

# SHEEP CARE

## Physiology of Sheep

The average lifespan for sheep is 10 to 12 years. However, most sanctuary animals come from abusive conditions and, consequently, they may have health problems and shorter life spans than this. Mature female sheep (ewes) generally weigh between 110 and 150 pounds. Mature male sheep (ram, if uncastrated; wether, if castrated) generally weigh between 125 and 250 pounds, depending on breed. The normal temperature of sheep is 100.9 °F to 103.8 °F.

## Nutritional Needs of Sheep

**Water.** Clean, fresh water must always be available to your sheep. Use heavy containers to avoid spilling. You may want to purchase an automatic watering system because it will greatly reduce water waste. These are also ideal for areas where temperatures get below freezing.

**Minerals.** Minerals should always be available to your sheep and are an essential part of nutritional maintenance. Sheep minerals come in different forms, including loose minerals or mineral blocks. Loose minerals can be fed in a creep feeder, which is mounted to the wall, to keep them from getting wet and dirty. Vitamin and mineral blocks are used in a holder designed specifically for them. If you keep sheep and goats together, make sure that the minerals you use are specified for both because goat minerals contain copper, which can be toxic to sheep.

**Feed.** Sheep are ruminants (multi-stomached animals) and consequently, they rely mainly on hay or pasture for their dietary needs. They will need at least eight hours of grazing time per day. Grain is very high in fat, and we do not recommend using it as feed because sheep who are not in production (not bred) tend to have weight problems. Again, make sure that any feed you use is designed for sheep and not for goats, because goat grains usually contain copper. We recommend using grains only when animals have dental issues or other problems that cause them to lose excessive weight due to an inability to eat hay. In these cases, grain can be used to supplement their diet. Watch carefully for obesity; it is very unhealthy for sheep. Older sheep can easily gain too much weight on even small amounts of feed or hay, which is too rich for them.

The best sheep pastures include clovers and mixed grasses. Cooperative extension can give you an idea of the best pasture mix for sheep that can be grown in your region. When using only pasture for roughage, avoid overgrazing. Sheep will graze very close to the ground if allowed, and this can destroy your pasture. The best system for grazing is to use two or more pastures and rotate them as needed. This system also cuts down on parasite problems. Before pasturing, be sure to remove all plants that are poisonous to sheep. Contact your County Agricultural Extension agent for a complete listing of poisonous plants in your area. Never put sheep on a rich clover or alfalfa pasture that is wet with rain or dew, as this can cause bloat.

If adequate pasture is not available, feed your sheep a grass-type hay such as timothy. Alfalfa hay is very high-protein and calcium and should be used only for sick or debilitated animals. To locate a source of hay in your area, check with your County Agricultural Extension agent for a listing of hay/straw auctions or look in the farming section of your local paper. Hay is less expensive per bale if you can buy it in large quantities; therefore it is well worth the investment to build some type of hay storage building or loft if you are feeding a flock of sheep rather than just one or two.

## Handling Sheep

When working with sheep, be very calm and gentle in your approach. Sheep are suspicious animals by nature and will spook easily if you yell or handle them roughly. When handling your sheep, use a rope halter (available at farm supply stores or through catalogs). If your sheep have horns, you can hold them help control the sheep, although many sheep do not like to have their horns used in this manner. If possible, it is best to have someone assist you. Once caught, some sheep will lie down automatically, and you can have your assistant cradle the head and pet them while you are working on them. Handling your sheep too roughly will actually cause them to struggle more, so the best approach is to apply just enough restraint to keep them still while you work with them.

**Tethering.** Tethering your sheep (putting them on a long leash) is never recommended because it can be stressful to them. Tethering can also be very dangerous; sheep can hang themselves on a tether.

**Identification.** If you have a large flock of sheep, it is important to be able to identify each sheep individually. Farm Sanctuary uses leg bands. When using leg bands, however, make sure they are not too snug when the sheep is shorn or unshorn. Check leg bands monthly if a sheep is still growing. A leg band that is too tight can cause discomfort and even serious injury.

## Shelter Requirements for Sheep

**Building.** For sheep, we recommend the use of a pole barn or a building with a dirt floor rather than a shed or a house with a wooden floor. If sheep slip, they may tear ligaments or damage joints, so the best precaution is to use a shelter with a dirt floor. Allow at least 25 square feet per sheep and be sure the shelter has good ventilation and no direct drafts. Always provide your sheep with plenty of clean, dry straw for bedding. Remove damp and soiled straw daily, replacing it with fresh straw. Hydrated lime will help absorb moisture and prevent spread of bacteria. Spread it lightly on any wet areas.

