CASH MIRROR

Volume 9, Issue 6 April 1998

The monthly magazine devoted to cashmere goats and their fiber

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CASHMIRROR

ISSN 1090-736X

Legal Drivel

This magazine is published each month by:

CashMirror Publications
2280 S. Church Rd.
Dallas, Oregon 97338
503-623-5194
Fax: 503-624-1704
E-Mail: goatknol@teleport.com
Home Page: http:// www.teleport.com/~goatknol

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The *CashMirror* welcomes contributions of articles and photographs. Submissions may be made by mail, fax or e-mail.

No responsibility will be taken for material while in transit or in this office, although we will certainly be real careful.

Cover photo by Linda Fox
Angel's triplets, Angelique, Jocko and Rusty—It doesn't get any better than this—unless all three had all been does, of course.
Photo taken at Foxmoor Farm, Silverton, Oregon

Reflections

by Linda Fox

The kids are here! It's truly spring!

"Heh! We have kids!" Our first kids were born on Easter, towards the end of the day, just when we decided we were going to end up babyless on Easter. We quickly cleaned out a kidding pen while Twinkle and her two new large brown baby bucks got to know each other in the barn. By the time their stall was ready, the kids were already climbing on hay flakes. We carefully applied iodine to their navels and moved them to a clean kidding stall. We gave the new mother molasses water and made sure both of her teats were producing milk. After the babies were dry with tummies full, we gave them a Bo-Se shot. Even though they were both bucks, we didn't care. Life was wonderful; we finally had babies! We cleaned out two more kidding stalls in anticipation of more babies.

"Two more bucks!?" The second kids of the season were born two days later. Fleece had twins. They were both bucks and one had a big brown spot on an otherwise all-black body, but it was still early in the year and they can't all be does and perfect, right? She had them in the barn while I looked for her in the pasture. Earlier in the day she had stayed away from the herd so I had been anxiously checking every few hours. I did the iodine thing, checked the teats, gave her a clean stall of her own and a pile of hay. Four babies. Life is good. They're all bucks, but it's not good to be too greedy.

"Finally a doe! She's even white!" The third set of twins was born the next day, on April 15th. Two little tax filing presents. Samantha had two big white babies with wattles (I like wattles), one boy and one girl. She had them in the new mother and kid area we'd worked on the day before. She'd looked imminent that morning so I'd separated her from the herd. She had the babies just as I finished the last side of the fence. Our three cleaned-out kidding pens were full. Spring is officially here at last!

"More twins? How many does that make so far?" The fourth set of twins was born five days later. Pearly Sue didn't leave the barn that morning with the herd for their day of browsing. While she delivered two white babies—a buck and a doe—I hurriedly cleaned out another kidding stall. After confining the new mother and her big hungry babies in their stall, I decided I might as well clean out the remaining two kidding stalls. It looked like we were going to need them soon.

"Didn't you use 150% kidding rate when you calculated how many kids we were going to have this year?" The next day Erma had her two babies in the woods. I located her just as she was having the first kid. She was a first time mother and didn't quite know what to do with these two new slimeballs laying by her side. She knew she needed to be licking something because she kept licking in the air, but she never quite connected with the babies.

After 15 minutes, I was getting worried the babies were getting cold, so I dried them with a towel and moved them a few feet into the sunshine. They then proceeded to stand and walk shakily toward Erma looking for food. Erma had an interest in them, but still wasn't quite sure what to do with them. She kept backing off so the babies could never quite reach her.

After 15 more minutes of watching this routine, I carried the babies up to the barn. Usually the mother will follow. Erma didn't. She was upset that she couldn't find the babies, but only wanted to look where

Continued on next page

Reflections

Continued from previous page

she'd had them. After securing the babies, I returned to catch Erma and drag her up the hill to the barn. I questioned the wisdom of letting the does kid where they want. Dragging a goat up hill is difficult and probably is not too healthy for the goat. After she was in the stall with the babies, she immediately started licking them and encouraging them to nurse. Either it was an "absence makes the heart grow fonder deal" or she just felt more secure in a confined area. She settled into motherhood quite comfortably after that.

"I'm getting them mixed up. We need to do ear tags!" The sixth set of twins was born the next day also in the woods. I found them just as Nicole finished having them. After she had them cleaned and they had nursed, I carried the babies to the barn to their appointed stall. Nicole, an experienced mother, dutifully followed. The kidding pens were full.

In our operation, six pens had always been enough as we spaced individual breedings somewhat so they did not all come at once. This year, however, we bred our does in groups, so timing was going to be somewhat more unpredictable. We knew that we'd be refining our system as the kidding season progressed.

So far our count was twelve—nine bucks and three does. Not a promising start, but, with the number of pregnant does left, the doe/buck odds had a *chance* of evening out.

We had a week's reprieve before more kids arrived. It gave us time to move the first set of mothers out of the kidding stalls and get ready for new arrivals.

"I thought you ordered the ear tags!" The next arrivals were confusing. About noon, I found two new mothers and two wet babies in the woods a long way from the barn. Both were nursing. One of the mothers was in the process of delivering another kid. It seemed that the larger baby belonged to little Muffin, a first-time mother and that the smaller kid was being claimed by Ida Marie, a four-year old doe. I marveled at how little Muffin could have had such a big kid inside her. Both does had kidded in the same area at, what appeared, about the same time and they seemed to be getting their babies mixed up. Ida Marie would lay down to try and push the second baby out and then the first baby would cry and she would stand up to take care of it.

I was getting worried that the second baby was taking too long to come out as usually the second twin arrives rather quickly after the first. The whole show was being further complicated by the babies going between the two mothers to try and nurse which was upsetting both mothers. To try and decrease the confusion, I decided to take Muffin and her baby to the barn. I picked up her large baby and headed up the hill, but she would not leave the other baby. I couldn't catch her while holding the baby and I don't like to stress them after kidding, so finally I had no choice but to put the baby down and sit and watch.

Ida was still alternating between pushing out the second kid and trying to care for the first. And I was alternating between thinking I should be trying to help her out and thinking I should just back off and leave them alone. Ida and the baby didn't seem to be in trouble and progress was being made; it just seemed that the birth was taking too long.

At last, Ida gave birth to a fairly large kid—and right on its heels, a second kid. The mystery was solved—both of the first two babies belonged to little Muffin. Not only had she been able to conceal one large kid in her smallish frame, she had concealed a smaller one as well. While Ida cleaned her two new babies, I took Muffin and her babies to the barn. As I drug Muffin up the hill, I definitely decided the does needed to be confined closer to the barn.

"Isn't it your turn to go check the kids?" Since then, we've had twelve more kids—most of them born in the woods. Three of them probably spent at least a day living in the woods before we missed the mothers. We have eleven more does to kid and we are getting tired. The barn is full with kids hopping all over the place. The mothers, as usual, have lost control of their kids and things are very confusing.

As we make sure that all kids are fed and accounted for at the end of the day, we are busy mentally refining our kidding system for next year so things will be a little more organized.

Update: **"We definitely need to get those ear tags on!"** Five more babies were born today. Four of them does—finally the odds are evening out. I spent the afternoon retrieving new mothers and babies and giving extra attention to the first-time kidders; they seem to take a little more care to make sure they are not disturbed until their maternal instincts kick in.

Only eight more mothers to go and then we'll have a long dry spell until next spring.

Scrolls from the Dead Sea

In 1947, two young Bedouin shepherds were searching for a stray goat in the Judean Desert when they entered a long-undisturbed cave and found jars filled with ancient scrolls. This discovery led to the finding of seven ancient scrolls which were Carbon-14 dated back to the time of Christ. Subsequently, an extensive search located thousands of scroll fragments and other artifacts from eleven caves. All this courtesy of some goat herders!

When Readers Talk...

Linda,

I thought maybe you could squeeze this BIG THANK YOU in your next magazine!

The Oregon Flock & Fiber Festival is just around the corner and I am happy to announce that Guy Triplett has volunteered to be the chairperson for the Cashmere show this year. He has supplied me with a list of classes for the livestock show and has also informed me that the Northwest Cashmere Association (NWCA) would also like to sponsor a trophy in the live Cashmere show this year!

We are very excited about the enthusiasm of the Cashmere show this year and want to sincerely thank Guy for getting involved with "the celebration of natural fibers" to be held once again in Canby, OR on September 26th & 27th, 1998!

Sincerely,
Lisa Roskopf
Livestock Show Coordinator
Oregon Flock & Fiber Festival
April 22, 1998

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Linda and Paul,

This year there will be an Open Class Cashmere Goat Show at the Washington County Fair!
When: 10 AM, August 1, 1998 - Saturday
Where: Washington County Fairgrounds,
Hillsboro, OR
Placings through 5th, premiums paid through 3rd
$2.50 per entry

This is a one day show. You can walk your animals in for the show and take them home afterwards. There are a few 5 X 5 pens available for week long exhibit at $5 per pen.

For more information or entry forms, contact: Washington County Fair, 872 28th St., Hillsboro, OR 97124, 503-648-1416
or
Lisa Zietz
46080 NW Levi White Rd., Banks, OR, 97106, 503-324-0910
or
Look for fairbooks at extension offices and feed stores.

Lisa Zietz
Moonshadow Farm
Banks, Oregon
April 10, 1998

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To the Editor:

Hey, remember that beachball on the cover of the December 1997 *CashMirror*? Actually that was a member of our herd--accompanied by an editorial theory that the chubette was vainly seeking nutrition in dead twigs. Well, there is another theory afloat, one that must be taken seriously because it comes from Dorothy Benedict. A big herd of Saanens and a few zillion pounds of gourmet goat cheese say that Dorothy's theories on caprine nutrition deserve respect. AND Dorothy say, "Dental floss."

She says the little goat is flossing her teeth after a big meal. For a human Dorothy knows a lot about these things.

However we goats offer our own theory. We say that, following a suggestion from Bambi, the little goat is seeking succulent and nutrition-rich buds. We have to work hard at surviving in Maine!

The Goats of BPC
Buckfield Maine
March 31, 1998

Don't Order the Coffin Yet!
CaPrA Update

By Marilyn Ackley, CaPrA President
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I would like to share some CaPrA (Cashmere Producers of America) news with CashMirror readers. I particularly hope to reach the cashmere growers who don't read Concerning Cashmere (the official publication of CaPrA) and so haven't followed the last year's discussion about CaPrA's future. For those who believe that CaPrA is somewhere between the emergency room and the morgue, my message is: don't order the coffin yet!

