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[www.cashmeregoatassociation.org](http://www.cashmeregoatassociation.org)

## A Message from the President

### Inside This Issue:

Hello everybody,

The summer is almost over, which means that the blissful period, when dams and kids are all together in the pasture, is coming to an end. The little 3 month old bucklings have to be separated from their mothers and sisters under great protests from everybody concerned. We are now looking forward to the SHOW SEASON!

We have added 14 ducklings to the menagerie here. The reason is an outbreak of lung worm and coughing last summer. I had to take to a big gun, Cydectin, to get rid of the problem. The lung worms are carried by snails and slugs, which are accidentally ingested by the goats (and I thought they were finicky!). My hope is that the ducks will take care of the little slimy things. In the meantime the ducklings are splashing a lot of water around in their pen, and they make me appreciate how clean and dry and dainty our goats are.

Our board is still struggling with the data base/registry system, and we are making progress. We have signed an agreement and made a deposit to Tyger Shark, a Canadian based company with some experience with Cashmere goats, to develop a user friendly data base. The name is intimidating, but I have been assured by a board member that the person in question is quite mild mannered.



With regards to shows we are aiming for efficiency this year. Our judge will deal with both the fleece competition and the live show at Tunbridge, Vermont, and I hope you will all participate one way or another! You will also have the opportunity to sell your cashmere related stuff at our booth at the Wool and Sheep Festival in Rhinebeck. New York.

Hope to see a lot of you (or at least your fleeces) in Tunbridge this fall!

Yvonne

## GOT GOAT?

You have been building fence, setting up shelters, researching various goat herds, and you are now purchasing some of the finest of caprines for yourself. There are a few precautions to remember in order to have a happy and content goat herd and goatherder:

**Buy two, four, or more.** Goats are very social animals. They want a buddy to hang with, just like most teenagers. They are also very hierarchical, and three seems to be a number where one is always left out, unless they are directly related, such as a mother and two daughters. If you are buying four or less, similar ages or common families can ease their transition into a new home. You will have one goat that will develop into the alpha/leader/queen/king, hopefully a benevolent monarch.

**Get histories and pedigrees for your new goats.** Most breeders keep health records for each goat. Get a copy of these and/or any verbal information that you can. Ask for family information, usually in the form of a pedigree. Ask for any fiber assessments they may have.

**Bring some of their regular repast with them.** Most breeders have some kind of grain/treat/hay for their goats. If this is the case where you are getting your goats, it is one more opportunity to ease their transition to a new home with some old home familiarity.

**Bring them home in comfy conditions.** In your vehicle, in a large dog crate, in the capped back of a pick-up, in a trailer, all of these will work to bring home your goats. They need to be dry and protected from direct wind or sun, and to be able to get up and turn around. If you are using one of those metal dog cages, block all but the opening side from view. Passing vehicles etc can get overwhelming for the goats. While a window is always nice, they also hunker down okay if it is dark, as long as it is not hot and there is good ventilation. Give them some bedding and some hay. They generally refuse

water while on the road, but if you are traveling more than 5 or 6 hours, offer them water when you stop for a break or overnight. Be set up to tie up any goats that get a bit feisty with the others.

**Once you get home keep them in a securely enclosed area for at least 24 hours.** Even though you are presenting them with goat paradise, they will be uncertain and very likely to bolt for anywhere but where you want them. Putting them in a small pen or a box stall will give them time to check out the new scene and to begin to feel at home. Tie any goats that are dominant if they begin squabbling and head butting. Once they have established that they are in a new home, you can open up your pasture to them and let them explore. Bring them back into the smaller area for something special to eat for a few days, and they should settle in nicely. Remove collars when they are not tied. Even though you use breakaway collars, they don't release when twisted, and a goat can easily get strangled, either by the horns of another goat or by getting the collar caught on some object.

**Introduce them to other animals with whom they will be sharing accommodations.** If you have livestock guardians, make sure your new goats realize that these are guardians, not predators. If other species such as sheep, horses, cattle, etc will be sharing a pasture, give your new goats a chance to see them up close before they are together. If they will be in with other goats, let them meet through the fence (non-electric) for a day or two before you open up to the inevitable squabbles and head banging that will occur as they establish a new hierarchy. It is recommended that if they will be sharing pasture with other sheep and/or goats that you keep them separate for a couple of weeks in case the new goats are bringing in any health problems.

**If they are trained to lead, walk the pasture perimeter with them.** Let them explore, sniff around, and generally check out the area. This

may not be practical if there are other animals in the pasture.

**Put them out into any new pasture/field delectables when they are full and ready to chew their cud.** While goats do tend to just nibble and experiment with new and unfamiliar foods, they also can over eat new and potentially toxic foods if they are hungry. Your new feeding area may have some very different edibles, and the goats will want to try them all.

**When your alpha goat turns out to NOT be a benevolent monarch.** In most herds one goat becomes dominant. Sometimes this goat is not very nice, and head butts everyone in sight. Check to be sure she isn't thin and thus protective of any food. Pet her first so she knows you understand her important position in the herd. Be sure your shelter has at least two entrances. Once your monarch lies down, guarding one entrance from pesky intruders, the others can come in and settle in themselves through another entrance. If you put them in an enclosure where they can't get out of the way you may need to tie them up. Tie them all, except for any kids, as with only some tied up, even just your monarch, they could get picked on by those that aren't tied. I will mention that this behavior tends to be prevalent in female as opposed to male herds. The bucks will strut their stuff, head butt, carry on, but generally then settle down to eat together and later snuggle up to sleep together.

**In spite of all your best efforts, one or more (may) take off.** Don't chase them, just secure any that are left. Chasing them will only encourage them to run farther and faster. You may be the only thing they currently recognize at all, so you want to maximize that by being a safe haven to approach, offering treats they are used to, and the sight of their buddies all safe and secure. When a goat runs off, she will tend to hole up and see what is up with everyone else. She will be silent and very clever at hiding from you if there is anywhere to hide. In the two longer experiences I have had, after 24

hours or so the lost goat will tend to call out and to look to rejoin the herd. If the whole herd left, they tend to stick together and look for good eats. Notify your local vet, police, animal control people, your neighbors, and anyone else you think might be able to help. Someone in the area may see the goat or goats and report this to the local vet, police or animal control office. This can add to your search party. Be patient, we haven't had any goats yet that were permanently lost either on our farm or on those where our goats have gone to live. We have had goats turn up at the local golf club applying for membership, at the local post office to send us postcards, enjoying the neighbors' fields, you name it!

**Once they're settled in, put up your feet, have something to drink, and enjoy! You've got goats!**



Anastasia was lost near Springfield, Massachusetts for THREE days!

A poster with this photo was up everywhere. She turned up at the post office, trying to send us a postcard.

Best of luck,

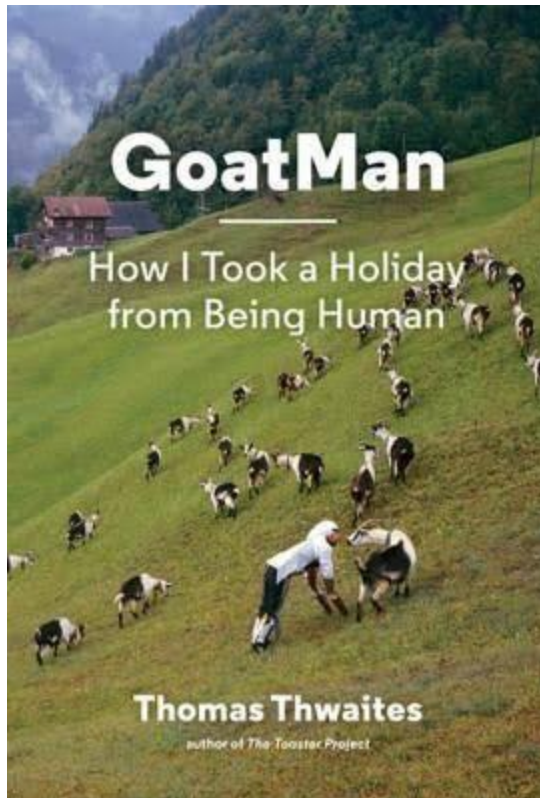
Wendy Pieh

Springtide Farm



## BOOK REVIEW

By Maggie Constantine Porter



There's a paucity of literature about goats. There are the classic children's stories - Heidi and The Three Billy Goats Gruff come to mind - and goats are featured in Greek mythology, i.e., the doe, Amalthea, suckled little baby Zeus. There are veterinarian texts and basic How-to-Care-for-Your-Goat books, of course. But in general goats are not the go-to animal protagonists in novels: where's the goat equivalent of Wilbur in Charlotte's Web? Or the stallion in Black Beauty?

Thus, whenever I notice a publication with the word "goat" in its title I rush and investigate. This was so when, earlier this year, I learned of Thomas Thwaites' **GoatMan** book about attempting to transform himself into a living, breathing *Capra aegagrus hircus*, armed with a

set of prosthetic front legs and a fake rumen so he could charge around the Alps with sixty dairy goats he'd never met nor interacted with before.

I had great hopes for this book. Prior to writing **GoatMan** Thwaites, a designer in London, fashioned a toaster out of raw materials using mostly pre-industrial tools and methods (he cheated at times, primarily out of necessity). The toaster never functioned properly: when first plugged in it toasted for maybe five seconds before its uninsulated copper wires began to melt. Nonetheless, Thwaites' undertaking is amusing, and this story shines a glaring light on how much of modern life's amenities we take for granted.

Unfortunately, Thwaites stumbles with his quest to metamorphose into a goat. His writing is clear and engaging, but his approach with this project is too academic, almost sterile – the animal itself is incidental to Thwaites' love affair with high-tech machines and well-credentialed animal science experts. Plus, he originally wanted to become an elephant (hello!), but logistical problems – the sheer size of a pachyderm – prevented this. So he travels to Scandinavia and meets Annette, a shaman; she urges him to consider "becoming" a goat. But she also cautions him as follows:

*"You have to decide if your project is really about trying to make a costume, or is the most important thing trying to find a way for people to feel their kinship, to bridge the gap, to feel like a animal? Because then you're gonna do everything much simpler."*

Thwaites ignores this wise woman. Despite the numerous insurmountable engineering and one might say philosophical issues involved in

transitioning into another species, Thwaites is undeterred. He researches the history of goats and their domestication by Man. He looks into the evolution of various species, and points out how much in common we have with other

**1) Language** Because goats are nonverbal, Thwaites thinks, Why not undergo transcranial magnetic stimulation? To induce temporary virtual brain lesions, to knock out my ability to speak or think abstractly for a short time? Unbelievably, he tries (and a principal investigator at the Royal Veterinary College's Structure & Motion Laboratory's Neurosciences of Language assists him) to de-activate one of his brain's major language centers. The exercise is a bust, thankfully, because serious damage could've occurred. But really, what's the point? Language is in Thwaites' DNA. Whether he loses the ability to speak for an hour or so is beside the point. Experiencing a state of non-language for a short time does not render one a goat.

Elaborating on this: does being non-verbal mean an animal doesn't communicate? Studies on humans indicate that over 80% of our communication is via body language, facial expressions and tone of voice.<sup>1</sup> Goats communicate with each other and with us without uttering one word.

**2) Eyesight** Thwaites knows goats have a panoramic field of vision of 320-340 degrees, to better see predators. Humans have a 100-degree vertical visual field, and a 200-degree horizontal visual field. Plus, goats have color blindness and lack depth perception. Evidently Thwaites couldn't find – or couldn't afford – the specialized computerized optical equipment to simulate how and what goats see. Thank heaven for this, because otherwise he'd have to wear a weird helmet with equipment attached which, I suspect, would make his assimilation into a goat herd that much more difficult and would contradict his thesis of taking a holiday from being human.

mammals. He spends time at the Buttercup Sanctuary for Goats, to interact with previously abused and neglected goats up close and personal. But mostly, he tries manipulating science as follows:

**3. Movement** Thwaites ultimately winds up with a goat suit, a contraption made of wood, glue, plastic sheeting, steel, Velcro, elastic, cable ties and ice skates. With this bizarre prosthesis, his arms become front legs, an awkward proposition given that his arms must now bear 60% of his total body weight. A Dr. Heath, who made the prosthetic limbs for Thwaites says:

"You'll only ever be a human in a goat walking position, constrained by your own natural anatomy. While Geoff and I make these, I think you need to do some stretching exercises to try and get more range in the pelvis and stretch your hamstrings and get your knees towards your chest."

