



Conservation Notes

USDA - Natural Resources Conservation Service - Michigan

November/December 2018

Partnership Preserves Leelanau Farmland

Gene Garthe has seen agriculture change on the Leelanau Peninsula, going from subsistence farming to large orchards. Agriculture will continue to change, but Garthe knows his land will remain in farming after enrolling his property in a USDA Agricultural Land Easement.

“This is my home, this is where I grew up. I don’t want to see it sold off and houses put up,” said Garthe.

Garthe’s was one of the first European families to settle in the Peninsula. He grew up on a 72-acre farm that was expected to provide a living for the entire family. There were walnut trees planted above the hog lot and mulberries grown over the chicken coops to help feed the livestock. The manure went back on the land. By the 1960s farming on the peninsula was concentrated in fruit growing and operations became larger, said Garthe.

Garthe eventually combined three farmsteads into one orchard operation that included his father’s farm and the original farm of his great grandfather. In 2015, Garthe enrolled about 200 acres of orchard land, including the two family farmsteads, into a permanent conservation easement through a partnership between the USDA Natural Resources Conservation Service and the Leelanau Conservancy. The partnership was formed through what is now called the Agricultural Conservation Easement Program.

Through ACEP, NRCS matches up to 50 percent of the cost for non-federal land conservancy organizations to purchase agricultural land



The Gene and Kathy Garthe farm near Northport in Leelanau County is enrolled in a farmland conservation easement with the Leelanau Conservancy and partially funded by the USDA. The Conservancy plans to enroll 10 more farms in Agricultural Land Easements through funding provided by the USDA Regional Conservation Partnership Program.

easements on working farmland. Organizations like the Leelanau Conservancy match the remaining 50 percent through non-federal and landowner donations. In 2016, Leelanau Conservancy was part of a successful proposal enrolled in the USDA Regional Conservation Partnership Program. The Tribal Stream and Michigan Fruitbelt Collaborative included USDA funding to preserve about 3,000 acres of farmland.

Leelanau Conservancy already has agreements to

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State Conservationist's Message

As we begin another year serving the citizens of Michigan and the United States by helping landowners protect our natural resources, we'll be working under the guidance provided by Congress as the Agriculture Improvement Act of 2018.

Agriculture Secretary Sonny Perdue issued the following statement after it was signed into law by President Trump on Dec. 20, 2018:

"This is a great day for our farmers, ranchers, foresters, and producers, as President Trump's signature on this bill is a Christmas present to American agriculture. Farmers take financial risks every year as a matter of doing business, so having a Farm Bill in place gives them peace of mind to make their decisions for the future. Since early talks on this Farm Bill began back in 2017, I've always believed it would be more evolutionary, rather than revolutionary, and that has borne out to be true.

"The bill bolsters farm safety net programs, protects federal crop insurance, and maintains strong rural development and research initiatives.

The legislation reinvents the Margin Protection Program for dairy producers, providing a boost to coverage levels and a reduction in premiums after the program fell short in the 2014 Farm Bill. The bill also includes a new Animal Disease Prevention and Management program, providing annual funding for three animal health programs.

This includes a new vaccine bank focused on foot-and-mouth disease and extended funding of the National Animal Health Laboratory Network to protect our borders and improve food safety.

"While we would have liked more progress on forest management reforms and work requirements for certain Supplemental Nutrition Assistance Program recipients, we look forward to using our authorities to make improvements in those areas. All



State Conservationist
Garry Lee



told, this is a Farm Bill that should be welcomed by producers, and at USDA we will eagerly implement its provisions. At USDA, we were pleased to provide a tremendous amount of technical assistance to Congress as legislators wrote the bill. I thank the President for his leadership on this legislation, and commend the Senate and House Agriculture Committees for their many months of hard work."

Like all of you, I look forward to another year of working with

Michigan's farmers, forest owners, and our conservation partners in helping to conserve our state's soil, water, wildlife and other natural resources. More details will be available soon about how the new Farm Bill continues the USDA's support of conservation on working lands. Happy New Year!