A few years ago, faced with a dwindling CaPrA membership and with healthy regional organizations that seemed to be siphoning off all of the energetic workers, Joachim Grevel and Tom Dooling addressed the problem by crafting a new format in which CaPrA would be the umbrella organization to the regionals and would avoid duplicating the efforts of the regionals. It was a valiant experiment, but it hasn't exactly worked. The most unfortunate result was the disenfranchisement of North American cashmere growers who didn't live safely within the territory of the two energetic regionals, ECA and NWCA. The direct members, DIMs, paid more and yet had no effective voice.

Acknowledging that the experiment had to end, the CaPrA delegates voted a few months ago to begin the process of returning the organization to its original format with a board of directors elected at large. I suggested to the delegates that sitting in our various kitchens attempting to draft by-laws collaboratively might drive us all nuts, and that we really should get together for a marathon by-laws drafting session. Eileen Cornwell, the NWCA delegate, and Linda Cortright of ECA agreed in theory but noted that selfless devotion to the common good isn't quite enough to justify such sacrifice. They wanted the pleasure of a personal learning experience as part of the deal. They agreed that being in Sonora, Texas, when James Barton was classing the '98 cashmere clip was adequate bait. That put us in the neighborhood of Joe David Ross, the Co-op delegate. No matter how we counted noses, we couldn't come up with an adequate number of DIM members to qualify their delegate Yvonne Zweede-Tucker to vote; so she stayed in Montana but armed me with a gold-mine of good ideas.

In the end the DIMs did have a strong voice in the discussions. Kris McGuire, bless her soul, drove down from Wyoming for the meetings. It was also extremely helpful, as we looked to creating a genuinely national organization, to have TCA president Dee Broyles with us for a day.

Using CaPrA's original by-laws as a starting point, we set ourselves the task of structuring an organization in which workers wouldn't have to be travelers. We agreed at the outset that expecting the membership or the board of directors to abandon family and farm to travel to meetings is simply not realistic. So the by- laws, which the delegates are now in the final stages of rereading and fine tuning, make it possible for members everywhere to contribute without gathering under one roof.

The June issue of Concerning Cashmere will include the by-laws and a set of priorities which the delegates worked hard at making both exciting and realistic. It will also introduce eight candidates for six positions on the new board of directors (yes, a real democracy with real choices: nothing pro forma in this election). There will be a ballot which will allow all CaPrA members to vote for their six choices or to write in another choice. If you are not currently a member of CaPrA but would like to be part of the effort to revitalize our national organization, I urge you to send your $25 to CaPrA treasurer Marilyn Burbank, P.O. Box 2067, Rogue River, OR 97537. If you would like to suggest an energetic worker (perhaps yourself) as a possible candidate for the new board, please let me know, and I will be sure that your suggestion gets to the nominating committee.

As for those reports about CaPrA's trip to the morgue: although I hate to admit it, organizational death is still a possibility. Having a well thought out structure is only half the task. Now we need people willing to commit time and energy to projects that will enable cashmere goats to fulfill their marvelous promises to American agriculture. CaPrA is a volunteer organization that can accomplish only as much as its members are willing to take responsibility for. It should be the vehicle for introducing cashmere producing goats to all the argricultural situations where multi-purpose goats will thrive. The goats are ready; I hope the humans are too.

Tips to Help Make Exhibiting Easier

By Carol Spencer
Foxmoor Farm, Silverton, Oregon

Fair time and fiber shows will soon be starting. There is a lot of interest in Cashmere goats and their fiber, so do take your animals out on display if you can. A few simple things will make showing easier for both you and your animals.

A month prior to a show, separate those animals you are taking and put them in a small enclosure. This allows them to determine their pecking order and to get used to being fed together. Also they will be less nervous if they are used to being in a smaller space than a large pasture.

You will have a lot more people interested in your animals if they are gentle and can be petted. A must is to break them to lead—as at all fair grounds, both at the beginning and end of the show, animals have to be led from and to your car in the parking lot. A screaming, kicking animal is hard to handle and attracts the kind of attention you do not want. Few fairs and shows will allow cars on the grounds until closing and the crowds are gone.

Things to take with you:

1) Tack box with lock
2) Grooming tools
3) Lead and rolled leather collar or halter
4) Hay rack
5) Bucket (for watering your animals)
6) Lawn chairs—fairs and shows will not provide seating.
7) Broom and dust pan—you are expected to keep your area clean for the public.
8) Wheelbarrow and pitch fork—you are expected to keep your pen clean and the refuse pile is usually far outside the building.
9) Food—only enough to last the length of the show or fair:
   a. Hay
   b. Grain
   c. Treats (daily)—some of my favorites are wild hazel nut, fir boughs, corn leaves, melba toast. NO black berry vines (they tangle in the fiber and children might handle it.) Also no fruit such asapples which are messy and can cause bloat.
10) Business cards—people don't have time to stop and write; they want things they can take with them.
11) Sign with farm name—not too big, but legible from a distance.
12) Informational sign—something telling what type of goats and their history is useful. It should be madeof metal or tacked on a board; goats will eat other wise.
13) Roll of paper towels—to clean up any spills or problems. The fair/show does not want you to use their bathroom supplies for clean up.
14) Items needed to put up your signs and display—tape, pins, rope, etc.

Cashmere goat owners in the show ring with their goats at 1997 Oregon Flock and Fiber Festival, Canby, Oregon. Exhibitors: Karl and Cynthia Heeren, Hokulani Farm

Be sure your name is marked on everything you take. The hay rack and signs should be secured by a light chain and padlock. Goats at night will eat any paper signs secured to their pen, so remove the signs and put them back up in the morning. At night before you leave, be sure to put everything away and lock up small items and equipment.

Let's present our animals at their best.

2 weeks before the show or fair:

1) Give a booster shot of CD&T and drench with worming medicine.
2) Trim the hooves.
3) Use a pair of dog thinning scissors to trim the tail and the hair above the hooves. This allows viewing of the back of the animals and its hooves for judging and display.
4) If there are any nicks in the horns, file them smooth with a small 8" wood rasp and a piece of fine sand paper. Grease the horns and knees with Bag Balm. Be sure to rub it in thoroughly. This makes the horns shine and softens the callus on the knees.

Continued on next page

Exhibiting Goats
Continued from previous page

5) Wash out the eyes with a sterilized water eye wash. I use Clear Eyes for dogs. Put in a dab of Terramycin eye ointment to prevent eye infections.
6) Brush the coat with a dog coat conditioner and brush to a nice shine.
7) If needed, clean out the nostrils and indentation above the anus with a Q-Tip and baby cream.

Keep the area around your pen swept and clean at all times. Items for grooming and feeding should be put away when not in use. Keep your tack pen looking neat too.

Every morning before the start of the show or fair, check and touch up any areas that are dirty and brush your animals. Later you will be too busy talking to the public, so it is better to have your animals clean and ready in advance.

If you have an opportunity before spreading the hay in your pen, spray the floor and metal of the pen with a disinfectant. The pens are only washed down with water between events. When dry, sprinkle a box of baking soda on the floor of the pen before putting in the straw. This helps control the urine odor and the goats don't cough as much.

Forget your animals' diets during the show—they will be much more content if they are stuffed. Feed the hay and grain in the morning and at night along with fresh water. Feed mid-morning and mid-afternoon one of the treat foods (see list above). You will find that your animals will lie down and chew their cud and handle the constant handling and stress very well.

Finally, it is time to load up and go home. But don't neglect a few health tips at this time. Dip all four feet in disinfectant before loading. Wash out the eyes with Clear Eyes and put in a small dab of Terramycin. The reason for taking the extra time and care: The fairgrounds are dirty and you can bring home a disease on the feet. Then when the goats scratches its eyes, it can cause an eye infection.

When you get home, put your animals in quarantine for 2 weeks before re-uniting with the rest of the herd.

One of the nicest things that happened to me when I was showing was when a gentleman came up to me at the Black Sheep Gathering and said, "You look nice, your goats look nice. It's very obvious you take good care of them." This type of compliment is what makes all the effort and hard work worthwhile. May it happen to each of you.

Baking Soda - A Goat's Best Friend

By Jackie Nix, Agriculture Extension Agent, Lenoir County
North Carolina Cooperative Extension Service

A goat's rumen contains microorganisms that work best within a narrow range of acidity. Feeds that ferment rapidly in the rumen increase its acidity. When acidity gets too high too fast, the microorganisms multiply faster than usual, the rumen's balance become upset, and the goat gets sick. A goat's health therefore depends upon proper acidity.

An alkaline substance such as sodium bicarbonate, or common baking soda, keeps acidity in check. A goat eats soda to keep the acidity within the proper range. Goats know when they need soda, and how much they need. All you have to do is make sure that they can get it when they need it. A goat will eat an average of 2 tablespoons of soda per day, however they may need more during hot or humid weather. Higher temperatures cause the rumen to be more active, thus increasing acidity. At other times of the year they may eat little or no soda.

Provide baking soda (found in any feed or grocery store) free choice just as you would trace mineral salt. Inexpensive plastic feeders can by purchased to dispense both soda and mineral salt.

Clean and refill the feeder often. Salt attracts moisture which will cause it to crust over. Also both salt and soda will get lumpy from water dripping from the chin of a goat that has just drank water. The feeder can also collect goat feces. Because goats are finicky eaters, any of the above will cause them to reduce consumption of these two very important substances, thus increasing the risk of other problems.

Per the extension service, this information was adapted from Your Goats. A Kid's Guide to raising and Showing, by Gail Damerow.

Book Reports (2)

By Linda Fox

Cashmere - A Complete Guide From Fibre to Fashion

By Sue Meech

This book is little—5-1/2" X 8-1/2" and 54 pages in all, and it has an ambitious title. It covers a little bit of almost everything including history (here and in China), Boer goats, cashmere classification, combing, dehairing, purchasing, storing, spinning, dyeing, blending, and washing cashmere. And this is just in the first 19 pages!

There are six patterns for weaving, knitting and crocheting cashmere (22 pages). There is a beautiful pattern for a baby hat and booties on page 29. With only one ounce of cashmere you can make a tiny outfit to leave around the house to make your husband worry that you might be thinking of having a little "something" to put them on.

There are four pages on raising cashmere goats, three pages on marketing, one page on the future of cashmere, two pages of glossary, one page of bibliography and two pages of resources including the *CashMirror Magazine* (with the wrong address).

The book contains an interesting method for hand dehairing. The author suggests you place the undehaired fleece in a sieve and get it wet. She claims that wet fleece is easier to dehair as the guard hairs will stand up and can be easily removed. I'm going to try that.

If you know nothing at all about cashmere or goats, this little book would be a good little introduction.

