



Helping People Help the Land



# Conservation Notes

USDA - Natural Resources Conservation Service - Michigan

January-February 2014

## NRCS Supports Detroit Local Food Effort

With vacant land and a still struggling economy, urban agriculture offers Detroit residents the opportunity to earn money while providing healthy food for their community. NRCS is assisting urban farmers in Detroit and Wayne County by making financial and technical assistance available to extend their growing season and produce more income.

On Valentine's Day Sen. Debbie Stabenow announced the availability of \$150,000 in financial assistance through NRCS for Wayne County producers to purchase and install seasonal high tunnels. In conjunction with this initiative, NRCS provided a \$75,000 grant to the Southeast Michigan Resource Conservation and Development Council to provide training on seasonal high tunnels to Detroit-area producers.

SEM RC&D held two public forums in Detroit during January to promote the Seasonal High Tunnel



*Sen. Debbie Stabenow announced an NRCS-Michigan Initiative to promote local food production in Detroit and Wayne County. Pictured (l-r) are: Malik Yakini, Executive-Director of the Detroit Black Community Security Network and Manager of D-Town Farms, Senator Stabenow, NRCS State Conservationist Garry Lee, Southeast Michigan Resource Conservation & Development Council Board President Morse Brown, Ashley Akinson- Executive Director of Keep Growing Detroit.*

Educational Initiative and to find out the training needs of urban producers, said Natural Resources Specialist Jessica Simons. The meetings were attended by local producers and community gardening organizations. NRCS District Conservationist Steve Olds participated in the meeting to talk about assistance available through the Environmental Quality Incentives Program.

"People were very interested in hands-on demonstrations," said Simons.

SEM RC&D will begin offering seasonal high tunnel workshops in late March and continue with one workshop a month through the summer. The workshops will cover

everything from site selection and obtaining local permits to marketing, said Simons. The workshops will be offered at no cost, she added.

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United States Department of Agriculture

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## State Conservationist's Message

On Feb. 7, Michigan had the honor of hosting President Obama for the signing of the Agricultural Act of 2014 which will guide USDA policy for the next five years. The signing was a great opportunity for the agricultural sector of a state known for manufacturing to receive some national attention.

Now that the legislation has passed, the long process of turning that legislation into policy has begun. In the coming weeks and months we will know more about how the new Farm Bill will affect our work and the customers we serve. Now is a good time to look at what was accomplished under the 2008 Farm Bill.

Under the 2008 Farm Bill, NRCS provided over \$154 million in conservation financial assistance to Michigan landowners. The 2008 Farm Bill offered more opportunities for specialty crop and organic producers, and forestland owners to participate in USDA conservation programs. Michigan saw a dramatic increase in the number of forestland owners participating in NRCS programs.

The last Farm Bill also included a focus on local resource concerns. The Cooperative Conservation Partnership Initiative provided resources to local entities for addressing regional issues. In Michigan CCPI funds are being utilized to improve wildlife habitat in

the northwest and to improve water quality around the Saginaw Bay. Programs like the National Water Quality Initiative and the Agricultural Water Enhancement Program have targeted that resource concern.

The resources provided by the 2008 Farm Bill were put to good use in Michigan, NRCS and conservation district employees can take pride in this accomplishment. Our state's landowners can also take satisfaction in utilizing the resources of the last Farm Bill to protect and conserve the natural resources we all share.



*NRCS Michigan State Conservationist Garry Lee*

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Among those who should take pride in the accomplishments of the 2008 Farm Bill are the six long-time NRCS employees who retired over the past year. They take with them the knowledge and expertise they acquired in over 200 years of government service and they will be missed. On behalf of everyone at NRCS I thank them for their service and wish them continued success.

