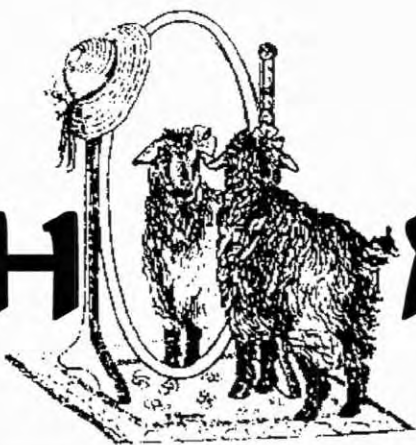




# CASHMERE MIRROR

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Volume 12, Issue 11

September 2001

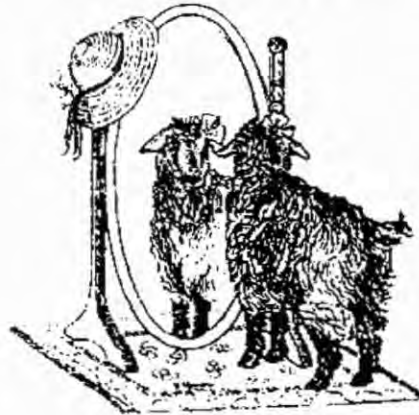
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The monthly magazine devoted to cashmere goats and their fiber



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# CASHMIRROR

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## Boring (Yet Important) Technical Information

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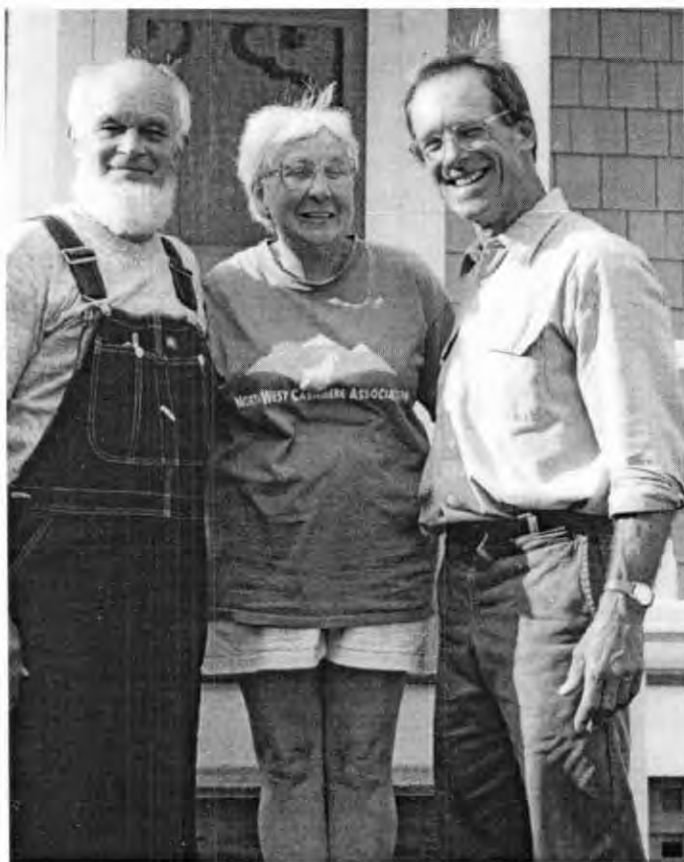
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No responsibility will be taken for material while in transit or in this office, although we will certainly be real careful.

Cover photo: Linda Fox

The Motley Crew

Left to right: Chris Lutpon, Steve Hachenberger,  
Ann Dooling, Paul Johnson



## East Meets West

NWCA members Moon and Diana Mullins from Twisp, Washington travelled east this fall to visit several ECA members. This portion of their trip was captured by photographer Marilyn Ackley in front of their Buckfield, Maine home. That's Wes Ackley on the right. The Mullins' trip was extended on the east coast while they waited for safe airline travel after the September 11th national disaster.

## The Photo Contest

There were so many wonderful entries that we need a bit more time to decide on winners.

Stay tuned for next issue when the results will be announced.

## Excellent Advice For Goat Professionals (Yes, we mean you!)

The following is advice from retiring graphic arts professional, Bob Chester, Sr. In case you're having trouble placing his name, you will probably recall that he was the man who, in the mid-1950's, invented the anhydrous ammonia system that replaced liquid ammonia in all blue-line/direct print machines. His advice was intended for other graphic artists, but we think it is so great we wanted to pass it along to you. We think his comments are applicable to any line of work—including raising goats:

1. Share your knowledge.
2. Expect change.
3. Remember, when you stop getting better, you stop being good.

## We're Late! We're Late! (Again)

Yes, we know this is October and this magazine issue is only for September. The best laid plans often go awry and we are behind schedule, yet again. Be assured, we will get back on track eventually and hopefully be on a more traditional mailing schedule. Please be patient with us; God isn't even close to being finished with us yet...



# Reflections

by Linda Fox

## Back to School

As we spent the weekend doing goat-related chores, I felt like we were getting the kids ready to go back to school. The carefree days of summer are drawing to a close and its time to settle in for the winter and tend to business again—for us and the goats.

We spent the weekend trimming feet, worming and sorting the does into their breeding groups. We observed cashmere growth so far and made notes about individual animals on the barn worksheets. We separated the does into three groups for breeding. Two of the groups got the immediate company of eager bucks and the third small group was moved to a pasture near the house so we could observe them for signs of heat. We intend to do individual breedings for this group, with selected bucks who weren't lucky enough to get a whole group of girls.

It seemed like we were bringing in the herd from their summer wanderings and getting them ready to attend to business. They had spent the summer, for the most part, free of their kids and wandering, snacking on fast-growing tidbits in the pasture and forest as they passed. They had filled their carefree days following the fruit harvest—nibbling on fresh apples, pears and plums as they fell from the trees. Later in the year, they demolished fresh, ripe blackberries along with their vines. We used to have to travel with the company of a machete to get through the blackberry vines in our woods. Now, we have to climb over the fence to find blackberries for jam. We and the goats know that since fall is in the air, it's time to settle in and think about the business of producing babies and cashmere.

The goats know there are perks to settling down to business. While the goats were out wandering, we have filled the barn with hay and fresh bedding straw for the winter. We've cleaned the barn and improved procedures, so maintenance chores will run more smoothly for us and the goats. There's also the grain thing to look forward to. They notice that their grain feeders have been replaced and cleaned and they inspect them regularly waiting for the good stuff to arrive.

There's perks to end of summer for us as well. It's getting dark earlier now, so we have a good excuse to quit working earlier and spend the evening in the house with a good book or a spinning or knitting project. In the winter, we will have better excuses for not working on the fences.



In the summer, after the kids are weaned, we don't see the goats much. They are gone from the barn most of the day, coming back only at night or for water in later summer, when the springs are dry. They don't look to us for providing food, so generally don't have much use for us. On hot summer nights, they don't even come in the barn, but spend the night on the knoll just outside the barn. We've learned that if potential goat customers are coming in the summer, to locate the goats before they arrive, or we may be spending the first hour of their visit searching for the herd. We check their water daily and feed the dogs, but once the hay feeding stops in the spring, they don't like us nearly as much as when we are the source of their food.

In the winter the goats pay us much more attention. If we sit in the barn, many will compete for our attention. The new kids who may have only considered being friendly in the spring and summer, will generally decide that we're OK. It's fun to pet them, talk to them and observe their cashmere growth and expanding mid-sides.

The good news about this back to school thing is that the goats seldom require school clothes. They grow their own winter sweaters and when spring arrives, they will pass them along to us, if we choose to claim them.

### Warning!

**After my article last month about cleaning out the barn and placing the barn goodies on the goats' pasture, we've received a warning from a reader about potential parasite contamination of pastures from this process. Before you hurry out and copy our procedures, you might want to obtain more information. We will publish a story about this from the reader at a later date.**

## When Readers Talk...



Linda,

Well we are progressing! It's been only three years this week to the date since we bought our farm, and we have a new barn 30' x 36' just put up a week ago. The interior is not finished yet since our day jobs get in the way. We are awaiting fencing before we transfer the ladies to the barn from their temporary quarters they've had since the end of July. Hay for the winter is ordered. The fencing guy is to come again this week. And yesterday I visited a nearby place to pick out a buck for visitation rights.

Let me tell you my first impression of bucks—They are STINKING, SLOBBERY, HAIRY, BARBARIC and GENERALLY FRIGHTFUL, overall disgusting males of their species. How can any little buck kid grow to be such a BIG thing? OK, I guess in a bizarre way, there's still a bit of cuteness in them if you look hard enough.

We only have one small oversight in our breed of goat—they're Nubians!!!!!! And their fiber is not much in the way of spinnable, but hey—they were a charity case from an older man, father of a co-worker, who was retiring from farming and didn't want to take them to the auction. At least now we have the facilities to get some Cashmeres, raise some crosses for meat, drink fresh milk, make some goat milk soap, relax and figure out in which direction we really want to move next.

Did I mention the sheep? The animals were a package deal—3 purebred Cheviot ewes and the two goats—a five for one deal!

AND there's more! The day the barn got its roof, a tiger-striped gray kitten came to visit. He stayed. Build it and they will come...

On a less progressive note—the new dehairing machine that in its former life was a hot air popcorn popper has not proven to be successful for dehairing. In fact it had further fibered my kitchen counter until last holiday season, when it was banished to the basement from where it has yet to return. I visit it often when I'm hunting other things down there and have visions of success someday. This hairy battle is not over yet!

Hope you're all enjoying the coming season—or is everything so busy that you haven't realized fall has finally arrived?

Linda Singley  
Shippensburg, Pennsylvania  
September 23, 2001

I recently obtained my first copy of your excellent magazine. Attached is a contribution on a new cashmere programme in Kazakstan, former Soviet Union (printed on page 7, this issue).

Can you inform me whether it is possible to purchase cashmere goat semen from some of the USA breeders?

Yours sincerely,  
Dr. Carol Kerven  
Macaulay Land Use Research Institute  
Scotland, UK  
email: Kerven\_Behnke@compuserve.com  
September 9, 2001

*If any breeders have cashmere goat semen available, please contact Dr. Kerven.*

—Ed.

Dearest Mickey,

I just wanted you to know what a wonderful pleasure it was to finally meet you last weekend. Your picture is on the wall in my office, so I thought I knew what you looked like, but you are much more handsome than your picture. I love your feet—and your hair is so soft and wavy. Anyway, I will look forward to our next visit together. In the meantime, do take care of yourself and keep everyone in line over there.

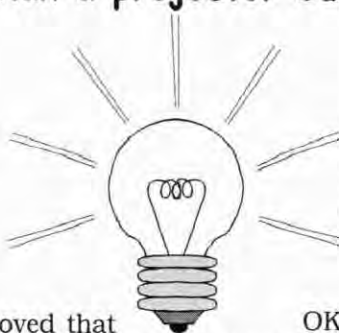
Your Most Devoted Fan,  
Ann Dooling  
Dillon, Montana  
September 27, 2001



**What's almost as fast as a speeding bullet, stronger than a local motive and slightly smarter than a projector bulb?—It's Paul and Steve!**

## **Lights Out...for Dr. Lupton**

**By Steve Hachenberger (aka Robin)**



## **It Was a Dark And Stormy Night...**

**By Paul Johnson**

Dr. Chris Lupton has once again proved that no matter what the event or the complications that arise, he can please the crowd.

In Canby, Oregon, we were honored by the presence of Dr. Chris Lupton of the Texas Wool and Mohair Department of Texas A & M University. Dr. Lupton has been a key part of the education in measurement of animal fibers and studies in fiber producing animals.

As the crowd assembled and the room was darkened for the slide presentation, we had less than 3 minutes before the lamp in the slide projector blew up. There was no spare bulb with the projector, so we needed to get another bulb. The task could not have been completed without Batman and Robin, aka Johnson and Hachenberger. These two went out into the night (well...it was really only about 6 PM) to find a bulb. Without delay, both proved that they could do just what was expected of them. NOTHING.