I bought the book at the 1997 Oregon Flock & Fiber Festival for $10.95 at the Woodland Woolworks booth. I've seen it since then for sale in several fiber and knitting shops. The book was published by Sue Meech, Sandy Pines Farm, R.R #6, Napanee, Ontario K7R3L1, Canada. It can most likely be obtained from the author if you can't find it elsewhere.

Goat Unit Study

By Kym & LeShay Wright

This (8-1/2" X 11") spiral-bound booklet (72 pages) is designed as a study guide to assist the reader in getting to know goats. The authors have been a homesteading family for six years. They live in Loxahatchee, Florida with their eight children and their Saanen goats.

This workbook may be obtained from the authors at PO Box 815, Loxahatchee, Florida 33470. The cost is $13.95 plus shipping costs. You may also obtain additional information at their internet web site: **http://members.aol.com/kymwright**.

The Goat Unit Study is a plan of study designed to involve the whole family in learning about goats. The guide provides a plan for gaining knowledge of goats through research of various resources, activities, field trips and other excercises designed to obtain knowledge for preparing for and caring for a goat. It includes hands-on activities, research and writing assignments, lesson plans and vocabulary lists.

Suggested activities for the family include comparing a goat's (cloven) hoof to our own feet, gluing twigs around a picture of a goat you draw yourself to simulate fencing requirements, and checking out various breeds on the internet.

For the foot trimming lesson, the plan calls for reading about how to trim hooves, studying a list of supplies required and arranging a field trip to a local farrier or a goat owner who might let you observe the trimming procedure. You are admonished to ask questions, take notes and volunteer to help them trim.

A lesson on learning to milk a goat (without the goat) instructs you to fill a latex glove with instant vanilla pudding. Squeezing on the pudding-filled glove fingers will help you to get the feel of things before you abuse an actual goat.

In case you think the book includes lessons only for the toddler set, on page 34 there are excellent instructions for creating a business plan including defining your visions for your goat business and doing a financial analysis. There's also a lesson in basic genetics and a recipe for Fromage Blanc (white cheese).

Included is an extensive list of references for further study including "Who Took the Farmer's Hat?" by Joan L. Nodset, "Goat Husbandry" by David Mackenzie, internet addresses and Bible scripture references to goats.

I would recommend this Goat Unit Study unit to any family (especially those with children) for a plan of creative plan of action for learning all about goats in a fun and comprehensive way.

If I had small children, a lot of time and the patience of Job, I'd certainly have a great time orchestrating a little adventure learning a whole lot about goats by using this Study Unit.

And now I have to go check and make sure that Paul is not getting his glue all over the kitchen table.

Martha Stewart Does Cashmere

A little known secret is that, along with Martha's chickens and bees, she keeps a few cashmere goats. She acquired them to have a readily-available source of cashmere in just the right shade for a sweater to wear for an upcoming dinner party she was hosting, but also found that they were a perfect addition to her neatly stacked shed of gardening tools to help her keep her perfectly trimmed landscaping perfectly trimmed.

She had a corner garden of roses (planted in a prior year when those nifty pastel yellow and pink Peace roses were "in") and she wanted to clear them out for an herb garden. Rather than invest in expensive chemicals or legal alien gardeners, she let in the herd. They quickly stripped those Peace roses down to their bare stalks, belched (Martha was shocked!) and moved on to the peonies.

And, as we all know, not only did they eat the roses, they also evenly spread little packets of organic fertilizer as they passed.

Not only does Martha see the value of her goats' weed -eating and fertilizing capabilities, she also likes the way they dress up her pastures. Behind her pristine white picket pasture fences (47" high with one strand of electric exactly 12" off the ground and exactly 6" out from the post on matching white custom-made ceramic (with blue flowers) extenders), are a herd of white-white matching cashmere goats. They are all exactly the same age and size and she has them trained to always stay together to set off the dark green grass to full advantage.

You may ask: "How in the heck does she do all this, with her active social life and television schedule and all? We often feel lucky to just get the dang things fed and keep them alive." Organization is the key!

We have been able to obtain Martha's "Goat Maintenance Calendar" for May 1998. You may want to follow along with Martha as we all take care of our goats during the merry month of May:

Martha's Cashmere Goat Calendar for May 1998

May 1: Repaint the white picket pasture fence and polish the ceramic insulators.
May 4: Trim goats' feet and paint their hooves pink. Carefully remove old polish first.
May 5: Clean barn, repaint inside in a "warmer" white. Sterilize all waterers and mineral feeders. Sterilize goats.
May 6: Check literature for any new research about cashmere goats. Renew subscription to *CashMirror*.
May 7: Brush and floss all goats' teeth.
May 8: Dye the goats a warmer white to match the inside of the barn. Wax all horns.
May 11: Can't find the goats. Looked for them most of the day. Finally found them in the barn—hard to see against the matching barn walls.
May 12: Bleach the goats back to their original white shade. Curl and condition their beards.
May 13: Take fecal samples from all goats to Veterinarian for testing (using rubber gloves and individual tuperware containers carefully marked with each goat's identifying number).
May 14: Vet called. Found one worm egg in one sample. Cull goat. Check *CashMirror* Breeder's Directory for a breeder in my area for replacement (wormless) goat of proper age and color.
May 15: Repaint picket fence and polish insulators. Replace electric wire.
May 18: Repaint outside of barn in forest green with ecru trim.
May 19: Weigh each goat and compare their weights with last month's chart. Prepare diet plans for any goat who has exceeded her ideal weight. Supplement any of the does who are less-than-fashionably thin.
May 19: Check hooves for any scuff marks in polish. Redo any of those who need it.
May 20: Attend workshop on obsessive-compulsive disorders. Takes verbatim notes.
May 21: File down horn tips and fill in any cracks or nicks with Horn-Renew™.
May 22: Rake all little doo-doos from the pasture for mulch in new herb garden. Replant peonies.
May 25-31: Hand dehair cashmere from this year's crop. Get help from entire staff. Sort individual hairs by length, crimp frequency and color.

Note: Martha does not breed her goats. She doesn't like buck prints on her does and birth has a tendency to leave unsightly slimy patches in the barn and on the grounds.

Heartwater

From a September 1977 Factsheet issued by the USDA APHIS

Another disease to scare the heck out of you...This information was taken from a September 1977 Factsheet issued by the USDA (US Department of Agriculture) APHIS (Animal and Plant Health Inspection Service).

Animal Heartwater is an infectious, noncontagious, tick-borne disease of domestic and wild ruminants, including cattle, sheep, goats, antelope, and buffalo. The disease is caused by an intracellular rickettsial parasite, Cowdria ruminantium, and is transmitted by a number of species of ticks in the genus Amblyomma.

Heartwater is usually an acute disease and is commonly fatal within a week of onset of clinical signs. The disease is widespread in most of Africa and on several islands in the West Indies. With increased trade and movement of animals in today's global market, heartwater may present a significant threat to the domestic livestock industry in the United States.

Livestock owners should monitor their animals for exotic ticks and for clinical signs of the disease. If heartwater is suspected, owners should immediately report these findings to a veterinarian or to a State or Federal animal health official.

History

Heartwater was first identified in sheep in South Africa in the 1830's. By 1898, it was shown to be a transmittable disease, and in 1900, the tropical bont tick was identified as a vector. In 1980, heartwater was reported for the first time in the Western Hemisphere on the Caribbean island of Guadeloupe, although the vector tick was probably introduced from Africa much earlier. The disease is also present on the Caribbean islands of Marie Galante and Antigua. The tropical bont tick has spread to several other islands in the Caribbean,

although a definitive diagnosis of heartwater has not been made to date on those islands.

Signs

The acute form of heartwater is the most commonly observed presentation of the disease. A sudden high fever (107 degrees F) is followed by loss of appetite, depression, and respiratory problems. Animals may initially have an increased respiratory rate, followed within a few days by severe respiratory distress. Nervous disorders often follow the respiratory signs and can include a variety of abnormal behaviors such as excessive chewing movements, incoordination, star-gazing, head tilt, overly rigid posture, and walking with a high-stepping gait. Some animals may undergo convulsions
or be unable to rise. These nervous signs usually last for no more than 24 to 48 hours, followed by the animal's death. In some cases, the nervous signs may not be noticed prior to death.

A mild form of the disease, known as heartwater fever, is present in some affected regions among indigenous breeds with a natural or acquired resistance to heartwater. The only clinical sign of the mild form of the disease is a transient fever, and animals with this form usually recover.

Postmortem Lesions

Heartwater derives its name from a common postmortem finding of excessive fluid in the sac surrounding the heart. More commonly, the fluid accumulates within the lungs; thus the lungs appear "wet" and heavy. The fluid may also accumulate within the chest cavity itself, outside the lungs.

Confusion With Other Diseases

The observed nervous system abnormalities suggest other diseases (such as rabies, tetanus, meningitis, or encephalitis) or toxic poisoning.

A definitive diagnosis of heartwater is made by microscopic examination and observation of the causative rickettsia in a brain tissue smear.

How It Spreads

Heartwater is transmitted only by ticks of the genus Amblyomma, with the tropical bont tick as one of the most important vectors. This tick is widely distributed throughout Africa, Yemen, the Cape Verde islands, and several islands in the Caribbean.

The life cycle of Amblyomma ticks may take from 5 months to 4 years to complete. Thus, the infection may persist in the environment, inside the tick, for a long time. The immature stages of the tick will feed on a wide variety of livestock, wild ungulates, groundbirds, small mammals, reptiles, and amphibians.

Rapid spread of the tropical bont tick in the West Indies has occurred
since the 1960's. Movement of tick-infested livestock was incriminated in some

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Heartwater
Continued from previous page

cases, but overall, the cause of the spread of heartwater has not been determined.

Cattle egrets became established in the region in the 1950's and have been implicated in much of the recent spread of heartwater. Small numbers of tick-infested cattle egrets have been shown to move among islands in the region and have been implicated in the interisland movement of the tick.

Susceptible Species

Animals susceptible to heartwater include domestic cattle, sheep, goats, and buffalo. Some breeds of cattle (e.g., Jerseys and Brahmas) may be more susceptible than others. Exotic ruminants can also contract the disease.

In laboratory tests in the United States, the white-tailed deer (Odocoileus virginianus) has been shown experimentally to be highly susceptible to heartwater. Amblyomma maculatum, another potential vector, is a common parasite of white-tailed deer in the Southern United States. However, there is no evidence that heartwater is present in wildlife in this country.

Prevention and Control

Preventive measures by livestock owners should include implementation of an effective tick-control program, including regular inspection of animals and pastures for ticks and elimination of the vector through acaricides.

To prevent introduction of heartwater or any other foreign animal disease, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) tests imported animals for heartwater and other diseases and ensures that all animals are free of ticks or other potential insect vectors before entry into the United States is permitted.

