Manure Happens
Pasture Management Seminar
UM-Central Maryland Research and Education Center
September 8, 2012
How do you view manure?

- waste?
- nuisance?
- nutrient source?
- costly disposal issue?
- source of disease?
Overview

• background on manure

• storing manure

• information needed for nutrient management plans
Manure

- feces, urine and bedding
- source of many nutrients
  - nitrogen
  - phosphorus
- manure management requires responsible action
  - storage
  - disposition

National Geographic
Nothing to Worry About!

• horse manure is comparable to beef manure in nutrient value

• 1 horse (1,000 pounds) produces 50 pounds of manure per day
Sitting Manure Storage

- convenient to barns
- year-round access
- free of stormwater influx
- distant from roof runoff, wells, streams
Outdoor Storage: Poor Conditions
How Could Storage Conditions Be Improved?
Overwhelmed Yet? Help is Available!

• Soil Conservation District
  – cost-share for manure storage facility
  – technical assistance

• Soil Conservation Planners/Equine Specialists (regional)
Does your Operation Require Nutrient Management Plan?

• 8,000 pounds of live weight of horses?

• generate $2,500 in gross income from your operation?

• if either answer is a “yes”, you need a plan
How Can you Acquire a Plan?

- contact nutrient management advisor at University of Maryland Extension office in your county
- hire a private-sector planner
- learn to develop the plan yourself
Regardless, You Need Information

• property
  – tax account ID
  – acreage managed

• fields
  – map
  – pastures, fields, sacrifice areas

• animals
  – number and weight
  – amount of time confined vs. pastured
Information Gathering Sheets

• if you need a plan, pick up a packet at display
  – farm information sheet
  – field information sheet
  – manure information sheet
Soil (and Manure) Samples Needed

• soil samples for each field and pasture

• manure sample, if manure is land-applied on your operation
Soil Sampling

Sample from the entire area of the field
Sampling Principles

   - before application
     - from various depths & locations in a pile
   - during loading
   - during spreading

**NOTE:** Include bedding in the sample to the same extent as it exists in the pile.
Sampling Principles (cont.)

2. Mix composite sample VERY WELL.

3. Sub-sample composite.

4. Package and ship to lab.
   – plastic resealable bags (double bagging recommended)
   – plastic bottles or jars (never glass)
See NM-6 for more information on sampling manure
Land-applying Manure?

- rate must be based on crop nutrient recommendations, typical yield and manure nutrient content
- consult your nutrient management plan
- calibrate spreader to recommended rate
Resources to Assist in Spreader Calibration

- **EC-1 Calibration of Manure Spreaders: Uniformity, Spread Patterns and Effective Swath Width**
- **EC-2 Calibration of a Manure Spreader Using the Weight-area Method**
- **EC-5 Calibration of a Manure Spreader Using the Load-area Method (with Estimation of Density and Load Weight)**
Responsible Manure Management

It’s an essential component of animal production.

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Questions? Concerns?

For more information, visit the Agricultural Nutrient Management Program webpage
www.anmp.umd.edu

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