**4. Goat Digestion** Thwaites has an ersatz rumen fabricated. Need I say more? So while he's wearing a so-called rumen, his own GI tract is carrying on as usual. The book is silent about whether or not Thwaites' back end spits out goat pellets.....

Significantly, GoatMan avoids the issue of breeding altogether (Thwaites decides to run his man-as-goat experiment after the rutting season is over). To be a male buck, and not spray oneself or knock heads with other bucks or not issue loud, strange vocalizations when in the mood for love – then you're not a male buck at all! You're a wether or you're a sick and/or elderly buck or you're a thirty-something artist/designer with a crazy science project.

Thwaites contacts a Swiss goatherd who agrees to allow him the opportunity to run with his animals down the Alps en route their winter feeding range. I was willing to be generous with Thwaites, give him the opportunity to show me that his newly acquired quadruped status and homemade rumen would make him one with

his herd mates. I was hoping he'd be able to bond with the Swiss goats over several weeks, figure who's who in herd hierarchy. But rather than interacting with even a single buck or doe in any meaningful way, Thwaites interacts primarily with his Swiss hosts, eating their food and enjoying their creature comforts before sleeping exactly one night in the barn - not with the goats, but in a loft area above the herd.

The next morning he straps on his goat suit and, with a large head start, inelegantly trots down the mountain where the goats will soon be charging and overtaking him. The book features many photographs of Thwaites hunched over on all fours, taking on the Alps – there's even a nice shot of him nuzzling with another – real! – goat. But the take-away from all this is that while Thwaites enjoyed himself with this project, and he writes well about goat history and anatomy, he should have skipped all the malarkey with the prosthetic legs and phony rumen. He should have listened to Annette, the shaman and kept it simple. He would've gained far more insights to being a goat if he had just taken the time to live with a couple of them for a spell.

Here's the point Thwaites misses: other animal species are composed of *individuals*. When Thwaites announces he's going to transform himself into a goat, he leaves it at that. At no time does he seriously contemplate whether he wants to become an athletic young doeling or

an overweight wether or an alpha doe with an entourage of great-grandkids, grandkids and daughters or a young buck working his way up in the male goat hierarchy.

It's as if a goat set out to become a human, but never decided what sex it'd be, or what country it'd live in, or its age or race or economic situation. There is no generic human – and, conversely, there is no generic goat. So Thwaites' insensitivity to this issue made, for me, his project a bit of a farce.

There is another book, recently published, one I haven't read yet: [Being a Beast: Adventures Across the Species Divide](#), written by Charles Foster. Foster apparently "goes feral," living out in the wild with animals native to his country of England – badgers, red deer, foxes, swifts and otters. He eschews costumes à la Thwaites; instead he forages for food and attempts to survive as an undomesticated animal would. Perhaps this is the book I should have reviewed!

Goats are not toasters. You can't just make one. But they really will dub you an honorary member of their clan if you interact with them day after day in a positive, reassuring manner. Cut them choice boughs of maple or ash trees or wild raspberry bushes. Provide clean water and shelter. Give does in labor space, but let them know you're nearby in the event of a difficult birth. And save the homemade goat costume for Halloween.

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## Test Your Knowledge of Management Practices That Affect Dewormer Resistance

By [Michelle Arnold](#) / June 20, 2016

There are many important diseases in goats but none are as common or threaten the health of goats as much as internal parasites (worms). Although there are many types of worms that may contribute to a parasite problem, the blood-sucking barber pole worm (*Haemonchus contortus*) is the most prevalent and most important, especially in the southern US. This parasite causes the highest death loss in young animals during their first year on pasture, especially around weaning time.

To read more visit: <http://onpasture.com/2016/06/20/test-your-knowledge-of-management-practices-that-affect-dewormer-resistance/>

## LEAVES AND SHEAVES

By Becky Bemus

In July my Agriculture Student and I made our way down to Belfast, ME to attend a week long seminar on tree fodder, entitled “Boosting Resilience in Biodiversity in Perennial Farm Ecosystems Through Use of Air Meadow Pollarding”. Although it was my initial impression that the seminar would be a more in-depth presentation with a hands on component of the information gleaned through an extensive review of historical literature by the farms owner and tree fodder enthusiast, Shana Hanson, that she presented in an article for the last HP’s issue; she managed to go above and beyond to bring together an intellectually rich and diverse group of presenters who provided an incredibly interesting and informative series of topics all related to tree fodder and the health of the overall farm system. Encompassing everything you might ever want or need to know about using trees in farming.

The seminar began with a brief review of the use of tree fodder for livestock over the past 8000 years. There were many depictions from all different cultures of the practice of tree pollarding over the millennia, some of which actually showed our beloved goats as some of the animals worthy of so much work in preparing and perpetuating their feed. It was interesting to learn that land owners and community areas such as church grounds and cemeteries’ would hold auctions where livestock producers could bid to win the right to pollard the trees and enhance their own feed stocks. That value of the fodder was directly related to the type of foliage harvested with some sheaves (bundles of ash leaves and fine

twigs) of dry matter being traded at a ratio of 2:1. Another interesting note was that the order of forage nutrition changed, sometimes drastically, depending on whether they were feeding just leaves or if the fodder had been sheaved to include small branches and twigs as part of the feed.



This rendering is from the book "Secret History of the World," by Mark Booth.

Participants learned firsthand about the different tools used to prune and efficiently strip leaf hay from trees which included some history on the development of the tools themselves and a presentation on the correct and safe use of Billhooks (presentation by Benjamin Bouchard), a traditional tool for harvesting leaf hay. At the time I did not think I would want to own such a sharp and potentially dangerous devise, but after using it on several occasions for a multitude of different tasks, I was tempted to try to bring one back to Canada.

As an aside, participants learned how to make our own light and easily portable ladders for harvesting tree hay from spruce trees as well as



how to position these ladders and ourselves to work safely while pruning. We were shown how to select limbs for removal while working with the natural shape of the tree and the available sun to encourage an abundant and balanced regrowth on the tree depending on our goals for that tree in that area of our farms. Traditionally trees growing abnormally would have been removed to allow the other trees more room to foliate. Traditionally tree foliage would be trimmed to a height out of reach of the livestock to prevent tree damage that might negatively impact the tree health during its production cycles. This practice is clearly depicted in the drawing above.

It was further explained that different types of trees will sprout regrowth differently so this was an important consideration when deciding what method to use in proximity to livestock and what tree species to focus on for maximum re-harvest versus fresh feeding or direct feeding areas.

Fred Servello, from the University of Maine prepared a document for the group comparing his years of studying deer browsing habits to the forage the goats at 3 Streams Farm traditionally eat and when. It is interesting because on our own farm we have noticed that the goats will only eat certain weeds or shrubs at a specific point and this seems to be a combination of the plants natural chemical signals to their surroundings regarding their stage of growth and palatability as well as the animals understanding of when peak nutrition can be obtained without decimating the plants ability to regenerate.

Obviously where goats are used for species control and reclamation purposes they are only given a choice of these plants and must ignore their normal patterns of munching but when given enough space and choice, they will work

with nature as best they can to maintain a healthy local ecosystem. This all lead to a more rounded discussion around learning the nutrition rankings of different tree fodders and their seasonal high values so that the timing of the harvest would optimize their value as a feed source and to better prioritize the species harvested for maximum nutritive return on your time spent pollarding.

The field and tree health and enhancement through pollarding was discussed and we learned how useful this practice is in fixing nitrogen in the soil which will greatly benefit the fields surrounding the pollards. Morten Moesswilde, a German scholar who assisted our host with the translations on pollarding from German sources and who is also a Maine State Forester, presented on the assessment of soils and how this affects the tree species that will grow there.

Going deeper into the soil, Dave Rocque a state soil scientist took us all on a walk through the forest auguring soil samples at different points and explaining the different types of soil. He touched on the historical importance of these geologically and pastorally in terms of farm selection and/or choosing the best areas on your farm property for an intended use. For some end uses, it is of the utmost importance to have this kind of assessment done prior to purchasing acreage.

In pollarding there is of course tree waste generated both at the time of pollarding and when the dried feed is utilized, so the course rounded out our experience by presenting on the different uses for this waste. Biochar production and use, presented by Mark Fulford, is incredibly interesting and the benefits and uses to land and animal are extensive. This is an area I hope to research further in future and write up my findings for the HP readers.



Steve Byers, a clinical herbalist, gave a talk on tree medicine which encompassed the benefits and uses of the fruits, bark and twigs generated when pollarding trees which have both human and animal benefits. He has been kind enough to write out his presentation for HP's readers in a series of articles, including the reference material he used for those wanting to delve a little more into a naturalistic approach towards our own and our animals' care and health.

To further round out the seminar and put all the information together we spoke to people already using these practices on their farms and small acreages'. Phone interviews were conducted with both Paul Hand of Bees and Trees in the UK and Michael Walder of Mahna Farms in Canada. Paul Hand spoke about studying and assisting the reclamation of old pollards in England and his experience in feeding tree hay to his donkeys as well as their therapeutic use of his biochar experiments. Michael talked about how he is using tree hay to feed his herd of Boer goats and some of his harvesting and processing techniques which includes the use of a manual square baling unit for easier winter storage and handling.

This was certainly time well spent off the farm and we were eager to apply our learning's to our trees back home. We managed to put up 50-60 ash sheaves in the top of the barn for storage. Not the traditional storage method we learned at the seminar, but something that will work well for my farm and we will report on the animals' winter interest in this feed in the spring. We already harvest loose leaf hay in the fall and store this for a mid-winter pick me up, which has always been received with great enthusiasm so I expect the sheaves will be even more popular. We hope to get to active pollarding of some sugar maples and some

more ash trees and maybe even some apple once I am better informed on pruning these trees.



An example of a pollarded Willow tree near my farm. You can see the width of the tree base in comparison to its height.

I also realized the more I thought about pollarding, that I in fact, knew of several places around my home town where trees were already being pollarded, although for what purpose I am not sure. Based on the size of their trunk growth I can only imagine it has been going on for many years. It is interesting what we see every day and don't think anything of until our eyes are opened. Tree pollarding has so many potential positive end outcomes and can certainly be viewed as a renewable and sustainable farm practice that we will be working hard to incorporate it more and more into our own farm practices. I hope others do as well.

## Tree Medicine from Goat Fodder: Using the Fruits, Barks, and Twigs of Our Labor

By Steve Byers

*The following article is an excerpt from a class taught on Tree Medicine by Steve Byers, Clinical Herbalist, at a recent Tree Fodder Seminar hosted by Shana Hanson at 3 Streams Farm in Belfast, Maine. The week long seminar focused on how to utilize tree leaves and bark as a useful and abundant food for livestock with a specific focus on goats and sheep.*

### AN INTRODUCTION TO POLLARDING

When we look at a pasture of grass with fences, most people think of it as a place to feed animals. When we look at a forest with hardwoods and evergreens, do we think of it as food and also medicine for animals and humans? In fact, the forest is an excellent place to stack functions for all of life by making use of trees for their animal fodder and medicine not to mention firewood and dozens of other building and fencing materials.

While North American agriculture rarely sees the forest as a possible source of food and medicine, many European cultures have a rich history and successful tradition of using leaf fodder for animals by pruning or stripping trees of new growth (3-7 years old). This practice is called pollarding in which farmers harvest tree branches above browse level of their livestock (often 6-8 ft. high). As a result, the tree grows more shoots in the same way a low level coppice might when a hardwood tree is cut to ground level and grows multiple shoots. Don't be confused, if done correctly, this is not hurting the tree. How do we know? Take a look at the 800 year old ancient forests in the United Kingdom that host the trees once pollarded over hundreds of years by farmers to feed livestock and still are the strongest and healthiest trees around.

Once the branches are harvested, the leaves can be fed to the animals fresh or stored on

racks (ranging from the size of a corn shock) to 20-30 Ft. high racks and fed in the winter. Want more details? Pollarding is a lost art but to learn more look up "Pollarding with Shana Hanson" online. Shana has become a local expert on the tradition. Consider also that trees are full of medicinal properties and the more the animals eat them for food, the healthier they will be, and the higher quality their milk, wool, and meat will be.