What Can the U.S. Livestock Owner Do?

Livestock owners should monitor their animals regularly for clinical signs of heartwater or tick infestation. If heartwater is suspected, a veterinarian, State or Federal animal health official, or county agricultural agent should be contacted at once.

The livestock owner is an essential link in the cooperative effort to protect our Nation's livestock resources from costly and deadly foreign animal diseases. Both early recognition of disease signs and prompt notification of animal health officials are essential if prevention or eradication of these diseases is to be successful.

For more information on heartwater disease, contact:

USDA, APHIS, Veterinary Services
Emergency Programs
4700 River Road, Unit 41
Riverdale, MD 20737-1231

Telephone (301) 734-8073
Fax (301) 734-7817

More Heartwater Information

Even though Heartwater, also known as cowdriosis, is a disease of all domestic ruminants, goats are the most susceptible natural host for the Cowdria ruminantium, the organism that causes Heartwater.

Heartwater is indigenous to sub-Saharan Africa, but has since spread to islands near Africa including Guadeloupe, Antigua and Marie Galante. The tick vector has also been found in Puerto Rico, Vieques, St. Croix, St. Martin, Anguilla, St. Kitts, Nevis, La Desirade, Martinique and St. Lucia. However, the disease-causing agent, C. ruminantium has not yet been found in this last set of exotic places.

Indigenous goats have been found to be more resistant to the disease than imported goats. Angora and Boer goats in South Africa have been found to very susceptible compared with other breeds. It is believed that indigenous goats develop a genetic resistance, which appears to be a recessive, sex-linked trait.

Young ruminants develop an age-related resistance to the disease independent of the maternally-derived passive immunity. There appears to be a period of resistance in kids, probably shorter than three weeks, during which exposed animals do not develop clinical signs of the disease, but do develop a resistance to future infection.

Unfortunately, young indigenous goats do not always get exposed during this critical time as variation in local tick levels occur and may be low at the critical time in the kid's life. Also, since ticks prefer cattle over goats, in an area where there are cattle and goats, cattle may be the meal of choice for discriminating ticks. In addition, young goats are sometimes confined in villages at young ages, for protection against theft and predation. The protected kids may not then be

Continued on next page

More Heartwater
Continued from previous page

exposed to the disease-bearing ticks, and therefore, not develop subsequent immunity.

Control of Heartwater is attempted by attempting to control the tick population, although this is sometimes difficult as wild ruminants can be a reservoir of the disease-bearing ticks.

A vaccination is available and has been used in Africa with some success, but vaccination is complicated. After vaccination, when the first sign of fever occurs in the animal, they are treated with oxytetracycline to lessen the symptoms of the disease and to impart immunity to reinfection. After doing all this, the period of immunity after vaccination in goats may be as short as two months.

Those Nasty Ticks That Carry Heartwater

Those nasty ticks that carry Heartwater disease are three different varieties, all of the genus *Amblyomma* which feast on a wide variety of mammals and birds. The most common vector for heartwater in Africa and the Caribbean is *A. variegatum.*

There are two ticks found in North and South America that are capable of transmitting *C. ruminantium* to domestic ruminants although they are not currently found to do so. These two species are *A. maculatum* (the Gulf Coast Tick) and *A. cajennense* (the cayenne tick) and I firmly suspect that this is far more than you ever wanted to know about ticks and heartwater.

Cashmere 2000

Reserve these dates - October 3-5, 2000!

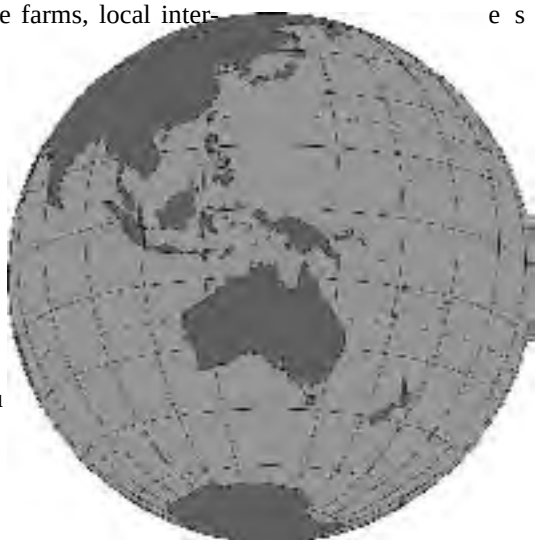
A seminar event to be held at the Gosford Convention Centre (approximately 1 hour by road north of Sydney) with Australian and international growers, researchers and processors. Together they will explore the future direction of the global cashmere industry as we enter a new millennium.

This event is hosted by the Australian Cashmere Growers Association who invite you to enjoy the hospitality and lifestyle of rural eastern Australia, and to visit the farms, beaches, theatres, cities and restaurants they call home.

For Growers:
The opportunity to be informed and learn about how to meet the needs of cashmere processors and to apply good use of research and technology to build an industry, recognizing contemporary attitudes and opinions.
For Processors:
The opportunity to inform growers of the future of the industry and help them provide the raw material that will improve industry profits and viability.
For Researchers:
The opportunity to share findings and communicate them to the people who will use them.
For Adventurers:
The opportunity to attend the 2000 Olympic games or discover coastal and rural Australia.

Conferences:
Community attitudes, needs of the international industry, perceptions of processors and government, research and technology, integrating cashmere in mixed farming, future direction from a grower's perspective.
Poster and Samples Display:
Photo competition, research and development displays, farm management software
Trade Participation:
Plant and equipment, veterinary displays, testing services, fashion, government department displays
Associated Activities:
Farm stays, bus tours of cashmere farms, local interest events

For more information contact:
Mrs. Helen Simmonds
Conference Convenor
Australian Cashmere Growers Association
RMB 1202, Jones Road
CALGA NSW 2250 Australia
Mobile phone: 015-003-002
Fax: 61-43-75-1123
Email: rowanprk@ozemail.com.au



This is where it's at in the year 2000—Australia!
(Assuming, of course, the world doesn't come to an end or all the computers don't crash and we wished the world would just end.)

A Tribute to Things That Herd (Goats)

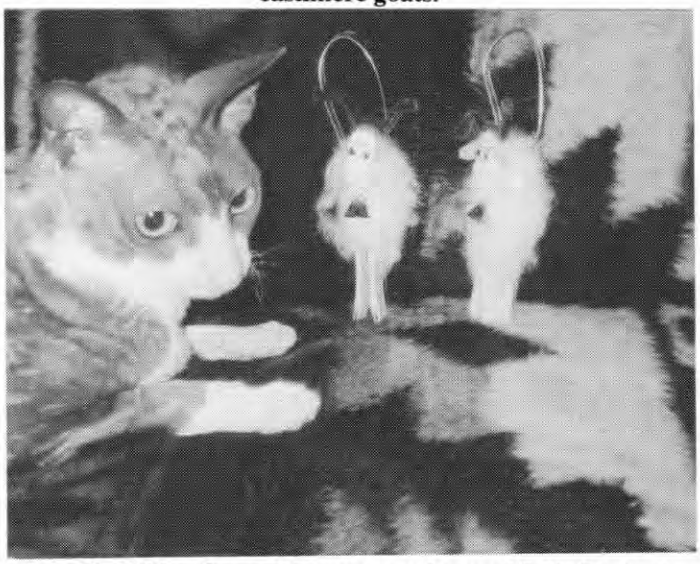
As we try, often in vain, to round up a few goats to examine or to show prospective customers, let us pay tribute to the animals who help us out with this chore. Although we have read that herding dogs are not effective with goats, we have seem some pretty impressive dogs in action.

The problem with herding dogs and goats is that goats are more inclined to challenge a dog than do sheep. Care must be taken to protect a young herding dog from aggressive goats with those pointy horns.

One of the arguments against using herding dogs with goats is that the goats will be stressed out by the dog. Somehow, we feel that humans running around after goats may be just as stressful for the goat and certainly stressful for the humans.

Sweep - Gould's dog

Sweep, Dottie Gould's (October Farm II, Baker City, Oregon) Border Collie demonstrates her skill at herding cashmere goats.



Goat Knoll herding cat has cornered two of Julie Becker's miniature cashmere goats on the corner of the couch. Good Mickey!

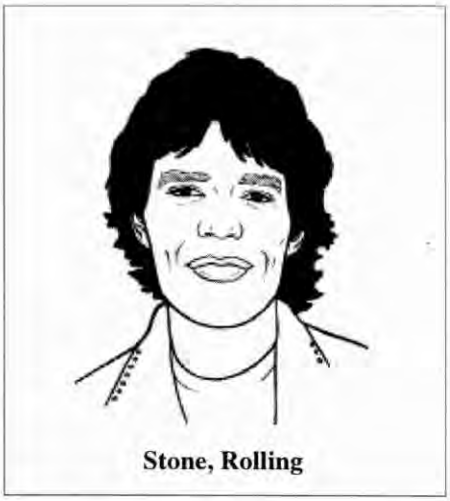
Jill, Border Collie puppy, is already showing herding instincts at a seven months of age, but she is too young to use.

Ann Dooling's (Pioneer Mountain Farm, Dillon, Montana) Border Collie, Jake, guards a roomfull of fleeces and keeps the cats in line.

Stones!

Urinary Stones in Goats

By Jackie Nix, Agriculture Extension Agent
North Carolina Cooperative Extension Service



Stone, Rolling

Adapted from Dr. Allen Cannedy's talk at the 6th annual North Carolina Goat Field Day

Bladder and urethral stones are a problem in goats, especially pet wethers, but also in intact bucks. Stones often lodge in the bend in the penis called the sigmoid flecture, or at the small tip of the penis called the pizzle. The reason that wethers are especially at risk is that the urethra, the tube that empties the bladder, does not grow to its full diameter if the buck is castrated before puberty. Does can get bladder stones also, but these usually pass easily through the short straight female urethra.

Why Stones Form

Stones are caused by improper diet. Diets unbalanced in calcium and phosphorus are a major factor in the creation of some stones. The calcium-to-phosphorus ratio should be 2:1 to 2.5:1. A diet that is unbalanced or too rich in either of these minerals can lead to stone formation. Excess calcium leads to calcium carbonate or calcium oxalate stones, while excess phosphorous leads to struvite (magnesium ammonium phosphate) stones.

Other dietary problems include eating forage that is grown in silicate rich soils (leading to silicate stones), or forages high in oxalates, which lead to oxalate stone formation. Also, intermittent large feedings and water deprivation contribute to stone formation.

