pus surrounds the cervix when you view it through a speculum.

The females we have seen with a prolapse have gone on to mate and birth again normally. It can be more difficult to get the alpaca pregnant again, mainly because of the inflammation and/or infection, not because of the prolapse itself. In most cases, uterine prolapses do not recur, especially in younger females.

Common Factors

An alpaca that keeps straining with its muscles after birthing creates the conditions for a prolapse, especially if the uterus isn't contracting properly. Sometimes it is necessary to address the conditions of the inert (non-contracting) uterus by providing the alpaca with some calcium in addition to oxytocin.

Our experience, and our reading, shows some common factors around alpaca uterine prolapse.

- A. Dystocias. Soft tissues get stretched in a dystocia, and may not be able to immediately recover adequately. Oxytocin is administered to help the uterus contract, preventing prolapse, and helping to detach the placenta and prevent infection.
- **B. Prolonged internal work.** Vet assisted births usually have a component in them of prolonged deliveries, which increase the chance of uterine inertia (no contractions), and increase the chance of infection (simply because the vet has inserted their hand and maybe arm). Hence the alpaca needs oxytocin to prevent the conditions for a prolapse to occur.
- C. Physical pulling. It is known that in assisted births of cows, where the calf has to be physically pulled out, that the placenta and uterus may follow.

An alpaca prolapse we were involved with was caused by the physical pulling out of a dead cria.

About the author: Linda Blake is from Southern Alpacas Stud in Christchurch, New Zealand and has extensive neonatal experience. With over 300 births on the farm each year, Linda has gained much hands-on, and hands-in, experience. Linda shares her knowledge, running Neonatal Workshops throughout New Zealand, and writing articles for alpaca magazines and the web. For more educational articles on alpacas, see www.alpacasnz.co.nz

General Alpaca Dental Requirements

ANIMAL HEALTH AND WELFARE ARTICLE by Allison Quagliani > Alpaca Dental Services, VIC

I'm writing this article in response to Pauline Bennett's Research and Development articles printed in the previous three editions of Alpacas Australia. These articles discussed Alpaca Owners' Beliefs and Feeding and Management Practices for their Alpacas. I will refer only to those practices relating to the trimming of the front teeth (incisors).

In Issue 54 it surprised me to read that 35.3% of the respondents believed that "Most alpacas should have their teeth trimmed regularly". Another 26.3% neither agreed nor disagreed with the statement whilst 33.2% disagreed with the statement. I actually fall in with the 5.2% that strongly disagreed with this statement.

In the table (Figure 1) below I show the results of my inspections of the incisors of alpacas in four herds. Most of the alpacas would be female ranging in age from two years old to fifteen years old. Not all of those animals that required trimming will need regular (yearly) trimming.

	Alpacas Checked	Quantity Trimmed	
Herd A	65	13	
Herd B	50	15	
Herd C	36	5	
Herd D	29	9	
Total	180	42	

Figure 1

Whilst it is true to say that some alpacas do need their teeth trimmed on a regular basis, I think that based on this data it is fair to assume that, "Most alpacas shouldn't have their teeth trimmed regularly".

I must stress that teeth trimming is not a husbandry procedure that should be administered to every alpaca, every year; but a procedure that should only be carried out when necessary. Examples of alpacas needing their teeth trimmed can be seen in Figure 2 and Figure 3. Indiscriminate grinding with inappropriate equipment can cause pain and long term damage to animals' teeth. Furthermore this task should only be undertaken by suitably trained practitioners with the necessary equipment.

In Issue 55 it was revealed that 93.9 % of respondents inspected their alpacas' teeth on a regular basis, mostly yearly. This is good practice to adopt as those alpacas that need trimming can then be attended to. Inspecting incisors is something that all owners and prospective owners are able to do for themselves.

It should be noted that alpacas have cheek teeth at the back of the mouth that are not able to be checked easily by a visual inspection. Regular body scoring and observation of the animal whilst chewing will usually provide the strongest indication of any potential cheek teeth problems.



Figure 2



First Export to Canada in 14 Years

INDUSTRY ARTICLE by Raelene Strong > Mariah Hill Alpacas & Exports, VIC

Raelene Strong from Mariah Hill Alpacas & Exports has learnt a lot since being the first alpaca breeder in Australia to earn the honour of accredited and licensed exporter for Camelids in December, 2004.

Raelene, together with her husband Rob and daughter Elise, operates a purpose built quarantine facility in Nar Nar Goon, Victoria specially designed for the easy handling of alpacas and llamas. The quarantine facility has been considered by AQIS to be the best facility for exporting alpacas in Australia. Currently shipments leave on the average of every six weeks, bound for New Zealand, and some then go on to the UK, Switzerland, Belgium, Holland, Netherlands, Italy, Scotland, Ireland, Finland and Norway.

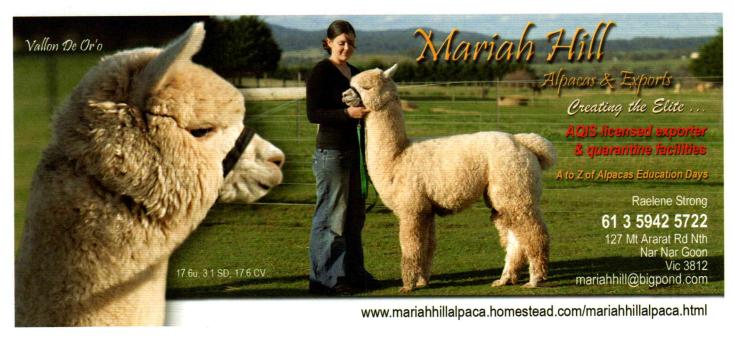
In recent times Raelene has been investigating further new marketplaces and their protocols, to open up new opportunities for the Australian alpaca. At time of writing, after five months of negotiations with the Canadian Quarantine Service, and confirming that all agreed Canadian requirements also met the AQIS and Biosecurity Australia requirements, the first shipment of Australian alpacas to Canada was to commence on 2 September 2008.

The Canadian marketplace is looking for quality, and herd improvers, and is looking at Australia to meet those demands. Many Canadians are watching this shipment very closely, and are eagerly awaiting its arrival in Vancouver on 16 November 2008. A successful export operation this time will see the Canadians confident to buy Australian alpacas in the future.

Raelene has also held talks with potential alpaca owners in China and is working with government officials to get this marketplace established. There are currently less than 200 alpacas in China. Taiwan is another country that is also looking at importing alpacas and llamas from Australia. It is not an easy task to open up these marketplaces as the promotion of alpacas must happen first and there must be firm interest to purchase before the governments will discuss protocols. It is a slow process to get any government to open up a new protocol however once the protocol is written, the exporter may start negotiations with the importing country, with approval of the Australian Government.

Rob, Raelene and Elyse are committed to exporting the healthiest, best presented alpacas overseas. Rob says, "We are opening the Australian alpaca marketplace to all of Australia, so that when you get enquiries from overseas give us a ring or email so that we can advise the next steps".

Raelene maintains the web site at www.mariahhillalpaca.com with links to information on exporting alpacas, with most of your questions answered on these pages. Elyse is finalizing her studies in agriculture and wool classing, specializing in alpaca, and assists in running their alpaca farm of 400 head, managing the day to day tasks of caring for alpacas in a quarantine situation. With the first shipment now in transit but still with a lot of plans and logistics to organize Mariah Hill Alpacas & Exports is looking forward to exporting more alpacas to Canada, with five shipments per year planned.



Norway, a Growing Alpaca Country!

INDUSTRY ARTICLE by Jon Ringstad and Line Werner > Enghaugen Alpakka, Norway

In Norway currently there are approximately 60-70 alpacas and in all of Scandinavia a total of approximately 600, so we are completely in the starting process even if the numbers are growing steadily. We have not yet had any alpaca shows in Norway, but when there are more animals in this country we are looking forward to conducting shows.

In 2006 we started our herd with two female alpacas that we bought from a Chilean import. Our 'herd' has now grown to five females. When the time came earlier this year to shear our alpacas, we were told that the shearer was injured and could not do the shearing. On short notice Chris Williams of Ambersun Alpacas in South Australia came to shear the alpacas in Scandinavia. He talked about the Australian Alpaca Association's National Alpaca Show and recommended us to visit the show.

When we arrived in Australia we visited a show with approximately 200 alpacas in Murray Bridge, South Australia. For us, this was our second alpaca show, the first being in our neighbour country, Sweden where there were 31 animals entered.

After an enjoyable and educational stay with Adrienne and Chris at Ambersun Alpacas, we headed off to the National Alpaca Show in Canberra. It was an overwhelming experience to get into the hall where all the alpacas were kept. Despite the alpacas and the people who were in the hall, there was still a quiet and comfortable atmosphere. It was very interesting to learn how this practical part of such a large show was organized. We walked around and met many friendly and welcoming people with knowledge of the alpacas. Everybody offered advice and information and they were very excited about the joy of starting up with alpacas in an undeveloped market.

If this is significant for you 'Aussies', we can confirm the saying that the 'Aussie' is very friendly and inclusive. We felt very welcome to the show and to Australia. We were also very well received by the Australian Alpaca Association, and were talking with some very helpful people with a lot of knowledge about the alpaca industry. They also had much knowledge of the registration and organization that we in Norway will be able to benefit from, as the 'beginner country' that we are.

The judging of the animals and fleece at the National Show was done in a very professional and efficient manner. Everything seemed very well organized and as audience members we enjoyed this very much. We were surprised, but in a very positive way, that there was a craft section. The auction at the end of the show was also a pleasant experience. We could feel the tension in the air, the men on the floor with their shouting made this a fun experience.

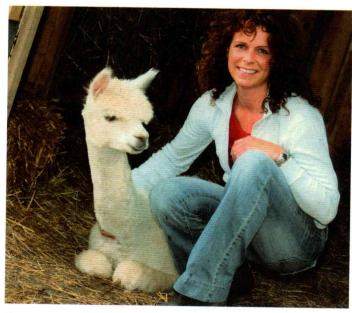
Line also thought it was particularly fun to be the first Norwegian who was 'participating' in the show and was delighted to accompany one of the Ambersun Alpacas' animals into the arena, carrying the lot number.

As for the animals that we saw at the show, we just put our hands in the air to say, "We have never seen such quality alpacas ever!" It was a quality we dream about and will work to achieve also in Norway. In order to speed this process we need some good alpacas to use in our breeding programs! To achieve this, we bought some Australian alpacas while we were there and will gradually buy more. Our goal will be breeding alpacas of high quality, so we are now working to achieve an import/distribution channel from Australia to Norway.

We attended the National Show this year together with other alpaca breeders from Scandinavia and Europe who are also interested in importing alpacas from Australia. The alpaca industry in Scandinavia is entirely in its beginnings, and we, like other 'newbie lands' elsewhere in Europe, will need high quality alpacas to jump start the breeding.

We thank you all for giving us a memorable and interesting stay at the National Alpaca Show.

See you at the National Alpaca Show 2009 in Adelaide.



Line Werner pictured with Benita

Dung Beetles for Alpacas – an R&D Project

RESEARCH AND DEVELOPMENT ARTICLE by Tony Cooke > Tread Softly Alpacas, NSW

Foreword: The AAA Ltd. currently invests a minimum of 10% of membership fees annually into the Research and Development budget, the majority of these funds goes towards our membership of the Rare and Natural Fibres Federal Government funding group. The group has and continues to allocate considerable scientific research into all things alpaca and other natural fibre industries.

The Dung Beetle Project is an initiative of the NSW Southern Region and has been successful in obtaining funding from the AAA Ltd. for initial studies. It is hoped that it may also be able to attract further funding both from the AAA and other outside bodies in the future.

Updates on other R & D Projects will be brought to you in future Alpacas Australia issues.

Carolyn Austin > AAA Ltd Director, Research and Development Chair

Background

Any alpaca breeder knows that alpaca dung is persistent and often needs to be removed from the paddocks to avoid rank areas surrounding the dung piles. Many owners remove and sell the dung or pile it in areas away from the paddocks. This is labour intensive, requires energy and removes potential nutrients in the dung but if it is not collected, it eventually makes the surrounding areas unsuitable for pasture growth thus reducing the productivity of the pasture.

In most places dung is returned to the soil by insects such as dung beetles and this is the case in Australia which has many species of dung beetles. However most dung beetles are specialized for dealing with dung from a particular vertebrate species, many species are active only for certain times of the year and are adapted to specific climates.¹

Alpacas drop their dung in piles and although from the perspective of the beetles, this represents a large resource, it is also a significant challenge because of its concentration and the habit of alpacas also to urinate on the dung piles. So it is likely that one or more of these factors is a reason for the persistence of alpaca dung.

By contrast, native Australian animals for the most part produce dry pellet dung which is randomly distributed across the landscape. Native species of dung beetle are adapted to deal with dry pellet dung and they collect and bury it.

Native dung beetles however cannot easily deal with dung from introduced animals particularly cattle which produce wet non pelletised dung. It would appear (from

the author's observations) that sheep dung may be dealt with relatively easily by native dung beetles because their dung is widely distributed and not urinated upon.

