

Soil sample boxes can be picked up at your county MSU Extension Service office. It is important that all information asked for on the container, as well as any additional paperwork, be filled out completely and accurately. Crop code 95 should be used for any wildlife seed mixtures (clover, alfalfa, ryegrass, chufa, etc.).

For more information, forms, sample boxes, sampling publications, packaging, and instructions, contact your local county Extension office or the MSU Extension Service Soil Testing Laboratory. The cost is \$6 per soil sample.

Samples may be sent directly to the Soil Testing Laboratory at the address below or may be returned to your local county Extension office. Be sure to include the information sheet and check or money order with the package. Label and tightly secure the shipping container.

**MAIL PACKAGES TO**  
MSU Extension Service  
Soil Testing Laboratory  
Box 9610  
Mississippi State, MS 39762-9610

The MSU Extension Service Soil Testing Laboratory is committed to meeting the needs of its clientele with an accurate and timely report of each soil or plant sample submitted.



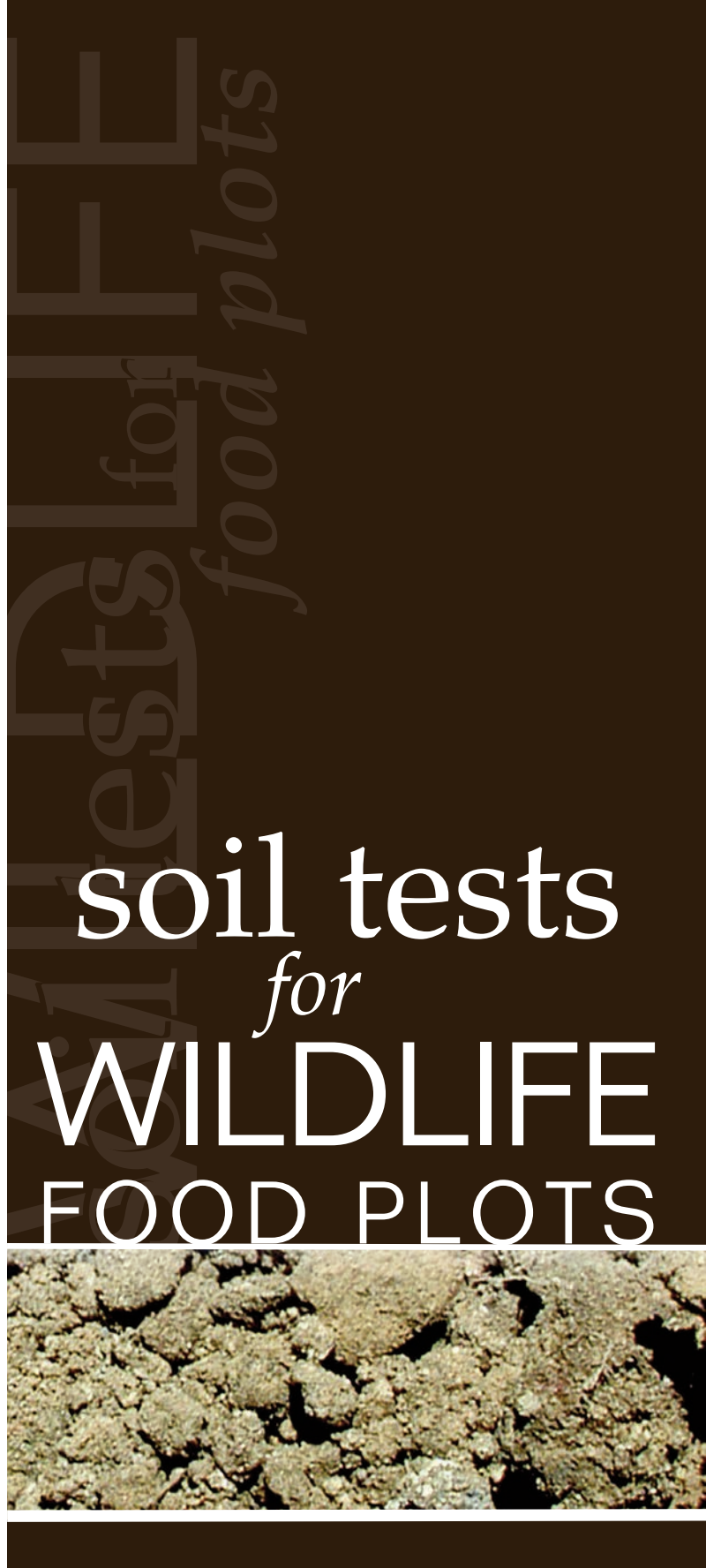
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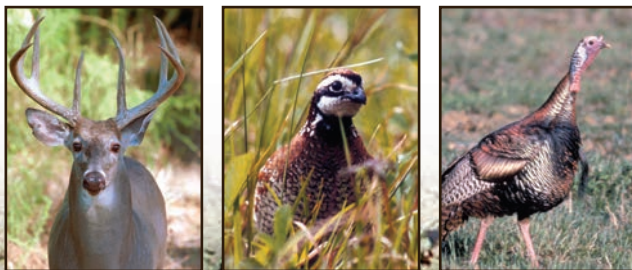
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IF YOU ARE INTERESTED IN *enhancing*  
*wildlife* ON YOUR PROPERTY—  
**bigger deer, more**  
**quail, larger turkeys—**

