CASH MIRROR

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The monthly magazine devoted to cashmere goats and their fiber

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CASHMIRROR

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Boring (Yet Important) Technical Information

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503-623-5194

Fax: 503-623-8575

E-Mail: editor@cashmirror.com
Home Page: http://www.cashmirror.com

Publisher and Ace Reporter: Paul Johnson
Editor: Linda Fox
Eastern Correspondent: Linda Cortright
Western Correspondents: Diana and Steve Hachenberger

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Results published in the magazine are from information supplied by clubs and organizers and no responsibility for complete accuracy can be taken although we'll certainly try to get it right the first time.

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 Carolyn Noble, Lake Oswego, Oregon
Carrie Noble and one of the new kids at NWCA/Goat Knoll Farm Field Day.

New Photography Contest

for Readers!

Deadline for Submission: September 1, 2001

Summary of Contest: You send us photographs—any size, black and white, color, digital, we don't care—with a caption, if you want. (not required). Tell us in which of the three categories you would like your photograph entered, or you can even let us decide. We'll either judge the contest ourselves or possibly hire/bribe a qualified panel of judges, depending on how lazy we are at the end of the contest.

Categories:

Smartest Goat: Your photograph will need to illustrate the superior mental capacity of your goat—which shouldn't be difficult. We all know that our goats are smart, but can we capture this on film?

Cute Kid Contest: This category is like the "Cute Baby Contests" of olden days; we're sure that our goat kids must be at least as cute as human kids. Submit a photo of a cute kid or a whole passel of cute kids.

Other: This is the category for that really great photo that just doesn't fit in the first two categories. Anything will fit here.

Prizes: There will be prizes, for 1st, 2nd and 3rd places in each category, but we haven't yet decided what they will be. Prizes will be announced in the next issue (for sure). We're sure that, regardless of the prizes, you'll want to enter just for the pure glory of winning.

Other Important Info: We'll return your photographs to you unharmed. So drag out those cameras, dust them off, buy some film and follow those goats around! Who knows what you'll manage to capture on film.

Go Forth and Photograph!

Import Restrictions Due to FMD

March 28, 2001 Update from the Economic Research Service US Department of Agriculture

The current outbreak of foot and mouth disease (FMD) in the European Union (confirmed cases in the United Kingdom, France, Netherlands and Ireland) and a number of other countries including Argentina, has focused attention on potential impacts to the United States. At the present time the United States, Japan and Russia (major red meat importers) have temporarily banned the importation from the European Union and Argentina of live animals, frozen and chilled red meats, and other red meats that do not meet certain processing standards to kill the FMD virus. The United States had previously declared certain regions of Argentina FMD free, which allowed the importation of chilled and frozen red meats. The primary impact will be on the U.S. beef imports. Previously, the importation of EU beef products were already banned because of the BSE problems. Importation of sheep and lamb from the EU are insignificant, thus the potential EU ban impacts center on the U.S. pork industry. The big question about this ban is the length of time for which Danish products are banned.

Recent Foot-and-Mouth Disease Outbreaks Worldwide (Status April 21, 2001)

United Kingdom FMD Outbreak (Type O) Confirmed cases as of April 21st: 1,426 cases in Great Britain—14 new cases in the period 19:00 April 20th to 19:00 April 21st.

Argentina FMD Outbreak (Type A) Argentina has 222 confirmed cases of FMD. The outbreaks are located in Buenos Aires (176 cases), Cordoba (9 cases), La Pampa (18 cases), San Luis (8 cases), and Santa Fe (11 cases). No new cases have been reported since the last confirmed case on April 14, 2001.

Kingdom of Saudi Arabia FMD Outbreak (Type O) The Kingdom of Saudi Arabia has 46 confirmed cases of FMD. No new cases of FMD have been reported since the last confirmed case on April 14, 2001.

The Netherlands FMD Outbreak (Type O) The Netherlands has 25 confirmed cases of FMD. The outbreaks are in Anjum (1 case), Ee (1 case), Heerde (4 cases), Kootwijkerbroek (1 case), Nijbroek (1 case), Oene (5 cases), Olst (2 cases), Oosterwolde (2 cases), Terwolde (1 case), Tongeren (1 case), Vaassen (1 case), Wapenveld (4 cases), and Welsum (1 case). No new cases have been reported since the last confirmed case on April 12, 2001.

France FMD Outbreak (Type O) France has two confirmed cases of FMD. The outbreaks are in the Departments of Mayenne and Mitry-Mory. No new cases have been reported since the last confirmed case on March 25, 2001.

Colombia FMD Outbreak (Type O) Colombia has three confirmed cases of FMD. The outbreaks are located in the Departments of Boyaca (1 case) and Narino (2 cases). No new cases since the last confirmed case on March 23, 2001

The Republic of Ireland FMD Outbreak (Type O) The Republic of Ireland has one confirmed case of FMD. No new cases of FMD have been reported since the initial confirmed case on

Reflections

by Linda Fox

Animal Wisdom

As I left for work yesterday morning, I noticed the chickens all standing by the door of their yard looking at me patiently. Some days I let them out to roam—not very often as I must be around to play the lookout for hawks. Also, when they roam, they poop on the porch and scratch around in my primroses, so mostly they live in their 8' X 8' chicken house and their 8' X 16' wire pen—which is pretty luxurious for only 5 chickens.

Even though they seldom roam free, whenever they see me, they go to the door and wait and watch. I assume that after I leave, they go back and do whatever it is that chickens do all day (besides lay that one egg). A chicken's life is simple. Either they get out or they don't. If they don't get out, they don't sit around and mope, they don't flap wildly at the door, they just move on. Chickens are wise.

Jill, our (untrained) Border Collie is a lesson in perseverance. Whenever we let her out of her run, the first thing she does is circle the chicken house and yard to try and get a chicken—perhaps she just wants to round them up. I don't know, but it looks like she'd really like to get a hold of one. If Jill doesn't have anything else to do when she's loose, she constantly circles the chickens. In three years she's never caught a chicken and, since they're so used to her routine, they pay her no mind. However, Jill continues her quest. Even though the chances are less than slim that she will ever get a chicken, she never gives up her quest. If we were half as persistent as that dog, think what we could accomplish!

As we all know, goats are creatures of habit. They thrive on routine. They establish a pecking order and then don't have to continually question who is in charge. There is no political maneuvering for superiority. They know exactly which goats' noses they can push out of the feeder and whose noses they have to move aside for. If you change the goats in the group, they will quickly sort out their new organization chart, and once they do, order is restored.

However, we've noticed that our order-loving goats also enjoy a change of scenery from time to time. If moved to a new pasture or the opposite side of the barn, they will curiously check things out and have a good time with their new surroundings. There are new plants to nibble, new fence lines to check for holes and new logs to follow across the creek.

Even our creatures of habit seem to value a change of pace. They are comfortable with the status quo, but unafraid to check out new opportunities presented. Goats are wise.

Goats have a good understanding of people. They generally know that their people mean them no permanent harm and can even be a source of pleasure with extra food or an occasional scratch behind the ear. Even those goats we have to chase a bit to capture for maintenance usually calm down once caught and restrained. Perhaps they trusted us all along, but were just toying with us enjoying watching us chase, or maybe they were afraid, but once caught, resign themselves to whatever will come along.

I had to think for a long time to come up with wisdom from sheep. Normally I wouldn't bother, but after last month's lambing snafu, I figured I owed them a fair shake.

Some sheep are wiser than others. We used to have two Suffolk ewes who were wise. Brownie and Monopoly were calm and trusting and not very flighty for sheep. They endured hours at the "hairdressers" while we slowly learned to shear them. They seemed to have the time to contribute to our education, perhaps knowing that their patience would make it easier for future generations of sheep who had to be trimmed by our hands.

Spring lambs give us a valuable lesson in concentrating on the joy of the moment. Our five lambs, all born on the same day, move as a pack in the pasture, running and jumping until they are tired or hungry, when they search out their mothers for a recharge— of food and reassurance. They don't try to do twelve things at once—they concentrate on one thing at a time and they do it well. They're either playing full tilt, recharging or sleeping. And there's no indecision between one task and the next. Lambs are wise.

You can say all the derogatory things you want about cats and be totally correct but, you must agree that they are wise. They are also lazy, manipulative, greedy and annoying. They howl when they want in and out, when their food dish is empty and when they demand your attention. They lay around sleeping and shedding all day and insist on playing a good share of the night. The kittens climb your curtains, chip your knick knacks and unravel your half-knitted sweaters. They've learned well how to use their soft, petable coats and soothing purr to further their goals. They are born knowing how to train and manipulate their human keepers.

In our animal kingdom, we humans, at the top of the heap with out superior brains, may not have the best bargain after all.

When Readers

Readers,

Julie Becker of High Plains Cashmere is very ill. She remains in the hospital from complications of an illness. As a supporter of the PCMA and the business of cashmere I want to extend our thoughts to her husband Alex and to her for a quick recovery. In the interim, we have sent her a "stuffy" (stuffed toy goat) to keep her company while she recovers.

Best Wishes,
Steve and Diana Hachenberger
Castle Crags Ranch
Hamilton, Montana
April 22, 2001

Paul & Linda,

I read your article on livestock dogs by W. F. Andelt. Most of the information looks like it came directly from the USDA bulletin 588 or OSU publication EC1238. Oh well.

He failed to mention one of the most dangerous predators. The two legged predator. Llamas or donkeys aren't much good with those predators, but dogs seem to get the job done.

We recently had some two legged predator problems. As you know half of our goats are located a mile from our house. We recently had someone break into the barn there and get into where the goats are. They didn't get any animals or destroy anything. It looked like they left in a big hurry. Our two Maremma livestock guardian dogs there, Maximillian and his son Leonardo, took a bite out of crime. Haven't had any more problems.

I like teeth in my protection.

Doug Maier
Breezy Meadow Cashmere Farm
Bellinghan, Washington
April 10, 2001

Hello!

I'm a newcomer in the world of Kashmere goats. Over the past five months, we've acquired 5 lovely goats from Black Locust Farm in Washington, Maine. I'm also new to the world of photography and my favorite subjects are the goats.

I've been having a blast! So I thought I'd send some "pics" to you! I love the *Cashmirror* and don't mind that you're behind-easily forgiven, for such a wonderful magazine!)

Thanks and keep up the great work!

Peace,
Caitlin Allen and Jen Gilmore
Farmington, Maine
November 19, 2000

See the great photographs below from Caitlin. Caitlin, don't forgot to enter the Photography Contest (see page 3).—Ed.

BLF Penelope

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From the unique talent of noted artist

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Introducing

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(June - Sept)

Jamaican Holiday?

By Kris McGuire

After a long, cold, white winter it was a surprise and a pleasure to get a message on my answering machine asking if I would be able to go to Jamaica and instruct a group of goat breeders how to improve their meat production. I admit, I stopped and thought about it for at least a millisecond! You bet I'd go! The Farmer-to-Farmer program is a far reaching one, but they could not have sent me to two places as different as Mongolia and Jamaica. Where Mongolia is vast, empty and barren, Jamaica is tiny, crowded and lush. The one thing they have in common, however, is skinny goats.