You would have better luck finding Paul or Steve than that stupid bulb. The town of Canby apparently does not own another projector bulb—or even another slide projector compatible with Dr. Lupton's slide carousel.

All the while, Dr. Lupton did what he does...just talk in that slow Texas style to the crowd. By the time Batman and Robin returned, the crowd was less interested in the slides and more interested in asking more questions. After Dr. Lupton completed his talk about the Latitude Study, the group rearranged for a round table discussion on cashmere and directed questions in various areas of the business to Dr. Lupton, Ann Dooling, Steve Hachenberger and Paul Johnson. The result was a satisfied group of people at the end of a very long day.

Although the people who attended the lecture were not able to see the slides, they did leave exhausted and full of information that was not, in some cases, featured in the general presentation.

As for Batman and Robin, they did not save the day with the bulb. It was Dr. Chris Lupton who kept the masses at bay and perhaps in the end it worked out better this way. If you attend Dr. Lupton's lecture in the future you will not be disappointed. Even if the lights go out, you will still learn much from the time you spend with our honored speaker. Who needs super heroes anyway?

OK, it was a bright, sunny day at the Oregon Flock and Fiber Festival. A feeling of dread suddenly coursed through my body as if someone had stepped on my grave (which of course is silly as I don't have a grave yet, and if I did, I would be in it and not feel anything.) Where was I? About 1:00 PM PST or is it PDT or PDST? Anyway it was several hours before Dr. Chris Lupton was to speak, I felt a sense of urgency about making sure the promised projector was present and ready for his slide presentation. After two hours of increasing panic, I found the person in charge of the event, only to find she had brought an overhead projector, not a slide projector. After another hour of trying to find, rent, buy or steal one, the L.I.C. (lady in charge) offered to "run home" and get hers. She lived over an hour away. After more calls and as the time for the presentation drew closer, she left to retrieve her projector. Two very long and tense hours later, just as Dr. Lupton was beginning to speak, the projector arrived.

Steve and I, as excited as two giddy first graders, ran into the presentation, plugged in the sacred projector and sat back, feeling like heroes with a job well done. The projector bulb exploded after the first slide.

After a huddled conference with Chris, Steve and I galloped off once more, now in search of a simple, common, everyday projector bulb. At our first stop, where they sold carousels for the projector, but no bulb or projector, they assured us we could find one "just across the street."

What followed was a Keystone Kops rampage through the small town of Canby, with ideas of where to try next getting wilder by the minute. Finally, after considering, then rejecting, Steve's last idea of throwing a goat through a school window to break in and seize a projector, we realized we were out of time.

Meanwhile, back at the fiber show, Dr. Lupton was bravely going on (it had been over an hour, at least since we had left) without slides in front of 40+ people.

We returned with sad faces, our reputations as heroes tarnished (again).

All ended well, as Ann Dooling and Steve Hachenberger joined Dr. Lupton in an open forum on cashmere goats that lasted another hour and a half. Not a single person left early,

Thanks again, Chris. You are our hero!

## Dr. Lupton Speaks

By Linda Fox



Dr. Christopher Lupton, from Texas A & M University talked to a roomful of attentive cashmere growers at the Oregon Flock and Fiber Festival held in Canby, Oregon. His intent was to talk mostly about the recently concluded Latitude study. The talk was shorter than planned due to the bulb affair, which you probably

learned more about than you cared to know from the previous page.

The results of the latitude study are still being analyzed and a paper will soon be published detailing its procedures and finding. This project was designed to study the effects of location on fiber production. Cashmere and Angora herds were maintained at three locations—Alaska, Montana and Texas under similar management programs. The Spanish goats were Texas selected cashmere producers. The cashmere goats were high-producing cashmere goats from Montana, from Australian genetics. Fiber growth was compared and analyzed.

A previous paper, "The Effects of Location on Fiber Production by Cashmere Goats: The Latitude Study—One Year In," was published in the December 1999 *Cashmirror*. The first year of the study found that location had no effect on cashmere production when expressed as grams of down per animal. However, when production was expressed as cashmere/lb. of animal liveweight, the goats in Alaska and Montana produced more than the cashmere goats in Texas. The cashmere goats in Texas produced coarser down than those in the other locations. Down staple lengths were similar among locations. It was felt that, for the first year of the study, location appeared to have a greater effect on Texas cashmere goats, which are relatively low producers, compared to the cashmere goats based on Australian genetics. However, it was noted that there were confounding variables which made conclusions tentative at the end of the first year.

Dr. Lupton said he was not yet prepared to discuss the findings related to the Angora goats in the study.

Even though it was intended to keep the goats under similar management conditions, so the only variable would be location, it was difficult to eliminate other factors. Weather conditions at the Alaska location were severe and snow covers the ground for six months of the year. The first Alaska winter was horrible; it was -40° for one entire month and most of the Angoras and some of the cashmere herd was lost. The goats in this herd were supplemented with local Timothy hay. The goats in Alaska did not grow as large as the other goats even though they were given all the food they wanted. This was probably because they used so much food for maintaining warmth. Chris emphasized that the goats in all locations were not

hungry and that all three herd managers were good livestock producers. Per Dr. Lupton, it might have been better to use fully grown goats for the projects rather than young goats, to avoid variations in growth.

Different locations required differing shearing times. Texas goats were shorn in January, Montana goats in mid-March and Alaska goats in April. The Alaska livestock producers were uncomfortable shearing their goats, even in April, due to severe weather.

In comparing fleeces, Dr. Lupton had the impression there was a density difference in the fleeces. It is probable that all goats had the same number of hair follicles, but that not all follicles activated every year.

The Texas (Spanish) goats in the study grew larger than the Montana-produced cashmere goats, but produced less cashmere.

Results measured each year included body weight, grease fleece weight, cashmere yield, cashmere down weight per goat, cashmere down weight per kg of body weight, cashmere diameter, guard hair staple length and down staple length. Findings were compared among the three years and among the three locations. The findings and analysis of these findings is complicated and analysis is not complete. Rather than attempt to pass along what I gleaned from Dr. Lupton's talk and the summary tables distributed, we will wait for the published study to give you complete details.

**Additional thoughts from Dr. Lupton and the other experts at the discussion group (not necessarily related to the Location Study):**

The Angoras are a relatively delicate breed compared to cashmere and Texas goats.

In most species, the more they eat, the coarser their fiber becomes. This is called the nutrition effect. Most of the current literature shows that increased food has no effect on the diameter of the cashmere. However, most of the research used Australian feral goats which are similar cashmere producers to our Texas cashmere goats. Lack of a nutrition effect might be due to relatively small amount of fiber produced by a cashmere goat—80-150 grams, as compared to 20 lb. of mohair from an Angora goat. Since the amount of fiber produced is less, less of the nutrition intake goes into the fiber. Perhaps the Chinese Lioning goat, producing 400-600 grams of fiber would show a nutrition effect.

You can use melatonin to fool the goat into reacting as if the daylight hours were different and thus change the timing of fleece production. You cannot use melatonin to change the amount of cashmere produced.

Don't use a buck until you have measured 3 fleeces from him. Use a good buck until you find a better one.

A doe can be used for breeding until they are 8 or 9 years old. Only use a doe under age 4 (or even 3) for faster improvement of the genetic line.

Americans are big on breed standards. However, on a production basis, the rest of the world doesn't care about breed standards.



## The Prickle Factor

Mohair sweaters. What does that image evoke for you? For many of us, it brings up two words—fuzzy and scratchy or itchy. Have you ever wondered why a fabric is prickly? This is important to cashmere producers, as our product is noted its softness and lack of prickle.

Scientists also wondered and studied the matter. They determined that the substance doesn't cause the prickle—in other words, it doesn't itch because it's mohair or because it's not cashmere—what the garment is made of makes no difference to the comfort of the wearer. However, if a certain percentage of the fabric is composed of fibers fatter than 30 microns, it will itch or prickle. The prickle factor is defined as the percent of fibers in the fabric which exceed 30 microns. The higher the prickle factor, the more likely the fabric will itch. It has been suggested that fabrics with a prickle factor greater than 2% not be worn next to the skin.

So, it's the "big" fibers that cause us to itch. The itch is caused when the ends of these relatively large, relatively stiff fibers, irritate the pain nerve receptors near the surface of our skin. These nerves are triggered when the stiff fiber ends exert a force on soft bare skin. Besides the diameter of the fibers, other factors effect the severity of the prickle sensation, including skin temperature and moisture and length of fiber protruding above the fabric surface.

The 30 micron prickle cutoff sounds pretty easy for us cashmere producers. As long as we keep all the guard hairs out of our finished product, we ought to be fine.

Research has shown that males, females and different age groups have a variation in sensitivity to prickle. In a recent test of skin sensitivity (study only included 55 people), it was found that the population as a whole can sense prickle when there are an average of 5.4 fat fibers in a fabric square measuring 10 cm<sup>2</sup> (a piece of fabric about 3" X 5"). Test subjects age 45-60 were the least sensitive, needing an average of 6.4 fat fibers to make a difference. Males, regardless of age were almost two hairs less sensitive than females. Researchers did not say whether this finding was a surprise or not. Generally, the skin of females and people under age 30 is more sensitive to prickle than males or older people.



## Indian Tribe Fights to Save "Brother"

A small Indian tribe, the Sauk-Suiattle, residents of the North Cascades country near Seattle, is fighting to save its brother, the mountain goat. The goats' Indian name is loosely translated as our-brother-the-color-of snow. These agile, cliff-dwelling goats with pure white wool have been in steady decline for decades. Its numbers are now perilously low. The 200-member Sauk-Suiattle tribe, is exercising its status as a sovereign nation to convene an ad-hoc, interagency committee which includes the Tribe, the U.S. Forest Service, the Washington State Department of Fish and Wildlife and the National Park service in order to attempt to bring back the local mountain goat from the low levels in the area.

This tribe, led by the Mountain Goat clan, is not waiting for U. S. government officials to act. Tribal members have headed to the mountains to collect data on a herd located in a remote area. It is hoped that this data will help persuade the government to fund further research.

"If the goats were gone, we would lose everything," said tribal elder, 86-year old Katherine Joseph. These goats have always defined life for these mountain Indians, who now live a few miles outside Darrington, near the Sauk River.

For centuries, the Indians have turned the goat wool into clothes, consumed their meat and used the horns for utensils and ceremonial objects. The tribe no longer eats the goats. The goats are described by one tribal elder as "clean spirits."

There are only 100 - 120 goats left in the Darrington ranger District. University of Washington and government officials have various and differing opinions why the goat herd is in decline including parasites, predation by cougars, hunting, and displacement of prime habitat by hikers and loggers. These goats are native to the area. Goat hunting peaked in the mid-1960's when about 400 goats per year were killed. Last year, only 30 were killed in the state.

The Tribe claims its treaty with the United States means that the government has a duty to protect the Cascade goats. They believe that the committee is moving in the right direction, but not fast enough to save the goats. Government officials believe the increase of the herd is not hopeless, but that it will take time to re-establish the habitat necessary to support increased herd numbers.

Tribal Elder Katherine Joseph remembers how "our people used to take care of those goats. They didn't kill them too much, maybe just one or two to feed the tribe. My grandfather used to sing in winter about the mountain goat. That was where he got his power."



## New Cashmere Goat Breeding Programme in Kazakhstan

By Carol Kerven

Kazakhstan is a very large, empty Central Asian country about the size of Western Europe. It was part of the Soviet Union until 1991. The indigenous goats produce fine down of between 11.4 to 16 microns diameter. However, in the Soviet period, state collective farms sought to increase the down yield. National scientists cross-bred the native goats with several breeds of Russian and other Asian goats (e.g. Gorno Altai and Orenburg) to produce more down per animal but with a coarser diameter of 17-21 microns for adults. The down is cashgora. These crossbred goats were widely introduced to the state farms, except in some very remote areas where the indigenous goats can still be found.

Since the collapse of the Soviet Union, the state farms no longer function in Kazakhstan or in most other Central Asian countries, for example, neighbouring Kyrgyzstan. Farmers can now choose their own breeds and they are increasingly interested in keeping native goats again. The crossbred Angora-type goats are weaker and less able to cope with the harsh winter climate of Central Asia. Farmers no longer get any support from the government, and want to lower their costs by keeping hardy animals that require less winter feeding and other care.

