Connection

Spring 2023

***I**N **T**HIS **I**SSUE:*

Transporting Alpacas to Veterinary Teaching Hospitals

Understanding Alpaca Fiber 101

Alpaca Fiber Skirting Table

Our purpose is to promote the well-being of alpacas, address the concerns of alpaca owners, and encourage the spread of alpaca ownership and the use of their fiber.

California Alpaca Breeders & Owners Association

Connecting members to Calpaca, the industry and each other

May 2023 v1

California Alpaca Breeders Association

In California's tradition as a pioneer of progress, Calpaca was the first, and the oldest, regional alpaca association in the Northern Hemisphere. Past and current members of Calpaca have been leaders in the American alpaca industry since 1989.

Calpaca represents alpaca owners, breeders, and enthusiasts in California and beyond. We promote the well-being of alpacas and education of the public about alpacas, alpaca fiber and alpaca products. We support each other through shared information and experiences. We host meetings, speakers and shows for the benefit of members and the public.

Calpaca membership meetings are held quarterly on the second Saturday of the month. *We invite you to join us!*

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VIRTUAL Quarterly Membership Meeting

05.13.2023 - 6:00 p.m.

Information on accessing the meeting will be sent prior to meeting date.

What's Inside

* Click lines below to jump those pages.*

Cover photo by permission of Alpacas of Somerset Farm

Chaparral catching zzz's and rays with mom

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Alpaca Research Foundation (ARF)
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calpaca.org/page//2572/join-calpaca

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Calpaca Website
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Group Emails
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Message from the Calpaca President

Welcome to Spring 2023

For many alpaca owners, this is the time of year when the crias begin to arrive and fill our fields with life, hope and promise. For all alpaca owners, this is also the time of year when we harvest the fleece these amazing animals have been producing for us. What are your plans for your 2023 fleece harvest?

If this is your first year shearing your alpacas and you don't have an answer to that question, ask your mentor. You can also check the archives of past *Connection* publications. The past spring or summer editions of the Connection are filled with articles about options for your fleece. Whatever you do, please do something with it.

The first quarter of 2023 has been relatively quiet for Calpaca. But that will change during the 3rd and 4th quarters.

Keeping in Touch

Calpaca has three primary ways for members to send or receive information: by email, through the Calpaca Facebook page, and on the Calpaca website.

Email: info@CalpacaBoard.org

- **To Email Calpaca Members:** A member of the board of directors will forward your message to Calpaca members in a timely manner.
- **To Email Board Members:** Your board members encourage members to contact us with any comments, questions or concerns. We are here to serve you.

Note: This process helps prevent the scamming that occurred with the former member email distribution list.

Website: Calpaca.org

This is Calpaca's primary online presence, the "Internet face" of our organization. It's the place where existing, new, or potential alpaca owners can go to learn about Calpaca. Who we are. What we offer. How we assist new and current alpaca owners. How we support the alpaca community through education. What events we offer. What support we offer.

Facebook Page: facebook.com/groups/Calpaca

Calpaca maintains an active Facebook page, **Calpaca-California Alpaca Association**, which serves as an extension of our website. The Calpaca Facebook page exists to promote and answer questions about raising alpacas, using alpaca fiber, husbandry issues; to share interesting news and ranch events; and to promote classes having to do with those issues. We are an open group and encourage people who are interested in alpacas to join the discussions; e.g., BOD announcements, alpacas in the news, emergency information, birth announcements, new purchases/acquisitions, Calpaca events, Calpaca farm member events, industry events, etc. This is a group for learning, sharing, and being supportive.

Advertising: Only Calpaca Farm Members may advertise animals or products for sale. If the frequency of this advertising becomes excessive, the post will be removed by the moderators. The moderators will also remove any advertising posts by non-Calpaca Farm Members.

Transporting Alpacas to Veterinary Hospitals

By Bill & Sherri Duey, Alpacas of Iowa

Appeared in Alpacas Magazine, Herd Sire 2006 & used here with all permissions.

Most alpaca owners will someday have the stressful situation of needing to transport a sick or injured alpaca to a veterinary hospital. The hospital may be just down the road, or it may be hundreds of miles from your alpaca ranch. This article will help you best prepare for that eventual trip.

Be Prepared for an Unexpected Trip

Knowledge and preparation are the best things for relieving stress from an otherwise stressful situation. Loading one of your valuable alpacas in a trailer and heading down the road seeking care at a veterinary hospital can be unnerving. Knowing what to anticipate and preparing for that event will help you improve the timeliness of getting specialized care for your alpaca.

[Ed.: At the time of this writing] There are only 28 accredited Colleges of Veterinary Medicine in the United States, and a similarly small number in Canada. Alpaca owners are often referred to a veterinary hospital by their local veterinarian because of the hospital's expertise and specialized equipment. These hospitals are typically located at land grant universities, and anyone may use their facilities. However, not all of these hospitals have expertise with camelids. It is a good idea to check with the veterinary hospitals that are within reasonable driving time and find out which ones are experienced with camelids. Then, visit with the staff to develop contacts and better understand their protocols in the event you need to take an alpaca to that facility.

Keep a map and list of directions to the veterinary hospital in the glove box of your towing vehicle. Include phone number for your local veterinarian, the daytime *and* emergency phone numbers for the veterinary hospital, and the numbers for a few motels near the veterinary hospital (just in case you need to reserve a room).

Have your alpaca transporting equipment reasonably prepared for travel at all times. You don't need to have the trailer hooked to your towing vehicle, but you should have ready access to the trailer. Ensure that the tires, lights, and other features of the equipment are in good repair and that many of the required accessories for transport are already in the trailer. Supplies such as about a week's feed and hay, feed tub, water bucket, a halter and lead, carry sling, portable corral panels, emergency vet kit, and bedding for the trailer floor can be stored on-board and ready to go. (See also: HER02 issue of *Alpacas Magazine*., "Alpaca Trailer Towing Tips.")

If you will be traveling out of state, be sure that your local veterinarian has prepared your transport papers for the sick alpaca (and a companion alpaca if going along) and cleared them

with the state you are entering. The AOBA members' website under the "Transportation Regs" tab has a directory of all of the state agencies.

Be sure to copy all of the health records for the alpaca(s) you are transporting and take them with you. These records will be most helpful to the hospital, and may help your alpaca avoid unnecessary tests and you avoid unnecessary expenses.

Some veterinary hospitals require a referral from a veterinarian. Find out from the hospital ahead of time what forms will be needed and work with your local vet to ensure s/he is familiar with the need for the document. Your local vet should summarize the animal's clinical signs, as well as any diagnostic tests or procedures that have been accomplished to date. (See also the AUT02 issue of *Alpacas Magazine*, "Working With Your Vet.")

Before you pull out of the driveway, be sure to throw in a suitcase with a few days' worth of clothing. If you have to stay overnight near the hospital, you will be ready to do so.

One very critical detail you should determine BEFORE the need arises is: who will take care of your animals in the event that an emergency situation takes you away from the farm for one or more days? This should be someone who is familiar with your herd, your farm, and how to care for your animals. This is an important consideration that you don't want to have to deal with in time of crisis. Needless to say, if a situation arises that might require calling on your ranch-sitter, you will want to alert him/her to the possibility of needing his/her services. In fact, you may want to ask your ranch-sitter to assume caretaker duties so you can focus your attention on the sick or injured alpaca.

Illness or injury to your alpaca is stressful on both you the caretaker and the animal itself. Travel to the hospital will be stressful. Leaving the alpaca by itself will add even more stress. Give consideration to taking a companion alpaca (gelding or less valuable alpaca) along for the trip. If the situation warrants, you may want to consider leaving the companion animal at the hospital with the sick alpaca. The hospital staff can help you with this decision.

Travel Tips for On the Road

Needless to say, be sure to focus on your driving on the way to the vet hospital. If at all possible, have a passenger along to assist with the driving and alpaca care if needed. How often you need to stop to observe the alpaca will be dictated by the situation. If the situation allows, try to stop every hour for a few minutes to check the alpaca. A stop every two hours for about 15 minutes may diminish the alpaca's stress by allowing your animal to stand, drink, defecate and urinate, and for you to walk around for a few minutes.

A remote trailer camera monitor can be invaluable in this situation, allowing your passenger the ability to continuously monitor the sick alpaca

while you drive on down the road. (See the WIN03 issue of *Alpacas Magazine*, "Security Camera Systems for Alpaca Trailers.")

When you are within 30 minutes of the hospital, call to let the staff know where you are, your estimated time of arrival, and update them on the alpaca's current medical condition. This will help ensure they are ready to receive the alpaca and have called up personnel if needed.

Veterinary Teaching Hospitals

Veterinary teaching hospitals are both a medical service facility and a veterinary teaching facility used as a laboratory for training students for a Doctor of Veterinary Medicine (DVM) degree.

Veterinary hospitals may specialize in various types of animals, such as companion animals, equine, farm animals, camelids, exotics. But they may also specialize in areas such as emergency medicine and surgery, ophthalmology, neurology, oncology, cardiovascular medicine, and others. Regardless of such specializations, all veterinary teaching hospitals have a common mission to educate aspiring veterinarians, provide outstanding animal care, develop more effective treatment methods, and expand knowledge of animal illnesses.

Because these are teaching hospitals, typically a team of doctors and students will work with you and your alpaca. The team may include:

- A supervising DVM (faculty and/or staff).
- Interns and residents in post-graduate training.
- Veterinary students pursuing the DVM degree.
- Certified veterinary technicians.

A visit to a veterinary hospital may take slightly longer than one with a private veterinarian because a student may complete an initial examination of your alpaca before you see the DVM.

As the owner of the alpaca, you should receive daily reports and updates on the results of diagnostic procedures and treatments. If you remain on-site at the hospital, patient visiting hours will be arranged with you. Your local veterinarian should also be kept informed about diagnostic findings, treatment decisions, and discharge instructions.

What to Expect at the Veterinary Hospital

If you are transporting an emergency case, be sure that you have made direct contact with the hospital to ensure they will be able to accept you and your alpaca immediately upon arrival at the facility. Be sure to understand exactly where to go and how to check in, especially if it is an after-hours check-in.

First, your alpaca will be stabilized, unloaded, evaluated, and taken to a stall in the facility. Important health information such as your veterinary referral form (if required), veterinary records (including test results, x-rays, etc.), and all details of the current illness or injury will be gathered to learn about your alpaca's medical history and make certain the medical records are complete.

Forms for documenting a method of payment, an estimate of the anticipated expenses, and important contact information will be collected. In some cases, a deposit may be required before treatment can be administered. Charges at a vet-

erinary hospital are designed to cover their costs and are generally comparable to those of a private veterinary. It is often difficult for the hospital to give you an accurate estimate of all the anticipated charges. They will do their best. Most hospitals do accept major credit cards for this purpose.

Students will be involved in various aspects of the hospital visit. The students interact directly with clients, as a valuable part of their learning experience. Students are involved in each case because these hospitals are in effect a "classroom."

Hopefully, you will not ever have to transport an alpaca to a veterinary hospital. However, if you do, take comfort in knowing you have done all you can to improve the effectiveness of your response for the care of your alpaca.

About the authors: Bill and Sherri Duey operate Southern Iowa Alpacas ranch located in the hills of Southern Iowa 60 miles southeast of Des Moines. They specialize in raising full Accoyo herd sires. They have incorporated innovative features into their alpaca ranch and conduct seminars on business planning, animal selection and ranch setup for new alpaca ranchers. They also enjoy helping existing ranchers learn about new products and techniques for fine tuning their operation. You may view their website at SouthernIowaAlpacas.com or contact them directly at alpacas@SouthernIowaAlpacas.com

Upcoming 2023 Calpaca Board & Membership Meetings

05.13 Quarterly Calpaca Membership Meeting
06.01 Monthly Calpaca Board Meeting
07.10 Monthly Calpaca Board Meeting
08.12 Quarterly Calpaca Membership Meeting
09.11 Monthly Calpaca Board Meeting
10.09 Monthly Calpaca Board Meeting
11.11 Annual Calpaca Membership Meeting
11.13 Monthly Calpaca Board Meeting

Upcoming 2023 Calpaca Events (calpaca.org/events/)

Date	Event Title	Location	Contact	For more information:
May 12-13	Yoga with the Alpacas	Yoga with the Alpacas 11175 Golf Link Road Turlock, CA 95380-9675	Stephannie Schmit macedosminiacre@gmail.com 209648238	Eventbrite.com/o/23204485281
May 27-28	Memorial Weekend Tours	Macedo's Mini Acre 11175 Golf Link Road Turlock, CA 95380-9675	Maureen or Larry Macedo macedosminiacre@gmail.com 209-648-2384	MacedosMiniAcres.com
May 28	Open Farm Days & Yarn Barn Gift Shop	Sierra Rose Alpacas 15895 Greenhorn Rd Grass Valley, CA 95945	Cynthia Kuhlmann Cynthia@SierraRoseAlpacas.com 530.272.1218	SierraRoseAlpacas.com/events
June 17	Peg Loom Class	Macedo's Mini Acre 11175 Golf Link Road Turlock, CA 95380-9675	Maureen Macedo macedosminiacre@gmail.com 2096482384	MacedosMiniAcres.com
Sept 30	National Alpaca Farm Days	Arapaho Rose Alpacas 10702 Arapaho Dr Redding, CA 96003	Karen Kelly kskelly1@att.net 530-949-2972 (text)	ArapahoRose.com
Nov 26	Christmas Boutique	Arapaho Rose Alpacas 10702 Arapaho Dr Redding, CA 96003	Karen Sue Kelly kskelly1@att.net 5309492972	ArapahoRose.com

Understanding Alpaca Fiber 101

What is alpaca fiber?
How does it grow?
How do breeders assess it?