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Partnership Preserves Leelanau Farmland

enroll seven Leelanau County farms into agricultural land easements utilizing RCPP matching funds, permanently preserving about 860 acres of farmland. The Conservancy hopes to finalize at least two of those agreements by this spring, said Leelanau Conservancy Land Protection Specialist Kim Hayes. The RCPP funds will be used to preserve fruit-growing land as well as vineyards and hay and corn land. Matching funds for the easements typically include a 25 percent match from the conservancy and 25 percent from the landowner, Hayes said. Leelanau Conservancy hopes to purchase development rights for at least 10 farms utilizing RCPP funding.

“Our goal is to keep people farming and not make it harder,” said Yarrow Brown, the conservation easement program manager for the Leelanau Conservancy. Leelanau Conservancy first began partnering with NRCS on farmland easements in the early 2000s, said Brown.

His farm will remain in agriculture but Garthe has no succession plan for when he leaves farming. His family is on the same page in the desire to keep the land in agriculture, but no one is planning to



NRCS District Conservationist Jason Kimbrough, Leelanau County farmer Gene Garthe, and Leelanau Conservancy Conservation Easement Program Manager Yarrow Brown (l-r) at the Garthe farm house near North Port.

take over the operation. Garthe’s mission statement for his farm is “sustainable self-sufficiency.” He installed several solar panels on his farm and is interested in installing a wind turbine. Maybe the future of the farm will be back to the future.

Leelanau Conservancy & USDA

- The Leelanau Conservancy has closed on 7 projects utilizing funds from the Agricultural Conservation Easement Program under the 2014 Farm Bill. The easements cover 1,029 acres including 10 acres of wetlands and 1,920 feet of stream frontage.
- Through RCPP, Leelanau Conservancy has agreements to enroll an additional 7 projects, comprising 865 acres that include 52 acres of wetlands and 1.8 miles of perennial stream frontage.
- About 20 percent of the Leelanau Conservancy’s farmland easements received ACEP funding. After the RCPP projects are finalized, about 37 percent of the Conservancy’s farmland easements will have received USDA funding.



WOMEN IN THE WOODS

A COMBINED FIELD DAY OF THE PRESQUE ISLE AND ALPENA CONSERVATION DISTRICTS

FRIDAY JANUARY 11TH, 2019
12:30PM - 4:30PM

MEET AT 13425 CARR RD. POSEN, MI

Tour two properties; an active harvest & a recent harvest.
Led by Brook Alloway & Brittany VanderWall. Light hiking, dress warm.

For info & RSVP:

brittany.vanderwall@macd.org, or call 989-734-4000

NRCS Soils Staff Identify Unique Soils for Cherry Production

Farmland Classification for the Fruitbelt in Northwest Michigan

- Grand Rapids MLRA Staff

Project Summary

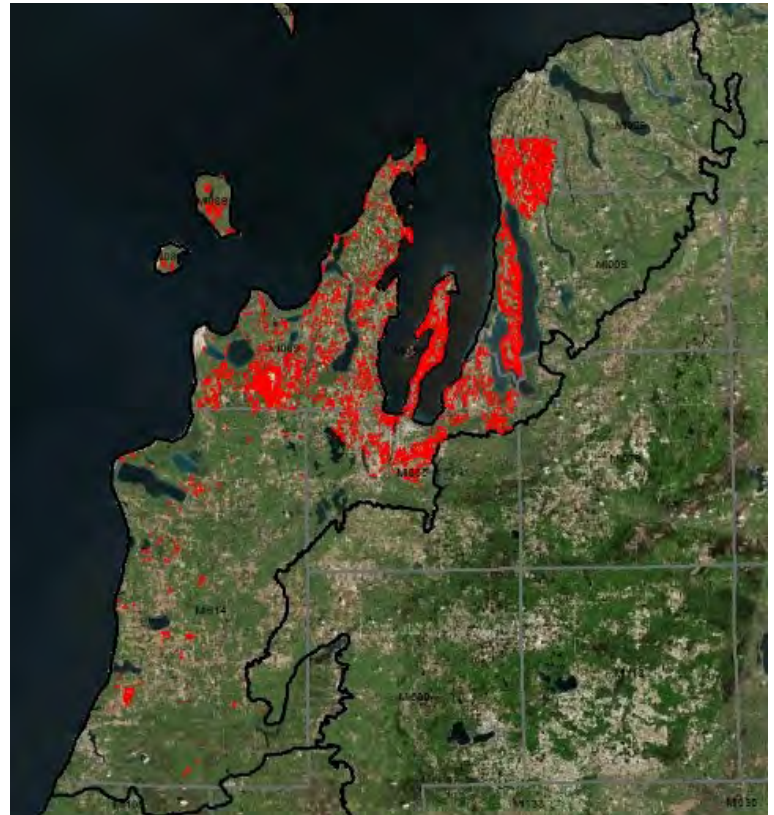
The northwest portion of the Lower Peninsula of Michigan is known as a major producer of fruit tree crops, producing 75 percent of tart cherries grown in the United States. Local conservation planners and conservation partners approached Michigan NRCS with a request to update farmland classification for soils that are common in areas of tart cherry production.