**Fencing.** In addition to adequate shelter, you will need a fenced-in area for your sheep. The ideal fencing to use for sheep is 4-foot high, no-climb, woven-wire horse fencing, available at farm supply stores. Field fence has large square openings, and sheep, especially those with horns, can easily get their heads caught. Be sure to walk your fence line frequently to check for holes dug by predators under the fencing. The use of high tensile electric fencing is also an option, especially if you are housing cattle and sheep together.

**Pasture.** We recommend allowing one acre of land for every three to six sheep. This acreage may vary, depending on the type of land available. In areas that experience hot weather, pastures should have shaded areas for the sheep to prevent them from overheating. Sheep should always have access to their barn and to fresh water at all times, especially during hot weather.

## Health Care for Sheep

**Maintenance Care.** Sheep are relatively easy to care for. Sanitary housing, good quality pasture, nutritious food, fresh water, minerals, and basic maintenance care are their main requirements.

**Hoof Trimming.** Sheep need to have their hooves trimmed every six to 10 weeks. This is a very important task because neglecting hoof trimming can lead to lameness and infection in your sheep. Hoof trimming is a simple procedure that your veterinarian can teach you. Hoof trimmers are available through farm supply stores or catalogs. Make sure your pastures have good drainage because wet, muddy areas lead to more serious hoof issues, including foot and hoof rot.

**Shearing.** Sheep need to be shorn once a year in the spring. Unless you are a trained shearer, we always recommend that you hire a professional shearer. Your local County Agricultural Extension agent or veterinarian should have a list of sheep shearers in your area.

During your daily contact with your sheep, always be on the lookout for any physical or behavioral changes. Symptoms indicating illness include loss of appetite, weakness or staggering, labored or fast breathing, diarrhea, or lameness. If any of these symptoms occur, pull the animal from the flock and conduct a full health check. If you cannot determine the cause of the condition, consult your veterinarian.

**Vaccines.** Make sure your sheep are vaccinated for rabies, tetanus, and *Clostridium* (Bar-Vac CDT). The rabies vaccine can be hard on sheep; therefore other vaccinations being administered should be given at least one month before or one month after the rabies vaccine.

**Teeth.** Sheep can have dental issues and, often, as they age, their teeth develop sharp points. If your sheep are demonstrating exaggerated jaw movements when eating or going off feed, a quick dental check by your vet may be necessary. Do not put your hand in the mouth of your sheep. They have strong jaws and very sharp back teeth. Unless you have experience examining sheep's mouths, leave this task to a vet.

## Common Health Issues of Sheep

**Upper Respiratory Infection.** A respiratory infection is any condition that affects the sheep's breathing apparatus, including the nose, trachea/windpipe, bronchi, and lungs. Symptoms include nasal discharge, excessive coughing or sneezing, loss of appetite, and

raised body temperatures. If any of these symptoms occur, consult with your veterinarian immediately.

**Bloat/Grain Poisoning.** Bloat is a serious condition commonly caused by overeating grain or new pasture. Preventive steps should be taken to stop bloat from occurring. Do not put sheep out on new pasture until their digestive systems have adjusted to that type of pasture. Be especially careful to prevent bloat if you have fields of rapidly growing plants such as alfalfa and clover. Gradually introduce sheep to new pasture by feeding them some of the new pasture for a few days along with their regular hay. Then, turn them out for only a few hours at a time, making sure that the field is not wet. A wet field is more likely to cause bloat than a dry field. Make sure feed barrels and bags are completely inaccessible. Sheep will gorge themselves on grain, which leads to bloat and grain poisoning.

The first obvious symptoms of bloat are distension of the rumen of the left side, labored breathing, and signs of discomfort such as kicking, grinding teeth, bawling, and profuse salivation. Any evidence of bloat *should be deemed an emergency*; you should contact your veterinarian immediately. Also have bloat remedies on site at all times when you house ruminants because a vet may not be immediately available. Remember that prevention is the best approach; bloat caught late is likely to be fatal.

**Coccidiosis.** Coccidia are a protozoan parasite which, when present in small numbers, cause very little damage to sheep; most adult sheep are infected and immune. Lambs, however, are extremely susceptible, and an acute form of this parasite can cause death. Almost all species of animal have their own strain of coccidian. The coccidia of rabbits and chickens, for example, do not cause disease in sheep. The coccidia of goats, however, may be responsible for some disease in sheep and therefore should be regarded as suspect. Regular fecal checks (every three months) should be done to help keep parasites under control.