Ian Watt
Alpaca Consulting Services USA

This booklet is an introduction to a better understanding of what is alpaca fiber, how it grows and how breeders assess it. For further information, contact:

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The acquisition of information takes many years and exposure to many ideas over time. I would like to extend my personal thanks to Dr. Jim Watts, Dr. Ian Davison, Cameron Holt and Ken Madl for their mentoring and/or assistance in my learning of matters alpaca fiber.

I would like to acknowledge the photographs generously provided by Dr. Jim Watts and his SRS® company - they make understanding so much easier!

Ian Watt

Download this booklet and more of Ian's articles and presentations at AlpacaConsultingUSA.com

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Preface

In a world that trades more competitively – and more ruthlessly – than ever before, growers of alpaca fiber face a future that will demand excellence as the norm and an exceptional product, as the measure of success.

The alpaca industry outside of South America is dominated by interests not necessarily aligned to the commercial production of one of the world's most exciting and natural fibers. In the show-ring, fiber comprises 60% of the animal evaluation in the United States of America and Australia – the two largest alpaca populations outside South America.

Most breeders extol the virtues of the fiber with relatively few promoting objectivity of fleece appraisal in their extensive marketing and advertising.

This is despite a wealth of knowledge and technology that could be used to bring greater understanding and credibility to an industry that is still very vulnerable to advances in wool and man-made fibers.

Alpaca breeders come from a wide range of occupations and age groups. They come together as a group interested in one thing and one thing alone – the alpaca.

The pioneers of the industry outside of South America entered an industry from a very, very low knowledge base and invested heavily in the exoticness of this hugely attractive member of the camelid family.

Newcomers enter the industry with much more extensive information available to them and the expertise of breeders who have gathered their skills through trial and tribulation peppered with large doses of painful personal experience.

It seems that everyone 'knows' about alpaca fiber.

It is apparent that what one person 'knows' and another person 'knows' can, and often are, poles apart in some, if not all, of the traits that make up a fleece.

Writing this booklet is a challenge and will undoubtedly bring a wave of disagreement from some, but there is a need for somebody to put down a work that will bring it all together in the one volume, as a base from which we can all move forward.

If readers become a little better informed, learn something new and are more successful as a result of reading this article, then I am content!

Ian Watt

ALPACA FIBER - AN INTRODUCTION PAGE 1

Chapter 1

What is alpaca fiber?

The alpaca industry has struggled to find a common descriptor for the coat of the alpaca. As a member of the camelid family of animals, it could be argued that the coat is really hair but others prefer to call it wool whilst most generally recognize it as fiber. Whatever the name, it will be identified as fiber in this text.

Alpaca fiber is a harvestable coat formed in the skin and grown on the alpaca animal. It is a fiber that comes in many different qualities, a wide range of colors and in two distinct types – huacaya and suri.

It is composed of three distinct fibers comprising primary, secondary and derived secondary, grown from primary and secondary hair follicles located in the skin.

As a further complication, some fibers are medullated, many partially medullated whilst some are solid.

Medullated fibers are hollow to varying degrees and are sometimes straight, the most obvious being the primary fibers, which create the 'halo' often seen on younger animals in particular. After examining nearly a thousand alpaca biopsies it can now be asserted that a high proportion of secondary fibers are either medullated or partially so at one point in time. This is an interesting discovery as medullation, to date, has only been measurable in white and light fleece samples tested through the OFDA 100 machine – biopsies allow all colors to be examined for medullation.

> Authors note: I have made a conscious decision to use Australian wool industry terminology where it fits with similar or identical alpaca fiber characteristics in preference to establishing a new set of descriptors that can only confuse international traders in alpaca fiber – our customers of the future. As much of our information on alpaca fiber correlates closely to that of wool producing sheep (mainly the merino), it is useful for readers, breeders and growers to understand any perusal of wool industry research and information they may care to make.

Alpaca fiber comes in a wide range of colors ranging from white, through fawn, brown and grey to black.

These colors are further divided into light, medium and dark for the fawn, brown and grey colors in Australia, and even more in the Unites States of America where black is separated into two tones and grey into a further category of rose grey and still another color of beige sitting between white and fawn. More recently, a new 'color', indefinite light and dark, has been introduced into the show circuit in the United States.

In South America the color of preference is white, which probably explains why the bulk of superior fleeces throughout the world are white in color. South American processors recognized that the world demand was for white fiber with the result that white was the focus of breeding plans in Peru, Chile and Bolivia.

This demand is fuelled by the ability of white fiber to take all colors of commercial dye and thus maximize the marketability of the finished product.

As all alpacas in the world originated from one or other of these three countries, it is perhaps not surprising that white fleeces are the benchmark by which others are measured in terms of fineness, uniformity of micron and color, and consistency as a whole.

Continues on next page

Chapter 2

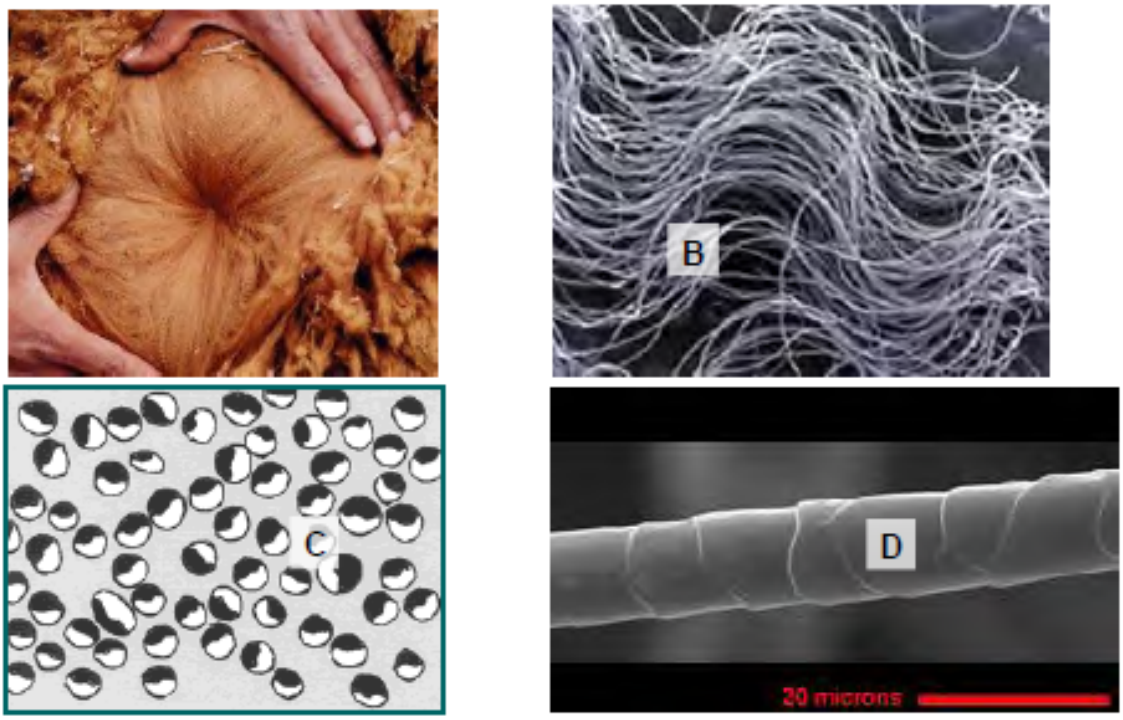
COMPOSITION OF THE FIBER

Alpaca fiber is composed of three primary parts:

1. Para and ortho cortical cells
2. Cuticle or scale, and
3. Intercellular binder

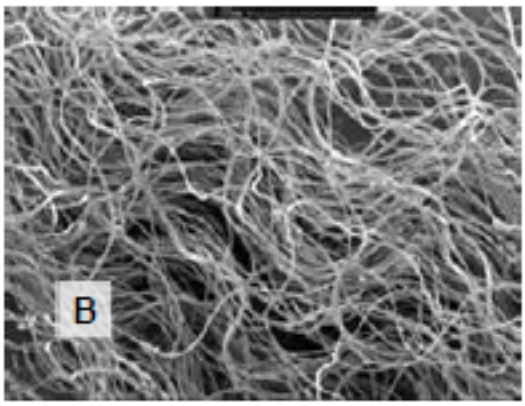
Cortical cells – are the cells that make up the strength of the fiber and, in effect, create the crinkle and crimp. It has been observed that the orthocortex (orthocortical cells) is always on the outside of the crimp curve which means that it, and the paracortex, twist to create the curve of the crimp, much like a two ply yarn that is twisted upon itself to create kinks, with the structural difference being that the fiber is more controlled in how it performs. As the two cortical cell types grow alongside each other it follows that the orthocortex provides the tension that allows the curve of the crimp whilst the paracortex is of lesser tension thus allowing the crimp to stay in place.

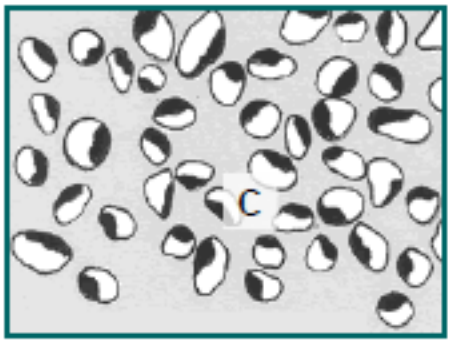
Cuticle or scale – each fiber is sheathed in a covering material known as the cuticle but more commonly defined as the scale. The scales protect the cortical cells, provide some structural strength, provide the softness (or otherwise) of what is called the 'handle' and reflects luster. The scales differ in length and height, which affects reflective ability more commonly referred to as luster in suri and brightness in huacaya.

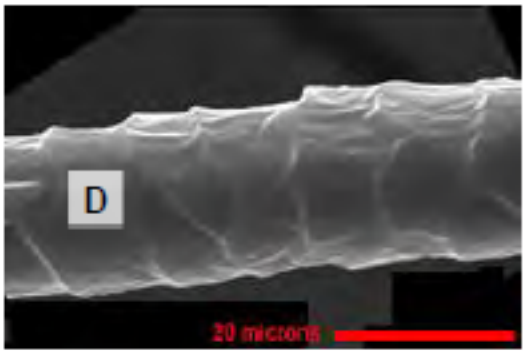


Long fibre bundles (A) are formed by fast growing fibres that are densely packed and highly aligned (B), fine, evenly sized and cylindrical in shape (C), and have smooth surfaces formed by long, flat scales (D).

B gives high crimp amplitude and low crimp frequency. C and D give softness. B, C and D give lustre.







Thick and short staples (A) are formed by slow growing fibres that are sparsely packed and entangled (B), coarse and uneven in size and shape (C), and have rough surfaces formed by short, protruding scales (D).

B gives flat and fine crimp C and D give harshness B, C and D give a non-lustrous finish

The dark section represents the paracortex and the white the orthocortex – the equal the proportions, the more round the fibers.

When the para- and ortho- cortex are out of balance the fibers do not crimp evenly or in unison, the scale height is higher and the staple is both fatter and cross-fibered.

Intercellular binder – is the 'cement' that holds the cortical cells together within the scales.

It is interesting to observe that as fiber diameter increases, the frequency of crimp decreases which is caused by a movement in the percentages of ortho and para cortical cells in the fiber. This breakdown shifts the balance between the types of cells and so reduces the tension differences between the two causing the crimp to broaden until the cells are almost indistinguishable in a straight fiber in huacaya fleece. There is reported to be no visible line of distinction between the two cortical cells types in the suri fleece – a fleece that has waves as distinct from crimp.

FIBER TYPES WITHIN A FLEECE

Primary fibers

These are the fibers around which follicle groups are formed within the skin. They are the relic of guard hair found in primitive types of alpacas and are easiest seen on the brisket, bib or apron, of an alpaca as long, straight hairs that project beyond the length of the finer, and softer, down underneath – hence the descriptor 'guard hair' – to guard the softer and downier undercoat.

Primary fibers sometimes appear in young alpaca (named 'cria') as a halo effect, which, in lighter colored animals, becomes less noticeable as the animal ages. This expression is usually related to a lower level of density as the crimping secondary fibers force the early primaries to conform within the staple. In the developing fetus the primary hairs start to grow before the secondary fibers and so are under no pressure to conform to the higher number of crimping secondary fibers surrounding the primary in each follicle group.

Primary fibers in less dense alpacas are usually higher in micron than those in denser animals.

Interestingly, as density increases so the primary fiber diameter decreases, as the pressure of secondary follicles forces the primary to conform to the group average as they form tight, individual bundles of closely aligned fibers.

In fleeces that are not dense (as determined by follicle numbers per unit area of the skin) the primary follicles may be as strong as 30 microns in young animal fleeces. As animals age, the fiber naturally strengthens in micron heading toward the upper limit of the primary follicle micron count.

Secondary fibers

Secondary fibers make up the undercoat or down of the fleece and are the finer, softer fiber that gives alpaca its luxury feel and improved insulation attributes. These fibers gather around the primary fibers to create follicle groups with the more secondary follicles to primaries creating finer, softer and more uniform fleeces. These fibers create the crimp, which is exhibited as waves within the staple or lock. Crimp style varies within the huacaya fleece type (there is no crimp in suri) ranging from high frequency, low amplitude (slower growing fleeces) to lower frequency and higher amplitude in faster growing fleeces.

