

## Nebraska Sheep and Goat Facts

- In 2016, Nebraska's numbers of sheep and lambs ranked fifth in the nation.
- Sheep and lambs, 2016 – 83,000 (compared to 80,000 in 2015)
- Goats, 2016 – 24,000 (20,000 meat goats; 4,000 dairy goats, compared to 3,500 in 2015)

# ON THE RANCH



## No Kidding - Goats Becoming More Popular in Nebraska

Goat and sheep numbers are increasing throughout Nebraska. They're also becoming a respectable presence at county fairs, the Nebraska State Fair and Aksarben Stock Show.

Whether on an acreage, farm or ranch, sheep and goats can supplement income and be environmentally sustainable. For every cow grazed, you can add one lamb or one goat.

Cattle, sheep and goats can complement each other when it comes to forage. Cattle eat grass. Sheep consume broadleaf weeds. Goats can and do eat woody- and tannin-containing

plants. Undesirable weeds removed by sheep and goats means using less pesticides. Additionally, their manure can be supplemental fertilizer.

It's interesting to note that goats tend to graze from the perimeter to the inside of a pasture, while sheep graze from the inside to the perimeter.

**Curiosity Got the – Goat?** - By nature, goats are curious and need to explore to satisfy that curiosity and be content. For example, their instinct to climb and jump helps satisfy their curiosity. To keep goats from being bored and unhappy, they should have something to climb or play on. Wooden utility spools or tractor tires make good goat playground equipment. Just keep these "toys" away from the fence or the goat will use them as a launching pad to clear the fence. Goat fences should be strong and at least 48 inches tall.

Goats also thrive on herd instinct. They don't do well alone, so you need to have two or three goats if you are going to have one at all.



Goats, like most animals, are susceptible to parasites.

Image from Joan M. Burke, USDA.

**Pesky Parasites** - Goats and sheep, like most animals, are susceptible to parasites. Sheep are more likely to expel parasite eggs than goats. Since goats are less likely to shed the eggs, goats are more susceptible to worms than sheep.

Grazing animals consume any insect larvae that may be on the ground foliage. Keeping animals in a dry lot, without grass, can help prevent parasites.

Pens are at less risk for parasites when 90 percent of the worms or larvae have died. If temperatures are extremely hot, they can die off in a few weeks; otherwise, it takes three to six months for them to die off.

Rotating grazing areas can help prevent heavy infestations of parasites. An empty pasture can take a year or an entire grazing season for worm eggs and larvae to die off; leaving a pasture empty this long, though, is usually impractical.

The most common destructive sheep and goat parasite is the barber pole worm, *Haemonchus contortus*. Up to an inch long, females are red and white striped. Males are solid red. Females can lay

thousands of eggs a day, and feed on the animal's blood. A severely infected animal can have millions of worms.

Barber pole worms are especially troublesome in hot, wet climates, or six weeks after a hot and rainy spell. In dry, arid climates where sheep and goats originated, parasites were kept in check. Even frost and colder temperatures don't kill barber pole worms.

Monthly worming kills most – but not all – of the worms. This means surviving worms are resistant to that wormer. Eventually, even rotating wormers will cause resistance to all deworming products. Worming less often can help reduce resistance.

Typically, a small percentage of goats in the herd carry the most worms. Culling them will help eliminate worms and make for a healthier herd.

**The Eyes Have It** - Today's sustainable parasite management system relies on strategic management. That's where the FAMACHA chart comes in. Producers must be trained to obtain the chart and properly use it.

Developed in South Africa, the FAMACHA (FAffa MAIn CHArT) chart shows five high-resolution colors of eyelids. The colors correlate with the shade of red on a scale of 1 (most pale) to 5 (most red) with a level of anemia.

Comparing the animal's lower eyelid with the FAMACHA chart shows the level of anemia in that animal. The paler the eyelid, the more worms the animal is likely to have, and the more anemic it is. Animals whose eyes show them to be mildly infected are treated before the worm numbers become too great. Animals that don't need to be treated aren't. Since all animals aren't treated at the same time, eventually the resistance is more likely to be diluted out. Animals that need dewormed frequently should be culled from the herd. This improves herd genetics, as well as reduces the number of infective larvae on the pasture.

While the system is good, it's not foolproof. Some animals can look healthy and have red eyelids, but suddenly die from worms.

Cattle, sheep and goats all need different dewormers. Some wormers work better on an empty stomach, so those animals can be penned up without food the night before. Generally, oral dewormers work better than pour-ons or injections.



