MISSION: "SUPPORTING, PROTECTING AND PROMOTING NEBRASKA'S SHEEP AND GOAT PRODUCERS"

NEBRASKA SHEEP & GOAT PRODUCERS Newsletter

VOLUME 10, ISSUE 3 MAY?JUNE 2023

SPECIAL POINTS OF INTEREST:

- PARASITES MANAGEMENT
- KEEP COCCIDIOSIS AT BAY THIS SPRING
- FIGHTING TO MAKE CLOTHES FROM AMERICAN WOOL
- CL—WHAT YOU NEED TO KNOW

# Daaan's Bleats

I haven't found the numbers for January 2023, but the January 1, 2022, Nebraska sheep and lamb inventory was 73,000 head, down 1,000 from the previous year. This reduction was mostly in the breeding sheep inventory while market sheep and lambs on hand January 1 totaled 13,000 head, unchanged. The 2021 lamb crop was down 1,000 head from the 65,000 of 2020. Interestingly enough, the lambing rate was 128 per 100 ewes in 2021 compared to 118 per 100 ewes in 2020. These numbers are according to USDA National Agricultural Statistics Service.

The milk goats and kids inventory in Nebraska (2021) totaled 3,700 head up 200 from the previous year.

Maybe just numbers but as producers, the need to maintain or increase inventory and production is important to the industry. When expenses seem to keep increasing and market prices don't keep up, it becomes necessary for producers to become more efficient. This requirement is a must, not just to stay in business, but also to retain or develop infrastructure and resources. Feed and equipment availability, veterinary services, market opportunities, even labor can become jeopardized with insufficient demand relative to numbers.

When I promote sheep and goat production, I usually emphasize these points and the economic impact increase or decrease of numbers can have on local, rural communities. When I taught high school agriculture in Kansas, my operation grew to 100 ewes. I estimated one time that this number reflected purchases over $300 with at least 60 entities in the area on an annual basis. This counted tires, grain, hay, pasture rents, fence materials, vehicle and trailer maintenance, veterinary services, ram purchases, shearing, sales, and other inputs. This was one flock. What if there were a dozen such enterprises in a community, what effect might that have?

In southwest Minnesota, many family farm operations are creating opportunities for the next generation to stay in the community by increasing sheep flocks to full-time status (800-900 head), mostly through confinement expansions. Not only keeping the family together but maintaining the community population with young families for schools, churches, etc. Related businesses then have a broader base for service or production, thereby creating volume for sales and employment for additional families in the community.

So how can producers expand or become more efficient? The NSGPA has provided programs on nutrition, breeding, new-born survival, and accelerated lambing. Opportunities for niche marketing of lambs and by-products (wool, soap, retail meat sales, and more) have also been shared. Sometimes efficiency involves matching numbers to availability of labor, time, and facilities. Maybe that means expanding the current program. It might also mean considering other production routes. Usually this discussion focusses toward accelerated lambing. (Multiple birthing dates for a ewe in a two or three-year plan.) I would like to share another consideration producers might think about that does not increase fixed expenses tremendously.

Why not maintain a spring lambing flock and a fall lambing flock? Randy Saner shared with me information from Penn State of several wool sheep breeds (Dorset, Polypay, Romanov, Ramboulette, and Finn) and several hair sheep breeds (Khatadin, St. Croix, Targhee, and Dorper) that are fairly consistent to breed in the spring for fall lambing. The weather is warmer in the fall. Ewes from summer pasture are in good condition. The same lambing facility could be used a second period of the year. Unused labor might be available. The same rams might be used for another breeding season. When the spring lambs are marketed, the fall lambs would be ready to wean to use the same fat pen and be gone before spring lambs again. Some of these breeds market at lighter weights, thereby requiring less total feed. These lambs could possibly reach satisfactory sizes for spring holiday markets such as Easter, Orthodox Easter, Cinco de Mayo, Holi, Eid-al-Fitr, Nowruz, and some years the calendar dates around Ramadan.

Think of this as similar to spring and fall calving herds of cows in the same operation. There are considerations as hair sheep might want to be kept separate from wool sheep for wool quality. But a spring flock of black-faced ewes and a fall flock of white-faced or hair ewes would be easy to sort or keep separate.

I am sharing this as there are currently opportunities to buy good quality ewe lambs. Such purchases would not only help the market lamb sector but also create additional sales of lamb in non-traditional times. It has been stated that 85% of the U.S. lamb crop is born in five months of the year. If production could be spread out over more months, this might enable harvest facilities (packers) and sales outlets to use American lambs throughout the year. Maybe increasing the consumer's desire and consumption and therefore demand?

Well, back to the pen,

Dan Stehlik, NSGPA President

## Upcoming Events:

Back this year—State Fair Tasting

August 27th Annual Conference and Meeting

September 9-10 4S Goat Expo Show and Sale

September 23 & 24

# Parasite in Sheep and Goats Continued

TREATMENT

Treatment of parasitic worm infections is usually done with chemical dewormers, or anthelmintics. Although there are non-chemical treatments like diatomaceous earth and herbal remedies, there is not sufficient published research that confirms their effectiveness. It is important to consult with a veterinarian concerning treatment because improper treatment techniques could result in major problems.

Anthelmintics

Anthelmintics (anti-helminthes) used for goats although there are only three (Ivome) are chemical dewormers used to treat infections of parasitic worms (helminths). There are a few types of anthelmintics that are commonly c©, Valbazen©, and Tramisol©) that are approved for use in goats. For anthelmintics that require "extra-label' use, a veterinarian should be consulted. The different classes or families of anthelmintics use different modes to kill the parasites. Table 1 contains the three classes of anthelmintics with brand names that are commonly used in goat production.

| Drug Class | Drug name | Tradenames |
|---|---|---|
| Benzimidazoles | Fenbendazole, albendazole, oxydendazole | SafeGuard®, Valbazen®, Panacur®, Synanthic® |
| Nicotinic Agonists | Levamisol, morantel, pyrantel | Prohibit®, Leva-Med™, Strongid®, Positive Pellet®, Rumatel® |
| Macrocyclic lactones | Ivermectin, doramectin, eprinomectrin, moxidectin | Ivomec®, Cydectin®, Quest®, Dectomax®, Eprinex® |

1. Table Dewormers used in sheep and goats

Source: Adapted from Susan Schoenian, https://www.sheepandgoat.com/underanthel

Coccidiosis is normally treated with sulfa drugs (Albon©) and amprolium (Corid©). The sulfa drugs do not directly cure the coccidiosis but instead prevent secondary bacteria diarrhea. In serious cases, the kid may need to be treated for dehydration and lack of electrolytes. To check for dehydration, perform the skin-tent test, which involves pulling a flap of the skin upwards and allowing the skin to fall back in place. If the skin takes more than a few seconds to fall, then the animal is dehydrated. To prevent dehydration, Gatorade© could be given by nursing bottle or stomach tube at a rate of 15-20% of their body weight per day (Heath & Harris, 1991; Schoenian, 2003).

