

A photograph of three alpacas grazing in a lush green field filled with yellow dandelions. One alpaca is in the foreground, another slightly behind it, and a third further back. The scene is bright and sunny, with a fence and trees visible in the background.

As the days of winter gradually tilt toward the longer days of spring and summer

we all begin to feel the relief of getting through another long cold winter. We shed our long warm coats for shorter more colorful clothes. We begin to look to warm days and a change of diet from winter stews to spring greens and strawberries.

Our animals are also looking forward to the longer days with the promise of a change from their inside environment and last summers hay to the freedom of larger pastures with new grass. The benefit of this change in diet is very often totally dependent on one of the most overlooked tools of livestock farming, a soil test.

Using a simple soil test could be the solution to many livestock health problems. We are familiar with the statement "We are what we eat." This is especially true for livestock. In a wild environment, animals may be well suited to find exactly the right mixture of plants to prevent illness. With enough grazing spaces (acres) they will have access to many species of grasses and herbs changing with the seasons. Problems start when these domesticated animals are confined to a pasture situation and fed a very limited mono-culture diet. Livestock growers have discovered that these types of feeds will not keep an animal healthy so mineral supplements are added to the diet in some precise amounts as determined by experts. Just as with people, our animal's stomachs are not well suited to get their minerals in this form. Plants eat rocks and minerals, people and animals eat plants. The best solution is to fertilize our pastures and hay fields with a complete fertilization program to provide the more than seventeen essential minerals needed for animal health.

The proper management of the soil minerals that confer animal health requires the accurate measurement of these minerals. Strong healthy animals that produce healthy offspring and high quality fiber require more than unfertilized pastures can provide. A complete fertilizer program must include all the essential elements, not just Nitrogen, Phosphorus and Potassium. Calcium and Magnesium should not be used to fight the acidity of the soil by changing its pH but should be used because they are essential to our animals in order to make the bones and teeth and to regulate countless operations by their construction of amino acids. We can't manage what we can't measure. With an accurate soil test, a strategy can be made to solve even the most difficult of problems.

Soil testing is one of the most reliable inexpensive tools for successful animal health. Time and time again livestock growers fail to take this simple test. The feeling seems to be that soil tests are for crop farmers not for livestock producers. It is even more important to understand the soil fertility capacity and mineral levels on a pasture than it is on a row crop because the pasture is a perennial crop without any tillage.

The pasture areas and hay fields are providing a majority of the feed for animals for much of the year. This grass is your crop just as a corn crop or potato crop is for a vegetable grower.

Not all soil tests are alike. How does a farm owner know which soil test to use? Should you use the closest lab? Perhaps the cheapest is best. Chemical suppliers and fertilizer companies often provide soil sample services and there are also private soil consultants as well. It is important that the test you choose can provide the information that you need to solve

SOIL TESTING:

By Alan P Perry

Essential for Alpaca and Pasture Health

your particular concerns. If you need help to turn the lab numbers into specific fertility recommendations than it is important that you use a test that the consultant understands. The most important aspect of a soil test is consistent accurate information. The cost of a soil test is not the critical issue. A cheap test that can't solve problems is worthless and the most expensive test is extremely cheap when compared with the loss of a single animal

I use the Albrecht soil auditing program. After 15 years of working the Albrecht soil tests to help farmers solve problems, I believe it is the best soil test program in the world. Here is why:

1. We get results solving even the most difficult problems
2. Proven usage in 45 countries, 200 crops and 40+ years
3. Data base of soil from one lab to learn from
4. Great teacher support
5. Classes, books, tapes to help you learn

This soil test program will look at all the essential elements for plant growth. It uses a base saturation percentage system to manage Calcium, Magnesium, Potassium, and Sodium cations. Calcium and Magnesium regulate the oxygen and water in the soil. Magnesium is the most important ion for chlorophyll in plants. Calcium is used to build bones and teeth and Magnesium for reproduction and many amino acids that regulate animal functions.

The anions require special attention. They include Nitrogen, Phosphorus, Sulfur and Boron. These elements have a negative charge and are marked on our soil tests. They are water soluble and won't stick to the positive charged clay portion of the soil and as a result they can be quickly lost and find their way into the water table. This leaching often leads to shortages of these elements and the resulting illness symptoms. Shortages of these items are more apparent on high rainfall areas or on sandy soils that drain easily.

Special attention should be given to the trace minerals Boron, Iron, Manganese, Copper and Zinc. These are often fed as feed supplements. It is much cheaper and more efficient to buy these as fertilizers and get them into the grass and hay crops. Many soil tests fail to measure these items and most consultants have very little knowledge of how to manage trace

minerals. It is the trace minerals that are so important for animal health. Boron makes Potassium, Nitrogen, and Calcium more available. Copper and Zinc show quickly in the quality of the hair and fiber and parasites are common when copper levels are too low. Iron, essential for the blood, and Manganese is an important part of the nervous system, eye sight and bone formation.

One of my best clients is a potato farmer in Maine. He grows potatoes for processing into potato chips and French fries. For a number of years we have been using the Albrecht soil program to increase yields and to increase the quality of the potatoes grown. We have had some really great results. When this potato farm family decided to raise alpacas, creating Spudland Alpacas, we brought the Albrecht soil program to help us build the new pastures. It has only been a couple of years but we are already getting some great encouragement from what we see with both pasture health and animal health.



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By working with our veterinarian, we have been able to reduce the need for feed supplements and still maintain animal health as determined by blood tests. Improvement in fiber quality has also been documented.

Since that time I have soil tested more than a dozen alpaca farms in Maine and we are confident that this soil test information is an important tool in raising the best crops and the best livestock.

As this spring approaches, take a few minutes to learn how this program can be used on your farm. Spring is a great time to add fertilizers to your pastures. All that is needed is a good soil test on pastures and hay fields that will be used this year.

If you are having specific problems with animal health or crop health, perhaps we can help you find a solution.

I am currently working in 11 countries and more than 20 states. You can get more information from the Spudland Alpacas web site or contact us directly.

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