

Flood, Erosion Control Vital To Conservation Award Winners

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corn and soybeans.

Recently the Bishops finished work for the Deep Run Mennonite Church East on an annual fundraising project. At the same time they were busy making final arrangements to preserve their own farm so they can purchase additional acreage on a neighboring farm.

The farm is located on moderately sloping topography adjacent to a tributary of the north branch of the Neshaminy Creek. The slopes are a challenge — not only to contain erosion but to ensure the quality of the surface water that feeds into the north branch and is used for drinking.

Last fall David installed a stabilized agricultural waterway crossing at a cost of \$350 (he saved by using inexpensive and sometimes free items). The crossings protect the New Glens part of the Neshaminy watershed. A month ago he installed another crossing to protect the streams on his property from livestock damage. A barnyard runoff control plan was implemented two years ago.

Bishop has also installed rain gutter runoff control system, directed away from the barnyard. In addition, runoff water from the rest of the barnyard is directed through a picket fence to filter solids and then to a fenced off grass filter area to treat liquids.

A manure facility — a concrete pad built in 1970 — is used to store manure over winter and spread following a nutrient management plan. From spring to fall Bishop spreads the manure on a daily basis. He noted that because of concerns about the neighbors over odors caused by stirring the manure, he spreads daily.

The Bishops farm 560 acres, including rented ground. The home farm encompasses about 37 tillable acres — the rest is pasture, according to David. Bishop purchased the herd from his father in 1988. In 1990 David purchased his way out of the partnership and owns the farm.

George Bishop started the farm with a herd of registered Ayrshires and gradually switched to registered Holsteins. David said his grandfather, Walter, at one time maintained a herd completely made up of colored breeds. George Bishop had chickens and cows — about 2,500 layers and broilers and about 58 cows. At one time, they also boarded hogs.

In 1982, a heifer barn and two silos were installed. Additional silos were installed in 1984.

In 1990, the farm maintained more than 100 cows. Now they are milking about 120 cows with an additional 120 calves. The farm, on Pa.DHIA, averages 25,700 pounds. They milk tiestall to pipeline twice daily. The 1997 Master Farmers are members of the Land O'Lakes Cooperative.

The Bishops manage about 210 acres of corn, 100 acres of soybeans (which are roasted), 45 acres

of wheat (for straw), and about 65 acres of alfalfa/rye and orchardgrass/timothy.

Additional acres are in clover and grass mixes. Most of the corn acres was in no-till. Much of the remaining acres are in a rotationally grazed pasture system.

According to the NRCS, Bishop uses a rotational grazing system on all of his pastures to maximize their feeding potential. Woodlots are selectively cut and dead or diseased trees are removed as part of his regular forestry management plan.

The toughest challenge has been dealing with stormwater on the farm. David noted that much of the farmland, particularly north and upslope from the farm, has been lost to development. A huge shopping center with a lot of macadam, according to Sharon, was installed. Before the shopping center, built at Plumsteadville in 1986, the Bishops didn't have to contend with floods. Also, the housing boom in the mid to late 1980s also increased the water coming downslope through their farm.

The biggest accomplishment, according to the Bishops, has been preserving their own farm to purchase bordering acreage. Settlement on 37 acres and a house and barn is set to take place early next month.

Sharon noted the farm's goal is to include owning more land base for the existing farm to ensure its survival.

A reason for owning more land, David noted, was simply to provide space between his farm and development. In one barn, the dairy sanitizer is activated at 3:30 a.m. — the sound it makes could concern neighbors. The additional land will provide that space, as well as additional cropland acres for feed.

The Bishops farm with their son, Josh, 14, in the 8th grade at Holicong Middle School in Mechanicsville and daughter Nicole, 11, in the 6th grade at Gayman Elementary School in Danboro. The family members are active participants in the 4-H Dairy Club and the family "leases" Holstein calves to other 4-H members, according to the extension office. They also have a full-time employee, Mike Lapsley. They also have some part-time help from Wes DeNato and Ruthann Moyer. George Bishop helps with the feeding.

They also show during the All American in Harrisburg and at the Middletown Grange Fair in August. The Bishops also compete at the Southeast District Show, a prelude to All American.

In the future, Sharon said that son Josh has plans to increase the size of the dairy to 200 cows and perhaps install a carousel milker. David noted that Josh is "all fired up" with plans for the farm in the years ahead.



In 1991, pipes to allow flows to pass through the original channel but route excessive flows around the buildings and back into the original stream below the farm were installed with the help of the organization formerly known as the Soil Conservation Service (now Natural Resource Conservation Service or NRCS). Cost for the pipe system: about \$6,700, including engineering fees, said David.



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Dr. Muller/ADSA President

UNIVERSITY PARK (Centre Co.) — Lawrence Muller, professor of dairy science in Penn State's College of Agricultural Sciences, was elected president of the American Dairy Science Association (ADSA) for its 1998-99 term at its recent meetings in Denver, Colo.

A Penn State faculty member since 1976, Muller has taught courses in dairy nutrition and management, advised students and co-advised the Penn State Dairy Science Club, a student organization.

His research has focused on dairy nutrition and manage-

ment, with recent studies emphasizing dairy cattle grazing systems.

He has been a member of ADSA for more than 30 years and has served on 15 different association committees. He previously completed a three-year term as ADSA director and

served as vice-president during 1997-98.

ADSA is a scientific and educational association that provides research and teaching support to the dairy industry in the United States and internationally.

The association has more than 5,600 members, including 1,000 institutional members and nearly 800 international members from more than 40 countries. It publishes the monthly *Journal of Dairy Science*.