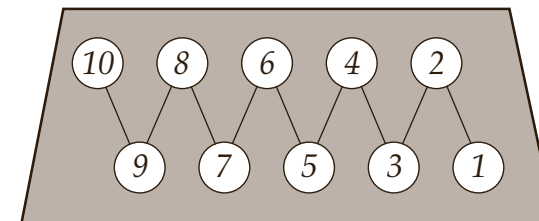
THEN YOU MUST UNDERSTAND THE  
 IMPORTANCE OF SOILS. SOIL FERTILITY and  
 TYPE INFLUENCES MANY ASPECTS OF  
 WILDLIFE, INCLUDING POPULATION  
 DISTRIBUTION, ABUNDANCE, and QUALITY.  
 FOR EXAMPLE, RESEARCH HAS SHOWN THAT  
 ANTLER SIZE IN WHITE-TAILED DEER IS  
 DIRECTLY AFFECTED BY SOIL FERTILITY.



The establishment of food plots is one management technique that more and more landowners are using to benefit wildlife. If you are interested in establishing food plots for wildlife, a soil test is necessary for success. A soil test will provide recommendations for lime and fertilizer, customized to your site and for the plants in which you are interested. The MSU Extension Service Soil Testing Laboratory runs a variety of tests on soil samples, including pH, buffer pH (lime requirement), phosphorus, potassium, calcium, magnesium, sodium, and zinc. Based on these tests, your report will recommend levels of nitrogen, phosphorus, and potassium needed for your specific situation. In addition, a soil test will provide you with lime recommendations to balance acidic soils, which are common in Mississippi. However, because some soils within the state are alkaline and do not require lime, a soil test is always recommended to determine the requirements for your site. Lime can improve the physical, chemical, and biological conditions in acidic soils, resulting in greater root proliferation, earlier aboveground plant growth, and improved nutrient and water uptake. Without proper liming, fertilization can be a wasted effort and expense (see table).



Proper collection of soil samples is extremely important to ensure reliable recommendations. To properly collect a soil sample, take several sub-samples from throughout the field and mix them together to obtain an average for the entire area. The number of sub-samples needed is dependent on the size of the field; as a rule of thumb, take about 10 sub-samples for every acre in the field. Thus, if you planned to establish a 1-acre wildlife food plot, plan on taking 10 sub-samples that you would combine into a single sample for that field. Sub-samples should be collected from the top layer of soil, which is 0–6 inches in depth. Mix the sub-samples together to form a uniform sample and discard any plant material that could have been collected.



SOIL ACIDITY	NITROGEN	PHOSPHATE	POTASH	FERTILIZER WASTED
Extremely Acid 4.5 pH	30%	23%	33%	71.34%
Very Strong Acid 5.0 pH	53%	34%	52%	53.67%
Strongly Acid 5.5 pH	77%	48%	77%	32.69%
Medium Acid 6.0 pH	89%	52%	100%	19.67%
Neutral 7.0 pH	100%	100%	100%	0.00%

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