Individual fibers exhibit a characteristic called crinkle (exposed when the staple is broken up into individual fibers as happens in the processing chain) which are irregularly spaced variations in the direction which the fibers take as they grow from the skin.

This can best be illustrated by observing the formalized crimp structure in the lock and then removing individual fibers to see the change – the crimp disappears and what is seen is a fiber not straight, but with changes of direction along the length.

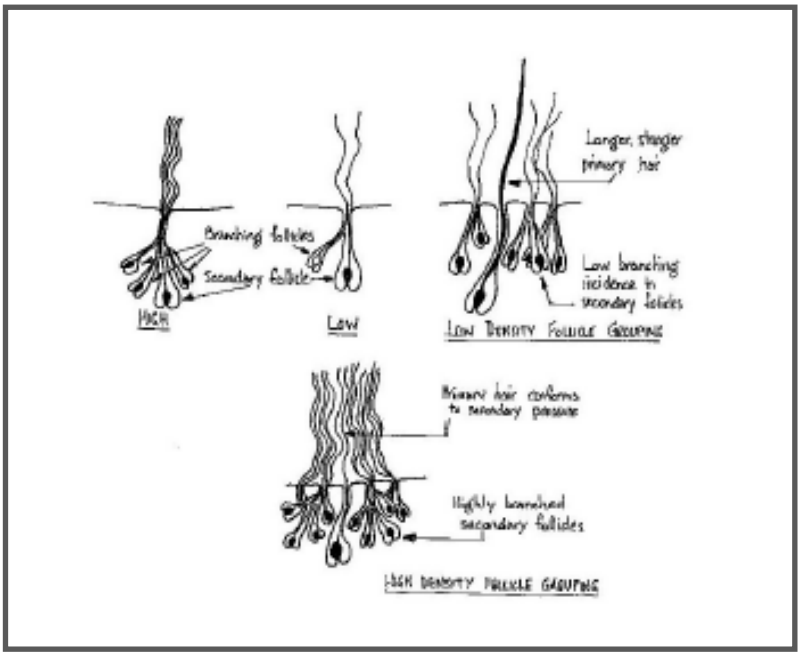
Derived secondary fibers

These fibers are usually the finest fibers within a fleece and get their name because they use the secondary follicle exit from the skin. They have their own follicle root and enter the follicle sheath from the side and then share the same exit point from the skin.

These fibers are the finest the alpaca produces and form a higher percentage of fibers in the fleece of elite alpacas.

Derived secondary fibers cannot be identified within a fleece sample but are identifiable within a properly prepared skin biopsy.

They are highly desirable fibers.



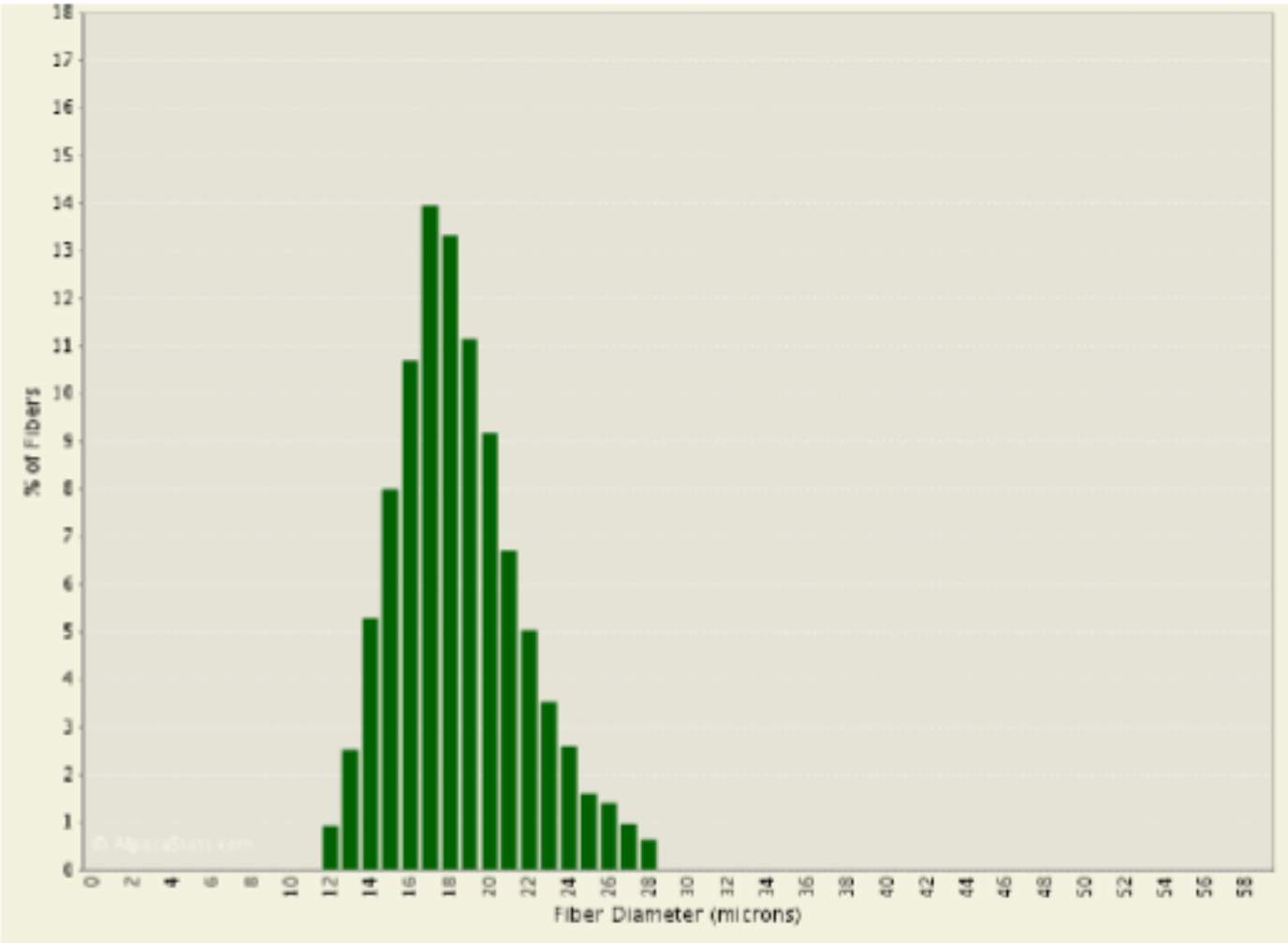
Medullated fiber

Many people, including alpaca breeders, limit medullated fiber with primary follicle fibers and/or guard hair.

There is a difference between the two descriptors but more importantly is the fact that medullated fibers are produced within the fleece by fibers that are not only sourced from primary follicles.

These are the more insidious fibers as they do not necessarily have that 'halo' look as a visual identifier to the human eye.

They do appear in histograms as strong micron (many Americans use the word coarse to describe what the world wool industry calls strong) and can be more clearly defined by using an advanced fleece measuring and recording methodology.



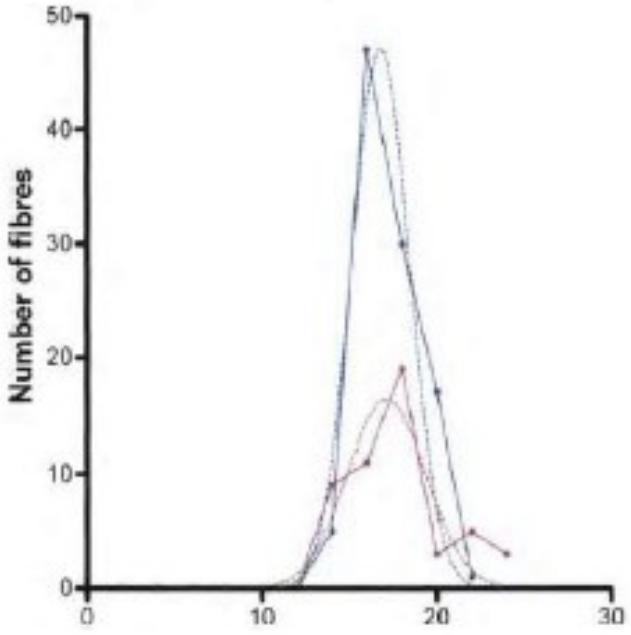
A standard micron histogram.

In this histogram it is likely that some of the primary fibers are in the 20 – 24 micron range but it is impossible to tell from a simple OFDA test which is which.

Mean fibre diameter (microns)	17.0	Crimps per cm	
Secondary follicle to primary follicle ratio	28.2	Fibre growth rate (mm per day)	
Follicle density (per mm^2)	103.5	Fibre length to staple length ratio	
SKIN THICKNESS (mm compressed):	0.96	**CYLINDRICAL FIBRES (%):**	

DIAMETER DISTRIBUTION OF PRIMARY AND SECONDARY FIBRES

	PRIMARY FIBRES	SECONDARY FIBRES
Mean (µm)	17.5	17.0
SD (µm)	2.6	1.8
CV (%)	15.1	10.3
Min (µm)	14.0	13.0
Max (µm)	23.0	21.0
Medullation (%)	0.0	0.0



A biopsy histogram showing the primary fibers sitting within the secondary numbers which has to happen to get low Standard Deviation numbers like merino wool.

These histograms present two traditional bell curves, one within the other, that clearly show the population of primary fibers within the sample tested.

Medullated fibers cover a range of types including solid, hollow and various grades between the two extremes. They create problems for the processors in that they do not accept dyes uniformly or as readily thus producing variations within the yarn that make it largely unacceptable for premium markets.

They present customer acceptance problems for processors because they have sharp ends, which protrude from the finished product and create a prickle factor when felt against the skin. Because 'prickle' has a negative connotation, the industry ihas adoptedthe more acceptable 'comfort' factor descriptor. Comfort factor is defined as the percentage of fibers over 30 micron based on research in the Australian merino wool industry that showed human discomfort when fibers of 30 micron (and over) were found in wool products worn next to the skin.

They also do not necessarily have the crinkle or elasticity that meld them into the non-medullated fiber and so cause a prickle factor in the finished yarn.

In the early days of industry development in both Australia and the United States, much was made of the superior insulation benefits of this miracle fiber with its hollow nature being the reason that alpaca fiber was five, eight, ten times better than the best wool.

This claim is without foundation and has been debunked for some years now but it is occasionally aired with conviction.

Estimates about the percentage of hollow fibers within an average fleece vary enormously with current thinking placing it somewhere in the vicinity of 5 to 10%. In this context, the supposed insulation benefits created by hollow fibers is far, far less than that gained from the trapped air between the fibers in the finished product.

Of importance to breeders is the micron of medullated fibers with industry, both breeder and processor, concentrating on fineness of micron as a primary breeding goal. Medullated fibers usually occupy the right hand side of the histogram, the stronger micron range within both the fleece and the sample.

Chapter 3

HOW FIBER GROWS

Follicle formation in the skin

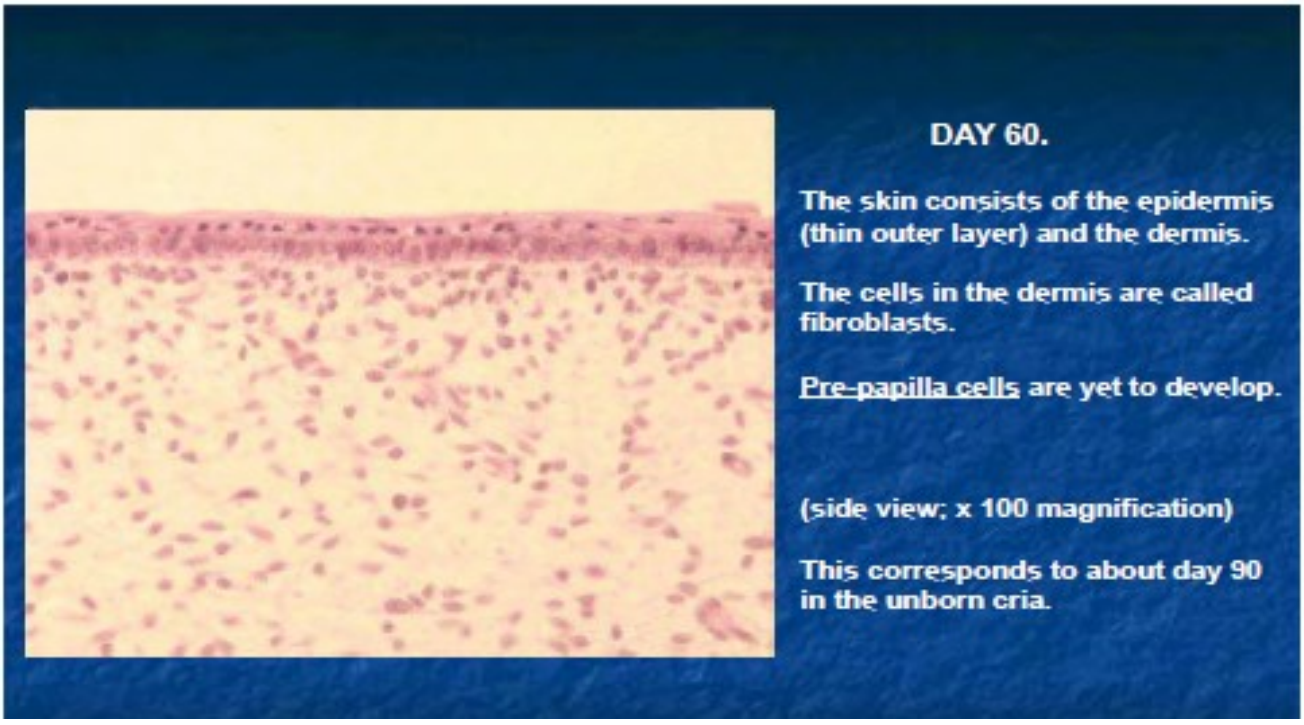
Many fiber coated animals share a common expression of fibers in the skin. Alpacas are no different and form their fiber follicles in groups developed around a primary follicles. It follows then that to get more follicle groups, there must be more primary follicles. Therefore, to select, and breed, against primary fibers will lower density and fleece yield.

