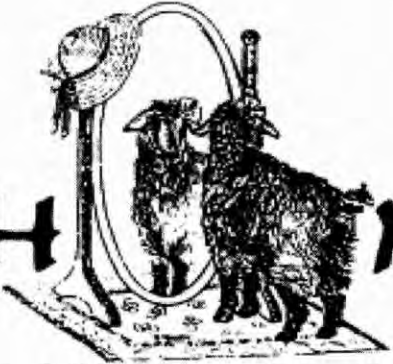




CASHMIR MIRROR

Volume 8, Issue 7

May 1997

The monthly magazine devoted to cashmere goats and their fiber



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No responsibility will be taken for material while in transit or in this office, although it will receive maximum care.

Cover photo:
Linda Fox, Goat Knoll

**"Ashley teaching the kid
the ropes about foraging."**



Breeders Directory Information

A reader inquired about the Breeders Directory. I guess we're just so used to seeing these listings in various publications that we forget that newcomers may not know what it is. The reader asked what was required to be included in the monthly Breeders Directory. The answer is (bluntly) - \$30.

The Breeders Directory listing is advertising. Anyone who wants the additional exposure of having their contact information listed for all the world (all the world who look anyway) to see, may purchase a listing.

Starting in July 1996, we also posted the Breeders Directory list on the internet for all the "bigger" world to see. These internet listings include direct links to breeder's email and home pages, if available. We've heard from many breeders that they are getting good response from these internet listings.

When we started this service, we warned you that it would only be free temporarily. We remind you of this now. The internet listing is updated monthly; it takes time to update and uses space on our internet server.

Starting January 1998, there will be an additional charge for the internet listing. We haven't decided on a pricing schedule yet, but for any new Breeders Directory listings or renewals after January 1, 1998, new rates will apply for breeders who choose to be included in the magazine listing as well as on the internet. New listings and renewals before January 1st will continue to be \$30 per year. Breeders who choose to only be in the magazine will still remain at the \$30 annual rate. We'll update you as January 1st homes in.



"Are you as sick and tired as I am of seeing all these new cute kids? Alright, it was fun for a while, but now I think it's time to move on...to the adults...to the bucks, to be more specific. We've hit spring and we're feeling frisky. We're warming up for the BREEDING SEASON!!! So, start thinking about the CashMirror Breeders Showcase issue coming up in August. We'll be there."

Breeders Showcase Issue

Coming August 1997

Deadline for ads, photographs and copy:
July 15, 1997

That's less than two months away!

As last year, we intend to print lots of extra copies of the August 1997 issue and distribute them as promotional material. As usual, there will be a good deal on advertising—both display and classifieds. We can help you design and lay out an ad, usually at no additional charge.

Get the word out!

Let others breeders and new cashmere producers know what you have for sale or rent. This is the time of year when producers "shop for bucks."

Reflections

by Linda Fox

Will the Real Mother Please Stand Up?

They will steal each other's babies, you know. I'd heard this, but had seen no signs of it in our obviously psychologically well-adjusted herd. At the lambing clinic we attended this winter, they talked of lamb theft being a problem with the sheep. Especially with the older ewes doing the stealing. Again, I thought, of course they'd have a problem with sheep; they're so stupid. But the goats, especially our intelligent, well-adjusted goats, certainly wouldn't even think of this.

Well, one of our psychologically-sound goats just successfully stole another's kid. On last month's Goat Quiz, question 5, you may have caught a glimmer that all was not perfect in paradise. When last issue went to press, we were still wondering who was the real mother of Stardust, the little gray doe born April 24th.

Thursday morning I found, in the barn, two does licking two babies. Princess, a gray doe, had obviously given birth and was caring for a fairly dry, black and white buck. Dusty didn't look like she'd kidded, although she was definitely bagged up. The small gray doe she was licking looked newer as it was still quite wet. There was no sign of afterbirth anywhere, but this is not unusual as the dogs (bless their hearts) clean things up. The colors told me nothing, as Dusty, the old rust-colored, Spanish doe, had thrown gray kids before. Neither Princess nor Dusty was a first-time mother. It was the 148th day after breeding for Princess and the 142nd day for Dusty, so I concluded that both kids must belong to Princess, although she certainly hadn't looked fat enough to twin and hadn't twinned the previous year.

Before I upset the natural system, I ran back to the house to check my records on the expected birthing dates. I found a mathematical error in my calculations—this was actually Dusty's 147th day, so both does were firmly in the "kidding window." I went back to the barn to reassess.

I decided that if Dusty had given birth, this was the cleanest birth I had ever seen. There was absolutely no "goop" on her rear. Stardust **must** belong to Princess. I put Princess and both babies in a jug and shoved Dusty outside. She promptly left and went to find the herd. I watched as Princess refused to let the gray baby drink. Even though she was carefully caring for the little black and white buck, she was



Are you my Mother?

firmly pushing Stardust aside whenever she came close. So, it looked like Dusty must be the mother.

I went outside, located the herd. Just in case there was yet another doe involved in the mystery, I checked the rears on all the other does, especially those others within the "kidding window." No one else looked promising, but I did notice that one of Dusty's kids from a prior year had a smidgen of blood on its side and it often lays by Dusty at night. So, perhaps the "goop" had ended up on the other goat? I dragged Dusty back to the barn, put her in a jug with Stardust and everybody seemed happy. The mystery was solved!

A few hours later, the two does and the black buck, who by now had been christened Oreo II, were happy, but little Stardust seemed hungry. She kept going back to the "faucets" every few minutes, but couldn't seem to get enough to fill her up. We checked Dusty's bag. She had something in there, but was it

Continued on next page

Reflections

Continued from previous page

When Readers Talk...

milk? One side seemed to have an almost-clear liquid and the other side had lumpy white stuff. Was this a different colostrum or was Dusty just giving inadequate milk because of her age? Or do all does have some pre-milk substance in their bags in advance of kidding? I realized I still wasn't sure of the real mother and that I certainly didn't know enough about how to tell if a doe has kidded and about what you should find in the udder when.

Just in case Dusty's milk wasn't giving Stardust what she needed and because a kid has only twelve hours to effectively assimilate the antibodies contained in the colostrum, I milked Princess (she certainly seemed to have colostrum to spare) and fed it to Stardust who eagerly consumed several ounces. During that evening and the next day, I stole more milk and offered it to Stardust, but she no longer seemed interested. I still wasn't positive who the mother was, but I had to admit that it was looking more like Dusty all the time.

And then, about 8 PM Friday night, Dusty started showing definite signs of imminent kidding. I watched her for several hours as I wanted to be there when she kidded. Would little Stardust be rejected when her real kid/s showed up? And, would Dusty have twins, like she had every other year? She definitely, at her age, could not care for three. I was sure there was no hope of replacing Stardust where she belonged, with Princess. Maybe the best I could hope for would be to try and graft her to another new mother, assuming one of the next two imminent does did not twin. It was looking like I had created a bottle baby.

We watched Dusty until midnight, but she still hadn't started labor in earnest so we told her she was on her own and we went to bed. The next morning, in Dusty's jug, was one(!) new baby buck sleeping in a corner with Stardust, and Dusty, the attentive mother, was dutifully caring for them both.

So, little Stardust, in typical American fashion, now has a birth mother (who could still care less—maybe as she gets older she'll develop an interest?) and her adoptive mother, who gives her and her little brother the best of care. And then there's the God-mother—that's me, hanging around to make sure they all get enough to eat.

And I have learned to watch those darn does; they'll steal each other's babies, you know.

Dear Paul and Linda,

In reference to the newspaper coverage of the Foxmoor Farm field day, I must offer this: we too had a cashmere field day at our farm and were pretty astounded by the "information" which appeared in our local newspaper. The article was written by the same reporter who wrote a piece about our preparations for a fiber festival a few years ago in which she described those things coming out of the pictured buck's head as "antlers."

Indeed, anything can happen when the press is involved, but I do hope that nobody from Forte' cashmere sees the misinformation from Foxmoor. They would be awfully unhappy to hear that their world class dehairing equipment chops fiber into little pieces. For the record, one of the Co-op's great strengths is its access to the Forte' dehairing machines which reliably process some of the world's longest and finest cashmere. On behalf of the Co-op's participating farmers, I want to note publicly how much we appreciate Dick Forte's graciousness in interrupting his schedule to dehair American cashmere.

Ooops. Gotta run. Think a volcano is erupting in my back pasture. No, hold on. It's Terry Sim's head popping up from the other side of the planet. Apparently he just heard that he was credited with defaming Forte'. Woooo. I've missed Terry, but I certainly didn't expect him to pop up this way!

