

Cayuga County Soil & Water **Conservation District**

2010 Annual Report

Inside this issue:

No-Till Seeding 2-3 **AEM** CCIDA

Recycling 4-5 Critical Area

Seeding

Americorps

Agricultural Complaints 6-7

Envirothon 8 Tree Sale

AVC 9 Conservation

Regional Digester 10 Conservation

Planning

Mowing

Ag. Plastic Recycling 12 Watershed Program

Water Diversion Swale, Nutrient & Sediment Basin & Vegetated Treatment Area

Dickman Farms is a fourth generation family-owned business that provides finished annuals and perennials to independent garden centers and retail customers. The project included a diversion swale that prevents water from further up the watershed from entering the greenhouse complex. This 2,450' long diversion swale will transfer the vegetated treatment area. water to the northwest. entering Hunter Brook upstream of Hoopes Park. With the water separated, all the water entering the green house complex will go through a collection and treatment area where the a 4,000 gallon concrete collection tank, a detention/settling pond and a

The system functions to settle excess sediment and attached nutrients from suspension with the water. The water then discharges from the basin to the vegetated treatment system including plants uptake any remaining nutrients before discharging into Hunter Brook.



Conservation Field Days

On September 21 and 22, 2010 approximately 500 sixth grade students from schools throughout Cayuga County attended the annual Conservation Field Days, held at Emerson Park in Auburn. The program, coordinated by the Cayuga County Soil and Water Conservation District and Cornell Cooperative Extension of Cayuga County, is an opportunity for the students to experience hands-on environmental education. Students rotate through a series of 15 stations hosted by a variety of professionals in the environmental field.



Students learn about the resurgence of the wild turkey in the Northeast.

<u>Cayuga County Industrial Development</u> <u>Agency - Eagle Drive Business Park</u>

During the summer of 2010 the Cayuga County SWCD began earthwork on a new road as part of Phase 1 of the Cayuga County Industrial Development Agency's (CCIDA) Eagle Drive Busin ess Park project. This project is a cooperative effort between the District, the CCIDA, the Cayuga County Highway Department, and the Town of Aurelius. The District's work on this project will include the installation of erosion and sediment control practices, cuts and fills on the proposed 1,691 feet of

road, installation of two twin 24" culvert crossings, placement of the geotextile fabric and gravel for the sub-base of the road. as well as the construction of permanent stormwater practices along the right-of-way. By August of 2010 the District had completed approximately 900 feet of cut and fill for the road. The District then hydroseeded all of the exposed soil to stabilize the site for the winter. Work will resume at the IDA site in the spring of 2011.



District Crews at work on cutting and filling for the Eagle
Drive Business Park.

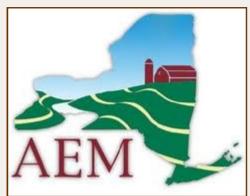
Conservation No-Till Seeding



During April and May of 2010 the Cayuga County Soil and Water Conservation District used their no -till drill to seed a total of 149.6 acres. Seventy seven of these acres were seeded to native, warm season grasses and forbs which provide valuable habitat for ground nesting birds and other wildlife. Most of these warm season grasses were planted at the Camillus Forest Unique Area. The Camillus Forest is public land owned and managed by the New York State Department of Environmental Conservation. The remaining 72.6 acres were seeded to cool season grasses for pasture and hay land.

These cool season sites were on three different farms located in the towns of Cato, Sennett, and Venice. Seeding cropland down to pasture and hay helps to reduce erosion, which improves water quality.

Agricultural Environmental Management (AEM)





Projects completed with funding secured with assistance from CCSWCD. Above—17,000 sq. ft. compost facility in the town of Fleming. Right—1.3 million gallon animal waste storage facility in Sennett. Below right—Newly installed rotational grazing system in the town of Throop.