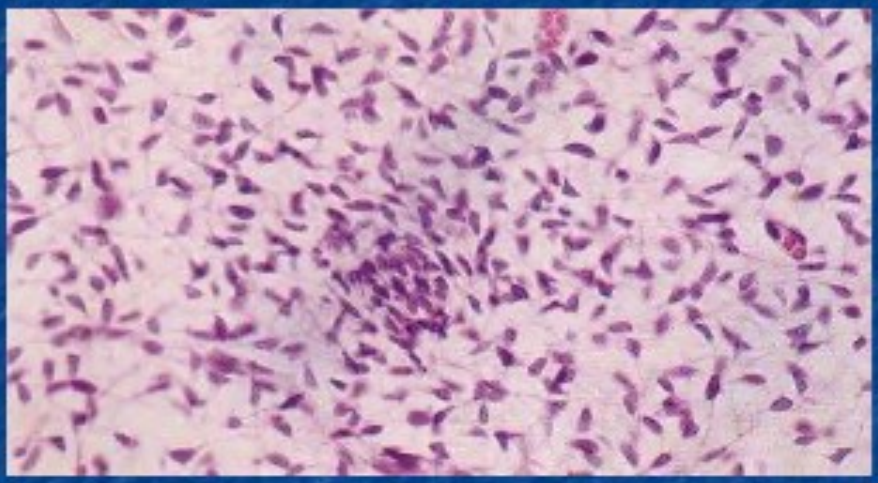
Primary follicles are set in the skin in the first three months of life after which follow the secondary and derived secondary follicles. Fiber is expressed from the skin during the last trimester of pregnancy.

Chemical messages cause a proportion of these fibroblasts to convert into pre-papillae cells, which are independently dispersed throughout the future epidermis layer. These cells are to become the hair follicle root.

Further chemical messages and changes cause these cells to randomly group throughout the epidermis. As they group, the epidermis forces them into the dermis where they are engulfed by the downward pressing sheath to form the hair follicle root.
The skin comprises the epidermis (the outer layer) and the dermis, the under layer.

In evolving the skin, the fetus develops a layer of fibroblast cells in the epidermis. These fibroblasts are the precursors to collagen cells, which eventually thicken to create the epidermis.





Some of the fibroblasts in the dermis change into pre-papilla cells.

Pre- papilla cells form clusters.

Pre- papilla cells are committed to forming wool follicles and fibres.

The more pre-papilla cells that are formed, the greater the potential the animal has to lay down a high number of wool follicles.

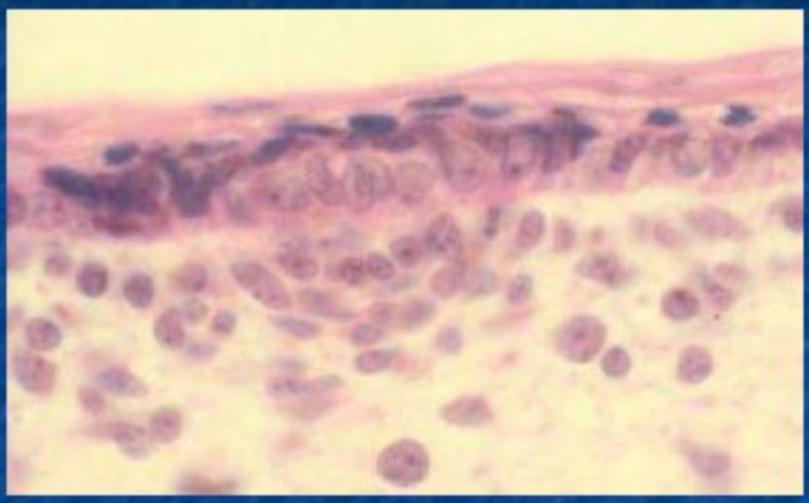
(x 260 magnification)

DAY 80.

The rapidly multiplying epidermal cells push the pre-papilla cell cluster down into the dermis.

DAY 90.

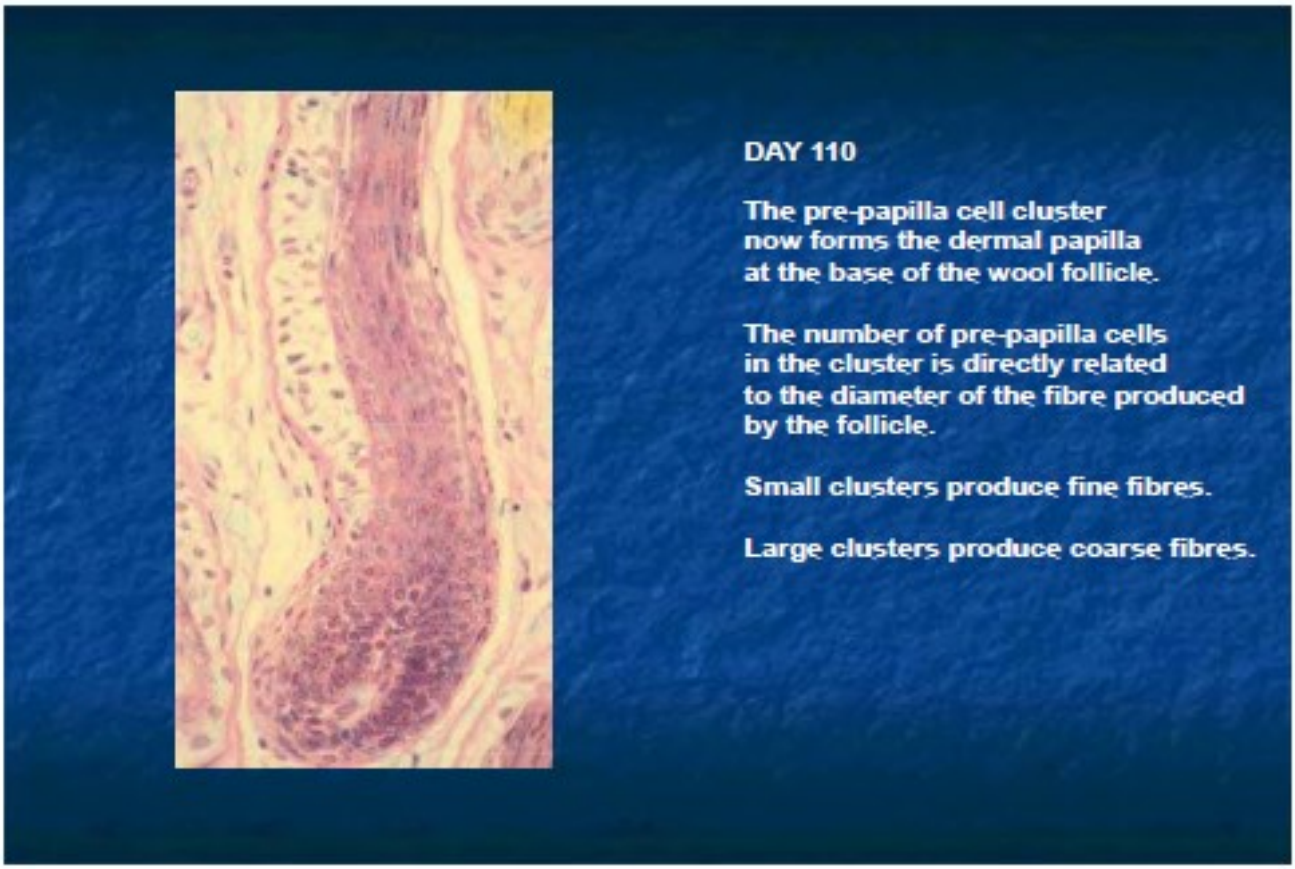
The epidermal cells engulf the pre-papilla cell clusters.



DAY 65.

A cluster of pre-papilla cells, now in intimate contact with the epidermis, stimulates epidermal cells to multiply.

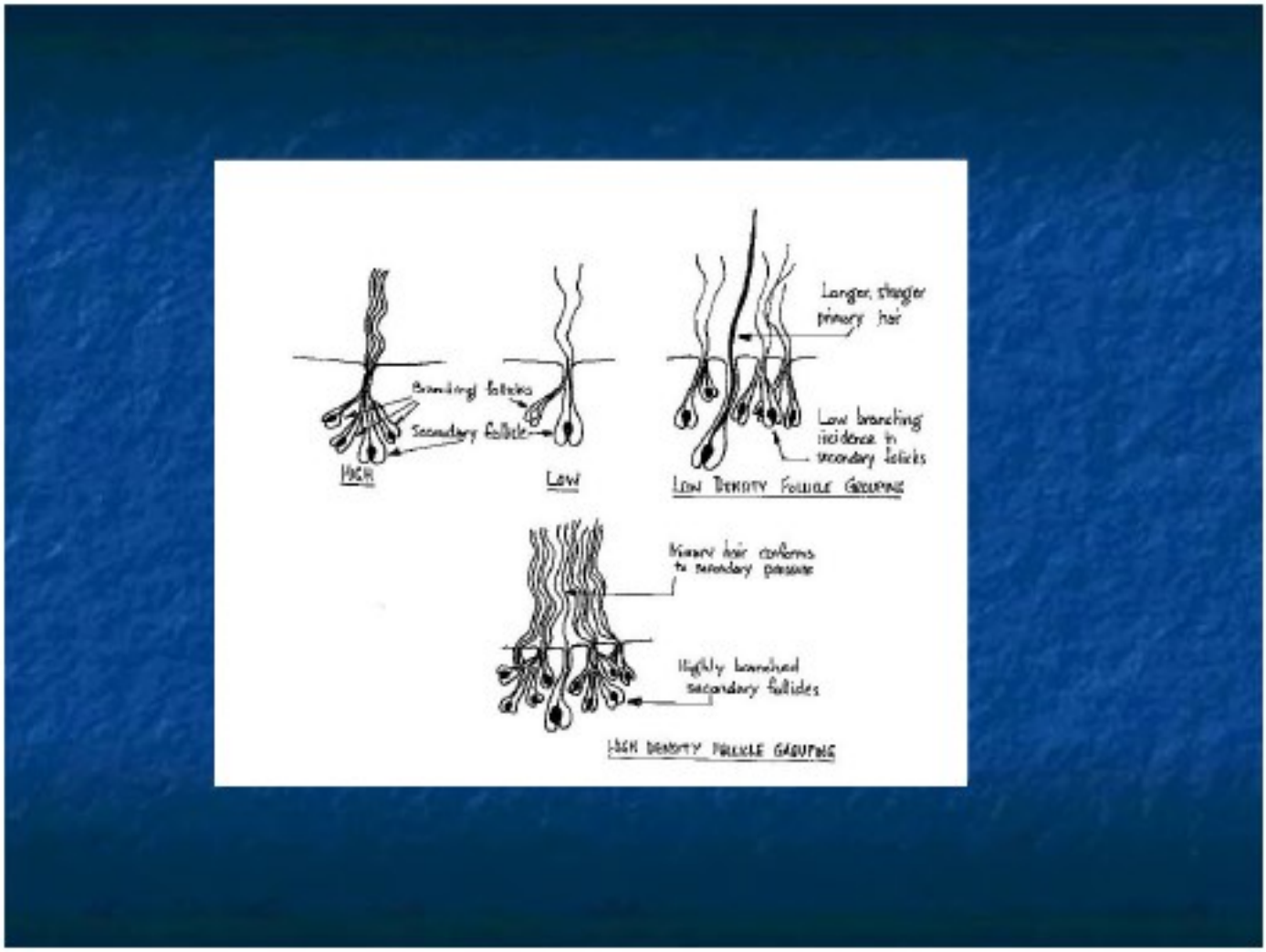
(x 300 magnification)



During the laying down of the secondary follicles, a number of 'branching' follicles are created off the secondary sheaths. These follicles are formed in the same way as the secondaries, with the important change being they share the same skin opening. Because of this feature, the hair from these follicles is significantly finer than the 'host' follicle, and so form the finest fiber in the follicle group.

It is probable that these 'branching', called derived, secondary follicles are finer for two main reasons:

1. There are fewer prepapillae cells from which to draw for the formation of the follicle bulb, and
2. The pressure of a number of hairs exiting the same skin opening causes the hair to not only squeeze through by becoming finer but also longer because of that squeezing action.