**How to administer properly**

Anthelmintics can be given either by drenching, injection, in the feed, or in the water. The preferred method is to give the anthelmintics orally. Oral treatments can be done with a drenching gun. It involves holding the goat's muzzle with the fingers in the backside of the mouth to open it. Place the gun in the back of the mouth, tilt the head back, and administer the medication. Although the aim should be to reduce spillage, some spillage may still result (Dunn, 1999).

**Treatment strategies** Three common treatment strategies that are employed are tactical, salvage and strategic. A management scheme that incorporates aspects of all three strategies is recommended. Programs that involve treating the herd excessively are very much discouraged and can be costly.

**Tactical treatment** involves treating the herd based on environmental conditions. The herd is treated when conditions such as weather (i.e. rain) has made the environment advantageous for the rise of parasite numbers. Tactical treatments might also be based on an increase in fecal egg counts. This treatment program usually involves a schedule that involves treating animals at the start of the grazing season, in the summer when parasite numbers are high, in the fall or winter after the first frost, and when moving the animals to a "clean" pasture. The entire herd is usually treated to prevent disease (Scarfe, 1993; Luginbuhl, 1998).

**Salvage treatment** involves treating the animals that are seriously affected by disease. The animals usually already show many of the symptoms of infestation including wasting away, rough coat, anemia, bottle jaw and diarrhea. This treatment is usually done to save the life of the animal. If the animal demonstrates the symptoms of a severely diseased animal, it should be treated quickly (Luginbuhl, 1998). At times, it may be required to treat the animal before a positive diagnosis from a lab test or a veterinarian can be made. Hopefully, the animal is managed in such a way as to not allow it to reach this stage of sickness, but since many goats do not show any symptoms until they are severely affected, this type of treatment may not always be possible to avoid.

**Selective treatment** involves treating only animals that are susceptible to parasite infection. Animals like females that are about to kid (2-4 weeks before kidding), young animals, and animals that are showing symptoms of infection based on visual observation or the FAMACHA© system are treated. It is probably the best program out of the three in the long-run because it decreases the number of animals that are treated. Although this sounds counterproductive, a program based on using the least amount of anthelmintics by leaving some animals untreated while still maintaining a healthy herd is the best approach especially to slow the rise of anthelmintic resistance (Luginbuhl, 1998; Sangster, 1999; Schoenian, 2003).

A management plan that incorporates aspects of all three treatment strategies is recommended. One aspect of tactical treatment that may be beneficial is to closely observed the herd both visually and evaluate them using fecal egg counts or the FAMACHA© system when environmental or seasonal conditions are favorable to parasite development. However, it is not suggested that the entire herd be treated based on environmental conditions alone. Salvage treatment is needed to save an animal that is severely affected and should be done accordingly. Selective treatment involves making smart decisions based on a method of selecting individuals either by the FAMACHA© system, individual fecal egg counts, or another factor that may show symptoms of a parasite infection.

A subcutaneous iron injection can also be given to severely anemic animals. A veterinarian should be consulted on the use and administration of iron.

**Copper wire particles** In recent research, the administration of copper oxide wire particle boluses have been shown to decrease parasite numbers in lambs. One disadvantage to this method of treatment is the danger of copper toxicity. However, mature goats appear to be more resistant to copper toxicity than mature sheep. Additionally, copper wire particle treatment shows promise in the control of parasite load in goats. However, more work needs to be done to determine proper dosage levels and treatment schedules. Also, since the levels of the natural intake of copper vary significantly based on geographic location, it is difficult to make general recommendations on usage to producers (Burke et al., 2004; Hale, 2006).

# Parasites in Sheep and Goats Cont.

**Nutrition** Research has proven that improved nutrition increases both the animal's resilience, which is the animal's ability to endure infection, and its resistance, which is the animal's ability to defend against infection. It is especially important to consider strategic feeding regimens that improve the nutrition of animals that are more susceptible to parasite loads like peri-parturient animals, lactating females, and the young. Increased protein supplementation also appears to improve the resilience of the host to gastrointestinal parasites. Further research is being done to discover optimal feeding regimes (Wallace, 1998; Schoenian, 2003; Waller & Thramsborg, 2004).

**Techniques to slow the development of resistance** It is important to incorporate management techniques that will slow the development of resistance. One technique that may contribute the most to the development of resistance is under-dosing. It is extremely important that animals not be under-dosed. The animals should be weighed to determine the proper dosage. If all the animals can not be weighed, the dosage should be set according to the weight of the heaviest animal instead of the average weight of the herd. A veterinarian should be consulted to determine the proper dosage for goats since many anthelmintics are not approved for use in goats and goats usually require a higher dosage rate than sheep or cows.

Another technique that should be employed is the rotation of the type of anthelmintic used. Anthelmintic rotation slows the development of resistance by not allowing a population to build up a significant tolerance or resistance to a particular anthelmintic by introducing the population to another anthelmintic, which insures that sensitivity remains high. It is important to not rotate anthelmintics less than on a yearly basis because a rotation scheme that is less than yearly may result in parasites that are resistant to multiple anthelmintics.

One last technique to slow the development of resistant on your farm is to stop the introduction of resistant parasites. New animals should be quarantine in a separate area for at least 4 weeks before they are introduced to the general herd. This allows the animals to shed the parasites that they might have picked up from their previous location. The animals should also be treated with anthelmintics from two separate classes of drugs while they are quarantined (Luginbuhl, 1998; Schoenian, 2003; Hutchens & Chappell, 2004).

**PREVENTION**

One of the most significant aspects in the control of internal parasites is to prevent parasite infection by decreasing the animal's exposure to the parasites. If the producer is able to effectively decrease the exposure and thereby the infection of the herd, the need to treat the animals also decreases, which has many benefits that are both economical and practical.

**A. Sanitation**

The first thing that should be taken into consideration in order to decrease the exposure to parasites is sanitation. Feed should be placed in troughs that cannot be contaminated by feces. The goats should only be fed as much as they will eat at that time to reduce waste. The feed troughs can also be moved periodically to discourage the buildup of mud around the feeding area. Water troughs should also be kept clean and free of contamination. It is important to keep the housing facilities clean and to not let fecal material build up as this may encourage the growth of coccidia (Heath & Harris, 1991; Schoenian, 2003). Shelters with raised slotted floors are encouraged to allow the feces to pass underneath and not allow the goats to walk or lay in them. The slotted floors will also decrease the frequency that the houses need to be cleaned.