AEM strives to:

- Document environmental stewardship activities that farmers have already undertaken;
- •Implement Best Management Practices (BMPs) on farms consistent with the resources of each individual farm;
- •Help farmers understand and comply with existing and future environmental regulations;
- Reduce farmers' exposure to liability;
- •Increase the awareness of nonfarm community members of how agriculture benefits the environment and their communities, and how farmers are already working to protect natural resources;
- •Increase farmers' awareness of how farm practices affect the environment on and off the farm;
- Provide "one-stop-shopping" service to farmers in terms of finding out about, applying for and meld together various local, state and federal assistance and incentive programs;
- •Use limited public program and financial resources efficiently by working on farms with the greatest potential for impacting the environment and:
- Promote teamwork between farmers, agricultural service agencies and agribusiness.



Round 16 Agricultural Non-point Source Abatement and Control Program Grants Awards

Cayuga Lake Prescribed Grazing—\$101,075 will fund 20 BMP's on 10 farms.

Mid-Owasco Lake Prescribed Grazing—\$65,157 will fund 15 BMP's on 7 farms.

Southern Owasco Lake Prescribed Grazing—\$126,008 will fund 18 BMP's on 8 farms.

Cayuga/Owasco Lake Watershed— \$238,346 in combined Ag. Non-point and USDA EQUIP funding for BMP installation to address nutrient management on a dairy farm.



Community Recycling Events

The CCSWCD is the host site for four large recycling programs. The District works with the Cayuga County Planning Department and Cornell Cooperative Extension, who act as the coordinators of these events. The District assists by making its facilities, equipment and staff available. Be on the look out for the dates of the 2011 recycling events.



County residents line up to drop off old and unwanted household electronics. The recent conversion to digital television has rendered many old units obsolete.

- •HOUSEHOLD HAZARDOUS WASTE CLEANUP DAY Is an opportunity for county residents to responsibly dispose of substances that do not belong in normal garbage, such as batteries, oil based paints, and household chemicals.
- •HOUSEHOLD ELECTRONICS RECYCLING DAY Is geared towards the collection and recycling of electronic devices found around the home. Heavy metals inside these devices can contaminate ground water when improperly disposed of.
- •TIRE ROUNDUP Old tires can be brought in by county residents for a small fee. Tires are then used as an alternative carbon source for the production of steel at Nucor Steel Auburn, Inc.
- •TRADE-A-TREE—Local residents drop off old Christmas trees in exchange for a voucher granting them a free seedling. The trees are chipped up and used as mulch.

Wood Waste Recycling



Municipal and commercial wood waste piles can often be difficult to dispose of. Storm events and utilities maintenance can result in very large quantities of wood waste that present a challenge to many municipalities. With the District's Tubgrinder and excavator with hydraulic shears, large quantities of wood

waste can be quickly and efficiently processed into readily usable wood mulch. The District's Tubgrinder performed contract work for 20 municipalities, including three County Highway Departments, the City of Auburn, and the Towns of Brutus, Conquest, Fleming, Owasco, and Sennett. The District recycled over 30,000 cubic yards of wood waste in 2010.

Animal Waste Storage Facility



Located in the Seneca River Watershed, the Whitcomb Farm has an extremely limited land base on which to spread manure from their heifer raising operation. A concrete manure storage was installed on the farm in order to collect the manure to be taken to the Regional Digester when it is operational. Meanwhile, the ma-

nure can be stored so that it can be applied at better times to the available cropland. This project was a NYS Round 14 Agricultural Non-point Source Abatement and Control Program Grant, a funding source that aids the farmer in implementing recommendations from the AEM process that address on farm issues.





Critical Area Seeding

Soil erosion and sedimentation are a leading cause of water quality degradation. The CCSWCD uses many tools to establish grass cover on bare soils. From its 1,000 gallon hydroseeder to hand seedings, the District can respond quickly to requests for assistance. In 2010 the District completed 12 acres of critical area seeding including road and stream banks, highway ditches, and steep slopes.



