



AG PRESERVATION INITIATIVE

Environmental discussions often lead to greater awareness of the interrelationships which exist in our natural and built environments. The Conservation District has been a leading advocate for farmland preservation for decades. As we all know, farmland preservation is critical to the long-term sustainability of the agricultural community and an essential element of quality of life benefits throughout the rest of the community.

Work on Lebanon County's new Comprehensive Plan brought together individuals and organizations that have recognized the need to protect farmland, especially in southeastern Lebanon County, to facilitate the feeding patterns of migratory waterfowl from Middle Creek Wildlife Management Area (WMA). Tundra swans and snow geese depend on nearby farm crops to provide the nutrition for migration travel to nesting grounds in northern Canada and Alaska. Land use changes through the creation of built environments (subdivisions and development) diminish the amount of farmland available to sustain bird populations and ultimately could impact the fragile populations, especially in the case of the tundra swan.

Accordingly, the Lebanon Valley Conservancy (LVC) has taken the organizational, educational, and fund-raising lead in a program called the Middle Creek Initiative, intended to insure that adequate farmland is retained in southeastern Lebanon County to satisfy the needs of Middle Creek's migratory waterfowl. The LVC has been meeting regularly with representatives from the Conservation District, Game Commission, Nature Conservancy, Planning Department, Leadership Lebanon Valley, and others to improve educational and financial assistance.

On October 9, 2008, the participating organizations of the Middle Creek Initiative hosted a public meeting in Schaefferstown to heighten awareness of the critical value of agricultural lands in southeastern Lebanon County. Farmland Preservation, Ag Security Programs, Conservation Easement Options, and their relationship to Middle Creek WMA were discussed with the predominantly agricultural attendees. In addition to other initiatives, the LVC is expecting to work with participating organizations to develop an educational and fund-raising video within the next few months, followed by a major media event at Middle Creek WMA in March during the peak of the migration period.

Anyone with suggestions, input, or desiring more information should contact the Conservation District or Conservancy representatives.

Written by Earl Meyer—County Planning Department

HAMMER CREEK UNDER SCRUTINY

The headwaters of the Hammer Creek lie at the southeastern end of Lebanon County. The stream flows south into Lancaster County over a sandy bottom through forests and farmland. The creek is named for the numerous large forge hammers, once powered by water wheels, which dotted the creek's banks many years ago. The stream meanders through a wildlife sanctuary, state gamelands, a county park, large and small farming operations, and a wolf sanctuary before entering Speedwell Forge Lake in northern Lancaster County.

Five miles of the creek have been designated as a "high quality," "cold-water fishes" waterway by the Commonwealth of Pennsylvania. With this rating, Hammer Creek is considered by many a pristine creek which should receive special protection.

The health of the stream is a point of contention among Heidelberg Township, Lebanon County, local residents in the watershed, the Department of Environmental Protection (DEP), the Chesapeake Bay Foundation (CBF), and EcoAnalysts – a respected national biological consulting firm. In 2007, DEP staff recommended the upper Hammer Creek be downgraded from a "high-quality" stream to a "cold-water fishery" – a loss of its special protection status. This was driven by Heidelberg Township who has been battling leaking septic fields in four small towns within the township for the past several years.

The township first tried to fix its septic problem by proposing to build a sewage treatment plant and discharge the wastewater from the plant into the stream. But with Hammer Creek's special protection status, DEP refused. Then the township supervisors proposed to pump the water into Furnace Run, but Lancaster County Commissioners and the Mayor objected to that alternative.

By 2002, local watershed groups, an attorney, adjoining townships, and technical consultants also protested the waste water treatment discharge. A group of ambitious high school students from Conestoga Valley conducted water quality tests on Furnace Run and found numerous pollution-sensitive macroinvertebrates (aquatic insects) living in the stream. These findings lead DEP to designate Furnace Run as a high-quality stream. That classification eliminated the possibility of Furnace Run receiving the waste water from the treatment plant.

Happy New Year!

Best wishes to all of you! May it be a year filled with many blessings and exciting opportunities to teach great lessons with your students.

A STRONG ECONOMY IS A GREEN ECONOMY

Blocked again, Heidelberg Township officials shifted their plans back to Hammer Creek, and in 2003, proposed a regional sewage treatment plant be built on a preserved farm along a small tributary. The township argues that the upper Hammer Creek's earlier "high-quality" rating was in error and it should be allowed to build a sewage treatment plant on its banks and to discharge the water into the creek. However, those opposing the project would prefer to see the community be connected to public sewer and connected to Lebanon City's sewage plant.