Symptoms of Stones

The goat may show the following symptoms: pawing, restlessness, looking at its abdomen, tail twitching, vocalization, or other signs of colic. He may strain or urinate, and may prolapse his rectum in the process. This act could be confused with constipation. There may be drops of bloody urine, or crystals on the hairs around the prepuce. If the urethra has ruptured, the abdomen may be swollen (water belly) and the goat may lose its appetite and become depressed.

Treatment

Most treatments require the aid of a veterinarian. These include: flushing, surgical removal of the stones or pizzle, penile urethrostomy, and tubal cystotomy. If you suspect urinary stones, contact your vet as soon as possible to avoid costly complication.

Prevention

The key to prevention is proper diet. Pet, hobby and show goats tend to be overfed grains and alfalfa by their well-meaning owners. Grains are high in phosphorus relative to calcium, thus upsetting the optimum Ca:P ratio discussed above. Alfalfa hay is higher in calcium than grass hay which can also upset the balance.

Avoid too much grain or pelleted ration. Feed frequent small meals and allow grazing in between. Also, always provide plenty of water. Check the waterers often to check for fecal contamination, debris, freezing (in winter) or any other factor that would reduce intake of water. Bucks that are intended as pets should be castrated after the onset of puberty (3 to 6 months of age) to allow the urethra to mature.

An increase in dietary salt promotes water intake, and a bladder containing dilute urine with a higher chloride ion level is less likely to form calculi. A salt lick may not be used by the goat in large

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Stones!
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More Stone Information

By Linda Fox

enough quantities, so salt can be applied directly to the feed, either applied loosely on moistened feed or mixed into just enough water to dissolve it and sprayed on hay. A 50 lb. animal requires approximately 50-100 grams of table salt daily to help dilute the urine.

Another preventative is ammonium chloride, which helps to acidify the urine. This makes the crystal components more soluble, and the goat will be more likely to urinate them out than form stones.

Generally, commercial meat goat producers shouldn't have to worry about urinary stones in wethers because animals are slaughtered at a relatively young age and there is less tendency to misfeed grains and alfalfa. If a market wether does develop stones it is often much cheaper to slaughter the animal at the onset rather than try veterinary treatments which can run from $100 up to the thousands.

Obstructive Urolithiasis is the term used by Smith and Sherman to describe the condition of a plug in the urinary tract. This plug usually consists of phosphate salts as noted in the article at left, although Goat Medicine, page 400 has a rather gruesome photograph of a blockage (after death) caused by consumption of a lead shotgun pellet.

Although a diet providing the proper raw materials for stones to form and plumbing inadequacies caused by early castration seem to be the major causes of urinary blockage, other factors come into play.

For a stone to form, a nidus may be required. A nidus is a place in an animal or plant where disease germs or other organisms lodge or develop. A common nidus for stones in ruminants are sloughed-off cells from the lining of the urinary tract. Increased cell sloughing can be caused by Vitamin A deficiencies and by urinary tract infections. It is noted that too many cells floating around in the urine all at once can plug the plumbing all by themselves.

John Mionczynski, author of The Pack Goat attributes stone formation to excess feed in combination with lack of exercise. He believes that goat owners have a tendency to overfeed grain and other high-phosphate supplements to increase livestock growth rates. Owners may also overfeed a goat after it has reached its full size when the animal no longer needs that amount of food to maintain its weight.

John believes that there is a link between exercise and proper calcium metabolism in man and other animals, so why would this not apply to the goat? Per John, in the wild the goat is a very active animal, "bounding over rocks and traveling daily from water hole to feeding area until old age (twelve to fifteen years, and occasionally over twenty)."

Often the average domestic goat is somewhat of a "barn potato" by comparison.

No blockages in our sigmoid fectures (or our pizzles either!)

References

Smith, Mary C. and Sherman, David M., Goat Medicine, 1994, pages 398-401.

Mionczynski, John, The Pack Goat, 1992, pages 78-79.

Webster, Merriam, Webster's New Collegiate Dictionary, 1950, numerous pages. (always a necessary companion when reading Goat Medicine, above)

What Goes in—Must Come out

GOAT MANURE

From the USDA Extension Goat Handbook

http://www.inform.umd.edu/EdRes/Topic/AgriEnv/ndd/GOAT_MANURE.html

For gardening, goat manure can be a real asset. In their naturally dry, pelleted state, goat feces are easily handled, stored or directly applied on vegetables, trees, and flower gardens, as mulch, organic matter, fertilizer, or just to increase the water holding capacity of the soil; and goat feces do not normally attract flies or breed maggots. A daily raking or sweeping of the goat yard keeps the goats clean and free from parasites; and the garden will soon show its appreciation.

Few research data are available on the value of goat feces or manure. Of course, it depends on the level of feeding. Thus high-producing, well fed dairy goats should produce more and better feces than other goats. In general, you can expect feces per day to average 2.0 to 6.00 % of the live weight of the goat. Depending on feed and water intake, the fresh feces voided per day might weigh between 30% and as much as 100% of the daily dry matter consumed. Dry matter content of goat feces is between 50% and 60% normally; and the color depends on the type of feed.

Hard feed kernels, like barley and corn may appear in goat feces, especially at high levels of feeding, but generally they are masticated and ruminated much finer and more completely than by calves or cows.

Goat feces contain not only feed residues but endogenous substances from the goat's intestinal tract too. Swedish research established that goats excrete daily, regardless of feed type, a minimum of 34g protein, 8g fat and 13g carbohydrates for each kg (2.2 lb) feed dry matter eaten. This would mean that a 150 lb goat milking a gallon of milk a day, and had been given 7 lbs of feed dry matter daily; this goat would lose 7/2.2 x 34 = 108g protein daily in her feces, not even accounting for her milk production and her own maintenance needs. This 108g endogenous protein loss also translates into a 3.4 minimum protein content in the 7 lb daily feed dry matter to avoid a negative protein balance for this goat. In comparison, a daily goat ration with a 14 protein content supplies just 445g protein, of which a certain percentage is always undigestible and a loss to the goat too. This percentage increases when the crude fiber content of the feed increases.

Goat manure, i.e. feces plus bedding and wasted feed, fresh or usually composted in pens or outside piles can average 10 lb per day for the above example goat—or more, depending on bedding amount, urine drainage or fermentation losses. This can amount to around 1-1/2 ton of manure per goat per year or more. This would consist of at least 1/2 ton dry matter with 15 lb nitrogen, 17 lb phosphorus, 5 lb potassium and 27 lb lime.

Goat manure (feces plus bedding and wasted feed) can average 10 lb per day...which can amount to around 1-1/2 ton of manure per goat per year!

For large herds or flocks, disposal of goat manure could have problems, but in some parts of the world animal wastes serve numerous useful purposes. In fact, animals are frequently kept beyond their period

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Helen cheerfully works at turning brambles into manure.

Manure!

Continued from previous page

of usefulness for the production of milk or work so that they can provide dung. Approximately 40 percent of the farmers of the world depend wholly or in part on animal wastes to enhance soil fertility. Generally, manures do not increase short-term crop yields to the extent of equivalent amounts of nutrients supplied in refined chemical form. The differences in yields are found only with long-term usage.

Small farmers who till land by hand or with chisel type plows prefer manures over chemical fertilizer because manure enhances the aggregate crumb structure and soil permeability which aids in cultivation. Marginal micronutrient deficiencies, which may occur after repeated cropping with chemical fertilizers, can be prevented with supplementary applications of manure.

The value of manures for soil fertility can be markedly influenced by handling procedures. At least 50 percent of the nitrogen and 60 to 70 percent of the potassium are found in the urine. Frequently, manure has a low fertility value due to failure to incorporate the urine, or the nitrogen is lost through leaching.

45 goats (more or less) times 1-1/2 tons of manure each = a whole lot of fertilizer!
(Photo of phurry goats at Pioneer Mountain Farm, Dillon, Montana)

Manure as Fuel

18 to 20 Mcal of energy inputs are required to produce one kg of nitrogen fertilizer. Fuel costs to produce nitrogen have already aroused new interest in research on storage and handling of manures. Predictions for the future are that animal wastes will again be viewed more favorably as a useful resource.

The energy in ruminant manures is rather high (dry cow dung 4.58 to 4.72 kcal per gram) and can be used as efficiently as energy from coal or oil if appropriate equipment is used. In some cases, dry dung cakes are preferred over plant residues because of uniformity of heat. India annually uses 60 to 80 million tons of dry buffalo, cattle, sheep and goat dung for fuel. In the central plains area, where there is no firewood, per-capita use is as much as one ton per year. In two instances, the sale of dung cakes to urban centers provided up to 60 percent of the total cash income per rural family. The expected return per animal per day from the sale of dung cakes is 1.03 rupees or $0.12. India would need to expend over US $3 billion per year, exclusive of distribution costs, for coal and oil to replace dung.

Pastoral herders, especially nomads, largely depend on cattle, sheep, or goat manure as fuel for cooking, heating and light. Estimates are that over 200 million tons of manure are used per year as fuel in developing countries. Supplies of firewood or charcoal—traditionally the chief sources of fuel in central Africa fringing the Sahara, the Andes region of Latin America, the highlands of Central America and the Caribbean islands—have become scarce or non-existent. In many areas nearly 20 percent of the total family labor is expended to gather wood or crop residues for fuel, and the time spent is increasing. Expenditures by salaried workers for firewood or crop residues have risen from 15 to 25 percent of income.

In Africa and the Americas, animal manures have not been used extensively as fuel, but usage will probably increase rapidly in the near future. Over

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Manure!
Continued from previous page

the long run, methane gas from animal wastes will likely make the greatest contribution.

Methane Gas

During the 1930's and 40's, digesters were used rather extensively in central and northern Europe for producing methane gas, but production declined to nearly zero when oil became cheap during the 1950's. Currently there is vast interest in digesters to meet fuel needs. In 1975, South Korea had 29,000 bio-gas plants and planned to build another 50,000. India has about 20,000 plants, two-thirds of which were built since the energy crisis, and plans to build 100,000 more within the next 5 years. Taiwan has a large number of plants and there are some in Bangladesh and Nepal.

The US could obtain nearly 1.0 percent of its energy from renewable resources, and this could increase to 25 percent by 2020 A.D. Of this, methane production is capable of producing about 5 percent now and 25 percent in 2020. Canada has a similar capability.

Fecal material produced by ruminants, particularly buffalo, cattle, sheep and goats, is an ideal substrate for anaerobic fermentation because it is already buffered and contains large populations of methanogenic bacteria. Methane from manure has a value of 5 kcal per cubic meter which is 71 percent of the energy value of natural gas. It works well for household use but is difficult to handle in mobile power. Processing manure through bio-gas plants has the added advantages of better preservation of fertilizer in some areas where dung is burned.

