

11th Annual Barn Dance Fundraiser

On Friday, October 17, 2008, approximately 350 guests filled the Dover Building at the Delaware State Fairgrounds for the Kent Conservation District's (KCD) 11th Annual Barn Dance. Participants raised a little over \$13,400 in net proceeds to support the Delaware Envirothon.

Guests were treated to a fantastic barbecue pork and chicken dinner cooked by KCD Equipment Operator Ron Argo, his wife Kaye and a few assistants. Other events of the evening included a silent auction, a live auction by Bruce Betts, and dancing to Just Kidding Around Entertainment. Many volunteers helped to serve the meal and beverages, and assisted with photography, the auctions and cleanup. Without the support of the volunteers and community in making the event such a success, KCD would not be able to make such a generous donation to the Delaware Envirothon. The District sincerely appreciates the many volunteers, those who provided financial support, and those who donated auction items, food and other items to the event.

Funds raised will be used by the Delaware Envirothon, a competitive problem-solving, natural resource challenge for high school students, to provide training opportunities throughout the year, to host the state competition next spring, and to send the state winning team to the North American competition.



The 12th Annual Barn Dance will be held at the Delaware State Fairgrounds on October 2, 2009.



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All District programs are available on a nondiscriminatory basis.

2008 Annual Report

The Kent Conservation District's mission is to put each acre of land to the use for which it is best suited and to economically develop and improve our environment to its highest potential according to sound planning and conservation practices.

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PROGRAM CONTACTS

Administration

Timothy Riley
District Coordinator

Paula Kohout
Administrative Manager

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Accountant

Nutrient Management

Lauren Bather
Conservationist

Chris Breeding
Conservationist

Kerin Walsh
Conservationist

Sediment & Stormwater

Jared C. Adkins, P.E.
Program Manager

Equipment

Wayne Wheeler
Program Manager

Tax Ditch/Drainage Assistance

Gene Vanderwende
Survey Technician

USDA Natural Resources Conservation Service

Thomas A. Wiltbank
District Conservationist

Education Initiatives & Awards

Outreach Efforts

District staff participated in the following outreach activities in our continuing effort to promote environmental awareness: distributed Soil and Water Stewardship Week materials to local churches, schools and libraries; staffed the Delaware Conservation Partnership display at the Delaware State Fair; participated in the Science Alliance's "What in the World" career awareness program at six elementary schools; sponsored a conservation poster contest; provided presenters and guides for DNREC's Make-a-Splash Water Festival; gave a presentation about conservation and soils at North Dover Elementary School; participated in South Dover Elementary School's Super Science Day by giving a presentation on conservation practices and soils; provided presenters and guides for the Maryland/Delaware Regional Water Festival; picked up trash twice along Honeysuckle Road (a little over four miles) as part of the Adopt-a-Highway program; provided an interview for WBOC-TV to explain nitrogen testing on manured soils; volunteered in various roles at the Delaware Envirothon

Delaware Envirothon

The District again supported the Envirothon, a problem-solving, natural resource education program for high school students. The competitive nature of the program motivates students to expand their knowledge of natural resources and realize their responsibility as stewards of our natural resources. The students answer written questions and conduct hands-on investigations of environmental issues in five categories: aquatic ecology, forestry, soils/land use, wildlife, and the current issue that changes each year. The 2008 topic was Recreational Impacts to Natural Resources. Students must also give an oral presentation solving an environmental problem. Fourteen teams competed in the competition. Teams from Kent County included Kent County 4H, Polytech High School Team A, and Polytech High School FFA. Honors for the Kent County teams were as follows:



Polytech High School Team A:

3rd Place - Overall; 2nd Place in Soils/Land Use and 3rd Place in Aquatic Ecology, Forestry and Wildlife

Polytech High School FFA:

4th Place - Overall; 2nd Place in Aquatic Ecology; and 3rd Place in Recreational Impacts to Natural Resources

Kent County 4-H:

2nd Place in Wildlife and Public Speaking

Polytech High School Team A earned the \$150 Dean C. Belt Award and Polytech High School FFA earned the Chairman's Award in the amount of \$100. These monies are to be used by the advisor to purchase educational supplies for the classroom.

Although they are not in Kent County it is important to note that the Charter School of Wilmington Team A won the Delaware Envirothon and then went on to win the Canon Envirothon, beating out 45 U.S. teams and nine Canadian provinces. Congratulations Charter!

