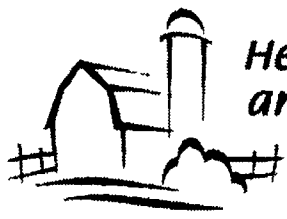


# "Basically" Farming



Helpful hints for new and existing farmers

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## SOIL FERTILITY: START FROM THE GROUND UP!

Dwane L. Miller  
Schuylkill County  
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Dr. Rick Stehouwer from Penn State refers to soil as the "black box" of crop production, and I have to agree with that. We put things into the box, and we get things out of the box, but no one really knows what happens inside that box. While most farmers are not chemists or soil scientists (myself included), we should still understand the foundation by which most fertility decisions should be made: soil testing.

A soil test performed by a reliable laboratory provides a good estimate of the fertility status of a field. Soil testing should be the basis for any fertilizer application. In order to have a chance at achieving maximum yields, soil testing for agronomic crops should be done every three years.

For vegetables and other high-value crops, an annual soil test is recommended. For each year, a fertilizer recommendation is given for nitrogen (N), phosphate, (P<sub>2</sub>O<sub>5</sub>), and potash (K<sub>2</sub>O). These are the same three main nutrients that appear in all fertilizers.

Recommendations are crop-specific, matching the crop you specify on the soil test form.

The basic soil test also gives an interpretation of the current pH of the soil. Soil pH indicates the level of acidity in the soil. A soil with a pH less than 7.0 is considered an acid soil. High levels of soil acidity (low pH) can reduce root growth, reduce nutrient availability, and affect herbicide activity. For most agronomic crops, a soil pH of 6.0 to 7.0 is ideal for crop growth.

However, the pH tolerance range for various crop species can vary. For example, legumes and barley respond better to a pH range between 6.5 and 7.0, while oats can tolerate a much lower pH (5.5). Soil test recommendations give, based on a specific

crop, the amount of limestone required to raise the pH of the soil to an optimum level.

If the test calls for more than four tons of limestone per acre, the application should be split with half of the limestone plowed in and the rest worked into the surface with secondary tillage. For low rates of limestone, or if a split application is not possible, the limestone should be worked into the surface rather than plowed down. This will assure that the surface soil, where the seedling is developing and where the nodulation begins in legumes, has the proper pH.

Many other tests can be performed on your soil sample. Some include organic matter, mercury, lead, and arsenic. These optional tests are available for an additional fee. Fees vary with the test performed.

Fall is an ideal time to have your soil tested. This will allow you to add any limestone to fields that require it, and give the limestone a chance to work its "magic" in the soil until the following spring. Soil test kits are \$6 each and are available from and Penn State Cooperative Extension Office.

Office.

Here are some soil sampling tips:

- Sample at the right time. The best time to sample is in the fall.

- Take cores from 15-20 spots randomly over the field to obtain a representative sample. Remember: the more spots you sample, the better your sample will represent the entire field. One sample should not represent more than 10 to 20 acres.

- Sample between rows. Avoid old fence rows, dead furrows, and other spots that are not representative of the whole field.

- Take separate samples from problem areas, or avoid them all together.

- Sample to plow depth in cultivated fields.

- Take two samples from no-till fields: one- to a six-inch depth for lime and fertilizer recommendations and one- to a two-inch depth to monitor surface acidity.

- Sample permanent pastures to a three- to four-inch depth.

- Collect the samples in a clean container.

- Mix the core samplings, allow to air dry, and remove roots and stones.

We've only begun to scratch the surface on the topic of soil fertility, but hopefully you'll understand that soil testing is one of the basic building blocks of crop production. You can't expect to achieve top yields without first knowing the condition of your soil. Where else can a \$6 investment return so much?

*Editor's note: Comments and suggestions are always welcome. Please contact Dwane Miller, Schuylkill County Cooperative Extension, 1202 Ag Center Drive, Pottsville, PA 17901, (570) 622-4225.*

## PMMB Announces September Class I Price

HARRISBURG (Dauphin Co.) — The Pennsylvania Milk Marketing Board (PMMB) announced the prices to be paid to Pennsylvania dairy farmers for September Class I milk (beverage) as an average of \$14.51 in the western areas of the commonwealth, and an average of \$15 in the central and eastern areas of the commonwealth. These prices include the over-order premium of \$1.65 per 100 pounds of milk.

Farmers, whose milk production is pooled under a federal order, will receive a marketwide blend price based upon the value of all classes of milk. However, the blend price received will vary

as the component composition of a farmer's milk differs from the established benchmarks of 3.5 percent butterfat, 2.99 percent protein, and 5.69 percent other solids.

# S.A.V.E. Hires Executive Director

KENNETT SQUARE (Chest-er Co.) — Safety Agriculture Vil-lages Environment (S.A.V.E.), has announced it has hired Dee Durham as its new executive di-rector.

Durham joins S.A.V.E. after eight years as the executive di-rector of Preservation Delaware, Inc., the statewide historic pres-ervation organization in Dela-ware.

She serves on Gov. Ruth Ann Minner's Advisory Council for Livable Delaware and is active in preservation and nonprofit proj-ects.

Chairman Louis Kaplan said "S.A.V.E. is fortunate to have an individual with the qualifications, insight, and energy which Dee Durham brings to our organiza-

tion. She will operate our office at Willowdale and provide con-tinuity for S.A.V.E. as we bring our two-lane alternative before elected officials and the public in the coming month."

S.A.V.E. is a citizens group working to develop and promote alternatives to PennDOT's plans for a new four-lane expressway along Rt. 41. According to Chair Louis Kaplan, there are better ways to address the safety and congestion problems in the cor-ridor. S.A.V.E. proposes a three-part solution that includes limit-ing through-bound tractor-trailer trucks in the area, implementing modern traffic calming tech-niques, and increasing enforce-ment of traffic laws.

## Top Dairy Industry Executives Speak At Dairylea

SYRACUSE, N.Y. — Dairylea Cooperative Inc. announced that several top executives in the dairy industry were scheduled to speak at its annual meeting Tues-day, at the Holiday Inn in Liver-pool, N.Y.

Each year Dairylea invites in-dustry leaders to speak to its membership and agribusiness professionals to provide perspec-tive on the dairy industry.

The program's first guest speaker is Wes Allen, president and chief executive officer of Leprino Foods Company, a man-ufacturer of mozzarella cheese. Allen spoke about how Leprino Foods began, its growth, the scope of operations, and the com-pany's unique position in the marketplace.

Secondly, attendees were set to hear from C.O. "Tex" Beshears, chairman and chief executive of-icer of National Dairy Holding-s,a dairy processing company.

Beshears' presentation is titled "New in the National Market-place — National Dairy Hold-ings" and he was set to talk about the history behind National Dairy Holdings, how it was formed, its scope of operations, and how it was able to quickly position itself as a major player in the national market.

The afternoon's last speaker was Gary Hanman, president and chief executive officer of Dairy Farmers of America (DFA), the nation's largest dairy cooperative with more than 23,000 members. Hanman's pre-sentation is titled, "Where are DFA and the U.S. Dairy Industry Going?" and he was to discuss the future direction for DFA, in-cluding new relationships and ventures. Hanman also shares his thoughts on the future direction for the U.S. dairy industry as a whole.

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