Production of wildlife food plots is necessary because urban sprawl, dominant inedible crops like cotton, and efficient harvest of grain are leaving less food for wildlife. The Agronomic Division has soil test crop codes especially for wildlife food plots. You can improve the quality of food plots by submitting soil samples and specifying these crop codes. The fertilizer and lime recommendations given on the soil test report are designed to optimize wildlife food production.

NCDA&CS analyzes 1,400 soil samples from wildlife food plots each year.

Recommended Procedure

- Take soil samples four to six months before establishing new wildlife food plots.
  - Sample boxes and information forms are available at all county Cooperative Extension offices. Sample information forms and sampling instructions are also available online.
  - Take soil samples to the appropriate depth.
    - Collect cores 6 to 8 in. deep before establishing new food plots.
    - Collect cores 4 in. deep from existing food plots or no-till areas.
- Collect 15 to 20 cores from each unique area, place the cores in a plastic bucket, mix thoroughly, and use this mixture to fill the soil sample box.
- When filling out the Soil Sample Information form, specify the appropriate food-plot crop code: 066 for deer/turkey, 067 for upland game, 068 for waterfowl, or 069 for fish ponds.

- Check your NCDA&CS soil test results on the Agronomic Division’s website and follow the recommendations on your soil test report.
  - If lime is recommended, incorporate it thoroughly into the top 6 in. of soil several months before planting. For established plots that will not be tilled, apply lime on the surface. Lime early so there will be enough time to neutralize soil acidity.
  - Phosphorus moves through soil very slowly so it should be added early and incorporated into the soil. If recommended, consider applying it with lime.
  - If nitrogen and/or potassium are recommended, add them after the food plot is planted and starting to grow. The new nitrogen recommendations for food plots vary from 0 to 60 lb/acre, depending on the crop. Legumes—alfalfa, clover, soybeans—do not require additional nitrogen; millets and small grains—like oats and wheat—may need as much as 60 lb/acre. Make sure legume seeds are inoculated prior to planting.

- If you have questions about your report or its recommendations, contact the NCDA&CS Agronomic Division in Raleigh or your local regional agronomist.
Collaboration with N.C. Wildlife Resources Commission

NCDA&CS crop codes and recommendations are based on cooperative studies with the N.C. Wildlife Resources Commission (NCWRC). Test plots were established on the Jordan Lake and Bladen County gamelands to compare rates of lime and fertilizer. Based on the findings, NCWRC adopted a new approach to fertilizing food plots.

“There are several differences,” says Wildlife Technician Don Barker. “Our first priority is liming. And we no longer routinely use a balanced fertilizer like 17-17-17. Instead, we use a combination of fertilizers that supply different amounts of nitrogen, phosphorus and potassium based on soil test results. We’re seeing improvement.”

Benefits of Soil Testing

Bill Kirk of Mount Gilead can vouch for the value of appropriate nutrient management in food plots. Several years ago, he adjusted his fertilization program based on advice from NCDA&CS. “My food plots went through the drought a couple of years, then the rain, then the armyworms, and they’re still doing great,” Kirk said. “If fertilization is right, plants can survive most anything that comes their way.”

For more information, contact your NCDA&CS regional agronomist. Contact information for agronomists assigned to the regions indicated below is available online at www.ncagr.gov/agronomi/rahome.htm.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
— Steve Troxler, Commissioner of Agriculture

The NCDA&CS Agronomic Division offers advice and assistance in all aspects of crop nutrient management and agronomic testing. For help in learning how to take and submit samples or to interpret report recommendations, contact your local NCDA&CS regional agronomist.