Governors Conservation Awards

Governor Ruth Ann Minner presented the 13th Annual Governor's Conservation Awards to winners from all three counties during a ceremony proclaiming Soil & Water Stewardship Week in Delaware. The award for agricultural conservation in Kent County was presented to Busker Family Dairy. The dairy was started by Chuck and Charmaine Busker in Harrington in the 1970's. With the help of their children Phillip and Sarah, this once small dairy has grown to accommodate a herd of 200 Holstein Cows, 100 of which are currently milking. This past year the Busker's have completed a manure handling and storage facility. The family tills 250 acres of minimal and no-till forage and grain crops that they utilize on farm as feed for the cows. They participate in the cover crop program. They have recently finished construction of a covered dry cow facility. To aid in manure management they have purchased a front-end loader and spreader, and they installed two large Heavy Use Protection Area's (HUPA's) and several smaller ones throughout the farm.



Former DNREC Secretary John Hughes, Phillip Busker, Sarah Busker, Charmayne Busker, and former Governor Minner (pictured left to right)

Dover's Joseph Petrosky, owner of the Sonic Restaurant on Route 10, was the recipient of the urban conservation award for Kent County. Mr. Petrosky was selected for his willingness to try a green technology approach that involved additional costs to himself while developing the 1-acre site. The project involved converting a grassed area to mostly impervious cover, posing many challenges in terms of the water quality runoff from the site. The green technology involved two bio-retention ponds and works by adding a special bio media mix consisting of concrete sand, sphagnum peat moss, and hardwood mulch to the pond to remove the pollutants.



Former DNREC Secretary John Hughes, Joseph Petrosky, and former Governor Minner (pictured left to right)

Sediment & Stormwater Program

The Kent Conservation District has been the delegated agency in Kent County for the State's Sediment and Stormwater (S&S) Program since its inception in July 1991. The District is responsible for plan review and approval, construction inspection, and maintenance inspection for all construction projects within the County. The Stormwater staff included the program manager, one plan reviewer, four engineering inspectors, a part-time engineer, an urban conservationist, and an administrative assistant. During the year the staff performed the following:

<u>Plan Review</u>	<u># Each</u>	<u>Outreach and Education</u>
Development Advisory Committee (DAC)		The urban conservationist gave presentations to several Home Owner's and Civic Associations during the year to educate property owners on the purpose of stormwater ponds and proper maintenance procedures.
City of Dover	57	
Kent County	51	
City of Milford	20	
Detailed Plans	271	The Delaware Chapter of the American Water Resources Association was also given a presentation on the District and its many programs.
Minor Subdivisions	93	
Plans Approved	102	
<u>General Permits</u>		The Freddy the Fish activity, which is designed to teach participants about stormwater and the effects of pollution, was presented by KCD staff at the Maryland/Delaware Regional Water Festival, the Delaware Make-a-Splash Water Festival as well as approximately 150 Cub Scouts at their annual Chuck Wagon Derby.
Permits Issued	1004	
Temporary Permits	92	
<u>Inspections Completed</u>		
Regular	1288	
Certificate of Occupancy (C of O)	1165	Melinda Muehlbronner and Kelly Wilson presented the Freddie the Fish activity to participants at the Maryland/Delaware Regional Water Festival.
Temporary	92	
Annual Maintenance	284	



This is an example of a bio-retention facility, located at the Rt. 10 Sonic.



Pictured above is a nicely established wet stormwater pond.



Porous pavers used for extra parking or travel lanes allow for water to infiltrate into the ground and cause less stormwater runoff.

Nutrient Management Program

The District, in cooperation with the University of Delaware Cooperative Extension Service, again offered pre-sidedress soil nitrate tests (PSNT) to all interested corn growers in Kent County. Use of this test can result in economic savings and reduce the chance of groundwater contamination by nitrates. A total of 226 samples were tested covering 8,990 acres. The District's conservationists also worked with cooperators in testing manure as well. Last year the following number of manure samples were tested: dairy—6; poultry—16; horse—5; beef—3; sheep/goat—2; and fish —1.

The conservationists also completed 29 nutrient management plans and 9 comprehensive nutrient management plans covering 5,437 acres.

What is the District? What does the District do?

Kent Conservation District (KCD) is a governmental subdivision of the State of Delaware authorized by state legislation in Title 7 of the Delaware Code, Chapter 39 and responsible for conservation work within Kent County. There is a conservation district in each county in Delaware. KCD functions to focus attention on land, water and related resource problems; to develop programs to solve the problems; to enlist and coordinate help from public and private sources to accomplish the District goals; and to increase awareness of the relationship between human activities and the natural environment around us. It is the Board of Supervisors' responsibility to plan and direct the District programs, to coordinate the help of other governmental agencies, to assign priority to requests for conservation technical assistance from private landowners, and to serve as a community clearinghouse for information services. The KCD Board meets monthly and all meetings are open to the public.



