COLLEGE OF
AGRICULTURE &
NATURAL RESOURCES

2018

Agricultural Nutrient Management Program Annual Report

Helping Agricultural Producers Manage Nutrients Since 1989

extension.umd.edu/anmp

Introduction:

This report highlights the work of the College of Agriculture and Natural Resources (AGNR) Nutrient Management Program (ANMP) in fiscal year 2018 (FY 2018).

The ANMP is funded by the Maryland Department of Agriculture (MDA). The program provides nutrient management plan (NMP) development services to farmers through advisors located in county Extension offices and continuing education and technical support to certified nutrient management consultants and certified farm operators via the program's nutrient management specialists. Additionally, the ANMP continually updates the program's nutrient mangement software.

232,188 total acres planned across Maryland

- Updated 5,028 existing NMPs, covering 222,373 acres, and 96 no-land plans
- Developed 375 new plans that covered 9,815 and 38 no-land plans
- Conducted the Phosphorus Site Index and Phosphorus Mangement Tool on 832 fields for 184 clients

Manure Management

- Developed NMPs for 14 manure transport clients, allowing transportation and application of manure on 2,607 acres
- Developed new and updated NMPs for 149 CAFO or MAFO clients

Cover crop cost share

- Developed plans for 321 clients participating in Maryland Agricultural Water Quality Cost-share (MACS) cover crop program

Trainings and Workshops:

- Offered multiple *Farmer Training and Certification (FTC)* workshops across the state to certify 25 farmers to write their own NMP, increasing the total farmers certified through this program to 675; 50% actively maintain their certification
- Five (5) *Plan Writing Help Sessions* were offered at 4 locations to provide certified farmers assistance in updating their NMP
- Thirty (30) participants attended *Fundamentals of Nutrient Management*, a Pre-certification Exam Training to help participants prepare for the MDA Nutrient Management Certification Exam
- Sixteen (16) newly certified nutrient management consultants attended 1 of 2 face-to-face *How to Write a Nutrient Management Plan* workshops

The guiding principle behind nutrient management planning and implementation, as outlined in the Maryland Water Quality Improvement Act of 1998, is that nutrients applied in any form should be balanced with the crops' nutrient needs. In agricultural production systems, managing nutrients to meet, not exceed, crop needs may increase profitability and improve the health of the Chesapeake Bay and its tributaries.

Regardless of land use, improperly or excessively applied nutrients can enter surface water via various transport pathways. Once in the water, excess nutrients upset the Bay's ecological balance by causing algal blooms and contributing to eutrophication and degradation of wildlife habitat.

Nitrate testing

- Performed the Fall Soil Nitrate Test (FSNT) for 149 fields , covering 4164 acres in 9 counties, reducing a total of approxmately 24,288 pounds of nitrogen
- Performed the Pre-Sidedress Soil Nitrate Test (PSNT) for 90 fields, covering 2,393 acres across 8 counties, reducing a total of about 6,100 pounds of nitrogen