Image from Randy Saner, Nebraska

**Grazing and Care** - Although both are small ruminants, which means they have a four-chamber stomach, sheep and goats are different species. Goats prefer plants containing tannins that can help lower fecal egg counts and possibly internal larvae numbers. Tannin-containing plants include undesirable sericea lespedeza and black locust.

Sheep, goats and cattle may be grazed together. However with sheep, producers must be careful about cattle rations that contain copper. While sheep can digest copper, their requirements are so low that additional copper in a sheep diet is toxic. Goat requirements for copper are higher and similar to cattle, so copper for goats is not toxic at cattle levels.

Goats and sheep may be kept together except during breeding season. Being of different species, if sheep and goats breed, and if the resulting animal survives, it is a rare infertile hybrid called a "geep."

Compared to cattle, sheep and goats are more labor intensive. Their hooves, for example, need to be trimmed every six to eight weeks, unless their environment includes rocky soil where hooves wear down naturally when they walk. Without the right holding equipment, bending over to work on small animals such as sheep and goats can be physically hard on a person.

**Put Your Guard Up** - Protecting sheep and goats from predators can help make the producer's life easier. Guard animals include llamas, donkeys and dogs such as Great Pyrenees. Having more than one guard animal can be desirable. For example, a single guard dog can be distracted when a pack of predators close in, leaving the herd vulnerable. On the other hand, guard dogs can prevent unfamiliar people from entering the pen. That means the herd owner, with whom the guard dog is familiar, will need to accompany anyone entering the area.

Source: <https://communityenvironment.unl.edu/no-kidding>

## REMOVE NET WRAP AND TWINE

Bruce Anderson, UNL Extension Professor

Is twine or net wrap good feed? Obviously not, but it can cause health problems if animals eat too much of it.

Feeding hay is work. To lighten the work load feeding hay, we often take short cuts and leave some twine or net wrap on the bales. And whether we want them to or not, animals eat some of that twine.

A few years ago I shared with you information about the potential for twine to accumulate in the rumen of cattle and cause obstruction. Recent research at North Dakota State University has confirmed this risk and provided further information on what happens to twine when cattle eat it.

In a series of experiments, the North Dakota research first showed that neither plastic net wrap nor biodegradable twine get digested by rumen microbes. The old fashioned sisal twine, however, does get digested, although quite a bit more slowly than hay.

In another study net wrap was included in the ration fed to steers for an extended period of time. Then, 14 days before the steers were harvested the net wrap was removed from the feed to learn if the net wrap eaten earlier might get cleared out of the rumen and digestive system. Turns out it was still in the rumen even after 14 days.

So what should you do? First, remember that it doesn't appear to be a health concern very often. And cows obviously are more at risk than feedlot animals. So, it might be wise to remove as much twine, especially plastic twine, as can be removed easily from bales before feeding. Twine in ground hay may be less of a problem since more of it is likely to pass completely through the animal.

Think about how shortcuts and work-reducing actions you take this winter might affect your animals. Then act accordingly.

## FEEDING ALFALFA AS A PROTEIN SUPPLEMENT

Bruce Anderson, UNL Extension Professor

Feeding more protein than cattle need can get expensive. Alfalfa can be an inexpensive protein source, especially if you feed just enough alfalfa to provide the protein your animals need.

Cattle often need extra protein when their winter diet is based on corn stalks, prairie hay, straw, or winter range. The protein supplement you chose is important, both in its effectiveness and its cost. Many cheap protein sources contain mostly urea and other forms of non-protein nitrogen. These supplements often are not used very effectively when cattle are eating mostly low energy winter forages.

Supplements containing mostly all-natural protein may be better. All-natural protein feeds the microbes in the rumen so they can digest more fiber from your forage. And many times the cheapest natural source of protein is alfalfa, especially when hay price is reasonable.

Keep costs down further by determining how much extra protein your cows actually need. Both a forage test for protein and a close estimate of how much your cows are actually eating are needed to be accurate. Then you can work with a local extension educator, a nutritionist, or use your own skills to calculate how much more protein is needed.

Many winter forage diets need between 1/2 and 1 pound of extra protein per day. Since the forage test of your alfalfa will tell you how much protein it contains, you can calculate how much alfalfa to feed each day, or every other day, to keep cows healthy and productive. This could come from as little as 2 pounds of hay when feeding high protein alfalfa to cows needing just a little extra protein to as much as 8 to 10 pounds when using low quality alfalfa to cows after calving.

It may not sound like a big difference, but when you feed just two or three pounds each day per cow, the savings add up fast.