Much of the districts' effectiveness is due to their ability to work with local, state, and federal agencies to solve local environmental problems. KCD enters into agreements (memorandums of understanding) with cooperating agencies and organizations that outline the obligations of each party and the assistance available. KCD operations are supported by federal, state and local governments and private individuals. The USDA Natural Resources Conservation Service (NRCS) and the Delaware's Department of Natural Resources and Environmental Control (DNREC) provide technical leadership to KCD. Additional cooperating agencies include: the University of Delaware's Cooperative Extension Service, the USDA Farm Service Agency, the Delaware Department of Agriculture (DDA), and the First State Resource Conservation and Development Council (RC&D).

KCD receives an annual allocation from the State of Delaware administered through DNREC, which is used to cost-share with landowners for environmentally sound improvements of their land. This funding also provides a portion for personnel and administrative costs to run the program. KCD also receives funding from the State of Delaware and Kent County to address the needs of the tax ditch systems within Kent County. Additional funding is received through special conservation grants and equipment rental.

Employees within KCD provide technical, administrative, and clerical support to district programs. At times, Earth Team Volunteers assist with carrying out the District's conservation programs. KCD works directly with farmers, landowners, and municipalities on the following types of challenges: water quality protection; stormwater management; aquifer protection; land use planning; erosion and sediment control on land undergoing development, farmland, critical areas and public lands; flooding problems; wetlands protection; soil survey information; and sustainable agriculture.



State and National Associations

Delaware's district supervisors have a statewide organization known as the Delaware Association of Conservation Districts (DACD). DACD is a voluntary, non-profit alliance, providing a forum for discussion and coordination among the districts as they work to ensure the wise use and treatment of renewable natural resources.

The 3,000 conservation districts across the nation belong to NACD, the National Association of Conservation Districts. This organization's primary goal is the conservation, orderly development, and judicious use of the nation's resources.

Both of these organizations make the effort of conservation districts more effective by providing a vehicle through which conservation districts can band together to promote their causes at the state and national levels. The District's cooperators were well represented by the KCD Board at the 62nd NACD annual meeting held in Reno, Nevada. Those in attendance included Robert Killen, Edwin Alexander, Terry Pepper, Bruce Snow, as well as Timothy Riley, District Coordinator, and Paula Kohout, Administrative Manger. The annual meeting theme was *Conservation Beyond Boundaries*. General sessions and breakout sessions featured topics such as absentee landowners, energy audits, water quality, district outreach programs, the locally led process in developing areas, partnership volunteer programs, stormwater management, the farm bill and more. Later in the year, Robert Killen, Edwin Alexander, Timothy Riley, Gene Vanderwende and Paula Kohout represented the District at the NACD Northeast Region meeting, which was held in Portsmouth, New Hampshire. That meeting's theme was *New Wave of Conservation*.

Equipment Program

Heavy Equipment

Use of the District's equipment enables the equipment crew to work with our cooperating landowners to establish new conservation practices and/or enhance existing practices on their lands. The equipment was utilized for 2,151 hours. The District owns the following heavy equipment: two hydraulic track excavators; two bulldozers; a farm tractor with loader; four pickup trucks; one low-boy tractor trailer; one backhoe; one six-wheel truck with a dump body which pulls a trailer used to move equipment; one ten-wheel dump truck; and one ATV for seeding.



The District's new excavator.

No-Till Equipment

The District currently owns three Great Plains no-till drills, one of which can be used to plant native grasses. The drills are rented to our cooperators on a first-come-first-served basis. They are delivered to the farm, and our technician works with the cooperator to ensure that the equipment is functioning properly and to the satisfaction of the cooperator. During 2008, 61 different landowners planted 1,202 acres of small grains and three other landowners planted 27 acres of native grasses.

Tax Ditch and Drainage Assistance

The District employs a survey technician whose main responsibility is to assist with the tax ditch program in Kent County. DNREC's Division of Soil & Water provides assistance in tax ditch planning and organization. There are 75 tax ditches totaling 700 miles in the county. The District's survey technician responded to 184 requests for assistance on the tax ditches. The requests for assistance concerned pipe sizing (78 pipes installed), flooding, ditch bank erosion, weed wiping (68 miles on 9 ditches), seeding, tax ditch maintenance, tax ditch construction, beaver control, and requests to stake, grade and survey ditches (102,385 feet were staked and graded on 13 ditches), etc. The District's survey technician attended annual meetings of 39 tax ditch associations.