Branching follicles
Secondary follicle
High
Low
Longer, stronger primary hair
Low branching incidence in secondary follicles
Low Density Follicle Grouping
Primary hair conforms to secondary pressure
Highly branched secondary follicles
High Density Follicle Grouping

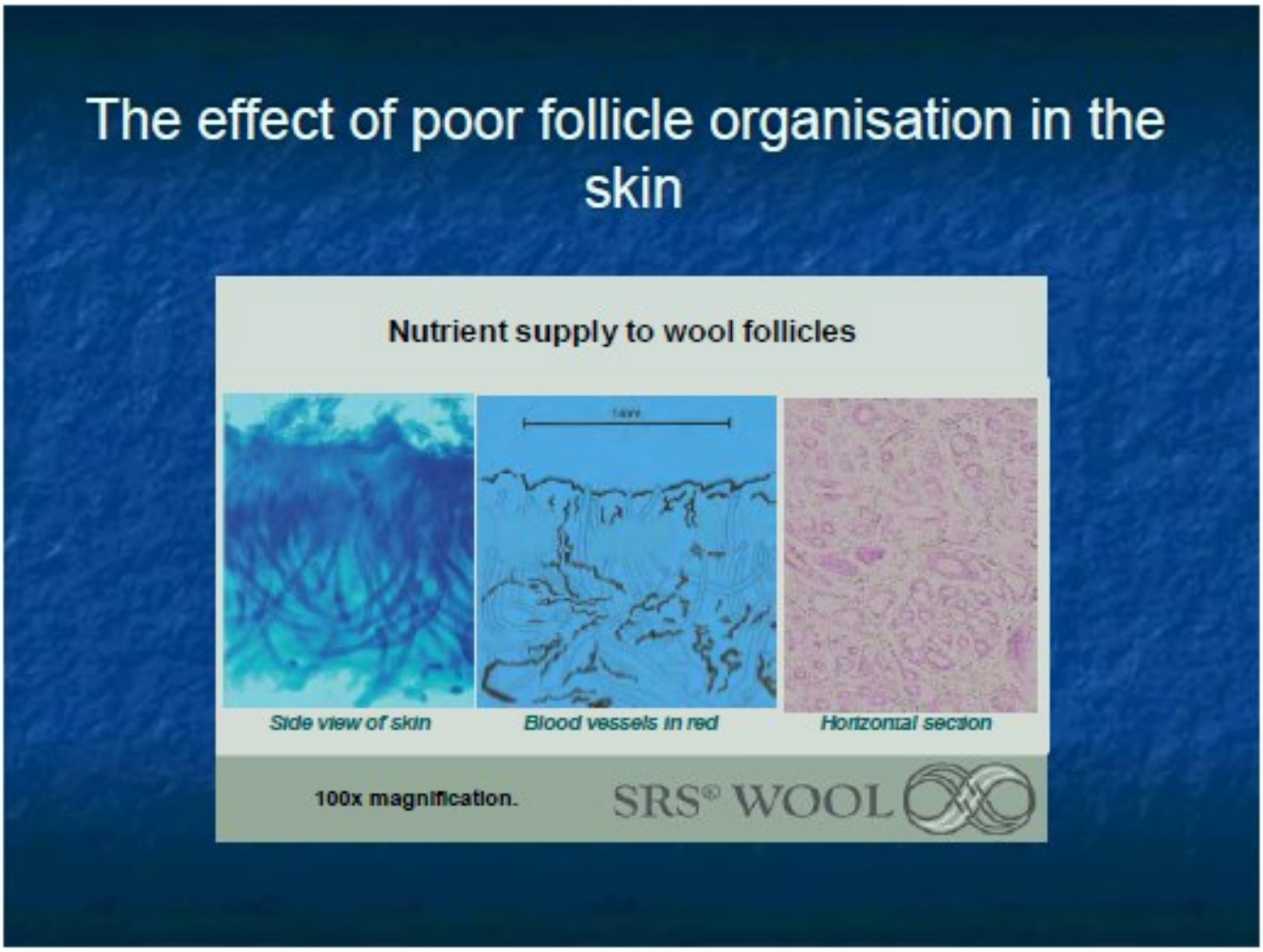
The timetable for each of the three distinct stages of follicle development is thought to be:

1. Primary follicles – 90 to 147 days
2. Secondary follicles – 187 days onwards
3. Derived secondary follicles – 264 days onward.

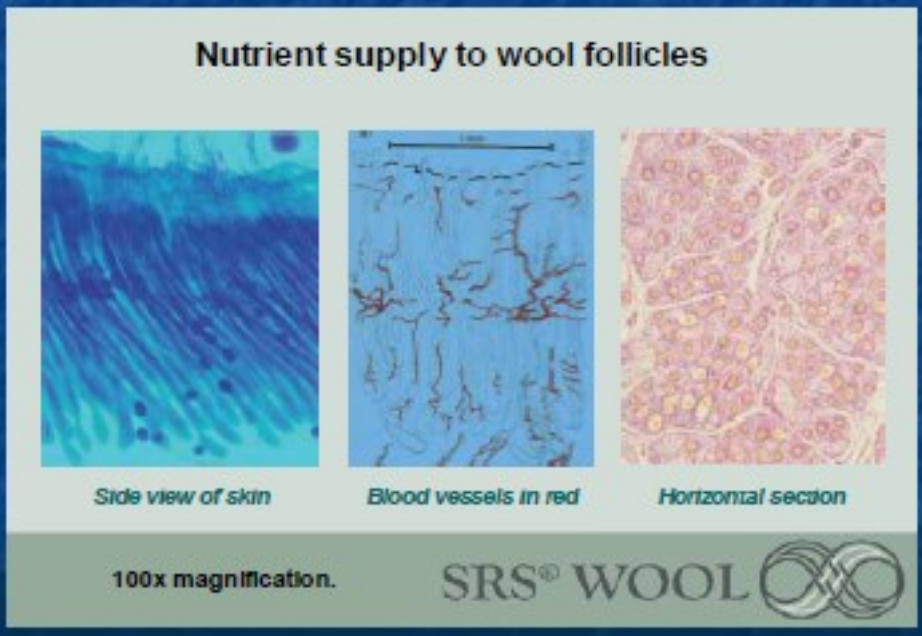
It is important to note that the formation of the secondary follicles has commenced some time before the derived secondaries commence formation. While the derived secondaries are in place by birthing, the expression of the hair may take some time after birth to become evident.

Primary and secondary hair expression commences in utero during the last trimester of pregnancy, perhaps with some of the earlier laid down derived secondaries being expressed at the same time.

This would perhaps partly explain the often talked about increase in fiber density some breeders notice after the first shearing.



The effect of high follicle organisation in the skin



Chapter 4

ASSESSING FIBER – BY TECHNOLOGY AND BY HAND

The assessing of alpaca fiber can appear to be a daunting thing for many people entering the industry but it is amazing how many people believe themselves to be expert within weeks of getting their hands into fleece.

> When assessing fleece it is important to recognize that the various components go in to make up the whole. Concentration on one or two aspects only can easily deny other important traits to the detriment of a breeding plan.

For example, there is an emphasis placed on micron (the thickness of the fiber) often at the expense of uniformity of length, color and definition, all of which are important considerations when assessing quality.

> Successful breeders will utilize objective measurement data as part of their arsenal of selection tools, which will also include the use of both their senses of touch and visualization.

Alpaca fiber is all about sensation; the sensation of touch as reflected in smoothness, softness, evenness and, in the case of suri, slipperiness, and visually by brightness (luster in suri), crimp and color.

Objective measurement should never be the sole arbitrator in the decision making process but it should be an essential part of the breeders decision making toolkit.

UNDERSTANDING OBJECTIVE MEASUREMENT OF FIBER

Objective measurement descriptors

It cannot be stressed too much that objective fleece measurements are a breeding selection tool and must be viewed as a helpful selection and measurement aid rather than definitive.

Placing emphasis on one or two measurements over others will limit the scope and viability of the breeding decision.

Objective measurement is a necessary selection tool for the serious breeder as it not only allows independent comparison between animals, but also provides a benchmark for evaluating future progress.

The Histogram

The histogram is a graphic representation of the distribution of the technological measurements within a fiber sample.

The histogram represents the distribution of the number of sample fibers according to their individual micron count and their numbers for each micron count. Plotted on a standard graph base with numbers of fibers along the side axis and the micron count along the base axis, the reader can immediately gain a distinct interpretation of the fleece sample from the graphic depiction.

The left hand side of the distribution curve is always the finer micron with the histogram of finer fleeces always depicted toward the left hand side of the graph.

The histogram itself is in the form of a graph reflecting a typical bell curve of distribution with thin, tall representations indicating superior fleece samples, and wider, flatter curves representing stronger (and, by inference) poorer fleece characteristics.

Most histograms are presented across the bottom axis of the graph with some represented on the side axis.

Some histograms vary in scale dimension, which makes comparison between fleeces sometimes difficult.

It is important, when comparing histograms that attention is paid to the scale as the shape of the curve of distribution can alter dramatically depending on the scale being used.

Staple Length

Staple length is probably the single most important consideration given by buyers when assessing fleece for purchase and processing. Staple length is affected by crimp definition, by nutrition and environmental influences, and genetically.

Staple length is always measured in the stretched state.

Broad, bold crimp is generally associated with longer staple length with the ultimate expression being suri, which has no crimp.

High frequency, tighter crimps are associated with shorter staple length and tend to sit those fleeces at the lower end of processing acceptability when their shortness is an issue. Generally speaking, a five inch (120mm) length staple is the maximum length for superior fiber processability for top-end retail product. Generally speaking classing fiber lines by length identifies 90 - 120mm (3.5 to 4.5 inches) as premium length followed by 70 - 90mm (2.75 to 3.5 inches) .

Staple length can be affected by environmental factors including weather and is most affected by age and reproductive activity with older animals progressively getting shorter staples and pregnant and lactating dams also producing shorter fleeces.

Micron

A micron is 1 millionth of a metre, or 1,000th of a centimeter – by any measure, a very fine measurement.

It has already been noted that fibers with a thickness exceeding 30 micron causes a prickle sensation when worn against the skin. It follows then that very fine fiber does not prickle and can be worn against the skin comfortably. Fineness also translates into softness and lightness when processed into a product.

In years gone by, fineness was estimated by linking crimps per unit of length to a count, which reflected fineness (called the Bradford Count). With the advent of lasers and HD camera's, measurement of fibers could be much more reliably done and the weakness of equating crimp with fineness was exposed. It is fair to say that highly crimped, shorter fleeces sit at the finer end on a scale of fineness, but it is not fair to imply that longer fleeces with bolder, less frequent crimping cannot also be as fine.

Crimp cannot be used to define fineness with any consistent accuracy.

Traditionally, low micron fleeces cut lower weights per animal, which makes the economic production of these types of fleeces truly dependent on premium pricing structures.

It is worth noting that mechanical measuring of micron does not have an accuracy any better than 0.6 micron. In other words, a fleece of 20 micron cannot be said to be finer than one of 20.6 micron measured by the same technology.

Standard deviation

Standard deviation is a calculation designed to indicate how consistent the micron spread is through the sample being tested, and, by implication, the consistency of the micron through those parts of the fleece similar to the test sample.

Put simply, a standard deviation describes where 68% of the fibers lie in relation to the mean fiber diameter of the sample.

Standard deviation is measured and quoted in microns.

So, a standard deviation of 4.0 microns means that 68% of the fibers within that sample fall within 4.0 micron on either of the mean.

The lower the standard deviation (often called the S.D.) the more consistent the micron in the sample.

Sometimes the expression 'two standard deviations' is used (not often though) which means that 95% of the fibers fall within the defined number of micron from the mean.

The lower the S.D. micron, the narrower and taller the graphic depiction in the histogram.

Co-efficient of Variation

Co-efficient of variation (C.V.) is a calculation designed to give an alternative method of describing evenness of micron in a sample, and allows for comparisons (between samples) that are more accurate and reliable than relying upon standard deviation alone.

For example, a standard deviation of 3.5 micron on a 30 micron AFD fiber sample is a much better reflection of evenness than the same standard deviation on a 15 micron sample where 3.5 micron represents a much larger proportion of the mean.

C.V. allows a breeder to look at like animals and compare them within a herd under the same management and environmental conditions.

In general, stronger micron fleece reflect a better C.V. than finer fleeces so breeders should be wary of expecting low figures for finer fleeces.

Exceptional finer fleeces will reflect low coefficients of variation with figures under 20% being highly desirable and reflective of superior fleece.

Comfort Factor

Generally speaking, fibers stronger than 30 micron create a prickle sensation when worn against the skin.

In the past, the alpaca industry reported this negative aspect of the fiber as prickle factor and described it as the percentage of fibers over 30 micron within a sample.

In marketing terms, prickle factor was considered to be a huge negative as it (accurately) created a negative connotation of the fiber. Following the Australian wool industry example the negative was turned into a (more) positive by describing the same trait in terms of comfort factor which is the percentage of fibers under 30 micron. Approximately 95% of people will experience a prickle sensation from yarn worn against the skin where more than 5% of the fibers are over 30 micron. This same negative is now described as a comfort factor of 95% when the sample has 5% of fibers over 30 micron.

Curvature

Some test results will indicate a measurement described as curvature. This is the degree by which the fiber moves from the straight line in a specific distance.

Straight fibers, like suri, have a very low degree of curvature because the fiber does not change direction along its length. Conversely, high frequency, highly crimped fibers will show high degrees of curvature.

