Crop or Food Plot Planning – About Lime

and

As spring approaches it is the time to start considering crops or food plot options for wildlife. Choosing the correct mix of seed, fertilizer and lime that best suits your soil, goals, and budget is important. Along with planting the correct crop, it is just as important to properly prepare the soil in which you want to plant. Determining the characteristics of your soil is important for success of your crop or food plot work integrating with your wildlife goals.

The first consideration is to choose a good location to place your field or plot and the size you are going to make it. Calculations of seed, fertilizer, lime, equipment and time all are based on this. Generally, one acre of planted food plot attracts game from forty acres around it. Qualities to look for are well-drained soil, accessibility to sunlight via forest cover (east-west orientation allows more sunlight), wind direction, and wildlife accessibility to water. Note here, prevailing winds during the fall or winter will be different than at your preparation and planting times. Don't forget the access and egress by whatever equipment you may use and for hunting season access. These considerations will help with planting success, wildlife use and hunter success.

Once a field or plot is located and its size determined, it is important to take a soil sample and determine your soil type. Knowing soil type and makeup will help you determine how and what to plant. Thanks to modern technology, soil type can be done through websites such as Web Soil Survey. Other options include county soil survey books. Through the web soil survey, you can find the soil type along with the best choice of plants for your field or food plot.

Utilizing the University of Missouri Laboratory for soil testing is a great option. The laboratory provides quality testing and unbiased, research-based recommendations to clients for economically viable and environmentally safe nutrient management practices. There is a small fee of $15 for each sample. It is well worth the money for all the information you receive about your soil. Specific directions to conduct a soil sample can be found at the University of Missouri Soil and Plant Testing Laboratory website.

Your soil test will come back from the lab with all sorts of information that can be useful for choosing your investments. Lime recommendations should be a primary focus for crops or food plots.

Lime is very important for the soil since it ultimately neutralizes the soil and allows better nutrient uptake. Another benefit from lime treatments includes better root growth. The plant's roots will not be exposed to harmful acidic soils that are caused by the presence of excess hydrogen and aluminum cations in the soil. Adding lime will infiltrate the soil and neutralize those cations.

There are different types of lime and each infiltrates the soil differently. Types of lime consist of powdered, pelletized, and liquid.

To measure the ability of lime to reduce acidity a rating system was developed. The rating system is called the Effective Neutralizing Material (ENM). All lime sold in Missouri must have an ENM rating. ENM considers the purity of the liming material as well as other factors such as particle size. The smaller the particle size, the more effective and quicker it will react in the soil. All variations are subject to ENM ratings. The higher the ENM rating the better results of the lime applied. Always review the ENM rating.

Powdered lime can be purchased normally by the ton, check for delivery criteria, at local agricultural material distributors or some farm stores. Powered lime is cheaper than pelletized and liquid versions. Liquid lime is more expensive than powdered lime but is more efficient at infiltrating the soil. The only factor that affects the infiltration is evaporation.

Pelletized lime is more efficient for smaller areas like food plots, has a high purity rating, and is good at infiltrating the soil even though it typically is more expensive. It is the best for getting what you pay for in the ground and adjusting your pH level. For small areas this may be the best option. Pelletized lime is normally sold in 50-pound bags and is easier to spread and works a little faster in the soil than powdered.

Lime is one of the most important considerations for crops or food plots since it is crucial for the best plant growth. Soils in forested areas are typically more acidic requiring lime for productive food plots. Considering lime applications this spring will increase the soil pH and lead to bigger and fuller crops this fall to meet your wildlife goals.

Further references are listed below.

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College of the Ozarks, Wildlife and Land Management

Choosing lime

https://extension.missouri.edu/publications/g9493

What does lime mean here in Missouri

https://extension.missouri.edu/publications/g9107

Soil Report

https://extension.missouri.edu/publications/mp188

Lime rate per acre

Purity of lime

https://www.thesoildoctor.com/

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