Bye now.

Marilyn Ackley
Bessey Place Cashmere
Buckfield, Maine
May 6, 1997

Continued on next page

CASHMIRROR

Readers Talking Back

Continued from previous page

To the Editor Cashmirror Publications:

After reading the articles in the Cashmirror the past two issues, I am somewhat disappointed, as it is starting again. It's the old "Spy Vs Spy" routine. Someone somewhere makes a statement and the battle for political dominance begins. In fact if you would ask your goats and they could reply, what do you think they would say about the whole matter? The last time I checked, this is still America and we have the right of free speech. All of this rumbling back and forth proves nothing. No moneys earned, no trophies for the shelf, or banners for the wall, and most assuredly, no more cashmere on the goats. I read in one of the articles about being a team and couldn't resist looking it up in the dictionary for a more detailed definition of a team. From my Websters Seventh New Collegiate Dictionary: "a number of persons associated to gather in work or activity: as **a**: a group on one side in a match **b**: Crew, Gang." I fully agree with that concept, however it does not dictate that we all think alike and do business alike. Who we do business with, what they think is truly there business, and it is up to us as producers to commit our resources to who ever we wish.

Sherrie and I have been raising cashmeres since 1991, and we made our first contact with the cashmere industry through the CAPRA and it wasn't too long before we came in contact with the Texas Cashmere Association and then Terry Sim, "The Cashmere Specialist From Down Under" arrived and not too long after that the Co Op was born. Today if you look in the back of this magazine you will find at least seven other associations located throughout this nation. The fact that there are more associations now, than a few years ago, this tells me there is more interest in the production of cashmere. In 1991 there was only one place to send your cashmere. Forte and they would only accept an eighty pound bale. Now there are at least four that I am aware of. There could be more simply because those producers I have known are very secretive about where they send their hair. Only in the past two

years has there been a open competition, through advertising for fleeces.

We have subscribed to this magazine since the beginning of our cashmere career, and have watched the many struggles between associations and even producers. As we began our cashmere quest we had high hopes of becoming successful and making a good income from our herd. It wasn't too long that we realized that raising cashmere had more variables than chess. The fact that how they do it in Maine has no effect on how they do it in Texas, and most assuredly does not apply in Oklahoma. Don't get me wrong, there are many similarities in raising goats. Pasture conditions, climate, and seasons play a big part of every operation large or small. Our dream has become a harsh reality, in that we are not going to get rich raising these goats. This truth is hard to swallow for the investor, as short term returns are questionable and depend on the producer's efforts. However the producer who stands and delivers year after year has learned that producing cashmere is a meticulous procedure to gain quality. We here at JKC keep no secrets about our operation from anyone who asks, and are willing to pass on any information that will help present and future producers.

The greatest assets we have realized are:

1. We have developed an on going income through our investment.
2. We have a growing operation committed to a quality production of cashmere and the livestock that provide it. All of these articles we read about raising goats provide a resource for positive improvement for our herd.

We the cashmere producers of America should keep an open mind and be willing to listen to the words of those who speak, as they have taken the time to pass on information that might help others. It is up to us, the individual producers to sift through the information and use it as it is applicable.

Red Nyland
Just Kidding Cashmere
Caddo, Oklahoma
May 6, 1997

Joe Dooling Receives FFA Award American Degree

By Ann Dooling

Pioneer Mountain Farm, Dillon, Montana



Joe Dooling (right) receives FFA American Degree

The FFA, formerly known as Future Farmers of America, is perhaps the most incredible organization for young people I have ever seen. Kids join FFA usually in High School, in their Freshman year, through Vocational Agriculture. Through FFA, they learn about agriculture, leadership, vision, and develop skills that they find nowhere else in their life.

I have seen Joe grow as a young man serious about all aspects of agriculture, both in the contemporary setting and for the future. During their high school years, those who wish to are given the opportunity to earn degrees of achievement by doing certain projects in conformity with a set of plans for whatever discipline they choose. It is possible to do a study on everything ranging from bees to mint, from pigeons to potatoes, from cattle ranching to horticulture, and any subject in any way related to agriculture. Some

students have done their study on mechanics or welding as related to agriculture.

Joe started his study in his Freshman year on sheep, but changed the next year to cashmere goats. Once the subject is decided upon, certain things must be done according to a set of parameters. Detailed records (for livestock of any kind) of feed type and costs, other operating costs, reproduction records, sales, and the like have to be kept. After it is completed to the satisfaction of the local chapter advisor, if it has met the stricter criteria of competition on the State level, it is submitted to the State Advisor Panel for consideration for a State Degree. If it then meets the much stricter standards for national recognition, it is submitted to the National Committee, where it is reviewed for selection for a National honor, called The American Degree.

There are nearly 450,000 FFA students in this country. The National Convention, held in Kansas City each year, is attended by about 43,000 students, advisors and parents. We had the distinct pleasure of watching Joe receive his American Degree in Specialty Animal Production—Cashmere, November 1996, with the other 1,500 students who achieved this highest recognition in FFA. This represents 1/3 of 1% of the FFA students nationwide to receive this honor. In addition, Joe was the first person in the history of FFA to receive his American Degree in cashmere production.

About Those IGA Proceedings...

For those of you "patiently" awaiting a copy of the VI International Goat conference proceedings from the Beijing conference, take heart!

Ms. Rosalee Sinn of the International Goat Association, in Arkansas, assures us that additional copies of the Proceedings have been ordered from China.

The price is \$US 50, not the \$40 reported last fall. Ms. Sinn says that all orders will be filled.

Goat People

Heidi Smith—Attack of the "Killer Goats!"

By Heide J. Smith, Heidi's Farm, Park City, Utah

This year, I combed about eight of the goats, sheared four and never got to the remaining ones since on March 31st, an unseen goat clipped me from behind and dislocated my knee. The EMT's and fire department had to come out and scoop me up from the pasture which was a scene from a comedy since I fell down while carrying their dinner and was laying in the hay. The goats were trying to eat around me, the emergency crew was trying to shoo them out of the way and there was a blizzard going on besides.

There followed three days in the hospital, two weeks of bed rest, and now I'm only back to work part time, hobbling around without crutches. I resumed evening feeding chores this week, tentatively. My "other half" is still stuck with morning feed chores, reluctantly. Goats are not a family project at our house. They're all mine, under normal circumstances, anyway.

Even my doctors had a hard time keeping straight faces, as did the insurance company when I had to explain my claim to them. Since I never did see which goat whacked me and could pin no blame on anyone in particular, my husband graciously offered to shoot them all and let God sort them out. However, I was not bent on revenge and I knew it was not a malicious attack. I just somehow got in the way of a couple of the girls butting heads or one of them being shoved into me completely by accident.

I don't hold it against them, although neither do I trust them quite like I used to either. I'm hoping the producers from the "Rescue 911" show call soon and ask us to do a re-enactment. That might be another way the goats could earn their keep: television and movie contracts!

Pat Fuhr—Photographer and Goat Raiser

Pat Fuhr, cashmere breeder and goat photographer extraordinaire, has a lot of cashmere goats. Probably not as many as the Doolings or the State of Texas, but a lot compared to most of us. She and her husband, Gerry are the proprietors of Giant Stride Farm in Onoway, Province of Alberta (Canada). Onoway is just south of Montana's northern border—about ten hours. They are located at the beginning of the Alaska highway and insist that anyone headed that way should call for instructions and drop in and see them.

Their crop of kids this year numbered over 100 and Pat reports that they are all happy, healthy and staying away from the coyotes, with the help of Sam, an Anatolian shepherd dog.

It gets really cold where she lives and she says that

she often turns up the brightness on her computer monitor just to keep warm. She has automatic waterers for her herd, but the winters are so cold, they generally freeze up from October through May. And then, they carry five-gallon pails of water for the herd.

Pat used to work in mortgage administration, but says that kicking turds around brings her much closer to her earthly roots and also makes her taller when they are stuck to the bottom of her heels.

Pat and a group from her area meet at her place every Tuesday night to spin. She says it reminds her of her Mom's bridge club, except, of course, they have much more interesting things to talk about—critters, critters, and more critters!

We are glad that Pat has e-mail so we can bug her often for advice and news without having to spend a fortune on telephone bills.



Photo by Gerry and Pat Fuhr, Giant Stride Farm
This photograph was featured in the 1997 *CashMirror* calendar and also in *Instep*, a ballroom dancing magazine out of Portland. Dancing goats???