A major handicap for methane production is capital cost for small units. Several countries have extensive research programs underway to reduce construction costs. Even so, the use of bio-gas plants is not likely to approach anywhere near the level projected, unless prices of fossil fuels rise to extremely high levels.

For the US, it is estimated that manure from 40 cows will be needed to supply fuel, including electricity, for an average farm family, but will not replace fossil fuel to operate tractors, trucks or automobiles. The average Indian village could potentially accrue high benefits from the use of digesters, but acceptance will be low because it will deprive individuals of one, if not their major, source of income.

In spite of limitations, anaerobic fermentation technology will undoubtedly play a significant role in waste management. For developed countries, units will be employed on large farms or in conjunction with feedlots where the cost of production will be in line with other fuels.

Manure—Goat Herders' Summary

Goat poop makes great fertilizer—comes in handy self-contained, easily-measured pellets.

Goats chew their food better than other ruminants (good goats!).

They don't get to keep all the protein you feed them; you must allow for what goes on out.

The goat will get to keep more protein in a feed with more crude fiber.

Goat poop isn't just something to scrape off your boots!

Kid Poop

As you've probably noticed, young kids' feces are different for about the first week after birth. The color and consistency of their feces go through a normal progression before they arrive at miniature sized, dark brown pellets.

It's good to know the normal kid poop progression, so you will be aware when something is wrong.

The first feces are a tarry black substance, looking much like car grease, but much stickier. This substance will appear only for the first few hours after birth.

The second stage is bright orange, more of it, and almost as sticky as the tarry black stuff.

A good goat mother will handle the clean up for these two icky stages, but sometimes, especially with first-time mothers, this orange crud will get ahead of them and you will need to help them out. We've found kids with their tails firmly attached to their little rears with no escape route for new poop. Usually, once you have cleaned things up, the mother will then stay on top of things.

Be careful when cleaning. I usually clean up using scissors, a wet washrag and a pet flea comb. The kid's rear end is very tender and thin-skinned so it is not good to just pull the big icky gob off—you may end up removing skin!

If feces become copious, loose, white or light yellow, the kid may have scours.

Fiber Definitions

At various fiber events, people ask us questions about cashmere and fiber. "Is cashmere wool?" and "What is cashgora?" are two common questions. At the last event, I had to admit, I wasn't sure if wool included cashmere or not. (I always say "fiber" when in doubt so I don't make a serious social slip.) The following are definitions of various fibers per Mabel Ross's Encyclopedia of Hand Spinning. Her definitions are probably not gospel, but they are certainly closer than mine:

Hands and eyes compare different fibers at Black Sheep Gathering 1997. Angus McColl (left) brought various exotic fibers for comparison.

Fiber
To be considered a fiber, something must be 100 times longer than it is wide. It must be relatively thin, strong and flexible. There are other important characteristics required if a fiber is to be valuable for commercial and textile uses.

Wool
Fiber from a *sheep*. The surface of wool fiber has thin scales which all point toward the tip. Different breeds of sheep have different scale pattern contributing different properties to their wool. Generally, you can only see the scales with a microscope, although on some coarser wools, you can feel the scales with your fingers. Wool fiber, chemically, is very complicated and not fully understood. Its chemical composition makes the fibers strong, flexible and water-absorbent.

Wool, physically, contains a center part composed of tightly packed, straight cells held together by a membrane. A cuticle, whose surface consists of thin, overlapping scales, covers the core. On the outside of the cuticle is a tough thin membrane which protects the fiber. This membrane repels liquid but is porous enough to allow the wool to absorb water without feeling damp.

Hair fibers
Term for fibers from all other animals besides sheep including alpaca, camel, cashmere and mohair. All are protein fibers whose physical and chemical structure is similar to wool. Animal hairs have a lower grease content than wool and the outer scales are often thinner and less prominent.

Cashmere fiber
Fine, soft underwool from a cashmere goat. Cashmere and fine merino wool have a similar chemical and physical composition. Both are non-medullated. Cashmere has a low grease content (less than .5%) and gets very wet very fast. Cashmere has 6-7 scales in a 100 micron length and they are smoother-edged than merino. Merino has 10-11 scales in the same length.

Medulla
Central core of certain fibers which contain a lattice of air-filled cells. Also called Kemp. Cashmere and fine wools have no medulla and are termed non-medullated fibers.

Cashgora
Fiber from a cashmere goat (sometimes from a cashmere/angora cross) whose diameter ranges from 17-20 microns, but with 60% of 17 microns. Fiber yields show much variation in fineness and staple length.

Angora fiber
Hair from an angora rabbit. One of the finest textile fibers at 13 microns. Epidermal scales are very smooth which makes the fiber feel slippery.

Mohair fiber
Fiber from an angora goat which consists of long, lustrous, fine-wool type fibers interspersed with kemp fibers. As the goat grows older, the proportion of kemp in its coat increases. The goat grows 12 inches of fleece per year! Average diameter of fleece ranges from 24 to 48 microns. Average scale length is 20 microns, compared with merino's 10 and the scales have very little overlap. Grease content in a fleece averages 5%.

Alpaca
Fiber diameter is 27 - 45 microns of 8-16 inch fiber. Epidermal scales are thin, smooth and widely spaced. Fiber is slippery.

Qiviut (musk ox)
Resembles cashmere in general characteristics, although fibers are slightly longer and finer.

New Internet Links

Of Varing Interest and Importance to Goat Folk
From Paul, the Resident Nerd

http://www.geocities.com/Yosemite/Trails/7451/
In Memoriam, Goat Memorial page
Your goat is waiting for you at the Rainbow Bridge. Well done page. You can remember your dear departed goat with an internet testimonial (complete with picture, if you want) and eternal (virtual) flame. It lists by the year in which little Fluffy died.
***Heartwarming, two hoofs up, say Krisco and Ebart.

http://www.icon.net/~tynygoat/ligaments.html
Kidding Info—Ligament Check Photos
This one, complete with goat-butt pics, shows and tells you how to tell when the doe is about to kid. Examples: To find the ligaments "... if the goat's head points in the north direction these bones point in the south direction", and the use of touch,..."you will get a 'feel' for their tension".
Interesting and potentially useful. Mickey particularly enjoyed the linked homepage.

http://www.goatweb.com/unclbuck.html
Visit Uncle Buck for "home-spun wisdom and wit". His "Goatisms" change weekly. Sample: "If you find yourself in a hole the first thing to do is stop diggin'."

http://www.askjeeves.com/
Search software dressed up like a British butler.
"Inspired by the unflappable British servant from literature, you can think of Ask Jeeves as your very own information valet. Ask Jeeves has been created to use the knowledge of a team of real human researchers. Ask Jeeves uses revolutionary new search software that not only understands plain English but also helps step you through the search process."
Useful, searches through 7 or more search engines such as Yahoo, WebCrawler and InfoSeek.
(Found over 37,000 links for "cashmere goat".)

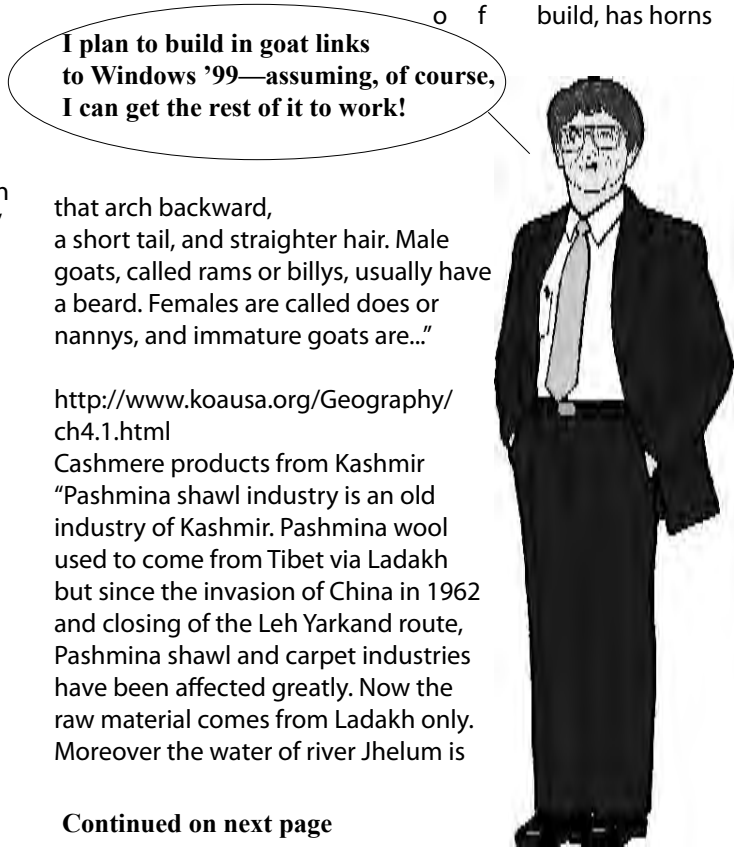
http://gurukul.ucc.american.edu/ted/CASHMERE.HTM
For some info on cashmere from a neo-enviromental point-of-view, this is it.
Examples are: "Environmentally, the Scottish Highlands and the Himalayan regions of China will be impacted by increased herding, over-grazing, deforestation, and increased textile manufacturing..", and "...the increased breeding and raising of goats in Scotland, Australia, New Zealand, the United States, Iran, Afghanistan, Tibet, and Tasmania will impact the environment."
Actually an interesting article if you can get past the bias.

http://www1.ridgecrest.ca.us/~auborn/vincent.html
The link to it says "Vincent Van Goat", but didn't find him.
Per information on the page: "This page is Goatscape-Enhanced. It may not work well with other browsers. I can't type well with my split hooves so send mail to my owners at .."
????????

http://www.chiantinet.it/penisola/welcome.html
A really good page from Italy by cashmere goat owners! Great pictures. "La Penisola is home to the Chianti Cashmere Company - the first commercial breeders of Italian Cashmere goats and producer of a line of unique and luxurious farm products: hand woven, undyed one-of-a-kind 100% Cashmere scarves, shawls and plaids, as well as hand-made soaps and skin-care products made from fresh Cashmere goats milk."

http://www.eb.com/cgi-bin/g?keywords=cashmere%20goat
Britannica Online
Cashmere: "Animal hair fiber forming the downy undercoat of the Kashmir goat and belonging to the group of textile fibres called specialty hair fibres. Although the word cashmere is sometimes incorrectly applied to extremely soft wools, only the product of the Kashmir..."