But what do we do with the branches now that they are stripped for food? From my experience working with goats and sheep and as clinical herbalist, my answer is: FOR MEDICINE! Trees are a perennial source of medicine that can be of benefit in so many health conditions when applied correctly. One important factor in determining quality of medicine is to harvest the tree when the medicine is most vital. For example, we get our fruit when the fruit is ripe, not rotting on the ground. The bark is most medicinal when the sap is either running in the Spring or settling back down once the leaves have fallen in Autumn. The leaves, if you are using them medicinally are best harvested when full size, green, and full of life (without bug holes). Let's take a look at 3 very common trees here in Maine and how they may be used for their medicinal value. I will cover leaves, even though the goats get to them first, there are always more trees and more leaves that we can harvest medicine from.

Before talking about the 3 trees below, I'll generally answer your questions about preparation and dosing now. How to prepare the leaf and bark? A simmered tea (known as a decoction) of the dried bark and fresh or dried leaves will be the easiest. A tincture (alcoholic extract) can also be used. Dosing depends on the person but bark or leaf tea would average out to be about 1 T per cup of hot water drunk 2-4 times a day. You can also just eat a few leaves if you are willing! (like your goats would). Both can be used topically for skin diseases as a poultice or compress.

### **ASH (*Fraxinus spp.*)**

Ash has been a very important tree medicine for Europeans, Native Americans, the Chinese and was used by the Eclectic doctors (1850s-1920s) in America as part of their plant pharmacopeia. Ash bark is primarily used though the leaves can be used too. Ash bark is an astringent bitter tonic. It has a positive effect on the digestive tract by stimulating digestive secretions (Hydrochloric acid, bile, and digestive enzymes) while also tonifying the intestinal tract by astringing (tightening) the junctions of the mucus membranes to improve their absorption of nutrients and sequestration of foreign pathogens. Additionally, the tonifying effect improves the peristaltic action of the mucus membranes in the gut helping with diarrhea (when too watery) and constipation (when too dry).

The bark of Ash has been used as a liver and immune tonic. Why immune tonic? It acts as an alterative (improving eliminatory functions in the body) and supports the gut which is where much of our immune system is located. Our highest concentration of lymphatic tissue is located in the gut and Ash helps the health of the gut overall (as described above) by reducing inflammation in those tissues, improving lymphatic clearance, and inhibiting worms, parasites, and pathogenic bacteria (it was once used as a substitute for Peruvian Bark, the main source of quinine). Ash bark does not contain quinine but does contain the bitter glucosides fraxin, fraxetin as well as quercetin which all

protect the body from oxidative stress. In Traditional Chinese Medicine (TCM) several species of Ash have been used for their bark, which is known as Qin Pi in TCM. It is indicated for "clearing heat" (infections), eliminating toxins, drying dampness (excess mucus/phlegm), clearing "liver fire" (poor liver function), and brightening the eyes. They have found it in laboratory studies to inhibit *Staphylococcus aureus*, *Bacillus dysenteriae*, and *E. Coli*. Ash bark has been used in America as a uterine stimulant for delayed menses, pelvic stagnation, and fibroids. Additionally, Ash bark has been indicated for skin diseases, abscesses, itchy scalp, and sores.

The leaves of Ash have diuretic, diaphoretic (make you sweat and break a fever), and for its metabolic effects. The spring gathered leaves and seeds have been used to stimulate the appetite, speed up weight loss, and improve sex drive as an aphrodisiac. The leaves have also been used as a laxative in higher doses as a substitute for the herb Senna though they are not nearly as irritating as Senna to the colon. They have been used for treating gout and rheumatoid arthritis, an autoimmune condition, and may have important value in other autoimmune conditions.

### **BIRCH (*Betula spp.*):**

Birch trees have traditional use all around the world. The bark has a common thread of use as a diaphoretic for fevers, as a diuretic for edema, gouty arthritis, kidney stones, and as an astringent for skin diseases topically and internally. Black birch bark contains the highest levels of methyl salicylates, which are the natural form of the anti-inflammatory drug Aspirin. It also contains a number of volatile oils that are anti-inflammatory and anti-bacterial. It can be used for sore muscles and joints topically as a warm compress and taken internally long term for reducing inflammation in the body affecting the joints. Birch bark can also be used to prevent and treat urinary tract infections (in formula with other herbs). Think of it, it is an anti-bacterial diuretic tonifying to the bladder.

Birch leaves are also a possible food for humans as they contain a load of polysaccharides that get a slight slimy feeling in the mouth when eaten. This slime is soothing to the throat and GI tract helping with sore throats, ulcers, and inflammatory issues in the gut. The leaves could be used to help restore the bowel function after a food poisoning attack, dysentery, or after you've had a bit too much extra spicy hot sauce at your Uncle's football party. The leaves can also be used for rheumatoid arthritis, skin diseases, and edema. Birch sap has been used for clearing kidney stones, bladder weakness, and as a spring energy tonic as it is so mineral rich. It can be made into beer, wine, and vinegar. Finally, the Cherokee used black birch as a tea to bath their men in after returning from battle and hunting. It was used by the tribe to spiritually cleanse their men after returning from the World Wars.

#### **WHITE CEDAR** (*Thuja occidentalis*)

Yes, you can feed white cedar to goats and yes they do love it especially in the winter when there aren't many other green things to eat. White Cedar is a superb medicinal tree for so many reasons. The green tips of cedar twigs are the part used medicinally. It has an amazing aroma, which indicates its high volatile oil content of oils such as thujone and fenchone. It is a very effective anti-viral that can help with prevention of contracting viruses and has been used in the treatment certain of flu viruses, stomach viruses, herpes virus (and other STD's), chicken pox, and shingles. Topically and internally, I have had great success with clearing stubborn warts that at the core are viral and need a strong anti-viral herb to send them on their way, never to return. I use it in combination with Echinacea tincture also applied topically and taken internally.

White Cedar also has anti-tumor, anti-fungal, astringent, analgesic (pain relieving), anti-inflammatory, and is a diuretic, a circulatory stimulant, and a vulnerary (stops bleeding) at the same time. It is also known as a "cicatrisant", which if you care to try pronouncing that, means that it prevents the formation of scars— yet another win for wart removal! I like to remind people that the Cedar tree "has nice skin" (meaning its bark is nice and smooth) and helps to keep our skin looking nice too. In Chinese medicine it is known to "resolve dampness in the GI tract, Bladder, and lymphatic tissue where there this stagnation presenting in diseases such as in cancer and where there is abnormal tissue growth. The leaf tips also contain Vitamin C and were used to prevent scurvy.

Dosing White Cedar is a little different than Birch and Ash. The Thujone can be too irritating and stimulating to some and you may want to use half the general dose mentioned above. Remember, treat the person, not the problem and consult an herbalist for proper use and dosing. Excess amounts of Cedar may cause uterine contraction and therefore should be used with caution in pregnancy, and not in the first trimester.

#### **TIME FOR TREE MEDICINE**

Tradition and science point to the power of tree medicine as having so many benefits for us humans and our animals too. Remember that we need plants to survive in every area of our lives. We need wood for heat and construction, fruit for food, and now think of trees for medicine. Your animals will be healthier and so will you. Make the most of your tree fodder efforts by exploring the many uses that they might have for your life, farm, and community. If you do, you will be more connected to the land, your animals, and yourself.

Steve Byers is a Clinical Herbalist trained in Cherokee Traditional Medicine, Traditional Chinese Medicine, and Western Herbalism. He has a private practice in Belfast, Maine where he lives with his wife and daughters on a farm with goats. He is also a Wilderness First Responder and teaches classes helping people to understand how to use trees as medicine for First Aid use as well as chronic health



conditions. Steve can be reached for questions by writing to 209 Back Belmont Rd. Belfast, Maine or calling out from a high tree yelling his name. You can also call (207)-205-2515.

## References:

### Medicinal Plant Books

A Modern Herbal By Maude Grieve

King's American Dispensatory  
By King & Felter

The Energetics of Western Herbs  
By Peter Holmes

### Tree Medicine Book List

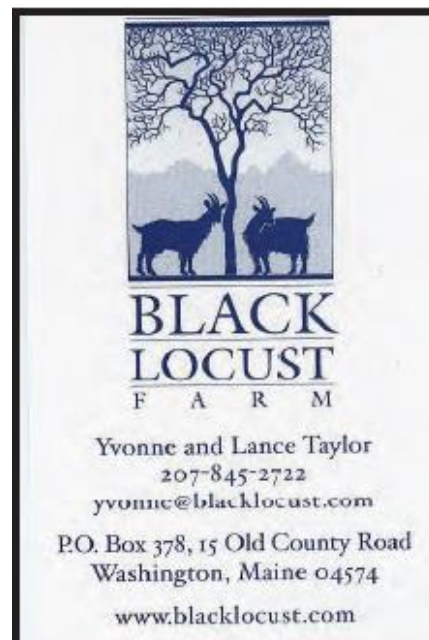
The Tree Identification Book  
By Stephen Chelminski

Fruit & Twig Tree Key By William Harlow

Peterson's Eastern/Central Medicinal Plants and Herbs By Steven Foster & James Duke

### Native American Culture

Notes on a Lost Flute: A Field Guide to the Wabanaki By Kerry Hardy



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[www.cashmeregoatassociation.org](http://www.cashmeregoatassociation.org)

## The Development of a Coat Colour Identification System for Cashmere Goats:

By Becky Bemus

Hello all, I have been interested in identifying and correctly labeling the many and varied combinations of coat colours that appear in our Cashmere goat herds for quite a few years now. Unfortunately something always seems to get in my way and I have to put this quest to the side, but with the development of the cashmere database, this is something that has become more of a priority.

As some of you may already know Dr. Phil Sponenberg has identified the coat colours in many breeds of animals and has done a fair bit of work already with regards to coat colour in goats. For those of you who may not already know of him, Phillip Sponenberg is the Professor of Pathology and Genetics at Virginia-Maryland Regional College of Veterinary Medicine, and Technical Advisor to the American Livestock Breeds Conservancy. He works with many rare breeds in assisting them with breeding strategies and I have had the pleasure of working with him in the past when I had rare breed sheep. I approached Dr. Sponenberg awhile back and he has agreed to work with us in identifying a colour system for cashmere goats; but before we can move forward with this, we need to first have a thorough understanding of the work he has already done and to identify cashmeres who fit into his current framework and seek his guidance around identifying any unique coat colour combinations that might not.

To assist me in my quest, I am looking for photos of animals you have in your herds that may be unique to your herd or a colour pattern you have seen show up infrequently, so we can get an idea of the full range of colour genetics our goats carry. Once we have a basic survey of our colour population, we can use this

information to begin to predict and obtain more variation and/or increase the numbers of these rare colours. This is not only important for those who want to specialize in a specific colour of goat, but also important for all of us as those less commonly coloured animals usually inherit other less common genes and this will allow us to have a visual means of identifying animals whose genetics are less similar to the others. This will allow us to potentially maintain a greater degree of genetic diversity in our herds and the greater population as time goes on. A pedigree from those animals would be quite interesting to be sent along with their photos, especially if the colour of the parents or a picture is included of the ancestors coat colour as well.

Additionally as we, as a group of breeders, start seeing more colour variations we have the potential to see more and more varying shades of fibre produced by our goats. Traditionally only white or light fibre goats were selected for and this likely lead to some genes for darker fleeces being hidden or in some cases maybe even lost to the gene pool but with the North American market catering more to the end buyer than to world market demands and with spinners having a great interest in colour variety and especially deeper and darker colours; some breeders are now seeing the emergence of some very dark and very unique shades of cashmere.

It was suggested not too long ago, that cashmere's were incapable of producing dark fibre so what I would like to do is ask that any breeders who have animals producing very dark fibre or a very unique shade of cashmere to please send me a small sample of the fibre and a photo of the goat it came from. Again a

pedigree would be quite interesting, especially if the fibre and coat colours are recorded on it.

My intension is to collect as many samples as I can and to send them off to Dr. Sponenberg for review and documentation. He has worked with the coloured angora breeders over the years to develop their coloured herds and has seen the progression of deepening colours so it is hoped he can use this background to help establish some breeding guidelines for reclaiming and preserving the genetics for dark and/or unique cashmere fleeces.

Unfortunately the samples would not be returned but they will help contribute to the information available on cashmere goats and become a part of their evolving history.

Anyone interested in joining me in this work is more than welcome. Please send me an email at [cashmere@rovingwindsfarm.ca](mailto:cashmere@rovingwindsfarm.ca).



*Hitachi is an example of a coat colour we have had appear in our herd just 3 times in 12 years. She and others have an added interesting feature of changing their depth of colour with the seasons.*

## DATABASE UPDATE:

The CGA has contracted with Tyger Shark, Inc., to design and develop a web application with animal database and registration functionality. Tyger Shark is located in Barrie, Ontario. It has begun the project, and we will be providing updates.