At the same time, in the last two to three years Chinese traders have been coming to Kazakhstan and Kyrgyzstan to buy raw cashmere from farmers through local agents. Prices have been good, and farmers are suddenly becoming aware that their goats may be valuable. This spring, some goat farmers in Kyrgyzstan and Kazakhstan were getting up to \$24 dollars a kg. (\$11 per lb.) from traders, for unclassified down. Three years ago, farmers only sold Angora fleeces, at about 25 cents per lb. As the market is just developing, there is a lot of speculation by local traders who are not knowledgeable about cashmere and are buying whatever is available, regardless of quality. Farmers are also uninformed about how to breed cashmere goats and market their down, since this is a completely new venture for them.

There is no research being done on improving cashmere from the few remaining native Central Asian goats. Government funding for agricultural research has dropped dramatically since the end of the Soviet Union. A breeding programme has just started at the Kazak Research Institute of Sheep Breeding in cooperation with the Kyrgyz Livestock Research Institute, with funding from the British Embassy in Kazakhstan. The programme aims to improve the quality of cashmere through selection and breeding of indigenous goats, possibly also with



artificial insemination from international sources. The goal is to create an elite flock from which to provide superior bucks for farmers. If more funding is obtained, the programme will expand to provide farmers with international market prices and advice on improved husbandry techniques. There is a need to train national scientists in cashmere fibre assessment and to attract commercial investment into cashmere processing in these countries.

The new breeding programme is supported by the Macaulay Land Use Research Institute, in Scotland ([www.mluri.ac.uk](http://www.mluri.ac.uk)). This Institute and the internationally-famous Roslin Institute in Edinburgh bred the Scottish cashmere goat in the 1980's and maintains an elite flock with the Scottish Cashmere Breeders Association (web site: [www.cashmere-scotland.co.uk](http://www.cashmere-scotland.co.uk)). For further information contact Carol Kerven email: [kerven\\_behnke@compuserve.com](mailto:kerven_behnke@compuserve.com) and Nurlan Malmakov in Kazakhstan, at email: [nurlan1@nursat.kz](mailto:nurlan1@nursat.kz)



First breeding buck, Billy the Kid, for Kazakhstan's cashmere elite breeding flock, with Dr. Serik Ayrngaziev, principal goat breeder of the Kazak Institute of Sheep Breeding.

## Can This Fleece Be Saved?

By Linda Fox

You've all seen one. A gorgeous fleece—except for a few minor problems—it's full of dandruff, tiny pieces of hay, weed seeds and very fine guard hair. Can a fleece like this be salvaged?

Normally I would just have sheared Black Pearl, sent her fleece in with the others and hoped the processors would make the best of it. However, as Black Pearl started to grow her first coat of cashmere last fall, I noticed that her cashmere was coming in a dark, dark brown color. I quickly claimed her as a combing victim. I love the dark brown cashmere fleeces and like to comb, hand dehair and spin them myself as time allows. If the very dark browns are pooled with other browns for processing, the darkest browns are diluted in the pool and lost. Black Pearl's fleece looked like the darkest brown I had seen on our farm to date and I waited anxiously for her to start shedding.

When her cashmere finally loosened this spring, I carefully combed out her fleece. Even though she was a small goat, I managed to harvest quite a bit of cashmere. Unfortunately, along with her fine, crimped, very dark cashmere came a bunch of other junk.

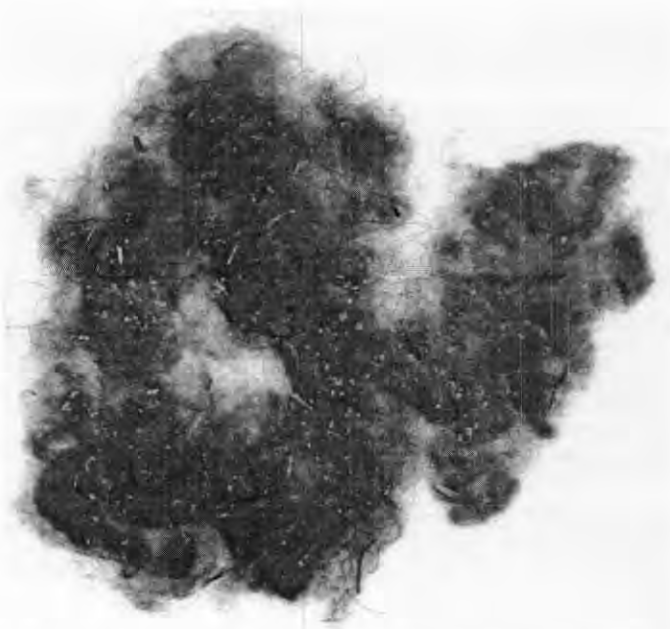
I decided this was a two part problem: 1) How do we avoid dandruff on Black Pearl in next year's fleece and 2) What can I do to salvage this fleece?

The Dandruff Quandary has been addressed quite nicely in the Association newsletters and debated at length among growers. It has been put down to lack of copper, lack of selenium, parasites and other causes. We, of course, will want to research it and present a story as well; it is on our list of things to do for future issues. This story addresses issue number two—how to make the best of this fleece—how photo one, at right, miraculously turned into photo two.

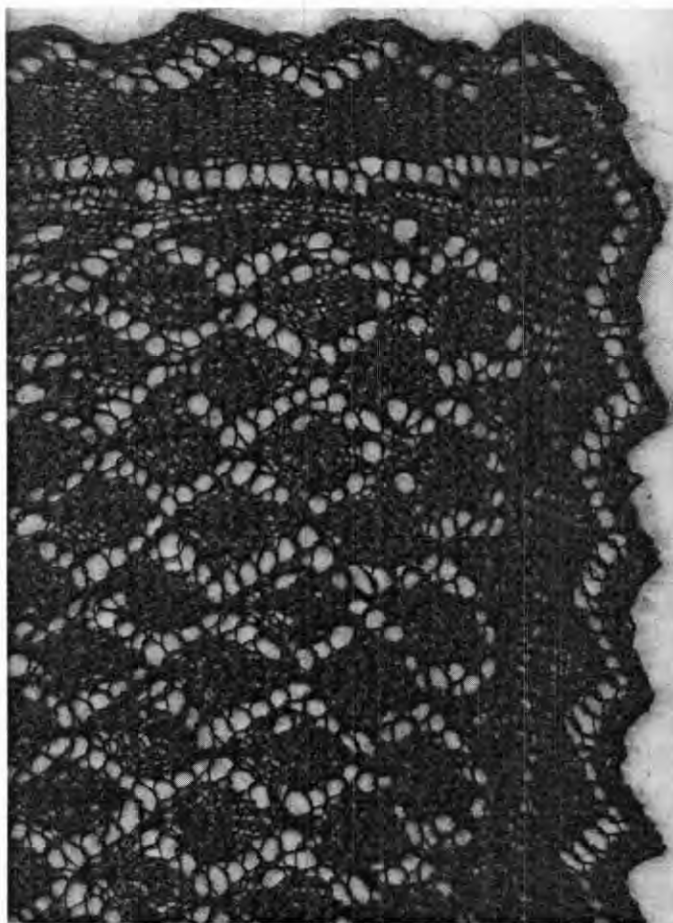
Black Pearl's fleece was harvested in two combing sessions, a couple of weeks apart. She has extremely long guard hair, but I find no difficulty in hand combing cashmere from long guard hair. I first brush out the guard hair to remove the tangles and then, usually, the cashmere underneath combs out easily even through the long hair. Black Pearl was no exception and didn't seem to mind her first experience in giving up her hair as long as she was provided grain from time to time. She's a practical girl. The first combing seemed to result in cashmere with very little guard hair. The cashmere removed in the second combing session contained more guard hair, hay, weed seeds and a whole lot of dandruff.

My experience is that dandruff is extremely difficult to remove by hand. Some of it will shake out, but most of it sticks to the fleece and it is tedious and time-consuming to pick it out. When I try to pick out dandruff, it seems that I end up disposing of a lot of fleece with it. In fact, there are so many bags of fleece around here without dandruff waiting to be dehaired that I won't usually waste my time attempting to clean up one containing dandruff.

Continued on next page



**Before:** A beautiful dark brown cashmere combed fleece—full of dandruff, hay and other assorted trash.



**After:** A corner of a 12" X 16" sample Orenburg-style shawl. After spinning, knitting, washing and blocking, it's fairly trash-free except for a few guard hairs, which can be easily pulled out. Don't look at this photograph too carefully; there are mistakes in the pattern—I'm still learning to knit lace.

## Saving the Fleece

Continued from previous page

When hand dehairing this fleece, I found that the guard hairs, which were mostly black, were very fine and almost impossible for my eyes to see against the dark brown cashmere. Even the cashmere I had combed during the first session which I thought had very little guard hair, upon closer inspection, contained a lot of the very fine, dark hair. After spending an hour dehairing and ending up with a disappointingly-small pile of dehaired fleece, serious eye strain and a major headache, I reassessed my options. I did not want to spend the rest of the week trying to clean up this fleece, but I did want to see it knitted up. I decided to pick out the worst of the hay and seeds and any big clumps of guard hair, shake out what I could of the dandruff and attempt to spin it as it was.

I didn't wash the fleece before spinning, but sent it directly to the cotton hand cards. The carding allowed more of the dandruff to shake out and I pulled a few more of those pesky guard hairs if I saw them sticking out. The spinning process took longer than usual as I had to slow down to pick out seeds and hay I had missed and to toss out an occasional guard hair. I did not attempt to pick them all out, but just removed some as time allowed; many were spun up in the singles. Most of the dandruff flipped out as I spun the singles. As I wound the single strand onto the ball winder, I placed my index finger and thumbnail loosely on the strand between the spinning wheel and the ball winder. As the strand passed between my fingers, yet more of the dandruff was removed or loosened. The remainder seemed to fly off as I plied the yarn. I spun the singles fairly fine and made a two ply yarn. The spun up guard hair and dandruff didn't allow me to make as even a yarn as I'd like for lace, but it still ended up very nice, and the color was gorgeous!

After spinning I washed the yarn skein and fullled it. After the skein of yarn dried, I pulled out a lot of guard hair that stuck out from the yarn. It pulled easily. The dried, fullled yarn no longer looked uneven.

I knitted a small sample lace block, using the standard 5-hole border from the *Gossamer Webs* book and a pattern called Willow from another lace book, *Traditional Knitted Lace Shawls*, for the center section of the piece. I'm still struggling with lace knitting, working up to that full-size Orenburg shawl, so I hunted for patterns that I thought I could follow by looking at the knitting rather than by following a pattern book line for line. My goal in life is to be able to talk or watch television while knitting lace without making mistakes or losing my place. I used No. 5 knitting needles and made the mini-shawl using the typical Orenburg shawl construction method, where you knit one side of the border, turn the corners and then knit across the shawl doing the side borders and the center section of the shawl at once. When the center section is complete, you turn the corners at the top edge of the borders and knit the remaining border, picking up the edges of the center section as you go. I am amazed every time I do this at how great it works. Don't look at the photograph of the sample shawl too critically. It's far from perfect. This was

my first attempt at placing a pattern in the center section.

After the knitted sample was complete, I washed the piece and blocked it. I stretched the wet piece as tightly as possible and pinned it with straight pins on one of those fold-up cardboard fabric cutting boards. I like to use these because they have one-inch squares printed on them and it allows me to block my work even and symmetrical.

After the mini-shawl dried, I found I could pull even more guard hairs from it. Now that it is done, I still find an occasional black guard hair poking out and I'm sure there are still more hiding in the piece that will work their way to the surface. It could be that if something knitted like this is worn next to the skin still, it would be prickly—especially if there are more than 63 guard hairs left in the piece. If you have no clue what I'm talking about it means you were a naughty reader and skipped over page 8 to get to this story.

However, the prickly factor may not be a factor here even if there are still too many guard hairs left as there's not too many places one can wear a shawl this tiny and the doll that I intend to let wear it seldom complains.