Animal Waste Storage Facility

Half Acre Dairy - A 78,000 gallon covered manure storage for the heifer barn was installed on this dairy farm in the Cayuga Lake Watershed. Improved nutrient management and more effective application of manure were the goals of this project. The District is working with the farm on an ongoing basis to enhance nutrient management and field application of nutrients. This helps to reduce the need for the farm to purchase

additional fertilizers. This allows the farmer to stockpile manure so that it may be applied to the field at an optimal time for nutrient uptake. By covering the storage excess water is prevented from contacting the manure, thus reducing the number of loads of liquid effluent needing to be transported and spread on the fields. District crews assisted in grant administration, construction surveying, and earthwork.





Agricultural Complaints



In 2010 the Cayuga County Soil and Water Conservation District responded to 12 agricultural complaints. Districts were delegated by New York State to respond to complaints from the public involving manure spreading, farmstead runoff, and other issues that are related to agriculture. District representatives field phone calls from the complainants, visit the site, inform the farmer of the concern while also suggesting ways that they could prevent any future incidents, and fill out a report. If there is a water quality violation then the District must inform the New York State Department of Environmental Conservation. A water quality violation is when manure or farmstead runoff can be seen entering a water body. Two of the complaints in 2010 involved water quality violations and the NYSDEC is working with those farmers and the District to help prevent future violations.

Contractor Stormwater Training



A District hosted training event at the Natural Resource Center. Contractors receive the training they need in order to be compliant on SPDES permitted construction sites.

Construction sites in New York that create one acre or more of soil disturbance are required to obtain a State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges. In 2010 all contractors working on SPDES permitted construction sites were required to complete a 4-hour Erosion and Sediment Control Training Course. This course familiarizes the contractors with the permit, their responsibilities under the permit, site inspections, and several of the best management practices that they may have to install under this permit. In 2010 the Cayuga County Soil and Water Conservation District held five of these training courses.

<u>A m e r i c o r p s</u>



In 2010, the District was able bring in four Ameri-Corps members. This year, all the members were Environmental Science students, and the District put their education to use, as the crew got valuable field experience. Stream surveys were made on the Owasco Inlet and along Cayuga Lake. The Crew installed storm-water protection measures; planted trees; learned to Hydro-seed; repaired a greenhouse; assisted with Recycling events; helped with the AVC program; assisted the Watershed Inspector; and helped around the District's campus. In addition to their pay, each earned an education award that could be applied toward their college expenses.





Page 8 Conservation in Action

Envirothon



The 2010 Weedsport Envirothon team as they participate in an Earth Day tree planting event.

The Envirothon is a fun, outdoor, team-based program designed to help students better understand their environment through exploration of ecology, natural resource management, and current environmental issues. The Envirothon combines classroom learning with hands-on field experience focused around five major topics: •Soil and Land Use •Aquatic Ecology •Forestry
•Wildlife •Environmental Issues

The Envirothon teaches students the importance of environmental sensitivity while stressing the need to achieve a social, economic, and ecological balance in life. It has been stated that 95% of students who participate in the Envirothon pursue careers in the environmental field. The Envirothon begins at the local

level with two teams representing Cayuga County, Moravia and Weedsport. These teams competed against 25 teams at a regional level initially, then at the state level and finally at the Canon Envirothon where participants from 44 states and 7 Canadian Provinces compete for prestige and a chance at cash scholarships.

Annual Tree Sale/Tree Planting



Many people look forward to the District's Annual Tree and Shrub sale, held early in May. It certainly means that spring has sprung, or is nearly upon us. Hundreds of people take advantage of the sale to stock up on trees, shrubs and native plants. Details on the annual sale can be found on the Districts web site or by calling the office.

The CCSWCD mission statement stresses the "hand-on" values of conservation. There is nothing more hands-on than tree planting. Each spring, the District takes on a few planting projects where the staff looks forward to getting their hands dirty planting thousands of trees.

Americorps summer crew members man the tree planter.