### **NRCS-Michigan Employees Retired in 2013 and January 2014**

- Thomas Van Wagner, District Conservationist-Adrian, 35 years of service
- James Iaquina, District Conservationist - Saginaw, 35 years of service
- Alex Bozymowski, District Conservationist - Cassopolis, 34 years of service
- Freddie McNeil, Agronomist - Flint Area Office, 40 years of service
- Mike LaPointe, Area Conservationist - Marquette, 34 years of service
- June Grabemeyer, Ag Economist - East Lansing, 31 years of service

## Seasonal High Tunnels Reach all Corners of Michigan

Beginning as an NRCS pilot project in 2010, seasonal high tunnels have been constructed all over Michigan. The practice allows producers to extend their growing season and produce more local food.

Through the end of fiscal year 2013, NRCS provided over \$4.27 million in financial assistance for the seasonal high tunnel practice. The funds were allocated for 461 high tunnels in 57 Michigan counties. About 150 high tunnels have been constructed.

Producers from all parts of the state contracted for the practice, from Gogebic County in the western Upper Peninsula to Monroe County in the southeast. The leading county for seasonal high tunnels is Monroe County with over 30 seasonal high tunnels contracted followed by Washtenaw and Wayne counties with 23 each.

The seasonal high tunnel practice has undergone some refinement since the initial pilot was announced. Initially producers were not allowed to install heating or ventilation systems in high tunnels. Heating and ventilation systems are now allowed but they must be installed at the contract holder's expense.

In addition to extending the growing season, high tunnels also have conservation benefits. Producing foods locally reduces the amount of fuel needed to get food to market. High tunnels also allow intense crop production with little wind and water erosion.



*Detroit producer Edith Floyd (left with Soil Conservationist Quincy Coleman) received financial assistance through EQIP to purchase a seasonal high tunnel.*

For more information about the seasonal high tunnel practice visit the [National High Tunnel Initiative Web page](#). For information on applying for EQIP assistance, including the seasonal high tunnel practice visit the [Michigan EQIP Web page](#).

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### Detroit Local Food Initiative

The workshops will be led by Adam Montri, who is affiliated with the Student Organic Farm at Michigan State University. Montri has presented numerous workshops on seasonal high tunnel production. He recently provided training to producers in Cleveland with NRCS EQIP contracts to build seasonal high tunnels. Montri has posted a number of instructional videos on the internet and contributes blog entries on the MSU Hoophouse Website at [hoophouse.msu.edu](http://hoophouse.msu.edu).

Montri owns and operates 10 Hens Farm in Bath along with his wife.

Simons hopes to include visits to operating high tunnels and a high tunnel building session in the training initiative. More information about the SEM RC&D Seasonal High Tunnel Educational Initiative is available on their website.

## North Michigan Farmers Participate in National Cover Crops Forum

- contributed by NRCA Area 2 staff

NRCS Area 2 and local partners were thrilled to participate in the live National Cover Crops Conference Forum: Harvesting the Potential, on Tuesday, Feb. 18. This unique opportunity took place locally in Alpena County at the Hillman Public Library, a central location where many landowners have a strong interest in the remarkable effects of cover crops. The library's internet capabilities made it possible to tap into the live video feed from the national forum taking place in Omaha, Neb.

NRCS Chief Jason Weller kicked off the forum using a quote from Hugh Hammond Bennett reminding us that conservation above all else, remains at the heart of our service and our work. Chief Weller was followed by a panel of farmers from across the nation, each highlighting their experiences with cover crops on soil health.

"I have a living root in the soil, before my cash crop, during my cash crop and after my cash crop is harvested, three hundred sixty five days a year," said an Indiana famer on the panel.

The purpose of the event was to provide national and local perspectives on cover crops and soil health, provide participants with the opportunity to discuss the role of advancing soil health and use of cover crops locally, and discuss opportunities, challenges or barriers regarding cover crop and soil health management systems adoption, nationally.

Additionally, the forum's proposed outcomes included determining if a consortium of individuals in the state should work together to organize an effort to promote cover crops and soil health and if so, how?