Do I intend to repeat this process with Black Pearl's fleece this coming spring? No! I will comb her again, but I will try to solve the dandruff problem, stop throwing hay over her back to eliminate the hay and seeds in the fleece and I hope that her guard hairs will have thickened. Also, since the fleece harvested from the first combing contained considerably less guard hairs (and less dandruff) than the fleece from the later harvest, I may try to reclaim only the first harvest. I could hand dehair the first combing and put the results of later combings in with the commercial processing batch—or comb her once and then shear her, knowing that the yield on the sheared fleece will be less.

Watch out Black Pearl—I have a comb with your name on it!



Black Pearl



### Cashmere Goat Breeding Herd FOR SALE

**SUMMARY:** Capricorn Cashmere, among the most widely recognized and successful active breeding goat herds in the United States is FOR SALE. The children are grown and gone, the kid goats are not, and owner/founder/manager/field hand Kris McGuire is busy with world travel for both personal and professional reasons. She has become involved in international consulting and volunteer work to aid struggling cashmere growers in foreign countries. Bottom line: no time for her own herd. After 12 years of careful breeding selection, showing, shearing and study, Kris's herd has been called "one of the best in the United States". And, it is for sale as a viable, ongoing livestock enterprise that can be expected to return your investment.

**HISTORY:** Capricorn Cashmere was established in 1989 when Kris traveled to Australia to study under the experts of the time and learn how to select top quality breeding stock. She imported 21 goats and Capricorn began to breed goats. In the past 12 years Capricorn has won every major goat and fleece competition in the United States (and some in Australia) and has been Most Successful Exhibitor at the prestigious Denver National Western Stock Show four times.

**OBJECTIVE:** To find a novice or established farm to take over the business so 12 years of genetic gain can continue to be maximized and serve as the source of superior genetics for cashmere breeders in the US and Canada.

**INCLUDED:** 50 Elite does (25 adults, 25 replacement does), 2 adult bucks, 5 kid bucks, 10 fiber wethers, 1 guard llama, 1 guard dog, 1 herd dog, management equipment such as shears, head stalls, leads, combs, frozen semen, free delivery in the continental US, pedigrees, records, and professional instruction in breed selection, management, fiber identification, and business planning support for two years after the sale at no expense. Also included are the name, reputation and clientele. These animals are not seconds or culls. These are the best of the best; there has been no cherry-picking. Up to 25 Select does (\$150@) and 5 kid bucks (\$150-250@) also available. Elite adult does tested 16.1  $\mu$ , 20.3% COV. Select adult does tested at 17.1  $\mu$ , 20.5% COV. Yearling does tested at 15.4  $\mu$ , 21.8% COV.

Free delivery in the continental US is available.

#### FINANCIAL SUMMARY:

A complete financial summary is available online at: [www.CapCas.com/capricorn\\_cashmere\\_is\\_for\\_sale.html](http://www.CapCas.com/capricorn_cashmere_is_for_sale.html) or by contacting Kris at 970-493-6015, 824 S Hwy 287, Laramie, WY 82070



### The Boer Four

This black cashmere doe is the proud (tired) mother of these four (4) Boer-cross *doe* kids. They were born this spring and are all big, healthy and doing fine. Doug said they tried to supplement their food, but only two of them would drink from a bottle. Today, Doug reports that one of the four is the largest of all their Boer cross kids. Photo by Doug and Roberta Maier, Breezy Meadow Cashmere Farm, Bellingham, Washington.

### Fleece Evaluation 101 (A Valuable Tool)

An ECA fiber packet designed for assistance in learning how to evaluate cashmere fleeces is now available:

\$10 for Eastern Cashmere Association members  
\$15 for non-members

To receive your packet, mail check (payable to Eastern Cashmere Association) to Ann Wood, PO Box 567, South Vienna, Ohio 45369

<http://www.justsaywow.com/smile.htm>

This is a totally useless website.

However...I keep a link on my desktop and connect up whenever I need a smile. The tinny little tune alone is enough to cheer you up!

--Ed.

## Enterprise Budgeting for Ewe Flock Operations Shhhhhhh!... You Can Use it for Goats, Too!

<http://www.montana.edu/extensionecon>

This is the internet address of the Montana State University Extension Service web site. Included on it, among other things, is a new downloadable program developed to aid sheep producers in evaluating current and alternative enterprises for profitability. The *Sheep & Goat Research Journal* (Volume 17, Number 1:2001) recently printed a Technical Note featuring the new program. The program is an Excel 97 spreadsheet template and can be downloaded from the site listed above. The program will, per the web site description, "Calculate both the variable and fixed costs and show both cash flow and profitability analysis for a ewe flock enterprise." The program is designed to calculate revenues, expenses and profits for a business that is not undergoing significant change. It is not intended to handle costs of a business in a transition or start-up phase. It is designed to help a producer analyze and evaluate current operations or potential future operations.

The spreadsheet downloads easily with a click of your mouse on the "EweCost" selection on the first page. The download operation will move a copy of the program to your computer and open it with your Excel program. If you have a later version of Excel, don't worry. Your newer Excel will be able to read the file and happily convert it. Once you have the thing on your screen, you can then save the file on your computer in a directory (file folder) of your choice and log off the internet site (after you've checked your email to see if there's a message from your mother, of course).

Once you have the template, you can enter input data of your own and the spreadsheet will calculate various reports for you. The EweCost program contains four sections: revenue calculation and inventory check, enterprise operating costs, enterprise ownership costs and results of operations.

In the first section, the user enters various basic information about the operation. It is noted that the beginning and ending inventory of the ewes (pretend they said does here) should be the same or similar. If it isn't, the budget developed will only be accurate for one production period. You will enter items such as value of a breeding ewe in your flock, cull rate, weaning percentage and other income—that would be those big fleece checks and perhaps lease income from weed eaters for hire. You will need to convert your income from stock sales to a per pound rate as the program does not allow for sales price entry on a per animal basis. Fortunately, this is not difficult.

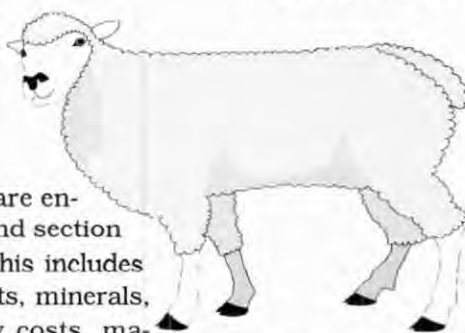
Operating costs are entered in the second section of the template. This includes hay and feed costs, minerals, straw, veterinary costs, machinery repairs and operating costs and pop for the barn refrigerator. There isn't any heavy math required. You enter number of tons of hay required and price per ton and number of sacks of grain required and price per sack and the program takes it from there. Costs entered in this section are what the accountants term variable costs—those that vary with the volume of the business. If you have one animal, she eats 3 bales of hay and 1 bag of grain per year. If you have ten animals, you can count on buying 30 bales of hay and 10 bags of grain.

The third section is for what the authors call ownership costs or fixed costs. Fixed costs are those that remain substantially the same no matter what your business volume. An example of a fixed cost noted in the article is the cost of owning a tractor. If you paid \$5,000 for your tractor and pay \$200 per year for taxes and insurance on it, these costs will be the same whether you have 10 animals or 1,000. The costs of *operating* the tractor—fuel, repairs and tires—will vary and will be included with the operating costs. Depreciation, interest (or opportunity costs), taxes and insurance are also entered in this third section.

When all input is entered, you can print schedules of revenues and animal inventory numbers, operating costs (including per head costs), ownerships costs, profitability and cash flow summary and a sensitivity analysis. Whatever that is.

Expect to spend some time with this worksheet if you want to obtain accurate information from it. I spent only half an hour playing with the program by entering information for our operation. My results indicate that I started the year with 30 does and ended it with -1. I earned \$257.05 per "breeding ewe" which included my annual fleece check of \$1,600. So far, this is sounding like a fairly lucrative operation. However, my return on investment comes in at -5.11%. I do believe that this template works well—you just need to spend adequate time with it.

There are other downloadable computer files on the Montana University Extension page, including "NOXSWEED" and "GRASSFAT" which look interesting. Many of these spreadsheet templates are also available as Quattro and Lotus files, for the non-Excel folks.



# Facial Eczema

Facial eczema is a condition of severe dermatitis in cattle, sheep, and goats caused by a toxin in spores of the saprophytic fungus *Pithomyces chartarum*, which lives in dead vegetative material in pastures, especially perennial ryegrass. Facial eczema is an example of "secondary photosensitization," in which the skin lesions are really the secondary result of liver damage, rather than the direct result of a plant toxin. The liver damage in facial eczema is caused by the toxin *sporidesmin* in the fungus spores <sup>1</sup>.

The *Pithomyces chartarum* fungus grows in the humid, protected dead material at the base of forage plants. Fungal growth is favored by warm, wet, humid weather, or with heavy dews or irrigation. Spore levels can rise quite rapidly under these conditions. The practice of intensive grazing may actually increase the incidence of facial eczema, because animals in closely-grazed pastures consume vegetative matter that may be heavily contaminated with fungus spores.

Facial eczema is relatively common in areas of New Zealand. Facial eczema has also been observed in Australia, South Africa, and in irrigated perennial ryegrass fields in the United States (Oregon). Perennial ryegrass is the grass species most associated with facial eczema. *P. chartarum* does not grow well in legumes.

Under normal conditions, the chlorophyll in ingested forage plants is metabolized by rumen microbes into phylloerythrin, which is absorbed and transported to the liver. Healthy livers then transfer the phylloerythrin to the bile for excretion. Livers damaged by the sporidesmin toxin cannot properly metabolize phylloerythrin, which then accumulates in peripheral blood. Circulating phylloerythrin causes the photosensitization reaction in nonpigmented skin <sup>2</sup>.

Animals suffering from facial eczema become restless and seek shade (photophobia). Growth and milk production are dramatically reduced. Typical symptoms of facial eczema include severely ulcerated skin in non-pigmented areas of the body, particularly on the head and ears of sheep, the top back-line where the wool parts, the light-colored areas of Herefords and Holsteins, and the udder, teats, and inside of hind legs of dairy cows. Newly-shorn sheep are especially vulnerable. Other symptoms may include itching and rubbing of affected areas, scabs, loss of appetite, droopy and swollen ears, and swollen lips and eyelids.

Animals suffering from facial eczema should be removed from the contaminated pasture and provided with shade,

cool water, and a good diet. A major goal of treatment is to reduce the phylloerythrin load on the liver. Changing pastures helps prevent consumption of additional fungus spores. Feeding hay and/or grain also reduces toxin consumption and maintains the animals until the skin lesions heal and new healthy liver tissue can grow. Feeding high levels of zinc may help prevent facial eczema. Zinc is not a treatment for facial eczema symptoms—it must be administered before and during exposure to high-risk situations. In some situations, however, high levels of zinc may interfere with copper absorption and cause a copper deficiency.

The occurrence of facial eczema is also influenced by livestock genetics. Goats are more resistant to facial eczema than sheep, although there is large variation among breeds of goats. The ability to tolerate exposure to sporidesmin is a genetic trait with a heritability of approximately 40%, and selection for resistance is possible. The field test for this trait involves placing sheep in high-toxin pastures and after 7-10 days begin testing for elevated blood levels of the enzyme gamma-glutamyltransferase (a symptom of liver damage). Resistant animals demonstrate a delayed elevation of this enzyme. Animals can be ranked by the results of this tolerance test. Performance testing programs in New Zealand have identified genetic lines of sheep that can tolerate relatively high toxin situations.

## References:

<sup>1</sup>Mortimer, P.H. & D.C. Dalton, 1981, Facial Eczema: Causes, Effects, and Treatment, NZ Ministry of Agriculture and Fisheries, Aglink publication # FPP493.

<sup>2</sup>Cheeke, P.R. and L.R. Shull, 1985, Natural Toxicants in Feeds and Poisonous Plants, The AVI Publishing Company, Westport, CT, esp. pages 365, 456-460.

## Other useful references on Facial Eczema:

Hansen, D.E., R.D. McCoy, O.R. Hedstrom, S.P. Snyder, and P.B. Ballerstedt, 1994, Photosensitization Associated with Exposure to *Pithomyces chartarum* in Lambs, JAVMA 204 (10):1668-1671.