Let me back off a little here, not all goats in Jamaica are skinny. Goats are everywhere on that island. Immediately upon my arrival, I saw goats running around at the airport and even in the teeming streets of downtown Kingston. Kingston is a city of 700,000 people and a million cars all crowded into a narrow spit of coast with its steep hillsides rising sharply out of the harbor. It is the 7th largest natural harbor and the largest English-speaking city south of Miami. I had no trouble communicating face-to-face. But trying to eavesdrop on Jamaican conversations was practically impossible. "Yahhh, mahhn!" I love it!

The greatest thing was realizing just how smart goats are. Here they are, surrounded by speeding cars and busses, pedestrians, dogs, fences, industry and empty lots. Small groups of goats walk the sidewalks picking up discarded banana peels, oranges, and dropped fruit from one of a billion different kinds of fruit trees and nibbling on the green plants that pop out of every crack. Luckily, many of those plants are the highly nutritious shrub Leucaena, known worldwide as an excellent goat feed and the source of a natural toxin (mimosine) that can stimulate goats to shed their fiber all at once. But, back to my point. These city goats are fat and happy!! Plus, I never saw any road accidents involving goats. Why? Because they have learned to use the crosswalks! I'm not kidding. They will wait patiently to cross the street until a crowd of people gathers at the corner. When the lights change and the people cross, the goats follow them.

The biggest reason for losing goats is theft. Everywhere on the island, homes are barred, cars are locked behind fences, and goats are literally under lock and chain for the night. My experience was that after buying a Bob Marley T-shirt in the crowded market, the stall operator came and found me to tell me I had overpaid her by $400J ($9.50US). Plus, there are more churches than pubs in Jamaica.

The Rio Cobre Goat Breeders Association is a well-organized group that has secured some USAID monies in their effort to improve their goat meat operations. The members all have built or will build secure goat houses for 10 - 15 goats and will receive 3 - 5 does from the organization. They will cross their local Criollo breed to Nubian and Boer bucks to produce a bigger meat goat. They operate on the "cut-and-carry" system, meaning they go out every day, cut roadside forage and carry it back to the goat

The Rio Cobre Goat Growers' Association members in downtown Linstead, Jamaica, W.I.

houses for the goats to eat. Some common forages they cut are huge grass species called elephant or Napier grass and a crab grass-like giant called African star grass. Both have a TDN of 50% and a protein content of about 15% at age 28 days. Older, mature stands of grass have probably half those numbers. But it's tall and green and when confined goats have it served up to them, they eat it with relish. Unfortunately, there may not be enough nutrition contained within that diet to support them, let alone make them grow. Add that to a parasite burden and you have skinny goats.

So I set out to calculate a balanced ration and believe me that was not easy. Have you ever actually sat down with a calculator and figured out all the requirements of growing, pregnant and/or lactating goats and then tried to match a balanced ration to their changing needs? It's not so bad if you can run down to the local lab and have your feed source tested or look it up in a book. But in Jamaica, they feed all sorts of stuff that just isn't in the textbooks. I struggled and finally after tapping all the human resources I could, including my local vet and extension agent, I called upon Dr. Steve Hart at Langston University. He was a font of information and so I was able to determine that feed supplements are necessary.

As luck would have it, I had met a goat specialist from Cochabamba, Bolivia, a co-exhibitor at the International Goat Conference in Tours, France last May and she shared with me her feed concentrate block recipe. With a little modification, the Jamaicans and I whipped up some blocks made of brewery mash, molasses, clay, cement, lime, urea and mineral salts. Ta-Da! A balanced ration all made from local ingredients, cheap, easily transported and stored. Add to that whatever is cut and carried, then get rid of the worms, and those goats will prosper.

So then what happens to them? Those of you who live in the east probably know that Jamaicans love to eat the biggest,

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Jamaican Holiday

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Chris Smith, a Peace Corps volunteer, supervises the mixing of a high protein feed concentrate block.

Imported Boer and Nubian and their crosses enjoy a meal of fresh citrus pulp (35.0% protein) which can also be served dry (22% protein) or crawling with maggots (50% protein).

Photographs on this and previous page by Kris McGuire.

smelliest, toughest bucks available. And how do they cook them? They cut the carcass up into little, tiny pieces, bones and all, and curry it. In a land that has roadside BBQ stands serving delicious "jerk" chicken and pork, mouth-wateringly slow roasted in smoke and seasoned with delightfully hot Jamaican spices, they only serve goat meat as curry. But that is the market for goat. Big, sexually mature males (no females or castrates, please) are the thing. They are sold by the head, not the pound and the most popular season is Christmas, Independence Day (August) and for wakes and birthdays. My goat farmer friends can sell one or two grown buck kids whenever they want to. As in so many places around the world, the goat meat market is underground.

So why grow big fat bucks when in the end you really can't identify the prime cuts? I have yet to figure that part out, but now I am proud that my Jamaican friends are really up to snuff on their conformation evaluation and feed ration calculations!

I was able to take this opportunity to get myself organized and publish a series of books that I have been thinking about for years. So far, there are 5 parts. The first is a 16 page, totally illustrated How-To guide on goat conformation. It incorporates everything that Joe David Ross has patiently been drumming into my head for all these years on the importance of aligned teeth and how to see them, good structure and why that's important, and all the other ingredients that go into making up a great meat goat.

Part Two deals with Basic Goat Husbandry, all those annoying things that you have to think about in order to get your kids to be born how and when you want them. Part Three deals with the all important and equally annoying chore of record keeping. How many goats do I have? What are they worth? How much do I spend on feeding them? How much do I make from them? Details, details...

I love Part Four, Feeds and Nutrition. It made me sit down and really think of why I feed my goats what I do and how I could do a better job of it. Tropical areas present a host of problems that I just don't have to deal with here. This year, my cousins brought me some drums of waste peanut butter candy (35% protein!) from a Mars factory in Texas. The goats (and the dogs) just loved it! I sold some 8-mo old meat wethers and they dressed out at 31 pounds. I wonder if they tasted like Snickers??

Part Five was Meats and Meat Marketing. This section is a bit thin due to not only my lack of knowledge on the subject, but also the lack of an organized subject. I think more research will have to be done in this area. I was able to draw upon the videos made at the last CaPrA conference when Dr Warrie Means, ably assisted by Bev Foard of Australia, cut up a meat goat in the abattoir at the University of Wyoming. Again, this wasn't so relevant to the folks in Jamaica, but if the market is hotels catering to tourist tastes, maybe they will need to know how to cut a long leg or a shoulder roast. Or, I've got an idea...

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Jamaican Holiday

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Jamaican fajitas! Oh lordy! Gastric orgasm!

Part Six is still under construction but I didn't need it in Jamaica anyway. This book will deal with Cashmere Fiber Identification. I made the original curriculum when I went to Mongolia two years ago to teach fiber classes. I am so happy to hear that the curriculum has now spread to thousands of Mongolian herders. The best news from the Mongolian front is that Dr Barrie Restall of Pattie and Restall fame, THE cashmere goat breeding experts nonpareil, are planning to go to Mongolia to evaluate breeding schemes. From what I hear, spring has sprung and last winter wasn't as bad as the winter before. Good thing! Maybe Barrie and Hennie won't freeze to death!

But, back to Part Six. I was going through my closets last winter and found a huge box of AWTA tested fiber from my original 21 goats imported from Cashco Goats Australia and Karakan back in 1989. There is fine fiber, coarse fiber, crimpy fiber, straight fiber, crimpy coarse fiber, straight fine fiber, white fiber, gray fiber and brown fiber in all the permutations possible. I can't help but think that it is important that we here in America all need to get on the same page as far as describing this luxury stuff that we grow. In Mongolia, the fine fiber is classed as a "3" out of 3, and that finely crimped fiber is also classed as a "3" out of 3. This corresponds nicely with condition "3" out of 3, meaning fat goats (skinny goats are a "1"), and the fact that longer fiber length is better than shorter fiber length. It's easier if in all cases, the larger number is better. Believe me, computers really like it when things like that are all consistently ranked. So, my goal is to publish a book that has not only descriptions of good, average and bad fiber but permanent physical examples of fiber. My Australian fleeces, long stored away will serve us well.

These books will be laminated and spiral bound so they are virtually indestructible, which is good. How many times have you set down your papers in the goat barn and turned around to see them disappearing down a goat's throat? As soon as I get around to it, I will redo my website and have examples from the books. Of course, my goats might have something to do with that. They will be kidding here pretty soon and spring has not yet found us here. Oh well. Where are my Carhardt's?? I want to go back to Jamaica!!!

The Beagle Brigade???

USDA's Beagle Brigade is one facet of APHIS' comprehensive agricultural quarantine and inspection (AQI) program. The Beagle Brigade is a group of nonaggressive detector dogs and their human partners. They search travelers' luggage for prohibited fruits, plants, and meat that could harbor harmful plant and animal pests and diseases. These detector dogs work with APHIS inspectors and x-ray technology to prevent the entry of prohibited agricultural items. The Beagle Brigade teams also serve as goodwill ambassadors by educating the public about USDA; they appear in many places like schools, fairs, and in the news media. The AQI program helps to prevent the introduction of harmful plant and animal pests and diseases into the U.S. ecosystem—pests and diseases that could threaten the abundance and variety of the food supply and cost U.S. taxpayers millions to

The Producer Owned Woolen/Textile Mill Research Foundation

The Producer Owned Woolen/Textile Mill Research Foundation was founded by Stacie Hermes in order to communicate with North American animal fiber producers with the hopes of building a producer owned fiber mill in North America. Their goals include the promotion of true value-added agriculture and the improvement of the bottom line for the North American fiber producers. The Foundation is funded by a grant from the U.S.D.A.'s S.A.R.E. Producer Grant Project along with several local supporters in the western Nebraska area. The Foundation works with State Extension offices and hopes to help fiber producers by gathering information concerning value-added agriculture business techniques and passing the information back to the Producers.

They plan this as a nation wide project and are trying to recruit sheep, llama, alpaca and cashmere breeders to serve on regional "Fiber Boards" and help spread the word.

Coordinators include Stacie Hermes, Potter, Nebraska, a spinner and weaver, and John Merrell, Coquille, Oregon, owner of Gateway Farm Alpacas. They are currently searching for coordinators for the Southern and North Eastern Regions.

The Foundation's initial grant from S.A.R.E. was $15,000. So far, $7,500 has been spent on office supplies, overhead and equipment to get information out. The research Foundation is in the process of applying for tax exemption and is considering some kind of capital campaign fund raiser for additional funds. They also hope to obtain additional funding in the form of grants. They anticipate that an eventual business would not be tax exempt, but see no reason why the research required cannot be.

Currently, the Foundation is publishing a quarterly newsletter, the Four-Legged Fiber Wire, which is intended to communicate the Foundation's progress. Cost of the newsletter is $4.00 per year. The newsletter also accepts advertising. The current issue, March 2001, contains a survery for animal fiber producers. The purpose of the survey is to gather information about the needs and concerns of fiber producers. It is intended that the results of the survey will be published in the July 2001 issue of the newsletter. They hope that survey results will aid in obtaining future grants as well as providing information for financial feasibility studies when they go to actually break ground on building a mill.

The goal of the organizers is to bring together all interested animal fiber producers to build a producer owned woolen/textile mill which would function as a full service wholesale/retail business. They believe that fiber producers need a way to ship their raw products after shearing to a facility they own in the United States to be processed into finished goods and marketed directly to consumers.

They intend the eventual mill and marketing organization will service all fiber producers from "coarse fiber sheep breeders to the finest cashmere and alpaca breeders."

