

Feed

On the average, alpacas consume approximately three pounds per day of food. This includes hay, grazing and any supplements. Individual needs should be based on body scoring. The diet is comprised mostly of hay/grass (90%). Aim for a diet lower in protein, typically 12% for average adult alpaca and possibly higher protein if lactating or if growth needed. Typical forages are orchard and brohm grass. There are two types of grasses to avoid, rye grass and tall fescue. These grasses may contain an endophyte that can cause illness in the alpaca. The local Extension Office can help with identifying grasses.

Supplements in the form of eg-soy products may be given to help provide needed minerals. Follow manufacturer's suggestions, allow 3 to 4 feet of feeder space per animal and feed low to the ground to prevent choke. Read the content labels, check the date that the feed was made and store in dry, cool place away from rodent contamination. Most alpaca supplements are formulated high in fiber and low in grain (COB).

Trace minerals may also be provided as free choice but should not be top dressed on supplements. Typically these blends are usually 20 to 30% salt, 25% necessary minerals, 50% of needed selenium as well as vitamins.

Test forage and water. Alpacas will consume 5 to 7 quarts per day of water. The pH should be between 6.5 and 7.5. Water that is high in iron, calcium or sulfur should be avoided.

Forage testing should yield the crude protein at 10 to 14%; the TDN at 55-60%; the potassium at 2.0% or less; and a RFV (relative food value) of 95 to 102 and total Copper less than 15. There are several laboratories available to perform these tests.

Vitamin A & D might be given to crias during the winter months.

Herd Health**

Meningeal Worm--Is of primary concern in the northeast part of the US. The primary host is white-tailed deer, intermediate host is snails/slugs and the aberrant hosts are alpacas along with llamas, goats, etc. Prevention in the form of injectable Ivermectin or Dectomax at 30 days or 45 days respectively is given, typically year round.

Internal Parasite--Consisting of but not limited to coccidia, *Eimeria macsaniensis* (*E. mac*), Cestodes (eg-tapeworms), Trematodes (eg-flukes) and nematodes are seen in alpacas. The best way to **manage** internal parasites is by fecal monitoring and then treating according to parasite. They are treated with paste/liquid medication orally. Prevention is best obtained by pasture rotation, quarantine as appropriate, foot baths, and cleaning up dung piles. Some survive in extreme low temperatures.

Toxoplasma Gondii--Transmitted primarily by infected feral cats. Prevention as primary means of control. Treatment typically not needed but can cause abortion.

Leptospirosis--Transmitted primarily by infected animals, such as raccoons, skunks, feral cats. Prevention as primary means of control. Can cause abortion.

Rabies--Transmitted by infected animal. Vaccinate yearly.

Clostridium--Yearly vaccination to prevent clostridium of which there are numerous subtypes including tetanus.

External Parasite--Such as mange (sarcoptic is most common), lice, ticks, general dermatitis, fungal infections can occur and are generally treated topically. Steroid use is contraindicated in bred females and should be used with caution in animals that come in close contact with bred females.

Mycoplasma Haemolama--This is an extracellular parasite on the RBC that is probably transmitted by blood (vectors such as mosquitoes). Diagnosis is by a blood test. One of the more common causes of anemia but can be treated with certain antibiotics.

Haemonchus contortus ("Barber pole" worm)--is a blood sucking parasite that pierces the lining of the stomach and causes internal bleeding leading to anemia and other problems. It is detected by fecal examination and treatment according to severity of the disease/illness.

BVD--Bovine Viral Diarrhea--detected by PCR blood test or other done once in the lifetime of the alpaca to determine if carrier of the disease (known as PI meaning Persistently Infected).

**This list is based on common pathogens seen in the northeast US and is not all inclusive. Consult with your veterinarian.

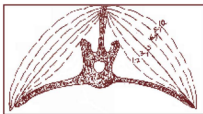
Toe Trims ★ Dental Care Shearing ★ Body Scoring

Depending on your animal, you might need to perform toe trims or administer dental care. Alpaca feet are similar to a canine in that there is a pad and a toenail. The toenail can be clipped easily with hand shears resembling pruning shears. Some animals grow toenails faster than others or they wear them down if they are on a rough surface such as concrete. Most alpacas can be trained to stand to have their toenails trimmed.