**B. Pasture management**

Pasture management is another important tool to decrease parasite exposure. Rotating goats to a clean pasture is a good technique to use. In tropical and sub-tropical regions, pastures that have not been used for four weeks are considered to be clean. Additionally, pastures that have been grazed by another species of animals such as cattle or horses are considered clean because another breed of animal is able to clean the contaminated pasture by "picking up" the parasites without being affected by them. Parasites are usually not able to affect multiple breeds. However, the use of sheep in a co-grazing system is not suggested since some parasites can affect both sheep and goats. Pastures that have been tilled or used to produce hay or row crops that were removed are also considered clean (Schoenian, 2003).

Results from the Florida AM University study suggested that stocking density and grass height has an effect on parasite load as the group with the higher stocking density and in the paddock where the grass was kept at a low level displayed a faster rate of re-infestation. The height of the grass in a pasture is important because most parasites are found in the first four inches of grass height (Lewadoski, 2006). If the pasture is overgrazed and the grass is very low, the goats may be exposed to a large number of parasites. Since parasites are found close to the ground, forage that requires browsing is usually free from parasites. A pasture management scheme that considers all of these factors will be a very effective tool in controlling parasites.

**C. Selecting animals that are genetically more resistant to worms**

It is also important to select animals that are more resistant to worm infections. It has been proven that the minority of the herd usually carries and sheds the majority of the parasites. If the animals that are less resistant to parasite infection are removed or culled, the entire herd will be healthier as the number and severity of parasite infections should decrease in the herd. Resistance and resilience to parasite infection has been shown to be in part genetically inherited. Animals that always have high fecal egg counts, high FAMACHA© scores, or always require treatment should be removed from the herd. It should also be noted that different breeds tend to be more resistant and resilient to parasite infestations. The common brush goat, the Spanish goat, and the Myotonic tend to be more resistant to parasite infestation than dairy goats and the Boer. The Kiko may also be able to better deal with parasites because of how and where the breed was developed (Schoenian, 2003; Waller & Thramsborg, 2004).

**CONCLUSION**

Although the control of parasites can be a daunting task, a management scheme that includes smart choices based on sound, science-based facts can lead to a healthy, profitable herd. With challenges like the rise of resistance of parasites to drugs and the high cost of these drugs, one of the most significant aspects in the control of parasites is to prevent parasite infestations by decreasing the animal's exposure to the parasites through management techniques like those discussed above. Lastly, it is important to consult with a veterinarian about proper diagnosis and treatment of infections since the symptoms of parasite infections are similar to other diseases and many drugs used to treat parasites are not approved for use in goats and require "extra-label" use.

For more information, contact Randy Saner, Nebraska Extension Educator at randy.saner@unl.edu or https://www.wormX.info
Source: Practical Management of Internal Parasite In Goats, Florida A&M Univeristy


## LET'S GROW

**Have you checked out the ASI Let's Grow Webinars? The webinars cover productions and management topics important to sheep producers. You can view all the webinars at sheepusa.org/growourflock-resources-educationalwebinars**

**These webinars help keep producers informed on industry technology , innovations and systems for improving production efficiencies to support sustainability. ASI hosts webinars at least three to four times a years.**

## Benefit for Tacie Hawkins

On March 20th Tacie Hawkins, Past NSGP President and member was involved in a horrible semi and car accident in Topeka, KS with her son Cordel and good friend Audrey as they traveled home from a funeral.

They all were severely injured in this accident. Audrey and Cordel are home recovering from their injuries but Tacie has just been moved to Madonna Rehab in Lincoln.

They will be having a fundraiser for them May 18 5pm to 7pm. At the Cherry County Fair Grounds in Valentine, NE There will be a Gun Raffle, Silent auction, Bake sale and donation spaghetti dinner will be provided.

Will be a great evening helping some wonderful people. Hope you can come.

If you wish to donate an item for the bake sale or auction
Contacts are:
Linda Ramos 402.389.1791 or
Ramm- 402.322.3567
Hope to see you there...Thank you
If you would like to send card of encouragement Tacie address is:
Tacie Hawkins
C/O Madonna Rehabilitation
Room #510
5401 South Street
Lincoln, 68506

# Keep Coccidiosis at Bay This Spring

*Clay Elliott, Ph.D.*
*Purina Animal Health*

It's that time of year when we start to shake off the winter blues and look toward a warmer, sun-soaked spring. A chang of seasons, new lambs and kids on the ground—what's not to love?

But spring weather also inevitably brings….MUD. And wet, muddy environments can be a breeding ground for coccidiosis, one of the most common and damaging diseases in sheep and goats, particularly in young lambs/kids. Coccidia are protozoa that can cause damage to the animal's intestinal tract so food is not absorbed well. Coccidiosis can be detrimental to flock health and performance. Learn how to identify symptoms and maintain a clean, dry environment to help manage coccidiosis in you flock or herd.

## WHAT CAUSES COCCIDIOSIS IN SHEEP AND GOATS?

Coccidiosis can be caused by parasitic protozoa in the genus Eimeria. The Eimeria are host-specific, and those that infect cattle will not cross over to sheep and goats. The life cycle of coccidia is complex, with its reproduction occurring in the animal's intestinal cells. Conditions that can increase sheep and goat's susceptibility include extreme weather changes, an unclean environment and stressful events such as transportation, nutrition deficiencies, feed changes, weaning, illness, parasites and lactation.

## WATCH FOR SYMPTOMS OF COCCIDIOSIS

The symptoms observed depend on the species of Eimeria, how many are present, the animal's age, production status, stress level and environmental factors. Young animals might be more susceptible than older animals. And, adult animals can have coccidia but not show any symptoms.

Due to the damage to the cells lining the intestines, the primary symptom of coccidiosis in sheep and goats is diarrhea. Diarrhea might have a dark, tarry appearance and, in severe cases, large blood clots might be seen. The hindquarters and tail might be covered with manure. Additionally, the performance of sheep and goats will suffer due to possible loss of appetite, weakness, abdominal pain or fatigue. Some animals might die before showing signs of coccidiosis if exposed to a large amount of coccidia in their environment. Even though sheep and goats might recover, there could be long-lasting effects due to intestinal damage that can cause general unthriftiness, decreased growth, inferior milk production and a greater predisposition to other diseases.