CSIRO over a period of several years identified dung beetles that can deal with cattle dung and have introduced them with great success into Australia.

Thus while it would be expected that native dung beetles should deal with alpaca dung which is dry and pelletised this is not the case, however it is reasonable to assume that because of the diversity of dung beetles around the world that suitable species can be found to deal with alpaca dung. Indeed we already know that alpaca dung can be dealt with in part by some species of beetles. (Refer page 25)

Other benefits of Dung Beetles

In addition to the removal of dung from the surface of the ground, dung beetles have other benefits and the following is a quote on the benefits of dung beetles from the ABC *Landline* Program of 14/10/2007.²

Belinda Pearce, Lucyvale Landcare Group:

"We talk about sustainable agriculture and this is something that's so important to that. Wherever we see dung in the paddock, we have a dung beetle shortage. By bringing the dung down into the tunnels, they're putting fertiliser, the holes, the tunnels helps with water penetration so when it does rain, that water's not running off, it's actually going down the tunnels. They help reduce the flies and they break the parasite cycle by bringing the dung underground and they also improve the water quality".

OBSERVATION OF DUNG BEETLE ACTIVITY

Insect activity in alpaca dung piles at Gunning, Southern Tablelands of NSW

Alpacas tend to produce fairly dry pelletised dung not dissimilar to the dung of many native species such as kangaroos and domestic species such as rabbits and sheep. The dung pellets can be easily separated when the dung is wet but may dry to a compacted mass.

The pellets themselves are approximately 1cm in diameter and they are found to contain a mass of vegetable fibres coated by a tough black skin. It is the author's surmise, that the skin is comprised mainly of mucopolysaccharides.

The photo below shows a compacted mass of pellets which have been partially attacked by insects and a section through an individual pellet. The coating around the pellet is not clear in the photo but can be seen at its bottom edge. The coating is estimated to be about 0.1-0.3mm thick.



Occasionally much wetter dung will be produced which forms a compact mass where the individual pellets are not so distinct. This seems to be diet related and may also relate to animal health issues.

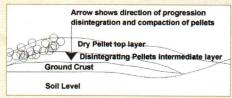
Alpacas urinate on the dung piles and this affects the piles in at least three ways. Deep piles are kept moist to a limited extent and may thereby be consolidated. The skin on the pellets may be opened up by the stream of urine and the pellets disintegrated. The chemistry and the pH of the piles is kept low. The physical changes can be seen in typical dung heaps as shown below.



Aged dung pile with moderately fresh pellets (dark patch at bottom left) weathered pellets with whitened surfaces (band in the centre), disintegrated pellets (centre top), consolidated pellets (various places)

Where dung piles are relatively deep (~7cm or more), they are covered with a layer of dried or drying separate pellets. If the pile is excavated the pellets are found to disintegrate and consolidate to a black moist crust. This material is of a composted consistency and contains the remains of pellets and loosely bound vegetable materials. The consolidated material forms a crust that may be from 2-5cm thick. The crust is usually only loosely bound to the underlying soil. If the entire crust is removed from the pile the underlying soil will be seen to be compacted and moist but shows no signs of any of the dung being buried.

The following diagram illustrates the structure of the dung piles and the next photo shows the earth beneath a dung pile that has been scraped to one side.



Section through deep dung heap.



Dung pile scraped aside to reveal underlying soil. Note the lack of holes indicating removal and burial of dung.

Invertebrates in the dung heaps

Many species of invertebrates were observed in investigation of the dung heaps. In addition to the dung beetles these included

- Ants of at least two species common elsewhere on the property - one small black species approximately 4-5mm in length and one larger brown thorax and black abdomen species approximately 5-10mm long.
- Mites white in colour and approximately 2-3mm in diameter
- Flies very small 1-1.5mm long with body form similar to house flies but on a much smaller scale.
- Spiders at least two species of hunting style spiders similar in shape to the common Wolf spiders but smaller - one species about 10-12 mm long and one 5-6 mm long.
- Springtales white in colour and about 10-12mm long.
- Centipede blood red in colour and about 12-15mm long.

One egg case or pupa of an insect was also

Dung Beetles

Two types of dung beetles were observed, one of which was only present as one specimen and since it was not caught it could not be identified. It was however black and about 12mm long.

The second species was abundant in moist compact lumps of dung described above. The beetles were approximately 4-6mm long, and were found in tunnels in the dung approximately the size of the beetle. They appeared to be feeding in the dung and as indicated above there was no sign that they remove and bury the dung.



Dung pellets showing characteristic tunnels and disintegrated scraps.

As may be seen above the beetles apparently burrow in the dung and eventually assist in the disintegration of the pellets. The fibrous scraps of dung are clearly associated with beetle activity.

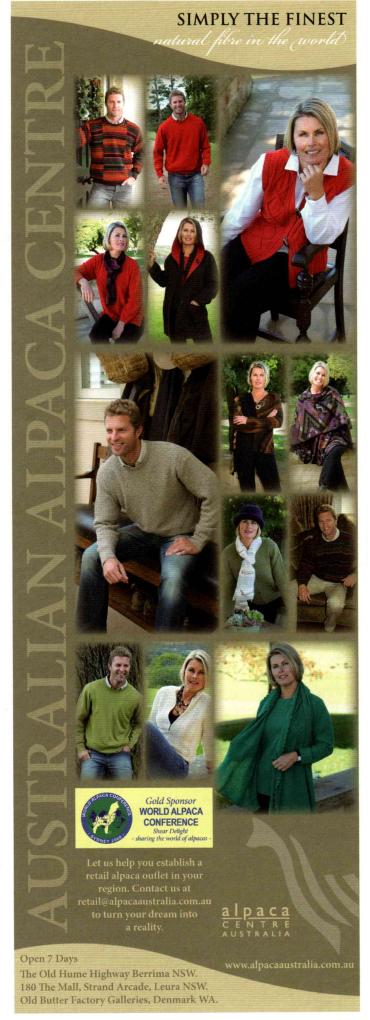
Sufficient samples of beetles were caught and tentatively identified from reference 1 as Aphodius pseudolividus.



Beetle tentatively identified from reference 1.

Summary of Observations

- Alpaca dung is resistant to degradation and remains in the paddocks for extended periods of time (at least 2 years residence seems to be common).
- In this location and during late summer, two species of dung beetles were observed with one being predominant. (tentatively A. pseudolividus.)
- Although moist dung is extensively attacked by the beetles there is no evidence of burying dung by this species.
- Mr Feehan advises that A. pseudolividus is not a true dung beetle and is not a dung burying species.
- Mr Feehan also advises that Onitis glexis has been found burying alpaca dung in the Forbes region of NSW as has Bubas Bison in WA. Members in the NSW Southern Region have also observed Bubas Bison activity.



Dung beetles for alpacas at your farm

The following is extracted from a presentation on dung beetles made at the February 2008 NSW Southern Regional Meeting by Mr John Feehan,³ a former researcher in the CSIRO Dung Beetle Project.

During the presentation it became clear that dung beetle selection is technically complex. Factors that must be considered include:

- Many beetles will deal with more than one species of dung so it may not be necessary to obtain specialised beetles to deal with alpaca dung although this may still be desirable.
- > Different species of beetles are active at different times of the year and therefore several species may be necessary to completely remove dung throughout the year.
- Species are also adapted to particular climates so a range of species that is appropriate to one climate will not necessarily be effective in other climates.
- > Different species deal with the dung in different ways for example some bury the dung, some live in it without burying it and some attach it to grass stems etc. Thus the most appropriate beetle for a particular region may also be determined by the soil type at the location.

Clearly, selection of suitable species for your farm must take these factors into account and our project therefore aims to provide you with the following information:

- > Recommendations for the range of particular species of dung beetles specific to your particular climate or region that can provide year round removal of alpaca dung.
- Detailed methods for you to identify dung beetles already established on your farms.
- > Detailed methods for you to introduce dung beetle colonies to your farm.
- > Methods for you to monitor the performance of your beetles and maintain their populations.
- > Recommended suppliers of beetle colonies.
- > Training and education packages to assist you to introduce and maintain dung beetle colonies on your farm.

Project Outline

We expect that the project will proceed as follows:

Stage 1: Survey and identification of suitable species of dung beetles

Two activities will be undertaken:

- 1. Local survey of dung beetle activity on alpaca farms and
- 2. Testing of identified active species.

We aim to identify species of dung beetles specifically adapted to alpaca dung that are already established in Australia. It will also identify their mode of removal of dung i.e. bury it, attach it to plant stems, cause it to disintegrate on the ground etc. It should also give some indication of the effectiveness of the dung disposal method on maintaining soil fertility and pasture health.

In the event that the established dung beetles prove not to be totally suitable to treat alpaca dung then we may have to consider importing beetles from South America, beetles that are already adapted. Alpacas are native to South America and it is certain that there are dung beetles that are specifically adapted to alpaca dung and indeed literature cited above already confirms this. However, a more comprehensive survey by someone familiar with the literature or with foreign entomologists will certainly give better information. It may be that scientists dealing with this problem in other alpaca breeding communities already may be able to make recommendations of suitable species.

The same considerations of climate, season and mode of action of the beetles will also apply.

There are of course risks in the introduction of foreign species and a proper approach to the problem must be undertaken.

Stage 2: Collection and release of suitable species of dung beetles

Once suitable beetle species are identified then Stage 2 will comprise:

- 1. Collection and (if necessary) importation of such species into Australia and controlled release at specific locations.
- 2. Monitoring of the performance of beetle colonies over the course of several seasons.

The aim of Stage 2 is to confirm and refine the findings of Stage 1 and to determine the necessary information for farmers to implement the release of beetle colonies.

Stage 1 will normally continue during Stage 2 thus Stage 2 may be modified as it proceeds in line with additional findings from Stage 1.

Stage 3: Recommendations, beetle supplies and education package

The final stage will be to implement the recommendations of the research as follows:

- 1. Recommendations for the range of particular species of dung beetles specific to particular climate or region that can provide year round removal of alpaca dung.
- 2. Recommended suppliers of beetle colonies.
- 3. Training and education packages to assist farmers to introduce and maintain dung beetle colonies on their farms.

Timeline

- Stage 1: Should be able to identify at least some effective species within one year of commencement. This will require a combination of both field and literature surveys to identify locally available and foreign species of beetles.
- Stage 2: Will have preliminary results after say, two years from commencement and more defined results each year thereafter. It should be possible to provide some colonies to interested farmers within the first two year period but this is not absolutely certain.
- Stage 3: Could be implemented within two to three years from commencement but is likely to require further time. We estimate that the program will likely require around five years for full implementation.

How can you help?

Your observations of dung beetles, or other insects on your farm in the disposal of dung, are most useful. Please feel free to communicate with the author by email at tonycookeinoz@gmail.com or by phone on 0403 291 359.

Notes and further information

- An indication of the diversity of dung beetle species and their adaptations can be found in "Common dung beetles in pastures of south-eastern Australia", Marina Tyndale-Biscoe, CSIRO Publications 1990, reprinted 2001, ISBN 0 643 050906.
- 2 The Landline dung beetle project can be found at http://www.abc.net.au/landline/content/2006/s2058060.htm
- 3 Mr John Feehan runs a company (Soilcam) to select and introduce suitable species of dung beetles to farms around Australia.



Champion Stud Male.

Camelot Tor, eight times supreme champion. His sons, Blackgate Lodge Snowmaster and Blackgate Lod A daughter, Lee Carrow Seventh Heaven was the hi A few quality females joined to Tor and a small number of both male and female pro



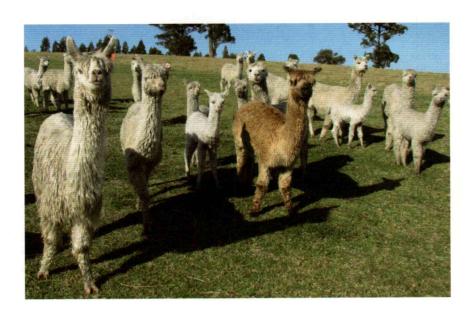
Champion Progeny.

Suntory were junior champion and junior reserve champion at the 2008 Australian National Alpaca Show. t priced alpaca at the 2008 Australian National Sale.

are available for sale. Details at www.flowerdalealpacas.net Ph +613 9827 8255.

Breeding to Purity and Beyond in Suris

SURI ARTICLE by Kaye & Jeff McNeill > Tambo Downs Alpaca Stud, VIC



The Purrumbete suri cross program has for the last two years lived at Tambo Downs Alpaca Stud in East Gippsland. This move was initiated by Jude Anderson and Al Cousill from Pucara Alpaca Stud, who are now running their US alpaca operation in Oregon. We took over the breeding program when we acquired a third share of the herd. The Purrumbete suri cross program began with Roger and Sue Haldane and the late Clive Haldane in 1996 and in 2000 it was purchased by Jude Anderson and Al Cousill of Pucara Alpaca Stud.

On the first move to Pucara there were 53 huacayas, 27 F1 and 3 BC1 and 5 pure suris, plus 2 homozygous suri males.