The Foundation is currently working with a designer who travels all over the world working with various fabrics and touring mills. He is helping collect information on types of mill equipment needed and the cost of that equipment. Once the organization knows how much equipment is going to cost, how many producers are interested and what they are willing to invest, they will have a clearer picture of where they stand.

The Foundation states that it is not their goal to hurt existing North American wool mills, fiber co-ops or fiber pools. They see opportunities for all to work together.

If you have not received a copy of their survery and would like to provide input, contact them. They need surveys returned by the end of June. You can download the survey from their website or even fill it in online.

Foundation Contact information:

Stacie Hermes
PO Box 337, Potter, NE 69156
Telephone: 1-308-879-4660.
Toll-free phone: 1-877-872-1275
email: wovengoods@scottsbluff.net

John Merrell
Phone: 541-396-5792
email: johnmerrell@earthlink.net

Foundation website: www.producerownedmill.org

Check them out if you haven't received information already. They could at least use your help with their survey.

What's New in Parasite Research?

From the Maryland Small Ruminant Page

http://www.sheepandgoat.com/parasiteresearch.html

Efficacy of ivermectin controlled-release capsule

Recently, an intra-ruminal controlled-release capsule delivering ivermectin was developed for use in sheep. There are two formulations: one for sheep weighing 20-40 kg/44-88 lbs. (lamb capsule), designed to deliver ivermectin at 0.8 mg/day for 100 days and the other for sheep weighing 40-80 kg/88-176 lbs. (adult sheep capsule), designed to deliver ivermectin 1.6 mg/day for 100 days. Field trials were conducted in Germany, Slovakia and UK to determine the efficacy and productivity responses attributable to treatment of lambs with the controlled-release capsules. One hundred and seventy-two (172) Merino Landrace (60), Valaška (60) and Suffolk cross (52) lambs, aged 3-8 months (weighing 20 to 40 kg/44-88 lbs.) were used in the experiments.

The trials were conducted in Germany (trial 1), Slovakia (trial 2) and UK (trial 3). In each trial, the lambs were grazed together on unimproved (Germany and Slovakia) or fully improved pasture (UK). In the German and Slovak trials, the lambs grazed belonged to flocks of about 1000 or 500 sheep, which were tended by day and yarded up by night. In UK, the lambs were run as one group grazing one paddock. The trials commenced in July and ended in October (Germany) or November 1996 (Slovakia and UK).

In each trial, the lambs were ranked within sex, based on pre-treatment body weights and randomly allocated to one of the two treatment groups. One group remained untreated to serve as control and the lambs of the other group were treated on day 0 with the ivermectin controlled-release capsule. When necessary, the control lambs were salvage treated with fenbendazole.

Before the start of the trial and on days 28, 56, 84, 98 and 112 after treatment individual fecal samples were collected to determine nematode egg counts. Body weights were determined using calibrated scales. Fecal soiling in the breech area was also scored. In all three trials, the lambs were found to be shedding strongyle eggs. Lambs in trials 1 and 2 had low or moderate nematode infections, while lambs in trial 3 had considerably heavier infection. The mean fecal egg counts were not significantly different before treatment, but after treatment the egg and larval counts in the ivermectin controlled-release capsule treated lambs were always lower as compared to untreated controls.

The ivermectin controlled-release treated sheep gained, on an average, 24.5% (Germany), 12.6% (Slovakia) and 50.4% (UK) more weight than the controls over the 112 days of the trials. The different weight gains correspond directly to the level of nematode infection, but may also be related to the general growth capacity of the different breeds and to the age of the animals involved.

The treatment of lambs with the ivermectin controlled-release capsule also reduced the mean scores of fecal soiling. The three field trials demonstrated that treatment of lambs with the ivermectin controlled-released capsule effectively removed existing nematode endo-parasites and prevented the establishment of newly ingested larvae for a period of at least 112 days, significantly improved weight gains and resulted in significantly lower accumulation of feces in the breech area of lambs. Source: Small Ruminant Reseach (1999).

Control of parasite larvae using nitrogen, bleach and limestone in vitro

At North Carolina State University, solutions of commercial fertilizers, bleach and limestone were used to examine their effect on the motility of infective Haemonchus contortus larvae (L3) in vitro. Infective larvae were cultured from feces of one Suffolk ram lamb infected with 5000 L3. They were pipetted into individual petri dishes with 500 l of a known concentration of either urea (U), ammonium nitrate (AN), liquid nitrogen fertilizer (LNF), a mixture of ammonium nitrate + urea (ANU), dolomitic limestone (DLM), limestone (LM) and sodium hypocholorite (SH). Percent non-motile L3 increased as they were exposed to increasing concentrations of N sources and SH. DLM and LM were not effective. Another trial compared the highest concentrations of the four N sources. Percent non-motile L3 were U, 81.3; AN, 96.8; LNF, 93.3; ANU, 89.2; SH, 99.8. Thus, this research shows that larvicidal properties of N sources and SH could decrease gastrointestinal parasite loads. However, field studies are needed to corroborate results. Source: Small Ruminant Research (1999).

Safety of moxidectin

Studies were conducted at the University of Thessaly in Greece to determine the reaction and safety of moxidectin 1% injectable solution and .1% oral drench. Two hundred (200) lambs 4-29 days old, were segregated into eight groups. Lambs in group A were injected with a single dose of moxidectin 1% injectable solution, those in group C were injected with a quadruple dose; those in group E with a single dose of moxidectin 0.1% oral drench and those in group G with a decuple oral dose. Lambs in group B, D, F and H were the controls.

The reactions of lambs were recorded 14 days after administration of the test product. The only adverse reaction observed was in one Group C lamb, but its symptoms regressed within 12 hours without medical intervention. Therefore, it was concluded that moxidectin is safe for administration to young lambs.

In another experiment, three hundred ewes were allocated to one of three groups. Ewes in group A were injected with 1 ml moxidectin 1% injectable solution, those in group B with 1 ml ivermectin 1% injectable solution and those in group C with 1 ml phosphate-buffer saline. Reactions of ewes were assessed during insertion of the needle, during injection of the product

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Parasite Research
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and after injection of the product. They were classified into one of four scores. In group B, 11 ewes reacted during insertion of the needle, 28 during injection and 35 after. Respective numbers in group A were 10, 4 and 1 and in group C 9, 1 and 1 ewes.

The findings indicate that moxidectin 1% injectable solution does not cause significant pain to sheep. Source: Small Ruminant Research (1999).

Progress on genetic studies of resilience to parasites Recent studies on 3 to 7 month old lambs have shown that there is genetic variation in the ability to withstand the effects of roundworm challenge and thus maintain acceptable performance (high growth) when left undrenched for extended periods. This trait is generally referred to as resilience. The heritability of resilience has proved to be low. Three years of data with 213 sire groups and two separate approaches to measuring resilience gave estimates of 0.10±0.03 and 0.14±0.03. Nevertheless, progeny testing should successfully identify genetically resilient rams for use.

A selection experiment for high vs. low resilience was initiated in 1994 at the Ruakura Agricultural Research Centre in Hamilton, New Zealand. Four progeny-tested rams with high resilience (RL +) and four with low resilience (RL-) were mated to outlier RL+ and RL- ewes. Progeny were grazed on infective pasture with minimal drench treatment. Relative to RL- progeny, RL+ progeny had 2.0 kg (4.4 lbs.)greater weaning to autumn gains, 2.2 kg (4.84 lbs.) greater live weights in April and a significant advantage in yearling weight. There was a 0.24 kg (0.528 lbs.) increase in yearling fleece weight (+10%). Whereas, there was no significant difference in January or March FEC. The results show that selection for resilience is possible, and that provided care is taken to avoid sires with high FEC, improved resilience in lambs should lead to lower drenching requirements without jeopardizing production.

Resistance to nematode infection, measured in terms of fecal egg count (FEC), is also known to be inherited in sheep, and studies of selection for low FEC have successfully improved resistance. However, resilience and resistance appear to be genetically independent. Source: Proceedings of the New Zealand Society of Animal Production (1996).

Vaccine against parasites
A multivalent vaccine against gastro-intestinal parasites of sheep is being developed as part of a Woolmark Company and University of Melbourne initiative. There are two approaches to vaccine development: the hidden antigen approach, which generally uses antigens from the parasite that are not normally seen by the host's immune system during infection; and the natural antigen approach, which uses larval antigens against which part of the host's normal immune response is directed.

Candidate vaccine antigens for three parasites (Barber's pole worm, small brown stomach worm and black scour worm) are being identified, purified, characterized and tested in sheep trials. The project reaches a major milestone when the funding organizations will access progress and likelihood of success. The project is of high risk nature and as much as antigen identification is a problem, the major issue is probably the sheep's immune system that the worms have been very successful for millions of years to circumvent. Source: The Woolmark Company.

Effect of protein supply on periparturent egg rise
The effect of protein supply on the periparturient parasite status of the mature ewe was investigated by researchers at Lincoln University in New Zealand. Thirty two (32) twin- and thirty two (32) single-bearing ewes were individually penned indoors nine weeks before lambing. Four dietary groups balanced for pregnancy status were established for energy (E) and protein (P) levels. These were E1P1, E1P2, E2P1 and E2P2 (groups 1-4) and were based on a lucerne hay and barley diet. E1 and E2 were designed to promote 0 and +50 g/day gain in maternal body weight, respectively. P1 and P2 contained approximately 120 and 200 g CP/kg DM, respectively with the difference achieved through the inclusion of fish meal in P2 diets. From seven weeks prior to and during parturition, all ewes were trickle infected with 10,000 Teladorsagia circumcincta and 7,000 Trichostrongylus colubriformis larvae. Fecal egg counts were determined weekly from five weeks prior and until three weeks after the parturition when worm burdens were determined.

Fecal egg counts and worm burdens were 1,610 and 145 eggs per gram (epg) and 12,020 and 1,540 worms, respectively on high and low protein diets and 310 and 750 epg and 2,290 and 8,090 worms, respectively for single compared to twin-bearing ewes. There was no effect of energy level.

The results of this experimentation indicate that the periparturient breakdown in resistance to parasitic infection appears to be counteracted by protein supplementation. Supplementation of the ewe may provide an alternative parasite control strategy by reducing parasite contamination and may have greatest effect in prolific flocks. Source: Proceedings of the New Zealand Society of Animal Production(1997).

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Parasite Research
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Even Mummies Prefer Cashmere

A study of garments worn by 3,000 year old mummies excavated in western China's Tarim Basin has yielded the world's oldest cashmere threads. Other (less-fashionable) mummies wore wool twills woven in a plaid design dating to 720 B.C. Production of the twill would have required looms which were probably brought by settlers from the Eurasian steppes.

Irene Good, University of Pennsylvania and Elizabeth J. W. Barber, Occidental College, examined the textile samples from two sites where mummies have been excavated since the late 1970's. The cashmere threads were identified by Ms. Good, by their shape, fineness and consistency of diameter. She noted that these textiles indicate a high degree of skill in sorting and spinning of fibers. "The presence of cashmere shows a very sophisticated breeding of goats for the fleece," said Good.

It is interesting to note that even 3,000 year-old mummies have been found to possess a keen fashion sense.