Due to improvements in equipment and management practices, the range of soils suitable for tart cherry orchards has expanded since the soil survey was published. With the current soil survey not reflecting these changes, it was not possible for the survey to be used by conservation partners in qualifying for programs like the Agricultural Land Easement program which is designed to protect important farmlands. In cooperation with the Regional Modeling Unit and local conservation partners, a tart cherry suitability interpretation was developed, which accounted for modern orchard requirements

Key Outcomes

Soil Survey staff developed a soil suitability interpretation for tart cherry orchards. The interpretation can be used to select map units that are well suited for tart cherry production and classified as Farmland of Unique Importance. The farmland classification was updated in SSURGO and Web Soil Survey for portions of five counties within the fruit belt of northwest Michigan. Recognition of these agriculturally unique areas will assist conservation planners when ranking potential projects.

Soil survey staff will continue to work with local field staff, partner agencies, and the public to create similar improvements to soil survey data in other areas. This data will address current land use concerns.



Approximately 40,000 additional acres of soils in northwest Michigan are now designated as Farmland of Unique Importance.

Grand Rapids MLRA Office

Major Land Resource Area Soil Survey Offices are part of the NRCS Soil Science Division. The one MLRA office in Michigan is located in Grand Rapids. The Grand Rapids office is assigned to Soil Survey Region 12, which has its administrative office in Amherst, Mass.

MLRA staff primarily work on national projects such as the National Cooperative Soil Survey. This work includes updating and improving the information available on the Web Soil Survey. They also assist states with their technical soil service workload in coordination with the state soil scientist and area resource soil scientists.



NRCS & MFB Produce Pollinator Video

A new educational video was posted to the NRCS-Michigan YouTube account that promotes pollinator conservation. The video was posted in November and was produced through a contribution agreement between NRCS and Michigan Farm Bureau.

The 3:21-video is available to view on [YouTube](#) and can be downloaded from the Michigan NRCS [SharePoint](#) site by NRCS and conservation district employees. The purpose of the video is to educate the public about the importance of pollinators to Michigan's agricultural economy and how landowners can establish pollinator habitat.

NRCS and conservation district field staff are encouraged to utilize the video whenever they present information on pollinators. Other conservation educators are welcome to share the video as well.



NRCS-Michigan State Biologist Dan Zay appears on an educational video promoting pollinator conservation produced by NRCS and Michigan Farm Bureau.

Nominations Sought for Environmental Stewardship Award

The National Cattlemen's Beef Association is seeking nominations for its annual Environmental Stewardship Award. The deadline for 2019 nominations is March 8.

Nominations can be submitted by any organization, group, or individual on behalf of a U.S. cattle producer. In the past, nominations have been submitted by a diverse mix of organizations. A partial list includes: The Nature Conservancy, NRCS, Society for Range Management, state games and parks services, state extension services, universities, wildlife organizations, and all types of livestock groups.

Environmental Stewardship Award winners are selected annually by the Environmental Stewardship Advisory Committee, a group of representatives from universities, conservation organizations and federal and state agencies. For guidance, the judges consider the management of water, wildlife, vegetation, air, and soil along with leadership abilities and the sustainability of the business as a whole.

Nominees will be competing for one of seven

regional awards based on their state of residency. After the application deadline, the Environmental Stewardship Advisory Committee meets to decide upon the regional winners. From the regional winners, one national winner is then selected later in the year.