As previously reported (HP, Summer 2014) animals eligible for entry will be goats judged by a qualified, neutral party to meet the North American Cashmere Goat standard for fiber, or for fiber and conformation. The database will provide easy access to information on the goat's attributes, pedigree, and owner.

The vision is that owners will be able to submit show or laboratory results on goats of their choice meeting the standard. Data will be submitted to the CGA Registrar, a new yearly position that will open once the database is launched. Board member Noreen Rollins has graciously agreed to fill the position for the first year.

The database will be searchable through a link to be added to the CGA's website. Many details will be ironed out as the project moves through the development phase. In order to enhance search results, data will be entered using pull down menus.

The Board will be choosing a standard list of colors to apply to a goat's fleece and guard hair. It will also be working on how to standardize a judge's evaluation of the goat's attributes. Efforts in these areas have been ongoing for some time and progressing.

If you are interested in participating during the development phase of this exciting project, you are invited to express your interest to the Database Committee by contacting chair Maryanne Reynolds at [Maryanne@stoneharvestfarm.com](mailto:Maryanne@stoneharvestfarm.com)

As part of this move towards a cashmere database the North American Breed Standard and the accompanying Grading System were and revised. The updated documents are printed here for your information.

## **North American Cashmere Goat Breed Standard**

### **General Characteristics**

The North American Cashmere Goat (NACG) is a dual purpose animal, providing both fiber and meat products. Both FIBER and CONFORMATION traits are described and scored in this breed standard, with current relative assigned values of:

- 50% FIBER
- 50% CONFORMATION

### **FIBER**

#### **Diameter**

Fiber diameter can be described as Mean Fiber Diameter (MFD). Fiber must be fine, with a histogram MFD of 19 microns or less.

#### **Uniformity**

Fiber diameter should exhibit minimal variation in a given sample or “swatch,” and transitional fibers should not be present. Uniformity is expressed as Coefficient of Variation (CV) and must be no greater than 24%.

#### **Style**

Style is defined as the crimp or curvature of the individual fibers, and is expressed as deg/mm (degrees of circular arc per mm). Individual fibers should exhibit three dimensional, irregular crimp along their entire length. Mean style measurements on the fiber scan should be no less than 45 deg/mm.

#### **Length**

Fiber length is measured in its relaxed (crimpy) state, and must be no less than 1.25 inches (32 mm).

#### **Differentiation**

Guard hair should be coarse enough to be easily differentiated from down fibers.

#### **Total Down Weight (TDW)**

The total amount of cashmere down that is obtained from the fleece of a single goat. Represented as Total Down Weight (TDW), it is measured after cleaning and processing, and must be no less than 2 ounces (60 grams).



**Cover**

All four harvest sites on the individual goat (neck, shoulder, side, hip) should produce cashmere fiber, and the down coverage at each of these sites should be Complete and Consistent. Complete Cover means that each harvest site actually grows cashmere. Consistent Cover means that the cashmere that is grown at each harvest site is of the same type and quality.

**CONFORMATION****Head**

Head should be well-proportioned to neck and body size. Horns may be of any style and shape that is functional and safe.

**Teeth**

Teeth should be flush with the dental pad. When viewed from the side, upper and lower biting structures should be symmetrical.

**Forequarters**

Neck should be well-proportioned to frame. Shoulders should be well-muscled and strong. Legs should be straight, strong, well-muscled, and proportional to frame. Shoulders, knees and pasterns should be correctly angled and strong. Forequarter movement should be free and correct.

**Barrel/Back**

Barrel should be long, broad, and well-muscled. Chest should be wide with ribs that are well-sprung, with adequate girth in proportion to frame. Back should be strong and straight from shoulder to rump.

**Hindquarters**

Rump should be broad, long, and well-muscled, with only a slight slope between hook bones and pin bones. Rear legs should be strong, well-muscled, and proportional to frame. Hips, hocks and pasterns should be correctly angled and strong. Hindquarter movement should be free and correct.

**Feet**

Hooves should be sturdy, broad, well-formed, and proportional to frame. Inter digital division should be adequate, and both sides of each hoof should be symmetrical.

**Reproductive System****Does:**

Udder should be round with good suspension, and with two teats that are functional and symmetrical. Vulva should be normally developed for age.

**Bucks:**

Two testicles should be present, smooth and symmetrical, and of adequate size for age. Any split in the scrotum should extend no more than one third total scrotal length. Two undeveloped teats should be present. Sheath should be normally developed for age.

# NORTH AMERICAN CASHMERE GOAT

## GRADING SYSTEM

### Grading System

The North American Cashmere Goat grading system described here (Figure 1) reflects the North American Cashmere Goat (NACG) as a dual-purpose animal, providing both fiber and meat products, with relative market values currently defined as: FIBER 50% and CONFORMATION 50%. This ratio has been a long-held and consistent position over many years for most North American breeders and producers. That ratio can be modified over time, however, to meet the needs of a developing NACG industry. For example, if the NACG industry requires more attention to fiber quality and production, and less attention to meat production, that ratio might in the future be changed to something like: FIBER 60% and CONFORMATION 40%.

The NACG grading system gives a decimal score from 0.0 to 3.0 for each of the scoring traits of both FIBER and CONFORMATION. This system also assigns descriptive terms to the decimal scores. The point here is that some breeders and judges might find the decimal scores most useful in the evaluation of goats and fleeces; others might prefer a descriptive term. This grading system accommodates both preferences.

<u>0-3</u>	<u>Description</u>
3.0	Excellent (best)
2.0	Medium (average)
1.0	Poor
0.0	Disqualified (DQ)

Note that high numbers (e.g. 2.8) are always better than low numbers (e.g. 1.8), and this is consistent across the board for all traits to be scored. In this scoring system, therefore, excellent Style would score 3.0, and poor Style would score 1.0.

### Part 1 - GENERAL INFORMATION (no score)

In this section, standard identifying information is recorded. Also, certain traits are described but not scored because they generally represent breeder preference or management issues, or otherwise have little to do with the overall genetic value of the goat.

**Cashmere Goat ID** (name, ear tag number, tattoo number, microchip number, etc.).

**Sex/Age/Birth Date/Birth Number** (single, twin, triplet, etc.)

**Fleece #** (1st fleece, 2<sup>nd</sup> fleece, etc.).

Since the cashmere fleece tends to coarsen a bit each year, it is important to know the age of the goat at the time of fleece harvest. Since the fleece harvest always occurs in late winter/early spring, and harvest might have been completed something like 6-8 months prior to evaluation of the live goat (e.g. in September), it is generally more useful to know the age of the fleece than the age of the goat.

### **Color Down/Color Guard Hair** (e.g. Light Brown/Black)

Note that there currently is no consensus among NACG breeders regarding the relative practical value or desirability of the various colors of down or guard hair on cashmere goats. For this reason, colors of down and guard hair are listed and described here as traits under GENERAL INFORMATION, and left as a breeder preference without a value score.

### **D:G Ratio (Down length:Guard hair length ratio)**

D:G ratio describes the length of down fiber (D) compared to the length of guard hair fiber (G). A goat whose down fiber extends beyond the guard hair, would have a D:G ratio that is greater than 1:1 (e.g. 2:1). A goat with medium guard hair length, whose down fiber is the same length as the guard hair, would have a D:G ratio that is 1:1. A goat with relatively long guard hair length, whose down fiber is shorter than the guard hair, would have a D:G ratio that is less than 1:1 (e.g. 0.5:1).

Examples:

Goat A has relatively short guard hair length, and the down is twice as long as the guard hair. The D:G ratio is 2:1.

Goat B has medium guard hair length, and the down is the same length as the guard hair. The D:G ratio is 1:1.

Goat C has relatively long guard hair length, and the down is half the length of the guard hair. The D:G ratio is 0.5:1.

D:G Ratio can provide useful information related to the harvest of the down fleece, and also to the quality of the down:

- Long guard hair (low D:G Ratio) serves to protect the more fragile down fibers from sunlight and other environmental damage that can cause fiber breakage and shortening in the dehairing process. If a low D:G ratio fleece is shorn, the down might be of good quality, but a great deal of guard hair is included in the harvested fleece as waste, which must then be removed in the dehairing process. If low D:G Ratio fleece is combed, however, most of the guard hair still remains on the goat, with much less guard hair waste in the harvested fleece.
- Short guard hair (high D:G Ratio) usually cannot protect the fragile down as effectively as long guard hair, and the method of harvest (shear vs comb) has little effect on down quality. At the same time, if the high D:G Ratio is shorn, there will be much less guard hair waste in the harvested fleece, and relatively less expense in dehairing.

D:G ratio is related to %Yield, but it is not the same thing, and that is why it is described separately. D:G Ratio is based on relative length of fiber types, not weight. %Yield is based on weight, and is generally estimated from a fleece that has already been harvested. (see below for more description of %Yield).

In summary, some NACG breeders prefer relatively long guard hair and some prefer relatively short guard hair. Currently there is no consensus among NACG breeders, so D:G Ratio is included here under GENERAL INFORMATION and not as a trait for scoring in the breed standard.

**%Yield (Down weight/ Total fleece weight in %)**

%Yield describes the weight of down fiber compared to the weight of the total raw fleece, and is generally estimated from a fleece that has already been harvested. A fleece with low %Yield (e.g. 25%) would have a large amount of “waste” in the fleece in addition to the valuable down product. This “waste” can be a combination of guard hair and foreign material such as hay chaff, dust and dirt, etc. A fleece with high %Yield (e.g. 50%) would have a smaller amount of guard hair and other waste relative to the down product.

%Yield can be related to D:G Ratio, but it is not the same thing, and that is why it is described separately. While D:G Ratio is based on length, %Yield is based on weight. While D:G Ratio is easily determined on the live goat, %Yield is determined from a harvested fleece. While D:G Ratio tells us only about relative fiber lengths, %Yield is affected by all types of “waste” in the harvested fleece, including hay chaff, dust and dirt, etc., as well as guard hair as “waste.”

If a fleece is shorn, %Yield and D:G Ratio can be closely correlated. All other factors being equal (like vegetable matter and dirt as waste), a goat with a high D:G Ratio (relatively long down/short guard hair) will also produce a shorn fleece with relatively high %Yield,, since relatively little guard hair is in the total fleece. If a fleece is combed, however, there is generally little correlation between %Yield and D:G Ratio, because the guard hair (much of the “waste” weight) mostly stays on the goat.

Example:

Assuming that the amount of vegetable matter, dust, and other foreign material is constant, a typical Yield on a shorn fleece with medium guard hair length (D:G Ratio of 1:1) is about 25%. A typical Yield on a combed fleece (regardless of guard hair length) is about 50-60%.

%Yield is defined simply as the % of down by weight in the total raw fleece. It is included under GENERAL INFORMATION, but is not given a score because it is primarily affected by the method of harvest. %Yield is used later, however, as part of the calculation formula for Total Down Weight (TDW). For evaluating the total amount (in weight) of cashmere (down) that is produced on a goat, go to Total Down Weight (TDW), under FIBER traits.

**Wattles**

The presence or absence of wattles is essentially a cosmetic issue that might be important to some breeders, but not to others. For example, the presence of wattles might have some practical significance if the goat is to be shorn (vs combed), and even then, wattles can be noted only to be avoided during shearing. This information is therefore listed under GENERAL INFORMATION and described, but it is not a trait in the NACG breed standard that is scored.

**Condition**

Condition is included with GENERAL INFORMATION and is not scored as a genetic trait. Condition usually has more to do with the way the goat has been managed than it does with genetics and breeding choices. So it is described, but not scored. Any practical effect on fleece (e.g. “hunger fine”) should be reflected in FIBER scores, and any additional practical effects on carcass quality should found in CONFORMATION scores.

**Disposition**

It is unreasonable to try to define the ideal disposition for a North American Cashmere Goat. Disposition should ideally match the conditions under which the animal is to be raised. Quiet dispositions might be best for small herds or for animals that are frequently handled. Animals raised under open range or near-feral



conditions, however, might need a disposition that is better suited to “fight or flight.” And some of the emotional and behavioral problems that are seen today even in some working dog breeds should teach us that disposition should not be a trait that is selected and scored primarily for the show ring.