Parasite Research
(Editor's Non-Scientific Summary)

Efficacy of Ivermectin controlled-release capsule
There's been a new product developed recently—capsules designed to release Ivermectin over time in the sheep's system. Researchers tested the pill on lambs of different breeds, aged 3-8 months old. They conducted the tests in Germany, Slovakia and UK. They treated some of the lambs and didn't treat some of them and periodically tested and compared the sheep for parasite levels and weight gain. Lambs treated had lower parasite levels and gained from 12.6% - 50.4% more weight than the untreated sheep. The treated sheep also showed less fecal soiling of wool in the breech area. The researchers concluded that the new treatment effectively removed existing internal parasites and prevented establishment of newly ingested parasites for at least 112 days after treament.

Control of parasite larvae using nitrogen, bleach and limestone in vitro
Don't worry if you thought "in vitro" meant something about an unborn animal. I had to consult with Mr. Webster. It just means "in glass"—like a beaker or a test tube or a petri dish—you do remember those flat round, glass petri dishes from high school biology, don't you? This research conducted at North Carolina State University involved trying out solutions of commercial fertilizer, bleach and limestone to see if they killed parasite larvae. Larvae was removed from the feces of a Suffolk lamb and placed in petri dishes. Once the parasite larvae were thriving in the petri dish, stupidly thinking they were safe inside a lamb, researchers tried to wipe them out with various solutions. Larvae became increasingly "non-motile" (sick) as the concentrations of nitrogen and sodium hypocholorite increased. Dolomitic limestone and limestone were not effective. Reasearchers concluded that these "in vitro" tests were promising, but more studies "in sheep" were needed.

Safety of moxidectin
Tests were conducted in Greece to determine the safety of moxidectin, a wormer, both as an injectible and an oral drench. Lambs, age 4 - 29 days old, were divided into groups. One group was given a single dose of the injectable, one group was given 4 times the regular injectable dose, one group was given a single dose of of the oral drench, one group was given ten times the normal dose of the drench and four groups were not treated. Fourteen days after treatment, the lambs were checked for reactions. Only one lamb—one of the ones that got 4 times the regular injectable dose—got sick, and it got better with no treatment. Researchers concluded that moxidectin was safe for treating lambs.

Researchers also wanted to find out if injections of moxidectin hurts. 300 ewes were injected with moxidectin, ivermectin and a phosphate-buffer saline. Reactions were compared. It was con-

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Parasite Research
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cluded that injection of moxidectin does not cause significant pain to sheep. They did not define "significant."

Progress on genetic studies of resilience to parasites
New Zealand researchers studied the heritability of resilience to roundworms in sheep. Resilience is defined as the ability of a sheep to thrive even when left untreated for parasites for extended periods. Heritability of resilience is low, although selection for resilience is possible. Resistance to nematode infection (not to be confused with resilience) is also an inherited trait, but appears to be inherited separately from resilience.

Confused? Resilience is the ability of the sheep to thrive, even in the presence of a worm load. Resistance is the ability of the sheep to resist worms. A resilient sheep gets worms, but does well anyway, even without treatment. A resistent sheep doesn't get the worm load of a "normal" sheep.

Vaccine against parasites
The Woolmark Company and University of Melbourne are working on this. They are using a couple of different approaches but consider the project high risk. Worms have been very successful in circumventing the sheep's immune system for millions of years, so this may be a difficult nut to crack.

Effect of protein supply on periparturent egg rise
Ruminant worm loads in late pregnancy tend to increase. Researchers in New Zealand studied the effect of increased protein on the parasite load of very pregnant sheep to see if increasing protein levels in their diet would help. They penned 64 sheep nine weeks before they were due to give birth and fed them diets differing in protein. Half of the ewes were carrying twins and half were carrying a single lamb. Starting seven weeks prior to lambing, the ewes were "trickle infected" (ick!) with parasite larvae. Parasite eggs were counted in feces weekly from five weeks prior to three weeks after the ewes gave birth. Researchers concluded that increased protein lowered the parasite level of the ewes. The higher protein diets had the most effect on the ewes carrying twins. They noted that supplementation of the ewes' diet in later pregnancy may provide another tool in parasite control, especially in prolific flocks.

Condition Scoring for Livestock
By Paul Johnson

It all began at the NWCA Field Day. While most sensible folk were in the house spinning and discussing fiber, half a dozen of us went to the barn to discuss condition scoring. For my first "volunteer" I chose Buster, a (really) large wether. Buster is a "barn potato" and spoiled pet. At 150 lbs. +, age 5, I thought he was a good example of a husky (read: fat) goat. I figured him for a "4". Someone else said "5", and another said "6" or "7". This was when I was confronted with the fact there is more than one way to judge condition. I was used to a scale of 1-4, another used 1-5, and someone else used 1-7. So began my investigation into condition scoring methods.

Cattle are scored, per Penn State, on a scale of 1-5. They break it down in .25 increments. The Henneke Body condition scoring chart for horses, uses a scale of 1-9. Llamas also are judged using the 1-9 score.

Now for sheep, Oregon State as well as Montana State report the 1-5 scoring method is most widely used.

The Dept. of Dairy Science, Virginia Tech, came up with a Manure Scoring Test, but I won't go into that here. Cats are, in my opinion, scored 0-1, live or dead.

And goats. Well, for meat purposes, 0-5 is used, as well as the 1-9 scoring method. Except in East Africa, where it is 1-3. Dairy goats use a scoring method that is just too confusing for me. Either 1-17, 0-640, or something like that.

David MacKenzie in Goat Husbandry uses 0-5 for all types of goats. In Goat Medicine, 1-4 is the standard. This scale is also used by the Australian Cashmere Growers Association. However, the Australian Goverment web pages mention a 1-5 scale.

It has been suggested that Mild Goat Men use 0-6, reflecting the amount of beer left in a six pack. Other than that, there is no conclusion, no one standard used by all. Where does this leave us? Buster is fat.

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Goat Medicine by Mary C. Smith & David M. Sherman Goat Husbandry by David MacKenzie

The Whiting. Do any of the condition scoring scales go to 20? Photograph by Steve Hachenberger.

Goat Knoll Farm

By Carrie Noble, Goat Lover
(age 11)

Goat Knoll Farm
Where goats can play
And relax all day
Where cats are suited best
Except for one who is dumber than the rest
Where dogs make guards
Who patrol the yards
Of everlasting green
And where it may seem
To be the Wild Side
Where a llama
Is like a mama
To the kids of the farm
And who sees they come to no harm
That is the place
Where there is many an animal face
Full of love and joy
Like that of a child with a new toy
When the farmers appear
(one works here)
The farmers whose hard work
Never gets a smirk
From an unfriendly face
Because the farmers work at the best place
Where there is happiness forever
And a sad face never
That is Goat Knoll Farm

NWCA / Goat Knoll Farm
Spring Field Day 2001

April 7, 2000

A group of 32 attended the recent Farm Field Day sponsored by the North West Cashmere Association. The event was held at Goat Knoll Farm, Dallas, Oregon, the home of Paul Johnson, Linda Fox and about 80 cashmere goats. Goat owners and people interested in goats attended from Oregon, Washington and California. It was billed as a day of hands-on workshops, sharing of experiences and food, and participants did not go home disappointed.

The event officially started at 8:30 am with coffee and home-made cinnamon rolls, but Sue Lasswell, from Kirkland Washington (the spinning instructor) and Pete and Charlotte Rhoads, from Placerville, California, arrived the night before. This year, at the suggestion of out of town attendees from last year, a pizza get together was planned in Dallas for Friday, the night before. Only five attended, but it was fun and we had to eat anyway.

Lessons started the next morning around 9 am with a 15 minutes video entitled "Who's Coming to Dinner." This video, produced by Oregon State University, focused on eating habits and pasture management techniques for different livestock species—cows, horses, sheep and goats. After the video ended, the troops headed for the barn.

On the two prior years' Field Days at Goat Knoll, there have been new kids born the day of the event. This year, all kids had already arrived so there was no need to follow around expectant mothers in hopes we could see new kids born.

After a brief tour of the barn and visit with new kids, the group divided into three separate working groups for goat maintenance chores. Each group was assigned a "volunteer" goat who needed work. Each group completed maintenance chores on at least two goats—including CD&T vaccination, pour-on worming with Eprinex and hoof trimming. Different methods of goat restraint were used including Paul's new height-adjustable (sheep) maintenance stand, the modified goat milking stand and just restraining the victim with a leash tied to a post in the barn. Participants got to find out what to do when the needle pops off your syringe while giving a shot and how to stop a little blood on an overly aggressive hoof trim.

Next on the schedule was harvesting cashmere, both by shearing and combing. Three lucky goats ("Star", "R" and "Jude") were sheared by the group. Guy Triplett demonstrated shearing one goat. He made it look easy. Most participants sheared a few strokes on a goat. No goats were harmed in this exercise.

Field Day Photographs on next two pages

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NWCA/Goat Kno
April 7, 20

Miranda Provost (left) and Carrie Noble feed lettuce to Mittens. Mittens likes Field Days.

A group in the barn compares notes about kidding procedures, kid care and other discussion topics.

Lucky wether "Star" gets a clean-up aft

Photographs by C

Kids! Fred and Barney have never seen so many people at one time.

New kids try to hide in a corner—unsuccessfully.

Carrie Noble feeds lettuce to Buster. Buster likes Field Days—except for the shot thing and the hoof trim thing and the combing thing...

Of course there was lots of food. A potluck lunch eaten while the NWCA held a brief meeting, provided energy for the afternoon activities.

Mickey stays in the house trying to avoid the crowds. He finds that piles of cashmere are good places to nap.

Tiger. New kid on the block.

Field Day

Continued from page 15

Participants also tried their hand at combing cashmere. Linda demonstrated briefly and offered eager combers a variety of tools to comb less-than-eager volunteers restrained in the barn aisle.

Then, it was time for lunch. Participants loaded plates with food. There was plenty of food, including Linda Lowell's excellent smoked turkey. There were dozens and dozens of cookies. It seems that someone had mentioned "BRING COOKIES!" in the promotional material for the event and participants had taken this as a mandate. We had cookies! We still have cookies! Good thing they freeze well.

The NWCA had a brief meeting over lunch. The new officers had previously met on February 10th and decisions from this meeting were discussed. The tentative schedule of Association events and general membership meetings was announced. It was also decided to sponsor Dr. Chris Lupton, world renown researcher from Texas A & M University (and MGM member), to talk about fiber measurement and the results of the recent cashmere and Angora goat latitude study in conjunction with the upcoming NWCA meeting to be held late September at the Oregon Flock and Fiber Festival. Discussion was also held about potential date and venue for the NWCA 2001 official fleece competition.

After lunch, we headed back to the barn for lessons and discussions on kidding and kid rearing. Linda and Paul introduced the kids (10 of varying ages from 3 days to one month old). They demonstrated giving a CD&T shots and ear tagging kids. They explained their ear tagging scheme—change color of tag each year, tag kids with birth order in the year, tag does in the right ear, bucks in the left—and them promptly punched a green tag #1 in the left ear of a doe kid. Participants examined three different types of ear tags and tagging instruments. On some taggers, the tagger punches the hole in the ear and on others, the tag to[does the actual punching. It is important to use the correct ear tag for each tagging device. A couple of participants also tried their hand at tagging kids.

Next, a group discussion was held on kidding procedures at various farms and any other matter that people wanted an exchange of information. A lot of good information about a variety of topics was discussed.

The final scheduled event was a spinning workshop. Several participants brought spinning wheels. Sue Laswell gave basic instructions and helped as needed.