The Clostridial Diseases

By Linda Fox

I was having breakfast with my brother-in-law the other day when I found myself, between bites of french toast, blithely talking about the clostridial diseases which we, in the goat world, normally vaccinate against. He is a cow man and I am a goat person and we were comparing notes on annual vaccinations. After I got home, I realized, I had turned into my worst nightmare—a person who, matter-of-factly, talks like an expert about something which they know virtually nothing about! Therefore, my self-imposed penance is to write this paper. It gets to take space in the magazine because it was a pretty good idea anyway.

What are clostridial diseases? How do they work, how do we prevent them and most importantly, exactly what does clostridial mean?

Clostridium is a genus, which is a group of similar and related species. The clostridia are a group of relatively large, anaerobic, spore-forming, rod-shaped bacteria which cause the clostridial diseases. The clostridial diseases, which are a threat to goats and other livestock, include enterotoxemia (overeating disease), tetanus, blackleg and botulism. The official names of the species of clostridia we are concerned with are as follows:

Clostridium sordellii
Clostridium chauvoei
Clostridium septicum
Clostridium novyi
Clostridium botulinum
Clostridium tetani
Clostridium perfringens

When reading books or labels on vaccine bottles, you will often find the above names abbreviated, such as "*C. perfringens*" or "*c. tetani*."

Don't be confused by this; the reference book authors just get tired of spelling out "Clostridium" and the vaccine manufacturers can't fit all those big words on one tiny bottle without providing a magnifying glass to be sold along with the little bottle, which of course would cost too much.

Many of these organisms are found in the intestines of the goat and the spores remain viable in the soil for years. The pathogenic strains are usually acquired through wound contamination or by ingestion. The clostridial diseases are a threat to successful livestock production in many areas of the world.

Not all of the clostridial diseases are common in goats, but I will cover all with *any* history in goats anyway as part of the penance, because they are interesting and might be useful for other animals, and just so you can have yet more semi-useful information to fill up all those under-utilized brain cells which we all own.

There are two major categories of clostridial organisms. There are the "Toxemia Group" and the "Gas-gangrene Group." Even though the names may sound more like Mutual Funds than bad bugs, they are actually groups of little toxin-breathing dragons waiting to attack the castle. Some live outside the castle (the goat) in the soil, but others live discretely inside the castle waiting for the proper set of conditions to multiply rapidly and take over the joint.

The Toxemia Group

The Toxemia group of Clostridia includes *C. perfringens*, *C. botulinum* and *C. tetani*. These organ-



isms, when active, reproduce rapidly and produce poisons causing enterotoxemia (overeating disease), botulism poisoning and tetanus. The Toxemia group cause the disease in the host by producing toxins which poison the host. Some of these clostridia live and produce their poisons in the digestive system of the goat (the enterotoxemias), some live only in dead tissue in the goat (tetanus-causing) and others live only in food or carrion outside the host body (botulism-causing).

The enterotoxemias are found throughout the world, are common and frequently fatal to goats and to other animals. Sheep and cattle also contract these diseases, but there are differences in their systems and their management. Goats more often develop diarrhea as a symptom and also, unfortunately, in goats the vaccination often fails to protect the goat from the disease. **It is, therefore, important to use other preventative measures as well as a regular program of vaccination in your management of the enterotoxemias.**

C. perfringens

Enterotoxemia is caused by *C. perfringens* of various "types." Even though enterotoxemia has been labeled a common and important disease of goats by producers, veterinarians and extension personnel around the world, there is little veterinary literature or research that

Continued on next page

The Clostridials

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relates specifically to enterotoxemia in goats. Documented outbreaks of enterotoxemia involve mostly dairy goats under intensive or semi-intensive management conditions. Outbreaks in fiber goats have occurred in South Africa and Texas when goats were corralled or restricted to grazing of grain fields.

I've often heard the vaccine used to protect goats from the *C. perfringens* and other clostridial species referred to as the "C&D" vaccine. You've probably noticed that trying to read the label on your bottle of "C&D" vaccine is something like trying to read a bowl of alphabet soup. Let's see if we can translate some of that stuff.

The *C. perfringens* are widely distributed in the soil and alimentary tract of animals. These little guys produce potent toxins which are responsible for the enterotoxemias. Six types of enterotoxemias have been identified based on the toxins which they produce and these have been named (boringly) A, B, C, D, E and F. Only types B, C and D are important. Type A, which is present in the gut of many clinically normal animals, has been suggested as a cause of hemorrhagic enteritis in cattle, horses and sheep. I don't know why type F isn't important. It wasn't even considered important enough for the reference books to mention why it wasn't important.

Types B and C are villains for cows, pigs, horses and sheep, as well as goats. Toxins released by these types causes severe enteritis, dysentery, toxemia and high mortality in young kids. Type C causes enterotoxemia in adult goats.

Type D, which is the principal cause of caprine enterotoxemia worldwide, is the cause of pulpy

kidney disease and overeating disease. Type D frequently causes enterotoxemia of sheep and less frequently in goats. Distribution of this organism is worldwide and the disease is most common in young animals which are less than two weeks of age. Weaned lambs in feedlots on a high carbohydrate diet are more at risk than animals on lush pastures.

These clostridia exist normally in the digestive tract and spores are passed in feces. They remain viable in the soil, however they remain viable in the soil for a lesser amount of time than other clostridial species. They generate very rapidly in favorable conditions—the generation time of Type D is only about eight minutes so you can see why enterotoxemia can cause death rapidly.

The causative agents of enterotoxemia for goats in the United States is *C. perfringens*—Type C and Type D. However, the animal needs predisposing factors for development of the disease. Predisposing factors include ingestion of excessive feed or milk in the very young. Twin sheep (and I assume goats) seldom get too much milk. A single nursing kid would be more at risk than a twin. Often sudden death in the best conditioned kids is the first sign of a problem. Diarrhea may or may not develop.

The best control of enterotoxemia, in addition to avoidance of predisposing factors, is vaccination of the doe. Initially, the goat should have two vaccinations one month apart and annually thereafter. It is suggested that a doe be vaccinated during the last third of her pregnancy so that antibodies are boosted for colostrum "pass along" to the kids. In addition to vaccination, control of enterotoxemia can be aided by avoiding sudden feed changes. Guard against overeating

and be careful of accidental access to grains.

Vaccinations limited to *C. perfringens* types C&D, with or without tetanus, may be preferred for goats over using the more complex polyvalent clostridial vaccines which are commonly used for cows and sheep. The less complex vaccines are less expensive and the other clostridial disease, other than tetanus, are less common in goats than in other susceptible animals. One study shows a lower response by goats to a multivalent vaccination (covers a broad range of clostridials) than to the bivalent vaccine (covers only types C&D).** Also, there is well-documented evidence of the occurrence of sterile abscesses, not necessarily caused by careless infection techniques, which appear after vaccination for clostridial diseases.

***C. botulinum* (Botulism)**

This disease is rapidly fatal. It is caused by the ingestion of the toxin which is produced by the organism *C. botulinum*. The bacteria reside in decomposing animal tissue and sometimes in plant material. The disease is actually an intoxication, not an infection.

***C. tetani* (Tetanus, Lockjaw)**

Tetanus is a toxemia caused by a neurotoxin produced by the *C. tetani* organism. Almost all mammals are susceptible to tetanus—cats are more resistant than any other domestic or laboratory animals and birds are quite resistant. Horses and man are the most sensitive. Goats are susceptible. Although the disease is worldwide, some areas, such as the northern Rocky Mountain section, the organism is rarely found in the soil and tetanus is almost unknown. Tetanus is more common in warmer areas of the world. The organism is anaerobic and is found in soil

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The Clostridials

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and the intestinal tracts of animals. It may be passed in feces in large numbers—especially by horses. Goats kept in barns inhabited or previously inhabited by horses may be at increased risk.

The *C. tetani* gain access to the host through wounds caused by accidents, obstetrical intervention, disbudding, dehorning, tattooing, castration, hoof trimming, bucks fighting, shearing and persistent skin irritation including wounds caused by metal neck chains or rope tethers. The *C. tetani* will flourish in a suitable anaerobic environment. It can't grow in normal tissue or wounds with sufficient oxidation from circulating blood. The organism stays localized in the original infected point, but the potent neurotoxin released by the *C. tetani* travels and interferes with the neurotransmitters of the host's muscles.

Incubation can be from one to several weeks. Early signs of tetanus are an anxious expression, stiff gait, mild bloat and a stiffness of the ears and tail. Later symptoms are a localized stiffness, followed by a general stiffness, followed by spasms in the voluntary muscles, including the head and jaw—hence the name "Lockjaw."

