

Pasture Management 101

Green pastures start with well-nourished soil. Have you ever considered the quality of your soil? Each soil is unique, with its own name, potential, and limitations. Most farms have several types of soil. These soils have been identified and labeled by soil scientists, looking somewhat like interlocking puzzle pieces, and can be viewed in a soil survey map. Many of the soils in Northern Virginia have high clay content and tend to stay wet. These soils require more intense management to produce good ground cover and forage. Proper management, including managing nutrient levels and pH, proper seed selection, and thoughtful grazing will bring even an inherently poor productive pasture to its full potential yield.

Nutrient management is the practice of achieving and maintaining soil nutrient levels and pH based on your crop (pasture) needs to produce maximum yields. A soil survey will provide information about the capabilities of your soils, but the only way to determine the soil nutrient levels and pH is by having the soil in each field analyzed. The process of soil sampling involves taking several samples of soil with a soil probe or spade to a depth of 2-3". Take care to avoid odd areas of a field, such as areas with high manure concentration (i.e. hay feeding areas), that may skew your results. A sample should represent as uniform an area as possible, in terms of crop/forage type and past management. All samples from a field should then be combined and from that mixture a small sample, representative of the entire field, is submitted to a soil testing lab for analysis. Prepare a sample for each field. You may want to sample any "trouble spots" separately. The analysis, which is free through VA Tech, includes phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg) levels, and soil pH. Fertilizer and lime recommendations are provided based on the analysis. Farms utilizing manure as a fertilizer can contact the District for manure sampling information and recommendations.

The timing and application of fertilizer and lime involves careful consideration. Blending the right fertilizer products to meet your needs can be tricky. The District, as well as local farm supply stores, can help. Under-application of nutrients will not produce the maximum yields you desire and conversely over-application results in an excess of nutrients beyond which your grasses can utilize. Over-application has a high cost on water quality, creating nutrient-rich runoff and a drain on your finances.

Fertilizers should only be applied when grasses are actively growing; usually March or August is best. Fall application will result in better root growth, helping grasses survive the winter as well as drought conditions.