Goat: "Any ruminant and hollow-horned mammal belonging to the genus Capra. Related to the sheep, the goat is lighter o f build, has horns



that arch backward,
a short tail, and straighter hair. Male goats, called rams or billys, usually have a beard. Females are called does or nannys, and immature goats are..."

http://www.koausa.org/Geography/ch4.1.html
Cashmere products from Kashmir
"Pashmina shawl industry is an old industry of Kashmir. Pashmina wool used to come from Tibet via Ladakh but since the invasion of China in 1962 and closing of the Leh Yarkand route, Pashmina shawl and carpet industries have been affected greatly. Now the raw material comes from Ladakh only. Moreover the water of river Jhelum is

Continued on next page

New Links
Continued from previous page

most suitable for washing pashmina wool. Best pashmina shawl is known as ring shawl, a shawl that can pass through a wedding-ring."
Real bummer, no order form or address!

http://dailynews.yahoo.com/headlines/top_stories/ (May 2, 1998)
Travel tip courtesy of the US Dept. of State:
A tip-sheet for officials visiting Mongolia with Secretary of State Madeleine Albright provided by the U.S. embassy warned American diplomats it would be impolite to refuse a host's offer of tea, food or vodka and advised the local custom is to yell "catch your dog" before entering a ger, the traditional felt-walled tent of Mongolia's nomadic people. (At a certain farm near Hamilton, Montana, the phrase is "Catch your goat.")

http://heart.engr.csulb.edu/~tbustill/uybook5.html
Okay, well, it's a story about, well, see for yourself:
"Yagi, the Lone Goat, is traveling with his son, Gorogoro, when Lord Hirone's samurai try to arrest him. Yagi and his son easily take care of them and..."

Get a life—Just say no to computers!

Goat Meat Recipes

From the Texas Agricultural Extension Service Publication, "South Texas Recipes"

Cabrito and Vegetable Casserole

(Makes 7 servings)

1 10-ounce package frozen lima beans
1-1/2 cups thinly sliced carrots
1 cup boiling water
1-1/2 lbs. ground goat meat
2 T chopped onion
1 T fat or vegetable oil
2 T grated Parmesan cheese
One 10-1/2 ounce can cream of mushroom soup
1/3 cup vegetable liquid
1-1/2 tsp. salt
1/4 tsp. thyme
6 tomato slices, 3/4 inch thick
1/2 tsp. salt

Add lima beans and carrots to boiling water. Cook covered until tender, about 15 to 20 minues. Drain and save cooking liquid.
Preheat oven to 350^0.
Cook ground cabrito and onion in fat until cabrito is lightly brown and onion is transparent. Pour off drippings. Add soup, vegetable liquid, vegetables, salt and thyme. Mix well and pour into a 2-quart casserole. Arrange tomato slices on top of mixture. Sprinkle with salt and cheese. Bake 35 to 40 minutes.

Curried Cabrito

(Makes 5 servings)

1 lb. chevon, salt to taste
3 oz. butter
2 T minced onion
2 T finely cut celery
1 T flour
1 T curry powder
2 ripe tomatoes, stewed and strained
1-1/2 cup water
2 T diced apples

Cut meat into 1-inch squares; salt meat and saute in butter. Add onion and apples; saute throroughly. Sprinkle mixture with flour and curry powder and cook until flour colors. Add strained tomatoes and water, cover saucepan and let cook slowly until done. Serve with steamed rice.

Calendar of Events

May 14-16, 1998
Maine Fabric & Fiber Arts Festival
Downtown Portland, Maine. Three-day educational conference and trade show, educational workshops, fiber arts marketplace. For info, send #10 envelope to Christine Macchi, Project Director, The Fiber Loft, 76 Maine Street, Brunswick, ME 04011

May 16-17, 1998
Northwest Fiber Fest
Skagit County Fairgrounds, Mt. Vernon, WA
Demonstrations, vendors, livestock. fleece show & sale, May 15th is long wool and cashmere judging from 7:00 - 9:00 pm, For information, contact NWFF, 143 Barrel Springs, Bellingham, WA 98226

May 23, 1998
California Wool & Fiber Festival
Mendicino County Fairgrounds, Boonville, CA
Fiber animal show, sale & exhibits, demonstrations, workshops, vendor & guild booths, activities for children. For info: Robin Potter, 707-468-8416 (evenings) or Gwen, CWFF, PO Box 761, Boonville, CA 95415 or email: mclish@saber.net

June 4-7, 1998
Estes Park Wool Market & Fiber Animal Show
Estes Park Fairg4rounds, Colorado. For information contact Estes Park Wool Market, Fairgrounds, PO Box 1967, Estes Park, Colorado 80157
Phone 970-586-6104

June 6-7, 1998
Big Sky Fiber Arts Festival
Ravalli County Fairgrounds, Hamilton, Montana, Animals shows, demonstrations, workshops, vendor booths, For information contact Diana Hachenberger, 406-961-3058.

June 19-21, 1998
Black Sheep Gathering, Lane Country Fairgrounds, Eugene, Oregon

August 1, 1998
Open Class Cashmere Goat Show, Washington County Fair, 872 28th St., Hillsboro, Oregon, 503-648-1416 or Lisa Zietz, 503-324-0910, email: moon@hevanet.com

September 26-27, 1998
Oregon Flock & Fiber Festival
Clackamas County Fairgrounds, Canby, Oregon

Association Contacts

American Meat Goat Association
W. E. Banker, President, 512-384-2829

Cashmere America Co-operative
Joe David Ross, Manager, 915-387-6052
fax: 915-387-2642
Wes Ackley (Maine) 207-336-2948
Marti Wall (Washington) 360-424-7935

Cashmere Producers of America (CaPrA)
Marilyn Ackley, President
Phone/fax 207-336-2948
ackley@megalink.net
CaPrA office: 512-452-5205, fax 512-452-5521

Colorado Cashmere and Angora Goat Association (CCAGA)
Carol Kromer, Club Contact, 719-347-2329

Eastern Cashmere Association (ECA)
Ray Repaske, President, 540-436-3546
cashmere@shentel.net

North West Cashmere Association (NWCA)
Pat Almond, President, 503-632-3615
razberi@teleport.com

Professional Cashmere Marketers' Association (PCMA), Tom and Ann Dooling
406-683-5445
ann@MontanaKnits.com

Pygora Breeders Association (PBA)
Darlene Chambers, President
phone: 541-928-8841, fax: 541-928-0246
email: dchambers@proaxis.com

Texas Cashmere Association
Dee Broyles, President
806-489-7645 office, 806-489-7959 home

Wild Goat Women
Debbie Walstead, Chairperson, 719-495-2962

BREEDERS DIRECTORY

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Christine Acridge
15419 E Rio Verde Drive
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Berkeley CA 94703-1804

Sunrise Cashmeres
Melody and Jeremy Driscoll
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Blocksburg, CA 95514
707-926-5430

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BV CASHMERE GOATS
Bert Appell
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Steamboat Springs, CO 80477
970-879-2160
Fax: 970-879-8701
email: bert@cmn.net

PEACHDÄTTER FARM
C.J. Prince
23676 County Road 73
Calhan, CO 80808
719-347-2510
Fax: 719-347-2696
email:cjprince@bewell.net

ROLIG GOAT RANCH
Cashmere Producing Goats
Steven or Ellen Rolig
8435 CR 600
Pagosa Springs, CO 81147
970-731-9083, email:
roliggoatranch@pagosasprings.net

KENTUCKY

CANAAN LAND FARM
Theo S. Bee
700 Canaan Land Rd.
Harrodsburg, KY 40330
606-734-3984
1-888-734-3984 (toll free)
http://www.bbonline.com/ky/canaan/

MAINE

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Buckfield, ME 04220
207-336-2948
email: ackley@megalink.net

BLACK LOCUST FARM
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Washington, ME 04574
207-845-2722
email: Lance@airs.com

HARDSCRABBLE FARM
Hattie Clingerman
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Winterport, ME 04496
207-223-4211

MARYLAND

MIDDLETOWN FARM
George and Barbara Little
8123 Old Hagerstown Rd
Middletown, MD 21769
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email: glittle640@aol.com

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Hamilton, MT 59840
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Fax: 406-961-4770

PMF CASHMERE COMPANY
Tom and Ann Dooling
3299 Anderson Lane
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406-683-5445
Fax:406-683-5567, email:
ann@MontanaKnits.com

SMOKE RIDGE CASHMERE
Yvonne Zweede-Tucker
2870 Eighth Lane NW
Choteau, MT 59422
406-466-5952
Fax: 406-466-5951

NEBRASKA

AIRY KNOLL FARMS, INC.
Richard & Harriet Jensen
76460 Road 424
Cozad, NE 69310
308-784-3312

HI-PLAINS CASHMERE
Julie and Alex Becker
160482 County Road C
Mitchell, NE 69357
308-623-2627
email: ajbecker@PrairieWeb.COM

SANDHILLS CASHMERE
Mark and Karen Crouse
Box 595, East Point Drive
Bingham, NE 69335
308-588-6248
email: fibergoats@aol.com

NEVADA

ROYAL CASHMERE
Eileen Cornwell
419 Centerville Ln
Gardnerville, NV 89410
702-265-3766
Fax: 702-265-1814
email:cashmere@sierra.net

NEW JERSEY

BLACK FEN FARM
Virginia Hinchman/Kevin Weber
117 RD 2, Rt. 46
Hackettstown, NJ 07840
908-852-7493

NEW MEXICO

DOUBLE EYE FARM, INC.
Sanford Bottino
PO Box 218
Ojo Caliente, NM 87549
505-583-2203

OHIO

TAMARACK RANCH
Bob and Ann Wood
12000 Old Osborne Road
PO Box 567
South Vienna, OH 45369-0567
937-568-4994
email: annwood@erinet.com

OKLAHOMA

TEXOMA KIDS & CASHMERE
J. D. and Karen Chandler
Rt 1, Box 37
Mannsville, OK 73447
580-371-3167
fax: 580-371-9589
email: jkc@flash.net

OREGON

ABORIGINAL FIBRE
razberi kyan (Pat Almond)
PO Box 899
Mulino, OR 97042-0899
503-632-3615
email:razberi@teleport.com

BLAUW DAK RANCH
Bill DeJager
10640 Freeman Rd.
Birkenfeld, OR 97016-7226
Voice & fax: 503-755-2005
pager: 503-229-2776
email: blauwdak@3dwave.com

CASHMERE GROVES
Pat Groves
16925 S. Beckman Rd.
Oregon City, OR 97045
503-631-7806
email: pgroves@europa.com

CHEHALEM CASHMERE
Heidi and Paul Sullivan
21605 McCormick Hill Rd.
Hillsboro, OR 97123
503-538-9791

FOXMOOR FARM
Carol J. Spencer
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Silverton, OR 97381
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Message: 503-873-5430
email: foxmoorfarm@juno.com