## MANAGING COCCIDIOSIS IN YOUR FLOCK OR HERD

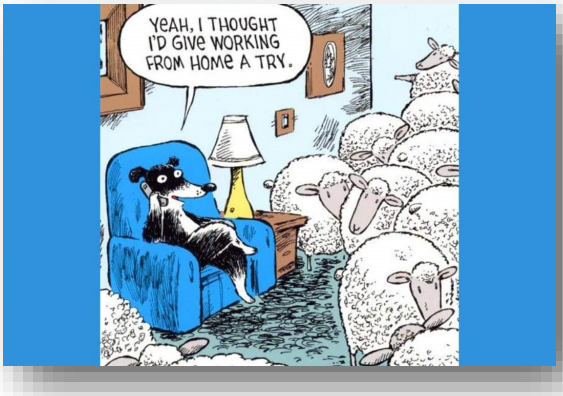
A veterinarian should be consulted to develop a program for coccidiosis on your farm. Following the veterinarian's directions during an outbreak is critical to help the flock overcome the disease. Coccidostats can help decrease the shedding of coccidia through the feces. Two medications available to help manage coccidiosis are decoquinate and lasalocid, an ionophore. Any medications must be used at least 30 days before lambing and at least 30 days before weaning to help protect lambs and kids during this stressful event. Additionally, using a coccidiostat at the right time in the production cycle does not replace proper hygiene but rather complements it. If an outbreak does occur, following your veterinarian's prescribed program will ensure that the medications used will be effective.

## MAINTAINING A CLEAN, DRY ENVIRONMENT

The best way to manage coccidiosis is to create an environment that's clean and dry with reduced stress. If lambs and kids are in pens, keeping the bedding dry and the dam's udder and teats clean is critical in reducing the chance of ingesting coccidia when nursing. On pasture, provide shelter and prevent feces from accumulating where the flock or herd congregates. In addition to clean bedding, drinking water should be fresh and clean and waters and fed troughs should be disinfected, if possible, to reduce potential ingestion of coccidia. Waters and feeders should be designed to prevent sheep and goats from walking in and defecating in the troughs.

Keed both newborns and dams growing and performing this spring by implementing these steps to manage coccidiosis in your flock or herd.





# Meet the female rancher fighting to make your clothes out of American wool

*BY ELIZABETH SEGRAN*

For years, luxury brands prided themselves on sourcing high quality wool from Italy. But three years ago, American designer Janessa Leoné met a rancher who persuaded her to make all her sweaters from sheep raised in the Pacific Northwest.
[Photo: courtesy Janessa Leoné]
The rancher in question is Jeanne Carver, an Oregon-based farmer who has received industry awards for her ethical farming practices. She speaks to me from her family's ranch, which was established in 1871 and has been operating continuously for 152 years. "After decades of fashion brands taking their supply chains offshore, there's now an assumption that you can't make things here in America," Carver says. "That assumption is wrong."
Twenty-five years ago, Carver started to observe the soil drying up and animal species disappearing from her land due to over-farming. She decided to take action, by completely overhauling the farming practices on her own ranch as well as the six other ranches that make up the Shaniko Wool Company, which she founded. She stopped tilling and closely managed where animals grazed to ensure the grasses wouldn't be depleted. In 2016, her ranch was the first in the world to be certified by the Responsible Wool Standard, a certification launched by the nonprofit Textile Exchange, devoted to combat climate change in the fashion industry.

Carver says that to survive as a business, she needs companies to buy her wool, which can be upwards of 30% more expensive than imported wool. Given these steeper costs, Carver has pitched her business to luxury labels who are interested in sourcing high quality wool, while also reducing their environmental impact. (The United States Department of Agriculture says that healthy, well-fed sheep tend to produce better fleece.) Today, her brand partners include Janessa Leoné, who launches her first collection with Shaniko Wool, Ralph Lauren, who used the wool for last year's Olympic uniforms, and Patagonia. "If I don't have these brands, I have nothing," Carver says. "They transform my harvests into something useable."

WHAT WENT WRONG WITH WOOL
America was once a major hub of clothing production. While the South was known for its cotton crops, there was also a thriving wool industry across the country, particularly in the Pacific Northwest. In 1988, Jeanne Carver and her husband bought the 32,000-acre Imperial Stock Ranch to raise cattle and sheep. Eventually, they bought six other ranches in the area, creating the Shaniko Wool Company. For a century, these ranches supplied local businesses with meat, wool, and leather. "We had regional systems that bought our meat and fibers to feed and cloth local communities," Carver says.
But over the decades, globalization made it cheaper for companies to import sheep products from overseas; here in the U.S., the sheep industry began to suffer. American sheep production has been declining since its peak in the late 1940s; in the 1990s, it started to plummet, with tens of thousands of sheep farmers going out of business. Today, there are only 100,000 sheep farms left in the country, producing just over five million sheep.
Carver says that as the Shaniko Wool Company struggled to compete with overseas competitors, which had cheaper labor and farming costs, they turned to industrial farming techniques. They used synthetic fertilizer to produce feedstock and packed as many animals as possible onto the land. But thirty years ago, it was obvious that the entire ecosystem on the ranch was depleted. "Creeks in this part of the world used to be packed with salmon, but in 1990, we only had two salmon return home to spawn," she recalls. "It was a key indicator of the health of this eco-system. We were in trouble."
Carver decided that the only way her ranches would survive was if she shifted to better farming practices. Thirty-five years ago, she began developing a conservation program—but, at the time, the land was so damaged she wasn't sure if it would actually have an impact.

One of the most important features of Carver's farm involves closely managing where animals can graze and for how long. When sheep feed on the grasses, it can stimulate more growth, while also keeping the animal fed —but if they completely deplete the grasses, it ultimately destroys the plants. The farm also strategically placed sheep close to water, to prevent them from searching for water on their own, which could result in trampling the banks and destroying the streams.
The program required that the ranch limit the number of animals on the land in order to give the soil a chance to regenerate, which meant less wool and meat to sell. The process of bringing in third-party auditors to ensure the farm meets its certification requirements is also pricey, costing as much as $15,000 per certification. All of this contributes to the higher price of Shaniko's wool.
Carver's shift in agricultural practices coincides with a broader movement towards regenerative agriculture that started first in the food industry, but has expanded, in recent years, to the fashion sector. The promise of regenerative farming is that it could help tackle climate change by sequestering carbon into the soil. (Shaniko doesn't till the soil, for instance, which would release carbon, and it keeps vegetation on the land healthy, which keeps carbon underground.) But some argue that regenerative farming is overhyped and calculating exactly how much carbon is in the soil is often inaccurate.
Still, Carver is committed to this approach to farming, mostly because she is seeing tangible results. The stream holds more water and there's more biodiversity throughout the ranch. "We hoped that in our lifetimes, we would see a difference," Carver says. "But in 20 years, we've already seen record numbers of salmon returning to this creek that borders our ranch.