Morris, C.A., N.R. Towers, C. Wesselink, and M. Wheeler, 1994, Selection For Or Against Facial Eczema Susceptibility in Sheep, Proc. NZ Soc. Animal Production 54:263-266.

Munday, R., A.M. Thompson, E.A. Fowke, C. Wesselink, R.M. McDonald, and A.J. Ford, 1993, A Slow Release Device for Facial Eczema Control in Sheep, NZ Veterinary Journal, 41:220 (abstr).

## CURRENT AND PROSPECTIVE SITUATION IN SHEEP AND GOAT BREEDING IN RUSSIA

By Ivan Kusakin, Leonid Zakharov, Hurbimarzarov  
Ministry of Agriculture and Food, Moscow, Russia

From the FAO website at:

<http://www.fao.org/regional/europe/pub/rts50/244.doc>

### Abstract

The combined output of products from sheep and goat farming over the recent years has greatly dropped and now it is developing by the semi-intensive type. The main product of sheep farming is fine and semi-fine wool; their production nowadays exceeds 80 percent of the total clip. The main export products are wool and sheepskins for coats. Agricultural enterprises and farms sell their products in the form of greasy wool and sheep and goat livestock (for meat and breeding purposes).

Before 1994 no products of sheep and goat farming were exported; nevertheless, over the three recent years—due to the absence of a demand from Russian wool processors—export of wool and sheepskins exceeded its domestic consumption, although that export is economically unprofitable. At present there are 34 different sheep breeds and 11 goat breeds. The main trends in their production are fine-wool sheep farming and fine-down goat farming. Agricultural enterprises and farms belong to collective and private forms of property. Nowadays the proportion of privately owned flocks is already exceeding the total flock at collective enterprises. Agricultural enterprises employ collective and mixed forms of labor. The majority of enterprises and farms use a seasonal system of coupling and lambing of sheep and goats. Production of feed for sheep and goats is carried out only at the relevant farms. Concentrated fodders and mineral additives can be bought only in limited amounts. Sheep and goat farming predominantly involves, manual labor; only sheep shearing and fodder storage are mechanized. The Association "Ovtseprom" (Sheep Farming) works on the federal level (Moscow), while large sheep farming territories work under corresponding local structures which are the founders of the Federal Association. There are a certain number of similar Farm Associations and Agricultural Cooperatives which organize farmers producing all kinds of agricultural commodities. Material and technical services are provided by self-efforts of enterprises and farms and also by the relevant services offered by State-owned and private structures. Over the period 1994-1996, the financial subsidies were allocated to enterprises and farms in exchange for realization of their wool clip to the State resources, but since 1997, these subsidies are paid per number of lamb-ewes or a kid-goats available by the beginning of the current year. The main problem for stabilization of the situation in that branch of Russian



agriculture, and further development of sheep and goat farming, is seeking the support provided by the State and the subsequent production of competitive commodities. The wastes of sheep and goat farming are disposed of in traditional forms, and due to big cuts in the total flock their utilization is not ecologically harmful. Regardless of the size of a sheep farm or an enterprise, the level of their production profitability is low. Our main task today is to preserve the genetic fund of currently available breeds for future stabilization and subsequent development of that entire branch of agriculture. The target Federal program for stabilization and development of sheep breeding of Russia has been specially elaborated in order to achieve the aforesaid goals.

### The small ruminant industry in Russia

Sheep and goat breeding has always been very significant for the agrarian sector of the Russian economy. The variety of sheep and goat breeds was much more numerous, in comparison with other domestic animals. Only sheep and goat farming could supply light- and textile industry with such kinds of raw materials as wool, angora, mohair, sheepskins and Karakul lamb skins, and also to supply the foodstuffs industry with meat and milk cheeses, as well as lanolin for the perfume industry.

Agricultural enterprises and farms mainly belong to collective and private forms of property. Now the proportion of privately owned flock is already exceeding the total flock at collective enterprises. Some statistics follow:

Continued on page 17

# OREGON FLOCK AND FIBER FESTIVAL

## CASHMERE GOAT SHOW—FIBER COMPETITION—GOOD TIMES

(DETAILS OF CONTESTS AND WINNERS TO ARRIVE IN A LATER ISSUE)



You spend time cleaning and fluffing up your goat and what happens during the first few minutes in the show ring? Flying sawdust all over your prize goat!



Part of the cashmere goat show—held in an outdoor ring on a beautiful fall day.



2001 Supreme Champion Doe. This is a 7-year old cashmere doe owned by Feral Fibre, Oakland, Oregon. Nice doe!



Young does in the cashmere goat show.

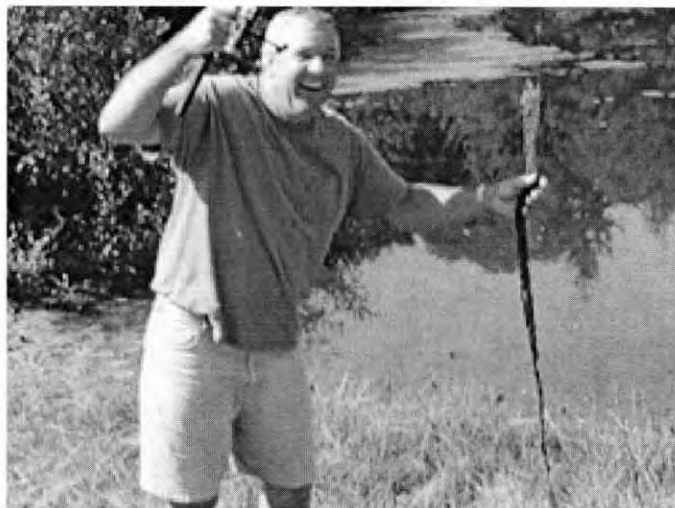
Right: The final contestants and their handlers line up for the selection of the Supreme Champion doe. Judge, Laura Beers (second from left), from Torrington, Wyoming, has a difficult choice to make. These are the Grand Champion winners of each breed category. From left to right: cashmere, colored Angora, other fiber goat, Pygora and Angora.



# SEPTEMBER 22 - 23, 2001, CANBY, OREGON



NWCA information booth—located in the center of the action (and good smells) in the livestock barn. It was full of goodies and people seeking information. It was also the place for NWCA members to check in, hang out and campaign for the hotly contested officer positions coming up for vote.



Steve Hachenberger fishing for bass and bluegill in Johnson's Pond. He claimed it was a fiber fish, but it looked like a string of weeds to us.



Prize winning cashmere fleece—those Spencer girls strike again!



Ann Dooling watching the boys fish on Johnson's Pond. Chris Lupton brought in a respectable-sized bass, Paul caught a bluegill and Steve snagged weeds.



The Three Mouseketeers—probably heading out for slow food.

**Small Ruminants in Russia**

Continued from page 15

Number of sheep-keeping agricultural enterprises and farms - 4,538.

Average number of sheep and goats per enterprise or farms - 2,190 heads.

Territories of agricultural enterprises and farms depend on the geographical region of their location and vary from 100 hectares to some thousands of hectares.

Number of agricultural enterprises not keeping sheep - 21,740.

Total number of agricultural enterprises - 26,276.

There are no specialized sheep-breeding or goat-breeding enterprises or farms.

Russian farmers have accumulated a very unique experience in sheep breeding under harsh climatic conditions; they have developed and introduced a number of programs targeted at converting low-productive coarse-wool sheep breeding into fine and semi-fine wool sheep breeding. They continue their work aimed at creating and improving semi-coarse sheep breeds to produce white carpet wool. Russian farmers have solved various practical tasks of productive sheep breeding in very different climatic regions of Russia, from zones of highly intensive agriculture to the severe conditions of Western and Eastern Siberia. Nowadays there is a big scientific potential to provide prospective development of this branch of the agricultural industry.

Creation of fine-wool sheep breeds under severe climatic conditions which have never been used for Merino breeding, is a unique phenomenon in the world's practice. For example, in the Chita region where winter temperatures fall below 50°C, there exists the Trans-Baikal fine-wool breed able to produce more than three kilos of clean wool. In the Altai region there is the Altai fine-wool breed, one of the best productive breeds in Siberia, giving more than four kilos of clean wool. The general quality and physical-mechanical properties of Russian wool in a number of cases was significantly improved with the use of Australian stud rams.

Farmers of Central Russia keep locally selected Romanov and Kuchughur breeds; in the Northern Caucasus there are Tushin and Karachayev breeds; in Western and Eastern Siberia there are Kulunda and Buryat breeds. Semi-fine wool sheep breeds have been improved today as well.

**The species**

Nowadays in Russia there are 48 sheep and goat breeds with different productive properties which produce a big variety of wool types. The majority of these breeds have been created over the past 40-50 years. But the general situation in this branch of the agricultural in-

dustry has been definitely worsened over recent years. The main products, such as wool, goat hair and sheepskins, are the raw materials for our light- and textile industry. But beginning in 1991 there emerged large stocks of wool, due to the significant decline of wool processing and lack of circulating capital in the mills of light- and textile industry. The wool producing branch found itself in a very difficult economic situation, which resulted in a sharp reduction of the total sheep and goat flock of Russia.

If in the beginning of the 1990's some reduction of the flock could be explained by the current situation in the country's economy; the subsequent fall by five to seven-million heads per year could be explained by only one reason: the very low price of wool and negative profitability of wool production.

Compared with 1992, the total sheep and goat flock kept at farms and different forms of agricultural enterprises fell from 55,200,000 head to 22,800,000 by the end of 1996 (Table 1); the total production of wool fell from 179,000 tonnes to 77,000 tonnes greasy. Over that period of time 33,877 farms and enterprises completely liquidated their sheep breeding (Table 2).

**Table 1. Sheep and goats January 1, 1997 (thousand head)**

|                          |               |
|--------------------------|---------------|
| Agricultural enterprises | 9,936         |
| Private households       | 11,940        |
| Other farms              | 896           |
| <b>Total flock</b>       | <b>22,772</b> |

**Table 2. Structural distribution of the flock**

| <b>Head</b>     | <b>Number of farms</b> |
|-----------------|------------------------|
| < 500           | 1,863                  |
| 500 - 1,000     | 742                    |
| 1,000 - 3,000   | 840                    |
| 3,000 - 10,000  | 943                    |
| 10,000 - 20,000 | 141                    |
| > 20,000        | 9                      |

It is known that a 20-30 percent loss in the number of head needs up to 10 years to restore the flock; while the loss of over 30 percent needs a 40 to 50 year recovery period. The most urgent task of today is to preserve the remaining sheep in the regions of their traditional breeding and also to save the genetic fund of Russian sheep and goat breeds.

Continued on next page

## Small Ruminants in Russia

Continued from previous page

### Sheep breeds

The problem of preserving the existing sheep breeds is extremely critical for Russia. Nowadays in Russia there are 20 rare sheep breeds and 7 rare goat breeds. The existing sheep breeds can be subdivided by the quantities of their flocks into the following categories:

1. Numerous - Mainly Merino kind of breeds (Soviet Merino, Stavropol, Trans-Baikal, Caucasus, Grozny, Krasnoyarsk, Altai, Precos, Volgograd) and Tsigay - over one-million head.
2. Average - Mountain Dagestan, Southern Urals, Soviet Meat & Wool, Russian Long-Wool - 300,000 to 1,000,000 head.
3. Scanty - Northern Caucasus Meat & Wool Salsk, Askania, Kuibyshev, Romney Marsh, Lezghin, Karakul, Romanov, Tuva - 100 000 to 200 000 heads.
4. Rare - Viatka, Gorky, Karachayev, Tushin - 50,000 to 100,000 head.
5. Vanishing - Bakur, Volosh, Kulunda, Kuchughur, Oparin, Latvian, Black Head, Telenga - below 50,000 head.
6. Extinct - Kalmyk Fat-Tail, Cherkessk - none.