Several references note that the method of elastration with bands may be particularly dangerous in establishing suitable conditions for the proliferation of *C. tetani* spores.

Control of the disease involves cleaning all wounds promptly and thoroughly. Open castrations are preferred to banding and disbudding and castration should always be accompanied by an injection of tetanus antitoxin. If the vaccination status of an adult goat in unknown, tetanus antitoxin should

always be administered when treating wounds, dystocias (difficult births) and other potential sources of tetanus infection.

The Gas-Gangrene Group

The gas-gangrene group of clostridia includes *C. novyi*, *C. sordellii*, *C. chauvoei* and *C. septicum*. These organisms actively invade and reproduce in host tissues causing diseases known as Clostridial Myositis, which includes a whole bevy of destructive diseases including Blackleg, Malignant Edema (Gas-Gangrene) and Swelled Head. The bacteria involved produce toxins which spread infection and are responsible for death of the host. They gained the name the "gas-gangrene group" as these diseases are often characterized by swelling, death of tissue, swelling of tissue and gas formation. Host tissues involved may be muscles, connective tissue or other subcutaneous tissue.

Diseased animals are treated with large doses of antibiotic (if treatment is attempted). The goal is made to put effective levels of the antibiotic in the center of the necrotic tissue where the clostridia are found. **Diseases caused by this group of clostridia are rarely found in goats.** One hypothesis to explain this fact is that goats, being browsers rather than grazers are less likely to ingest the clostridial spores from grazing on low lying, wet pastures.

Infectious Necrotic Hepatitis (Black disease)

This disease is caused by *C. novyi*, which is soil-borne and frequently present in the intestines of herbivores. It may also be present on skin surfaces. It is a potential source of wound infection via fecal contamination of pasture by contaminated animals. The most common area of infection is the liver, in the damaged parts caused by migration of liver flukes. There are no well-defined symptoms of this

disease so the first indication of a problem may be a sudden death which is pretty difficult to treat. The disease has been documented in Angora goats in Australia. New Zealand and Australia are considered to have a serious potential for Black Disease in goats as goats are moved into traditional sheep areas.

Navel Infection in Kids

Caused by *C. septicum*. This disease is less common in kids than in lambs. Prevention would include vaccination and procedures to facilitate rapid drying and healing of the newborn's navel cord—the old iodine dip trick.

False Blackleg

False Blackleg is caused by *C. septicum* and *C. novyi*. I couldn't find much about this disease and didn't try very hard as it is uncommon in goats. I assume that symptoms are similar to "real" Blackleg and it has a different name as it is caused by different bacteria.

Malignant Edema (Gas gangrene)

Malignant edema can be caused by *C. septicum*, *C. novyi*, *C. chauvoei* or *C. sordellii*. This disease is uncommon in goats and when found in goats, is mostly found in South Africa, Australia and New Zealand. In the United States, black leg and malignant edema are uncommon in goats, even where the diseases occur in other animals on the same property. They are costly and common in cattle and sheep.

This disease is generally fatal and is found worldwide. *C. septicum* is found in the animals' intestines and in the soil. The organism gains entry through a wound caused by accident, castration, unsanitary vaccinations and parturition. *C. septicum* can live only in dead tissue. The disease causes local lesions with soft swellings which extend rapidly.

Continued on next page

The Clostridials

Continued from previous page

Big Head (Swelled head)

Big Head is a type of Malignant Edema caused by *C. novyi*, *C. sordellii* and rarely by *C. chauvoei*. Disease indications are a swelling of the head, face and neck of young rams or bucks. The disease is initiated by fighting and head butting by the young males. The resulting bruised tissues and broken skin provides conditions for the entry and growth of the clostridia. Toxins released produce local inflammation and can lead to fatal toxemia. Treatment for the disease is broad-spectrum antibiotics or penicillin.

Blackleg

Blackleg is caused by *C. chauvoei*, an organism which occurs naturally in the intestines. The spores can remain viable in the soil for years. Outbreaks were found in cattle after a recent excavation of earth, indicating that buried spores may remain active for many years. *C. chauvoei* may be ingested by the host or a resident (sitting around in the castle drinking beer and watching television) crop of *C. chauvoei* may become active. They pass through the digestive wall into the bloodstream where they are deposited in the muscles and other tissues where the spores hole up waiting for ideal conditions to multiply. Ideal conditions could be triggered by muscle trauma or circulatory disturbance which create an anaerobic environment for the clostridia to grow and prosper releasing their nasty toxins to poison the host. The host dies, they die and what have they accomplished?—seems awfully near-sighted of them, but who has been in the mind of a bacterium?

When the infection develops from within, it is called endogenous and is uncommon in sheep (as well as goats) in the United States. It is more common in New Zealand.

The more common blackleg for sheep in the US follows introduction of the *C. chauvoei* through a wound such as those caused by routine herd maintenance including shearing (cuts), docking, crutching and castration.

Death can occur in 12 - 48 hours. The disease is characterized by swelling, usually in the heavy muscles. The affected muscle is dark red to black, appears dry and spongy, has a sweetish odor and is infiltrated with small bubbles. Any muscle can be infected including the tongue or diaphragm.

Vaccinations are available for prevention.

Summary

You will need to get advise from your local veterinarian concerning which clostridial diseases your animals are at risk for in your area and consult with him/her regarding your vaccination program. Also, as the clostridial vaccines are not 100% effective, especially with goats, extreme care is advised in managing your animals' feed and care in routine management practices so that you do not inadvertently set up the ideal conditions for clostridial diseases.

References:

Goat Medicine, Mary C. Smith DVM and David M. Sherman DVM, MS, 1994
The Merck Veterinary Manual, Seventh Edition, 1991.

**Blackwell, T.E., Butler, D.E. and Bell, I.A.: Enterotoxemia in the goat: the humoral response and local tissue reaction following vaccination with two different bacterin-toxoids. Can. J. Comp. Med., 47:127-132, 1983.

Definitions

Pathogenic - Disease causing.

Anaerobic - Doesn't need air to live; can or must live in absence of oxygen.

Toxin - Poisonous substance produced by a biological organism.

Toxemia - Blood poisoning caused by absorption of toxins.

Septicemia - Blood poisoning caused by absorption of toxins and the bacteria producing them.

Pyemia - Blood poisoning, when associated with multiple body abscesses.

Alimentary - Of or relating to food or nutrition; the path from the mouth to anus.

Bacteria - (I know we've had this one before, but just in case you've spaced it, here it is again.) Relatively large (microscopically speaking), widely-distributed group of typically one-celled microorganisms, chiefly parasitic or saprophytic. They come in three shapes: spherical (coccus), rod-shaped (bacillus) and spiral and threadlike (spirillum). Many bacteria are disease producing - including our goats' clostridial diseases. The clostridial bacteria are rod-shaped. You do remember that bacteria is plural and that just one is a bacterium?

Necrotic - Dead.

Antitoxin - An antibody formed in the body as a result of the introduction of a toxin and capable of neutralizing the specific toxin which stimulated its production.

Toxoid - A toxin, treated so as to destroy its toxicity but leave it still capable of inducing the formation of antibodies on injection.

UNSEEN FIBER ARTS

By George Howe

"Presentation to the Blind"

The title conjures up all sorts of questions that are hard to answer with a quick reply, or a pat answer. Spinning, weaving, knitting or other fiber related crafts are very visually dominated endeavors.

Writing about this type of presentation has been harder to do. The invitation to do this type of show and tell came about with my mother asking if I would bring my spinning wheel and table top loom over to the Director for the Blind Guild (in Grand Junction) and the result was a day and date to do this.

The biggest question I had was how do you show blind or visually impaired people how this craft is done. It isn't as difficult as it first appears to be.

I began by having samples of yarn I had spun and passed it around the table so each person could feel, or see with their fingers. The next thing to make the rounds was the loom. I carried the loom to each person and as they ran their fingers over the weaving I explained the different parts and how they worked.

While explaining the role of the heddle I was at a loss. I could not think of enough words to define this operation. Suddenly while I was watching one of the ladies move her hands over the weaving, I could see how to do it so each person could feel. By placing the loom on the table in front of them, and placing both the index fingers from the left hand and the right hand of the person in the shed created by the heddle, then shifting the heddle to the other position, they could feel the warp threads cross over their fingers. As the warp threads changed position, I explained to them that their fingers were in the position of the weft yarn.

I then presented the spinning wheel in much the same manner. I had taken some unspun wool to pass around so they could feel it. Then by taking the wheel to each person and explaining each moving part and its function as they ran their hands over the wheel.