Following the purchase by Jude and Al, they introduced four homozygous males imported from the US. Fortunately all of these males have confirmed homozygosity for the suri gene and they had the good fortune to put them over so many huacayas and F1 suris. The program is now up to fifth generation, well beyond pure suri, defined as fourth generation. As Pierre Baychelier says in his article in Alpacas Australia, issue 39, page 33, the majority of other breed societies accept 15/16 as pure.

Now in July 2008 the Purrumbete herd is made up of: 11 F1, 11 BC1, 9 BC2, 7 BC3, 5 BC4 females and 6 males of stud potential. No original huacayas are left. We are now up to the fifth generation or BC4s and this has taken 12 years!

On arriving to the fourth generation, there was enough history in front of us to start seriously identifying the lines with propensity of the best suri traits we were looking for. This was done with our own understanding and the guidance of Jude Anderson and Al Cousill.

Over the 12 years particular breeding lines within the herd demonstrating various fleece traits have been established. From these lines the nucleus of the herd has been determined. We have been able to use males to combine these superior traits to link density with fineness, lustre and greasy handle.

It has been the policy of the Purrumbete crossing program to sell off the F1 and BC1 generations, as the herd moves further forward to purity. We have also been vigilant about removing the males from the program to avoid any risk of a huacaya popping up! It is only now that we are closer to achieving purity that we may consider using a male from the program.

As we achieve higher levels of suri gene homozygosity in the females, the fleece qualities have markedly moved from the F1 heterozygous suris in terms of lustre, locking, density and overall type.

The tell tale signs of a F1 suri are generally the fluffy, voluminous type fleece that has no real structure or density to the lock, as well as little to low lustre. Although we have

produced some stunning F1 cria, we also know two pure suri don't always produce the stunning offspring we expect all the time.

It is too easy to forget how long it has taken to produce suri generations to advance a herd. For example, it can take a second cross (BC1) six to seven years to produce from huacaya, considering the original huacaya dam has a 50/50 chance of having a female cria. Then that female first cross has to be mature enough and at about 21/2 years old to have a cria and there is a chance it may be a boy! On top of that we are chasing quality not just generational advancement. It all depends on the quality and the prepotency of the parents we have to work with. This of course applies to all alpacas and all breeding programs.

We have been excited to see no huacayas ever born in the Purrumbete crossing program. It wasn't long before good suri crosses looked phenotypically every bit like a lot of pure suris.

We can all talk about our own herds, but what is unique about the Purrumbete herd? Every suri has originated from a huacaya dam, only homozygous males for the suri gene have ever been used. This is amazing in itself, when 12 years ago many suri males were unproven for the suri gene. It has moved from Bellbrae to Tambo Downs, running as a separate herd. Breeders have the opportunity to see and observe the generations of suri together from great, great grandmother down to fifth generation cria and see the herd evolving. This is unique because it all originated from huacayas, and only homozygous males have ever been used, so that the huacaya gene has never been reintroduced back into the breeding program, as so often can be done if heterozygous males are used.

Using a heterozygous male prevents the terminology of back cross being used as an accurate description. A backcross means a suri is crossed back with only a homozygous male to produce the next generation towards purity. When a

61 3 9887 4107

heterozygous male is used at any stage in a progression of crossing, you can only claim F1, F2, F3 status and not BC1, BC2, and BC3. In this case BC1 is not the same as an F2 because the percentage of suri gene will always be mathematically greater in a herd bred with homozygous males for suri gene in the next generation and then the correct terminology can be used as a B1, BC2 etc.

- $> F1 \times F1 = F2$
- Homozygous suri x F1 = BC1
- Homozygous suri x BC1 = BC2
- Homozygous suri x BC2 = BC3

Too often in the industry, the incorrect terminology is being used to define the genetics of the suri purity. If a heterozygous male is ever used in a breeding program, BC1, BC2 etc. is incorrect and misleading to describe the outcome and does not reflect the true suri percentage of purity because the huacaya gene is being reintroduced and not eliminated. The use of a heterozygous male in your breeding program diminishes the suri gene, and one never knows the degree of suri purity you have in your herd, mathematically.

Some breeders do choose to use heterozygous males for the suri gene, for many reasons known to themselves, but if you want a pure suri outcome, it is a very long pathway to get your end result. It has taken the Purrumbete herd 12 years to reach fifth generation; we just don't have time to delay our breeding goals.

References

- > Homozygous suris in alpaca breeding Dr Pierre Baychelier, Alpacas Australia issue 42, 2003, p30-34
- > What is a pure suri? Dr Pierre Baychelier, Alpacas Australia, issue 39, 2002, p30-33

<u>ADD VALUE TO YOUR ALPACA</u> **Enquire about equipment** suitable for your needs Electric Drum Carders (3 Drum Machines) Hand Drum Carders Electronic Hand Spinners PHONE OR FAX NOW

ERTOEL WHEELS Specialists in: Electronic Spinners and Carding Machines (Hand & Electric) 67 RAHEEN AVE, WANTIRNA, VICTORIA, AUSTRALIA 3152 PH/FAX 61 3 9887 4107 E-MAIL: ertoel_info@connexus.net au WEB SITE: www.ertoel.com

DENISE" ELECTRIC CARDER

A Critical Comparison of Alpaca MAP and Q-Alpaca

INDUSTRY ARTICLE by Bob Kingwell > Monga Alpacas, NSW

The following article has been produced by an independent author, not AAA Ltd Animal Health, Husbandry & Welfare Committee. The views and suggestions expressed by the author do not necessarily reflect the views or recommendations of AAA Ltd. At the present time, Pooled Faecal Testing for Alpaca has not been approved by relevant authorities.

Are you considering an alpaca assurance program and/or a bio-security program for your herd?

Do you believe that Johne's Disease (JD) is no longer a threat to your alpacas?

If you answered yes to either of these two questions then you should read this article.

Are you already in a program but are frustrated by the program's rules and guidelines? Animal Health Australia (AHA) who administers the Alpaca Market Assurance Program (Alpaca MAP) carries out regular reviews of all their Market Assurance Programs. If you answered yes to this third question then, as a stakeholder, it is an appropriate time for you to take a critical look at Alpaca MAP. When AHA conducts its next review you will then be in a position to offer suggestions and comments on how you believe this program could be improved. This comparison between Alpaca MAP and Quality Alpaca (Q-Alpaca) has been written in the hope that it will generate thoughts and ideas within the readers on the possible future direction for Alpaca MAP.

The fundamental difference between these two bio-security programs, both of which are also quality assurance programs, is that Alpaca MAP is administered by AHA and deals only with JD whereas Q-Alpaca is administered by the Australian Alpaca Association Ltd (AAA) and covers a broad range of diseases. Herds cannot enter Alpaca MAP until the whole herd has been isolated and tested negative for JD. This is not a requirement for herds wishing to enter Q-Alpaca. The methods employed by each program to monitor disease are also fundamentally different.

Alpaca MAP has three risk assessment levels referred to as Monitored Negative 1, 2 and 3 (MN1, MN2, MN3) that indicate the number of whole herd tests that the herd has undergone. These levels rely on set frequency biased maintenance faecal testing and post-mortem examinations with specimen testing if necessary, to confirm that a herd remains free of JD. It assumes that the herd may be infected until confirmed otherwise by these tests or examinations.

Q-Alpaca on the other hand is a single level assessment program. It does not have maintenance testing, but requires all alpacas over 12 months of age that either die, from whatever cause, or are euthanased, to have a post-mortem examination carried out by the approved herd veterinarian. This also applies to young alpacas under 12 months old with a history of wasting or diarrhoea that die or are euthanased. Q-Alpaca assumes that the herd is free of disease unless confirmed otherwise by a post-mortem examination.

Both programs have internal auditing procedures to maintain the integrity of a herd's status. Alpaca MAP also has provision for regular external sample auditing of all stakeholders including herds, veterinarians, laboratories and state authorities.

Before a herd can enter either program a Herd and Property Management Plan and a signed agreement of intent must be endorsed by an approved veterinarian. Alpacas must not be allowed to run on land that is being grazed by other Bovine Johne's Disease (BJD) eligible species (cattle, goats, deer and other camelids) unless these species are in the appropriate Market Assurance Program (MAP). There are however differences involving time constraints, the origin and status of the animals and the status of other animals running with the alpacas. I refer you to the references for the details of these differences.

When introducing new alpacas into an existing herd, both programs allow for the immediate entry of animals that are of an equivalent or higher risk assessment level. Both require isolation and testing before alpacas of a lower level can be introduced. Because herds that join Q-Alpaca do not need to be herd tested, these Q-Alpaca animals cannot join an Alpaca MAP herd without first being isolated and tested negative for JD. They do however have an MN1 equivalent risk status for movement purposes only.

Significant changes were made to the Alpaca MAP in 2005 to accommodate those herds that chose to be in both Alpaca MAP and Q-Alpaca. Alpaca MAP herds that also join Q-Alpaca are no longer required to carry out regular maintenance testing and herds are automatically given a status credit to the next highest level (MN1 becomes MN2 and MN2 becomes MN3).

These changes have significantly reduced the isolation time involved when introducing alpacas of lower status. As an example, two or more non assessed (NA) alpacas can now be introduced into an MN2 herd in the time it takes for one set of faecal test results to come back (up to 3 months). This is the same time and the same number of tests to introduce a NA alpaca into a Q-Alpaca herd. Before 2005 it would have taken this long for the animals to achieve MN1 status and then a further two years before the animals would have been eligible for their second test to achieve MN2 status. There is provision for testing after 12 months, but only to align testing with other eligible species that may be running with the alpaca herd. The table below shows the times and tests required to achieve and maintain the different Alpaca MAP levels without Q-Alpaca compared with being in Q-Alpaca.

ALPACA MAP pre 2005 ALPACA MAP + Q-ALPACA post 2005 isolation + negative whole herd isolation + negative whole herd up to 3 months up to 3 months enter at MN1 level enter at MN1, join Q-Alpaca, advance to MN2 then biased maintenance testing every 2 yrs to retain level no maintenance testing 22-26 months later 22-26 months later negative whole herd test negative whole herd test (backdated) (backdated) min. 25 mths (3+22) to reach min. 25 mths (3+22) to reach MN3 MN2 level then biased maintenance testing no maintenance testing every 2 years to retain level 22-26 months later negative whole herd test (backdated) min. 47 mths (25+22) to reach MN3 level then biased maintenance testing

Table 1: Time/testing differences between Alpaca MAP and Alpaca MAP+Q-Alpaca

every 3 years to retain level

It can be seen from Table 1 that, if an Alpaca MAP herd chooses to join Q-Alpaca and also chooses to take advantage of the incentives that this offers, the pre 2005 risk assurances based on time dependent maintenance testing no longer exist.

The original Alpaca MAP, through the use of introductory and maintenance testing, was specifically designed to protect herds from JD and provide levels of assurance that these herds remained free of the disease. The fact that Q-Alpaca and now post 2005 Alpaca MAP + Q-Alpaca do not require maintenance testing means that, were an alpaca to develop JD, it would probably go undetected until the animal showed clinical signs of the disease or died. By this time it could have infected other properties and herds in the programs and the disease would have had time to spread to all states and territories. The disease is usually contracted when animals eat feed that has been contaminated by animal faeces containing the bacteria. It could also be transmitted to healthy animals that ingest contaminated milk products such as colostrum. Alpacas most at risk are travelling stud males. They have the greatest exposure to properties and herds that are not in either program and must rely on the host property's assurances that the mating area is a dedicated area not otherwise used by the host herd.

It could be argued that the Q-Alpaca program has effectively rendered the Alpaca MAP redundant. Q-Alpaca is significantly cheaper to both administer and maintain.





Coach Rd, Strathbogie, Vic | 03 5790 5288 | www.baarrooka.com.au

It has only one risk assessment level and unless new animals of a lower status are being added to the herd, there are no testing requirements. There is also no requirement for external auditing.

In 2005, when Q-Alpaca commenced, there were 169 herds participating in Alpaca MAP. In March 2008, this number had increased to 183, a net increase of only 14 herds. Q-Alpaca on the other hand now has 237 herds (March 2008) participating. These numbers clearly indicate a preference for Q-Alpaca over Alpaca MAP and suggest that, if this trend continues, Alpaca MAP participation will become insignificant as existing participants retire and leave the industry.

Alpaca MAP was developed in the late 1990s in response to an outbreak of Bovine Johne's disease in which 33 alpacas were known to have contracted the disease. Of these 33 alpacas, 15 died with clinical signs of the disease and another 11 either died or were put down and confirmed by post-mortem examination to have had the disease. The remaining 7 alpacas, which initially tested positive to the disease, were later found to be negative and had thus been able to shed the disease. The disease outbreak, which started in the Bendigo region of Victoria in 1993, spread to all mainland states. The last confirmed case was reported in 1996 and this animal subsequently died of the disease in 1997.



Trish Munley 03 5784 3352 0400 099 818

Priestlaw Labradors

- Breeding for temperament, soundness and type.
 - Puppies available for sale.

8

Tyaak Park Alpacas, Broadford

- Best New Breeder 2008 Ballarat Show.
 - Coonawarra Lucifer standing at stud.