GOAT KNOLL
Paul Johnson/Linda Fox
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503-623-5194
Fax: 503-624-1704
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HARVEST MOON FARM
Guy and Karen Triplett
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541-388-8992
harvest@bendnet.com

HAWKS MOUNTAIN PYGORA'S
Lisa Roskopf & George DeGeer
51920 SW Dundee Rd.
Gaston, OR 97119
503-985-3331
Fax: 503-985-3321
email:hawksmtn@teleport.com

HOKULANI FARMS
Cynthia and Karl Heeren
22260 East Highway 20
Bend, OR 97701
541-388-1988
email: hokulani@bendnet.com

MCTIMMONDS VALLEY FARM
Janet and Joe Hanus
11440 Kings Valley Hwy.
Monmouth, OR 97361
503-838-4113
email: janhanus@open.org

MOONSHADOW FARM
Lisa and Jerry Zietz
46080 NW Levi White Rd.
Banks, OR 97106
Voice & fax: 503-324-0910
email: moon@hevanet.com

NORTHWEST CASHMERES
Carole Laughlin
19025 SW Hillsboro Hwy.
Newberg, OR 97132
503-628-0256

OCTOBER FARM II
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Baker City, OR 97814
541-523-9859
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email: octfarm2@eoni.com

OVER THE RAINBOW FARM
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95150 Turnbow Ln.
Junction City, OR 97448
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email: Llama@teleport.com

ROARING CREEK FARMS
Arlen and Cathy Emmert
27652 Fern Ridge Road
Sweet Home, OR 97386
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email:cashmere@proaxis.com

SOMERSET CASHMERE
Julie and Jim Brimble
12377 Blackwell Rd.
Central Point, OR 97502
541-855-7378
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SUNSET VIEW FARM
Jean Ferguson/Carolyn Bowser
4890 Sunset View Ln. So.
Salem, OR 97302
503-581-9452
email: carolbow@open.org

WILLOW-WITT RANCH
Suzanne Willow and Lanita Witt
658 Shale City Rd.
Ashland, OR 97520
541-890-1998

PENNSYLVANIA

PHEASANT HILL FARM
Ralph, Jan, Ryan & Steven O'Banion
5935 Pidcock Rd.
New Hope, PA 18938
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email: phcashme@voicenet.com

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BAR Y RANCH
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PO Box 915
Sonora, TX 76950
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Park City, UT 84060
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email: heidi.smith@genetics.utah.edu

KANARRA KASHMERE
Ron and Jan Gerrity
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email: GerrityGroup@EMail. Msn.com

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Tia and Peter Rosengarten
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Weston, VT 05161
802-824-8190
Fax: 802-824-4072

VIRGINIA

RANEY DAY KIDS
Craig and Lucy Raney
3627 Va. Ave.
Goshen, VA 24439
540-997-1121
Fax: 540-997-1124

STONEY CREST FARM
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email:cashmere@shentel.net

WASHINGTON

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BROOKFIELD FARM
Ian Balsillie/Karen Bean
PO Box 443
Maple Falls, WA 98266
360-599-1469

GLACIER VALLEY CASHMERE
Jim and Josie Baine
9817 381st St. E.
Eatonville, WA 98328
360-832-4442

KELLERS KRITTERS
Kay Keller
11030 Grandview Rd.
Arlington, WA 98223
360-435-6123

LIBERTY FARM (NLF)
Cliff and Mickey Nielsen
1505 Nile Road
Naches, WA 98937
509-658-2502

Continued on next page

Breeders Directory
Continued from previous page

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email: dmullins@methow.com

WALLFLOWER FARM
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360-424-7935
Fax: 360-428-4946
email: cashmere@sos.net

WINDRIDGE FARM
Becki and Jim Belcher
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Selah, WA 98942
509-698-3468

CANADA

GIANT STRIDE FARM
Pat Fuhr
RR #3
Onoway, Alberta, Canada, TOE IVO
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email:103600.1332@compuserve.com

TRAILTREE FARM
Brian and Julie Snyder
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RR #1
Woodville, Ontario, Canada KOM 2TO
1-705-374-5527

MEXICO

EL MORO
Fidel Florez B.
Tecnologico #58 - APDO. #31
Parral, Chih, Mexico 33800
Phone: 3-06-02

Classified Advertising

CashMirror back issues 7/96 - 11/97 $3 each or a whole dozen for $20. Back issues 10/89-6/96 $2 each or $15 for a dozen. We'll pay postage just to get them out of our attic. Most issues available. A good reference source about cashmere goats and history of the industry. Index for 11/89-4/96 in May 1996 issue, index for 7/96-6/97 in July 1997 issue. 7/97-3/98, you're on your own! (or ask us)

CashMirror Volume 10, Issue 1 is approaching. Something is coming. Something wonderful!

Maremma Sheepdog Club of America, Maremma Livestock Guarding dogs, PO Box 546, Lake Odessa, MI 48849, 616-374-7209. Free information and Breeder Direc-

A Simple (Yet Elegant) Pattern for a Cashmere Scarf

So, you're one of those new knitters or maybe just one who likes to *watch* the television show while you knit, not concentrate on a difficult pattern. Here is a pattern for you. Even a beginning knitter can handle this one. It only has two different rows and one of them is what we all like to see in any difficult pattern—"knit all the way across." It's even done on size 8 needles, but the end result is fine and lacy.

The traditional pattern, which I found in a Shetland lace book, calls for the use of Shetland yarn and a traditional change of colors at various rows, but I like to use different colors of hand spun (very fine) cashmere or cashgora and change the colors when I run out of yarn or get bored with a certain color. The finished product makes a nice display piece to take to shows and impress people with all the different natural colors of cashmere.

The original pattern calls for 3-1/2 ounces of lace weight yarn (to make 9-10" X 46" scarf), but you can vary the width and length as you see fit and as your stash of yarn allows.

Directions:
With size 8 knitting needles, cast on 65 stitches.
Row 1: Knit 2, knit 2 together
Repeat this until there are only 11 stitches left: Knit 3, yarn over, knit 1, yarn over, knit 3, knit 3 together.
Last 11 stitches: knit 3, yarn over, knit 1, yarn over, knit 3, knit 3 together, knit 2
Row 2: knit all the way across

Note: If you want a wider scarf, add more repeats of the middle part—each repeat will add about 1-1/2".

That's all. Keep repeating these two rows until the scarf is as long as you want it to be. Change colors whenever you like. Change colors at the start of row one. The pattern makes a beautiful lacy design with scallops at both ends of the scarf. It ends up looking like a whole lot more work than it actually is. It is beatiful in hand-spun cashmere!

Display Advertising Rates:

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Business Card	$25 / 100 / 150
1/8 page	$35 / 130 / 320
1/4 page	$45 / 165 / 410
1/3 page	$65 / 240 / 600
Half Page	$80 / 300 / 730
Full Page	$150 / 550 / 1,370
Other sizes, options	Ask us

Extensive layout or photo screening may be extra.
Payment must accompany ad order.

Classified ads 50 cents/word.

CashMirror Subscription Information

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To: CashMirror Publications
2280 S. Church Rd.
Dallas, OR 97338

Annual Subscription is only $25 for 12 monthly issues! ($35 Canada, $50 outside US other than Canada).

Breeders Directory listing for full year $30.

Noteable Quotes

A watched doe never kids.
A watched goat never poops.
A watched goat never does anything you're trying to catch it at.
...Paul Johnson

Never try to teach a pig to sing; it wastes your time and it annoys the pig.
...Unknown

You don't have to belong to ECA, NWCA, TCA, Sam's Club or even know the secret handshake to get money for your fiber. You can join the Coop, you can join ECA, you can join CaPrA, and if you do all three then we will show you the secret handshake. ...Linda Cortright

The Deadlines:

Articles, photographs, advertising and other information submitted must be received by the 20th of the month prior to magazine issue date.

If you need assistance designing or laying out a display ad, or fine-tuning an article, earlier is appreciated.

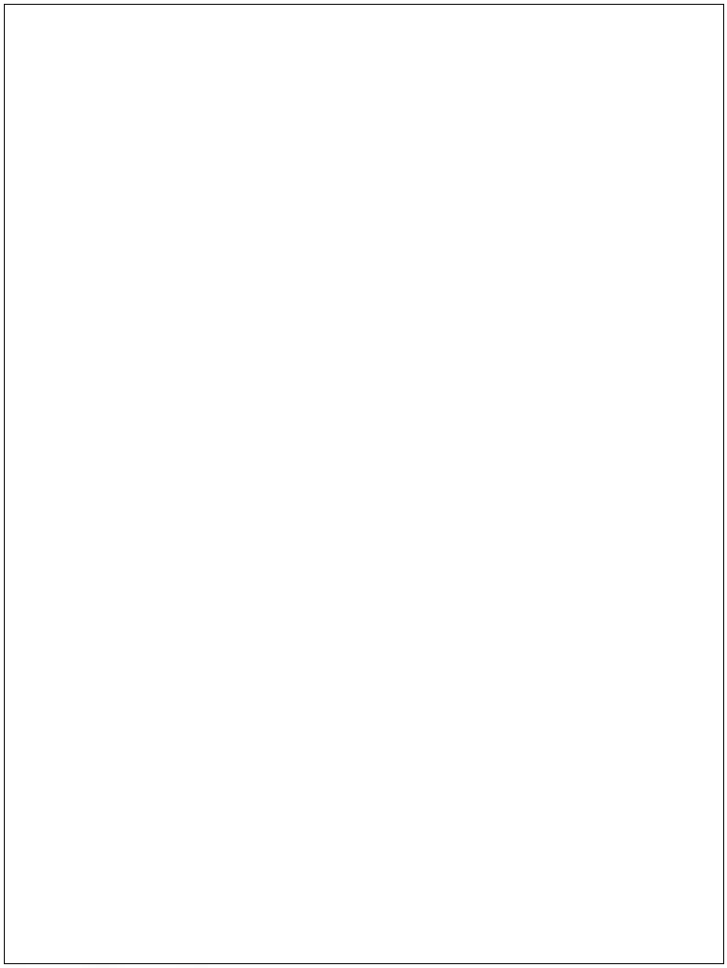
Lisa's business card ad

Serving northern California, Idaho, Nevada, Oregon, Washington and western Canada

Membership includes: NWCA Quarterly Conferences and optional CaPrA membership

Northwest Cashmere Association

Annual Dues: NWCA only $25 or $37 to include NWCA membership and CaPra (Cashmere Producers of America) Participating Membership and *Concerning Cashmere*
Cynthia Heeren, *Membership Coodinator*, 22260 East Hwy 20, Bend, OR



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