Husbandry of South American Camelids in Central Vermont

Feeding:

Non-lactating SAC adults require hay or grass, minerals, and water to thrive.

Many camelids benefit from a zinc supplement to keep their skin and fiber in peak condition. Additionally, Central Vermont is a selenium-deficient area and many animals will need to be supplemented with Vitamin E and Selenium. Copper is also necessary for health, as are other minerals and a goat mineral works well for most camelids.

Males in particular should not be feed excess grains or pelleted feeds without consulting your veterinarian, because there is a risk for urinary stones.

Lactating females and females in their last trimester of gestation have additional nutritional requirements and should be fed a supplement appropriate for SAC’s.

All camelids, but especially YOUNG ONES, in Vermont should be fed a supplement that contains Vitamin D or given Vitamin D injections during the winter months to prevent Rickets. I use an intramuscular injection of commercial vitamin D at a dosage between 1,500-2,000 IU/kg (700-900 IU vitamin D/lb) body weight. That will effectively increase serum vitamin D concentrations for up to 90 days. For a product containing 75,000 IU/ml of Vitamin D, this is equivalent to 0.9 to 1.2 ml/100 lb BW dosage. These injections can be used to treat a clinical animal or used to boost vitamin D status in an effort to prevent the problem. Preventive treatment should be given in the early fall months.
Vaccinations:

Vaccinations specifically for llamas or alpacas are not presently manufactured in the United States. All vaccinations recommended were produced and tested for efficacy and safety in other species. All vaccinations given to SAC’s in the US are therefore “extra-label.” Owners should bear in mind that whilst vaccination programs in SAC’s have historically been successful, a veterinarian must use his own judgment when selecting vaccines for these animals and guarantees of vaccine success and safety cannot be assured. SAC’s who are kept as pack or fiber animals and who are not bred should be vaccinated annually against rabies and against clostridial diseases including types C & D, and tetanus (Covexin-8 is a good option). They should also be vaccinated against Eastern Encephalitis, Western Encephalitis, and West Nile Virus. The initial series of EEE/WEE/WNV is two injections, 30 days apart, then vaccinate again the following spring.

Breeding animals:

- Rabies annually.
- 8-way clostridial vaccination that includes tetanus when animal is not pregnant, and CD/T vaccine for pregnant animals.
- EEE/WEE/WNV vaccine annually after initial series.
- Leptospirosis vaccination (SpiroVac) after creation and before re-breeding if your vet thinks that lepto may be an issue on your farm.
- Pregnant animals should be vaccinated with EEE/WEE/WNV/Rabies at 10 months of gestation CD/T at 9 and 10 months of gestation to help the dam produce a high-quality colostrum if the llama or alpaca is not overly-stressed by the vaccination process. If she is stressed, vaccinate the female with Covexin-8 and rabies before breeding only. Leptoferm has been used in pregnant camelids without incident.

Young animals:

- Crias should be vaccinated against clostridial diseases once a month for 3 months beginning at 3-4 weeks of age if the mother was not vaccinated and at 3 months if the mother was vaccinated.
• Rabies and leptospirosis vaccination should commence at weaning or around 6 months of age and boosters given 1 month later.
• EEE/WEE/WNV should commence at weaning or around 6 months of age and boosters given 1 month later.

Deworming:

Deworming any herd of animals depends on the conditions in which the animals are kept. For SAC’s who have access to pasture, deworming before the snow melts and green grass begins to grow is an important part of breaking the parasite lifecycle. Because parasite resistance is becoming a more difficult problem, selective deworming is presently recommended. Deworm in the spring before the animals go out on pasture and again the fall after the first deep freeze. Additional deworming in the spring may be necessary to promote small parasite burdens on pastures. It is safe to use a double-dose of most dewormers including fenbendazole. If you animal weighs 250 lbs, treat with 500# worth of paste. If you are using fenbendazole (Safeguard), however, it may be even better to break up the dose over 3-4 days and possibly to use a second dewormer on day 5. Your veterinarian can help you with this protocol. Ask your veterinarian about examining your animals’ feces for parasite eggs to help guide and fine-tune your deworming protocol. Testing feces for parasite eggs is crucial on most camelid farms. Camelids are very sensitive to high worm burdens!! Many camelids need more frequent deworming than once in the spring. This deworming protocol does not help with coccidia, so if you have crias discuss coccidia with your veterinarian.

If you live in an area with meningeal worm, you should discuss monthly injectable ivermectin deworming with your veterinarian as there both up- and down-sides to this preventative measure. Watch for toe dragging, looking “wonky” behind, standing with legs at funny angles, or other signs that your camelid is weak or does not know where is feet are or how to use them. If you see these signs, call your vet right away.

Young animals may need treatment for coccidia parasites. You should consider having the feces of young animals tested and treating with a coccidiastat if necessary. You should have feces tested if your crias or juveniles develop diarrhea.
• Most importantly, pastures and paddocks must be cleaned and manure removed frequently. This is the single most effective way to control parasites on your farm.

**Care of the Cria**

Most llamas and alpacas will expel the fetus from the standing position in 8-24 minutes. If this stage of labor takes many minutes longer than this, you should call your veterinarian immediately. After birth if you are present, make sure that your cria is breathing well. He may need his nose and mouth wiped with a soft towel to dislodge the fetal membranes.

The lamoid mother does not lick or groom her cria, but most will hum as the cria gets his bearings in the world. The cria should be active immediately and most will get up and begin attempts to nurse within one hour.

If the delivery was normal and your cria is active and nursing well, he should be examined by your veterinarian and his or her IgG levels checked at 24 hours. He should receive an injection of Vitamin E and Selenium at this time. If you use Bo-Se, the dose is 1 cc under skin for an alpaca cria, and 1-2 cc under skin for a llama cria (1-2 mg/cria) The placenta should be saved for examination by your veterinarian. Your cria should be weighed at birth and this noted in his record. Normal alpaca crias weigh 13-20 lbs, and normal llama crias weigh 18-40 lbs.

If the delivery was difficult or if the cria is not healthy (i.e., lively and nursing), call your veterinarian immediately.

**Feet**

Your SAC’s need their claws trimmed as necessary to keep the claw about the height of the pad. Monitor for claws that turn or twist and monitor for lame animals.