Even Oregon's stormy spring weather cooperated. In early April, showers in Oregon are frequent. However, on this day, it rained only when we were in the house for lunch.

At the end of the day, participants agreed that they had learned a lot, had a good time and had eaten more than they should have.

A second NWCA Field Day is tentatively planned in Bellingham, Washington at Breezy Meadow Farm, the home of Doug and Roberta Maier. Details will be announced soon.

Paul's Tips for Field Days

I always come away with a few snippets of wisdom from every Field Day. This one was no different. Here's this year's list:

1. Try using a drywall scraper to trim hooves.

2. If you feed at night, your kids will be born in the am. If you feed in the morning, kids will be born at night. I tried to find an authoritative source confirming this, but couldn't. It did seem to be the consensus of Field Day attendants.

3. Hosting a Field Day means that you will have a clean barn—at least for a few days.

4. It was the consensus of the group that wethers produce the most fiber, when compared to does or bucks.

5. When demonstrating ear tagging, make sure you get the correct ear.

6. Following Field Day, your guardian dogs may be hoarse for a few days.

7. Use waterproof markers on your directional signs for the event. At the end of the day, our "Goat Knoll" signs looked like Haunted House Signs and were barely legible.

7. Do not specifically ask folks to bring cookies!

ACHIEVING ECONOMICAL SUSTAINABILITY IN SHEEP AND GOAT HUSBANDRY: A QUESTION OF MARKETS AND LAND-USE

By J. P. Boutonnet, INRA/ESR, 2, place Viala, 34060 Montpellier Cedex 1, France

http://www.fao.org/regional/europe/PUB/RTS50/324.htm

ABSTRACT

As any animal product, sheep and goat husbandry can survive or develop only if the price of the products is higher than the cost of the feed they need. Sheep and goats' milk and meat are not competitive with cow milk and pork and poultry meats if they are fed with grain. As a result, sheep and goat husbandry can survive and develop only if low cost feed is available (range land access and/or farm by-products) and if the producers are able to meet a specific demand, generating high prices for meat and/or milk. This can be achieved on a small scale in backyard patterns of production, which seem to be the main form of existence of sheep and goats today in Central and Eastern European Countries. But increased volumes for export, or for big cities, are achievable only in some sort of commercial peasant pattern of production, which needs a good network of traders for collecting, processing and distributing the products.

INTRODUCTION

As in all other productive activities, economical sustainability is achieved when there is a balance between the resources and the products. This paper is an attempt to show some specificities of small ruminants and some keys to make decisions in this sector.

SOME CHARACTERISTICS OF ANIMAL HUSBANDRY

Animal husbandry can use three types of feeding resources (Boutonnet, 1997): natural pasture, by-products and crops. Natural pastures are not created by human labour and the feed provided has no production cost. The amount of animals maintained on it depends on its availability and accessibility (social and demographic conditions).

By-products may be domestic or industrial. In the first case the amount of animals depends on the number of families. In the second case, it depends on the quantity of the main products (for example, grain) from which the by-products come (e.g. bran). Both on range-land and by-product, the amount of animal products do not depend on the market (demand and price) of the product, but on the available resources. (Figure 1)

The third resource is crops (grain, cultivated grass, fodder crops). Their cost, from the point of view of animal husbandry, is equivalent to the market price of those products, or to the price of alternative products cultivated on the same land. Fodder crops can be used only if the price of the animal product(s) is high enough to pay for the fodder crops used, at the market price. As a consequence, nowadays, the countries where animal husbandry is well developed have the following characteristics:

1. Good availability of cereals, achieved by domestic production (USA or France: more than 1000 kg produced /inhabitant/year) or by a good access to imports (Netherlands);

2. Strong demand for at least one animal product on the domestic market (USA), or by a good access to the export market (Australia).

Animal husbandry is generally multipurpose. Specialized models are, even today, very rare, except for poultry. During the previous centuries, human beings have eaten meat from animals kept for other purposes (ruminants), or fed with low cost feed (pork, poultry). Only when and where the standard of living improved, in developed countries, the price of animal food products rose enough to allow a specialized husbandry fed with fodder crops.

According to the combination of resources and products, different husbandry patterns can be elaborated (Boutonnet, 1997):

1. Pastoral, backyard, and ranching models can provide the market with very low price products, as they use only low cost feed. But the quantities are limited by the amount of feed available.

2. Industrial models can provide unlimited quantities, but they need a product/

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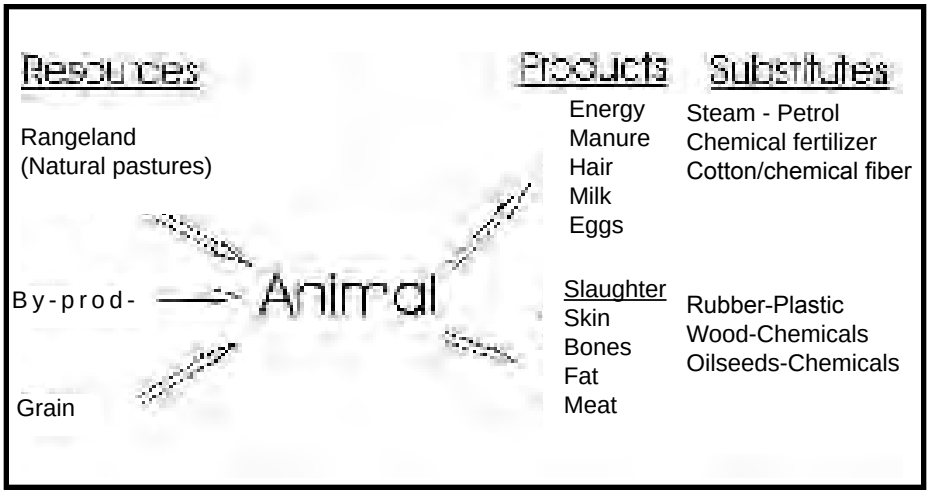

Figure 1. - Nature of Animal Husbandry

Sheep and Goat Husbandry
Continued from previous page

grain ratio higher than the biological transformation rate.

3. Peasant models combine a specific mix of different resources and products to achieve good profitability, according to their needs, and to their resources in land, labour and capital. They are very flexible and can adapt themselves to various market and social conditions.

SOME CHARACTERISTICS OF SMALL RUMINANTS

As ruminants, sheep and goats are able to graze, and to take profit from natural pastures, or from straw and fallow. This allows sheep to provide wool at an acceptable price (production of one kg greasy wool needs the feeding equivalent of 70 kg grain, or a feeding cost of US$10/kg wool if fed with grain, while the price of raw wool is not more than US$4/kg). As small animals, they are: easy to handle; suitable to very small farms or rural households; more sensitive to predators than cattle: they need to be kept or housed except in very safe countries such as Australia, New-Zealand, or Argentina (Boutonnet, 1986). Finally, sheep produce wool. But this product, as all other non-food animal products, has lost its monopoly or strategic position as the sole provider of clothing material. (Table 1)

Nowadays, sheep and goats produce meat and/or milk. But as milk producers they are less competitive than improved dairy cattle, and as meat producers they are less competitive than pork and poultry.

Sheep and goat husbandry can survive only if they can be fed mostly with low cost forage on natural pasture in large flocks, where free range is available and safe, or on by-products in small flocks belonging to small farmers, in various peasant models. There must also be a demand for their products at higher prices than similar products, and this demand must be able to be met by appropriate marketing channels.

Food products from sheep and goats are definitely not staple food, providing only proteins, lipids and energy to human beings (we know that a human being could be fed with corn, protein meal, and a mineral/vitamin complement, for less than US$0.50 per day).

Sheep and goat products are, maybe more than other foods, providing pleasure, dream, identification. Demand for these products is universally very cultural, even when it is very low. It depends on consumption patterns, strongly dependent on cultural factors. Some countries, or some part of the population of a country, like to eat sheep or goat products, some others don't. Small ruminant husbandry can develop only if it is aimed at providing markets where specific demand for these products is strong.

Sheep and goat products are very specific to each country or region, as a result of traditional types of breeding, and cooking habits. A type of lamb fitted to Greek consumers is not convenient for the Russian market. French cheese is not good for the German market. That means that exporting regions or countries have to adapt their types of products to the different markets they provide, or to organize selective trading procedures in order to choose the proper product for their different markets. But generally, specific products are sold mainly in the region of their production, or exported to countries with large communities of emigrants.

CONDITIONS FOR SUSTAINABILITY OF SHEEP AND GOAT HUSBANDRY

The capacity of sheep and goats to survive and develop is not linked to the size of the flocks, but to the resource/product balance which is offered to each particular farmer in each social, economic, and marketing situation. The availability of low cost feeding resources is the main factor, if sheep and goats are the best way to use them.

At a territory level, such a development needs a network of specialized traders for collecting, processing and distributing the product towards the proper consumer. That means auction markets, equipment (such as slaughter houses, dairy plants, etc., of which size must be adapted to the farmers needs), information systems (on prices, quantities, qualities, etc.)

In some circumstances, when the market for milk and/or meat is not sufficient, and when the state finds it necessary to keep an agricultural activity in some "less favoured areas", some subsidies are necessary to support the income of farmers who are occupying the territory and maintaining the landscape (Béranger, Flamant, Gibon, 1997).

Thus the multi-purpose character of sheep and goat husbandry can be restored. As far as Central and Eastern European Countries are concerned, the drastic drop of sheep numbers is due to

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	1800		1900		1950		1990	
	Million ton	%	Million ton	%	Million ton	%	Million ton	%
Total	0.6	100	4	100	12	100	41	100
Detail of Total:								
Wool	0.2	33	0.8	21	1.0	8	1.5	4
Linen	0.3	50	0.6	15	0.4	3	0.7	2
Cotton	0.1	17	2.0	50	8.4	70	18.4	45
Artificial Fiber	-	-	-	-	1.7	14	19.1	47

Table 1. World use of raw material by the textile industry 1800-1990.

Sheep and Goat Husbandry
Continued from previous page

the loss of the highly supported market for its former main product: wool (Pouliquen,1997). Except for Balkan countries, where a significant part of the ewes are dairy ewes, and where lamb meat is highly appreciated by consumers, lamb was a by-product of wool production and mainly exported. Nowadays, large flocks seem to have almost disappeared. Sheep and goats are grown mainly on small plots, providing milk and meat to the family and relatives, in a peasant or backyard model of production. In such a situation, the capacity of these countries to export lamb and cheese will soon be very low, as well as their capacity to provide for their own urban markets. For such a development, it would be necessary to develop, at a great scale, some form of "commercial-peasant" pattern of production, which needs a good network of traders/processors, in order to create and manage the appropriate marketing channels able to maintain sufficient prices.