Conservation Mowing

The CCSWCD uses two mowers in its conservation mowing program. The boom mower has a floating brush-hog style head on an arm that gives it a reach of over 15 feet. It is an ideal mower for trimming back overgrown hedge rows, ditches and roadsides. The "bat-wing" deck mower can mow 15 feet in one pass, making it ideal for overgrown pastures and field conservation programs. Over the last few years, the District has been increasing the number of acres mowed and trimmed. The District completed 202 acres of mowing for landowners and municipalities in 2010.



Aquatic Vegetation Control

Cayuga County is home to a very diverse collection of water bodies. Lake Ontario defines the northern boundary of the County. Cayuga County also includes parts or all of three of the largest Finger Lakes, Cayuga, Owasco, and Skaneateles. In addition there are several smaller water bodies including Lake Como, and Otter Lake. These water bodies are used year round by local residents and visitors alike. One of the primary uses of these water bodies is recreation. The most common complaint of individuals utilizing Cayuga County's water bodies is nuisance aquatic vegetation. Aquatic vegetation is an unavoidable reality in the aquatic ecosystems. Nutrient inputs, solar radiation, and a ready supply of water ensure that these lakes are highly productive. From hindering navigation and swimming, to creating water and air quality issues during mass die off events, aquatic vegetation can dramatically interfere with people's use of the lake. The Cayuga County Aquatic Vegetation Control Program's objectives are to increase the accessibility and usability of the county's water bodies, while seeking to leave the lakes in the most ecologically intact manner possible. Vegetation is of the utmost importance for maintaining water quality and providing shelter for a



Volume (Yd³)	Fair Haven Bay	Cayuga Lake	Owasco Lake	Lake Como	Otter Lake
2010	260	280	660	25	50
2009	410	480	530	120	120
2008	360	795	540	120	160
2007	470	480	750	140	30
2006	712	800	226	40	104

large cross section of the aquatic life found in the water bodies. A careful balance must be struck to meet the demands of the human uses of the lakes as well as the needs of other organisms who rely on the lake ecosystem for survival. The AVC program seeks to provide relief to areas of the County's water bodies where usability has been impaired.

Regional Methane Bio-Digester Project

In February, the Cayuga County Soil and Water Conservation District was pleased to receive an additional \$6.3 million from the American Recovery and Re-investment Act of 2009. Contracts were awarded March 17th, and work on the building and mechanicals began as the weather cooperated. Work was carried out on multiple aspects of the project. The generator set,



the heart of the digester was installed and piping components have begun to take shape. A high voltage power line, as well as an electrical aggregation system, which allows the power of the digester to reach outside the facility. Internal piping and wiring work to bring the other components of the digester together, and synchronize their efforts into production. Work on the highly visible digester tanks has continued with District staff hard at work on the outdoor plumbing of the tanks, and other contractors completing construction and insulation work on the tanks.

Comprehensive Nutrient Management Planning



Comprehensive Nutrient Management Plans (CNMP's) address point source as well as non-point source pollution on farms. A farmstead plan looks at the possible point sources around the farmstead. These could include barnyards, manure handling and storage systems, feed storage, milkhouse waste, animal mortality handling, and roof runoff. The farmstead plan takes an inventory of the current conditions and develops a plan to improve or replace any systems that are currently allowing nutrients, sediment, and/or pathogens to leave the farmstead through runoff or leaching. Non-point source pollution from cropland is addressed in the nutrient management portion of the CNMP. This includes planning a farm's tillage, crop rotations, as well as their manure and fertilizer applications. The planner balances manure and fertilizer applications to the agronomic needs of the crops. To be effective, a CNMP must be updated annually and the farm must keep records to prove that they are following the plan. Annual updates and records are also required for farms to qualify for grant funding. In 2010 the Cayuga County SWCD developed 2 new CNMP's and updated 3 existing CNMP's.