GETTING BRANDS ON BOARD
A decade ago Janessa Leoné founded her eponymous fashion label, which makes hats, handbags, and sweaters. She's focused on building a supply chain on par with other luxury brands, which is why she began by sourcing her wool from Italian mills, which are known for their high quality. But it occurred to her that many European brands have long-term relationships with local suppliers and are able to keep a close eye on production, to ensure that quality is up to scratch. "I wanted to explore what it would take to do that here in the U.S.," Leoné says.
Several years ago, she came across Shaniko Wool Company, and was impressed by the quality of its wool. (The Responsible Wool Standard says that sheep that are healthy and well-fed tend to make fleece that is soft and strong, which makes for better yarn.) But it was Shaniko's land management practices that convinced Leoné it was worth completely overhauling her supply chain. She hired Rachel Cantu, the former head of supply chain at Patagonia, to build a new one. "We're at a new stage in the fashion industry where we aren't just working to reduce harm in production, but we're thinking about how to make a positive impact when we source raw materials," Cantu says.

As Leoné explored Shaniko's practices (which are documented by the Responsible Wool Standard), she believed that buying the company's wool was a way to support American farmers and improve the health of American soil. And over the past two years, as she's reimagined her supply chain, sustainability has become her main focus. This month, she released a manifesto outlining her goals for the next seven years, which includes actively partnering with farms and supporting responsible farming practices.
Part of the reason that Leoné has been able to make this switch is that her label is known for its high-end knits, which cost upwards of $300 and can run as much as $797. From the start, she priced her garments to incorporate high-quality raw materials, so it was easier to switch to Shaniko wool. But many other fashion brands are more price-sensitive, which is why cheaper wool dominates the market. Until consumers are willing to pay more for sustainably sourced products, or governments impose more stringent regulations on agriculture, it's unclear how scalable Shaniko's approach will be.
Still, Leoné believes she's moving in the right direction. This fall, all of her sweaters will use wool from Shaniko farms, which is sent to a mill in North Carolina, and then knit in Los Angeles, allowing her to achieve a product entirely made in the United States. "To me, there's something beautiful about tending to the land here in my own country, close to where I live," she says.

# Preparing for Shearing

## Remember, a fleece's quality and value can be significantly increased – or diminished – on shearing day

### 2-5 MONTHS BEFORE SHEARING

- Schedule shearers
- Schedule extra labor as needed
  - * Sheep handlers
  - * Wool handlers/classer
- Order supplies
  - * Wool packs/bags, clips and markers
  - * Veterinary supplies, including antiseptic spray, antibiotic medication, fly ointment
  - * Other supplies such as disinfectant, insecticides, wormers, vaccines, hoof trimmers, branding fluid
- Reduce wool contaminants throughout the year (such as poly, paint, hair, colored fibers, vegetable matter, burrs, etc.)

### 5-30 DAYS BEFORE SHEARING

- Prepare holding pens
  - * Clean from all contaminants such as twine, brush, weeds, shavings, straw
- Prepare shearing area
  - * Shearing Board/Floor- A solid, clean shearing floor is essential, such as a raised board or a solid wood floor on the ground (such as 2 4'x8' sheets of plywood). Never use tarps or carpet.
  - * The floor should be:
    - Flat, non-sloping
    - Solid
    - Smooth, but not slick or rough
    - Easy to sweep and keep clean
    - Large enough for each shearer to have ample space to shear
    - Covered to provide protection from the elements
    - Clean
  - * Overhead machine mounting site, if needed by shearer
  - * Electrical outlets within 6 feet of the shearing area
  - * Lighting as needed
- Prepare wool handling and packaging equipment
  - * Clean the area from any debris and contaminants
  - * Setup equipment as needed (skirting tables, sorting bins/racks, packing equipment)
- Prepare wool storage area
  - * Ensure the area is empty, and will remain dry (ideally, not directly on concrete)
- Prepare restrooms, potable water, handwashing station and other amenities as needed

## Flushing Sheep, Goats Leads to Breeding Season Success

*Nutritional flushing can provide producers many benefits com lambing and kidding season.*

NUTRITIONAL FLUSHING is a key component to sheep and goat breeding season success. The flushing process involves increasing nutrition and energy intake before breeding season starts. This elevated nutrition helps optimize ovulation, conception and embryo implantation rates, which can result in a higher lambing or kidding percentage.

"Implementing a flushing program on your farm can optimize the percentage of lambs or kids on the ground and help put more money in your pocket," says Clay Elliott, a small ruminant nutritionist with Purina Animal Nutrition.

THE LOW-DOWN ON FLUSHING

Flushing ewes and does have a higher chance of breeding at first service, while those fed a lower nutrition level are more likely to miss this first breeding window.

"Breeding ewes and does in their first estrus or heat cycle provides more value when selling, weaned lambs and kids," Elliott says. "Breeding earlier means lambing and kidding sooner, which provides an advantage of additional days to gain weight before weaning compared to their younger counterparts—which can ultimately boost the number of pounds sold post-weaning."

As ewes and does age, reproductively tends to decrease. Additionally, terminal breeds typically produce fewer offspring than maternal breeds. Because flushing supports ovulation and embryo implantation rates, even ewes and does with historically lower reproductive performance can have success.

DON'T SKIMP ON KEY NUTRIENTS

While adding extra grain to the diet will ramp up energy levels, don't forget about these key nutrients as you plan your flushing program:

⇒ Vitamins and minerals: Every nutrition program should start with vitamins and minerals. Regardless of the production stage, these two components remain crucial to both the mom and her offspring.

⇒ Fat: Increasing fat in the diet also increases energy intake. And, fat's influence on reproductive hormones sets ewes and does up for successful conception.

⇒ Protein: Maintaining protein levels between 10-16% of the total diet is ideal for reproductive health.

Flushing should begin around 45-60 days before breeding and continue into the first stages of gestation. Adding a complete fed or a high-fat supplement product to the mix will ensure ewes and does meet their energy requirements during this critical time.

"Once ewes and does have confirmed pregnancies, diets can back down to an average nutrition level with pasture and a supplement tub," says Elliott.