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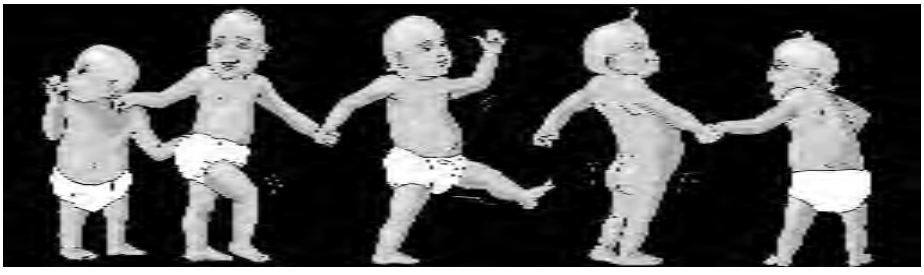

List of Items
For the Well-Stocked
Goat Medicine Chest

A good goat health book
Veterinary thermometer
3 cc plastic syringes
6 cc plastic syringes
12 cc plastic syringes
35 cd plastic syringes
Weak kid syringe
Needles (1" and 1/2")
30 or 50 cc drenching syringe
Balling guns (small, large)
Surgical scissors
Scalpel, disposable blades
Surgical gloves
Gentle iodine spray (for wounds)
7% tincture of iodine
Betadine or Blu-Kote (for cuts)
Blood stop powder
Propylene glycol (for ketosis)
Nutri-Drench (for stress)
Probios anti-stress formula
Vet Rx (for respiratory ailments)
Ketocheck (to diagnose ketosis)
Electrolyte powder (for stress)
Nutrient electrolyte powder
Biosol (for scours)
Nitrofurazone wound dressing
Fungisan (for ringworm)
Vetwrap

In the refrigerator:

Procaine Penicillin G
Enterotoxemia vaccine
Tetanus toxoid
Tetanus antitoxin

Check your goat medicine cabinet regularly and replace any missing items immediately. Check that all medicines are fresh and still good.

Information from
Caprine Supply 2001 Catalog
P.O. Box Y
DeSoto, Kansas 66018

www.caprinesupply.com

Missouri Internet Goat Auction 2000

By Emmanuel Ajuzie, Ph.D., State Marketing Specialist

Information from the Marketing Program Newsletter Livestock-Goats, Lincoln University, Jefferson City, MO

In 1999, a decision was made to conduct two Internet goat auctions in October and December 2000. The October sale did not take place because there were not enough goats consigned to cause buyers to bring their trucks to Missouri, mostly from the East Coast. December proved to be the better month. More than 1,400 head of goats were consigned and sold. Goats were sold on Thursday, December 14, 2000, and picked up the following Tuesday, December 19, 2000.

It would be good to point out here that for the first time since the Internet goat auction started, a few producers failed to bring the goats they sold to the pool or collection point for pick-up. The committee is pointing this out to prevent individuals from such a breach of contract in the future. Once you consign your goats and accept the price offered, you are committed to bringing your goats to the designated pool site. Buyers are coming from far distances to get the animals they bought on the Internet. This is a matter of trust and no one would like to spend enormous transportation costs only to find out that he would not have the products to sell to cover those costs. The consequence is that they would stop buying Missouri goats on the Internet. When one realizes that prices of goats have gone up everywhere since the introduction of the Internet goat auction, we are certain to see those same prices fall when the Internet goat auction fails. This is because there will no longer by competition among buyers in the fast growing goat industry.

The price per head in December 2000 was 12 percent higher than the price the same period in 1999. Top kids weighing between 50 and 70 lbs. were bought for $83 per cwt. in 1999. Similar goats sold for $93.75 per cwt. during the same period in 2000. They sold for approximately $72 in 1998, when we had the first auction. That is an increase of 30 percent in price within three years. This indicates a solid upward trend in goat prices as demand continues to outpace supply in the country.

In order to sustain buyers' interest in Missouri goats, producers need to do two things: First, continue to produce quality goats. It is quality that attracts a particular type of price. If it is possible, I would recommend the production of some percentage of Boer crosses for meat goats. Fullblood Boer Goats are not recommended for Internet auctions. One would be better off finding a niche market that would be willing to pay the type of price they are worth. Second, be dependable in your practices. This means making sure that the types and goats you consign are the ones you will deliver for a pick-up. It also means making certain that you deliver the goats after you have accepted the price(s) offered for them. I would advise producers to do all they can to recognize the substantial benefits of working together for the good of everyone in the industry. Collective effort produces success and this industry needs collaborative work to be effective and sustainable.

In terms of market and price, there has never been a better opportunity for producers in Missouri than now. The demand for goats and goat meat is at an all time high and will continue far into the future. Everyone is encouraged to seize the moment and make a living out of one's farm. Producers need to produce more to support the growing Internet auction market. Again, selling on the Internet significantly reduces the transportation costs producers incur as they drive long distances to sell their goats. For example, one may take his goats from Missouri to New York and get higher prices. However, the pricing benefits would be more than offset by the cost of transporting the animals, which includes the wear and tear on the vehicle used, gas, motor oil, hotel accommodation, food, drinks, and time spent driving, which could have been usefully employed in another income yielding venture.

2001 Internet Auction Dates

In its committee meeting on November 18, 2000, the Missouri Goat Marketing Committee decided to hold the Internet goat auction on the following dates in the year 2001:

Sale Date	Delivery Date
June 14, 2001	June 19, 2001
December 6, 2001	December 11, 2001

Depending on circumstances, these dates may change. These changes could result from the failure by producers to call and consign enough goats to make truck loads for buyers. As was announced earlier, we need in excess of 500 head of goats to complete a truck load. A producer should begin consigning his/her animals a week or two before the sale dates listed above. Again, this is accomplished by calling Equity at (800) 362-3989 and informing David Johnson that you would like to consign goats for sale on a given date.

Foot Rot

Clinical Signs, Prevention, Treatment

By Don Hudson, D.V.M., Extension Veterinarian

Foot rot (necrotic pododermatitis, foul foot) can be a very annoying problem. Once started in a herd and "seeded" in the soil, it may persist for quite a long time. Although the incidence of foot rot may not be high at any one time, it requires constant observation to prevent serious economic loss.

The bacterium Fusobacterium necrophorum has been reported to cause foot rot. However, researchers have not been able to reproduce typical foot rot lesions with this organism. Recent research at the University of Missouri indicates that a combination of Fusobacterium necrophorum and Bacteroides melaninogenicus are the predominant bacteria isolated from foot rot. When mixtures of these two bacteria were applied to the broken skin of the foot or injected into the tissue between the toes, typical lesions of foot rot were reproduced. Both bacteria were re-isolated from the experimentally-induced lesions.

Other organisms commonly isolated from animals with foot rot include streptococci, staphylococci, corynebacterium, and various fungi, all of which are common in our environment, especially where moisture is present. Cuts, bruises, puncture wounds, or severe abrasions permit these bacteria to enter the tissue of the foot where they start an infection.

Foot rot can be a seasonal disease, occurring during periods of extreme moisture, sudden freezing of muddy yards, or severe drought.

Clinical Signs

The first observed sign of foot rot is lameness, which may vary from scarcely noticeable to severe in one or more feet. Foot rot may affect only one animal or a high percentage of animals in a pen or herd. If a single animal is showing signs of lameness, examine the foot. Often the cause may be nails, wire, bruising or other injuries. Lameness caused by acute foot rot is followed by swelling of the foot, spreading of the toes and reddening of the tissue above the hoof. In severe cases, the foot will abscess above the hoof with a discharge that has a characteristic foul odor. The animal usually has an elevated temperature with loss of appetite and body weight. If the infection is not stopped, it will invade the deeper tissues of the foot and may invade one or more joints, causing chronic arthritis.

Prevention

Management practices that help reduce hoof damage or avoid bruising will help decrease the incidence of foot rot. Keep the hooves of heavy cows and bulls trimmed to help reduce stress on the soft tissue of the foot. Maintaining maximum drainage of lots and around water tanks to prevent mud helps reduce the incidence of foot rot. In winter when rough ground freezes around water tanks, the feet become bruised and this may lead to a higher incidence of foot rot. These areas can be smoothed with a blade or covered with straw to prevent foot damage. Mounds of soil in the feedlot help to promote drainage and give cattle a dry place to lie. Cement slabs along the feed bunks and around water tanks reduce injuries and help prevent muddy conditions in the winter.

Walk-through foot baths in dairy operations have been used to help prevent foot rot. Copper sulfate (dissolve 2 pounds in 5 gallons of water) or formalin (1 gallon of 40 percent formalin in 9 gallons of water) can be placed in the door or alleyway where the cattle walk coming into the barn. Place shavings soaked in these solutions in the alley where the cattle walk to help prevent slipping. These are more effective if the feet are not muddy and the concentration of medication is maintained. However, these solutions may cause chapping or cracking of the teats if not washed off at milking.

Ethylene diamine dihydriodide (EDDI, tamed iodine) mixed in the feed or salt to provide 50 milligrams per head per day has been used as a preventative measure. However, feeding EDDI has not been a very satisfactory control for foot rot. Over-consumption of the chemical can cause irritation of the respiratory tract. This may lead to pneumonia, hacking cough, depressed appetite and watery eyes.

Good nutrition may be helpful in preventing foot rot. Be sure that all cattle receive adequate calcium, phosphorus, and vitamin A for good bone and tissue health.

Treatment

Research reports from Missouri indicate that when treatment was administered the first day of the disease, recovery was observed in 3 to 4 days. When the first treatment was delayed for 3 days, treatment was required again at 7 days, recovery was delayed for 10 to 12 days, and two animals required 30 to 45 days with multiple treatments to recover. Early treatment is necessary to prevent animals from becoming chronics. Examine the feet of lame animals for foreign objects such as wires, nails, etc., and treat as soon as possible.

Penicillin, penicillin dihydrostreptomycin combinations, or the oxytetracyclines (terramycin, liquamycin, and oxy-tet) usually work well if given at the recommended dosage and treatment is started early. Sulfonamides (sulfapyridine, sulfamethazine, or triple sulfas) have been used successfully at 1 grain per pound of body weight. These can be given intravenously or as a bolus. The boluses given simultaneously with penicillin or oxytetracycline for 3 days are probably the best overall treatment. The new, long-acting terramycin injectable and sustained release sulfa boluses used in combination are good drugs for treating foot rot. Treatment with these drugs must be given once every 3 to 5 days to maintain adequate blood levels. In many early cases of foot rot, one treatment may be adequate.

Feed additives containing chlortetracycline (aureomycin) or a

Continued on next page

Hoof Rot
Continued from previous page

combination of chlortetracycline and sulfamethazine can be used for treatment on a herd basis. To be effective, the minimum dose for calves should be at least one gram of chlortetracycline per animal per day. Increase the amount of antibiotic for larger animals. Lower dosages may contribute to the production of drug-resistant organisms.

When foot rot fails to respond to medication, thoroughly check the foot for foreign objects. If infection proceeds and infects the joints, arthritis may develop and claw amputation may be needed to correct the condition until the animal can be salvaged at slaughter. All treatments should be under the direction of a veterinarian. Observe the withdrawal time on all medications administered.

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Excuse Me!
Did You Say Cows!

(We have *goats*, remember...)

Yes, we know that the last article says "cow, cow, cow, cow, cow", but don't throw your magazine on the floor and stomp on it in disgust. Foot rot is a ruminant thing and just because Mr. Hudson, Extension Veterinarian, doesn't like to talk about goats (at least not publicly), the information is still good for goats.