Alpacas have a split upper lip which allows for selective grazing. They have incisors only on the bottom mandible or jaw that meet a soft pad on the top mandible or jaw. There are molars in the back that are used to chew their cud. The incisors should just meet the soft palate on the top or rest just behind the soft palate. Alpacas with poor alignment will not wear down their incisors well and will need dental filing to improve the alignment. Generally this can be done with a dremel tool. Alpacas will lose their primary teeth at around two years of age and will follow immediately with their permanent teeth. Males if not gelded by age 2 or so will develop sharp, fighting or canine teeth which will need to be shaved off to prevent injuries. Regular inspection of gums and oral cavity should be done to check for abscesses.

Shearing is generally done yearly in the Spring. Most huacayas, if not sheared, will have fiber that ends up matted and of poor quality, making it difficult for the fiber mill to process. Males can overheat which could cause problems such as infertility. Professional shearers are available or some people prefer to do it themselves. In some cooler areas of the country, alpacas will be given a partial shearer. Other warmer areas might do a second belly cut to avoid overheating. There are several outlets for the fiber once it is off the animal. There are co-ops, mills, and hand spinners and crafters that may purchase the fleece.

Body Scoring is used to determine an alpaca's weight and is graded on either 1 to 5 or 1 to 10 scale with 1 being too thin and 5 or 10 being overweight. Measurements can be taken at various points on the alpaca body, such as at the brisket or between the hind legs. The most common place is over the backbone just behind the withers. Picture the angle created by your thumb and pointer finger with the palm of your hand placed over the backbone. An angle of 90 degrees is normal (3 or 5 depending on scale).



Insurance and Contracts

Insurance is available in several forms to protect your alpaca investment. Basic insurance generally means mortality and theft protection. Anticipate a rate of 3.25% of the insured amount. Young crias and older alpacas might be at a different rate. Physical exams are required for higher insured amounts. Other types of coverage could include specified perils & theft, major medical, surgical, loss of use, infertility, herd deductible policies and liability to cover shows. Mortality and theft insurance is generally required by a seller if payment is not made in full.

Wilkins Livestock Insurers, Inc.
www.livestockinsurance.biz
800.826.9441

Prairie States
www.prairiestatesinsurance.com
800.627.4677

Alpaca purchases should be made with a signed contract. There are many terms & conditions used in these contracts. Some particulars to consider in making the purchases include total price, any payment schedule, financing if available, insurance requirements, boarding and boarding charges if needed, a pre-purchase examination, and any and all warranties, such as breeding guarantees, and what the remedy will be if claim is made, responsibilities for expenses, duty of care, nonassignment in the event of transfer. In the event of co-ownership, other specifics will need to be addressed. You should always get a pre-purchase examination. Financing is available for the alpaca purchase, eg-from the buyer or as a Small Business Loan or Agriculture Loan.



Fiber Analysis and Color Charts

There are 22 recognized colors of alpacas according to the ARI ranging from white to black plus rose grey and silver grey. The ARI has a color chart available to properly identify the animals. This identification is made at the level of the skin, first at the alpaca's blanket area and secondly or thirdly at other sites depending on any patterns or secondary colors.

Some breeders desire to have an objective measure of the quality of their alpaca's fleeces. Fleece samples should be taken from at least one consistent site to help improve reliability of results. There are several laboratories available to test for fiber thickness and consistency. The principle measurements are:

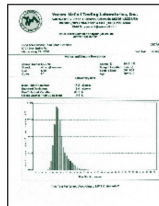
Average fiber diameter (AFD)
--a measure of fiber diameter.

Standard deviation (SD)
--shows how close most of the fibers are to the average.

Coefficient of variation (CV)
--a measure of how much variation there is within the fiber sample.

% greater than 30
--identifies percentage of fibers above 30 microns.

Other important measurements are fiber length and fiber weight which can be done by the owner. These records can be kept yearly to help determine breeding selection and progeny decisions.



ARI Forms and DNA Cards

The vast majority of alpacas in the US are registered through the ARI. Animals are DNA tested using a blood sample to identify ancestry. The ARI certificate is issued to the owner and will list the sire, dam, estimated date of conception, birth date, microchip number if known, registry number, and registered color and breed type, eg-suri or huacaya. The certificate will identify multiple generations, the birth origin of each ancestor if known, each ancestor's registered color and its ARI number.



Record Keeping

Most farms keep herd health records, either using a standard pen and paper or one of the computer programs available. They are essential in breeding programs and very important at times of illness. Most will track immunizations, deworming, weights and/or body scoring, illnesses, injuries, treatments as well as breeding and pregnancy confirmation and behavior testing. Optional records include show winnings and fiber statistics. Other items that may be helpful to track include pasture analysis, fertilizations, feed changes, or transports on and off the farm.