As a primary indicator of energy reserves, body condition score (BCS) allows producers to evaluate the nutritional needs of the flock or herd. By meeting your BCS targets, ewes and does can take less time to breed and have heavier lambs or kids at weaning.

As ewes and does enter different production stages their target BCS changes—and changes to their diet should follow suit. This 1-5 BCS scale is especially useful before breeding as energy requirements and BCS goals increase.

"Flushing aims to bring body condition scores up to 2.5 to 3.0 before breeding and into the first stage of gestation," says Elliott. "Getting ewes and does to this condition can lead to optimal conception and embryo survival rates."

Using a planned-out flushing approach in the lead-up to breeding season will go a long way towards reproductive and performance success. Contact your local feed dealer nutritionist.

## Loaded Greek Lamb or Goat Fries

Ingredients:

- 1—28oz bag of frozen French fries or fresh cut fries
- 2 Tbsp extra Virgin olive oil
- 1 lb American Lamb or goat meat
- 1 tsp Kosher salt
- 1 tsp dried oregano
- 1/2 tsp dried thyme
- 1/2 tsp garlic powder
- 1/2 tsp onion powder
- 1/4 tsp freshly ground black pepper
- Topping: Feta Chees
- Pickled red onions, Lemon wedges
- Whipped feta dip and/or tzatziki

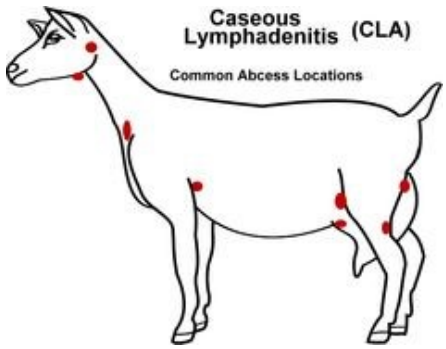
DIRECTIONS

1. make the French fries by following the package instructions or your own method.
2. Cook the ground meat. Heat 2 Tbsp. of oil in a large skillet over medium-high heat. When hot, add the ground lamb or goat, then sprinkle with 1 tsp salt, 1 tsp dried oregano, 1/2 tsp dried thyme, 1/2 tsp garlic powder, 1/2 tsp onion powder and 1/4 tsp ground pepper. Cook, stirring occasionally to break up, until the lamb is fully cooked through, about 5-7 minutes. Set aside. USDA recommends ground lamb reach an internal temp of 160°F.
3. Assemble the Greek fries. Use a slotted spoon to transfer the cooked lamb on top of the crispy fries (directly on the baking sheet or on a platter), then scatter with crumbled feta, pickled red onions, and fresh dill or oregano (fresh parsley is good too!), if using. Serve with lemon wedges and whipped feta or tzatziki.

# Caseous Lymphadenitis or 'Cheesy Gland' A Scourge You Don't' Want in Your Flock

**Caseous Lymphadenitis** (CLA or CL) is a bacterial disease of chronic suppurative lymphadenitis of both sheep and goats that has major economic consequences. It is commonly referred to as "Cheesy Gland" or "Lympho", and is associated with "Thin Ewe Syndrome."

CL is caused by Corynbacterium pseudotuberculosis. Abscessation of both internal and external lymph nodes is possible. Goats tend to have abscessation of external lymph nodes, while sheep tend to have internal nodes affected.




*The red marks are locations of common swellings caused by CLA. When you see abscesses in the location of external lymph nodes, it most likely is caseous lymphadenitis.*

The bacteria can survive within purulent material (pus) in shaded areas on fence posts, in shearing barns, etc., for several months, and can be found in sheep feces, surviving in straw, hay, and wood for several weeks. The bacteria can also survive at least 24 hours in commercial sheep dips.

The primary mode of infection is direct contact with pus or the secretion from abscesses that contain the C. pseudotuberculosis bacteria. The CL bacteria can exist in contaminated soil for a long period of time In a study conducted by scientists at the Brazilian Agricultural Research Corporation (EMBRAPA), the C. pseudotuberculosis was found in the soil of semi-arid environments for up to two years.

The C. pseudotuberculosis bacteria enters the body of an animal or a human through the skin, by ingestion or inhalation, or by coming in contact with contaminated equipment facilities, pastures, and feed and water troughs where a herd may congregate. Herd mates that come into direct contact with a ruptured abscess can also spread the infectious bacteria from animal to animal.

Upon infection, C. pseudotuberculosis will multiply and spread throughout the body via the bloodstream. Subsequently, lymph nodes and internal organs including the lungs, kidneys, and liver become infected and can develop abscesses. The spinal cord can also develop CL abscesses.

Once infected an animal is considered to be a carrier for life. The period of incubation, the time between the initial infection and the appearance of physical signs, can vary from 2 to 6 months. However, some animals within a herd appear to be very resistant to this disease. They may be infected with the CL bacteria, but not develop the disease.

There is no cure for CL. However, CL abscesses must be treated to prevent ruptures and further contamination of other animals and environments. If you have an animal that develops an abscess:

- Immediately isolate the animal from the herd.
- Place the infected animals on a concrete floor or other surface that will make disinfecting easier to avoid spreading the CL microorganism.
- Wear gloves when draining the abscesses to avoid contamination. The abscess is about to rupture then it has lost hair.
- Use a disposable scalpel to cut the surface of the abscess and drain it before it ruptures on its own in the field.
- Create a cross cut (+) to better drain an abscess.
- Completely drain the abscess of its content; a large amount of pus with the consistency of toothpaste may appear. You may wish to collect some of the pus with a new syringe for submission to a diagnostic lab for pathogen isolation and identification.
- Wash the resulting abscess cavity thoroughly with hydrogen peroxide, then flush it with an iodine solution.
- Keep the infected animals from the rest of the herd until the abscess is completely healed.
- Disinfect the area where the animals with the abscesses were housed.
- Keep records of abscess cases.
- Incinerate gloves, napkins, and lining material immediately after use.

The control of the CL disease by vaccination remains controversial although toxoid vaccines are now commercially available in some countries. A vaccine for sheep is commercially available in the United States. This vaccine is made with killed germs and seems to be effective in decreasing the incidence and severity of the disease in sheep (flocks). However, the vaccine is not approved for use in goats.

Historically CL has been controlled in herds by culling visibly infected animals and emphasizing hygiene in shearing and handling animals. These methods are effective in reducing the incidence of disease on a farm, and should continue to be implemented.