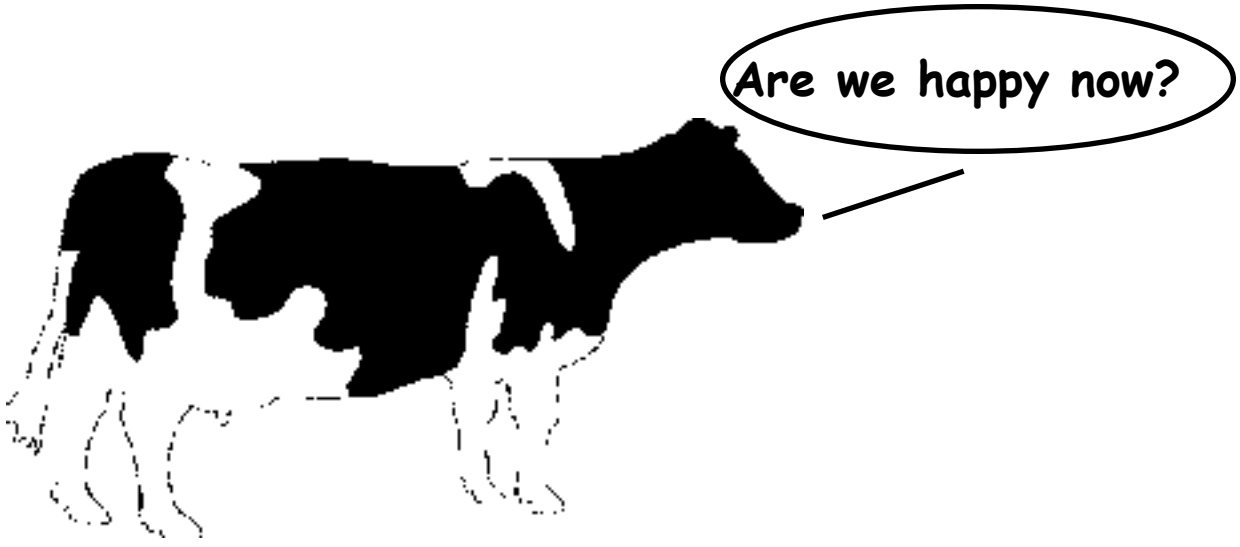
The Merck Veterinary Manual (7th Ed.) refers those seeking information on goat hoof rot to the book section on cattle and sheep. The only differences in treatment we could find, per Merck, were differences in the recommended solutions for treatment—which doesn't necessarily mean that the solutions recommended for COWS by Mr. Hudson, wouldn't work for goats. It just means that Merck lists different treatments. You will want to confirm any treatment used (for either your goats or cows) with your Veterinarian.

The article at left recommends preventative footbaths of copper sulfate (2 lbs. in 5 gallons of water) or formalin (1 gallon of 40% formalin in 9 gallons of water).

Merck recommends the following treatment:

Cattle - Footbaths of 3% Formalin or 5% copper sulfate.

Sheep - Footbaths of 10% zinc sulfate or 10% copper sulfate or 5% formaldehyde.



Calendar of Events

May 5 - 6, 2001
Maryland Sheep & Wool Festival, Howards County Fairgrounds, West Friendship, MD. Contact: 410-531-3647, internet: www.sheepand wool.org

May 12 - 13, 2001
25th annual New Hampshire Sheep and Wool Festival, Hopkinton State Fairgrounds, Contoocook, New Hampshire, Info: Caroline Owens, 603-653-8553, email: daowens@erols.com

May 18 - 19,2001
Eighth Annual Rare Breed Livestock, Miniature & Pet Expo, Fairgrounds, Knoxville, Tennessee. Features agricultural and companion animals focusing on rare breeds. Heartsong Triple D Farm, 1292 Lakemoore, Jefferson City, TN, 37760, 865-475-3577, email: ddtarr@usit.net, http://www.public.usit.net/ddtar

May 18 - 20, 2001
Snake River Fiber Fair, Idaho Falls, ID, Info: Pat Day Hartwell, 208-522-1337, email: lasypj@srv.net

May 19, 2001
42nd annual Tri-County Lamb & Wool Show and Sale, Hillsboro, OR, Contact: Karen Lobb, 503-538-7987, email: bideawee@iname.com

May 19, 2001
Sheep to Shawl Festival, Mission Mill, Salem, Oregon, 10 am - 4 pm, Rain or Shine! Free admission, animals, spinners, weavers, knitters, exhibits, 503-585-7012, http://www.misionmill.org

May 26 - 27, 2001
Great Lakes Fiber Show, Wayne County Fairgrounds, Wooster, OH. Contact: Linda Reichert, 330-264-9665, email: don47linda@valkyrie.net

June 2-3, 2001
Big Sky Fiber Festival, Ravalli County Faigrounds, Hamilton, Montana. Theme: "Back to the Barn:. , Info: Deb Essen, 406-642-6424, email: deb@eccmontana.com

June 22-23, 2001
Black Sheep Gathering, Lane County Fairgrounds, Eugene, Oregon. Demonstrations, classes, exhibits, vendors. Info: 541-343-6596, internet: www.blacksheepgathering.org

September 22-23, 2001
Oregon Flock & Fiber Festival, Clackamas County Fairgrounds, Canby, Oregon. Vendors, exhibits, classes, demonstrations. Info: www.flockandfiberfestival.com

Association Contacts

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

Cashmere Producers of America (CaPrA)
Kris McGuire, President
970-493-6015, email: krisvadale@aol.com
Membership info: Marilyn Burbank, PO Box 2067, Rogue River, OR 97537, email: burbank@cdsnet.net

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

Eastern Cashmere Association (ECA)
Gloria Rubino, President
570-629-6946, Toadhaven@aol.com

Mild Goat Men
Steve "lips didn't touch" Hachenberger, *Acting* President (Filling in for Paul Johnson who has been recently elected to a prestigous position with a real organization and can't possibly continue to serve as head of this prentensious group of underachievers until he is removed—possibly forcibly— from the NWCA job)
406-961-3058, email: cashmere@bitterroot.net

North West Cashmere Association (NWCA)
Website: http://www.nwcacashmere.org
Paul Johnson, President
503-623-5194, paul@cashmirror.com
Diana Mullins, Membership Coordinator
509-997-2204, dmullins@methow.com

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

Pygora Breeders Association (PBA)
Inga Gonzales, Secretary
PO Box 565, Knightsen, CA 94548
925-625-7869, email: Igonozo@goldstate.net

Texas Cashmere Association (TCA)
William (Bill) Nagel, President
4625 Sandy Fork Rd., Harwood, TX 78632
830-540-4707
email: bnagel@bvtc.com

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

Breeders

CANADA

GIANT STRIDE FARM
Pat Fuhr
RR #3
Onoway, Alberta, Canada,
TOE IVO
403-967-4843
email:
giantstride@compuserve.com

LLONE PINE FARM
Myrna Coombs
PO Box 863
Onoway, Alberta, Canada
TOE-1VO
780-967-4583

UNITED STATES

CALIFORNIA

CAPRETTE CASHMERE
Barbara Fiorica
13059 Cherry Rd.
Wilton, CA 95693
916-687-6406

HENRY LOWMAN
PO Box 2556
El Granada, CA 94018
650-225-1171
email: hlowman@
compuserve.com

COLORADO

K. BULLARD/CHALK
7225 E. County Rd. 18
Loveland, CO 80537
970-667-2999

MARSHALL'S ORGANIC ACRES
9217 N. County Rd. 7
Wellington, CO 80549-1521
970-568-7941
email: Borganic2@aol.com

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

CONNECTICUTT

THUNDER HILL CASHMERES
Coleen Nihill
165 Boston Post Road
Old Saybrook, CT 06475
860-873-3403

MAINE

BESSEY PLACE CASHMERE
Wes and Marilyn Ackley
319 Brock School Road
Buckfield, ME 04220
207-336-2948
email: ackley@megalink.net

BLACK LOCUST FARM
Yvonne Taylor
PO Box 378
Washington, ME 04574
207-845-2722
email: Lance@airs.com

GRUMBLE GOAT FARM
Linda N. Cortright
574 Davis Rd.
Union, ME 04862
207-785-3350
fax: 207-785-5633
email: grumble@midcoast.
com

SPRINGTIDE FARM
Peter Goth & Wendy Pieh
PO Box 203
Bremen, ME 04551
207-529-5747
fax: 207-529-5739
email: wpieh@lincoln.
midcoast.com

MARYLAND

MIDDLETOWN FARM
George and Barbara Little
8123 Old Hagerstown Rd.
Middletown, MD 21769
phone & fax: 301-371-8743
email:glittle640@aol.com

MONTANA

CASHMERE 2000, INC.
Tom and Ann Dooling
3299 Anderson Lane
Dillon, MT 59725
406-683-5445
email:ann@montanaknits.com

CASTLE CRAGS RANCH
Steve and Diana Hachenberger
894 Pheasant Run
Hamilton, MT 59840
phone & fax:
406-961-3058
email: cashmere@bitterroot.net

DOUBLE OUGHT RANCH
Frank and Sally Zito
HC 60, Box 21
Brusett, MT 59318
phone & fax: 406-557-2291
message: 406-447-6210
email: dblought@midrivers.
com

J & K CASHMERE
Jim Haman
Kathy Sumter-Haman
RR1
Park City, MT 59063
406-633-2210
fax: 406-633-9157
email: JKCashmere@yahoo.
com

SMOKE RIDGE CASHMERE
Craig Tucker
Yvonne Zweede-Tucker
2870 Eighth Lane NW
Choteau, MT 59422
406-466-5952
fax: 406-466-5951
email:
smokeridge@marsweb.com

NEVADA

ROYAL CASHMERE
Eileen Cornwell
Byron Higgins
5455 Reno Highway
Fallon, NV 89406
phone & fax: 775-423-3335
email:cashmere@phonewave.
net

NEW JERSEY

BLACK FEN FARM
Virginia Hinchman
Kevin Weber
117 RD 2, Rt. 46
Hackettstown, NJ 07840
908-852-7493
fax:908-852-1336 (call first)
email:blackfen@juno.com

CREEKSIDE FARMS
Eugene Applegate
426 Monroeville Rd.
Swedesboro, NJ 08085
956-241-1820
Fax: 856-241-1896
email: GAPPLEGATE@Snip.
net

NEW YORK

FROG WINE FARM
Elizabeth Dane, OMD, PhD
134 West 93rd Street, Suite
2E
New York, NY 10025
212-866-3807
fax: 212-866-2340

HERMIT POND FARM
Pamela Haendle
10601 Merrill Road

Directory

West Edmeston, NY 13485
315-899-7792
email: hermit@borg.com

MORE NEW YORK

MOO'S MEADOW FARM
Judith E. Paul
10630 Springville-Boston Rd.
Springville, NY 14141-9011
716-941-5826
email: goats7228@cs.com

OHIO

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

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
razberi@teleport.com

AYER'S CREEK RANCH
19655 NE Calkins Lane
Newberg, OR 97132
503-554-9260
email:
Linda_Lowell@beavton.k12.or.us

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

DUKES VALLEY FIBER FARM
Fran and Joe Mazzara
4207 Sylvester Drive
Hood River, OR 97031
541-354-6186
email: FMAZZARA@gorge.net

FOXMOOR FARM
Carol and Carrie Spencer
1178 N.E. Victor Point Road
Silverton, OR 97381
Phone: 503-873-5474
Message: 503-873-5430
email: foxmoorfarm@goldcom.com

GOAT KNOLL
Paul Johnson/Linda Fox
2280 S. Church Rd.
Dallas, OR 97338
503-623-5194
email: goatknol@teleport.com

HARVEST MOON FARM
Guy and Karen Triplett
63300 Silvis Road
Bend, OR 97701
541-388-8992
email: harvest@empnet.com