<u>The Natural Resource Center Welcomes</u> <u>The New York Farm Bureau</u>



Pictured left to right - Scott Baker (Senator Valesky Staffer), New York Farm Bureau President Dean Norton, Assemblyman and Chairman of the NYS Ag. Committee William Magee, and Cayuga County Soil & Water Executive Director Ron Podolak

On November 22nd, around forty people gathered at the Central New York Farm Bureau Regional Office in Auburn for an open house event. A ribbon cutting ceremony was held to commemorate the opening of the new regional office. The event showcased the newly opened Central New York Regional Office which serves as a Farm Bureau resource center for Cayuga, Jefferson, Lewis, Madison, Oneida, Onondaga, Ontario, Oswego, Seneca, Wayne and Yates Counties. The event was held at the Natural Resource Center on County House Road where the Central New York Farm

Bureau Regional Office is now housed. Farm Bureau is a non-governmental, volunteer organization financed and controlled by member families for the purpose of solving economic and public policy issues challenging the agricultural industry. Locally produced foods and beverages were provided representing agricultural products produced in many of the participating central New York counties.

NYSAC Conference

District Executive Director Ron Podolak traveled to Buffalo, NY on September 16, to take part in the 2010 NYS Association of Counties Fall Seminar. The seminar focused on strategic economic development, reforms to the State's service delivery structure and providing real property tax relief for homeowners and businesses across the state. Ron spoke as part of a workshop showing Legislators from across the state, how their county appropriation to the local Soil & Water Conservation District is an investment that can have significant returns. District programs, pro-



CCSWCD Executive Director Ron Podolak addressing NYS Legislators on the importance of funding their local Soil & Water District .

jects, and inter-municipal agreements were some of the points highlighted during the speech. The main point was the local Soil & Water Conservation Districts ability to take their county appropriation and return the investment back to the community at an increased rate through the introduction of grant dollars back into the community.

Mission Statement

It is the mission of the Cayuga County Soil and Water Conservation District to enhance and protect the natural resources of Cayuga County through "hands on" implementation of best management practices.

Cayuga County Soil & Water Conservation District

The Natural Resource Center 7413 County House Road Auburn, NY 13021

> Phone: 315-252-4171 Fax: 315-252-1900

E-mail: cayugaswcd@cayugaswcd.org

Agricultural Plastic Recycling

What are they? -Dairy Silage Bags, Bunk Silo Covers, Bale Wrap, Bale Net, Polytwine, Greenhouse & Hoophouse Covers, High Tunnels, Nursery Pots & Trays, Mulch & Fumigation

Films, Pesticide & Dairy Chemical Containers.

What to do with your Ag. Plastic products?

- -COLLECT, COLLECT, collect your Ag. Plastic.
- -Avoid any debris such as manure, feed and mud.
- -Fold plastic so that it can be managed by one person.
- -Store your Ag. Plastic material undercover and out of the weather if possible.

-Contact Cayuga County Soil & Water Conservation District for further details and how you can get in on the Ag. Plastic program.



Owasco Watershed Inspection Program

The Owasco Lake Watershed Inspection Program (OLWIP) was met with several changes during 2010. OLWIP did not receive further funding from previous sources to hire seasonal inspectors for the summer months. Even without help, OLWIP completed 244.5 hours inspecting by vehicle, foot, and boat within the watershed which resulted in 291 inspections. This resulted in eight violations of the Owasco Lake Watershed Rules and Regulations (five septic system-related issues; three agricultural issues), as well as three violations of NYS DEC regulations and one violation of US ACE regulation. OLWIP also monitored ten

lakefront construction sites, and ten other construction sites throughout the watershed, as well as eighteen concerns and many public outreach events.

Through the work of IAGT, the Owasco Watershed Network (www.owascolake.org) was developed as an internet "hub" for information about the lake and its watershed. OLWIP developed a webpage with information about the Program and important contact information. There is also a link for property owners to send the Program an e-mail with questions, concerns, and even provides them the ability to upload a photo of their concern/question.



Town of Fleming Highway staff working to repair broken section of sewer line. This situation was resolved with help from the home owner, the Watershed Inspector, and Fleming Highway Department.