Nominations must include a history and description of the operation, sustainability on the ground, compelling interest for consumers, conservation leadership within the local community, and letters of recommendation.

The Environmental Stewardship Award Program was established in 1991 by the National Cattlemen's Beef Association and is made possible by the generous sponsorship of Corteva Agriscience, Agriculture Division of DowDupont, the Natural Resources Conservation Service of the United States Department of Agriculture, McDonald's and the US Fish and Wildlife Department.

For more information about the award and the application process, go to www.environmentalstewardship.org.



Wood is Heating Up

by Bill Cook, MSU Extension Forester/Biologist

Heating, cooling, and wood are comfortable and long-established partners when considering alternatives to fossil fuel use. Although, the media spot-light too frequently shines only on power generation.

Now, with long nights and cold temperatures, many people are acutely aware of the need for heat and how many dollars are required to feed that need.

Roughly 40 percent of Michigan's total energy budget is expended on heating and cooling. However, many people use the words "energy" and "electricity" as synonyms, leaving heating and cooling out of the discussion, as well as transportation. This tends to push fuel sources for heat onto the back-burner, so to say.

Within the residential sector, about three-quarters of Michiganders heat with natural gas. This is the least expensive and automated way to heat homes, as long as the environmental costs of extraction, distribution, and waste are left out of the equation.

For those off the natural gas grid, most heat with propane or electricity. That's about 650,000 households. It's this market that might benefit from less expensive wood and wood pellet heating appliances, as well as those homeowners on the grid that dearly regard environmental quality.

For those hearty souls happy with processing firewood, and haven't a concern about smoking-out neighbors, then a wide range of stoves and outdoor boilers are available. Roughly 130,000 households have done this already. There are some excellent products available. These technologies are the least expensive heating alternative by quite a margin. However, messing with wood isn't everyone's cup of tea.

Advanced, fully-automated wood pellet furnaces and boilers (much different than stoves), have a huge potential to satisfy those on a budget, that desire clean heating, and don't want to do much more than adjusting a thermostat. Southwest Michigan is an especially "ripe" landscape. However, there are

three problems with achieving these admirable goals in home heating.

One, the capital cost is high, especially for homes "wired" for electric heat. However, if one looks at the total cost over the life of the appliance, it's usually less expensive than propane and easily less expensive than electricity. And, the costs of fossil fuels are likely to rise, while the costs of wood pellets are likely to remain stable.



Two, delivering wood pellets, in the manner of propane or fuel oil, requires enough customer demand to support a specialized truck. A marketing plan and, perhaps, some patient capital, will be needed. But once a bulk pellet delivery network is established, we'll have the beginnings of a significant renewable, sustainable, and local economic driver.

Three, HVAC companies must be aware of and be trained to install these advanced wood pellet appliances. Currently, most HVAC companies are unfamiliar with the technology. There is one HVAC company in all of Michigan that's trained in the installation of these advanced wood pellet appliances.

For larger buildings with more square footage than houses, heating (and cooling) with wood chips is an even easier financial sell. Schools and hospitals are common users of these technologies, although the wood products industries have been following this low-cost pathway for decades. Wood is, by far, the most common renewable energy source for Michigan, especially in the heating and cooling sector.

Michigan is home to one of the few manufacturers of these wood chip systems. Messersmith Manufacturing has over a hundred deployments around the nation. That means even more home-grown potential for the state economy.

The next upward tier towards more renewable energy independence are the large, community-level, combined heat and power (CHP) stations

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NRCS People

NRCS Staff, Sammy Soil, Minnie Microbe Attend Career Quest Event



NRCS Soil Conservationist Kandrea Johnson helps an attendee pose as new NRCS mascot Minnie Microbe at the MiCareer Quest Southwest event at the Kalamazoo County Expo Center in November. She was joined by other NRCS staff including Soil Conservationist Megan Fawcett appearing as Sammy Soil (above). The event was organized to introduce young people to potential careers.



District Conservationist Perry Smeltzer Retires



District Conservationist Perry Smeltzer retired on Dec. 31, 2018 following 32 years of service. Perry led the NRCS field office in Onaway serving Cheboygan and Presque Isle counties. He retired on the same day as FSA Program Technician Robin Grainger (top photo).