The number of questions they had was almost as many as sighted people. This turned out to be a very unique experience for me, to be able to show and tell with enough clarity for them to invite me back next spring when a majority of the members will not be visiting families out of the valley.

I had only anticipated a 15 to 30 minute presentation. Before all questions had been answered, an hour and fifteen minutes had slipped by. I hope that by the next presentation I can come up with a shorter version and still have them understand it.

That just covers the highlights of this experience. I hope any one who has this kind of opportunity takes advantage of it. I haven't had a more rewarding experience.

George Howe designs and makes spinning wheels and repairs antique spinning wheels in Elizabeth, Colorado.



Sighted spinners at 1996 CaPrA conference in Wyoming, learning to spin cashmere. Above Karen Triplett (left) and Julie Zuver from Oregon. Below: Marti Wall (left) from Washington and Lynn Venteicher from Montana



Fiber Testing Update

For those of you who are considering having cashmere fleeces tested, the following is the current status of the three laboratories we found currently doing testing. It is our understanding that all three offer fiber diameter testing, standard deviation computation, histograms and other pertinent information.

AgResearch Fibre Measurement

(formerly Whatawhata)

Contact: Paul Turner
Invermay Agricultural Centre
Puddle Alley
Private Bag 50034
Mosgiel, New Zealand
Telephone: 011 64 03 489 3809
Email: turnerp@agresearch.cri.nz

AgResearch offers full cashmere testing, including

down yield, fiber diameter and variability histograms. For current prices, contact Paul Turner. If you are "connected", his email works well.

Macaulay Animal Fibre Evaluation Laboratory

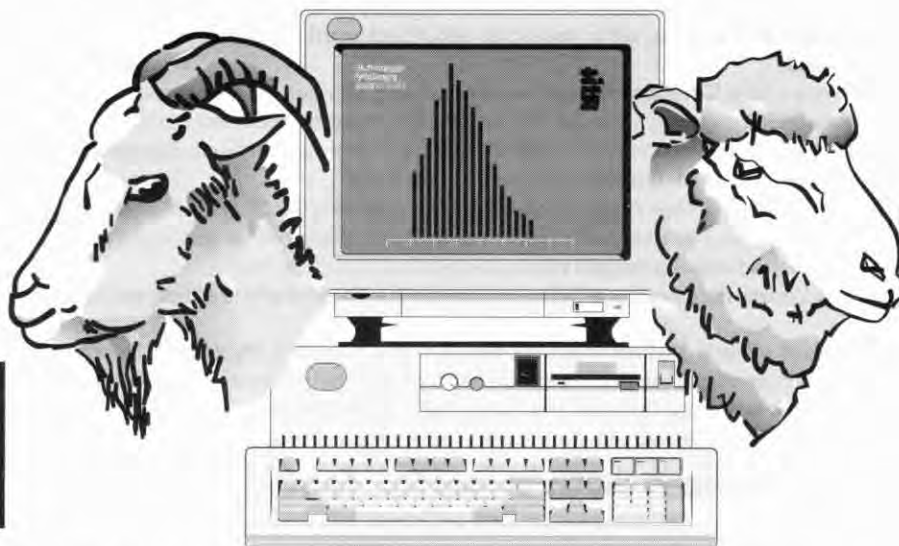
Contact: Helen Redden
Craigiebuckler, Aberdeen
AB29 2QJ
Telephone: 011 441224 318 611
Email: i.wright@mluri.sari.ac.uk

Macaulay offers testing including fiber diameter, yield, and "drawn length." Their tests include a histogram. They offer a discount of 5% for five or more samples and a discount of 10% for ten or more samples. They note that all prices are subject to VAT at 17.5%. Samples must be of at least one gram and should be

Continued on next page



AFM



- **Full Cashmere Testing:** Down Yield and Fibre Diameter plus Variability Histograms
- **Full Mohair Testing:** Fibre Diameter, Medullation, Kemp and Statistical Analysis
- **Full Wool Testing Service:** Yield, Colour, Fibre Diameter plus Fibre Distribution Analysis

Please Contact: **Paul Turner**

AgResearch Fibre Measurement

Invermay Agricultural Centre, Puddle Alley, Private Bag 50034, Mosgiel, New Zealand
Telephone +64-03-489-3809 Facsimile +64-03-489-3739
Email: turnerp@agresearch.cri.nz

Fiber Testing

Continued from previous page

taken from the mid-side of the animals, if taken from a live animal and representative of the whole fleece, if taken from a fleece. Prices advertised in the April 1997, *Scottish Cashmere Bulletin*, for a single test, are as follows:

Fiber diameter	\$14.35
Fiber diameter and yield	\$27.30
Fiber diameter, yield, drawn length	\$27.70

Their prices, of course, were quoted in pounds, so I have roughly estimated the price in US currency. Before sending samples, you will want to contact them to get the exact price and effect of the VAT.

Macaulay is determining yield manually, using projection microscopes. In the very near future, they will be receiving an OFDA, and then they will be fully automated.

Yocom-McColl Testing Laboratories, Inc.

Contact: Angus McColl
540 West Elk Place
Denver, Colorado 80216-1823
Telephone: 1-303-294-0582
Email: ymccoll@ix.netcom.com

Yocom-McColl can now test undehaired samples as well as dehaired samples by excluding all fibers over 30 microns. Their test provides a histogram, average fiber diameter, standard deviation and coefficient of variation of the fibers considered as cashmere.

Per Angus McColl, the yield program for cashmere is not yet as reliable as they need for testing purposes. They will continue to investigate and test the yield program until it is consistent and accurate.



*"Mirror, mirror on the wall,
Who tests the finest of them all?"*



**"Go ahead! Make my day!
Try to steal some fuzz for a test!"**

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CLAUDE MONTANA VS. MONTANA KNITS

By Linda Fox

Claude Montana, noted French fashion designer of cosmetics, luggage, clothing and shoes, has taken offense that Montana Knits located in Dillon, Montana, has been using his name for their business without his consent. In August 1995, two years after Tom and Ann Dooling attempted to obtain a trademark for the name Montana Knits, Claude Montana's attorneys sent the Dooling a "notice of opposition" to their trademark application.

The word "montana" is currently being used by 5,723 businesses in the state of Montana alone and appears in 55 registered trademarks. The Governor of Montana, Marc Racicot is seeking clarification from the Federal trademark office regarding Claude Montana's claim to the State's name. A March 18th letter to the Assistant Secretary of Commerce states that, "It is the State of Montana's belief that the word 'Montana' is generic in nature and refers to a geographic location."

Claude Montana holds several trademarks including "Montana", "Claude Montana" and the "State of Claude Montana." Gerald Padian, attorney with a law firm which specialized in license and trademark disputes said that the dispute would probably be decided based on whether the name "Montana Knits" will create confusion with the Claude Montana products in the marketplace. Claude Montana's New York attorneys declined comment.

The State of Montana is worried that this dispute might affect products marketed under the Montana

Department of Commerce's "Made in Montana" program, which allows "Made in Montana" labels on products having 50% or greater value added in Montana. There are at least 50 other apparel manufacturers and retailers who use Montana in their names, according to the State's Department of Commerce. Dooling said that some of these had backed down from Claude or had decided not to pursue trademark applications. Per Ann Dooling, "We're not giving up. There's no way we could ever be a threat to Claude Montana."

However, it is understandable how Claude Montana might be concerned. Since consumers are basically stupid, it's easy to see how they might think that anything bearing the "Made in Montana" label might have been made inside Claude Montana. This does not paint a pretty picture. Also, consumers might buy Claude Montana luggage expecting it to be lined with cashmere. Then when they get it

home, unzip the stuff (Oops, we're talking Claude Montana here—it probably doesn't zip, it has a nice (very nice) clasp!) and then discover there's not a hint of cashmere in it or even little goat pictures on the lining. Then they have to take the dang thing back and try to explain to the customer service people how they got confused because of the "Montana" thing. Perhaps Tom and Ann should rename their company "France Knits."

The whole episode, however ridiculous, has been great exposure for Montana Knits and for the north American cashmere industry. Recent coverage of the dispute, given a "David and Goliath" slant, has appeared in the ultimate women's fashion magazine, *Women's Wear Daily* (March 21, 1997) and in the *New York Times* (March 23, 1997).

The Doolings, Pioneer Mountain Farm and Montana Knits were also featured in the March 1997 *Farm Journal*.

Ed Note: We thought we were out of it when we heard of this dispute. Paul hadn't heard of Claude Montana and Linda thought he was a football player. However, in the "Women's Wear Daily" article, Ann is quoted as saying that, before the dispute, they had never heard of him either.



