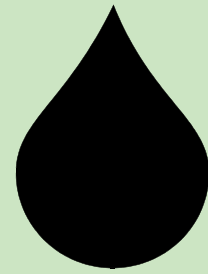


Groundwater

AGRI-BUSINESS STEWARDSHIP

*Brought to you by the Michigan Agri-Business Association
through a grant from the Michigan Groundwater Stewardship Program*



AUGUST 2009

The objective of this document is to provide you with current and helpful information regarding groundwater protection, and the Michigan Groundwater Stewardship Program.

Soil testing is critical

Soil testing is an important diagnostic tool to evaluate nutrient imbalances and understand plant growth. The most important reason to soil test is to have a basis for intelligent application of fertilizer and lime. Testing also allows for growers and homeowners to maintain a soil pH in the optimum range (6.0-7.0), which keeps nutrients more available to the plant for growth. Soil testing allows us to protect our environment. We cannot afford to pollute our surface water and ground waters by indiscriminately applying phosphorous or nitrogen fertilizers. Soil testing also helps save costs, and test results provide information about the soil's ability to supply nutrients to plants for adequate growth, and are the basis of deciding how much lime and fertilizer are needed.

What's in a soil test

The regular soil test includes determination of soil pH, available phosphorus, potassium, calcium, and magnesium levels as well as recommendations for lime and fertilizer. Other soil tests are available at supplemental costs, such as, organic matter, zinc-manganese, etc. Up-to-date soil tests (once every 3 years) are necessary in order to make appropriate fertilizer recommendations.

How to sample your soil

- Using a soil probe, spade, or trowel, and a clean plastic pail, sample in a zigzag fashion throughout a uniform area.
- Take a representative sampling of the soil in the area you are testing, 15-20 subsamples. Farmers need to collect separate samples for the surface (pH only) and soil profile for no-till/min till fields. The "Grid Sampling" approach reflects the most current technology.
- Sampling depths are as follows: Field soils, 8 inches; garden soils, 6 to 8 inches; lawn, 3 inches below turf..
- Combine all samples into the plastic pail and mix thoroughly. Fill a soil sample box with the sample, or package about a pint of soil.
- Fill out an information form and send it in with the soil sample to the soil testing lab.

There are costs associated with soil testing. For questions, call the Michigan Department of Agriculture at (517) 373-1052. For additional contacts and resources, visit the Michigan Agri-Business Association's Web site at www.miagbiz.org

**Developed and
Paid for by Nitrogen and Pesticide Fees.
Distributed by the Michigan Agri-Business Association**