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Wood is Heating Up

that are so common in many of the more energy-advanced European nations. The closest example to Michigan, perhaps, is the CHP plant that heats and cools downtown St. Paul, Minnesota.

These CHP facilities supply heating and cooling first, as district energy, and are then large enough to emplace an electricity-generating turbine into the mix. This makes sense, as the combustion of anything, including fossil fuels, generates far more energy as heat than power. Most power plants throw-away most of the energy as waste heat.

District energy is a distributed network that heats

multiple buildings from a central heating facility. Michigan has a couple of these examples, such as Bordine's Nursery in Grand Blanc and the Pinecrest Medical Care Facility in Powers.

Perhaps, the most interesting component of all these technologies is that they're market-ready. In the renewable energy world, this is the low-hanging fruit. Sometimes the easiest solutions are among the best solutions.

This article was published by Michigan State University Extension. For more information, visit <http://www.msue.msu.edu>.

Upcoming Events - Upcoming Events - Upcoming Events - Upcoming Events

January

- 9 MSU Extension U.P. Crop Nutrient Management Meeting, 6:30 to 8 p.m., Rudyard Township Hall - Rudyard, for more information go to <https://events.anr.msu.edu>
- 11 Center for Excellence Crop Day, 8 a.m. to 2:30 p.m., The Centre - Adrian, for more information and to RSVP contact the Lenawee Conservation District at 517/263-7400
- 11 Women in the Woods Field Day, 12:30 to 4 p.m., 13425 Carr Rd. - Posen, for more information and to RSVP call 989/734-4000 or email brittany.vanderwall@macd.org
- 15-16 Northwest Michigan Orchard & Vineyard Show, 8 a.m. to 5 p.m., Grand Traverse Resort - Acme, for more information go to <http://msue.anr.msu.edu>
- 17 Cabela's Soil Health Workshop, 9 a.m. to 4 p.m., Cabela's - Dundee,
- 22 Greenhouse Field Day, 8:30 a.m. to 1:30 p.m., Countryside Greenhouse - Allendale, for more information go to <http://msue.anr.msu.edu>
- 23 Silvopasture Train the Trainer, 9:30 a.m. to 4 p.m., Mid-Michigan Community College - Harrison, for more information go to www.canr.msu.edu/events
- 24 Silvopasture Train the Trainer, 9:30 a.m. to 4 p.m., MSUE Research & Extension Center - Chatham, for more information go to www.canr.msu.edu/events
- 25 Ag Action Day, 8 a.m. to 4 p.m., Kalamazoo Valley Community College - Kalamazoo, for more information go to <http://msue.anr.msu.edu>
- 25-26 Northern Michigan Small Farm Conference, 9 a.m. to 5 p.m., Grand Traverse Resort - Acme, for more information go to www.smallfarmconference.com

January ctd.

- 30-31 Great Lakes Crop Summit, Soaring Eagle Casino - Mt. Pleasant, for more information go to www.greatlakescropsummit.com

February

- 1-2 Black Lake Sturgeon Shivaree, 1701 Winifred St. - Cheboygan, for more information go to www.sturgeonfortomorrow.org
- 4 MSU Extension U.P. Crop Nutrient Management Meeting, 6:30 to 8 p.m., MSUE Research & Extension Center - Chatham, for more information go to <https://events.anr.msu.edu>
- 9 Michigan Family Farm Conference, 8 a.m. to 4:30 p.m., Kalamazoo Valley Community College - Kalamazoo, for more information go to www.miffs.org/events
- 11 MSU Extension U.P. Crop Nutrient Management Meeting, 6:30 to 8 p.m., Mass City Community Center - Mass, for more information go to <https://events.anr.msu.edu>
- 12 American Chestnuts Today, 7 to 8 p.m., Boardman River Nature Center - Traverse City, contact the Leelanau Conservation District at 231/256-9783 for more information
- 25 Municipal Invasive Species Training, 10 a.m. to 2:30 p.m., AgroLiquid - St. Johns, for more information and to register go to www.inghamconservation.com/mm-cisma

March

- 4 Municipal Invasive Species Training, 10 a.m. to 2:30 p.m., Hannah Community Center - East Lansing, for more information and to register go to www.inghamconservation.com/mm-cisma

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