It has now been 12 years since the last reported case and the original cause of the outbreak has still not been identified. The first animal to die was an 11 months old male that started showing clinical signs of the disease at 9 months of age. His 7 year old mother also died of the disease, but not before another two young alpacas also died. Whether the disease first infected the cria or the mother is not known, however since the young are more susceptible than adults, it is reasonable to assume that the first animal to be infected was the male cria. As a result of this outbreak we know that alpacas are, under the wrong circumstances, susceptible to the Bovine strain of the disease. We also know that some alpacas have a natural ability to shed the disease.

Although it is unlikely that Johne's Disease currently exists in Australian alpacas, the question which now begs to be asked is, can another outbreak occur in the National herd? The answer is undoubtedly, YES!

The current trend for a rural lifestyle change has heightened the risks of JD reinfecting alpacas. In most cases these lifestyle properties are small by rural standards, are often overstocked, and frequently have a large variety of 'pet' animals including sheep and a milking cow or milking goats. These are JD eligible species and are usually purchased with little or no regard for their risk assurance levels. The risks become apparent when female alpacas are added to this mix. If the females are mated to a visiting male, and adequate precautions are not taken, then these risks are capable of being transported off the property by the male.

Dairy cattle, sheep and goats are extremely susceptible to JD. Different strains of the disease are also known to jump from cattle to sheep and from sheep to cattle. It is therefore expedient that adequate bio-security measures be adopted in areas where these animals are present.

Because the disease is capable of spreading beyond these areas through the movement of animals, it is also advisable that ALL herds adopt adequate bio-security measures. Herd owners that are, or are likely to be selling animals also have a vested interest in participating in a risk assurance program. Buyers will pay a premium for animals from such herds.

The Alpaca MAP and the Q-Alpaca program are specifically designed to be both bio-security and risk assurance programs.

It is strongly recommended that all members participate in at least one of these two programs. The following list summarises the differences between the two programs.

Summary of differences					
Activity	Alpaca MAP	Q-Alpaca			
Administered by	АНА	AAA Ltd.			
Diseases covered	JD	Broad range			
External auditing	Yes	No			
Number of risk assessment levels	3	1			
Entry herd isolation and JD testing	Yes	No			
JD maintenance testing	Yes (voluntary if also in Q-Alpaca)	No			
Post-mortem examination	Yes (if JD suspected)	Yes (all deaths)			

A few years ago alpacas could not freely enter the Western Australian Free Zone unless they had an MN3 risk assessment. Today MN1, Q-Alpaca and alpacas from a Queensland Protected Zone can enter this Free Zone as long as they comply with a range of property requirements and time constraints. This relaxation of entry requirements means that there is now little or no incentive for an MN3 herd to maintain this risk level.

The original MN1, MN2, and MN3 levels reflected the number of whole herd faecal tests that the herds had undergone. It has already been shown in Table 1 that an MN1 herd requires the same number of tests as an MN2 herd that is also in Q-Alpaca. Joining Q-Alpaca has therefore replaced the second test with a post-mortem examination, a requirement although limited that already exists in Alpaca MAP, and the MN2 status has lost its original meaning. It no longer represents a herd that has undergone two whole herd tests.

Rather than the Alpaca MAP having three risk assessment levels, it could simply have two levels; an MN level which would be comparable with the existing MN1 level, and an MNQ level which would be comparable with the existing MN2+Q-Alpaca level. These new levels would more accurately reflect the true risk assessment levels and would greatly simplify the Alpaca MAP Rules and Guidelines. The proposed MN level would require all alpacas to be isolated and faecal tested negative before entering Alpaca MAP and would still require maintenance testing. This testing could be an annual pooled test, if available, of those alpacas either involved in movement off the property or that had run on land used by other alpacas visiting the property. The MNQ level, apart from requiring all alpacas to be isolated and tested before entry, would effectively be no different than Q-Alpaca.

These changes would eliminate the accelerated entry requirements and would simplify the maintenance testing and new introduction's requirements. There would no longer be a need for the 10% rule that allows for the entry of a small number of animals from herds of one status lower, after they have first been isolated and tested negative.

How real is the risk of a future outbreak of JD in alpacas? This is a question that each of you must answer before you can decide which of the two programs best suits your needs. Both are voluntary programs and if you choose to participate in Q-Alpaca there is nothing stopping you, other than the cost, from regularly faecal testing your herd. If or when pooled faecal testing becomes available for alpacas, this will be a cheaper option than whole herd testing. If you then choose to carry out yearly pooled testing of your more vulnerable animals, you will have a quality assurance level for your herd that is better than either of the current programs. Your animals will be monitored for a broad range of diseases, you will have a biased maintenance program for JD and your costs will be kept to a minimum. You will have the best of both programs.

References

- 1. Alpaca MAP Rules and Guidelines of the Australian Johne's Disease Market Assurance Program, 3rd Edition, February 2005 at: www.animalhealthaustralia.com.au/aahc/programs/jd/maps.cfm
- 2. AAA Q-Alpaca Program at: www.alpaca.asn.au/pub/AAA/ga/intro.shtml
- 3. Dixon, R., Q-Alpaca Program Second Annual Report, March 2007.
- 4. Q-Alpaca Bio-security Program Guidelines for Veterinarians.
- 5. Garner-Paulin, E., Animal Health, Husbandry and Welfare Committee, Australian Alpaca Association Ltd. Newsletter No. 55, June 2007.
- 6. Harkin, J.T., Johne's Disease and Australian Camelids, ACVA J14:6-11 (May 1998)

Invitation to subscribe to the **SRS®** Breeding Service

Phone Sue on (03)5474 8144 or Email admin@srsalpacas.com to subscribe, enquire about workshops, herd classing or skin testing.

Details at www.srsalpacas.com



SRS® Alpacas International Pty Ltd

The Royals 2008

SHOWING AND JUDGING ARTICLE compiled by Sandra Wright > Australian Alpaca Association Ltd.

Royal Adelaide Show

by Lea Richens > Councillor, Royal Agricultural & Horticultural Society of SA Inc.

A good atmosphere prevailed throughout the 2008 Royal Adelaide Show. Overall, feedback received from exhibitors, show organisers and from the public was very positive. Exhibitor numbers were most pleasing with 169 animal entries and a record 63 fleece entries. Based upon entries in 2007 and 2008 it would appear that support for the alpaca section has consolidated and the target of between 160-180 alpacas is now quite achievable.

Good weather during judging days and the installation of large fans in the pavilion by the Show Society helped avoid problems associated with sweating and dampness - a great relief for all competitors and alpacas alike. The standard of entries was high, and competition keen. Congratulations to all winners and thank you to all exhibitors for your support and participation. And sincere thanks to all those special volunteers who assisted with stewarding and the myriad of tasks needed to ensure a successful show.

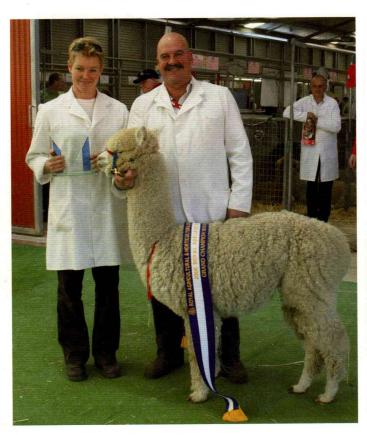
After initial scepticism, the new Composite Classes resulted in a considerable degree of interest. Alpaca exhibits were

first judged in fleece along normal judging lines, and then shorn and the fleeces judged, and finally the alpacas were reappraised once shorn. An added bonus was the amount of interest (and surprise) these shorn alpacas created during the rest of the show. A special thank you to judge, Kylie Martin for taking up the challenge and adding another dimension to the show.

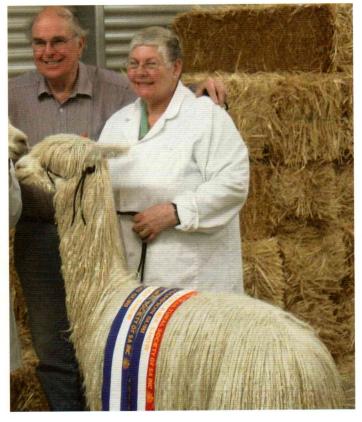
The second half of the show was also well supported by breeders and the alpacas on display were a popular feature. Four shearing demonstrations, again so professionally presented by the Freemandale team, attracted large crowds and a great deal of public and media interest.

Next year, the Royal Agricultural & Horticultural Society of SA Inc. will raise the level of competition for its alpaca section, by running the SA Alpaca Breed and Fleece Championships as an integral part of the 2009 Royal Adelaide Show. As well as the current age and colour championships offered, the show will feature opportunities for Grand Champion Female, Grand Champion Male and for the first time a Supreme Champion.

A warm invitation is extended to all breeders able to meet entry requirements, to be part of this exciting event.



Adrienne Clark and Chris Williams, of Ambersun Alpacas, with Grand Champion Huacaya, Ambersun Distinction ET



Anne Bean with Grand Champion Suri, Ambleside Andante, owned by Lakehaven Alpacas

Royal Queensland Show

by Barbara Mills > Assistant Steward

This year we had wonderful weather and record crowds at the Royal Queensland Show. We were allowed entry for vehicles into the pavilion as a trial this year, instead of off-loading on the street, which went very smoothly thanks to the majority of exhibitors who quickly unloaded their vehicles and animals and exited to allow the next vehicle in.

We had a young student from Laidley State High School, Lance Kirkegaard to help people settle into the pavilion and his efforts were greatly appreciated.

Fleeces: 36 entries (7 suri and 29 huacaya). We had a new prime position this year right near the pavilion entrance and there was plenty of room to display the exhibits in the new lightweight wire baskets purchased by the RNA for the purpose. Next year we will be looking for at least another 20 fleeces to fill the back row so start sorting and cleaning now!

Alpacas: 130 entries (54 suri and 76 huacaya). It is pleasing to see that suri numbers continue to increase in Queensland. Judge Julie Bird and Assistant Judge Helen Fritsch did an excellent job and we got good feedback that the exhibitors were impressed by the detailed description of their animals.

We also had participation from Junior Handlers from Wilsonton Ag Field Study Centre and Biloela State High School. All Junior Handlers performed beautifully and

displayed their animals to their best. It is pleasing to see young people becoming involved in the industry and it is something our Region wants to develop.

Congratulations to Catherine and Peter Bishop of Leranda Ridge Alpacas who won Supreme Huacaya with Leranda Ridge Phoenix ET. Congratulations also to John and Esme Graham with their beautiful female suri, Elysion Micaela who took out Supreme Suri. The Judges were pleased with the quality of the winning alpacas and encouraged Queensland breeders to consider showing at a National level.

The Queensland Alpaca of the Year awards were also announced at the close of the show. Sunline Elegance owned by Jeff and Jill Willis was the Queensland Huacaya of the Year, and Elysion Micaela, owned by John and Esme Graham was the Queensland Suri of the Year.

Thanks to our volunteer members who assisted with the show and to those members who gave their time to man the camelid stand in the John Reid Pavilion.

And finally to the exhibitors who also take time from their busy work schedules, abandon their families, battle traffic with a trailer, work through the logistics of parking, lug all their equipment and present their animals so beautifully (those hours of halter training do pay off!) and to those who 'brave' the sleep at the Ekka – we know it isn't easy at times but you are not only promoting your studs but also the alpaca industry in general. THANK YOU FOR PARTICIPATING!! See you next year.



Supreme Champion Suri Elysion Micaela



Supreme Champion Huacaya Leranda Ridge Phoenix ET

by Geoff Hargreaves > Chair, RASV Alpaca Committee Photos > Cath Norman

At this year's Melbourne Royal, the quality and depth of competition in both suri and huacaya alpacas was repeatedly evident to the observer and from the comments of judges Wendy Billington and Julie Bird.

For the first time, and as a temporary arrangement, facility constraints necessitated holding a separate suri day on Thursday with the huacayas coming in for the weekend. There were benefits from this timetable in the very manageable numbers spread over the three days of judging - 130 suris and the 330 huacayas split evenly between juniors on Saturday and the older animals on Sunday. This led to a much more relaxed event, particularly after the breakfasts cooked by Reg Smythe for exhibitors on their arrival on Thursday and Saturday mornings.

It was obvious that exhibitors had been more discriminating about junior entries in response to requests about penning limits. Entry numbers of juniors were down but there was a greater arrival rate.

Show organizers are always grateful to receive advance notice of withdrawals!

Although the dominance of white animals in number and quality was still apparent, the number of fawn, grey and black animals singled out by the judges is pleasing and encouraging.

The Most Successful Suri Exhibitor was Surilana and Huacaya, Ambersun.

Reduction of the number of fleece entries to about a third of previous years is of concern. Contributing factors included the requirement to mail fleeces for pre-show judging and the National Show preceding the Royal this year rather than the usual reverse situation. Fleeces entered for both shows have usually been collected at the Royal and transported to the National.