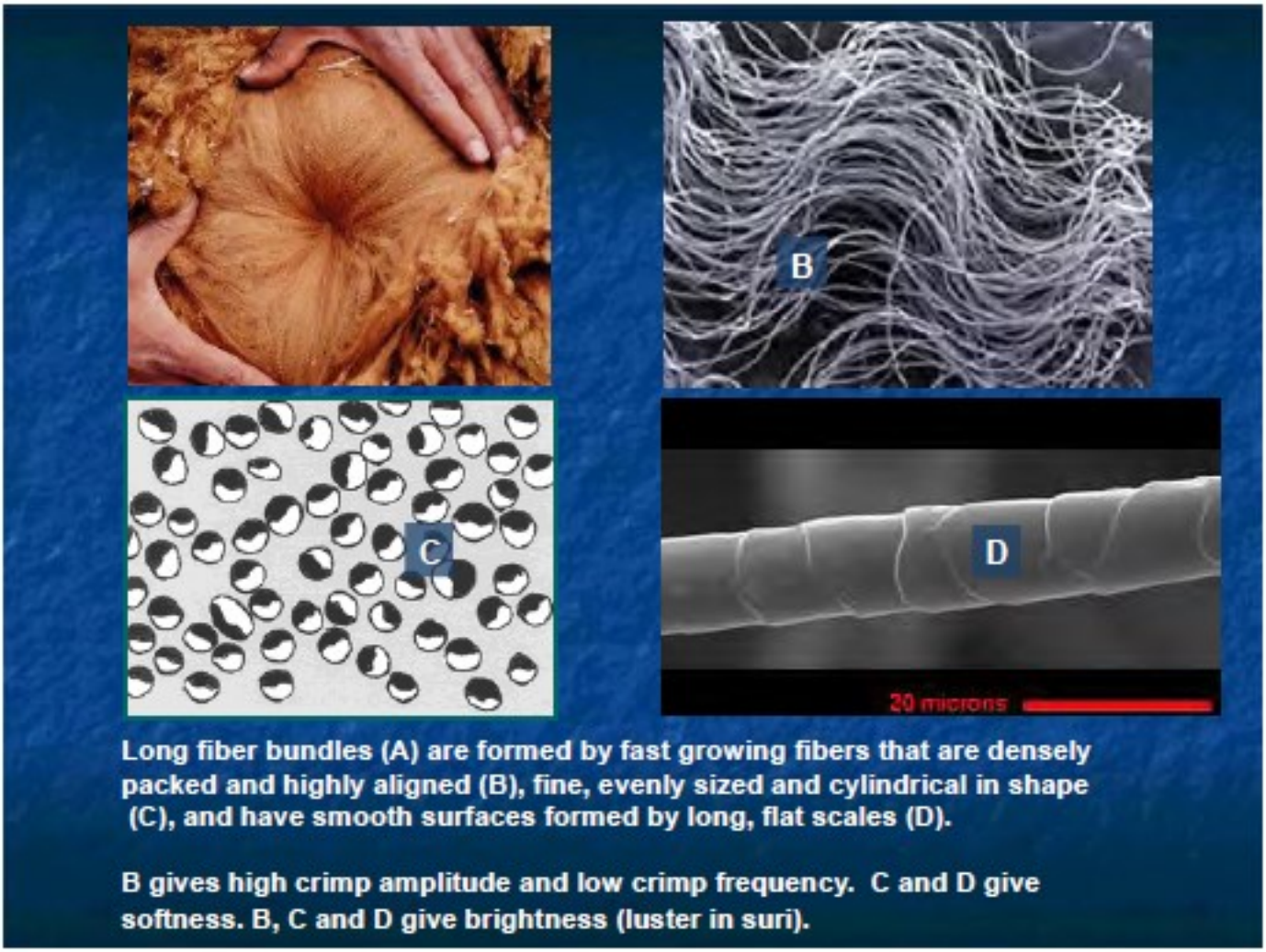
It is suggested that curvature is an important indicator in defining the processability of fiber but it has also been suggested that this is not as important in alpaca as it is in wool, primarily because there are many more production and quality traits that need priority at this stage of development of the alpaca.

OTHER PRACTICAL CONSIDERATIONS

Handle

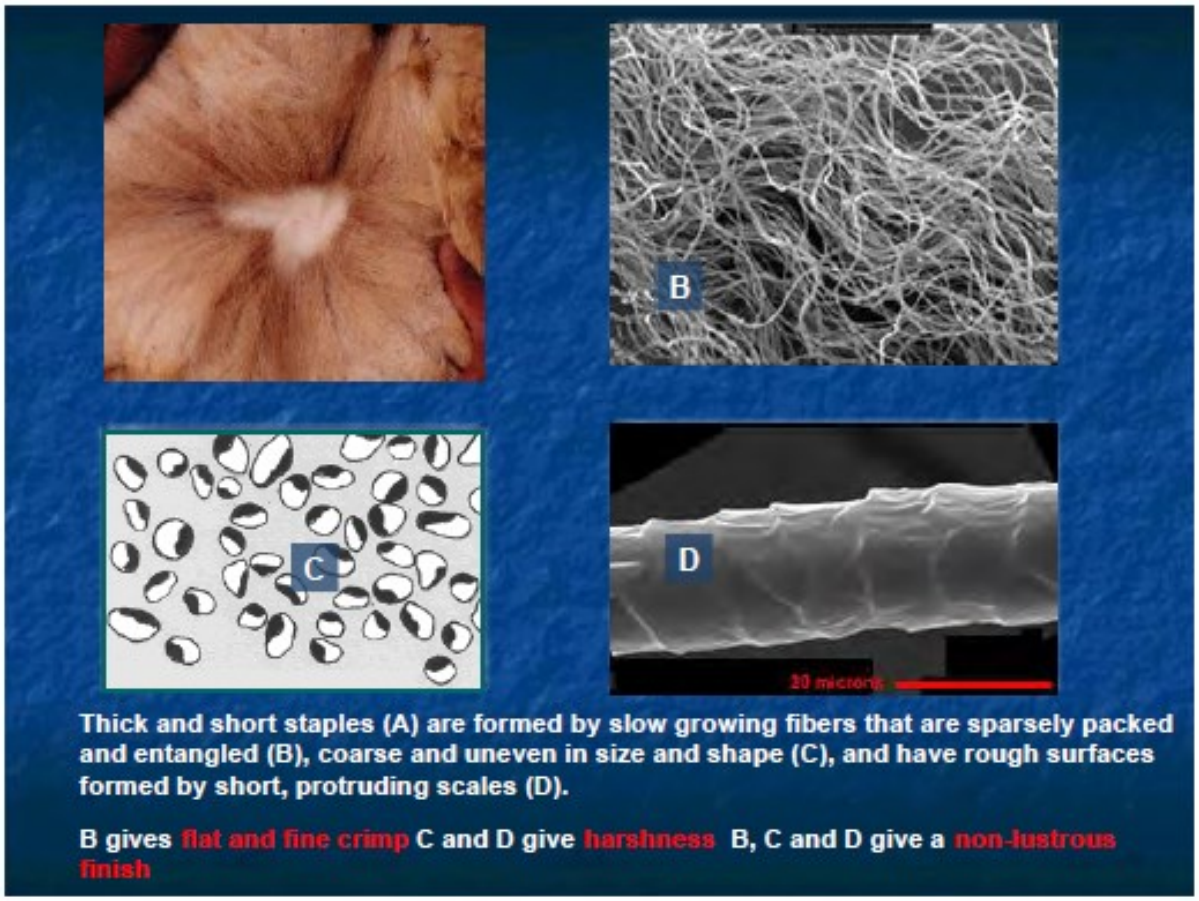
Handle is the term used to describe the sensation felt when 'handling' the fleece – it is the feel of the fiber in the fingers, the softness, the evenness and, in suri in particular, the silkiness.

In essence, handle is the evenness of the individual fibers as felt by the fingers, within the sample being felt. In most animal species, poor handling fiber is mainly related to unevenness of the individual fibers within the sample. In wool it has been suggested that dense fleeces are comprised of near perfectly round individual fibers with less dense animals exhibiting uneven shaped fibers.



Long fiber bundles (A) are formed by fast growing fibers that are densely packed and highly aligned (B), fine, evenly sized and cylindrical in shape (C), and have smooth surfaces formed by long, flat scales (D).

B gives high crimp amplitude and low crimp frequency. C and D give softness. B, C and D give brightness (luster in suri).



When running these samples through the fingers, the sensation is of unevenness of individual fibers in both shape and micron.

Of course, dust and vegetable contamination will also affect the sensation as will the condition of the skin on the fingers and hand.

Experience shows that darker fleeces in the higher microns quite often 'handle' better than many of the lighter colored, finer fleeces.

Standard deviation and/or co-efficient of variation are as close as objective measurement will describe handle but nothing measurable will describe the pure sensation of handling an elite fleece.

Color

In the commercial world, color represents a problem for processors, which they would prefer not to have.

The commercial reality is that the world demand in alpaca is overwhelmingly in white fleece, with black being important but on a much, much lesser scale.

In the American alpaca industry (in particular), color is hugely important in the showing and marketing of alpacas.

Color is very much in the eye of the beholder and very much a preference issue for individual breeders.

In general, colors are stronger in micron as the color darkens away from white. The same could, in very general terms, be said for density and, perhaps, staple length.

As a general rule, solid colors are much preferable to mixed colors as minor colors in a fleece offer problems of contamination with a subsequent downgrading of price on offer.

Bundling

The term 'bundling' was introduced by Dr Jim Watts to describe what a truly dense fleece staple looks like to the eye – until that time wool growers had bred for thick staples that stood erect from the skin.

Selecting for bundling means selecting for staples that droop from the skin and are small in nature – in fact, the smaller the bundle the more dense the alpaca is likely to be, the longer the staple will be and the more the staple will droop or hang from the skin. In alpacas this helps when the animal rolls as the dust tends to fall out as the animal shakes and walks.

Bundling also is usually associated with high definition crimp and brightness as the density creates closely aligned fibers that lock together simply because they emerge from the skin from closely aligned follicles. Bundling does not appear to be as prevalent in animals where staple length has not been a high selection priority – selecting for density and length creates bundling.
Note: alpacas are densest as cria and settle down at optimum bodyweight to a lower number of follicles per unit area.

Long fibre bundles indicate high levels of fiber density and length

Alpaca Fleece Skirting Table

By Bill & Sherri Duey, Alpacas of Iowa

Appeared in Alpacas Magazine, Summer 2007 & used here with all permissions.

For [a relatively small amount of money and two hours of time, you can build this fleece skirting tale that works great and stores easily when not in use.

Handling fleeces at shearing time is always a challenge. New procedures and specialized pieces of equipment that help improve the process and save time are most welcome. Cleaning debris from raw fleeces and then skirting the fleece helps ensure a better end product.

There are many different types of tables used for skirting alpaca fleeces. An excellent article on "Skirting Tables" was published in the Summer 2001 issue of *Alpacas Magazine.* The article has some excellent ideas on skirting tables, how to make them, and the distinct features of each.

After reviewing these skirting table designs and others, we set out to design and build an even better skirting table that:

- Uses readily available components.
- Is easy to assemble.
- Is convenient to store.
- Allows one to clean and skirt a fleece.
- Does not cause damage to a blanket being prepared for show.
- Is relatively inexpensive.

A trip to our building supply center produced some likely candidates for components, but we quickly focused on two readily available components that make up the table: wire closet shelving (also available online) and common PVC pipe and fittings.

Simple Design, Easy to Make

PVC pipe and fittings make up the table frame and legs. Two "close mesh" or "tight mesh" wire closet shelves make up the skirting table top. Plastic electrical ties are used to attach the two sections of wire shelving to each other to make the table top and also to attach the table top to the PVC pipe table frame. It is that simple.

The spacing between the wires on the "close mesh" or "tight mesh" shelving is only 1/2 inch apart. (AFCNA in the past has recommended one inch to one and one-half inch square openings.) We have found that there are distinct advantages to the long, narrow openings. The biggest advantage to the wire shelving is that reasonably dense fleeces can be skirted for show and then slid off the table without damaging the fleece. Second cuts, dirt, sand, pea gravel, etc., fall through the wire mesh and leave the fleece in a cleaner condition.

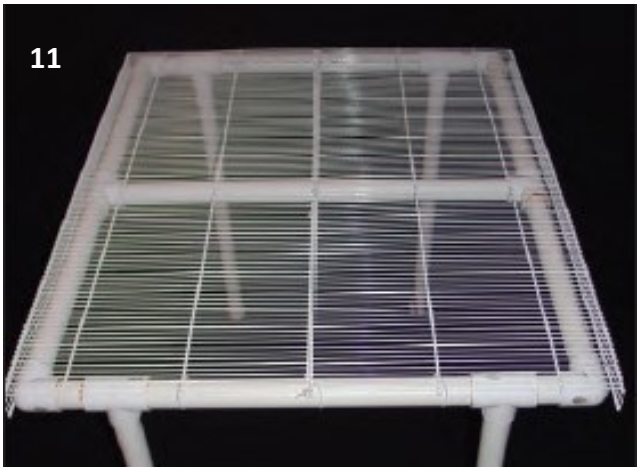
Skirting Table Materials List

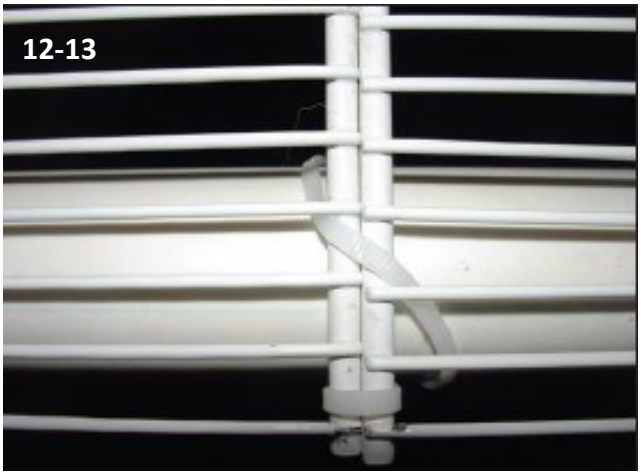
- (2) 20 inch by 48 inch, tight mesh wire closet shelves
- (20) 10 inch white plastic cable ties
- PVC cleaner (clear)
- PVC glue (clear)
- PVC pipe and glue type fittings, Schedule 40, 1-1/2"diameter:
  - ◊ (3) 10-foot long sticks of pipe
  - ◊ (4) 90-degree elbows
  - ◊ (6) Ts
  - ◊ (4) Caps
- Hardboard (Masonite) 1/8 x 40 x 48"

Assembly Procedure

1. Cut PVC pipe lengths as follows *(note: PVC fittings may vary in size)*
   - (1) 35 inches, table frame center support
   - (4) 4 inches, short connectors, table frame ends (along 40 inch edges)
   - (2) 22-1/4 inches, table frame ends (along 40 inch edges)
   - (4) 20-7/8 inches, table frame (along 48 inch front and back edges)
   - (4) 33-1/2 inches, table legs
2. Assemble all components without gluing to ensure understanding of assembly.
3. Set wire closet shelves on top of unglued frame to test size.
4. Disassemble.
5. Clean all fittings and pipe ends with PVC cleaner.
6. Glue pipe and fittings starting with one of the 40 inch end sections first. (Be sure to point all the Ts in the end sections straight up or straight down.)
7. Assemble and glue the front and back edge units.
8. Assemble and glue the center and second 40 inch end section simultaneously.
9. Glue caps on end of each of the four leg sections.
10. Place the four leg sections in the Ts on the table frame and set upright. (Note: DO NOT GLUE the table legs onto the frame if you want to be able to disassemble the legs from the frame for easy storage.)
11. Place the wire shelving on the table frame.
12. Attach the two wire shelves to each other with plastic cable ties.