### **Frame**

In this grading system, Frame is simply defined as the overall size of the animal, and does not indicate the “shape” or conformation of the animal. If Frame is to be measured on a weight scale as live body weight, adjustments might need to be made for the Condition of the animal when looking at Frame. The point here is to estimate the true “genetic frame” of the goat, which correlates best with the “lean body weight” as it would be with the goat in ideal Condition.

Example:

A goat might weigh 180 lbs. on the scale, and that weight is recorded as “live body weight.” If the goat is obese, however (noted under Condition), what should also be recorded is an estimate of “ideal body weight” - what the goat would weigh if it were in proper good condition. The estimated “ideal body weight” more accurately reflects the true “genetic frame.”

So “ideal body weight” is the actual scale weight (live body weight), adjusted up or down (to ideal body weight), by subtracting the estimated extra body weight on the animal due to obesity, or adding the estimated lost body weight due to management issues.

Note that there currently is no consensus among NACG breeders regarding the relative practical value or desirability of goats with either small or large Frames. Some breeders simply prefer larger goats, and some prefer smaller goats. For this reason, Frame is listed and described here as a trait under GENERAL INFORMATION, and left as a breeder preference without a value score.

## **Part 2 – FIBER SCORE**

Most of the FIBER traits can now be scored by using objective data obtained from computer scanning techniques. They can also be scored by eye, using a 0-3 score or descriptive score.

### **Mean Fiber Diameter (MFD)**

A smaller fiber measurement (in microns) is associated with a finer fiber and a softer fleece, and a better (higher) score on the 0-3 scale. An “objective” measure of MFD can be determined from a sample by computer scanning, and the micron measurements are then plotted on a histogram (“FD Histogram”). A simple conversion table then translates the objective micron measurements into a 0-3 score. MFD can also be estimated by eye, and scored in either the 0-3 or Description columns.

There is some varied opinion around the world regarding an acceptable range for MFD in cashmere fiber. In the NACG grading system, however, 19.0 microns is the upper limit that defines North American Cashmere, and anything coarser than that is better described as “cashgora,” but would not qualify as North American Cashmere.

### **Uniformity**

Cashmere down fiber should be fine, as defined by Mean Fiber Diameter (MFD), and should also have a “uniform” pattern of fiber diameter, defined in this grading system as Uniformity. An objective measurement of Uniformity is expressed as the Coefficient of Variation (CV) of the fiber diameter measurements, and seen also in the shape of the plotted histogram. A “tight” histogram indicates that most of the fiber diameter measurements are close to the mean, so the sample would have a small CV and the Uniformity score would be

high. A “broad” histogram indicates that whatever the mean fiber diameter (MFD) might be, individual fiber diameters are not uniform and differ widely from each other, so the CV would be a high number, and the Uniformity score would therefore be low.

Note that the sometimes loosely used term “consistency,” as it relates to fiber diameter measurements in a specific small fleece sample (“swatch”), is defined in the NACG grading system as “Uniformity,” and is evaluated as the Uniformity component of the FIBER score.

The FD histogram will also pick up the presence of the dreaded “transitional fibers.” These fibers are disastrous if found in any cashmere product (“cashmere cancer”), with diameters measuring somewhere between down and guard hair, usually in the 25 micron range. The plotted curve of the FD histogram will typically show a “second spike” or will appear to be “skewed to the right” if transitional fibers are present. Transitional fibers can also be seen by the eye (again, some magnification helps). The problem with transitional fibers is that they essentially ruin the rest of the good cashmere in the product as they cannot be removed in the dehairing process. Remember that cashmere is soft because it is 19.0 microns or less, and the fine individual fibers will “bend” when they contact skin. Fibers over 20 microns, however, will not bend as easily, and are more likely to “prickle” the skin on contact. That is why transitional fibers (since they are usually coarser than 20 microns) are sometimes called “prickle fibers.” The presence of any transitional fibers in a fleece would categorically disqualify that fleece as North American Cashmere.

### **Style**

Style is another term for the “crimp” that is seen in cashmere fiber. Fine fiber (small MFD measurement) is usually associated with crimpy fiber (good Style) but not always. Most experts agree that good style is important to the quality and “feel” of a cashmere product. In some testing labs, style can now be measured objectively by computer scanning techniques. Results are reported as “deg/mm.” A very crimpy fiber would have a lot of curvature and therefore more degrees of a circular arc (deg) along a measured millimeter (mm) of fiber length. A simple conversion table can then translate this objective data score (deg/mm) into a Description score or 0-3 score (still using 3.0 as the best score).

### **Length**

Length refers to the relaxed length of the cashmere down fibers. Generally this is simply measured by eye and a ruler.

There is some varied opinion around the world regarding an acceptable range for length of cashmere fiber, and in some parts of the world, it is not even measured or included in a standard. In this NACG grading system, however, 28 mm (1.25 inches) is the lower limit of the scale that defines North American Cashmere. Anything shorter than that would not qualify as North American Cashmere, as it would tend to “pill” when made into yarn, would be difficult to spin, and would also reduce the tensile strength of the yarn.

### **Differentiation**

Differentiation refers to the difference in diameter between guard hairs and down fibers in a given sample. Ideally, guard hair would be very coarse, and down would be very fine. If a fleece is well “differentiated” in this way, the down separates from the guard hair much more easily in the dehairing process, and more clean down is produced with less time in the dehairing machine. This translates into better quality (and longer) cashmere with less fiber damage. But if down hair and guard hair are too similar in diameter, the dehairing machine cannot clearly tell the difference between them; the result is that either too much guard hair will go into the final product (“porcupine yarn”), or too much down will be damaged or lost as waste.

Differentiation can be evaluated with reasonable accuracy by eye. Therefore it is generally not reported on a conventional histogram which only reports diameter measurements on the down fibers. The FD histogram can sometimes be expanded by request, however, to include both down and guard hair fibers, and Differentiation will then be more clearly, accurately, and objectively measured in micron units.

### **Total Down Weight (TDW)**

TDW refers to the Total Down Weight, or net amount (by weight) of down fibers that are obtained from any given fleece after the guard hairs (and other waste and impurities such as hay chaff, dust and dirt, etc.) have been removed by processing. TDW is also sometimes referred to as “production.” Total Down Weight (TDW) is easy to calculate because %Yield (% of down in a total raw fleece) is relatively easy to estimate by eye, and the total weight of the raw harvested fleece is simply measured on a weight scale. So TDW (the actual weight of the final cashmere down product) is determined by weighing the total raw fleece (including guard hair and other waste and impurities), then multiplying that weight by the estimated %Yield.

Example: A complete raw shorn fleece weighs 480 grams. Estimated %Yield is 25% (this is a typical %Yield on a shorn fleece with medium length guard hair, or a D:G Ratio of 1:1, with minimal dirt, chaff and other impurities). So this goat’s TDW is  $480 \text{ grams} \times 25\% = 120 \text{ grams}$  (about 4 ounces).

It is important to understand the difference between % Yield and TDW. %Yield is simply the % of useful product in the raw harvested fleece. So the total weight of the raw harvested fleece (including guard hair and other waste)  $\times$  %Yield = TDW. Note that the method of harvest (shear vs comb) is generally the primary factor in determining %Yield. Note also that good TDW scores can therefore come from raw fleeces with either high %Yield or low %Yield, depending on the weight of the complete raw fleece after harvest. And good TDW scores can come from goats with either high D:G Ratio or low D:G Ratio.

### **Cover**

Cover refers to the distribution of down fiber over the four harvest sites (neck, shoulder, side, and hip) on the goat. Cover should be both complete and consistent. Complete Cover means that each harvest site actually grows useful cashmere. Consistent Cover means that the cashmere that is grown at each site is of the same type and quality.

Examples:

- A goat might grow lots of down on the shoulder, side, and hip, but little or none on the neck (the neck might even grow guard hair only). This goat would have a low Cover score, because down growth is not Complete on all four harvest sites.
- A goat might grow down on all four harvest sites, but the growth on the neck is more coarse and less stylish than the down on the other sites (possibly “cashgora”), and is therefore of lesser quality than down growth at the other sites. This goat would also have a low Cover score because although down growth might be Complete at all four sites, the type and quality of the down is not Consistent throughout each of these four sites.

Since Cover is a trait that is important to the evaluation of the goat’s ability to produce a consistent quality of cashmere fiber, it is included in this NACG grading system as part of the FIBER score. At the same time, it is the only FIBER trait that is best evaluated on the live goat, and not from a single bag of harvested fleece.

### **Part 3 – CONFORMATION SCORE**

CONFORMATION traits are certainly important to meat production, but their importance is not limited to the meat market. They include traits of conformation such as hooves, teeth, and reproductive organs that might not directly increase carcass weight or meat quality, but would certainly promote hardiness, thriftiness, and reproductive ability of the North American Cashmere Goat.

#### **Head**

North American Cashmere Goats almost always have beautiful heads and horns, and most of them score high (i.e. 3.0). There are certain horn configurations however, that are truly dangerous and should be disqualified (i.e. score = 0).

One of the most dangerous horn patterns is a pair of horns that rise together steeply, then flute out to the right and left. The vertical space between the two horns forms a steep, narrow wedge that can tightly hold a captured leg. Another dangerous pattern is a pair of horns that flare out horizontally and widely to each side, with short upturning tips at the end of each horn. When fighting or even sparring, goats can drive these upturned tips into an opponent's abdominal wall, and can easily rupture internal organs, particularly the rumen.

Goats with dangerous horn patterns often “know their own strength,” and are often aggressive with other goats in the herd. These types of horn configurations can also be dangerous for the handlers. So here is an example of a trait that promotes the survival of the individual goat, but is dangerous enough to the rest of the herd (and even to the handlers) to disqualify the goat from breeding.

#### **Teeth**

Good teeth are important to the health of any browsing animal, who regularly forages on very rough material. Different goat breeds have different standards for teeth, but in this NACG grading system, the lower teeth ideally meet perfectly flush with the upper pad, and the side view shows symmetry between the upper and lower biting structures. These teeth would score high (i.e. score = 3.0 or Excellent).

#### **Forequarters**

This conformation trait is scored 0-3 or by Description in the same way that meat goats are scored. Since there is currently no objective method for evaluating these traits, they are scored only in the 0-3 or Description columns, and not in the Data column.

The ideal is a neck that is strong and well-proportioned to frame. Shoulders should be well-muscled and strong. Legs should be strong, well-muscled, and well-proportioned to frame. Shoulders, knees, and pasterns should be correctly angled and strong. Forequarter movement should be free and correct.

#### **Barrel/Back**

This conformation trait is scored 0-3 or by Description in the same way that meat goats are scored. Since there is currently no objective method for evaluating these traits, they are scored only in the 0-3 and Description columns, and not in the Data column.

The ideal is a barrel that is long, broad, and well-muscled. Chest should be wide, with ribs that are well-sprung, and with adequate girth in proportion to frame. Back should be strong and straight from shoulder to rump.



### **Hindquarters**

This conformation trait is scored 0-3 or by Description in the same way that meat goats are scored. Since there is currently no objective method for evaluating these traits, they are scored only in the 0-3 and Description columns, and not in the Data column.

The ideal is a rump that is broad, long, and well-muscled, with a slight slope between hook bones and pin bones. Hind legs should be strong, well-muscled, and proportional to frame. Hips, hocks, and pasterns should be correctly angled and strong. Hindquarter movement should be free and correct.

### **Hooves**

The ideal hoof has the correct size, strength, and shape to carry the weight of the animal without predisposing to injury, arthritis, hoof rot, or similar problems. It should be sturdy, broad, well-formed, and proportional to frame. Interdigital separation should be adequate to prevent hoof rot in moist conditions. Both sides of each hoof should be symmetrical and straight (not “collapsed”) Here again, it is the “genetic foot” that should be judged, not management practices or trimming proficiency of the owner. Sometimes it helps to trim a foot correctly in order to better evaluate the “true” shape and size of the “genetic foot,” and to score it after a trim.

### **Reproductive System**

Scoring here should be based strictly on function, and criteria can be straightforward and simple. Both males and females score high (3.0) as long as reproductive organs are healthy and “normal,” and no significant functional deformities are present. While this might sound easy, experts sometimes disagree about what is “normal” and what is “significant” regarding deformities.

NACG guidelines:

Does:

Udder should be well-proportioned with good suspension, with two (only two) functional teats and vulva normally developed for age. Note that other breeds (e.g. Boer Goats) apply a different standard, and some Boer breeders actually prefer extra teats (and accept the associated problems).