Over the recent years we have lost a number of important meat breeds, such as Mikhnov, Bitrug and Bokin breeds. Kuchughur sheep and some other rare breeds are on the brink of extinction. All goat breeds belong to the rare category. One exception is the Dagestan milk goat which can be considered as a vanishing breed. Nowadays, milk goats do not exist any longer.

There are 38 sheep breeds in Russia, out of which 24 belong to fine and semi-fine wool breeds. They produce up to 80 percent of the total wool clip of Russia. Russian fine wool sheep breeding has traditionally developed in three directions: production of only wool, wool and meat, as well as meat and wool. Every fine-wool Merino breed contains internal breeding lines. Today we have 15 fine-wool sheep breeds altogether. The most popular semi-fine breeds are Tsigay and Soviet Meat Wool. Among the rest of the Russian sheep, the most important breed is the Romanov sheep from Central Russia, which is well adapted to our severe climate and brings three to four lambs each year.

Romanov sheep are famous for their unique productivity, high quality of sheepskins, very good coarse wool for Russian winter felt boots, the most numerous lambing, and excellent taste of meat. These sheep are the best to be kept on small farms and private agricultural properties.

### Goat breeds

Nowadays there are ten goat breeds in Russia. Depending on the production purpose they can be subdivided into the following categories:

1. Angora - Mountain Altai, Dagestan, Don, Orenburg - 4 breeds.
2. Mohair - Soviet Woo, Dagestan, Tuva - 3 breeds.
3. Milk - Saanen and crosses with local breeds, Gorky, Russian Milk - 3 breeds.

Continued on next page

**Table 3. Number of sheep and goats in state and collective farms and wool production in the 1st half of 1997.**

|                               | Thousand heads | Actual weight<br>in tonnes | Expected 1/1/98<br>All types enterprises |
|-------------------------------|----------------|----------------------------|------------------------------------------|
| Total in RF in thousand heads | 10,427         | 14,453                     | 19,000                                   |
| Northern region               | 96             | 87                         | 200                                      |
| North-Western region          | 0.4            |                            | 200                                      |
| Central                       | 45             | 28                         | 800                                      |
| Volgo-Vyatski                 | 45             | 54                         | 700                                      |
| Black soil region             | 258            | 277                        | 600                                      |
| Povolzhie (Volga region)      | 2,490          | 3,955                      | 3,500                                    |
| North Caucasus                | 3,751          | 7,948                      | 6,300                                    |
| The Urals                     | 888            | 912                        | 2,300                                    |
| Webs Siberia                  | 963            | 658                        | 1,900                                    |
| East Siberia                  | 1,987          | 622                        | 2,300                                    |
| Far East                      | 0.4            |                            | 100                                      |

**Small Ruminants in Russia**

Continued from previous page

**The possibilities of future**

In order to rescue all the Russian sheep and goat breeding from the current crisis it is necessary to take urgent and drastic measures. The main help must be provided by the state. It is necessary to create a civilized wool market in Russia. The state assistance to sheep and goat breeding is rendered at present in two ways. First of all, it comes as a partial compensation of the expenses to keep the flock at stock-breeding farms, calculated up to 700,000 Roubles per head. Both state sheep farms and private properties obtain specially allocated subsidies from the federal budget, up to 85,000 Roubles per head of a ewe or a goat. The payments are differentiated according to the climatic and economic regions of the country. There are three zones:

1. The zone of most extreme conditions of Western and Eastern Siberia. There are practically no other branches of agricultural production. The zone contains seven Subjects of the Federation.
2. The zone of main resources of sheep and goat breeding, and other agricultural production. This zone contains 20 Subjects of the Federation.
3. The most expanded zone containing 38 Subjects of Russian Federation, but sheep and goat breeding here is not the preferred branch of agricultural production. Starting from next year the subsidies from the state budget will not be allocated here, with the only exception being for the state stock-breeding enterprises.

The farms buying pedigree sheep will obtain some partial compensation of 4,000 Roubles per kilo of the live weight of a young pedigree animal.

The second way to preserve and to stabilize Russian sheep and goat breeding is the production of competitive products.

In comparison with 1991, the production cost of one kilo of wool or mutton has increased more than 1,500 times. The average price of Russian wool, with the subsidy and 20 percent profitability of its production, should come up to 60,000 Roubles in 1997 per kilo clean, or over US\$10. With such level of production cost, we cannot speak today about any competition capacities from our products. It is necessary to improve the productivity of our sheep and to diminish the costs. It is necessary to revise the plans of selection work, and to provide new breed lines and new breeds, in order to correspond to the current needs of the market.

**Breeding, Farming and Trade Organizations**

There exists a special "Federal Program for Stabilization and Development of Sheep and Goat Breeding of Rus-

sia". This program gives the evaluation of the current situation in sheep and goat breeding in Russia and suggests the main directions of its stabilization and development. The main task of the program is to restore the basic stock-breeding flocks of all productive types. The main priority is given to the Merino, Crossbred and Romanov breeds. It is provided to create the state-owned pedigree farms in order to preserve the genetic line of the Romanov sheep and other vanishing breeds. There will be 26 farms of that kind for 15 sheep breeds and also 9 farms to preserve and develop rare and vanishing goat breeds. The farms and enterprises in the main sheep breeding regions, as planned by the program, will establish special banks of seed from the best sire rams of Russian breeds, in order to preserve and to further improve the genetic lines of traditional Russian sheep breeds.

Russia needs to establish a civilized market that will allow stabilization of the current situation in this branch of the industry, which has to act as a united edifice for production, processing and realization of its products.

The currently organized wool market will involve collective farms, state farms and other structures in the form of joint stock companies, wool scourers and wool processors, as well as different commercial structures acting as mediators in wholesale and other trading operations.

The level of free market prices for sheep wool and goat hair is recommended to be determined through the system of auction trading. That will require, in all the wool producing regions the opening of a certain number of State-protected permanent auctions for selling greasy wool and goat hair. The starting prices for the basic types of wool should be proposed by the current market prices for the corresponding wool end-products.

I would also like to say that the aforesaid program is providing the allocation of 5.6 trillion Roubles from the state budget over the period of five years, out of which 5 trillion Roubles are planned to be spent as a partial compensation for the expenses to keep the pedigree flock at the leading farms, and as production subsidies for sheep and goat breeders.

In the case of allocation of these funds and realization of the Program, the clean profit from all the products over the five years is estimated to be on the level of 10 - 12 trillion Roubles as net income to the State budget.

The Program was approved in February 1996 by the Presidium of the Russian Agricultural Academy and Collegiate of the Ministry of Agriculture of Russia, but due to the contemporary difficulties in the economy of Russia, it is financially supported on a limited scale.

# CAE: CAPRINE ARTHRITIS ENCEPHALITIS

By D. M. Sherman, U. of Minnesota, St. Paul (June 1992)  
From the USDA Extension Goat Handbook

In 1974, a scientific report described a previously unreported nervous disease of goats which was believed to be caused by a virus. This was followed by a report of an arthritic disease in goats presumably caused by the same agent. Shortly afterward the viral cause of these conditions was confirmed and the virus characterized. The development of a diagnostic serologic test was soon reported along with the observation that a high percentage of goats in the United States appeared to have experienced the virus. Investigation into the transmission of the disease suggested that virus was spread through colostrum and milk of infected dams and that virus free herds might be maintained by raising kids in isolation.

## Nomenclature

The nervous disease first reported in 1974, was named Viral Leukoencephalomyelitis of Goats (VLG). When it became apparent that arthritis could also result from the same virus infection, the name of the disease was changed to Caprine Arthritis Encephalitis Syndrome (CAE). It is now apparent that the virus also produces changes in the lung and udder. The name CAE however still remains in place.

## The Causative Virus

The virus which causes CAE is very closely related in structure to the virus which causes Ovine Progressive Pneumonia, a common respiratory ailment of sheep in the western US, and to the virus which causes Visna, a nervous disease of sheep first reported from Iceland. These agents, called retroviruses, are classified as slow viruses which means that they usually produce disease only after a very long incubation period and that once an animal is infected, the infection persists throughout the animal's life. This fact is important in regard to interpretation of diagnostic tests. CAE virus has not been shown to cause any disease problems in man.

## Transmission of CAE Virus

Knowledge of how a disease is transmitted is often the key to developing a successful program for preventing the spread of infection. To date, all published reports suggest that goats become infected with CAE virus as newborn kids. Experimental evidence for this is persuasive. Kids delivered either naturally or taken by cesarean-section, but deprived of colostrum and fed cow milk remain free of the virus despite the fact that their dams are infected. If taken by cesarean-section or delivered naturally, but allowed to nurse colostrum or milk from an infected doe, kids will show evidence of virus infection. These findings indicate that kids are not in-

fectured in utero or during passage through the birth canal; but do pick up infection when nursing colostrum or milk from infected dams. This suggests that control of the spread of new infections might be achieved by separation and artificial rearing of kids at birth.

## Prevalence of CAE

One aspect of the CAE syndrome which has proven most troubling to the US goat industry was a published report that a high percentage of goats tested from all over the United States showed serological evidence of infection with CAE virus. Of 1,160 goats tested from 24 states, 81 showed antibody to CAE virus using the agar gel immunodiffusion (AGID) test. It can be assumed that animals with antibody to CAE virus have been exposed to and infected by the virus. The only exception to this could be young kids with detectable antibody picked up from the dam's colostrum. Unlike most bacterial diseases, where a strong antibody response means that the animal has cleared itself of the invading organism, infections with CAE and other retroviruses are likely to persist in the animal despite a high antibody titer. Therefore, it is probably true that a large percentage of antibody positive goats carry persistent infections. However, it does not necessarily follow that the majority of these goats are likely to show clinical signs of the CAE syndrome. The factors which contribute to the onset of clinical signs in animals infected with the virus are unknown.

The major problem associated with this high prevalence of infected US goats is not the actual incidence of clinical disease so much as the negative perception of prospective goat buyers and regulatory officials confronted with a positive AGID test. Already some countries importing US goats, like Kenya, have refused or destroyed shipments of goats which turned out to be antibody positive. Economic restraints such as this increase pressure on the goat industry to aggressively tackle the CAE problem.

## Clinical Signs of CAE

Two separate distinct syndromes are caused by the CAE virus, a neurological disease in the spinal cord and brain of young kids and a joint infection of older goats resulting in arthritis. How individual animals infected with CAE virus escaped one or the other or both syndromes remains a mystery. The clinical signs of the two syndromes are as follows.

Continued on next page

**CAE**

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**The Nervous Form of CAE** — The nervous form of CAE was the first to be described. All breeds of goats can be affected as can both sexes, and most individuals first show signs between one and four months of age. The problem is one of progressive weakness (paresis) of the hind limbs leading to eventual paralysis. The early paresis may be perceived as lameness, incoordination or weakness in one or both rear legs. Knuckling over of the feet and difficulty in rising may follow until such time that the animal is unable to rise at all. The course of the disease is from several days to several weeks. Despite the progressive paralysis, the kid will usually remain bright and alert and continue to eat and drink. Mild pneumonia may be present. If the correct diagnosis is made, the animal is often euthanized since there is no known treatment for the condition.

The development of these signs results from inflammation in the spinal cord induced by the virus. Nerves which control motor function of the hind limbs are progressively destroyed. In spite of the ongoing inflammation, there is little or no change observed in the cerebrospinal fluid on CSF tap nor in the complete blood count (CBC). Diagnosis is based on recognition of the clinical signs and confirmation depends on observation of the characteristic changes seen microscopically in the spinal cord at the time of postmortem examination.

In older goats, a clinical variation of the nervous form of CAE has been observed which is clinically indistinguishable from Listeriosis. Signs include circling, head tilt and facial nerve paralysis. On postmortem examination, the characteristic lesions of CAE virus are found in the brain stem rather than the cervical spinal cord. In arthritis of goats due to CAEV, clinical signs are limited to the joints and surrounding structures. Affected goats may initially show soft fluid swellings over the joints, especially in the bursae of the front knees. Over a period of weeks to months pronounced lameness may develop and progress to the point where animals are unable to extend the limbs and may walk on their knees. Radiographs may reveal extensive calcification of the soft tissues surrounding the joint. Joint fluid will contain excessive numbers of mononuclear cells. Postmortem examination will reveal extensive proliferation of the synovial membrane. In other animals the advance arthritic signs may not be so severe and these animals show only intermittent pain, reluctance to move and progressive weight loss.