Start the project by carefully cutting the pipe to specific lengths and laying out the table top frame.

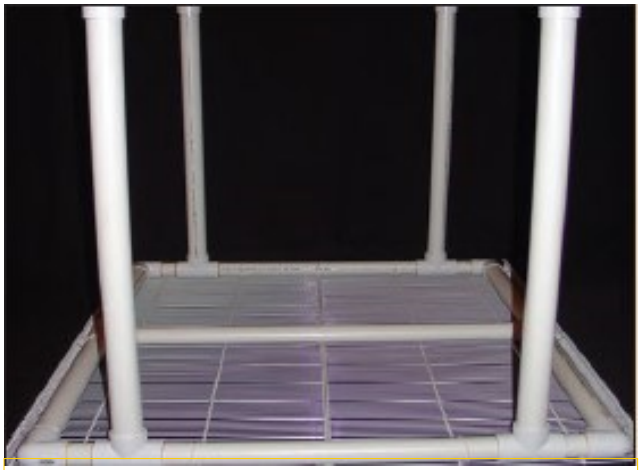




13. Attach the wire shelves to the table frame with plastic cable ties.

Easy Storage

To partially disassemble: pick up the table, turn it upside down, and pull the four legs out of the Ts. Store the table by hanging it up on a wall. The legs can be secured together in a bundle with a Velcro cable strap and hung up along with the table top (available at office supply stores in the computer section).



Partly disassemble the table by picking it up and turning it upside down. Then, pull the four legs out of the Ts.

The table stores flat by hanging it up on a wall.

How to Use the Table

At shearing time, allow the blanket to gather on a 48 x 40" piece of 1⁄8 inch thick hardboard (Masonite) right off the shearing table or mat.

Transfer the blanket from the shearing table or mat directly to the skirting table. The fleece slides smoothly off the hardboard and onto the table.

A second piece of hardboard can be used to sandwich the blanket for flipping. A strip of 1⁄4 inch hard- board that is 35 x 4" will help serve as a stick to slide the fleece off the board in one piece.

Shaking, skirting, and picking are performed on the skirting table. The blanket can then be slid off the skirting table and back onto the hardboard.

Next, the fleece can be rolled and bagged for show.

These self-supporting plastic bag stands work great for holding bags for shorting various qualities of alpaca fiber.

Another option is to slide the blanket directly into a flat 36 x 24 x 4 inch cardboard box for storage. We store many of our fleece blankets in these boxes for showing to alpaca customers.

This stack of 12 flat storage boxes holds a half-blanket from twelve different alpacas.

The blanket can be slid off the hardboard and onto the skirting table by using a 35 x 4 x 1/4 inch piece of hardboard.

Shaking, skirting, and picking can be performed on the table to a freshly sheared alpaca fleece. Second cuts, dirt, sand, pea gravel, etc. fall through the wire mesh openings and leave the fleece in a cleaner condition.

Optional Second Table

A second table really helps speed things along at fleece-skirting time. We made the legs on our second table about 1⁄4 inch shorter than the first so that we can slide fleeces off of one table and onto a piece of hardboard setting on the second table. The slide drop in height allows the fleece to slide without catching on the lip of the second table or the hardboard.

For about two hours of your time, you can build this fleece skirting table that works great and stores easily when not in use. Have fun!

- Press Releases
- Latest News
- Latest Blog

- Alpaca Academy
- Alpaca Owners Guide
- Affiliate Directory
- Breed Standard, Huacaya
- Breed Standard, Suri
- Marketing Opportunities
- Members Helping Members
- Mission and History
- Renew/Join AOA
- Upcoming Events
- Upcoming Shows
- Veterinarian Schools

Alpaca Owners Association (AOA) Disaster Planning Articles

Alpaca Education At Your Fingertips

Do you know the AOA website contains a section called the Alpaca Academy? The Alpaca Academy provides education and information for the entire alpaca community. Topics range from the most common questions about alpacas and the industry to in-depth articles on alpaca EPDs, genetics, and breeding. Alpaca Academy also provides information on the latest alpacas research and links to additional resources.

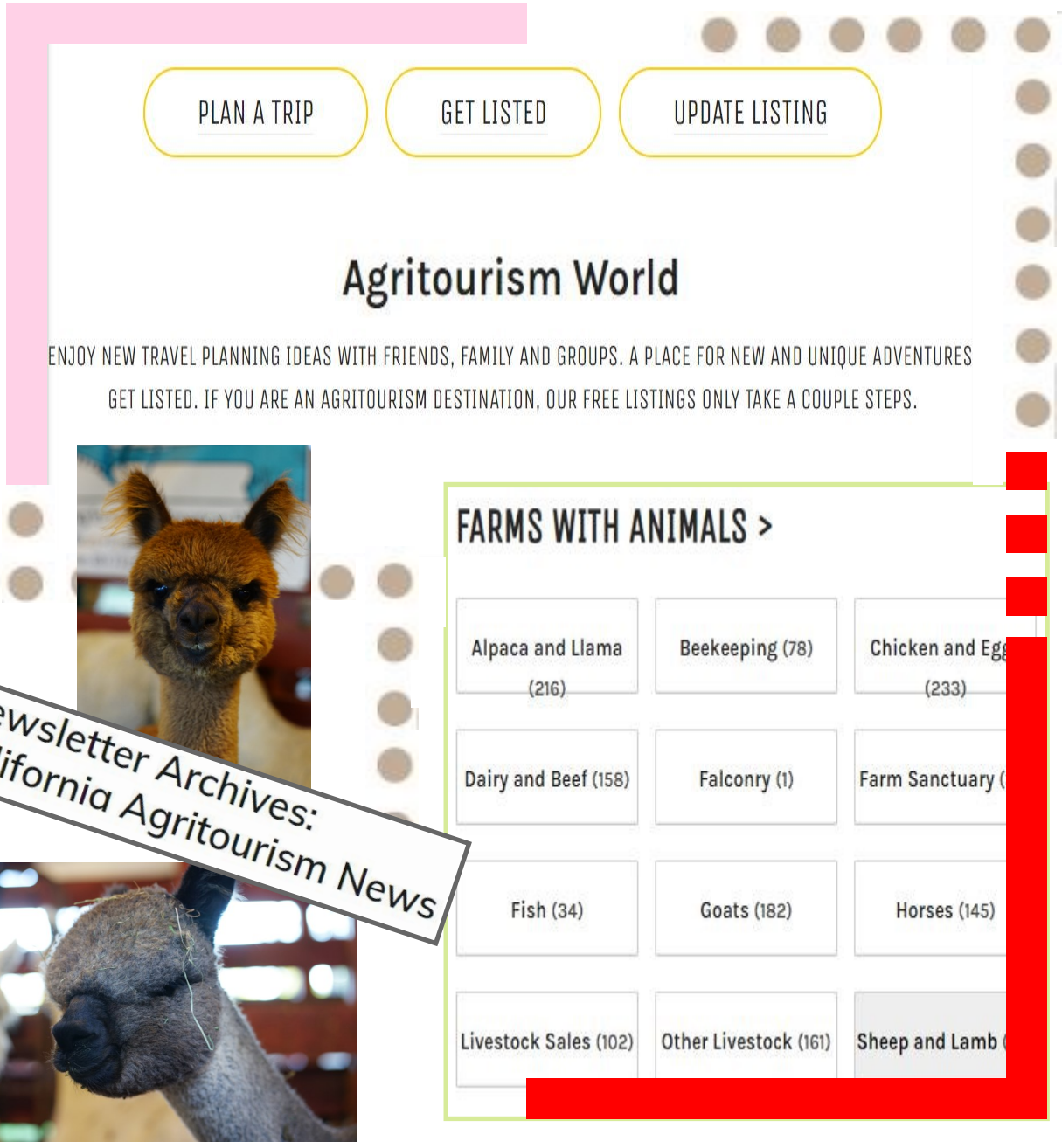
The following pages contain examples of the various topics available for those wanting to know more about alpacas and the industry.

One of the common themes I have found in reading about what alpaca owners breeders would like is the desire for more education. Perhaps many don't know that many of their questions have already been addressed in the Alpaca Academy. Take a few minutes to review the topics on the right . If you would like to learn more about the Alpaca Academy just follow this link, and click on the topic.

ALPACA ACADEMY

- About Alpacas
- Alpaca Fiber
- Alpaca Registry
- Alpaca Research
- Alpaca Shows
- Alpacas as a Business
- Disaster Preparedness
- Embryo Transfer
- EPDs
- Farm Management
- Genetics & Breeding
- Health & Husbandry
- Marketing
- Research Registered Alpacas

Agritourism Resources

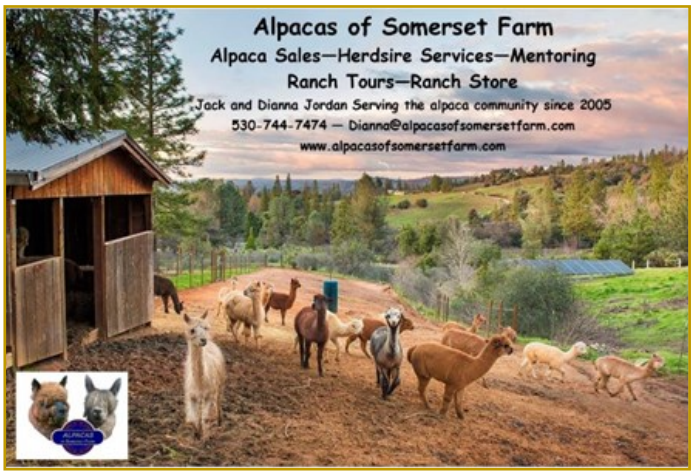


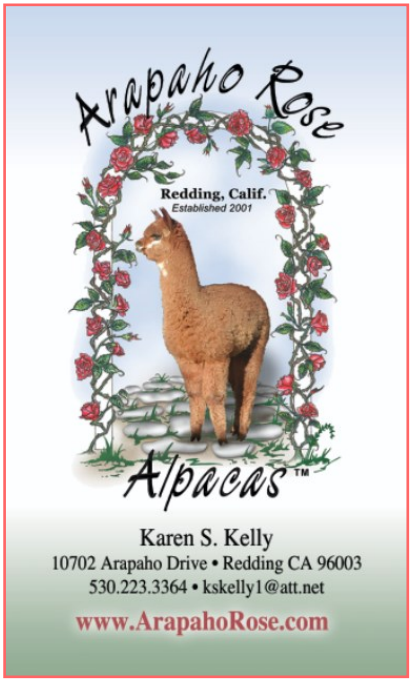
California Agritourism News

Agricultural tourism (agritourism) is a commercial enterprise at a working farm or ranch conducted for the enjoyment and education of visitors, and that generates supplemental income for the owner or operator.

The **California Agritourism News e-newsletter** is written by the statewide agritourism coordinator for the UC Sustainable Agriculture Research and Education Program (UC SAREP). This e-mail newsletter is a chance for growers, agritourism operators, county staff, tourism professionals and everyone else involved in California agritourism to keep up with the latest information. Input and suggestions from readers are always welcome!

Calpaca Member Business Cards





www.atersalpacas.com

Ater's Alpacas

2251 Rita Court
Santa Clara, CA 95050-5617
Res: 408.246.8506
Cell: 408.497.1289
e-mail: info@atersalpacas.com

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Owners:
Jerry Porter
Claudia Porter

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brmalpacas.com

Belvoir Mine Alpacas

Shalon Smith – Owner
916.390.5802
info@BelvoirMineAlpacas.com

www.BelvoirMineAlpacas.com

BOSQUE RANCH

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520-909-6503
Schedule a farm visit – Check out our website
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"Creating a Living Investment One Generation at a Time"

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Alisha Cooper
Owner
mrs.coop23@gmail.com
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From animal to art, I hand process my alpaca fiber into crocheted finished products.