Bucks:

Two testicles are present that are correctly sized for age. Scrotal measurements are of uncertain value. Two (only two) undeveloped teats are present. A split scrotum is a finding of uncertain significance, and until more evidence-based data is available, no points are deducted for small splits that involve 1/3 of the scrotum or less. Sheath should be normally developed for age.

### **Addendum 1 – Grading for shows:**

The North American Cashmere Goat Grading System described here is best suited for the purposes of breed development, herd improvement, herd management, breeding decisions, and the sale and purchase of breeding stock. This same grading system, however, can also be adapted for use in the show ring. By using this grading system, each goat in the show could be evaluated and scored on all seven traits of FIBER and all seven traits of CONFORMATION, and the completed scorecard kept on file for reference when choosing animals for breeding.

If the show requires competition, however, with ribbons and awards (beyond the completed scorecards), this can still be done. After all goats in a class are scored by the judge (scorecards), the “best” goats can then be chosen by the judge. Although there are currently no formal guidelines for determining the “best” goats (since no relative weights have yet been applied to the various trait scores), the trait scores on both FIBER and CONFORMATION can still serve very appropriately as “reasons” for choosing the “best” goats. No matter what happens to ribbons and awards, however, note that all goats who participate in shows that use this NACG grading system (not just the winners) can still leave the show ring with a complete evaluation and score on all 7 traits of FIBER and all 7 traits of CONFORMATION. That is one way that “live goat” shows can very effectively contribute to the overall development and improvement of the NACG breed.

Some additional points on shows deserve clarification:

For “fleece” shows, in which only the previously harvested fleece is judged from a bag, most of the FIBER traits can still be evaluated and scored. If the entire fleece is included in the bag for judging, Total Down Weight (TDW) can be scored accurately by weighing the total raw fleece, then multiplying that weight by the estimated %Yield. But Cover must still be scored on the live goat. So if a FIBER trait (like Cover) cannot be scored from a single bag in a fleece show, this score can simply be left blank or noted as “not applicable” (NA).

For “live goat” shows, evaluation of most of the FIBER traits are still generally done on the previous winter’s fleece, combed or shorn, and brought to the show in a bag. The reason for this methodology is that North American Cashmere Goats produce most of their useful cashmere during the winter months, and are not really in full cashmere production until sometime between November and January. Since these goats might not be producing their best cashmere when a “live goat” show is held (e.g. during September or October), it makes most sense to evaluate the true cashmere potential of an individual goat by evaluating the latest complete winter fleece (saved in the bag).

### **Addendum 2 – Conversion Tables:**

Conversion tables, correlating objective Data scores to 0-3 scores and their corresponding Description terms, need further work and development, and hopefully can be done through a consensus process over time. Consider that whatever process is used, these conversion scores should always be dynamic and responsive to developing trends in the North American Cashmere Goat industry.



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[www.blacklocust.com](http://www.blacklocust.com)

## CALL FOR COMMENTS

By Maggie Constantine Porter

After submitting my rather negative book review of Thomas Thwaites' book, GoatMan, for publication in this edition of Hoof Prints, I spent some time thinking that perhaps I had been too critical of Thwaites' endeavor to become a goat. My main problem with his endeavor – explained in greater detail in the review - is that he set out to become "a goat," as if all goats are created equal.

Those of us who interact with goats every day know that their personalities are as varied as humans', with quirks and idiosyncrasies to match our own. There are traits common to most goats (four legs, rumen, tail), just as most humans have two arms, two legs and a nose. But there are traits that distinguish goats from each other, same as with us *Homo sapiens*. Some goats are skittish, others friendly; some are elderly, some are babies; some amuse us and some annoy us.

With this in mind, the editors of Hoof Prints thought it would be fun to hear *your* stories regarding uncommonly smart or unbearably silly or otherwise noteworthy members of your goat herd.

For this issue, Becky Bemus offers up a portrait of Jolene, whose IQ and sense of humor might put some of us to shame:

Note: This is an edited excerpt from an email conversation with two friends about Jolene:

Well aside from maybe putting scratches on the hood of a visiting care providers' car, you have to respect the thing for her brilliance...

Last week Jolene took Phil's phone off the top of a wine glass and set it down on the patio table in the same position it had been in on top of the glass. She then took the wine glass off the table setting it gently upright between the feet of the table so she could consume its contents. As my sister and I returned from the barn she stumbled by with a dismissive flip of her head when my sister spoke to her. We thought it odd as she is usually very vocal about our lack of care in not providing 24 hour feed delivery. It was not until later, when Phil was searching for his missing glass, that we realized what she had been up to.

Tonight I found her in the buck pen at chore time. I watched her as she went down the side of the fence and pulled the end of every string or piece of wire she could find that "stitches" the sagging fence to a board along the top of the posts that prevents the bucks from standing

on and jumping over the fence; to see if she could find a loose one and unweave it enough to escape. Jolene, Jolene, I thought to myself, good luck finding your way out..... Now this was after watching her all day running from one former escape route to another; and there are MANY tricks to her escapes, to return to the doe yard to scream at me about her plight and how unhappy she was being expected to be a goat of all things! As I watched she repeatedly went to the sidewall, two wooden gate panels bending outward under the pressure of built up wasted hay to the point of having a rather large gap in between them, where dog or goat or whatever could easily come through were it not for the electric net fence on the other side keeping the pigs in. Given the ramp like angle of the gates. I fully expected her to simply walk up and jump over into the pig pen then jump out from there. There was clearly something that she did not like about her odds of success that held her back. It was not until I watched her back up and hesitate several times, then look at the overhead connector, look at the net fence and do another round of the pen that I

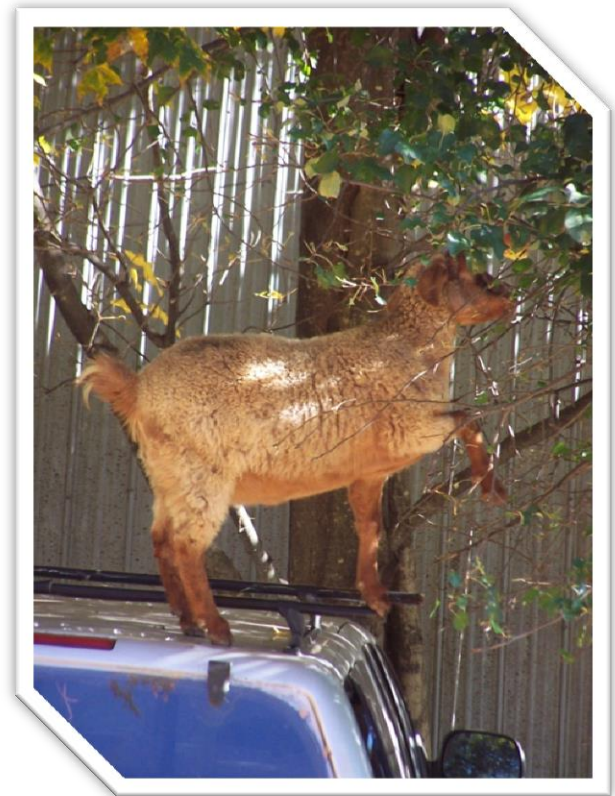
realized her hesitation. It was at that point that I put the events of the last couple days together. Man oh man this goat is Brilliant!

On each of the previous three days Jolene has been out wandering the yard despite my constant attempts to thwart her plans. I could not for the life of me figure out what her new escape trick was... During the same time, I have found the jumper wire for the electric to the pig pen lying on the ground inside the buck pen at least twice a day. I figured one of the bucks had come and caught his horns in it for a good scratch or their dog, in his zeal for dinner had jumped up getting caught in it and pulled it loose.

This morning I once again found the pig pen with no power to the fence but I took the time to get the pliers to open the end of the wire to make a good solid eye and again placed it over the connecting hook completing the circuit. So as I watched Jolene look up at the wire and then over the bent gate at where the net fence comes in relation to it, I suddenly realized she has been getting in the buck pen and disconnecting the power so she could safely jump the fence! So when the supervisor for the caregivers said to me well can't you just close the gate while the workers are there so there are no goats around their cars I almost blew a gasket .... if only they had a clue what we are dealing with here.

As much as she is a pain in our backsides', and ended up costing us a couple hundred dollars in car buffing fees because she used their vehicle as a means of reaching the leaves on the maple tree they has parked under on a very muddy, very rainy day; you have to respect intelligence like that! Phil says one day she is going to save the herd, and then quietly added or lead them to their deaths... but I think the former as I am pretty sure she gets out her slide rule and

calculates the probability of success and that is why she did not take the risk jumping the gate tonight. I am sure she could have made it but something told her the risk was too great. Perhaps it was simply because I was standing there and she didn't want me to know her most recent trick?



*The Infamous Jolene  
pictured here atop of our Dodge Dakota  
balancing on the roof rack in an attempt to pick  
apples from the tree.*

Jolene has a worldwide following amongst our former helpers who either love or hate her. One helper, who loves her dearly, stated she hoped we never sent her for meat BUT if we did she had first dib's on her hide! Unfortunately for Anni, Jolene's arch rival and fellow ginger Ryan, already made that claim.





## INTERNATIONAL CASHMERE GOAT WORKSHOP

Chianti Italy 2017

Saturday, November 3<sup>rd</sup> – Saturday, November 11<sup>th</sup>

*Join us at the Chianti Cashmere Farm in beautiful Radda (Tuscany) with your host Nora Kravis. Our mission is to gather as many cashmere goat breeders from as many diversified countries worldwide to explain, compare, evaluate and exchange ideas on: genetics, fiber characteristics, preferences for short or long hair, for combing or shearing, favorite color, harvesting tools, as well as examine the future of cashmere production on small and large scale production. The week will include workshop venues, visits to Siena and Prato, transportation and local food provided, plus so much more!*

### Workshop Itinerary

- Day 1: Arrival and check in. Welcome to Chianti Cashmere farm/studio. Group dinner on the farm
- Day 2: Workshop seminars in the villa of Chianti's Village Hall \*See some examples of workshop presentations below
- Day 3: Workshop seminars & round table discussions
- Day 4: Prato Textile Museum visit & DHG Factory Boutique Dye House Store
- Day 5: Siena and local farm visits
- Day 6: Consorzio Arianne cashmere registry visit & presentations by local weavers/spinner s/dyers
- Day 7: Free day- open farm day and time to explore Tuscany !

### Workshop Seminars to Include :

- ❖ *Research scientist specializing in genetics and animal fibers and involved in several research projects during his academic career with a focus on the genetic traits and research on cashmere goats at the University of Tehran . presenting on:*  
Research comparing cashmere characteristics and the reasons for these traits from different regions of Iran, Kirghizstan , Tuscany, and Australia
- ❖ *Representative attending the 3rd European Symposium presenting on :*  
Summaries of the most up to date research from the 3rd European Symposium on Fibra animals (July 2017)
- ❖ *Australian Cashmere Growers Association representative presenting on*  
Follicle growth in cashmere – shearing twice a year. How and why?
- ❖ *US Cashmere Goat Association representative presenting on:*  
North American Cashmere Standard and registry development
- ❖ *Round table discussions & much more!*

*Availability will be limited to a specific number of participants. Please reserve early to ensure your attendance for this amazing opportunity! Contact: [mcbrearty3@yahoo.com](mailto:mcbrearty3@yahoo.com) to reserve today or inquire more information . (Seminar fee will be established by September 2016. (Please inquire if interested))*

\*Airfare and lodging are not included but recommendations & websites will be provided



## CALLING ALL MEMBERS!

### Opportunity to sell cashmere!!

The Cashmere Goat Association has secured a consignment space at the [2016 New York Sheep and Wool Festival in Rhinebeck New York October 15<sup>th</sup>-16<sup>th</sup>, 2016](#). Start planning to consign your cashmere fiber, roving, items made with cashmere, etc... For details and a consignment contract please contact Jane Hammond at [springgatefarm@gmail.com](mailto:springgatefarm@gmail.com) or 434-531-8547 cell.



## Can Animals Learn to Prevent Bloat?

By [Beth Burritt](#) / November 30, 2015

Bloat is a big problem for producers, but based on research at Utah State University, it could be one that animals can solve for us.

[Dr. Juan Villalba](#), Utah State University, studies how animals choose what to eat so he can help producers create more efficient alternative for managing animals and the landscapes they inhabit. Since bloat is a real challenge for them, recently, he investigated if ruminants can learn which foods to eat to relieve the effects of bloat. His results provide a new understanding of how animals form food aversions and preferences and have Juan thinking about the next steps in teaching animals to alleviate bloat.