There are several points of attention for maintaining good hygiene. Preventing wounds by careful blade shearing, maintaining good fencing, and the use of well trained, gentle mouthed dogs for herding can all reduce the incidence of wounding. Decreasing the infection of wounds by quickly moving animals from higher contamination areas, disinfection of clipper blades and shearing equipment , construction of easily cleanable shearing sheds, and avoidance of dipping sheep until after all wounds have healed may all decrease infection. Shearing sheep youngest to oldest may also help prevent infection of uninfected animals.

Vaccination of sheep and goats can reduce the severity of CL. Older vaccines provided partial protection and contained inactivated whole-cell, cell-wall extract, or inactivated exotoxin. Newer vaccines contain both inactivated whole cell antigen and detoxified exotoxin. The newer two-component vaccine has been shown to decrease both the number of abscesses in sheep and the number of sheep that develop abscesses. Further, there was a significant reduction of both internal and external abscesses leading to fewer condemned carcasses and reduced environmental contamination and subsequent spread of disease. The vaccine should not be used in naïve flocks/herds. Vaccinated animals will have a positive serological test result, indistinguishable from infected animals.

Lambs should be vaccinated twice before shearing, once at tail docking, and once at weaning, at least 4-6 weeks apart. Adults should receive an annual booster. There is no vaccine licensed for goats.

Additionally, all new animals should be carefully inspected for peripheral lymph node enlargement, draining tracts, or other evidence of disease. If possible animals should be purchased from known CL-free herds.

Source: SHEEP & GOAT September 2022

"Cheesy" (purulent exudate)

Typical of CLA

Internal CL abscess in the intestine

# Upcoming Events for 2023

April 28-29 - Yellow Rose Fiber Fiesta - Seguin, Texas - www.yellowrosefiberfiesta.com

May 19-20 - Crazy Mountain Fiber Fest - Big Timber, Mont. - www.bigtimber.com/chamber-information/fiber-fest/

May 31—Showman's Best Camp (showmansbestcamp.com) Vermillion, SD

May 31-June 4 - Contemporary Handweavers of Texas - Sugar Land, Texas - www.weavetexas.org

June 2-3 - 73rd Annual West Virginia Purebred Sheep and Goat Show & Sale - Tri-County Faigrounds in Petersburg, W.V. - www.wvsheepandgoatsale.com

June 8-11 - Estes Park Wool Market (& Workshops) - Estes Park, Colo. - www.estesparkeventscomplex.com/wool-market.html

June 11 - New York State Fiber Conference - Butternut Hill Campground in Bouckville, N.Y. - caahp.ccext.net/civicrm/event/info?reset=1&id=170

June 14 - UI-USU-SDSU Extension Sheep and Goat Monthly Webinar - Online - https://uidaho.zoom.us

June 23-25 - Black Sheep Gathering - Albany, Ore. - www.blacksheepgathering.org.

June 23-25 - Houston Fiber Fest - Cypress, Texas - www.houstonfiberfest.com

June 24-25 - Beginning Shepherding and Pasture Management Workshop - Bellingham, Wash. - www.lydiasflock.com

June 25 - Michigan Sheep Producers Association Picnic and Tour - Kalamazoo, Mich. - Samantha Ludlam at samaludl@gmail.com

June 30- **July 2 -** Wyoming Sheep & Wool Festival - South Lincoln Training and Events Center in Kemmerer, Wyo. -

**August 27th—Nebraska Sheep & Goat Producers—Nebraska State Fair Tasting 2 pm CT—Grand Island, NE**

**September 9 & 10, 2023—NS&GPA—Annual Conference and Meeting—Broken Bow**

September 23 & 24, 2023—4S Goat Expo and Sale—North Platte, NE—s4goatexpo@yahoo.com

Renew your membership today for 2023!!!

Online go to nebraskasheepandgoat.org

Or

Email ne.sheep.goat@gmail.com

## ASI Offers Resource List for Sheep Producers

The American Sheep Industry Association has created two new postcards that include a QR code to take sheep producers directly to a list of available resources. The postcards will be distributed at industry events.

From the farm flock grower to the large producer, you can now find a list of resources on raising sheep, growing quality wool, wool education, contacts for sheep and wool, and ways to stay connected.

Click Here to access the list of resources.

**We are still working on our members directory!**
**Please fill out the form on page 14 and email, mail or text back to us.**
**This is a free service to all members.**
**Do you have a upcoming sale or clinic?**
**Let us help spread the word for you.**
**Just email the information to ne.sheep.goat@gmail.com**
**We will put it on our Facebook page and in our newsletter.**

Goat Curry

Ingredients:

5-1/2 cups raw goat milk the creamier the better be sure to catch the cream floating at the top

30 dates pitted (or about 3/4 cup of moist date pieces)

2 tablespoons arrowroot powder

6 organic or pastured egg yolks from naturally raised chickens - important!

3 tablespoons vanilla extract

1 avocado peeled and sliced

Directions:
Blend all ingredients until smooth in blender or Vitamix wet container.
Chill thoroughly.
Freeze according to your ice cream maker's instructions.
Serve immediately or put in the freezer to harden for about an hour.
If you freeze much longer, it gets very hard. That's not so bad because hard ice cream = milkshakes!

# NSGP Producers Directory

## Goats

Wood Chuck Hills
Kevin & Kendell Brichacek
Linwood, NE
402-615-1290 or 402-750-1639
lvfd71@gmail.com
Boer Goats
Breeding & show stock

Heidi Cuny
Gordon, NE
415-279-0185
heidimd@yahoo.com
Lamb and goat meat
All Natural –Grass Fed
Regenerative Ag

Forty Creek Acres
Sara Nichols
Eddyville, NE
308-340-4880
fortycreekacres@gmail.com
Commercial & Registered Boer and Registered Alpine Goats
Breeding and show stock
Hoof Trimming Services

## Sheep

Feldmann Farms
Bradley Feldmann
Meadow Grove, NE
402-750-1537
bdfeldmann@telebeep.com
SAMM & Ramouillet/G-link cross

Littlefield Family Farms
Michael & Bryan Littlefield
Surprise, NE
402-526-2240, 715-417-1525 or 402-270-2928
michaelrlittlefield@yahoo.com
Columbia
Breeding Stock
Sheep, Goat Llama & Alpaca Shearing

Circle M Targhees
Georg Mann
Hayes Center, NE
715-533-0249
gjmann47@gmail.com
Targhee
Great genetics and awesome Fleeces

Raising Targhee for 55 yrs
Lamb meat, breeding & show stock

Pigroco
Dan Stelik
Curtis and Dorchester, NE
785-275-1152
dstehlik2@unl.edu
Dorset, Dorset/Suffolk F1 Cross-bred
Individual cuts of lamb, Breeding stock, show lambs commercial market lambs—All natural/ antibiotic free
Accelerated Laming Program

Bluff Valley Farms
Kenneth & Mary Grace Thiltges
Rulo, NE
402-245-5460
bluffvalleyfarm@sentco.net
Polypay ewes—Xbred lambs
Individual cut of Lamb—USDA inspected.