One dozen landowners representing over a thousand acres within four counties across Northern Michigan attended the forum in Hillman and the group reached several considerations in Michigan. Discussions included the future creation and distribution of a list of willing landowners who sell cover crop seed or enjoy successes with cover crops,



*District Conservationist Perry Smeltzer leads discussion at the Hillman Library following a live broadcast of the National Cover Crops Conference Forum broadcast from Omaha, Neb. on Feb. 18.*

and challenges in proper timing of cover crops. The single most predominant conclusion was the need for more broad scale adoption of cover crops. Simplifying the process would serve more people across more acreage.

Selected comments and ideas from all across the country were a part of the written report prepared following the conference and forum event, and referred to by a working group following up on these ideas and recommendations.

The Alpena and Onaway Field Offices wish to thank all of our landowners who participated, MSU Extension Educator, James DeDecker for bringing this unique event to our attention, the entire staff of the Alpena Conservation District, and the staff of the Hillman Public Library for their support and partnership on this endeavor. Area 2 worked together with partners with an aim to make this forum a lasting success.

The live broadcast of the Cover Crop and Soil Health Forum was shown at over 200 locations nationwide, including six locations in Michigan. It is now posted and can be viewed online at the [USDA-SARE website](#).

## National Resources Inventory Gives Snapshot of Nation's Agriculture

A new report shows a boom in growing certain specialty crops as well as a growth in agricultural land, stable erosion rates, and notable land use changes.

These findings are just a few from USDA's Natural Resources Conservation Service's [2010 National Resources Inventory Report](#), which provides a summary on the status, condition and trends of land, soil, water, and related resources on the nation's private lands from 1982 to 2010. The NRI report includes data from 800,000 sample locations across the country.

"The NRI summary report is the only report of its kind and is one of our most comprehensive tools to understanding what's actually happening on the country's landscape," NRCS Chief Jason Weller said. "As a science-based organization, this information is an invaluable resource to help us understand where conservation is working and where we need to focus more effort."

NRCS is increasing the frequency of NRI reports, recognizing the dynamic and rapid changes in the agricultural and related land uses.

Some of the highlights include:

- Land dedicated for cultivated fruits, nuts and flowers increased from 124,800 in 2007 to 273,800 in 2010;
- Cropland acreage increased by about 2 million acres from 2007 to 2010 after a steady decline over the previous 25 years;
- Acres in pastureland increased by 847,000 acres;
- Developed land increased two percent from 111.1 to 113.3 million acres;
- Palustrine wetlands, such as swamps or marshes, and estuarine wetlands, such as a river flowing into the ocean, saw a small increase from 1997 to 2010;
- Cropland erosion rates remained stable despite a growth in agricultural land use and more extreme weather events, such as drought and floods.



Snapshot of agricultural lands

"We expected to see an increase in the erosion, but our numbers told a different story," said Patrick Flanagan, PhD, who is NRCS' national statistician.

NRCS records also show growth in conservation programs administered by the agency. Enrollment grew from about 17 million acres in 2007 to about 40 million in 2010.

"We're excited that more farmers, ranchers and forest landowners have chosen to voluntarily install conservation practices on their operations," Weller said. "Because of their hard work and dedication, cropland erosion rates have remained stable even though more land is in production."

The 2010 report marks 28 years of scientifically valid, comprehensive and relevant data on how U.S. non-federal rural lands are being used. It also gives a statistical perspective on natural resource and environmental conditions for these lands, with the specific goal of supporting agricultural and environmental policy development and program implementation. It serves as the foundation for critical analytical efforts for USDA and other agencies and groups.

## Tillage Practices have a Direct Correlation to Soil Health

by Christina Curell, Michigan State University Extension

Many areas, including Michigan, have experienced a heightened sense of awareness of the importance of soil quality. Farmers have a direct impact on soil quality through many of their field practices, including tillage.