Juan's experiment used lambs\* with rumen cannulas and balloons. Here's how it worked: Balloons that could be inflated or deflated were placed in the lambs' rumens. Lambs were then fed one food and the balloon was inflated to simulate bloat's effects. Next the lambs were fed a different food and the balloon was deflated to relieve their bloat.

To read more visit: <http://onpasture.com/2015/11/30/can-animals-learn-to-prevent-bloat/>

## 2016 FALL SHOW INFORMATION



### Northwest Cashmere Association

2016 Fleece Competition – September 22, 2016

The fleece competition will be held on Thursday, September 22, 2016, in connection with the 20<sup>th</sup> Annual Oregon Flock & Fiber Festival at Canby, Oregon.



#### Our Judge:

**Jayne Deardorff, ME2 Custom Fiber Processing, Colville, Washington, Jayne actively serves as a judge at fiber events. Her involvement helps her keep up to date on what is new and trending in the fiber world. She judged the Canadian National Cashmere Fleece Competition (CNCFC) during the [2013 Olds College Fibre Week](#) and the Canadian Cashmere Producers Association Live Goat Show and Fleece Competitions for multiple years, as well as local fiber fairs and competitions.**

Jayne and her husband own a boutique custom fiber processing mill where she loves to make fiber blends. They raise registered Montadale sheep, a colored fleece sheep, and Cashmere fiber producing goats, hay, grain and cattle on their farm, Me2 Farm, south of Colville, WA. Working with fiber is a true joy for Jayne, and she enjoys exploring the uses of different fiber in this wonderful life journey.

#### Instructions for Entering

Fleeces and entry forms should be delivered or mailed to Diana Blair, Fleece Competition Chair, by Tuesday, September 20. An entry form is included as a separate file and can be downloaded from the Club website: [www.nwcashmere.org](http://www.nwcashmere.org)

An entry form must be submitted for each fleece entered.

Fleeces should be raw fleeces—not dehaired or washed and they can be harvested by either combing or shearing. Fleeces may be entered in any bag. NWCA will place fleeces in a show bag for judging. Please

submit your fleeces, entry forms, entry fee and return address label to: Diana Blair, Fern Hill Farm, 15400 Ferns Corner Road, Dallas, OR 97338. Out of country entries must include return postage.

## Classes and Awards

### Classes

Fleeces entered must be from the current year harvest. Fleeces will be divided by age groups as follows:

Kid Fleeces (1 <sup>st</sup> year)	4 <sup>th</sup> – 6 <sup>th</sup> fleeces
2 <sup>nd</sup> fleeces	7 <sup>th</sup> – 9 <sup>th</sup> fleeces
3 <sup>rd</sup> fleeces	Senior fleeces (10 <sup>th</sup> & over)

The age classes are subdivided by sex (doe, buck, wether). There is no per-farm limit to the number of fleeces that can be entered in each category. Fleeces will be available to be picked up at Fern Hill Farm, or they will be mailed back to you. Entry fee is \$6 each (out of country entries, please add return postage). NOTE: If your fleece is to be judged at OFFF, please make sure you check “yes” at the bottom of the fleece entry form.

### Awards

Ribbons will be awarded in each category through 5<sup>th</sup> place. Rosettes will be awarded to Champion and Reserve Champions – Junior Doe, Senior Doe, Junior Buck, Senior Buck and Wether. Rosettes will also be awarded to overall Grand and Reserve Champion Doe and Buck.

**Entry deadline: Entries must be received by Fleece Competition Chair no later than Tuesday, September 20, 2016.**

Questions: Diana Blair: 503-623-5500, email: [mrstdiana@outlook.com](mailto:mrstdiana@outlook.com)  
15400 Ferns Corner Road, Dallas, OR 97338



*Fill out one form (half page) for each fleece entered.*

2016 Northwest Cashmere Association Fleece Competition

Date: September 22, 2016

Judge: Jayne Deardorff, ME2 Custom Fiber Processing, Colville, WA

Location: Aboriginal Fibre, Mulino, Oregon

Farm Name: \_\_\_\_\_

Owner Name: \_\_\_\_\_

Goat Name: \_\_\_\_\_ ID Number: \_\_\_\_\_

Goat DOB: \_\_\_\_\_

**Division (Circle One):**

1. Doe
2. Buck
3. Wether

**Class (Circle One):**

- A. First Fleece (DOB 2015)
- B. 2<sup>nd</sup> Fleece (DOB 2014)
- C. 3<sup>rd</sup> Fleece (DOB 2013)
- D. 4<sup>th</sup> – 6<sup>th</sup> Fleece (DOB 2010-2012)
- E. 7<sup>th</sup>-9<sup>th</sup> Fleece (DOB 2007-2009)
- F. 10<sup>th</sup> Fleece and over (2006 and prior)

\_\_\_\_ Yes \_\_\_\_ No Do you want this fleece returned to you at OFFF.



## CASHMERE GOAT ASSOCIATION

**Cashmere Goat Association's  
North American Cashmere Goat Show  
at the Vermont Sheep and Wool Festival  
Tunbridge, Vermont  
October 1 & 2, 2016**

The Cashmere Goat Association invites Cashmere goat owners, breeders and youth to participate in the 2016 North American Cashmere Goat Show to be held at the Vermont Sheep and Wool Festival in Tunbridge, Vermont, on Saturday and Sunday, October 1 and 2.

CGA welcomes Jayne Deardorff of Collville, Washington, as the judge for this year's fleece and goat show. Jayne has raised cashmere goats for over 15 years on a 200 acre farm which also produces registered Montadale sheep, cattle, hay and grain. Jayne began processing wool on her farm in 1983, and her fiber processing plant includes a de-hairing machine for which she accepts small batch orders.

Jayne is an adjunct teacher with Olds College Alberta, Canada, teaching beginning spinning at their annual Fiber Week. Her Master's Thesis at Olds was based on blending cashmere with other fibers in the hand spinning process. Jayne was the judge for the Canadian National Cashmere Fleece Competition in 2014, and will also judge the 2016 Oregon Flock and Fiber Cashmere Goat Show the weekend before the CGA show in Tunbridge.

**Premier East Coast Cashmere Goat Show**

The CGA New England Breeders Show has become the premier Cashmere goat show in the northeast, drawing goats and owners from New York, Maine, New Hampshire, Massachusetts, Connecticut and Vermont.

All goats shown which meet the North American Cashmere breed standard are eligible for Certification and Registry within the North American Cashmere Goat database, to be established in 2017.

An emphasis on raising up the next generation of North American Cashmere goat enthusiasts continues with a Junior Showmanship class for youth aged 5 through 18. Mika Ingerman of Burlington, VT, returns as Junior Showmanship judge.

**Sixth Year in Tunbridge, Vermont**

CGA is pleased to continue their collaboration with the VSWF for a sixth year. The Vermont Sheep and Wool Festival has been a mainstay for New England fiber enthusiasts for 25 years and has been held at the Tunbridge fairgrounds for six years. Home of the Tunbridge World's Fair which has operated almost continuously since 1867, the fairgrounds offer a unique New England country fair setting largely unchanged for more than a century.

**NWCA Cashmere Fleece Competition**

For those wishing to submit fleeces to a qualified judge in 2016, CGA recommends the [Northwest Cashmere Goat Association Fleece Competition](#) at the [Oregon Flock and Fiber Festival](#) for which Jayne Deardorff is also judge. The cost is \$6 per fleece plus return postage. Fleeces must be shipped to Oregon for the show by mid-September. More information is available elsewhere in *Hoofprints* or on the NWCA website. (Plans for a CGA fleece competition have been postponed.)



### Entry Deadline and Fees

The cost is \$10 per goat (regardless of how many classes are entered.) A registration form follows and may also be found on the CGA website.

Mailed entries with payment may be sent to:

*Sister Mary Elizabeth Garrett  
CGA Show Superintendent  
242 Cloister Way  
Greenwich, NY 12834.*

***The entry deadline for Goat Show entries is September 16.***

### Show Classes

Buck, doe and wether classes will be determined by the number of entrants with a probability of class divisions for does born in 2016 (kids), '15 (yearlings), '14 (two year-olds), and combined '13, '12, and older (senior). Wethers will subdivide this year into junior (kids and yearlings) and senior wethers. Bucks will show as kids, yearlings and senior bucks. Farms may enter up to three goats per class. (Youth exhibitors showing goats leased through a local county extension program may enter goats without restriction to the farm's total.)

Judging is based on both the goat's body and fiber, with fifty percent of an animal's score based on the past year's fleece and fifty percent on body conformation and movement in the show ring.

Fleece judging will begin the show this year, with the judge looking at the most recent whole fleece. Unprocessed, combed fleeces should be submitted in a zip-lock type bag with identifying tag inside (but no identification written directly on the bag).

In the afternoon the judge will examine the goats in their pens, checking for basic soundness and conformation. The score cards with both fleece and pen judging scores are then brought with the animals to the Show Ring on Sunday, where the animals are compared as a group in a standard Ring Show competition.

Youth may also register for the Youth Showmanship class which evaluates showmanship over a walking course.

### Schedule for the 2016 Show

#### Friday, September 30, 2016

Noon	Animals may begin to arrive at Fairgrounds.
------	---

#### Saturday, October 1, 2014

9:30 a.m.	All goats must be in place in their stalls
10:00 a.m.	<ul style="list-style-type: none"> <li>• Festival begins</li> <li>• Fleece Judging begins</li> <li>• Wrap Yourself in Cashmere Raffle opens</li> </ul>
1:00 p.m.	Pen Judging begins
4:00 p.m.	CGA Annual Meeting
5:00 p.m.	Festival gates close
6:00 p.m.	Dinner in South Royalton for Show Participants

#### Sunday, October 2, 2014

9:30 a.m.	Youth Showmanship Class
10:00 a.m.	<ul style="list-style-type: none"> <li>• Festival opens</li> <li>• Wrap Yourself in Cashmere Raffle opens</li> </ul>
10:30 a.m.	Doe & Wether Classes
	Short break for lunch
1:00 p.m.	<ul style="list-style-type: none"> <li>• Wrap Yourself in Cashmere Raffle drawing</li> <li>• Buck Classes</li> </ul>
4:00 p.m.	Festival closes

### Housing of Goats at the Festival

As you plan how many and which goats to bring, expect that the barn can generally house two doe/wether pens and two buck pens per farm. This number is flexible since we have not filled the barn to capacity in recent years. In most cases anticipate that two does will be

comfortable in one pen, though some larger family groups may prefer to be together. Be prepared to tie bucks, aggressive does and/or “jumpers” -- especially overnight. They should be accustomed to being tied before the show weekend.

Bedding hay will be provided but entrants must supply feed stuffs, water buckets, tools for barn clean-up at the end of show, etc. Stalls should be broom-clean upon leaving on Sunday with bedding removed to a compost site near the barns.

***Owner/entrants are responsible for appropriate care of their animals through the weekend.***

### **Preparing for the Show**

Preparation for show begins in late winter with the setting aside of the prospective show entrant's fleece from the past season. Combed fleeces should be reasonably free of excessive vegetative matter but otherwise **not** de-haired and should be submitted in a zip-lock type bag with an identifying tag inside.

The second step is to begin *now* to bring your goats up to prime condition and to accustom them to walking on a lead. Kids should be weaned from does intended for show at least ten weeks before the show date. They may be housed with their mother at show time but separation allows the mother to recover from the stress of nursing. Check for worm load and feed carefully to bring bucks and does into condition. Most judges penalize for poor conditioning, but under-condition animals may also pick up opportunistic infections under the stress of travel and being housed with other goats in an open barn. Hooves should be trimmed two or three weeks ahead of show to prevent the appearance of tender feet in the ring.

### **Vermont Health Requirements**

All entrants must comply with the Vermont law concerning interstate transport of animals and will be inspected by the Show Superintendent

upon arrival at the fairgrounds. **A Certificate of Veterinary Inspection (CVI) of herd and specific animals to be transported, dated within 20 days of the show, is required.** The VT Department of Agriculture will mail to you a Permit to Transport document when your veterinary registers the CVI with their office. The CVI should be brought with you and kept with your goats at the Tunbridge fairgrounds. Goats should be in good health and free of lice, hoof rot or anything looking like sore mouth. Rabies vaccination is “strongly recommended” but is not required by Vermont Agriculture regulations or Festival organizers.