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

HIDDEN MEADOW FARM PYGORAS
Susan J. Prechtl
23471 Cedar Grove Rd.
Clatskanie, OR 97016
503-728-4157
email: pygora@clatskanie.com

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

ROARING CREEK FARMS
Arlen and Cathy Emmert
27652 Fern Ridge Road
Sweet Home, OR 97386
503-367-6698
email:cashmere@proaxis.com

SOMERSET CASHMERE
Julie and Jim Brimble
12377 Blackwell Rd.
Central Point, OR 97502
541-855-7378
email: brimble@cdsnet.net

T & T CASHMERE
Trycia and Tom Smith
PO Box 488
Turner, OR 97392-0488
503-743-2536
email: TryciaSmith@msn.com

WILD FLOWER FARM
Michele and Perry Lowe
4295 Perrydale Rd.
Dallas, OR 97338
503-831-3732
email: pmlowe@teleport.com

PENNSYLVANIA

SANDRA ROSE CASHMERES
Jim & Sandra Rebman
8001 Colebrook Rd.
Palmyra, PA 17078
717-964-3052

TEXAS

4-B RANCH
William G. Nagel
4625 Sandy Fork
Harwood, TX 78632-9999
830-540-4601
fax: 830-540-4707
email: bnagel@gvtc.com

BAR-Y
James Barton
PO Box 915
Sonora, TX 76950
915-387-5284
email: bar-y@sonoratx.net

BESCO RANCH
Robert and Ethel Stone
7220 CR 261
Zephyr, TX 76890
915-739-3733
email: bobstone@web-access.net

FOSSIL CREEK FARM
Norman and Carol Self
1077 Cardinal Drive
Bartonville, TX 76226-2620
940-240-0520
fax: 940-240-7024
email: CWSelf@email.msn.com

J 'N' S RANCH
James and Sylvia Stalnaker
Route 1, Box 206
Burlington, TX 76519
254-605-0299
email: jnsranch@hot1.net

VIRGINIA

SILVER BRANCH FARM
Chuck and Lisa Vailes
1506 Sangers Lane
Staunton, VA 24401
540-885-1261
email: crvailes@cfw.com

Continued on next page

Breeders Directory—Continued

STONEY CREST FARM
Anne and Roy Repaske
570 Paddy's Cove Lane
Star Tannery, VA 22654
Phone/fax: 540-436-3546
email:cashmere@shentel.net

WASHINGTON

BREEZY MEADOW CASHMERE FARM
Douglas and Roberta Maier
810 Van Wyck Rd.
Bellingham, WA 98226
360-733-6742
email: fibergoat@earthlink.net

BROOKFIELD FARM
Ian Balsillie/Karen Bean
PO Box 443
Maple Falls, WA 98266
360-599-1469 or
360-715-1604
email: brookfarm@earthlink.net

LIBERTY FARM (NLF)
Cliff and Mickey Nielsen
5252 Hwy 12
Yakima, WA 98908
509-965-3708
email: Cnielnlf@aol.com

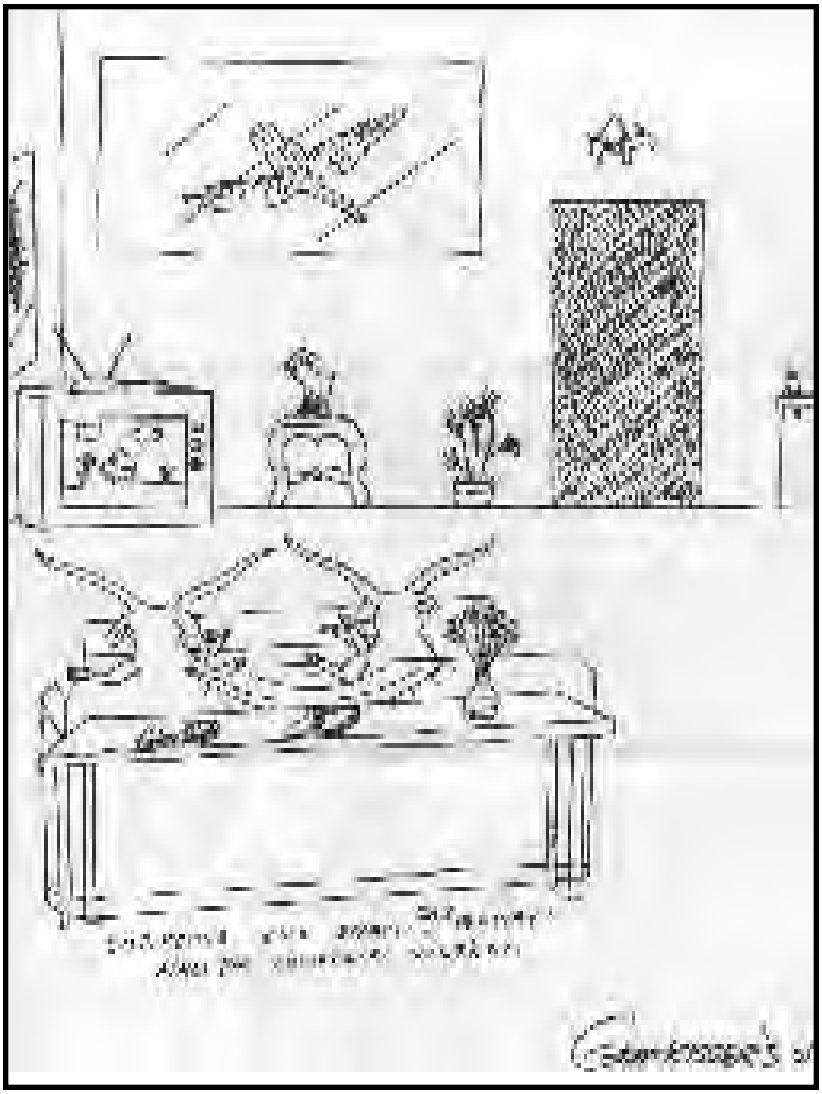
SHEA LORE RANCH
Jeremiah and Nancy Shea
4652 S. Palouse River Rd.
Colfax, WA 99111-8768
Phone: 509-397-2804

STILL WATERS CASHMERE
Moon and Diana Mullins
PO Box 1265
Twisp, WA 98856
509-997-2204
509-429-0778
email: dmullins@methow.com

WALLFLOWER FARM

Internet listing of these breeders and a link to their email addresses and homepages, if they have one, can be found on the net at: http://www.cashmirror.com/breeders.htm

Roxey and Marie Nielsen find that there always seems to a hoof around somewhere that needs a trim. Photo by Mickey Nielsen, Liberty Farm, Yakima, Washington.



World Cashmere Prices Information from the Scots

Per a recent issue of the Scottish Cashmere Bulletin (March 2001), the official publication of the Scottish Cashmere Producers' Association, Ltd., a number of factors has influenced world cashmere prices over the past few years. These are:

1. China's commitment to develop their own processing facilities to dehair, spin, knit and produce garments for the export market, rather than merely producing raw fiber. Since they are keeping more of their fiber to add value, they have less to export. Less export means less raw cashmere on the market which would normally mean higher prices.

2. Cashmere is fashionable—especially Pashmina shawls. They say the trend has peaked in the West, but continues unabated in the Far East.

3. Reduction in the amount of fiber being processed in the last two years.

4. Decline in amount of cashmere coming from Mongolia due to decline in number of cashmere goats caused by extremely bad weather.

Due to the combined effect of the above factors, world prices over the past 18 months have increased about 160%.

Check out the SCPA's new improved web site at:

www.cashmere-scotland.co.uk

They have beautiful woven scarves for sale in a variety of colors, a handy currency converter and a secure web site for credit card orders. It doesn't get much better than that!

Water Your Kids?

Per the Western Australia Goverment web site, rainfall is related to the growth rate of young goats. Kids grow more rapidly after good rains.

USDA Bulletin

Effective March 30, 2001, all used farm equipment from foot-and-mouth disease affected countries will be denied entry into the United States.

BLF Calliope Too. Is she eating these steps or just using them as a handy nose-scratching tool?
Photograph by Caitlin Allen, Farmington, Maine.

Goats belong, scientifically, to the Bovidae family within the suborder of ruminants (chevrotain, deer, elk, caribou, moose, giraffe, okapi, antelope), who besides the other suborders of camels, swine and hippopotamuses make up the order of even-toed hoofed animals called artiodactyla. They evolved 20 million years ago in the Miocene Age, much later than horses, donkeys, zebras, tapirs, rhinoceroses, who make up the order of un-even-toed hoofed animals; and the hyrax, elephants, manatees who make up the ancient near-hoofed animals. All these are herbivorous mammals, i.e., they live from plants and nurse their young with milk from an eternal gland and carry their unborn young to term relatively long in an internal uterus with a complex, nourishing placenta.

Source: The Small Farm Resource
http://www.farminfo.org/goats/goats.htm

WANTED!

Have You Seen this Woman? Or this Goat?

	Human	Goat
Name:	Linda Cortright	Unknown
Sex:	Female	Unknown
Height:	Tall	Unknown
Weight:	Thin	Unknown
Age:	Won't say	2 months
Distiniguishing Marks:	Cheerful, Busy, Great hair Large feet	Wattles(?) Great hair
Last Seen:	October 2000 issue of CM "How Many Rocks Will it Take?"	This photo

Please report any incidence of sightings of this woman (and this goat). We want the woman to write us more stories. We have no idea why we'd want another goat...

Linda's email and address are in the Breeders' Directory under Maine. Write and tell her you miss her! And find out about that goat, too.

Classified Advertising

CashMirror Back issues, $3 each or a dozen for $30. 10/89 - 2/01. About half of old issues still available. Index available. Order specific issues or give us subjects you need and we'll peruse our computer-sortable index and select back issues for you. Great reference material. Order from CashMirror Publications. Price includes shipping.

Children's Book: Buster the Cashmere Goat, Children's book by Paul G. Johnson, CM Ace Reporter. 66 pages, includes photographs, good goat fun. Suitable for reading aloud for young children, 3rd to 4th grade reading level, or for brightening the lives of bored adults. Guaranteed only happy endings. $7.50. Order from CashMirror Publications. http://buster.cashmeregoat.net

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

T-Shirts: CashMirror and Mild Goat Men, Heavy-duty cotton T's still available in Large and XLarge sizes only. All the Small and Medium people already have theirs. Suitable for "downtown" wear, yet sturdy enough for barn chores. CashMirror T's are natural-colored. MGM T's come in choice of burgundy or dark green. $17.50@. All prices include shipping. Order from CashMirror Publications.

Yocom-McColl Testing Laboratories, Inc. for individual animal and core testing. Ph: (303) 294-0582, Fax:: (303) 295-6944, Email: ymccoll@ix.netcom.com
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Extensive layout or photo screening may be extra.
Payment must accompany ad order.

Classified ads 50 cents/word.

Notable Quotes

"The Scottish knitters still constitute one of the biggest markets for cashmere fibre outside China. "

...United Nations FAO, 1995

"Dogs have masters; cats have staff."

...Martha Norwalk

"Healthy, well fed kids may be expected to grow from 150-250 g per day (1/3 - 1/2 lb.), or 5 - 8 kg per month (11 - 18 lb.)."

...Meat Goats

"If man evolved from monkeys and apes, why do we still have monkeys and apes?"

...George Carlin

The Deadlines:

Articles, photographs, advertising and other information submitted must be received by the 25th 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.

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