Soil erosion from wind and water increases as tillage of a field increases. Though the soil may not move off the field, it will be moved from higher to lower elevations, causing some parts of the field to be less productive.

According to the Michigan State University Extension, compaction is also a common side effect of tillage – at the soil surface, the plow layer and the subsoil. Crusting at the surface happens when unprotected wet soil particles are pounded together to form a thin, dense surface layer. This hard surface inhibits water from infiltrating down through the soil profile. It will also increase the potential for water runoff after rain or snow.

Compaction at the plow layer not only causes problems with production but also makes seedbed preparation more labor-intensive. Compacted soils require a secondary tillage followed by a packing tool to make a good seedbed and ensure a good plant stand. Every pass over the field – for any type of tillage or by other farm tools – can break up soil aggregates and reduce the ability of the soil to hold moisture. Heavily tilled fields may have a good seedbed for planting, but any rainfall after planting may cause the surface to seal, resulting in surface compaction. Some soil at this point will harden, reducing plant viability. Soils will soften when it rains again, but plants will suffer as soon as it dries out.

Subsoil compaction, or plow pan, is compaction below the tilled surface layer. The pressure of tillage equipment pressing on the subsoil

can cause this. The pressure of tractor tires on moldboard-plowed furrows also can cause subsoil compaction. The effect of subsoil compaction can be exacerbated when fields are tilled when they're wet.

Many farmers are addressing the compaction problem by using a minimal tillage system. There are several types of minimal tillage systems with various degrees of soil disturbance. With no-till, the soil is not disturbed during planting and a high amount of crop residue remains on the soil surface. With ridge-till, the seedbed is prepared on ridges. The soil between the ridges is undisturbed, and the residue is left between the ridges. Mulch-till involves a minimal amount of disturbance prior to tillage. Chisel plowing is a common type of mulch-till.

An important part of all of these practices is that residue is left on the field. Michigan State University Extension educator Paul Gross visited several fields throughout Isabella County during the fall of 2012 and measured the amount of residue left after various tillage types. His findings are illustrated in the accompanying photos, which show that limited tillage greatly reduced compaction.

Fall tillage is a common practice on many Michigan farms. Farmers should understand how this and other tillage practices affect their soils and their subsequent crops. The challenge is that no two farming systems are exactly the same, so farmers need to find a way to reduce tillage that will work for their individual farms. Some may need to use more than one tillage practice in their crop rotations. For assistance in determining what tillage system will work for your farm, contact your local MSU Extension crop educator.

*This article was published by Michigan State University Extension. For more information, visit <http://www.msue.msu.edu>. To contact an expert in your area, visit [expert.msue.msu.edu](http://expert.msue.msu.edu), or call 888-MSUE4MI (888-678-3464).*



## MSUE Promotes Smart Gardening

Michigan State University Extension has resources online to help any homeowner be a smart gardener.



The MSUE [Smart Gardening website](#)

includes information to help homeowners better manage their lawns and gardens to benefit the soil and wildlife like pollinators. The site focuses on smart plants, smart soils and smart lawns.

MSUE posted nine tip sheets on the site last year and will post six more in 2014. All of the tip sheets with helpful information on lawn and garden care can be downloaded free from the Smart Gardening website.

Smart Gardening public events are also planned for this summer with dates and locations to be announced.

## MSU Ag and Natural Resources Week

Michigan State University hosts its 99th Agriculture and Natural Resources Week beginning on March 1.

ANR Week continues to be one of the largest events of its kind in the nation. Foundations for the week were laid by the Farmers' Institute more than a century ago.

The topics of interest over 90 years has changed with the times. In 1982, Farmers' Week became Farmers' Week and Natural Resources Days followed by another name change in 1985 to Agriculture and Natural Resources Week. The event now hosts more than 50 programs and annual association meetings.