Four years later, in 2007, DEP declared that Hammer Creek does not (and probably never did) qualify for "high quality" stream designation, and proposed to downgrade its status. This decision was based on farm pollution incidents from the 1960s and 1970s and stream samples from 2003-2004.

The Chesapeake Bay Foundation (CBF) stepped in to refute DEP's claim and challenged DEP's commitment to meeting the federal Clean Water Act and the Pennsylvania Clean Streams Law and their goal to restoring Pennsylvania's polluted streams. CBF decided to conduct their own research to determine the quality of the stream, so they hired EcoAnalysts. This biological consulting firm collected data at 11 sites for water chemistry, macroinvertebrates and habitat. The study showed a startlingly different picture. Most water-quality scores indicated a very healthy stream. In fact, at one spot in the heart of the proposed downgrade section, macroinvertebrate populations indicated stream quality exceeding DEP's criteria for "exceptional-value" streams, placing it among the most pristine creeks in the entire Commonwealth.

What could account for the difference between the EcoAnalysts results and the DEP conclusion? One possible reason is that better agricultural practices on some farms along the creek—such as building fences to keep cattle out of the water and replanting trees along the streambanks—have mitigated past pollution.



CBF members Tisha and Steve Walmer, residents of Heidelberg Township, are committed to conservation and best management practices. Tisha serves on the Conservation District Board as an Associate Director and the Lebanon Valley Conservancy Board (past Chair). In 1995, Steve and Tisha bought a farm on a tributary to the upper Hammer Creek and installed a riparian buffer planting on seven acres bordering the creek. Over 2,400 trees and shrubs were planted in an effort to protect the creek and improve water quality and wildlife habitat. The EcoAnalysts data showed that their efforts had likely made a remarkable improvement: between 2004 and 2007, the number and type of macroinvertebrates had more than doubled at the site.

Heidelberg Township continues to pursue possible alternatives to their leaky septic fields. The township is currently investigating the potential to hook up to Lebanon City's sewer. The township is also working with County Planning on an enhancement strategy of the newly designated Route 419 Scenic Byway. Local residents, students, and watershed groups continue to 'speak for the creek' and fight for its protection and designation as a 'high quality' stream. To date, no specific plans have been determined.

Save the Bay Magazine, Fall 2008 – Story by Ad Crable
The Bay Journal—October 2008

"Right now, everyone in congress is discussing stimulus packages to turn around the economy. The question is, what do we want to stimulate? Frances Beinecke, President of the Natural Resources Defense Council (NRDC), says "the best investment we can make is in a clean, green energy future that will help stave off the worst effects of global warming."

Business executives she has met with are beginning to see significant economic opportunities in tackling global warming. Equity fund managers call on NRDC experts to discuss investments in clean energy solutions, and she has talked to Fortune 500 executives who want to advocate national policies that will bring cleaner fuels to market. In the next 20 years, \$3 trillion will be invested in power plants, refineries, and other energy infrastructure in the United States; more and more utilities, manufacturers, and investment firms want to redirect that money away from dirty, outdated equipment and into the latest clean technology. Put \$3 trillion into global warming solutions, and America could become the worlds sustainable energy leader, says Frances.

Of course, you'd expect her to say that. But in December 2007, a group of financial analysts at McKinsey & Company released a report that examined the cost and market potential of 250 technologies for reducing global warming; it concluded that we can reduce greenhouse gases at little or no net cost to the economy. In July 2007, the Environmental Protection Agency did an economic analysis of the Lieberman-Warner Climate Security Act. The study's bottom line: reducing global warming pollution will have an imperceptible effect on economic output overall. This is remarkable news. We can stave off the biggest environmental and humanitarian crisis without disrupting economic growth.

These studies don't even account for the benefits of cleaner air, lower childhood asthma rates, and reduced dependence on repressive oil regimes. Clean energy solutions will pay significant dividends to consumers and businesses alike. But market barriers stand in the way. Why would investors--who hate uncertainty--put money into capturing carbon emissions from coal plants when America hasn't enacted a limit or price on carbon pollution? A federal cap on carbon emissions, along with smart incentives, can move emerging technologies out of the lab and into the marketplace. The longer we wait, the more costly it will be to bring about climate solutions. The time to start a clean energy revolution is now. The faster we get started, the sooner we can begin creating jobs in America and protect our natural resources from destructive energy development. "

By Frances Beinecke, NRDC President—Oearth—Spring 2008 Issue



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