From left to right: Ann Dooling, Dr. Thomas McCoy, Dean, College of Agriculture, Montana State University, and Tom Dooling

Finishing Kids

by Dr. Margaret Merchant (MLURI)

This article is reproduced from the newsletter of Goatmeat Producers (Scotland) Ltd. and was later reprinted in the SCPA's Scottish Cashmere Bulletin. We, of course, have the kind permission of the author to reprint it yet again for perusal here in the colonies.

Good news at last! There is now a market for prime and cull stock at prices providing a tremendous boost to all types of goat enterprise in Scotland. It is now up to us to keep it supplied with good quality goats within the ranges specified.

So what is a prime goat? The buyers are currently looking for female or castrated male goats under 18 months of age and with a carcass weight range from 9 kg. - 21 kg. (20 lb. - 46 lb.) Bearing in mind the reported range in killing out percentages (41% to 52%) we should be aiming for a range in live weight from 22 kg. - 40.5 kg. (48 lb. - 89 lb.) at slaughter.

The goat stores most of its fat internally in the abdomen; there is very little subcutaneous fat, so the concept of "finishing" that we apply to lambs does not apply to goats. However, the proportion of lean meat and fat in the carcass is variable and is likely to depend on the pattern of growth as well as the genotype. With greater experience of our product, the buyers are likely to refine their requirements for prime kid meat but in the meantime we should all be aiming to produce kids of the required slaughter weight.

In a dairy herd rearing surplus kids for meat this might mean in-

tensive rearing over a period of 3 - 4 months; in a fibre producing herd this might mean slaughter at 12 - 18 months after removal of the fleece. The optimum pattern of growth will depend on the time of harvesting of other products and the availability of feedstuffs in each individual enterprise.

Kid size will depend on its date of birth and growth rate. In general kid growth is rapid during the first few months prior to weaning, then slows down towards puberty and declines progressively until maturity is reached. Actual growth rates depend on:

1. Genotype (mature size and speed of maturity).
2. Sex of the kid (entire males grow faster but are not eligible for prime classification).
3. Level of feeding.

Goat kids, in addition to the pre-weaning milk supply, may be offered the full range of cereal and forage based diets typically available for lambs, e.g. good quality grass pasture (although sward surface heights will need to be above 6 cm. (2-1/2 inches) for reasonable growth rates, particularly after weaning), arable stubbles (which provide clean grazing) and forage crops, hay and straw for roughage (bear in mind that goats are highly selective and may waste 50% of that offered), beet pulp and grain (wheat and barley have a higher energy content than oats).

Apart from some intensively reared dairy or Boer kids, few, and in particular fibre bearing kids, will have reached the minimum slaughter weight by weaning and while we can aim for pre-weaning growth rates in fibre goats of 150/g/h/day (3-1/3 lb./head/day), this may fail to <20g/h/day for kids weaned in late summer and kept on poor quality forage. Supplementary feeding can be effective at this stage and Angus Jacobsen has reported liveweight gains of 85/g/h/day in cashmere kids fed 150g beet pulp/h/day in addition to sown pasture.

From October to January growth rates are very low and kids should be housed or given access to shelter in all but the driest and mildest of climates. Feeding fibre kids over this period at levels to supply 1.5 to 2.0 x maintenance energy requirements is unlikely to produce growth rates greater than 50g/h/day but feeding ad lib (where kids may consume dry weights of feed up to 5% of their live weight daily, and providing approximately 2.5 x maintenance energy requirements) can increase growth rates to 160 and 90/g/h/day for male and female kids respectively over the housing period. High levels of intake and growth over this period have the added advantage that shorn kids do not appear to suffer a check from cold stress following shearing.

The energy cost of 100g liveweight gain has been estimated to in-

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Finishing Kids

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crease from 2.2 to 2.9 MJ metabolisable energy (ME) in the rapidly growing kid to 2.4 MJ ME in the adult goat (due to the increasing proportion of fat which is energetically more expensive to deposit), and a minimum crude protein level of 12% (of the dry diet) is recommended (although this is increased to 16% if kids are weaned early and non-protein nitrogen should not be used). So we can estimate the feed requirements for a particular gain. However, estimating intake in the grazing goat is not easy, and diet selection and rejection of hand fed forages means that regular weighing and condition scoring of the stock is the best way to adjust feed levels to your own individual system. Why not write to the newsletter and tell us about it—giving an indication of growth rates, costs, etc? We can all benefit from the exchange of information.

Here are a few points to remember:

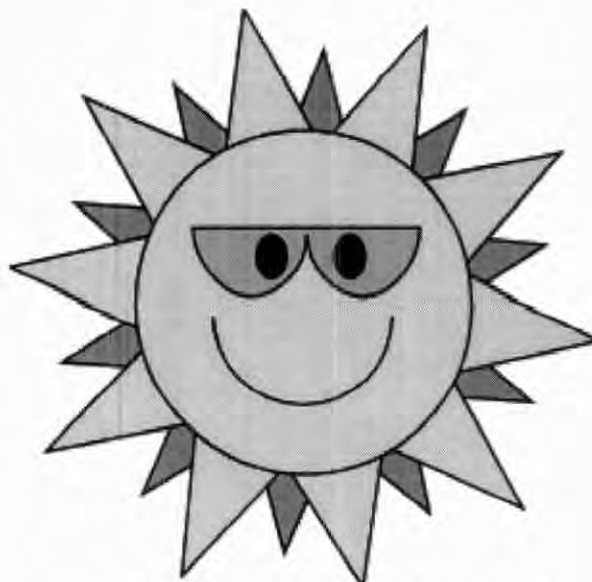
For optimum feed conversion efficiency keep the goats healthy—free from internal and external parasites. Vaccinate against clostridial diseases and adopt a foot care programme. A minimum of 15% roughage is required to maintain healthy rumen function in ruminant animals and a calcium:phosphorus ratio of at least 2:1 is required to reduce the incidence of urolithiasis in male kids.

For high growth rates the goats require high nutrient intakes. To maximise intakes of hand feeding increase the number of feeds offered daily. Take steps to reduce bullying particularly in housed goats. Keep feed and water troughs clean

For cost effective feeding reduce wastage. Concentrate feeds can work out cheaper (\$/unit energy) than conserved forage owing to reduced wastage.

This article is reprinted with the kind permission of Dr. Merchant, The Scottish Cashmere Producers Association and the Goat Meat Producers (Scotland) Ltd.

Dr. Merchant, a research scientist with the Macaulay Land Use Research Institute, Scotland, has been involved in work on animal fibers for a number of years. She and her husband farm in Mains of Drumtochty near Laurencekirk, where they have a small herd of cashmere goats and some fine wool sheep. Dr. Merchant has had considerable success at the SCPA Fleece competition over the last few years and has recently become a member of the Council of the SCPA.



Sunburned Goats? (Photosensitization)

We first learned of photosensitization last year when three of our white does started losing hair around their neck and ears, revealing bright, reddish-pink skin. This happened shortly after the does had been sheared and had kidded. Our Vet, while patiently listening to our theories of mange, white muscle disease, etc., examined the does. He then explained it was probably just photosensitization, most likely caused by a combination of diet, shearing, kidding, and sunburn. Blood tests confirmed this. The tests were performed to check for possible liver disease, which thankfully was not the case.

Photosensitization occurs when the top layers of skin on goats with light skin pigmentation (white) become sensitized to ultraviolet light, beyond simple sunburn. Liver disease, as mentioned, can be a cause, but usually it comes about due to ingestion of a toxic plant. Plants which can cause photosensitization include Goatweed, Klamath Weed, Rape, Lantana, Buckwheat and St. Johns Wort.

The problem we experienced was that the photosensitization had led to dermatitis, as we had experienced a brief period of sunshine right after shearing. This was easily treated with an antibacterial wash and antibiotics.

Our paranoia may have paid off, as it could have developed into serious medical problems such as erythema (reddening of the skin), edema, or pruritus or itching (they rub off hair and skin!), which can lead to infections. Acute pruritus can be fatal.

Lesson learned here: White goats can sunburn, especially after shearing, and sunburn can lead to or result from other problems.

And of course this problem is most likely to occur on your better stock, and not on some lowly, no crimp, short-length, fat-diameter wether who is waiting to become a brush goat, pet, or sausage!