Double M
Mike & Fran Wallace
Nelson, NE
402-984-4837
St. Dorpanov
Ewe Lambs available

Old Barn Farm
John Wagoner
Phillips, NE
308-379-4898
mobydick51@msn.com
Purebred Suffolk

## Both

M/N Boer Goat & Sheep
Connie Moore & Bronc & Melissa Nicholson
Chadron, NE
970-629-2689 or 308-386-8378
crmoor4@gmail.com
Whole lamb/goat & Breeding stock—All natural Grass Feed
Rambouillet, Southdown, Boer, Spanish and Registered Alpine

# Columbus Sales Pavilion, Inc.
# Tuesday's 4:00 PM
# 2023

## Feeder Pig, Butcher Hog & Sows, Sheep & Goat Sale

| | |
|---|---|
| March 14th & 28th | August 8th & 22nd |
| April 11th & 25th | September 5th & 19th |
| May 9th & 23rd | October 3rd, 17th & 31st |
| | (subject to change due to Montana Sale) |
| June 6th & 20th | November 14th & 28th |
| July 11th & 25th | December 12th |

**Randy 402-276-2775**

## ALB's Lamb Jam Set for Month-Long Experience

What started more than a decade ago as a tasty tour showcasing local chefs and innovative lamb dishes to lamb lovers in six target markets has broadened its scope to a month-long dine around celebration. The American Lamb Board's Lamb Jam restaurant program will take place in Austin, Boston, Washington, D.C., Denver, San Francisco and Seattle during the month of May.

Eight chefs in each market will create an American lamb special to win over the palates of lamb enthusiasts. The lamb dishes will all feature either boneless leg, boneless shoulder or ground lamb. Live near Austin? Stop by Lenoir for Lamb Pastrami. What about Seattle? Book a table at Spinasse for Breaded and Fried Lamb Lollipop on a Stick. And if you live in Boston, do not miss out on the Lamb Birria Tacos at Sub Rosa.

"The American Lamb Jam Restaurant Month is an epic chef competition and culinary experience that brings together the most talented chefs to celebrate family-operated farms and ranches raising sheep in the U.S.," says Peter Camino, ALB chairman from Buffalo, Wyo.

As Lamb Jam takes on the dine-around format, diners will decide the People's Choice Award. The chef/restaurant with the highest number of votes for favorite American lamb dish will receive a donation to the charity of their choice. Participating diners who cast a vote will receive an exclusive Lamb Jam T-shirt and have a chance to win a $250 gift card to the participating restaurant of their choice.

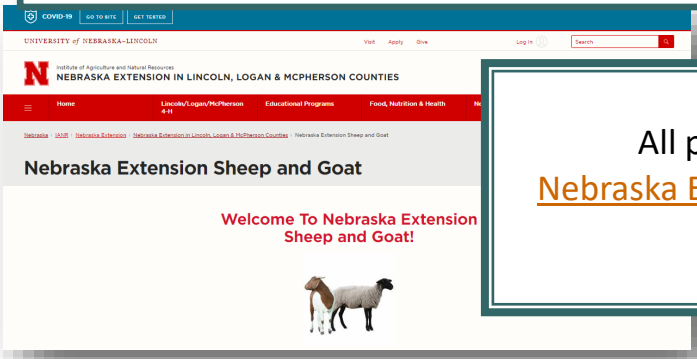
In each market, three foodie influencers will serve as secret dining judges. They will visit all eight participating restaurants and evaluate each dish for presentation, taste and creativity. The winning chefs will be considered Lamb Jam Masters and receive a trip to Napa, Calif., where they will cook and enjoy an American lamb lunch at the Culinary Institute of America and visit a nearby regenerative agriculture sheep ranch.

Lamb Jam promotions will appear through ALB's social channels, paid social posts, brand collaborations and Google ads. A breakdown of participating cities, chefs and restaurants is available at AmericanLamb.com/lamb-jam.

Funded through the national American Lamb Checkoff, ALB invests the industry's valuable resources to foster profitability and create opportunities for all sectors involved in producing American lamb. All segments of the American lamb industry contribute to building the demand for American lamb through mandatory checkoff payments. Unlike other United States livestock checkoffs, funding is only collected from domestic lamb, not imported lamb. This allows ALB to focus all its efforts on increasing demand for American lamb.

Click Here for more information.

*Source: ALB*




All programs that are recorded posted to this page.
Nebraska Extension Sheep and Goat | Nebraska Extension (unl.edu)

# NSGP Producers Directory

Do you have lambs/goats for sale? Do you sell breeding stock or have a service to provide to others? Do you sell directly to consumers? We want to get your name out there and promote your business. We are going to work hard this year to build a directory that will be posted on our website and in our newsletter that will provide buyers and consumers a list of where they can purchase local lamb/goat, sheep and goat services, and quality breeding stock. *Please remember, if you are selling lambs or goats as meat (not sold live prior to slaughter) they must be butchered at a state or federally inspected plant.

Name: _____

Operation Name: _____

Phone Number: _____

Email: _____

Location: _____

**What do you sell?**

- ☐ Whole lambs/goats
- ☐ Half lambs/goats
- ☐ Individual cuts
- ☐ Mutton
- ☐ Breeding stock Breed: _____
- ☐ Show lambs/goats
- ☐ Other Please explain: _____

**Do you have any special statement with your lambs/goats?**

- ☐ All natural
- ☐ Grass Fed
- ☐ Organic
- ☐ Other: _____

Please return to NSGP:

Melissa Nicholson

308-386-8378

Ne.sheep.goat@gmail.com

P.O. Box 1066—Chadron, NE 69337

This is a free service for all members. Non-member there will be a $25 annual listing fee.

PO Box 1066
Chadron, NE 69337

www.nebraskasheepandgoat.org
ne.sheep.goat@gmail.com

Tel: Daniel Stehlik, President - (785)-275-1152
Email: dstehlik2@unl.edu

Newsletter:
Melissa Nicholson Newsletter and Communications Secretary (Chadron)
(308)386-8378 ne.sheep.goat@gmail.com
Website:
www.nebraskasheepandgoat.org

**"Supporting, Protecting and Promoting Nebraska's Sheep and Goat Producers since 1979"**