

For the Nutrient Management Advisor

Soil Sampling Procedures for Nutrient Management

1. Define the management units. A management area is an area that **can** and **will** be managed separately from any other. If different field areas have different soil types, past cropping histories, or different production potentials, these areas should be sampled separately and managed separately (See *Figure 1*). If it is impossible for a farmer to manage different areas separately, they should be treated as one management unit.

2. Sample the management units. Each unit should be sampled separately. Follow these steps for each management unit.

- Collect 15 to 20 samples in a clean plastic bucket.
- Take samples from throughout the entire area of the unit.
- Follow a sampling pattern similar to that in *Figure 2*.
- Avoid sampling unusual areas such as windbreaks, old fence lines, wet areas or areas near lime rock roads.
- Scrape away any surface residues.
- Sample to the correct depth (See *Figure 3*).
 - 2 inches for monitoring pH on no till cropland and pasture
 - 8 inches for fertility samples on cropland and pasture
 - 12 inches for PSNT

3. Mix the sample. Thorough mixing is essential.

- Sieve the samples through the sieve into a receiving box. If the sample is hard or strongly aggregated, use a mallet to help break up soil aggregates.
- Transfer the soil to the ODJOB mixer. Roll the mixer at least 50 revolutions. Spread the sample out.
- Return the soil to the receiving box. Spread the sample out.

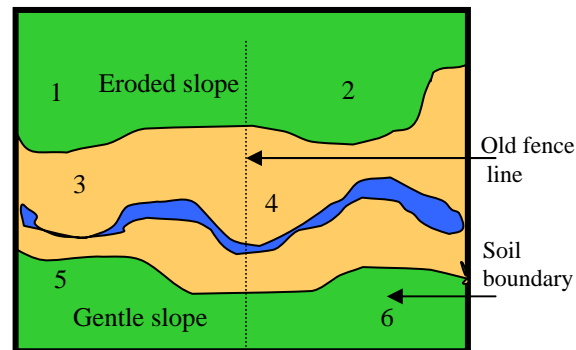


Figure 1: There are ideally 6 different management units in this field because of differences in landscape position and past management.

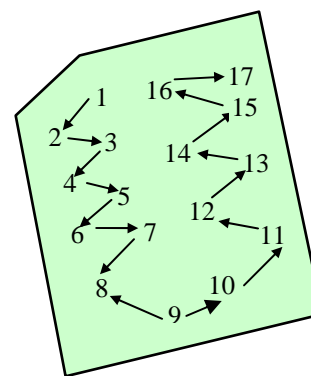


Figure 2: Sample from the entire area of the management unit.

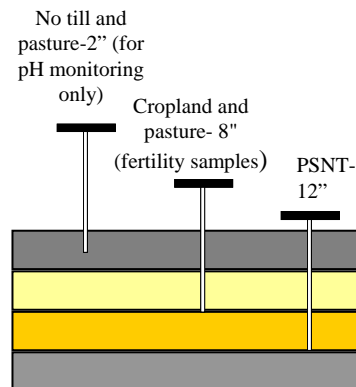


Figure 3: Sample to the correct depth.

Soil Sampling Procedures for Nutrient Management (continued)

- Take 5 scoops of soil from different parts of the sample to provide a total soil volume of approximately 1 pint.
- Place the soil into the sample bag.
- Take the soil back to the office.

4. Drying the sample.

- Spread the sample out in a warm place overnight to air dry it.
- **DO NOT HEAT** the soil.

5. Label and place the soil into a soil bag.

6. Fill out the information sheet as completely and accurately as possible.

Agricultural Nutrient Management Program, January 2010

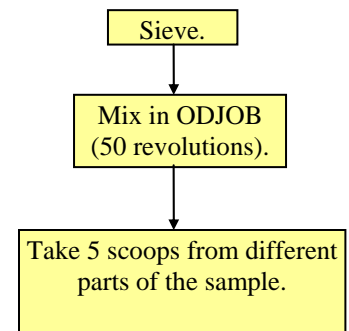


Figure 4: Thorough mixing is essential.

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