**Other Internal Parasites.** Parasites thrive in areas that are cool and damp. On the East Coast, we see far more parasites in our sheep flocks than we do at our West Coast facilities, which are dry and hot. Parasite infestation is one of the most important health issues with sheep and goats, and many have developed resistance to the treatments most commonly used. It is imperative that you institute a strict treatment program for all your small ruminants. Strongyles are one of the more common parasites, but a few parasites that are much more dangerous to your flock are listed below. Again, regular fecal checks and a worming program for your sheep are imperative.

**Lungworms:** Lungworms, like many parasites, are passed through the feces and then ingested by grazing animals. They then travel to the lungs and trachea. Only in severe infestations do these parasites cause sheep to manifest clinical signs such as fever, coughing, and nasal discharge, but older animals, younger animals, or animals with weakened immunity can become quite sick and even die from these parasites.

**Barber Pole (*Haemonchus*):** Barber pole is the most deadly of the stomach worms that infest sheep and goats. Barber pole is a blood-sucking parasite that pierces the lining of the abomasum, or the true stomach, of the sheep. This process causes anemia and can quickly lead to death. The most obvious symptom of this parasite is anemia. Many sheep have black or gray gums, which makes the gums difficult to use to diagnose anemia. The “FAMACHA system” can help you identify anemia by examining the lower eyelid of a sheep. Cards are used in this system to help you identify anemia by comparing the color of the lower eye lid with a color chart. Bottle jaw or fluid accumulation under the chin is another sign of this infestation. In many areas of the country, these parasites are becoming resistant to antibiotics. Because these parasites lead to fatalities, it is imperative that a proper worming program is established at your shelter.

**Abscesses.** Abscesses are localized pockets of infection filled with pus, usually caused by wounds or cuts that have penetrated the skin. Abscesses are indicated by swellings or lumps found under the skin and can occur anywhere on the sheep’s body. Should you notice any unusual lumps or swellings on your sheep, isolate him or her from the herd and contact your veterinarian. Abscesses can be a sign of other health conditions, including CL, listed below.

**Caseous Lymphadenitis (CL).** Caseous lymphadenitis (CL) is a chronic disease that causes enlarged, localized, and non-painful abscesses on the skin, organs, and lymph nodes. There are two forms of CL, internal and external. The external form, which results in abscesses on the skin, can become internal via blood or the lymphatic system, affecting the internal lymph nodes and organs. One of the first outward signs of CL is large, pus-filled abscesses. If you have a sheep with an abscess, you should separate her from the herd and have a vet take a culture of the pus. This is the most accurate test for CL. If it is CL, the pus in the abscess is contagious and can spread the disease. Because of this, shearing your sheep can spread the bacteria, and precautions should be taken during the process. If you are involved with sheep rescue, you *will* have CL sheep, and you will need to know the best way to care for them. There is a wealth of information available on the disease and how to care for sheep with this condition, which can be daunting to decipher, so please contact someone at our shelter for more information.

**Caprine Arthritis and Encephalitis (CAE).** Caprine arthritis-encephalitis virus, called CAE, is an RNA virus or retrovirus that affects both sheep and goats. CAE-positive animals are infected for life. In rescue, many sheep are positive for the CAE virus, and many of the sheep at our shelters currently have been diagnosed as being CAE-positive. This includes our older sheep herd — many of the sheep arrived with CAE and have lived with the condition now for more than 12 years.

CAE virus can cause infections in the lungs, central nervous system symptoms, inflammation and breakdown of the joints, and issues with the mammary gland. The virus affects sheep and goats, and the majority of the animals we have seen have symptoms that manifest as adult arthritis. Two of the sheep had chronic pneumonia and all, as they

age, have experienced progressive weight loss. All of these symptoms, however, have been manageable until the animals are very old.

The virus unfortunately is transmitted in utero, so all babies who were born to infected mothers are likely to be positive for the disease. The primary means of transmission, other than in utero, is through the colostrum. All lambs at our shelters received colostrum because the mothers were not diagnosed with the condition until after their births. Horizontal transmission is also possible through infected blood, but we have not witnessed that phenomenon here.