Matching Funds for Drainage Projects

To maximize the efforts of providing a beneficial drainage system for county residents, the Kent County Levy Court and the State of Delaware provided the District with a total of \$350,000 to be used for the construction of new tax and public ditches and the maintenance of existing tax ditches. These funds, combined with \$7,469 from FY07, were used in conjunction with tax ditch funds to perform the necessary work. After the work was completed, the projects were inspected by the District's surveying technician before any matching funds were released. During 2008, the 3921 funds were used as follows:

Tax Ditch Dipout (102,385')	\$ 63,990
Tax Ditch Pipe Installation (78 pipes)	\$ 25,925
Tax Ditch Mowing (327 miles)	\$ 49,080
Weed Wiper Bar (68 miles)	\$ 20,400
Technical & Administrative Assistance	\$ 77,350
Brought Forward to FY-08	\$ 48,777
Total	\$285,522



Newly installed crossing pipe in a recently cleaned-out tax ditch.

At times the District is called upon to assist landowners with their drainage concerns that do not fall under the Sediment & Stormwater or Tax Ditch programs. These requests for assistance concerned flooding problems, ditches that need cleaning out, erosion problems, etc. The District's survey technician handled 130 requests for drainage assistance during 2008.

Financial Assistance

The State of Delaware, and USDA's Natural Resources Conservation Service and Farm Service Agencies provided technical and financial assistance through cost-sharing programs to cooperating landowners for the installation of conservation practices. Cost-sharing through the Environmental Protection Agency (EPA) enabled the District to continue work toward the reduction of non-point source pollution (NPS). Additional funding from the State of Delaware and Kent County Levy Court also allowed the district to continue a community drainage and resource development program.

Conservation Cost Share Program

The General Assembly provided \$865,000 in cost share funds, which were utilized by different cooperating landowners. Projects implemented emphasized water quality, water management, and erosion/sediment control. Funds were allocated for the practices below:

Poultry Heavy Use Area Protection	55	Pads
Poultry Manure Structures	3	Each
Dead Bird Composters	1	Each
Manure Spreaders	3	Each
Front-end Loaders	3	Each
Cover Crops	10,930	Acres
Tile Drainage	11,380	Feet
Farm Drainage	14,160	Feet
Horse Manure Structure	1	Each
Fish Composter	1	Each

Conservationists completed a total of 568 inspections of installed practices to ensure the practices are working properly and do not need any maintenance.

Conservation Reserve Enhancement Program

This money was used to install conservation practices on marginal cropland to improve water quality and enhance wildlife habitat. A total of 17 contracts were signed on 12 farms.

Cost-share funds in the amount of \$16,800 were obligated to cover the estimated costs for establishing the practices. The practices cover 133.7 acres and are broken down as follows:

Hardwood Tree Planting	57.1	Acres
Wildlife Upland Habitat	26.3	Acres
Shallow Water Area for Wildlife	16.3	Acres
Filter Strips	30.7	Acres
Riparian Buffers	3.3	Acres

Environmental Quality Incentive Program (EQIP)

The total amount of EQIP cost-share funds earned for the year was \$1,240,000. This money was used for the implementation of the water quality practices that are listed below:

Access Road	1,209	Feet
Composters	3	Each
Comprehensive Nutrient Mgt. Plans	4	Each
Fencing	4,160	Feet
Forage Harvest Management	3	Acres
Heavy Use Area Protection	12	Each
Irrigation Sprinkler Systems	1,339	Acres
Irrigation Water Conveyance Sys.	2,536	Feet
Irrigation Water Management Sys.	1,490	Acres
Micro-irrigation System	81	Acres
Nutrient Management	5,200	Acres
Pasture and Hay Planting	25	Acres
Pest Management	6,083	Acres
Pipeline	810	Feet
Pumping Plant	5	Each
Residue Management	832	Acres
Waste Storage Facilities	8	Each
Water Wells	2	Each
Watering Facilities	10	Each
Windbreak / Shelterbelt	7,049	Feet
Roof Runoff Management	3	Each

Poultry manure storage structures with attached channel composter.



State Revolving Loan Fund Program

The State Revolving Loan Fund (SRF) program is designed to provide low-interest financing at the rate of 3% for the implementation of best management practices.

Cooperators were assisted in the SRF application process on the following projects:

Composters	1	Each
Front-End Loaders	3	Each
Poultry Manure Structures	2	Each
Heavy Use Area Protection (Poultry)	14	Each
Dairy Ag Waste Systems	1	Each