The Nafplio Conference - Setting the agenda for the LSIRDnetwork

By Jerry Laker

The first conference of the LSIRD (Livestock Systems in Rural Development in Disadvantaged Areas) was held in Nafplio, Greece on January 23-25, 1997. The LSIRD network is intended to become a channel for effective international co-operation, collaboration and idea-sharing for research workers interested in the special issues encountered in the European less-favored areas (considered to be 56% of the farmed area of Europe). There are currently 350 members, representing 218 organizations spread across the EU. The LSIRD network was formed about a year ago and this was their first major conference.

The programme for Nafplio was designed to explore the areas in which different research disciplines could be applied to address the specific problems encountered in LFA livestock production, and possible approaches to enhance the role of livestock in European rural development.

The conference began with three perspectives on some of the biological, social and economic problems facing livestock farms. It was regarded as vital that the relationship between livestock operations and economic development of the rural population should be well understood in order to develop strategic and policy recommendations. The types of constraints facing farmers in disadvantaged areas were categorised into 5 types - availability of labour, management skills, grazing resources, status of other land uses (e.g. forestry and nature reserves), and infrastructure. Work was reported that aims to characterise the processes linking agricultural policy and marginalisation of farming operations in the EU.

Key elements in many programmes to improve the profitability of farming enterprises are on-farm processing and direct marketing of the products. Value-adding activities give farmers the opportunity to realise some of the market potential provided by their location in regions identified with quality products, and a clean environment. Three papers examined regional differences in on-farm processing, and the opportunities and constraints that farmers face to develop and exploit a quality image.

The third session demonstrated some of the current work that is being carried out aiming to identify the opportunities for species diversification, using cashmere production from goats as an example. Attempts to identify the current relationships between European fibre-producing groups, were reported, relating in particular to two such fibres: mohair and camelid

hair. Through a series of market-orientated models, future opportunities for co-operation between present and potential contributors to the European fibre pool were identified, highlighting areas of current strength and weakness.

In the light of the shifting emphasis in agricultural support resulting from, amongst other pressures, the WTO negotiations, environmental management is emerging as possibly the key role, and indeed purpose of, livestock keeping in disadvantaged areas. Many of the ecosystems found in disadvantaged areas are managed through the presence of large herbivores, mainly domestic ruminant species, and there is a great need to identify grazing strategies for different farmed species to meet nature conservation and environmental needs.

These different aspects of farming—overcoming the physical constraints, realising the maximum product value, and managing vegetation effectively and sustainably—are all intimately influenced by the wide range of policy instruments acting in disadvantaged areas. These policies were examined in detail, and the effects of the environmental measures introduced in 1992 were discussed, using UK LFA beef farming as a case study.

The importance of farmers in the rural areas of the Union, and in particular in less-favoured areas, was recognised by all. Agricultural activity will undoubtedly need certain aids to compete on open markets, and this may be more or less direct granted or given as compensation for the occupation and maintenance of land. However, there was a diversity of views expressed on whether the priority should remain to

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Cashmere Goats
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Home of
Genghis Khan

Nafplio Conference

Continued from previous page

maintain agricultural and livestock production activities oriented around economic and market objectives, or if this might be replaced by a new ethos in which agriculture should be a means to maintain landscapes, and traditional ways of life.

Arguments were put forward recommending closer integration of rural development and environmental policies into agricultural support mechanisms. In order that appropriate policies may be tailored to suit the diversity of climatic and geographical situations covered by the CAP, it was stressed that considerable flexibility should be left, in order that local decisions, e.g. investments in local infrastructure, subsidies for direct marketing and processing, subsidies for investments outside agriculture or for the creation of tourism facilities etc., may be made at a local level.

The ideas explored at Nafplio will be taken forward and examined in closer detail over the next 18 months in the LSIRD workshop series, beginning in May with the policy workshop—"The future development of EU rural policy mechanisms and the implications for livestock farming research in the disadvantages areas."



Europe



Thoughts on Mothers' Day

We've noticed during the past kidding seasons that all goat mothers are not alike. We took a few minutes out of our Mother's Day celebration (worming and hoof-trimming our mothers—the goat mothers, that is) to observe differences in those instinctive maternal characteristics. We found several different types of mothers on our farm:

Lotus - The Surprised Mom

This is often a new mother. She isn't really sure what she's supposed to do with that wet blob laying beside her. "Whoa! Where'd that come from? Are you sure that's mine?" It usually takes her a while to orient herself, but after the first lick, she knows the drill.

Princess - The Frantic Mother

This one's a worry wort. If the kid is not attached to her teat, she bellows and looks frantically everywhere for him—everywhere except right behind her, of course. It's a fact of life that her kid will be the one that explores and is usually found across the pasture frolicking with the other kids. Perhaps her phobia is not entirely unwarranted, as she has lost one of her babies to a kid thief! (See

Dusty below)

Ida Marie - Overly Protective

She intends on killing anything that comes close to her kid—the guard-dog, other goats, and even us if we don't talk "nice" to her first. She may even hunt down the dog to butt him in case he's even *thinking* about sniffing her kid.

Ashley - The Modern Mom

Her kids are scarcely with her, but they always seem fat and healthy. Her attitude: "Hey, I got things to do; if they need food, they'll find me."

Dusty - The Greedy Mother

"They're mine! All mine!" She wants them all. If hers take too long to be born, she'll steal another's. Clever old gal; she won't succeed with this another year!

The rest - Normal Mothers

The rest of the does don't stand out. They quietly do a good job feeding their kids, keeping track of them and going about their business. The kids are born without incident, raised with no problems and life goes on. Year after year after year.

An Eradication Program For Caseous Lymphadenitis

In Goats in the Southern Netherlands

Note: This information was obtained from the Langston University Extension program materials via their internet pages.

Goat producers have expressed a significant interest in caseous lymphadenitis (CL) in goats. The pathogen responsible for producing the abscesses in goats is *Corynebacterium pseudotuberculosis*. During the past VI International Conference on Goats (1996) in Beijing, China, Drs. D.P. Dercksen, E.A. Ter Laak and B.E.C. Schreuder from the Central Veterinary Institute in the Netherlands presented a report detailing the efforts of goat producers to eliminate CL from their herds. The following is a summary of their report.

The Netherlands has created a program to eradicate CL in a cooperative of 46 farmers with approximately 11,000 goats. This program was designed to produce cheese and other milk products from CL-free herds. The dairy goat industry started in 1985 (*in the Netherlands*) and had expanded by 1993.

As the demand for dairy goat products increased, goats were imported into the Netherlands from other countries along with the possible importation of CL infected goats. The farmers in the cooperative reported symptoms of enlargement of the mammary lymph nodes and the development of abscesses which may rupture and contaminate the milk. They decided that CL would have a negative effect on the marketing of milk and cheese. Therefore, eradication was a logical step.

Because of lack of available land, producers in the Netherlands house all goats indoors on straw

bedding or wooden floors.

In 1989, a voluntary CL eradication program was started in the Netherlands. Members of the cooperative identified all goats by a farm number tattooed in one ear and an individual number in the other ear. Serological testing (A double-antibody sandwich ELISA) and disposal of all positive goats and goats identified with clinical signs were removed from the herds and slaughtered. Producers disinfected pens and kids were reared separately and deprived of goat colostrum.

Goats older than six months were tested every six months. An immunoblot assay was used as a confirmation test for the ELISA-doubtful reactors and ELISA-positive reactors in herds considered being CL free or having at least one previous test without a positive or doubtful reactor.

Herds were certified CL free following two consecutive tests with no goats showing positive results with the ELISA test and with no history of goats being introduced in that period. The CL free certificate is prolonged if all goats older than one year are negative to the ELISA test after 12 months, and herds are then tested every 24 months after that.

Through the eradication program over a six-year period, the number of herds in the cooperative declined from 60 to 46 with the number of goats increasing from 6,200 to 11,000. The percentage of infected or positive herds decreased from 6.7% to 0% and the percentage of positive goats from 82% to zero over the six years. The scientists working on the program suggested that a successful CL eradication pro-

gram must identify and register all goats; use a serological test with a high specificity and sensitivity; slaughter all infected or reacting goats; and have the support of all participating farmers in the program.

Eden Obtains Grant Ten Mile Creek Project

Dan and Sheryl Edens of Helena Montana have received one year funding for a project designed to demonstrate, document and evaluate the control of leafy spurge by grazing cashmere goats in environmentally sensitive areas.

At this time they are in the preliminary stages of startup. The Trust Fund Board approved their proposal and provided funding for one year. The project is known as the Ten Mile Creek Project.

The Edens, as project sponsors, will fence two small plots, heavily infested with leafy spurge, with temporary electric fence. One site will be grazed continually throughout the growing season with one animal unit of goats.