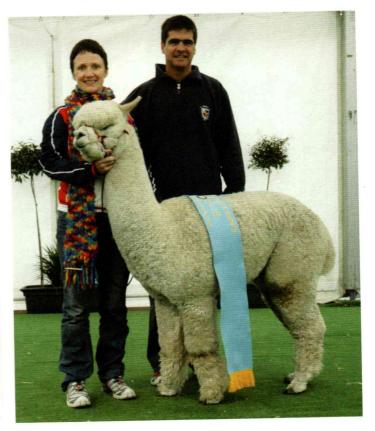
The positive aspect of the early fleece judging was the display of the winning fleeces with the winning sheep fleeces in the Craft Pavilion for the duration of the show. Positive comments on the display from exhibitors, staff and members of the public were very well received. Congratulations to fleece judge Peter Kennedy.

The Junior Handler competition continues to attract public interest and the efforts of Natasha Clark, Jillian Holmes and Mike Snow on Thursday, and, chiefly, Rhys Owen on Sunday added to the enjoyment. We were pleased that Charlie Kat braved the critics to perform in the Junior Judge event under the scrutiny of overjudge Natasha Clark. Charlie impressed with his deliberation and presentation. We would certainly encourage other younger members to enter this important event.

This year was the first Show organized under the RASV Alpaca Committee formed earlier in the year. We thank the members, the stewards, officials and judges and the exhibitors for continuing the success of this major show.



Supreme Champion Suri -Kurrawa Snapshot



Supreme Champion Huacaya Windsong Valley Firedragon

Royal Perth Show

by Barb Game > WA Central Region Marketing Representative

Proving once again that the alpaca industry is very much alive and flourishing in WA, a record number of animals and fleeces entered in the Perth Royal Show this year meant that two Judges, namely Bill Robbins from NSW and Peter Kennedy from Victoria were required to officiate.

The other modification, introduced by Show Convenor Chris Ravenhill and his busy committee, and one which proved to be an excellent move, was to increase the judging days from two to three, with 91 fleeces being judged on day one followed by one day each being dedicated to the 238 Huacaya and 58 Suri entries.

Once again this year, a Royal Show record was set in the Junior Huacaya section with 31 females and 48 males being shown. These record numbers in the Junior age group certainly auger well for the ongoing future of the industry in WA.

Another exciting new innovation which proved to be a very popular attraction with the viewing public was an 'Open Paddock Display' for the final five days of the show which featured not only alpacas but also llamas and camels together with a number of their cria/babies. This allowed many of the onlookers to learn the difference between the three species of camelids.

Supreme Champion Suri Wesuri Alita

The Supreme Champion Huacaya was won by 19 month old male, Rosedeane Sayonara of the Futura Alpaca Stud in Albany.

The judges, who announced at the end of the judging that all those animals who had been judged as champions could stand up to the rest of the nation, had stated on making the award to Sayonara that he had a magnificent fleece which showed consistency right throughout his body.

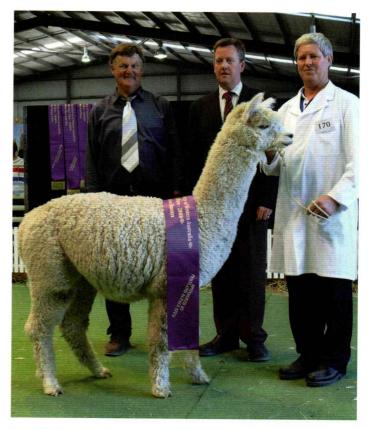
This was born out by the fact that Rosedeane Sayonara was also awarded Supreme Champion Fleece for the 2008 Royal Show.

Wesuri Alpacas of Gidgegannup scooped the 'Suri pool' once again this year with the Supreme Champion trophy being awarded to their 20 month old white female, Wesuri Alita.

On top of this Lorraine James and David Wesley's Wesuri Myth was awarded the Champion Suri Fleece. This alpaca also dominated the 2007 Suri competitions for Wesuri by being awarded Supreme Champion at last year's Royal Show as well as Alpaca of the Year for 2007!

The Best Wether was won by Rosetta Inheritance - this honour also went to Inheritance at the 2007 Royal Show.

Full results of the 2008 Perth Royal Show can be found on the WA Central Region web site at: http://wacent.alpaca.asn.au ▶



Supreme Champion Huacaya Rosedeane Sayonara

by Irina Abbott > Show Convenor

The elements were kind and the Royal Launceston Show was held in sunny weather this year. There were 106 animals entered which was on a par with previous years. Suri entries were down from previous years but there were still some lovely animals representing the best of suri breeding. The Supreme Suri was awarded to *Serena Lodge Lady Sueanne*, a graceful fawn female.

It was pleasing to see some new faces proudly showing off their animals in the huacaya section. There was strong competition in the junior sections with a lesser number of animals in the more mature sections.

The judge, Darrell Bishop from NSW commented that he was looking for an animal that not only was superior in conformation and fleece but also had an indefinable quality of 'presence'. He commented that his selection for Supreme Huacaya of *Serena Lodge Prince Artdale* fitted his image of a magnificent animal who knows he is a supreme winner.

The Champion Huacaya fleece was won by *Jolimont Lawson*, owned by Mossvale Alpacas and the Champion Suri fleece was won by *Kurrawa Just a Rumour ET*, owned by Serena Lodge.





Supreme Champion Suri - Serena Lodge Lady Sueanne

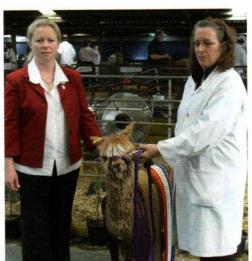
Royal Hobart Show

by Helen Dowd > Show Convenor

The Royal Hobart Show for 2008 was once again a very colourful show held over two days in the Sheep/Alpaca pavilion. It was pleasing that we were able to continue with our preparations for the show following the decision of the AAA Ltd. Board in August. Many breeders would have been extremely disappointed if the show had not proceeded. This was the first year that AAA and AABA entries were judged in the ring together. The atmosphere was great and the rivalry, camaraderie and co-operative assistance between all exhibitors and stewards was very pleasing to see. We had 105 alpaca entries and 26 fleece entries, all judged by Kylie Martin.

Awards were spread amongst breeders with nearly every exhibitor receiving at least one ribbon. It was wonderful to see the expressions on faces of exhibitors when a ribbon was placed on the animal they were presenting in the ring. Some were first time exhibitors. The Supreme Champion Huacaya was won by *Clarence Point Wesley*, owned and bred by Glenn and Jean Bruce of Clarence Point Alpacas. The Supreme Champion Suri was won by *Mareniko Tulip*, owned and bred by Maree and Nick Hamming of Mareniko Alpacas. The Champion Huacaya Fleece was won by *Encantador Peony* exhibited by Mark and Helen Jessop of Mossvale Alpacas. It was regrettable that there were no Suri fleeces entered for this show.





Supreme Champion Huacaya -Clarence Point Wesley

Supreme Champion Suri - Mareniko Tulip

Summer Checklist Your Herd

ANIMAL HEALTH AND WELFARE ARTICLE summarised from Alpacas Australia #54

Note: Normal body temperature 37.5°-38.6°C. Cria can be up to 1°C higher and adults may also rise 1°C.

Heat stress

The potential for heat stress to occur is when the body temperature reaches 40°-41°C and is further exacerbated with high humidity. To determine the degree of risk the following rule may be applied:

- > Temp deg C x 2 + 30 +% Humidity = risk index
- Risk index less than 150 indicates low risk 150-180 indicates hyperthermia is possible 180 is the danger zone

The following signs may be indicative of heat stress

- > Animals can be lethargic and depressed.
- > May be seen panting with their mouths open and nostrils flared.
- May be recumbent and refuse to stand.
- > The central nervous system can be affected; causing depressed mental function and possible convulsions.

Management of hyperthermia

Any animal exhibiting the signs of heat stress requires urgent intervention.

- > Provide shade and thorough ventilation.
- Gently spray with a hose the belly and under the legs.
- Drench with cool fluids including electrolytes (e.g. 'Vytrate' or 'Lectade') to restore electrolyte balance.
- Cool water enema under veterinary supervision.

Heat stress can affect fertility

- > In males it may take 6-8 weeks or more for their sperm count to recover and there is potential for prolonged or permanent damage.
- Overweight males will have large fat deposits in their scrotum that will severely affect their fertility in hot weather.
- > Females can be affected by premature labour, abortion and stillbirths.

Minimize the risk of heat stress

Water

- < Clean drinking water is essential.
- < In hot weather, provide an additional water supply containing electrolytes (e.g. 'Vytrate', 'Lectade'). Ensure water containing electrolytes is removed and replaced every 24 hours.
- < Provide cool ground temperatures by shade or water with the use of sprinklers, soaker hoses, dams and paddle pools.

Shearing

- < Shear at the appropriate time of year for your climatic
- Use a 'snow' or 'camelid' comb to leave sufficient fleece on the animal to provide protection from sunburn and some insulation should the weather post-shearing turn cool.

Shearing cria from six weeks of age during the height of summer can be of immense benefit for the welfare of the cria, however, there is potential for the dam to reject her cria post shearing.

- < Never remove the cria from the dam's eyesight during shearing.
- < Never shear the head or tail area of the cria.
- After shearing, place the dam and cria in a pen on their own until the cria is observed to be suckling.

Management practices

- < Activities such as stud services, feeding and transporting should all be carried out in the cool of the morning or
- < When transporting alpacas in floats, ensure adequate air movement and never park in the full sun.
- < Sensibly manage moving animals from cool or temperate areas to hot locations.
- The time of weaning is also important, as the cria and mother may continue to seek each other and therefore stand out in full sun or run along fence lines.
- Monitor overweight alpacas as a large body mass loses heat more slowly.

Summer birthing and newborns

- < Generally, it is advisable to avoid birthing in peak summer.
- < Ensure that crias keep hydrated by sufficient suckling from dams or supplementation with electrolytes.
- < Crias' small bodies heat up extremely rapidly and with inefficient thermo-regulatory mechanisms during their first few days, they will be at high risk of hyperthermia.
- < Dams can pose a risk to females due to give birth, as females have been known to deliver in or beside dams with disastrous results for the newborn.
- < Around dams, the potential for snakes must also be kept in mind.

Pastures

In humid climates avoid slashing between November and March; the waste encourages the growth of a fungus called Pithomyces chartarum which contains a toxin called sporodesmin that can prove fatal to livestock and especially alpacas. Sporodesmin affects the liver and also manifests itself as facial eczema.

Prescription Mating Helps Us To Get Better ...

FLEECE ARTICLE compiled by **Jeffry Farman** > Flowerdale Estate Alpacas, VIC in conjunction with **Dr Jim Watts** > SRS® Alpacas International Pty. Ltd.

at Breeding for Quality Fleece Improvement!



We go to our doctor for advice to get better. He prescribes the treatment. You take the medicine with confidence and wait for a positive outcome. So it is with using a Breeding Advisor to help us "get better" with our alpaca breeding program. Victorian breeder Annette Woodgate knows because this is the process she has chosen to assist her in her breeding improvements.

In 2000 Annette and her husband Keate bought their farm in Victoria's Yarra Valley as a key step in the retirement process. "I was desperate to live on land with space to move and separation from neighbours, as a total contrast to our previous city lives," says Annette.

She explained, "They were both retail pharmacists with a scientific/medical/retail background. Having had no experience in farming and breeding animals, we needed something to eat the grass, so we bought some sheep. I soon decided I would prefer something with more personality and something I could easily relate to. I suggested to the family that I would like to have an alpaca for Christmas and to my surprise it happened".

"That's when the very steep learning curve began," says Annette. "We were so unsure of which way to go and what were the best breeding decisions to make".

At their stage of life they knew it was important to make good breeding decisions if they were to realise their dream of breeding animals with superior fleeces without taking decades.

Finally in 2004, Keate, a keen golfer was to benefit from a chance meeting with a retired wool classer who recommended talking to Carl Dowd about alpaca fleece. This led to an introduction to Carl's Halcyon Alpaca Stud Manager, Justin Weaver, who is a qualified SRS® Alpaca Breeding Advisor.

Annette became curious about the science based breeding Justin was doing and this led to the purchase of more



"We have been seriously focussed on SRS® breeding for 3 years and are delighted with the consistent improvement across our herd. We are looking forward to skin testing the first of these progeny in a few months when they are 18 months old. We are very grateful for the enormous assistance from our breeding advisor Justin Weaver as we were indeed very nervous beginners." Annette and Annkea

white females. Annette says, "I became fascinated and quite obsessed with improving the white fleeces in our current herd and tried to understand why it was important to match the right male to a particular female". Keate and Annette attended the SRS® workshop, presented by Dr Jim Watts at Halcyon in 2005, and immediately became subscribers to the SRS® Breeding System. With the appropriate skin testing, herd classing and breeding advice it would be the fastest way to improve their fleeces. It was

clear that this method was taking the guesswork out of breeding. With the science background they both had, they thought Jim Watts' breeding approach made complete sense and could not wait to have their animals classed to find the real potential in their herd.

Herd classing sets the benchmark

Many breeders would be aware of the availability of herd classing as part of the SRS® Breeding Service. Many would also be unaware of how it works. Having your herd classed provides a benchmark for mating selections that will help the breeder move more quickly towards his or her goals. Herd classing is available to SRS® Alpacas International subscribers and is carried out by the SRS® Breeding Advisors who work closely with alpaca owners to breed an alpaca with no guard hair and a high fleece weight of fine wool of exceptional quality.