ANR Week 2014 provides a wide variety of topics in areas such as agriculture, horticulture, and natural resources, i.e. Quiet Water Symposium, Michigan Wildflower Conference, Growing of Michigan's Organic Future, MSRBA Rabbit Show, Growing Michigan Agriculture Conference and the 86th state convention of the Michigan FFA.

## DVD Highlights Green Accomplishments

A partnership of mid-Michigan conservation organizations released a 28-minute video, *Greening Mid-Michigan: A Vision for Green Infrastructure!*, to highlight green infrastructure success stories in Ingham and Eaton counties.

The video can be viewed on the Greening Mid-Michigan channel on Youtube and will be broadcast by Public Television stations in Michigan. Subjects on the video include the reuse of industrial sites into successful county parks, local farms and markets, watershed protection efforts, and promoting active living for mid-Michigan residents through the use of river, park and trail systems.

The Greening Mid-Michigan team includes the Clinton County Greenspace Commission, the Eaton Conservation District, the Eaton County Parks Department, the Ingham County Parks Department, the Ingham County Open Space and Farmland Preservation Board, the Greater Lansing Regional Committee for Stormwater Management and the Heart of Michigan Trails Partnership.

## Farm Bureau Offering Educational Grants

Michigan Farm Bureau is offering grants of up to \$3,000 to its county chapters to educate farmers about USDA conservation programs and the Michigan Agriculture Environmental Assurance Program.

This is the fourth year Michigan Farm Bureau has offered the grants as part of a partnership agreement with NRCS. County Farm Bureau chapters in Michigan have until April 7 to submit an application for the grants.

More information about the grant program is available by contacting the Michigan Farm Bureau Agriculture Ecology Department at 517/679-5337.

## Conservation Notes - January/February

### Upcoming Events - Upcoming Events - Upcoming Events

#### March

- 1-8** MSU Agriculture and Natural Resources Week - East Lansing, for more information to [anrweek.canr.msu.edu](http://anrweek.canr.msu.edu) **25**
- 8** Branch County Conservation District Annual Meeting & Conservation Expo, 8:30 a.m. - 2:30 p.m., Branch Area Career Center - Coldwater, for more information go to [branchcd.org](http://branchcd.org) **27**
- 19** Wildlife Habitat Workshop, 6:30 - 8:30 p.m., Eaton Conservation District - Charlotte, RSVP to the Eaton CD at 517/543-5848 ext. 5
- 19** Van Buren Conservation District Winter Conference, 8:30 a.m. - 3:30 p.m., Boersen Farms Ag - Decatur, lunch provided, RSVP required, call 269/657-4030 x 129
- 20** Backyard Orchardist Pruning Workshop, 6:30 - 8:30 p.m., Country Mill Farms - Charlotte, \$8 registration fee, for more details and to RSVP call the Eaton Conservation District at 517/543-5848 ext. 5
- 25** Qualified Forestry Program Meeting, 5:30 - 7:30 p.m., Isabella County Court House, Room 320 - Mt. Pleasant, for more information contact the Isabella Conservation District at 989/772-9152 ext. 3

#### March ctd.

- Rural Education Day, Jackson County Fairgrounds - Jackson, educational sessions for area third graders, call the Jackson Conservation District for more information or volunteer at 517/784-2800 ext. 214
- 27** Mid-Michigan Farm and Garden Show, 10 a.m. - 5 p.m., Gladwin Community Arena - Gladwin, for more information go to [farmandgardenshow.com](http://farmandgardenshow.com)

#### April

- 12** Van Buren Conservation District Spring Field Day, 9 a.m. - noon, Gene Sahr's Farm - Paw Paw, contact the Van Buren CD to RSVP at 269/657-4030 ext. 129 or e-mail [colleen.forestieri@mi.nacdnet.net](mailto:colleen.forestieri@mi.nacdnet.net)
- 18-19** Branch County Conservation District Annual Tree Sale, Branch County Fair Grounds - Coldwater, for more information go to [branchcd.org](http://branchcd.org)

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