A serum test can be run which demonstrates that the goat has been exposed to the virus, but the test will not absolutely confirm that arthritis is due to the virus in-

fection. No treatment or vaccine is available for arthritis due to CAEV.

**Prevention and Control**

Suggestions for the control of CAE infection and plans for the establishment of CAE free herds have been published. These plans are based on current knowledge concerning the transmission of the virus and controversy has arisen regarding the practicability and effectiveness of these programs. Perceptions of how reasonable these suggestions are, may depend largely on the interest to establish a CAE virus free herd. A hobbyist with two grade does in the backyard for home milk consumption may not be motivated sufficiently to change the management in order to raise CAE free kids. On the other hand, an internationally reputable breeder with sales of registered stock may in fear of a positive AGID test want strongly to establish and maintain a CAE free herd. A control plan would include the following:

1. A serologic survey of all animals presently in the herd.
2. Culling of all AGID positive animals if economically feasible.
3. Repeated AGID testing at 6 month intervals to insure that all positive individuals were identified.
4. If some or all AGID positive animals are maintained for the time being, the strategy then shifts to the creation of a new CAE free herd founded with the next kid crop.
5. At the next kidding season all births are observed and the kids are removed from their does immediately. These kids are either deprived of colostrum, fed only frozen colostrum from does previously identified as AGID negative, or fed pasteurized colostrum. Only experienced herdsman with a strong background in kid rearing should attempt to raise colostrum deprived kids since these animals are susceptible to a variety of dangerous infections if not given protective immunoglobulin injections. Pasteurization of colostrum is considered a poor alternative because heating to 160°F causes the liquid colostrum to congeal. Slow pasteurization at 131°F for 1 hour may minimize this problem but this is time consuming. Feeding colostrum from AGID test negative does may be the best compromise although it must be pointed out that an occasional seronegative doe may actually be shedding the virus and a small number of new kids may be infected.

Continued on next page

## CAE

Continued from previous page

6. Kids should be raised in separate quarters from does and fed cow milk or milk replacer until weaning.

7. All kids should be tested at 6 months of age and periodically thereafter to insure their seronegative status. Seropositive animals should be culled immediately.

8. As the new replacement herd matures, older previously seropositive animals, still in the herd, should be systematically culled. Any animal showing clinical signs of CAE should be culled immediately.

9. In this manner the incidence of CAE in a herd can be dramatically reduced in one generation and possibly eliminated in a few generations. For this to occur, conscientious adherence to the program is necessary.

Hopefully research into the workings of CAE virus will continue at the same dynamic pace observed over the last eight years. Clarification of the mechanisms of transmission and the animal's responses to infection could lead to better recommendations for control of the disease.



**BF** **MOV** **10/91**

2<sup>ND</sup> **riva**

994 St. B. Schutze Judge:

1996 VA St. Judge:

1<sup>st</sup>

1998 VA State Fair ECA Show, ... Judge:

1<sup>st</sup> place fleece, Rating: Fine TYLE 4

2000 VA State Fair ECA Show, C. McGuire Judge:

1<sup>st</sup> place fleece

Now: Herdsire at:

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## Colostrum Substitues?

While reading about CAE in our essential copy of Smith & Sherman's Goat Medicine, we ran across information on substitute colostrum. The CAE article at left mentions that even though kids raised without colostrum may eliminate the chance of contracting CAE virus from infected does, raising kids without colostrum should only be attempted by experienced herdsmen with a strong background in kid rearing. Goat Medicine states that an increasing number of colostrum supplements are on the market and that these supplements usually contain lyophilized colostrum or whey immunoglobulin concentrates. Even though these products have been used for kid-rearing in CAE control programs, some of the products will not raise the kids' antibody levels high enough to protect them from diseases. The authors view the effective use of colostrum substitutes with skepticism.

## More CAE Facts

Highest prevalence of CAE is found in countries with long established, intensive dairy goat industries—Canada, France, Norway, Switzerland and the USA. In US, 81% of 1,160 goats tested were positive for CAE.

In countries actively importing dairy goats (Kenya, Mexico, New Zealand, Peru), prevalence of CAE is less than 10%, highest in imported dairy goats, next highest in local goats in contact with imported goats and least prevalent or nonexistent in local goats with no friends who are imported goats.

In New South Wales, Australia, 82% of 155 goat herds were infected. In South Australia, dairy goats tested positive 18% - 45%, while combined percentages for Angora, cashmere, crossbred and feral goats were only .1%. The reasons for increased risk in dairy goats over non-dairy goats is not completely understood, but differing management practices and heritable predisposition to infection in certain breeds or family lines are suspected.

Within infected herds, rate of infection exceeds percentage of goats showing signs of the disease. This could mean that some goats hoarding the retrovirus will later show the disease and that some of them will never show clinical signs of CAE.

## S L O W F O O D

Slow food. Isn't that what they call it when your Big Mac takes longer than two minutes to be handed to you in a little white bag from the drive-through window? Not exactly. Slow Food is the name of a international movement founded in 1989 which is active in over 40 countries worldwide with 70,000 members and 600 chapters, which they call Convivia. The started in Piedmont, Italy and their noble aim is to rediscover pleasure and quality in everyday life by slowing down and learning to appreciate the traditions of the table. It does this by organizing gastronomic, educational and cultural events around the country.

Don't expect to find elephant ears and scones at Slow food events. At a 5-day Taste Fair in Turin, Italy last year visitors made their way through tiny bites of obscure apples, rare hams, special wines, camel's-milk cheese and other gastronomic delicacies. At a recent Cheese 2001 event in Italy 1,200 kilos (that would be 2,640 pounds!) of buffalo mozzarella were sold.

Fast Food got off the ground originally with a protest against McDonald's 14 years ago. They've grown since then and moved on to tastier pursuits.

Slow Food USA is a non-profit, educational organization founded last year. It has quickly gained members and Convivia. There are currently 5,000 US members, second only to Italy in membership totals. Slow Food USA aims to counter the degrading effects of industrial and fast food culture which has standardized tastes; promotes the beneficial effect of nutritious, locally ground and indigenous foods; sponsors taste education programs for adults and children; works toward safeguarding and promoting public awareness of culinary traditions; supports artisanal food producers; promotes the pleasure of food and food traditions; and encourages tourism that respects and cares for the environment. These are the people who probably favor parsley on every plate. Slow Food's project, The Ark is designed to document and promote food and beverages in danger of becoming extinct.

To find a Slow Food Convivia nearest you, check out their web site at [www.slowfood.com](http://www.slowfood.com) or call them at 1-800-Slowfood. And put down that Whopper!



## Slow Food USA Mission Statement

Recognize that the enjoyment of wholesome food is essential to the pursuit of happiness, Slow Food USA is an educational organization dedicated to stewardship of the land and ecologically sound food production; to the revival of the kitchen and the table as centers of pleasure, culture, and community; to the invigoration and proliferation of regional, seasonal culinary traditions; and to living a slower and more harmonious rhythm of life.

## So You Want to Be a Slow Food Groupie?

**Do** sit down for a leisurely dinner with the family, using Aunt Martha's recipe for pot roast.

**Don't** proclaim, when the family walks in the door, "Everyone's on their own tonight," and watch them grab leftover cold pizza from the fridge and eat it standing over the sink.

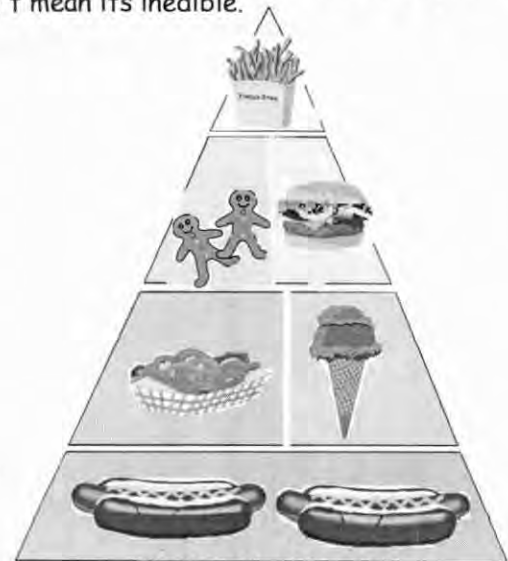
**Do** realize that you can't live on Power Bars and mochas alone (for more than a day or two).

**Don't** eat anything available as a numbered meal. It will not be socially acceptable with the Slow Food group.

**Do** savor and value good food meals with family and friends.

**Don't** eat in front of the television, not even for Star Trek.

**Do** remember just because you can't pronounce it, doesn't mean it's inedible.



The Fast Food Pyramid

## Calendar of Events

### October 20 - 21, 2001

New York State Sheep and Wool Festival, Dutchess County Fairgrounds, Rhinebeck, 914-756-2323, [2www.sheepandwool.com](http://2www.sheepandwool.com)

### October 25, 2001

Steve Hachenberger and Paul Johnson's birthday. Happy Birthday, Batman and Robin! No, you can't both be Batman!

### November 3, 2001

Farmfair International 2001 Goat Gala, AMA Hall A, Northlands AgriCom, Edmonton, Alberta, Canada. Showcase for livestock, fleece, skein and garments. Goat Show 10 AM. Entry closing date October 10, 2001. For information, call Northlands Park, Agriculture Dept., 780-471-7335, email [farmfair@northlands.com](mailto:farmfair@northlands.com), web site: [www.farmfairinternational.com](http://www.farmfairinternational.com)

October 31, 2001 - Halloween, November 22nd - Thanksgiving, December 25th - Christmas. Get the feeling we're lacking events to list? Is there not much going on this time of year besides the traditional holidays or are our spies not doing their jobs?

### June 13 - 16, 2002

Estes Park Wool Market events and workshops, Estes Park, Colorado. Workshops, livestock exhibits, vendors, cashmere goat show (June 15th), other animal shows, handspun skeining competition. For a detailed schedule, see their website: <http://www.estesnet.com/>

### September 2004

8th International Conference on Goats, Pretoria, South Africa. For information, contact Dr. Norman Casey, University of Pretoria, Department of Animal and Wildlife Sciences, Pretoria 0002, Republic of South Africa, fax: 27-12-420-3290, email: [nhcasey@postino.up.ac.za](mailto:nhcasey@postino.up.ac.za)

NWCA cashmere discussion group, September 22, 2001. Participating experts: Chris Lutpon (Texas), Ann Dooling (Montana), Steve Hachenberger (Montana). Don't ask us which little heads they are here.