You begin by requesting a herd assessment from Sue Northfield at the SRS® Alpacas International office. When a Breeding Advisor visits your farm, it is the herdsires, females and their progeny that need to be yarded. The herdsires are usually inspected first, followed by their progeny. The progeny can be separated into sire groups beforehand but if this is not possible, the grading system that the Breeding Advisor uses will allow the breeding performance of a particular male to be assessed. The same outcome is possible for a particular female. It is a great help if the owner prepares before the visit, a spreadsheet of the animals with the following information listed – the animal's name, IAR number, subspecies (Huacaya or Suri), sex, colour, sire, dam, date of birth and last shearing date.



The fleece of this alpaca, identified through classing, exhibits many of the desirable SRS® characteristics of alignment, high crimp amplitude, length, lustre and weight.

On this spreadsheet, the Breeding Advisor records additional information about each alpaca that defines its worthiness in an SRS® breeding program. As the key breeding objective is to reduce or eliminate 'guard hair' (coarse, medullated primary fibres) whilst increasing the density and length of wool fibres grown by the alpaca, the Breeding Advisor will grade the fleece accordingly. The grades help define which males should be mated to particular females.

If the fleece grades indicate that a male should be considered as a herdsire, or a female as an embryo transfer donor, the Breeding Advisor may recommend that a skin sample and fleece sample be collected from the alpaca. Laboratory measurements of primary fibre diameter, fibre density and fibre length can be made to determine whether or not these key selection decisions are accurate.

Prescription mating

The fleece grades, plus the additional testing of key animals, provide the information for the Breeding Advisor to allocate matings of females to a specific male. This is often referred to as 'prescription' mating. For example, a female with high fleece production but obvious guard hair may be assigned to a male that has high density and length but also has low primary fibre diameter. And a female with a soft and uniform fleece with little guard hair and low fleece weight could be mated to a high fleece weight male with tolerable, but not necessarily low, primary fibre diameter. In this way, the classing and joining of the alpacas in your herd is geared to producing better fleeces and more consistently.

Annette Woodgate is particularly keen on the term prescription mating as she likens it to her pharmacy experience where the specialist (doctor) prescribes the best treatment for your needs. The result is an improved outcome based on special expertise.

Breeding Advisor, Justin Weaver says, "Prescription mating is about using the right macho for the job. This year's annual classing at the Woodgates' farm demonstrates the power of using the best techniques available. This depth of quality is rarely seen in alpaca herds. Young machos are emerging with a **new** type of fibre that has a unique handle, density and growth rate".

Written reports on the assessment

The Breeding Advisor will send you a herd assessment report that lists the breeding decisions that have been made, including the skin test reports that were recommended. This process occurs each year so that your alpaca program is designed, implemented and assessed in an ongoing, professional way. A great benefit of this process is that the Breeding Advisor knows which herdsires across Australia have tested well and have performed well in different herds and in different environments. This allows the Breeding

Advisor to recommend with confidence (and complete impartiality) to you the outside sires that you may wish to purchase or lease for your breeding program.



Following the classing of your herd you receive a written report that identifies alpaca of special significance for a breeding program including any potential herd sires and ET donors.

Rapid improvements

Rapid improvements in fleece quantity and quality are occurring because clear cut, subjective as well as objective procedures are being followed. Choosing a sire with the combination of minimal guard hair (low primary fibre diameter) and high levels of fibre density and fibre length is critically important. If we get this decision right, the quality and quantity of the fleeces produced by the offspring can improve quickly, even from dams with poorer quality fleeces.

Sire status is confirmed provided the male reaches the measured standards for primary fibre diameter, follicle density and fibre length. The Breeding Advisor will collect a skin sample and a fleece sample for these measurements to be made.

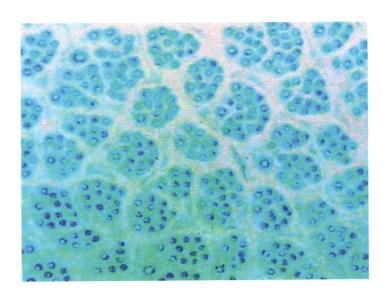
For a tested male to be accepted as a herdsire, it must reach the following minimum standards:

- > mean primary fibre diameter of less than 35 microns.
- > follicle density of at least 35 follicles per square millimeter.
- > fibre length of at least 0.35 millimetres per day for animals under four years of age.

These minimum standards are derived from a database of follicle and fibre measurements of alpacas tested at the SRS® laboratory. The standards will be raised over time, as progress is made and based on new data received from alpacas that qualify as herdsires.

Joining strategies

Males with primary fibre diameter below 30 microns and wool follicle densities above 40 follicles per square millimetre are classified as WOOL sires. If the WOOL sire is outstanding for frame and bone as well, it can be joined to any female in the herd; otherwise avoid joining the sire to females that are small or light boned.



A Wool sire with a skin test (magnified view under the microscope) showing a high density of wool follicles and fibres of uniform and fine diameter.

Males of outstanding body growth, libido and testicular development with slightly lesser values for follicle and fibre traits (primary fibre diameter below 35 microns and follicle density between 35 and 40 follicles per square millimetre) are classified as FRAME sires. FRAME sires are joined to females lacking growth rate and vigour.

What are the eventual improvement goals?

The objective is to breed adult alpacas that have:

- > fleeces of less than 17 microns in diameter.
- > primary fibres finer than the secondary fibres.
- > follicle densities above 85 follicles per square millimetre (about twice the current level for alpaca).
- > fibres that are smooth cylinders of uniform size and high elasticity and totally free of medullation.
- > fibres that grow in length at a rate of at least 0.70 millimetres per day or more and maintain this length throughout much of the animal's life (about twice the fleece length of current alpaca).

At about 17 microns, medullation reliably disappears from both primary fibres and secondary fibres. If the primary fibres are finer than the secondary fibres, it is easier to select for very high levels of fibre density which in turn positively influences the fineness, softness and 'life' of the fibre.

So, if it is about time you had a check up for your herd, maybe prescription mating is for you. Further information can be obtained from Sue Northfield at the SRSAI Office on 03 5474 8144 or *admin@srsalpacas.com*

Next issue: A follow up article on how the skin testing process is carried out and how to use the written report to select appropriate males for your breeding program.

Protecting Livestock From Bushfires

ANIMAL HEALTH AND WELFARE ARTICLE summarised from Alpacas Australia #54

Bushfire preparedness

Being prepared is a key to minimising the impacts of fire on your property and livestock. Take measures to reduce the fire hazard on and surrounding your property. Ensure that any firefighting equipment you intend to use is adequate and operational and that emergency plans are in place.

Protection of livestock

In particular, stockowners must have in place a plan for protecting livestock.

Some considerations include:

- Know the best places where livestock can be moved to aim to have yards, ploughed paddocks or other relatively safe areas available. The perimeter of the paddock should be either ploughed or graded to prevent the spread of fire into it. This area should be as close to the home as possible so that it can be monitored regularly and should have a dam and sprinkler system. Consider access to these 'safe' sites during a fire event and have an alternate access point to these if one is cut off. It has been demonstrated that lucerne paddocks are effective as a safe haven for livestock during fires.
- > Have equipment readily available for cutting fences to allow trapped livestock out in emergency situations.
- If warning is given early enough, consideration to transporting stock to a safe place should be considered. Consider what impact this will have on any quality assurance program that you administer on your property. Wherever possible, make special arrangements to maintain your stock's status and market access.
- > It is important to have fodder reserves at hand or at least know where fodder can be accessed quickly. If all pasture is lost it is important that emergency reserves are available to maintain livestock.
- Water will be vital for livestock and firefighting. When establishing waterpoints be wary of running poly pipe above ground as it will burn in fires and cut off valuable water supplies.

Nursing burnt livestock

Animals that are injured should be placed in a 'hospital' paddock or yard where they can be inspected regularly and nursed.

Points to consider and ensure are:

- > Place stock on the softest, most level ground available, especially if their feet are burnt.
- Provide ready access to good-quality feed and water. Burnt animals are reluctant to move and usually do not feed for a few days. They should be given high-protein feeds such as good lucerne or meadow hay.
- > Inspect animals often enough to ensure they are able to move to water and drink. Animals which are unable to drink should be euthanased.
- Try to provide access to good shade.
- > Check all animals regularly for signs of flystrike, both on burnt areas of the body and on the feet, and treat if necessary.
- > Remember to control worms especially after rain.
- > Some animals may benefit from long acting antibiotics to treat secondary infections - seek Veterinary advice.

Re-examine and reassess stock daily for at least a week after the fire and then 2-3 times weekly for a further 2-3 weeks. Particular attention should be given to mobility, inappetence and development of respiratory signs.

Useful web sites

- > NSW Rural Fire Service (RFS) www.bushfire.nsw.gov.au www.rfs.nsw.gov.au
- > Country Fire Authority www.cfa.vic.gov.au
- > South Australian Country Fire Service www.cfs.sa.gov.au
- > Fire & Emergency Services of Western Australia www.fesa.wa.gov.au
- Tasmania Fire Service www.fire.tas.gov.au
- Queensland Rural Fire Service www.ruralfire.qld.gov.au

Acknowledgements

- Simon Oliver
- Graeme Eggleston, Director, Emergencies & Strategic Response, Orange
- Luzia Rast, Senior Regional Animal Health Manager, Surveillance & Biosecurity Operations, Wagga Wagga
- John Bowler, Former Senior Agricultural Protection Officer
- State of New South Wales through NSW Department of Primary Industries 2006
- Emergency Management Australia
- Australasian Fire Authorities Council and Country Fire Authority

Breeders Come Together For Showcase

SHOWING AND JUDGING ARTICLE compiled by Deborah Patti > Convenor and Victorian Central Region Marketing Representative

Organisers of the 2008 Victorian Alpaca Colourbration event 'pulled out of the hat' all they could to put on a showcase event and participating breeders were not disappointed.

Hosted by the Victorian Central Region of the AAA Ltd. for its fifth year and second year at the Bendigo Exhibition Centre, this year organisers also met the challenge of sharing the venue with 300 sheep and 35 sheep breeders participating in the Australasian Dorset Championships Show & Sale. The combination worked well and brought two major industry events together.

The concept of Colourbration was introduced to enable coloured alpacas (which normally compete against white animals for Championship status) to be judged for Championship status within their own colour groups and to enable breeders to receive appropriate acknowledgement for their breeding efforts and contribution to the industry. Colourbration is now regarded as a very important event on the showing calendar and is growing with intense popularity every year.

Each year the Victorian Colourbration event has raised the bar and this year was no exception. As a 'stand alone' event (not governed by an Agricultural Society), Colourbration enables the organising committee to look at new ways to offer participating breeders more than just another show. This year's focus was to (1) provide maximum showing and marketing opportunities for all breeders (whether large or small, coloured or white animals); (2) bring together new breeders with experienced breeders in an environment that truly encourages learning, networking and camaraderie; and (3) introduce and demonstrate to the general public and other industries the strength and opportunities available through the Australian alpaca industry.

We were fortunate to have two very experienced and capable judges, Lyn Dickson (NSW) and Steve Ridout (VIC). Working well together, they processed through the extensive line up of animals to produce 11 Supreme and 2 Best winners. Under the watchful eye of Chief Steward, Ken Haines judging commenced on time both Saturday and Sunday and concluded at a very respectable time of 3pm on Sunday. Also, to ensure the presentation of all awards to the 11 Supreme fleece winners and in turn give appropriate recognition to the respective fleece exhibitors and fleece show sponsors, Steve judged all the fleeces on Friday with the assistance of Fleece Steward, Rod Sales and his small group of helpers.

What Colourbration offered in 2008

Everything introduced or done at this year's event was as a result of feedback from last year's participants and every effort was made to implement their suggestions. New initiatives included:

Sale & Stud Catalogue - Although the show was held on 12-14 September, the event actually commenced in July and August with the release of a Sale Catalogue to assist breeders with sale of their animals in the sale section of the event. Selling opportunities are still ongoing with the inclusion and regular updates of the electronic version listed on the event's web site www.alpacacolourbration.com.au



- Web site Launched early June and created as a marketing tool to (1) help link breeders with the event, (2) improve communications on event activities, (3) provide participating breeders with a number of marketing opportunities, and (4) provide a direct link to general public and potential newcomers to the industry.
- > Full Complement of Shows Colourbration offered 12 animal shows and 11 fleece shows with representation in every show. 365 animal entries and 96 fleeces entries were received. A special section was introduced where three classes were offered for Fancy Suri.
- > Parade of Champions Showcases on the web site, photographs and details of all Supreme winners and acknowledges winners and sponsors.
- > New Breeder Encouragement Award This award was introduced for the first time to both Huacaya and Suri breeders new to the industry since 2003. Fifteen new breeders registered for the award which collectively represented 55 of the total animals entered. Congratulations to:
 - New Huacaya Breeder Hans & Margaretha Van Poppel of Joma Alpacas
 - New Suri Breeder John & Karyn McLaughlin of Lowanna Alpacas
 - Youngest Breeder A special award, 'Youngest Breeder, Victorian Alpaca Colourbration 2008' was presented to Grace Hardie (pictured below) aged 10, of Hardie Park Alpacas. Young Grace sold her own cows in April to buy five alpacas. She registered her stud name with the Association in May this year and Colourbration was her first alpaca show.
- > **Trade Displays** This year's event attracted 16 trade displays providing a balanced combination of stud displays, industry products and services, craft demonstrations, and non-industry products.
- > Living with Alpacas For the second year, by request, the Living with Alpacas media slide presentation ran continuously during the weekend bringing the 'Farm to the Show'.



