### **Undergraduate Program**

Ecological Technology Design
Ecosystem Health
Soil and Watershed Science
Natural Resources Management

#### **Graduate Program**

Soil and Watershed Sciences
Ecological Technology Design
Wetland Science
Ecosystem Health & Natural Resource Management

## Agricultural Nutrient Management Program

The University of Maryland Extension's (UME) Agricultural Nutrient Management Program (ANMP), which is funded by the Maryland Department of Agriculture (MDA), focuses on reducing pollution in the Chesapeake Bay from plant nutrients applied to cropland.

### Nutrient Management Planning in Maryland

The Water Quality Improvement Act (WQIA), also known as the Maryland Nutrient Management Law, was passed in 1998 by the Maryland state legislature. The goal of nutrient management planning is to reduce non-point source pollution (e.g., nitrogen and phosphorus from cropland) by balancing nutrient applications with crop nutrient requirements. Nutrient management planning, which is an array of best management practices (BMPs), is considered to be one of the most cost-effective means of controlling excessive nutrient applications.

Under provisions of the WQIA, all Maryland agricultural producers (crop producers, animal operations, and nursery and greenhouse industries) are required to implement a nutrient management plan if they have an annual gross income of \$2,500 or more OR livestock operations with more than 8 animal units (approximately 8,000 pounds of live animal weight). Nutrient management plans in Maryland are developed by University of Maryland Extension advisors certified and licensed by MDA, private consultants certified and licensed by MDA and farmers certified by MDA to develop plans solely for their own operations.

# Role of the Agricultural Nutrient Management Program

The ANMP plays a crucial role in Maryland's nutrient management planning process. First and foremost, the program provides nutrient management planning services to Maryland farmers through a network of nutrient management advisors located in all 23 county Extension offices.

The program also provides continuing education and technical support to certified nutrient management consultants and certified farm operators via nutrient management specialists. Continuing education courses, which are offered throughout the year and consist of a mix of formal instruction, hands-on practice, demonstrations and small group work, include:

- Farmer Training and Certification
- Nutrient Management Certification Exam Preparation
- Plan Writing Workshops
- University of Maryland Phosphorus Management Tool Classroom and Field Training
- Experiential Topics (e.g., equipment calibration, nutrient management software, yield estimation)
- Nutrient Management Topics (e.g., soil fertility, phosphorus management, nitrogen management)