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# Directory

CASHMIRROR

## OKLAHOMA

### TEXOMA KIDS & CASHMERE

J. D. and Karen Chandler  
Rt 1, Box 37  
Mannsville, OK 73447  
580-371-3167  
fax: 580-371-9589  
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  
Linda\_Lowell@beavton.k12.or.us

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

**DUKES VALLEY FIBER FARM**  
Fran and Joe Mazzara  
4207 Sylvester Drive  
Hood River, OR 97031  
541-354-6186  
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  
foxmoorfarm@goldcom.com

### GOAT KNOLL

Paul Johnson/Linda Fox  
2280 S. Church Rd.  
Dallas, OR 97338  
503-623-5194  
goatknoll@teleport.com

### HARVEST MOON FARM

Guy and Karen Triplett  
63300 Silvis Road  
Bend, OR 97701  
541-388-8992  
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  
lisa@hmrpygoras.com

### HIDDEN MEADOW FARM PYGORAS

Susan J. Precht  
23471 Cedar Grove Rd.  
Clatskanie, OR 97016  
503-728-4157  
pygora@clatskanie.com

### MCTIMMONDS VALLEY FARM

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

### ROARING CREEK FARMS

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

### T & T CASHMERE

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

### WILD FLOWER FARM

Michele and Perry Lowe  
4295 Perrydale Rd.  
Dallas, OR 97338  
503-831-3732  
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  
bnagel@gvtc.com

### BAR-Y

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

### BESCO RANCH

Robert and Ethel Stone  
7220 CR 261  
Zephyr, TX 76890  
915-739-3733  
bobstone@bwoodtx.com

### FOSSIL CREEK FARM

Norman and Carol Self  
1077 Cardinal Drive  
Bartonville, TX 76226-2620  
940-240-0520  
fax: 940-240-0204  
CWSelf@email.msn.com

### J 'N' S RANCH

James and Sylvia Stalnaker  
Route 1, Box 206  
Burlington, TX 76519  
254-605-0299  
jnsranch@hotmail.net

## VIRGINIA

### SILVER BRANCH FARM

Chuck and Lisa Vailes  
1506 Sangers Lane  
Staunton, VA 24401  
540-885-1261  
cvailes@cfw.com

### STONEY CREST FARM

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

## WASHINGTON

### BREEZY MEADOW CASHMERE FARM

Douglas and Roberta Maier  
810 Van Wyck Rd.  
Bellingham, WA 98226  
360-733-6742  
fibergoat@earthlink.net

### BROOKFIELD FARM

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

### LIBERTY FARM (NLF)

Cliff and Mickey Nielsen  
5252 Hwy 12  
Yakima, WA 98908  
509-965-3708  
Cnielnlf@aol.com

### SHEA LORE RANCH

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

Continued on next page

## CASHMIRROR

### Breeders Directory Continued

#### MORE WASHINGTON

#### STILL WATERS

##### CASHMERE

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

#### WALLFLOWER FARM

Dan and Marti Wall  
16663 Beaver Marsh Road  
Mt. Vernon, WA 98273  
360-424-7935  
Fax: 360-428-4946  
cashmere@sos.net

#### CANADA

#### GIANT STRIDE FARM

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

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>



### *Llama Show and Fiber Arts Show, Monroe, Washington August 11 - 12, 2001*



Breezy Meadow Cashmere vendor booth (left) and NWCA information booth (right).



One of Doug and Roberta Maier's friendly cashmere ambassadors at the Festival.



This must be a fiber dog. We're not sure if he (she?) was cooling off in front of the fan or just guarding the coffee pot. This was the favored spot for most of the (hot) two-day festival.

## USDA PROPOSES TO PAY INDEMNITY FOR BRUCELLOSIS-INFECTED SHEEP, GOATS, AND HORSES

WASHINGTON, Sept. 12, 2001—The U.S. Department of Agriculture proposed an amendment to its brucellosis regulations today that would allow indemnity payments for sheep, goats, and horses destroyed because of brucellosis. The indemnity amount will be the appraised fair market value of the animal less its salvage value.

This action would make it easier to eliminate affected animal herds and flocks and will encourage owners to cooperate with USDA's Animal and Plant Health Inspection Service brucellosis eradication program.

Brucellosis is a contagious disease caused by bacteria that mainly affects cattle, bison, and swine. It causes loss of young through spontaneous abortion or birth of weak offspring, reduced milk production, and infertility.

Goats, sheep, and horses are rarely infected with brucellosis in the United States. However, they are susceptible to certain strains. When they are, it is almost always a result of having been in direct contact with infected cattle, bison, or swine.

The brucellosis eradication program is in its final, critical stages. State, federal, and industry efforts have all but eliminated most cases of brucellosis in the United States. At this time, there are no known U.S. herds or flocks of goats, sheep, or horses infected with brucellosis. However, should any sheep, goats, or horses become infected with brucellosis, USDA's ability to pay indemnity for those animals would be a crucial tool in encouraging livestock owners to destroy infected and exposed animals and eliminate the last sources of infection.

This proposed rule is scheduled for publication in the Sept. 13, 2001 Federal Register. APHIS documents published in the Federal Register, and related information, including the names of organizations and individuals who have commented on APHIS dockets, are available on the Internet at <http://www.aphis.usda.gov/ppd/rad/webrepor.html>.

*Consideration will be given to comments received on or before November 13, 2001.* Please send an original and three copies to Docket No. 00-002-1, Regulatory Analysis and Development, PPD, APHIS, Suite 3C03, 4700 River Road, Unit 118, Riverdale, Md. 20737-1238.

Comments may be reviewed at USDA, Room 1141, South Building, 14th Street and Independence Avenue, S.W., Washington, D.C., between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays. Persons wishing to review comments are requested to call ahead on (202) 690-2817 to facilitate entry into the comment reading room.

## New and Improved Cold- and Arid-Resistant Goats?

Research scientists of Qinghai Province in northwestern China announce they have succeeded in producing a new breed of goat which they are calling the Qaidam cashmere goat. They claim that it has an improved ability to survive the cold and dry climate of the high altitude plateau.

This goat is a hybrid of the Liaoning cashmere goat from northeast China and the Qaidam goat of northwest China. The new goat is intended as a multi-purpose goat—used for cashmere, milk, mutton and hide. They also claim it has superior multiplication qualities. They do not mention if they know how to divide or compute square roots.

Its cashmere fleece is reported to be less in quantity than its Liaoning counterpart, but finer in diameter.

The local people, intent on improving the quality of their local goats, are impressed by this new improved breed. Numbers of these goats in the western region of Qinghai alone, are reported to have reached 390,000, accounting for 78.59% of total goat number in the region.

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### Langlois (Oregon) Sheep Rancher Fan of Goats

John Guynup is a sheep rancher on the southern Oregon coast. He and his wife, after a trip to New Zealand, were inspired to begin their 1,200 acre sheep ranch in 1976. In years since then they have cleared stumps and brush, seeded pastures, put in fencing, barns and ponds, selectively bred their sheep and diversified their business. They breed hair sheep—Dorper, St. Croix and horned Dorset crosses. Hair sheep are those that don't need annual shearing.

Along with his sheep, he runs goats. He considers his goats almost a "freebie." "I figure I can run 500 goats free on this ranch for brush control, utilizing browse and forage not grazed by the other livestock," he said.

Guynup is experimenting with goats. He currently has 200 Spanish cashmere nannies, crossed with Boer billies. He has had difficulty with foot problems and believes these breeds may not be well acclimated to the rainy coast weather. He wants to introduce other breeds of goats into his herd to help. He said in the smaller pastures, the goats don't get to walk on the rocks enough to keep their hooves worn down, causing too much need for hoof trimming.

Guynup says goats serve two purposes—a universally eaten red meat and weed control. He sees his goats as future workers in a "paid for graze" plan where people pay you for grazing your goats on their property. He currently has wethers in Bandon, grazing around a feed store acreage for gorse control.

## CLASSIFIED ADVERTISING

**CashMirror Back issues**, \$3 each or a dozen for \$30. 10/89 - 8/01. 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>

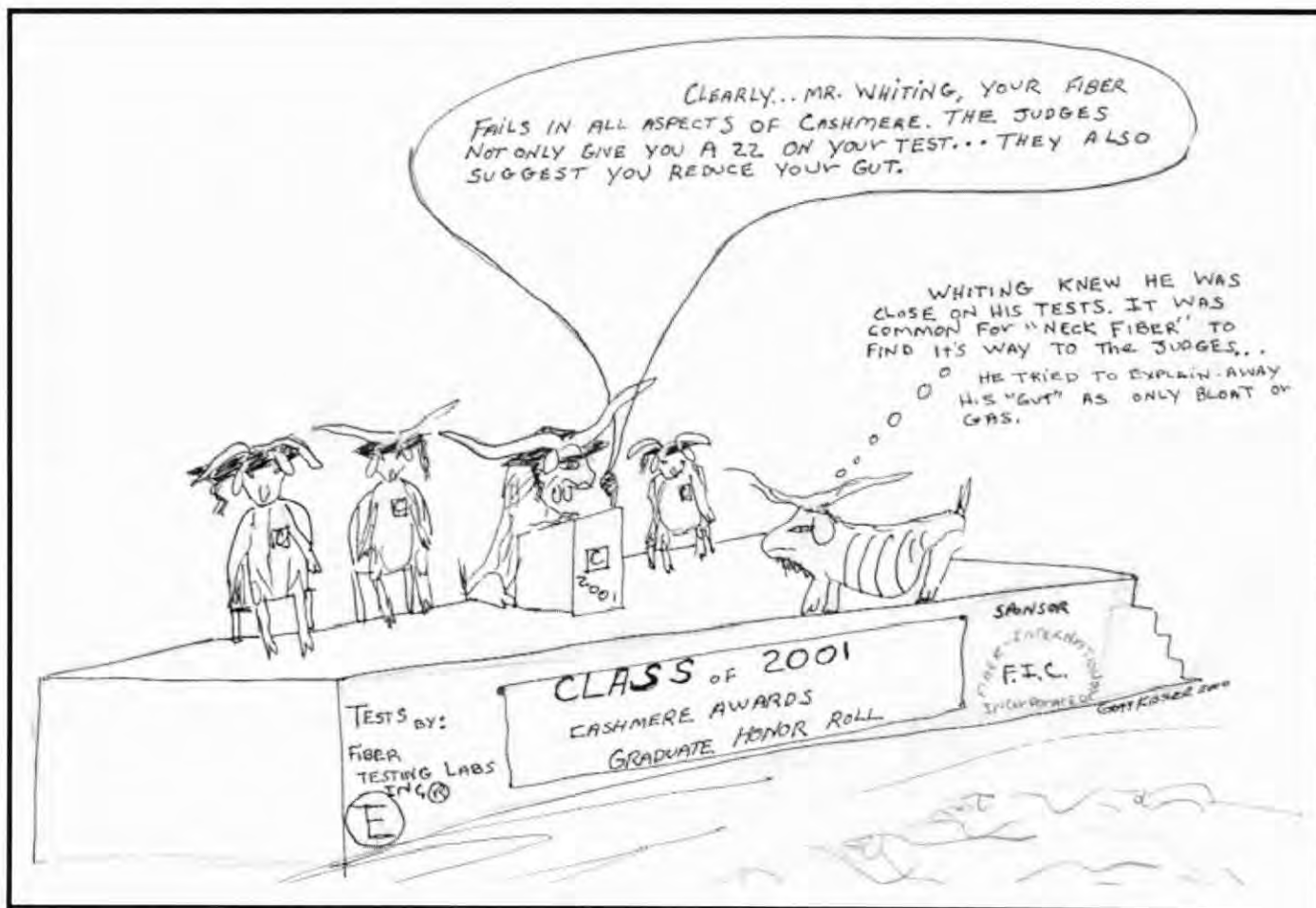
**Maremma Sheepdog Club of America**, Maremma Livestock Guarding dogs, PO Box 546, Lake Odessa, MI 48849, 616-374-7209. Free information and Breeder Directory.

**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: [ymcoll@ix.netcom.com](mailto:ymcoll@ix.netcom.com) Website: <http://www.ymcoll.com>



An organization of mild macho men, making a difference in the world of goats. For membership information contact: Mickey, membership chairman: [mickey@neuteredcatsworld.net](mailto:mickey@neuteredcatsworld.net).



### Display Advertising Rates:

| Ad Size              | Price (Issue / 4 mos. / 1 yr.) |
|----------------------|--------------------------------|
| Business Card        | \$25 / 100 / 150               |
| 1/4 page             | \$45 / 165 / 410               |
| 1/3 page             | \$65 / 240 / 600               |
| Half Page            | \$80 / 300 / 730               |
| Full Page            | \$150 / 550 / 1,370            |
| Other sizes, options | Ask us                         |

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

Classified ads 50 cents/word.

### Notable Quotes

"Breeding bucks need to be in sound physical condition, because during mating season they go 'off feed' and may lose as much as 50 pounds."

... Suzanne W. Gasparotto

"I figure I can run 500 goats free on this ranch for brush control, utilizing browse and forage not grazed by the other livestock."

...John Guynup, Langlois, OR sheep rancher, 9/01

"Could it be that all those trick-or-treaters wearing sheets aren't going as ghosts but as mattresses?"

...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.



## CashMirror

### Subscription Information

### To subscribe

Send: Name  
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Address with zip code

To: CashMirror Publications  
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Dallas, OR 97338

Annual Subscription is only \$25 for 12 monthly issues! (\$35 Canada, \$40 Mexico, \$50 overseas).

Breeders Directory listing for full year \$30.



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Producing Goats*

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