### **USDA Scrapie Identification.**

The CVI requirement includes conformity to rules regarding the unique identification of goats under the guidelines of your home state's scrapie eradication program. Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats which can only be addressed through post-mortem identification, tracing back to farm of origin. If you have not received ear tags or an identification number for your herd, you should call the appropriate USDA APHIS (Animal and Plant Health Inspection Service) office immediately. If you need assistance in contacting the scrapie eradication program in your state, call 866-873-2824. Special rules apply for animals carrying microchip identification. Check with the Sister Mary Elizabeth before you come to show if you have any questions regarding the scrapie identification requirement.

### **Herd Codes**

Note that Herd Codes used by CGA custom are different from USDA assigned scrapie numbers or ear tags. Animals are identified through CGA and other cashmere organizations by a three or four letter ID indicating the farm on which they were born. These letters generally precede the goat's name -- for example, STC Lizzie. If you buy a cashmere goat and show her, she shows under her farm-of-origin Herd Code. Her children born on your farm show under your Herd Code.

### General Information

The Festival website is [www.vtsheepandwoolfest.org](http://www.vtsheepandwoolfest.org) and contains pertinent travel information, a map of the grounds, workshops offered by the Festival and other information.

Festival gates open at 10 a.m. on Saturday and Sunday, and CGA goats are on display to the public at the Riverside Barn until closing at 5 p.m. on Saturday and 4 p.m. on Sunday. General admission is \$6; seniors--\$5; children under 12--\$10.

CGA show entrants have a free pass for the weekend. See Sister Mary Elizabeth to get your pass.

Parking is free but limited to designated areas, with no movement of cars on the fairgrounds during Festival hours. Show Exhibitors may park near the Riverside Barn but may not move their cars while the public is moving about the grounds.

### Accommodations

We have reserved a block of 10 rooms at the Comfort Inn in White River Junction, VT. The

cost per room is \$155/ +tax. You can make your reservations by calling 802-295-3051 or online at [www.comfortinn.com](http://www.comfortinn.com). The reserved block status is only in effect until August 30 so make your reservations soon. The Comfort Inn is 24 miles from Tunbridge with a drive time of 30 minutes to the fairgrounds. Let the Comfort Inn know you are with the Cashmere Goat Association.

It is also possible to sleep on the fairgrounds in a tent or camper. Information about camping is available on the festival website, listed above.

### Show Superintendent and Volunteers

The 2016 Show Superintendent is Sister Mary Elizabeth of St. Mary's on-the-Hill Cashmere in New York. If you have a question, she can be reached by email at [maryelizabethcsm@aol.com](mailto:maryelizabethcsm@aol.com) or by calling 518-791-4142. Her postal address is: Sister Mary Elizabeth, St. Mary's on-the-Hill Farm, 242 Cloister Way, Greenwich, NY 12834.

***Volunteers are needed through the weekend.***  
Please let Sister Mary Elizabeth know if you can help.

## Stoneycrest Farm

### Cashmere Goats

**Anne Repaske**  
570 Paddy's Cove Lane  
Star Tannery, VA 22654

phone/fax: 540-436-3546  
e-mail: [cashmere@shentel.net](mailto:cashmere@shentel.net)





## Spring Gate Farm

CHAMPION CASHMERE  
GOATS AND FIBER

Barboursville, VA 22923  
[www.springgatefarm.com](http://www.springgatefarm.com)

**Jane McKinney**  
434.990.9162  
[springgatefarm@gmail.com](mailto:springgatefarm@gmail.com)



### Hulse Hill Farm

*Authentic Farm Stay Experience*



*Hike with cashmere goats*

*Harvest farm fresh vegetables and eggs for meals*

*April/May help comb out cashmere goats*

*Assist with morning and evening farm chores*





Visit us at [hulsehillsfarm.com](http://hulsehillsfarm.com)

*Private suite/bath with views of the farm*

*Located in the Leatherstocking Region*

 Like us on Facebook

*Live, Laugh & Love on the Farm*



## Canadian Cashmere Fleece Competition, October 15, 2016

The Canadian Cashmere Producers Association invites cashmere producers to participate in the Canadian Cashmere Fleece Competition, on October 15<sup>th</sup>, 2016. Details follow below and can also be found on the CCPA webpage <http://www.cashmerecanada.ca/canadian-national-cashmere-fleece-competition-cncfc.html>. I hope you will share this invitation/announcement with your colleagues, association members and friends and that you will participate, yourselves.

### The Judge

Phil Smith owns and operates a mixed livestock farm with his wife Becky Bemus near Orillia, Ontario. Irish Dexter cattle and Cashmere goats have been the mainstays on the farm for the last 15 years.

Although Phil was not raised on a farm, he always enjoyed outdoor activities including cycling, canoeing and cross-country skiing throughout his youth. The farm gave him an outlet for using his chain saw, tractor and power tools while Becky built the herds and livestock specializations. But just as important to his day-to-day life as an IT specialist, are the goats. Cashmere goats have unique spirit and character. Their personalities impart enjoyment and natural fulfillment to those who spend any amount of meaningful time with them.

Every year Phil and Becky review and class all of the fibre harvested from their herd of over one hundred. Each animal's fleece is visually inspected, scored and recorded. Many of the fleeces are sent to private labs for objective testing and each result is reviewed and recorded to improve personal knowledge and for herd improvement. Having started their herd in 2004 and with numbers sometimes reaching 300 goats, Phil has honed his assessment skills through 12 years of herd evaluations and rounded out his perspective through his attendance at Springtide's goat husbandry seminar in 2006 and the fibre classing seminar with Terry Simms of Australia at the New York Sheep and Wool Festival in 2008.

### The Classes

Fleeces are from this year's harvest; they are raw, meaning that they are unwashed and do include Guard Hairs. On the other hand, the judge will appreciate assessing fleeces without VM and poop.

Fleeces will be judged by class, with 1<sup>st</sup> to 4<sup>th</sup> place ribbons in each class and rosettes awarded to Champions and Reserve Champions for Junior Does (1<sup>st</sup>-3<sup>rd</sup> fleeces) and Senior Does (4<sup>th</sup> fleeces and over), Junior Bucks (1<sup>st</sup>-3<sup>rd</sup> fleeces), and Senior Bucks (4<sup>th</sup> fleeces and over), and one in the Wether class, and finally Best In Show.

## To Register & Submit Fleeces

### To Register

complete and forward the Registration Form to

Heide Krause  
2261 Rawlings Road  
Quesnel BC V2J 7E2

or via email: [heidekrause@netbistro.com](mailto:heidekrause@netbistro.com)

you can pay the \$10 entry fee online on the CCPA CNCFC webpage or  
or by check or money order to CCPA, c/o address above (along with the  
Registration Form)

### To Submit Fleeces

complete Fleece Entry Form for each fleece and send with fleece to

Kathy Chapdelaine  
Chambord Farm  
187 Hyatt's Mills  
Compton, Quebec J0B 1L0

\*\*\* Deadline: Fleeces must be received by Monday, October 10th. \*\*\*

For any questions, please email me, [heidekrause@netbistro.com](mailto:heidekrause@netbistro.com) or if you prefer, call  
250.249.5504.



*Bearlin Acres Farm*  
*Cashmere, Wool and Alpaca*

180 Mt. Ash Lane  
Shippensburg, PA 17257  
717-530-3605  
[bearlin@pa.net](mailto:bearlin@pa.net)  
[www.bearlinacres.com](http://www.bearlinacres.com)



*Hermit Pond Farm*  
*Cashmere Goats*

**Pam Haendle**  
10601 Merrill Road  
W. Edmeston, NY 13485  
**315-899-7792**  
[pamela.haendle@bnymellon.com](mailto:pamela.haendle@bnymellon.com)





## REGISTRATION FORM

## CANADIAN CASHMERE FLEECE COMPETITION 2016

Name: \_\_\_\_\_

Farm Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Prov/State: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Fleece #	Class	Name of Animal
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
# entries _____	@ \$10/fleece	Total Entry Fees Due:

Fleece Entry Fee: \$10 per fleece (includes return packaging &amp; shipping via Canada Post)

Registration & Payment Options:Online at <http://www.cashmerecanada.ca/canadian-national-cashmere-fleece-competition-cncfc.html>

Or by Cheque or Money Order payable to: Canadian Cashmere Producers Association and forwarded along with the Registration Form to:

Heide Krause, 2261 Rawlings Road, Quesnel, BC V2J 7E2 or [heidekrause@netbistro.com](mailto:heidekrause@netbistro.com)

Please complete one of these **for each fleece** that you are entering.



Canadian Cashmere Fleece Competition 2016  
Date: October 15, 2016  
Judge: Mr. Phil Smith  
Location: Woodstock Fleece Festival, Woodstock, ON

Owner Name: \_\_\_\_\_  
Farm Name: \_\_\_\_\_  
Goat Name include herd code: \_\_\_\_\_ ID/tag #: \_\_\_\_\_  
Goat's Date of Birth: \_\_\_\_\_  
Class (circle one)

**Class 1** 2015 Doe (1<sup>st</sup> fleece)  
**Class 2** 2014 Doe (2<sup>nd</sup> fleece)  
**Class 3** 2013 Doe (3<sup>rd</sup> fleece)

**Class 6** 2015 buck (1<sup>st</sup> fleece)  
**Class 7** 2014 buck (2<sup>nd</sup> fleece)  
**Class 8** 2013 buck (3<sup>rd</sup> fleece)

**Class 4** 2012-2010 Doe (4<sup>th</sup>-6<sup>th</sup> fleece)  
**Class 5** 2009 & older Doe (7<sup>th</sup> fleece & over)

**Class 9** 2012-2010 buck (4<sup>th</sup>-6<sup>th</sup> fleece)  
**Class 10** 2009 – older buck (7<sup>th</sup> fleece & over)

**Class 11** Wether

Please complete one of these **for each fleece** that you are entering.



Canadian Cashmere Fleece Competition 2016  
Date: October 15, 2016  
Judge: Mr. Phil Smith  
Location: Woodstock Fleece Festival, Woodstock, ON

Owner Name: \_\_\_\_\_  
Farm Name: \_\_\_\_\_  
Goat Name include herd code: \_\_\_\_\_ ID/tag #: \_\_\_\_\_  
Goat's Date of Birth: \_\_\_\_\_  
Class (circle one)

**Class 1** 2015 Doe (1<sup>st</sup> fleece)  
**Class 2** 2014 Doe (2<sup>nd</sup> fleece)  
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**Class 6** 2015 buck (1<sup>st</sup> fleece)  
**Class 7** 2014 buck (2<sup>nd</sup> fleece)  
**Class 8** 2013 buck (3<sup>rd</sup> fleece)

**Class 4** 2012-2010 Doe (4<sup>th</sup>-6<sup>th</sup> fleece)  
**Class 5** 2009 & older Doe (7<sup>th</sup> fleece & over)

**Class 9** 2012-2010 buck (4<sup>th</sup>-6<sup>th</sup> fleece)  
**Class 10** 2009 – older buck (7<sup>th</sup> fleece & over)

**Class 11** Wether

# HOOFPRINTS

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*Hoofprints* is the official newsletter of the Cashmere Goat Association. It is published 3 times per year and sent to all members. If you have comments about articles you've seen in *Hoofprints*, any farm tips, or personal experiences you'd like to share, please send them to us. Please note that Hoofprints is sent electronically.

## CGA MEMBERSHIP

Full individual membership is \$30/year or \$50 for two years.

Junior (under 18 years) membership is \$15/year (non-voting)

If you have not filled out a membership application for a year or two, it would be helpful to the association for you to do that. The application can be found under contact information at our website:

[www.cashmeregoatassociation.org](http://www.cashmeregoatassociation.org)

Send membership and advertising information and checks to: Jana Dengler, 60 Hardwick Road, Petersham, MA 01366. Make checks payable to Cashmere Goat Association or CGA.

## CGA Officers:

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Yvonne Taylor

P.O. Box 378

Washington, ME 04574

207-845-2722

[yvonne@blacklocust.com](mailto:yvonne@blacklocust.com)

### Vice President

Maggie Constantine Porter

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603-284-6260

[constantine.maggie@gmail.com](mailto:constantine.maggie@gmail.com)

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P.O. Box 190

Fly Creek, NY 13337

[mcbrearty3@yahoo.com](mailto:mcbrearty3@yahoo.com)

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60 Hardwick Road

Petersham, MA 01366

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Bringing together breeders, fiber artists and  
others interested in these charming animals  
and the luxurious fiber they grow.