Most sheep that are infected with the virus are asymptomatic, but when they do manifest symptoms, there are five ways the virus presents:

- arthritis (most common)
- encephalitic form (lambs between two and six months of age)
- pneumonia
- mammary form/mastitis
- chronic/progressive weight loss

**Hoof Rot.** Hoof rot is a bacterial infection of the hoof. It is more prevalent during wet seasons or when sheep spend long periods of time on wet ground, which softens the hooves and feet and makes them more prone to openings. One or more hooves can be infected at any time. Symptoms include lameness, swelling between claws, and an elevated temperature. If left untreated, the foot will begin to “rot,” creating a foul-smelling discharge. By tending to your sheep’s hooves on a regular basis, keeping your pastures free of wet areas through proper drainage, and keeping bedding clean and dry, you will help prevent the occurrence of hoof rot. To treat hoof rot, trim out all rotten areas that you are able to remove. Clean the foot well with a product designed for treating hoof rot, such as Dr. Naylor Hoof & Heel Care. We also recommend treatment with an antibiotic from the tetracycline family. Proper hoof maintenance is the best way to prevent this condition. Have your vet check the hooves if you find many infected sheep because contagious hoof rot is easily spread but also very hard to treat. Treatment for this type of hoof rot is far more serious and includes foot baths, systemic antibiotic treatments, and aggressive trimming.

### Incoming Sheep Procedures

When sheep arrive on your farm, they must be isolated in a strict quarantine area, and ISO suits (Tyvek, coveralls, or even scrubs) boot covers, and rubber gloves should be worn unless the sheep came from another sanctuary and have received a clean bill of health. If animals are in poor shape, do not spread straw on pastures. Pile it in a separate area on the farm until all tests below are complete and conclusive. Sheep must remain in quarantine for a minimum of four weeks.

- Check all hooves immediately, trim them and look for any indication of hoof rot. If there is hoof rot, have it diagnosed to determine if it is contagious. Immediately set up hoof rot mats and carry out individual treatments on all sheep that need it.

- Check for any discharge or watery eyes and, if present, have a vet determine if it is pink eye. If so, treat immediately and wear gloves when handling all animals.
- Check weekly for lumps and bumps on the skin of each individual animal and culture any abscesses found for CL. If, after four weeks, there is no sign of CL, you can test for it, but tests often give false negatives or false positives. The most accurate test is a pus sample from an abscess. Tests for either disease are not considered accurate in lambs and kids up to three months of age due to antibodies received from their mother.
- Send in fecal samples for analysis and treat as needed. Many sheep and goat parasites are resistant to medications, so multiple treatments with various types of medications may be required.
- If you are concerned that CAE may be present, take blood tests to rule it out.
- Vaccinate all sheep with Bar-Vac CDT. Pregnant and nursing mothers may need a booster shot if they remain isolated for longer than four weeks. Lambs should be at least four weeks old before vaccinated unless your vet advises you to vaccinate earlier.
- Shear sheep if weather permits to get a better view of their skin so that abscesses, external parasites, or problems affecting the skin are visible.
- Check for external parasites or skin problems. Treat lice with topical treatment, which is available in most farm catalogs.
- If there is a chance that a sheep is pregnant, have a vet check her status immediately. Check all animals for sores on their mouth because many arrive with Orf, or soremouth, which is contagious to humans as well. If there is even a possibility that orf is present, gloves must be worn at all times by all staff caring for the animal or handling their bedding.
- Neuter all unaltered males. Older sheep should be neutered in a hospital setting, and we recommend a full scrotal removal under anesthesia. Lambs can usually be neutered on-site by a large animal vet. If you are unsure of the best method to use, please contact us at the shelter.
- Keep new sheep or goats in isolation pens in the resident barn for at least two weeks to allow them to adjust to their new herd mates before they are put together.
- Follow all requirements set by USDA and APHIS when transporting animals out of state to new homes.
- Animals should be healthy and parasite-free before being adopted and moved to new home or placed with resident animals on the main farm.

#### Resources for Sheep Care

Please note: Many of the catalogs listed contain products commonly used in animal agriculture.

Unfortunately, there are no farm catalogs that list only cruelty-free items.

Omaha Vaccine Company: -PO Box 7228 Omaha, NE 68107; phone: 800-367-4444

Nasco Farm & Ranch: 901 Janesville Ave., Fort Atkinson, WI 53538-0901; phone: 800-558-9595

Valley Vet Supply: PO Box 504, Marysville, KS 66508; phone: 800-468-0059