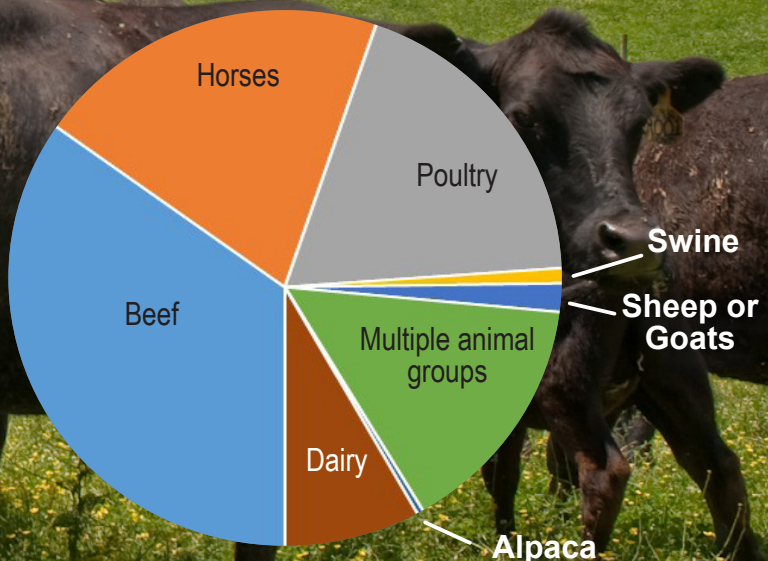
MDA Enforcement Clients

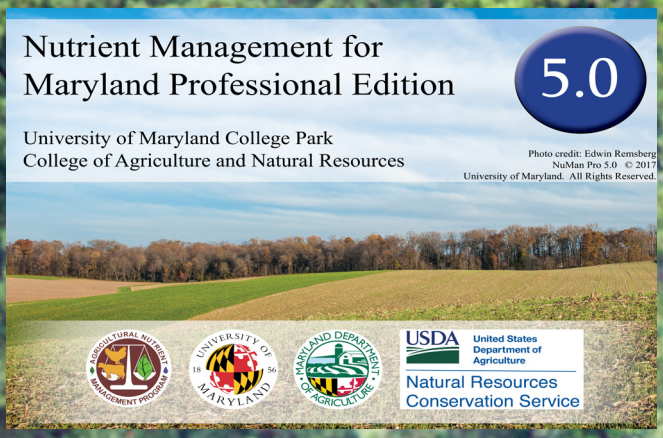
- Developed NMPs for 95 clients who were under enforcement for non-compliance

Orchard and Vineyard Plans

- ANMP Nutrient Management Advisors wrote plans for 24 orchards operations and 5 vineyards

Figure 1. Animals were a part of the operation for 879 of the 1,335 unique clients for whom NMPs were developed in FY 2018. This chart depicts the portion of each animal group that was managed by these 879 operators





NuMan Pro 5.0 programming and development continued through FY 2018 to add functionality for implementation of the Phosphorus Mangement Tool, including multi-year rotations for Tier Group requirements. The software is scheduled to be released in FY 2019.

The ANMP website (extension.umd.edu/anmp) provides users with access to general information about the program, training materials, publications, and resources for developing nutrient management plans. The ANMP also maintains a social media account on Twitter (@UMANMP) to announce training and job opportunities.

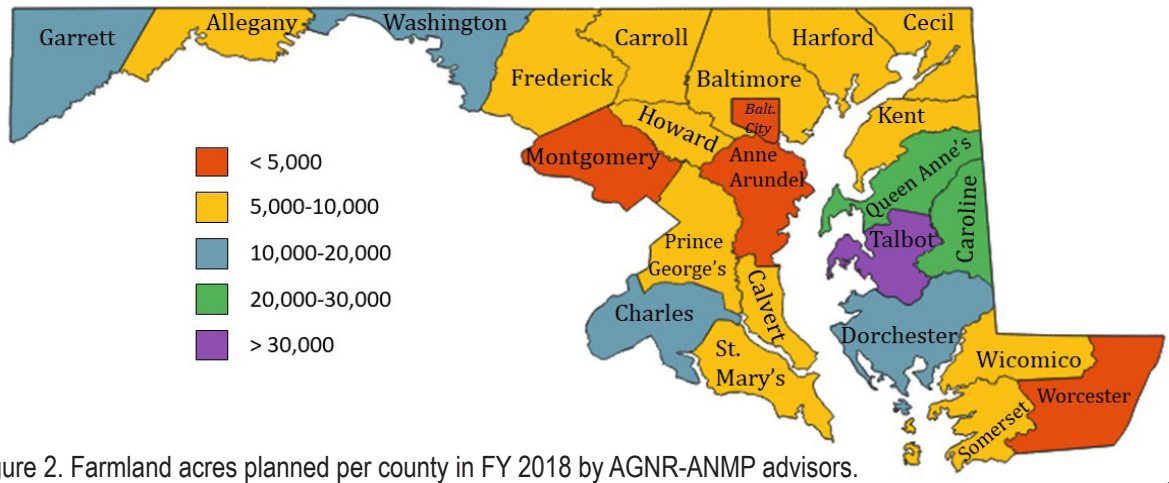


Figure 2. Farmland acres planned per county in FY 2018 by AGNR-ANMP advisors.

In Closing

ANMP's efforts are dual-focused. The Program provides support to the nutrient management planning community through educational opportunities, technical support, and software development. Additionally, support is provided to agricultural producers through development of nutrient management plans. These efforts encourage compliance by agricultural producers with the Water Quality Improvement Act, thereby documenting agriculture's contribution to Maryland's Total Maximum Daily Load committments.

Photo Credit:
Edwin Remsberg