The second site will be grazed using one animal unit of goats on a rest-rotation basis. Animals will be removed after the leafy spurge has been defoliated.

The Edens will publish progress reports and updates during and after the project. They will also make available, upon request, tours to interested groups. The Lewis and Clark County Weed District is their primary sponsor and Bret Olson will serve as the oversight coordinator for all grazing projects statewide.

The Edens feel that this is an exciting step in moving cashmere goats towards mainstream acceptance as a viable weed control method.

A Kinder, Gentler Chicken!???? Comfy Mattresses for Cows!??? Our Tax Dollars at Work...

We are paying our government taxes for this research, so read up!

This information provided complements of the USDA via their internet pages at <http://www.reeusda.gov/new/success/Animal.Final.html> and <http://www.reeusda.gov/new/success/sum96.html>

Thriving Livestock

The USDA'S Animal Well-being/Thriving livestock mission statement: Comfortable livestock are more productive and profitable.

Animals in the wild manage under the theory of survival of the fittest: the strongest survive. But animals under the care of livestock producers have a distinct advantage, with land-grant scientists and specialists battling for their health, safety and well-being.

Although a healthy animal is a worthy goal in itself, the fight against disease, infections and just plain discomfort wages on because the livestock industry pumps billions of dollars into the economy every year.

When reindeer herds in Alaska mean \$1.6 million in meat and by-product sales to Native American villages, these herders take comfort in knowing researchers are monitoring herds for disease and trends in nutrition and productivity.

Whether it's dairy cows in Pennsylvania, chickens in Indiana or mink in Utah, if a livestock industry is economically important to producers, they can count on scientists, professors and specialists (and tax dollars) to back them up.

The Projects

Bad milk is bad business for dairy producers and consumers. Mastitis costs the dairy industry \$185 per cow. So Idaho researchers help them reduce mastitis in the herds to improve milk quality. Eighty-seven percent of Idaho dairy operators have adopted critical milking procedures promoted by the Extension Service. At Louisiana State, collaborative efforts are producing control techniques that cost \$20 per cow but return \$100 in increased milk production. That translates into \$6 million in increased milk production in Louisiana alone.

Cooped-up chickens can get henpecked, making for a short, unhappy life. So Purdue animal scientists are breeding kinder, gentler chickens. Purdue's docile chickens showed dramatic vitality with a 16-

percent mortality rate in 56 weeks, compared to 73 percent for a commercial group of chickens. *(Chickens are already stupid; if we also make them docile, will they have any defenses left?)*

Cows can sleep comfy in Georgia. A new kind of mattress helps cows sleep happy and well-rested. As herd sizes increase and pastures get harder to maintain, cow mattresses in free stalls or barns control the environment around the cow between milkings. Each mattress costs about \$28 and pays for itself in about two years through less disease, less maintenance time and more milk. *(Who trains them not to "go" in bed?)*

After a 35-year struggle, Missouri scientists have developed the tools and techniques for nonsurgical embryo transfer in pigs. The research breakthrough will allow hog producers to change the genetics in their herd quickly and easily without risk of diseases and without surgical facilities. It should also improve the quality of hogs and the uniformity of pork cuts. *(A pig named Dolly? What will Babe think?)*

More than 850,000 cattle in Kansas alone have liver abscesses, generating losses of up to \$56 million a year. So Kansas State researchers are developing a vaccine for the problem, eliminating the need for antibiotics in the feed—alleviating a public health concern at the same time.

Cattle producers in Texas are finding ways to improve quality and reduce costs through the Texas A&M Ranch to Rails program, which tracks and rates cattle through each processing step and uses data to help producers make management changes. So far, participants have seen a 60% increase in profits and a \$21/head reduction in medical costs. The program is going nationwide.

Do you like onions and carrots with your lamb? An Extension Service study at Colorado State learned that sheep producers could lower feed costs by using culled vegetables unsuitable for human consumption. Culled onions and carrots fed to lambs increased growth while maintaining carcass quality with no difference in the taste of the meat. *(What would happen if they were fed good carrots?)*

Pseudorabies, a disease that costs U.S. pork producers millions annually in lost revenues and affects cattle, dogs, cats and some wildlife, may have met its match. Florida scientists have developed a prototype recombinant vaccine that is introduced with the

Continued on page 26

Calendar of Events

May 17, 1997

Fiber Fest

Skagit Valley Fair Grounds, Mount Vernon, Washington, 360-724-5371

June 7-8, 1997

8th Annual Big Sky Fiber Arts Festival

Hamilton, Montana

PO Box 1525, Hamilton, MT 59840, 406-777-4178

June 20-21, 1997

Black Sheep Gathering

Eugene, Oregon, 503-621-3063

June 25-27, 1997

Fiberfest '97: The Forum

Lakeland Community College and Lake Farmpark, Kirtland, OH

70 workshops on all aspects of natural fiber industry

For information contact: Fiberfest '97, PO Box 508, Novelty, OH 44072, 212-256-3828

June 28-29, 1997

Fiberfest '97: The Festival

Vendors, animal displays, competitions, workshops

Location and contact information same as Forum above

September 27-28, 1997

Oregon Flock & Fiber Festival

Angora, cashmere, pygora—livestock and fiber shows and sales, Clackamas County Fairgrounds, Canby, Oregon. For information contact Brandy Chastain, Whistlestop Farm, 503-628-1205

September 29 - October 1, 1997

Virginia State Fair, Richmond, Virginia

Home of ECA's goat show and fleece competition.

October 24-26, 1997

PCMA Business of Cashmere Conference III

Bozeman, Montana, Holiday Inn Convention Center

For information, contact PCMA at 406-683-5445, fax 406-683-5567

Association Contacts

American Meat Goat Association

W. E. Banker, President

512-384-2829

Cashmere America Co-operative

Joe David Ross, Manager, 915-387-6052

fax 915-387-2642

Wes Ackley (Maine) 207-336-2948

Marti Wall (Washington) 360-424-7935

Cashmere Producers of America (CaPrA)

Marilyn Ackley, President

Phone/fax 207-336-2948, ackley@megalink.net

CaPrA office: 512-452-5205, fax 512-452-5521

Colorado Cashmere and Angora Goat Association (CCAGA)

Carol Kromer, Club Contact, 719-347-2329

Eastern Cashmere Association (ECA)

Ray Repaske, President

540-436-3546

North West Cashmere Association (NWCA)

Cliff and Mickey Nielsen, 509-658-2502

Professional Cashmere Marketers' Association

(PCMA), Tom and Ann Dooling

406-683-5445

knits-pioneer@worldnet.att.net

Texas Cashmere Association

Dr. Don Huss, President

915-396-2920 or 915-396-2195

tca@webstar.net

Western Prairie Cashmere Association

John Harris, President

308-635-1579

JHarris@Hannibal.WNCC.CC.NE.US

Wild Goat Women

Debbie Walstead, Chairperson

719-495-2962

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719-347-2510
Fax: 719-347-2696

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Kinder Chicken

Continued from page 22

swinepox virus. This host-specific virus poses little or no risk to humans or other animals.

If you can stop a disease before it gets started, you preserve life, health and profits. A Clemson University computer-based disease monitoring system for the South Carolina poultry industry averted a state-wide epidemic of laryngotracheitis, a disease that can kill up to 70 percent of a flock. (*Go Nerds Go!!!*)

Teamwork in Wisconsin warned animal producers about an outbreak of fungal toxins in corn in 1992. Thousands of farmers received information on the risk and how to avoid feeding contaminated grain. The warnings saved farmers from losses of \$20 million during the following six months.

Aleutian disease in mink infects about 30 percent of the mink herds in Utah, resulting in mortality of about 20 percent. A vaccine being developed against the disease by Utah State promises to eliminate these losses, which could save Utah mink producers \$2.4 million.

Cows need vitamins, too. Tennessee scientists found that excess iron in dairy cattle diets increases the likelihood of two common dairy diseases, retained fetal membranes in cows and udder edema in heifers. Simply by supplementing cattle diets with vitamin E or zinc, producers could reduce these problems.

This is, I suppose, all good stuff—but where's the Thriving Goat Projects?

Note: Italicized comments are not words of wisdom from the USDA folk, merely unsolicited comments from the Editor.



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Dick and Dottie Gould

October Farm II

Baker City, Oregon

The hapless victims of next month's Farm Feature!



Dick Gould (left) and an unidentified, very thin woman
(man?) wearing nothing but cashmere at the
1996 PCMA Conference in Bozeman, Montana.

Why is Dick shaking this thin person's hand?

And just where is Dottie?

Find out in next month's exciting Farm Feature of
The Goulds!

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