- > Sponsorship Major sponsors included MillDuck Alpacas and Wyterrica Alpacas which jointly represented the Huacaya section of the event and Surilana which represented the Suri section. Of the 23 individual shows, only 22 were offered with sponsorship packages with 20 being secured. All sponsors were offered extensive 'added value' showing and marketing opportunities with their packages.
- > Full Catering This may seem an unusual aspect to highlight but the 'seasoned Showies' will understand. Quality, wholesome food was available on site continuously for breakfast, lunch and dinner and available to everyone from Friday afternoon through to the conclusion of the event on Sunday afternoon. No one missed out on a good feed!

The Victorian Alpaca Colourbration Spring Carnival provided opportunities for everyone who participated and from all reports was a resounding success. Plans are already in motion towards next year's event. Breeders should also regularly visit the web site for new updates.

Deborah Patti, with support from her partner Jack Swan, passionately took on the role as event coordinator after falling into the position early in the year. Deborah, first time Show Convenor with no professional experience organising major events or in marketing, is also a new breeder to the industry. Deborah and Jack were introduced to the Association in 2004 and Deborah understudied under the watchful eye of Jill Short, former Suri breeder and previous owner of Surilana, before establishing their own stud Esterlina and purchasing four Suri females in 2006.

At the 2006 Colourbration event, held at Lancefield, Deborah recognised the importance and potential of the event for both breeders and the industry. She also believed that the quickest and best way to learn about the industry was to actually become actively involved in it – not realising where she would end up or where it would take her. Not being a person who stands on the sideline she offered some suggestions (with solutions). Before she knew it she was assisting the 2007 event committee. As Show Convenor for the 2008 event, Deborah said, "I have never before taken on anything so challenging as this, but the journey has been one of the most enjoyable and rewarding experiences to date. I have learnt so much. I also had an excellent team working with me and I am so grateful for their support. Without them and their similar passion and commitment, the event would not have been the same".

Everyday in the preparation, Deborah looked at the show from two angles: (1) from an organiser's perspective running a major show under AAA show rules and ensuring it met all showing requirements; and (2) from a breeder's perspective where maximum showing and marketing opportunities should exist for all participating breeders. Wherever possible she would ask, "As a breeder, what would I want and will it benefit all participating breeders?" and, "As a Show Convenor, can we do it?"

If it did benefit all breeders, we ran with it. If we weren't sure, we gave it a go anyway.

Deborah has indicated that she also wanted to show what could be done to help breeders when we all work together to promote the industry, for the event to have a festive feel about it and if possible have everyone come away better from the experience.

Poisonous Plant Profile

ANIMAL HEALTH AND WELFARE ARTICLE by Elizabeth Paul > Erehwon Alpacas, VIC

Castor Oil Plant

The castor oil plant is the source of commercial castor oil, extracted from the seeds, which has been used as a laxative for centuries. Castor oil plant is native to Asia and Africa. It has previously been cultivated as a garden ornamental for its striking foliage and interesting flowers. In urban areas, castor oil plants are usually found in wasteland, disturbed ground, or factory corners as in Photo 1. In bush or farming areas, it likes moist situations such as gullies, and breaks in native vegetation.

Removal of mature plants results in massive regeneration of seedlings, which grow rapidly and can form dense stands along edges of bushland, preventing bush regeneration.

IMPORTANT NOTE: Two castor oil seeds can kill an adult if swallowed. They are extremely dangerous for children.

Species: Ricinus communis

Fam: Euphorbiaceae

Plant description

The castor oil plant is a straggly, multi stemmed shrub, which can grow to over 2 m in height if supported by a fence or wall. The long stemmed leaves are large, glossy green, and divided into finger like extensions. Because of this, the plant is sometimes called Palma Christi, or the Hand of Christ. The leaves have an unpleasant smell when crushed. On some plants, the stems and new leaves can be a rich reddish or even purplish colour. Male and female flowers occur separately on the flower stalk, with the yellow male flowers below the female ones. See Photos 2 and 4.



Photo 1: Typical urban location



Photo 2: Flower stalk



Photo 3: Young capsules



Photo 4: Parts of Castor Oil Plant

The capsules containing the seeds are round and spiky when young, becoming dry and woody when mature. The seeds are smooth, shiny, greyish and attractively marked with black stripes and splotches. The name Ricinus refers to tick like, as the seeds are said to resemble engorged ticks. See Photos 3 and 4. When touched or jolted, the dry capsules can explode, hurling the seeds several metres away.

Poison parts

The flowers and leaves are very poisonous, the seeds extremely so. 2-8 seeds can be fatal if swallowed, and they can also be a skin irritant. Sometimes the effects can be delayed from several hours to several days after ingestion. They are especially toxic for children, who may find the pretty, shiny seeds and exploding capsules attractive to pick up and play with. The force of explosion could also cause eye injuries.

Human symptoms include a burning sensation in mouth and throat, nausea, vomiting and gastric pain, bloody diarrhoea, cramps, thirst, followed by high temperature, skin turning blue, convulsions, coma and death from respiratory and cardiac failure. Toxins include ricin and ricinine.

Stock poisoning is rarely reported, no doubt because of the bitter taste. However, because of their poison potential and noxious weed status, castor oil plants should be removed from garden and farm areas, with follow up treatment of seedlings. (Stock should not be allowed to graze sprayed plants). Gloves, goggles and even a mask might be required

for handling. Mature seed heads may need to be carefully bagged and cut off before removing the rest of the plant, to reduce seed spread. Any free seeds or fallen capsules should also be bagged up and binned.

Status

Noxious weed.

Similar Species

Fatsia, or Japanese Aralia has somewhat similar large green, divided leaves. However, it has clusters of small white flowers, and berries which ripen from green to black, similar to ivy berries, to which it is related. It is more likely to be grown as an indoor pot plant in colder areas. The berries are poisonous.

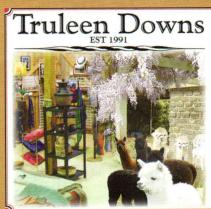
References

- Pretty But Poisonous. RCH Shepherd 2004, RG & FJ Richardson, 2001.
- > Field Guide to Weeds of Australia. Charles Lamp and Frank Collett. First published 1976 reprinted 1984 Inkata Press, Melbourne.
- Bush Invaders of South East Australia. Adam Muyt. Published by RG and FJ Richardson. Meredith, Victoria. 2001.
- What Indoor Plant is That. Stirling Macoboy. Summit Books. Published by Paul Hamlyn Pty Ltd 1976 Sydney.
- Environmental Weeds A Field Guide for SE Australia, Kate Blood, 2001. CH Jerram & Associates - Science Publishers Victoria.

Business Card Directory

BUSINESS CARD ADVERTISEMENTS MONO: \$112 PER ISSUE OR \$90 PER ISSUE FOR 3-ISSUE BOOKINGS COLOUR: \$133 PER ISSUE OR \$110 PER ISSUE FOR 3-ISSUE BOOKINGS





- ALPACA SALES
- PACA SHACK GIFTS
- BED & BREAKFAST
- SILK-PHOTO & ART GALLERY

Open by appointment Coach Tours Welcome Enquiries please phone

03 5197 7488 0428 558 909

78 Banks Road Gormandale VIC 3873 truleen@net2000.com.au www.truleendownsalpaca.com.au

\$(NZ)250.00



Herd management software for Windows

- Record animal details
- Record paddock and show details
- Schedule up-coming tasks
- Track the progress of Matings (incl. ET)
 Create AGE Trait Recording Spreadsheet
- Identify common ancestors

Use it free for up to 5 animals Visit www.epsilon.net.nz/alpacamanager.mv for more details **Epsilon Computer Services Ltd** PO Box 39, Martinborough, New Zealand Phone +64 27 247 7584 or eMail info@epsilon.net.nz



OLYMPIC TRAILERS FLOAT MANUFACTURERS

SPECIALISING IN THE "ALPACA" FLOAT

6 Carsten Road • Gepps Cross SA 5094 Phone (08) 8349 5400 • Fax (08) 8349 5463



For more information about the Australian Alpaca Association Ltd. visit

www.alpaca.asn.au



M CRON FIBRE MAN ANALYSIS

SPECIALIZING IN MICRON PROFILE REPORTS

For the Alpaca Breeder who puts fibre quality as top priority

Established 1988 - Prompt service Australia wide

Contact: Wayne or Jo Marshall Email: micronman@iinet.net.au Ph: (08) 9418 1733 Fax: (08) 9494 2931 Johanna Alpacas Bed & Breakfast

Indulge in a Johanna experience

50 Red Johanna Road

Johanna, Victoria

Hosts: Sue & Malcolm

+61 3 5237 4204



Chris Highet & Alan Hamilton Trimming an Alpaca's teeth.

THE HIGHCROFT TEETH TRIMMER

Used by leading breeders and vets here and in the U.S.A. and Peru.

> Available from Highcroft Mail Road Harrogate SA 5244

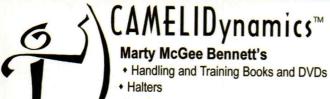
Ph/Fax: (08) 8538 7115 Email: higheten@lm.net.au

QUALITY ALPACA SUPPLIES

- BOOKS ADJUSTABLE HALTERS LEADS
- TOENAIL CLIPPERS
 LARGE VARIETY OF GARMENTS & SKIN PRODUCTS INCLUDING
- TEDDY BEARS FLOOR RUGS HATS SLIPPERS

JACKETS & LONG COATS
 GIFT ITEMS

Retail/Wholesale ph/fax (02) 4572 5812 Christine Roffey Email: hembra@bigpond.com



- Leads
- Wands
- Other Handling Equipment

phone (02) 4841 5025, mobile 0403 195 349 www.daisybankalpacas.com.au





Australian Alpaca Fleece Limited

Urgently needs your fibre in all colours

For all enquiries regarding fleece collection P (03) 9311 0933 E info@aafl.com.au W www.aafl.com.au

www.fibrenaturally.com.au



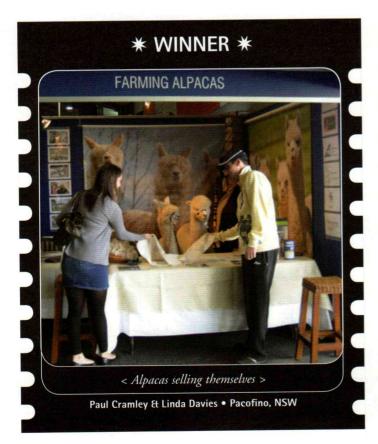
PacaPics

Every picture does tell a story!

Alpacas Australia is always on the lookout for photos to publish. Serious or humorous, send us your favourite alpaca snaps and let your photos tell us about your stud in either the popular PacaPics pages or the prestigious position of magazine front cover.

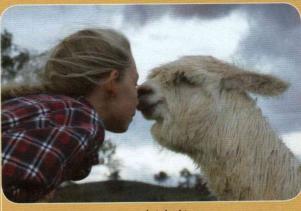
The winner in the PacaPics feature will receive a complimentary business card size advertisement insertion in the next magazine. Front cover photo winner will also be awarded the same advertising opportunity as well as five complimentary copies of the magazine bearing their winning photo. The magazines will prove to be excellent promotional tools for your stud.