Facebook.com/hilltopterrace2018

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209.617.5392 Dennis
209.675.4330 Mychaela
Donna & Dennis Morris
luvrpacas@yahoo.com


Macedo's Mini Acre
Turlock CA
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Larry & Maureen Macedo
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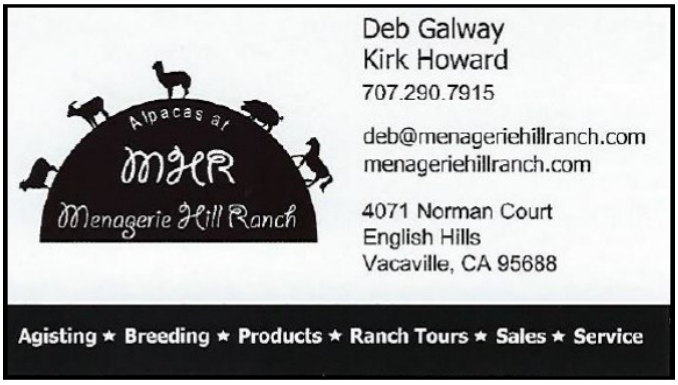
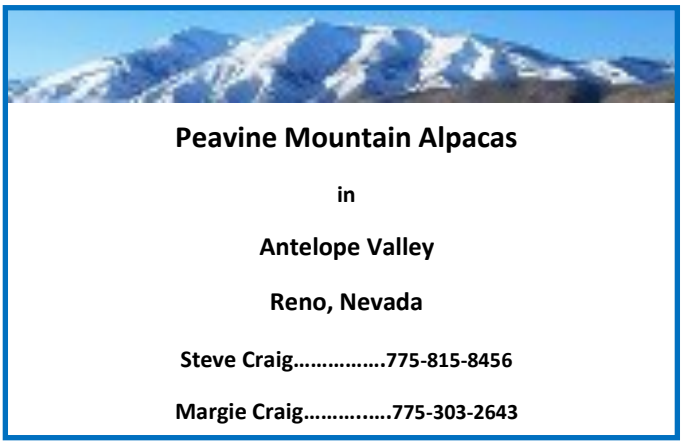

Alpacas at
MHR
Menagerie Hill Ranch
Deb Galway
Kirk Howard
707.290.7915
deb@menageriehillranch.com
menageriehillranch.com
4071 Norman Court
English Hills
Vacaville, CA 95688
Agisting ★ Breeding ★ Products ★ Ranch Tours ★ Sales ★ Service


Misfit Ranch
Misfitsranch.com
Alpaca Breeding & Sales
Cyndi Howard
Owner
7045 King Road
Loomis, CA 95650
916-869-0765
misfitranch2@gmail.com


YOUR BUSINESS CARD
HERE!
And it's free to members!


Peavine Mountain Alpacas
in
Antelope Valley
Reno, Nevada
Steve Craig……775-815-8456
Margie Craig……775-303-2643


Picotoot's Pack of Paca Farm
Russ and Brandi Mello
Anderson, CA 96007
530.945.0801
picotootsppf@gmail.com


Ranch of the Oaks
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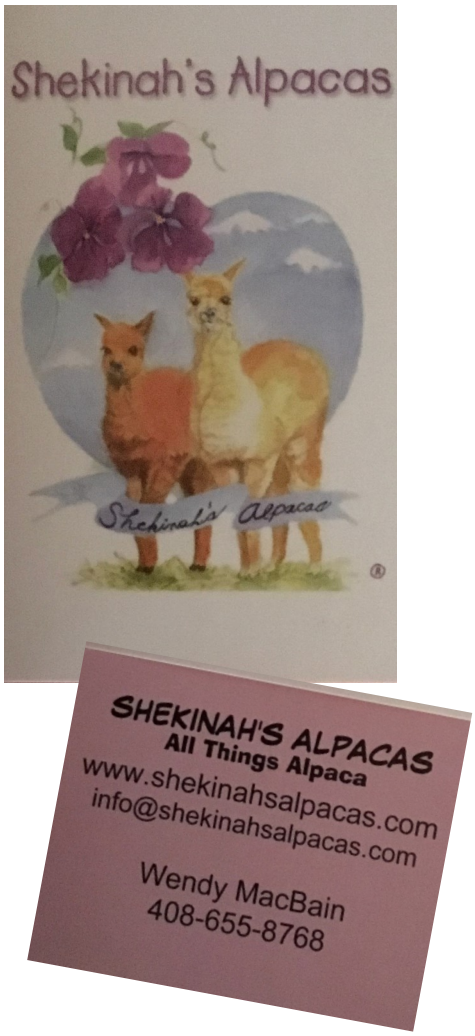
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SHEKINAH'S ALPACAS
All Things Alpaca
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info@shekinahsalpacas.com
Wendy MacBain
408-655-8768


L'illette Vasquez, Coordinator
170 Hoofbeat Trail
Kerrville, Texas 78028-8780
LlamaRescue@lillette.net
Mission Statement
To provide safe refuge for unwanted, neglected or abandoned llamas through intervention, education and necessary support. To seek placement and lifelong care for all llamas entrusted to our care.
Southwest Llama Rescue,
SWLR—a 501 c3 non-profit organization
SouthwestLlamaRescue.org

Calpaca Classified Ads

Agisting

Menagerie Hill Ranch is a full service, family run alpaca ranch offering **agisting, consulting, sales, support and alpaca fiber products**. Our agisting service includes quality feed/water, routine husbandry, vaccinations, birthing and other care. Cria born here receive basic halter training. Owners are welcome to visit any time by appointment, and we will help you learn how to care for your alpacas. Veterinary care, breeding, show training and other services are extra. Standard rate $3.50 per day. We are located in the English Hills area of Vacaville, close to Hwy 505.

Deb Galway & Kirk Howard, Owners

www.menageriehillranch.com **707.290.7915**

Farms / Ranches

Macedo's Mini Acre, Turlock, California Suri and Huacaya breeding program focused on performance (obstacle, pack and public relations) as well as fiber. Classes also offered in spinning, felting and fleece preparation. Wholesale dryer balls!

www.macedosminiacres.com | macedosminiacre@gmail.com

Larry 209-648-2338 | Maureen 209-648-2384

Herdsires

Menagerie Hill Ranch is pleased to offer the stud services of **RR Gun's Kit Carson (KC).** With **17 Championships** and **21 1st-Place** wins, it's no wonder that more than **10 of his offspring are Color Champion** winners! KC took his first championship at eight months of age. Since then, his fleece has maintained its length, fineness and uniformity, and he remains one of the best grey males in the country.

His kids still win big in the ring... including: 2016 Gold Country Gathering KC son 4-Sights Crawford won RCC behind RR Dizzy Gillespie in Grey Male; KC daughter 4-Sight's Centerfold won CC, grey female; and KC son RR Lancelot won Black CC. Centerfold also took CC at the 2016 ABI and the 2017 Futurity. And at the 2017 CA Classic, Lancelot won CC in both Halter and Walking Fleece. Most recently, MHAR Ebonni Carson won CC in Walking Fleece (Black) at the 2019 Gold Country Gathering!

Check out KC and his cria at:

http://www.menageriehillranch.com/alpacas-for-sale/121347/rr-guns-kit-carson

With gorgeous silver-gray fleece, excellent conformation and a perfect bite, we believe Kit Carson can make a big impact on our breeding program and yours!

He normally summers in Utah and will be leaving around May 1. Until then, he's available for hosted breedings at **$3,000,** with **drive-byes at $1500.** Reserve your breedings now and take advantage of his great genetics!

Deb Galway & Kirk Howard, Owners

www.menageriehillranch.com **707.290.7915**

Calpaca Classified Ads

Herdsires, *cont.*

MHAR Blizzard by Justice is a beautiful, bright-white stud, with extremely uniform, dense, crimpy fleece, full-body coverage, and excellent bite/conformation. At six years of age, his fleece still has a lovely, soft, buttery feel!

At the 2014 Gold Country Gathering, judge Kathy Klay said, "He's the total package!" when awarding him First Place (no CC), noting his soft crimp style and density. Most recently, his 3rd fleece spin-off entry won Judges Choice! And his fourth fleece spin-off entry won 1st Place in the adult (D) class (of 8) at the 2017 AOA nationals, this in spite of being very dirty thanks to our very wet/muddy winter. His first cria are on the ground with more due next winter. We can't wait to see them all!

To date, we haven't used him as much as we should because we've been focusing on the SG/black colors. But he's produced several lights/fawns; and now a gorgeous brown with amazing early crimp/bundling and density, plus staple length, brightness and handle that we'll definitely be showing! So we're focusing more on using Blizzard and hope you will too!

His stud fee is $750 for Calpaca members, including 60 days agisting at **Menagerie Hill Ranch** in Vacaville for your girl. Reserve your breedings now, and take advantage of his great genetics at this special price!

Deb Galway & Kirk Howard, Owners
menageriehillranch.com | 707.290.7915

Alpaca Products & Instruction

Put that stockpiled huacaya alpaca fiber to good use, have a finished product to sell at Farm Days, Ranch Tours, Holidays, etc. Fiber should be a minimum of two inches in length, minimal guard hair results in better quality finished products.

Payment is based upon quantity of competed dyer balls, $2.50 per dryer ball. Contact Larry Macedo for the form to use when submitting your fiber. Larry's e-mail is macedo1ref@aol.com, phone number 209-648-2338

Alpaca batts, roving, pre-felt in natural and dyed colors. (We grow many of our own dyes.)
Dryer balls at wholesale pricing. Classes in skirting, felting, dyeing or spinning by appointment.

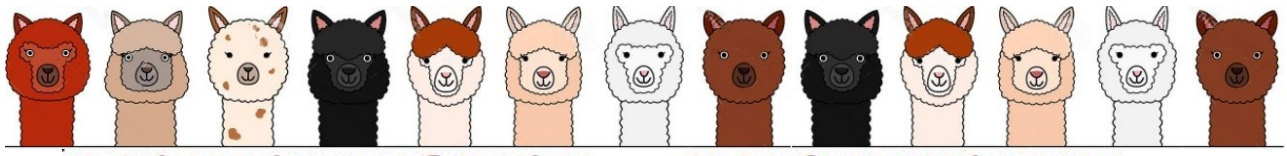
Macedo's Mini Acre, Turlock California | Maureen & Larry Macedo
209-648-2338 or 209-648-2384 | macedosminiacre@gmail.com | www.macedosminiacres.com

See next page for Advertising Rates and Submission/Publishing Deadlines.

Calpaca Connection Newsletter 2023 Deadlines			
ISSUE	**SUBMISSIONS DUE**	**PUBLICATION DATE**	**MEETING DATE**
Winter 2023	Jan. 21, 2023	Feb. 04, 2023	Feb. 11, 2023
Spring 2023	Apr. 22, 2023	May 06, 2023	May 13, 2023
Summer 2023	July 22, 2023	Aug. 05, 2023	Aug. 12, 2023
Autumn 2023	Oct. 21, 2023	Nov. 04, 2023	Nov. 11, 2023

Non-member Ad Rates

Ad Type	Width x Height	Member Rate
Business Card	3.5 x 2.0”	Free
1/4-page horizontal	7.5 x 2.0”	$24
1/4-page vertical	3.5 x 4.5”	$24
Half-page	7.5 x 5.0”	$48
Full-page	7.5 x 10”	$78



To Submit Advertising & Articles:

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editor@lillette.net

Mail CDs/DVDs to editor at:
L'illette Vasquez
170 Hoofbeat Trail
Kerrville, TX 78028-8780
720-839-0787 text/voicemail

To Pay for Your Advertising:

Make checks payable to:
“Calpaca” with info identifying what you are paying for in the memo line

Mail checks to:
Brandi Mello, Calpaca Treasurer
16860 Hawthorne Avenue
Anderson, CA 96007

***CONNECTION* DEADLINES ARE FIRM!** Newsletter deadlines allow publication one week prior to each quarterly Calpaca Membership Meeting. Both advertising copy and articles must be received by the deadline, or they will not be published until the following issue. Payments for advertising must be received by Calpaca Treasurer within seven days of submitting advertising via email, or ten days if submitted by CD or DVD to Editor.

Join Calpaca Today!

The **California Alpaca Breeders Association (Calpaca)** represents alpaca owners, breeders, and enthusiasts in California and beyond. We promote the well-being of alpacas and education of the public about alpacas, alpaca fiber, and alpaca products. We support each other through shared information and experiences, and host meetings, speakers and shows for the benefit of members and the public. We invite you to join us!

Calpaca Membership Meetings are held quarterly on the second Saturday of the second month of each quarter.

Calpaca Farm Membership - $100/year ($50 first year)

Benefits:

- Free marketing on Calpaca website (animals, fiber, store, services etc.)
- Educational quarterly Calpaca membership meetings
- Free advertising opportunity in the Connection newsletter
- Ability to link your Web site to a mobile device
- Ability to link your Web site to Facebook page
- Lobbying our State Legislature through– AG Day sponsorship
- Discounts at alpaca events
- Advertising opportunity to showcase your farm to over 3000 alpaca breeders
- Opportunity to run for a seat on the Calpaca Board of Directors and have a voice in the future
- Opportunity to host a Calpaca meeting and give your ranch and alpacas more exposure
- Two votes on Calpaca issues
- Connection newsletter that provides educational articles
- Ability to send email marketing items to members offering your animals, products and services
- Complimentary listing of your Openherd website on Calpaca's website – check out http://www.calpaca.org/alpaca-farms/

Calpaca Associate Membership - $30/year

Benefits:

- Attend all Calpaca meetings and events
- Quarterly Calpaca *Connection* newsletter

Join Online