Send your photos to: The Editor, Alpacas Australia, PO Box 1076, Mitcham North, VIC 3132. Email sandra@alpaca.asn.au





Ivette Warren • Nevita-Tie Alpacas, VIC



< A goodnight kiss >

Denise Tiyce-Mathews • Shalom Alpacas, NSW



Barbara Hyatt & Sara Battle . Hyatt Alpacas, NSW



< This takes a lot of practice, you know >

Des Johnson • Hinchliffe Alpaca Farm, QLD



< You look like you need a hug >

Lorraine Ivins • Glenoma Alpacas, NSW



< What is she doing with our paca poo? >

Michelle & Kim Oates • Serenity View Alpacas, TAS



< This is so comfortable >

Des Johnson • Hinchliffe Alpaca Farm, QLD



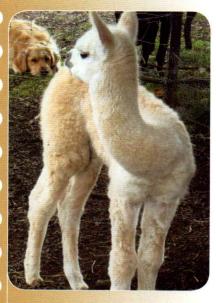
< Off to China >

Ian Wooster . Muntham, VIC



< But the poem says...
I love a sunburnt country >

Kylie Streatfeild & Fiona McKenna Kyona Alpacas, NSW



< Are you talking to me? >

Grace Hunter • Hillside Alpacas, TAS



< Three days old and already taking Mum's assets >

Margie Stanley • Cuttagee Hill Alpacas, VIC photo by Vicki Wall



< Just thinking about things that need to be thought about >

Angela Smyth • Gwandalan Alpacas, VIC



< If I hide down here maybe they won't wean me yet >

Tracy Pratt • Tallo Alpacas, NSW



< Only his mother could love him >

Irene Wooster . Muntham, VIC



< Are you my mother? >

Sue Roberts • Tinonee Alpacas, NSW



< Tahnia and Asteroid >

Barry Musgrave • Wombarooma Alpacas, NSW

Upcoming Events

January

31 Nimmitabel Show: NSW

Venue: Nimmitabel Showgrounds Highlights: Alpaca & fleece judging Contact: Lynne Dominish (02) 6454 6180

February

13-15 Bega Show: NSW

Venue: Bega Showgrounds Highlights: Alpaca judging

Contact: Lyn Kerr (02) 6493 2524

13-15 Crookwell Show: NSW

Venue: Crookwell Showgrounds

Highlights: Fleece judging; promotional display

Contact: Penny Pittard (02) 4837 3394

14 Bushy Park Show: TAS

Contact: Briony Cairns (03) 6292 1134

20-22 Seymour Alternative Farming Expo: VIC

Venue: Kings Park, Seymour Highlights: Promotional display

Contact: Rod & Ann Sales (03) 5433 3789

27-1/3 Bothwell International Spin-in: TAS

Contact: Helen Jessop (03) 6266 4380

28-1/3 Royal Canberra Show: ACT

Venue: EPIC (Showgrounds)

Highlights: Alpaca & fleece judging 9.00am

Saturday & Sunday

Contact: Susan Nielson (02) 6493 2602

or 0418 684 688

March

1 Berwick Show: VIC

Venue: Berwick Showgrounds Highlights: Alpaca & fleece judging Contact: Bob McLeod (03) 5629 1140

6-7 Booroowa Show: NSW

Venue: Boorowa Showgrounds Highlights: Alpaca judging

Contact: Graham Lugg (02) 6227 3158

6-8 Royal Bathurst Show: NSW

Venue: Bathurst Showgrounds Highlights: Fleece judging 22 February; Alpaca judging 8 March Contact: Kylie Streatfeild (02) 6366 5067

7-8 Greenbank Show: QLD

Highlights: Promotional display Contact: Steve Rowley (07) 5546 3971

14 Wynyard Show: TAS

Highlights: Fleece judging

Contact: Briony Cairns (03) 6292 1134

20-22 Castle Hill Show: NSW

Venue: Castle Hill Showgrounds

Highlights: Alpaca judging; promotional display

Contact: Sue Maynard (02) 9653 2277

21 Bream Creek Show: TAS

Contact: Briony Cairns (03) 6292 1134

21 Wodonga Show: VIC

Venue: Wodonga Showgrounds Highlights: Alpaca & fleece judging Contact: Jenny McKenry (03) 5439 6525

21 Mt Pleasant Show: SA

Venue: Mt Pleasant Showgrounds Highlights: Alpaca & fleece judging Contact: Jolyon Porter (08) 8568 5254

21-22 Goulburn Fleece Show: NSW

Highlights: Fleece judging

Contact: Jackie Waugh 0428 298 157

26-28 Toowoomba Royal Show: QLD

Highlights: Alpaca judging 28 March Contact: Julie Macgregor (07) 3202 3113

26-29 Lardner Park Field Days -Farmworld 2009: VIC

Venue: Lardner Park, Warragul Highlights: Promotional display Contact: Jenny Miles (03) 5623 6654

28 Red Hill Show: VIC

Venue: Red Hill Showgrounds Highlights: Alpaca & fleece judging Contact: Bob McLeod (03) 5629 1140

28 Hamilton Show: TAS

Contact: Briony Cairns (03) 6292 1134

28 Camden Show: NSW

Contact: Ray Seymour (02) 4636 6909

April

1 Alpaca Fiesta, Info and Sales Day: VIC

Venue: Ballarat / Shepparton area - TBA Contact: Cherie Matheson (03) 5883 9271 or Shane Carey (03) 5334 6126

7-8 Kempsey Show: NSW

Highlights: Promotional display

Contact: Alistair Smedley (02) 6566 9403

10-11 Macksville Show: NSW

Highlights: Promotional display

Contact: Alistair Smedley (02) 6566 9403

11-13 Royal Sydney Show: NSW

Venue: Showgrounds, Homebush Highlights: Alpaca & fleece judging Contact: Jeanne Brown (02) 4576 3333

18 Paca Picnic: TAS

Venue: Parliament House lawns, Salamanca

Highlights: Promotional display

Contact: Michael Dowd (03) 6239 6223

18 Williams Expo Fleece Show: WA

Venue: Williams Gateway Expo

Highlights: Fleece judging

Contact: Frances & David Harding

(08) 9883 9231

25 Whiteman Park Show: WA

Venue: Whiteman Park Highlights: Alpaca & fleece judging Contact: Ron Reid (08) 9296 4888

May

2-10 National Alpaca Week

Highlights: Open days on farm and promotional events Contact: AAA Ltd. National Office (03) 9873 7700



Order Form

Free Information Kit					
	☐ I am not a member of the Australi learning more about alpacas. Please			TOTAL \$AUD \$0.00	
	☐ Please tick if you <i>do not</i> wish your	\$0.00			
Subscription	I would like to subscribe to three issu	es of Alnacas Austro	alia Magazina		
	☐ Australia \$AUD 29.00 ☐ New Zeal		_	\$	
			\$AUD OVERSEAS PLUS P&H		
Publications		icl. GST - Incl. P&H within Aust only	Please contact AAA for specific P&H charges		
Managing Alpacas in Australia, 3rd Edition For orders in excess of 10 copies ** within A	4.50 ea	3.20 ea 2.70 ea	\$		
Alpacas Australia Magazine – 3 back issues		20.00	12.00	\$	
Herd Book ☐ Vol 1 ☐ Vol 2 ☐ Vol 3 ☐ Vol 4	(per volume)	19.80 ea	15.00 ea	\$	
Herd Book Vol 5		26.90	18.00	\$	
Herd Book Vol 6		29.10	18.00	\$	
Herd Book Vol 7		33.50	22.00	\$	
Herd Book Vol 8		40.10	27.00	\$	
Herd Book Vol 9		40.10	27.00	\$	
Herd Book Vol 10		46.20	32.00	\$	
Herd Book Vol 11		48.50	34.10	\$	
Herd Book Vol 12		48.50	34.10	\$	
Herd Book Vol 13		63.60	46.00	\$	
Herd Book - CD Format ☐ Vol 12 ☐ Vol 13 ☐	Vol 14 □ Vol 15	15.40	10.00	\$	
Conference Proceedings Glenelg, SA 1999	☐ Canberra, ACT 2000 ☐ Hobart, TAS 20	004 28.60	23.00	\$	
☐ Adelaide, SA 2006	5	35.00	22.70	\$	
☐ Sydney, NSW 200	8	33.00	25.45	\$	
TOTAL				\$	
NOTE: With the exception of ** (shown a	bove) all prices are \$AUD inclusive	of P&H within Aus	tralia only.		
Overseas orders, contact the Association	for specific postage charges.		,		
Name (PLEASE PRINT) MR / MRS / MS/ MISS / DR					
Address					
	State Postcode	Count	ry		
I enclose my cheque /money order for \$AL					
(required in Australian dollars drawn on an Ai	ustralian bank and made payable to 'Au:	stralian Alpaca Asso	ciation Ltd'.)		
Please debit my credit card for the amount	of \$AUD		☐ Mastercard ☐ V	isa	
Credit Card No Expiry Date /					
CCV No Credit Card Verific	ation (CCV) - the last 3 numbers on the	signature strip on t	he back of your Credit Card	(1	
Name on Credit Card		Signature			

Copy or cut out this form and send to Australian Alpaca Association Ltd. ABN 30 067 146 481 ACN 067 146 481 PO Box 1076, Mitcham North, Victoria 3132 Australia • PHONE +61 (0)3 9873 7700 • FAX +61 (0)3 9873 7711

Advertising

Rates

	Casual Rate		x 2 issues		x 3 issues		Production*	
ų.	\$AUD Incl. GST AUSTRALIA	\$AUD OVERSEAS						
4 colour							>	
Full Page	1,070.00	973.00	996.50	906.00	845.00	768.00	315.00	287.00
1/2 Page	755.00	686.00	698.00	635.00	597.00	543.00	237.00	215.00
1/3 Page	704.00	640.00	648.00	589.00	552.00	502.00	193.00	179.00
1/4 Page	653.00	594.00	597.00	543.00	507.00	461.00	158.00	143.00
Business cards	133.00	123.00	122.00	112.00	110.00	102.00	N/A	N/A
Mono								
Full Page	755.00	686.00	698.00	635.00	597.00	543.00	225.00	205.00
1/2 Page	529.00	481.00	496.00	450.00	428.00	389.00	158.00	143.00
1/3 Page	417.00	379.00	389.00	353.00	338.00	307.00	124.00	112.00
1/4 Page	304.00	276.00	282.00	256.00	248.00	225.00	90.00	82.00
Business cards	112.00	102.00	101.00	92.00	90.00	82.00	N/A	N/A

Loading for Specified Positions

Outside Back Cover + 25% Inside Front Cover + 20% Inside Back Cover + 15% Right Hand Page + 10% Specific Positions + 10%

Double Page Spread price on application

*Production costs include

Layout, typesetting and electronic finished artwork with low resolution email proofs and allow for up to 3 scans

Space and Sizes (mm)



Full Page Image: 188 x 275

1/2 Page horizontal 188 x 123



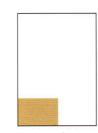
1/2 page vertical 91 x 269



1/3 page 188 x 83



91 x 123



Business Card 90 x 55

Trim: A4 (210 x 297) allow 5mm bleed all sides

Material

Editorial Material: If possible, all editorial contributions should be typed and preferably submitted electronically or by floppy disc in Word format. Visual material preferably supplied as colour photographs or transparencies. If supplying digital photography ensure that it is in high resolution of at least 250 dpi. We will endeavour to return all photos and slides.

Advertising Material: Please supply electronic artwork on disc to correct size. Preferred Macintosh programs InDesign, Illustrator or Photoshop. Alternatively save your adverts in high resolution pdf, jpg, tif or eps. Include all screen and printer typefaces, high resolution pictures, logos etc associated with the adverts. For full page adverts please allow 5 mm for bleed.

Colour adverts to be supplied in CMYK (not PMS or RGB). Please supply hard copy proof in colour or mono (as applicable) for printing reference. We cannot guarantee inclusion of late adverts.

Further advertising material enquiries can be directed to:

Irene Garner, Garner Graphics: Phone +61 (0)2 4884 1222 Fax +61 (0)2 4884 1233 Email garnergraphics@bigpond.com

Deadlines

Issue 58: Autumn

Due: April 2009 Deadline: Friday 6 February 2009 Issue 59: Winter

Due: August 2009

Deadline: Friday 5 June 2009

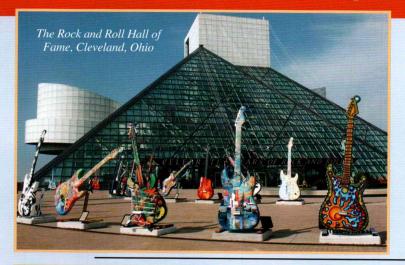
Issue 60: Summer

Due: December 2009

Deadline: Friday 2 October 2009

Please book and send all editorial and advertising material to Sandra Wright
Australian Alpaca Association Ltd. ABN 30 067 146 481 ACN 067 146 481
PO Box 1076, Mitcham North, Victoria 3132 Australia
PHONE +61 (0)3 9873 7700 • FAX +61 (0)3 9873 7711 • EMAIL sandra@alpaca.asn.au

Second World Alpaca Conference



Cleveland Rocks!

The Alpaca Owners and Breeders
Association is proud to host the
second World Alpaca Conference in
rockin' Cleveland, Ohio, June 3 - 7, 2009.
In addition to speakers of international
renown and educational sessions, there will
be receptions, dinners and networking with
alpaca breeders from around the world.



Fiber Rocks!

A fleece show with international entries will allow competition for awards in what may be the largest fleece show yet held anywhere. Depending on

your travel schedule, a
visit to an Ohio alpaca
farm can be arranged.
Come join us for an
unforgettable experience
at the Cleveland I-X Center.



WAC Rocks!

- Show ring competitions
- World's largest fleece competition
- Pre-conference alpaca farm tours
- Educational seminars
- Updates from alpaca associations all over the world



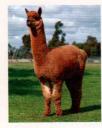
















Twilight Park Poetic Licence
Windsong Valley Nelson
Timbertop Mystic Force
Narraburra Jo-Jo
Timbertop Thorpedo
ILR NWA Luminosa
Tumi Xcalibre.

PROVEN GENETICS DELIVERED TO YOUR FARM

Our males are now available for mobile mating throughout Victoria. Interstate by negotiation. Visit tumialpacas.com for details.





ph. 03 5384 7446 www.tumialpacas.com