



Centre County Agricultural Land Preservation News Update

SPRING 2023

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What's Happening in Centre County Farmland Preservation

Recorded Agricultural Conservation Easements

David G. Burket Living Trust farm, 22.41 acres, Ferguson Township, closed January 17, 2023

Nancy A. and Webb C. Miller farm, 84.1 acres, Ferguson Township, closed April 6, 2023

These newest preserved farms in Centre County bring our total to 60 farms on 9,147 acres

Approved by the Pennsylvania Agricultural Land Preservation Board, April 13, 2023

Cynthia A. Barker farm, 84.15 acres, Potter Township

Larry F., Suzanne M. and Dawn Harpster farm, 200.7 acres, Ferguson Township

Strickler Living Trust, Donald W. Strickler, trustee, 78.02 acres, Walker Township

Agricultural Conservation Easements in Progress

Leo E. and Bernard L. Corl farm, 166.76 acres, Benner Township; State Board meeting June 15, 2023

Joanne M. Fisher farm, 112.07 acres, Halfmoon Township

Appraisals Authorized by the Centre County Agricultural Land Preservation Board, May 4, 2023

#1 Ranked PACE applicant, Thomas and Cynthia Hall farm, 87.52 acres, Halfmoon Township

#2 Ranked PACE applicant, Carl R. Gates farm, 182 acres, Ferguson Township

#3 Ranked PACE applicant, Karen Dreibelbis farm, 101 acres, Ferguson Township, pending available funding

Could solar effectively support your agricultural operations?

This farm couple's investment in solar is paying off

When Elwin Stewart and Barb Christ were determined to add solar to their farm, at least one expert advised that solar wasn't practical in Pennsylvania — too much cloud cover and not enough consistent sunshine. While our State has more cloudy than sunny days, it actually has sufficient sunshine for solar.

Elwin and Barb would not be discouraged by naysayers. "We started solar on our own because it fit our philosophy," said Barb, who co-owns Happy Valley Vineyard and Winery with Elwin. "We called it our 'nuclear power plant.'"

Elwin found a source in California offering solar panels with cosmetic defects that cost pennies on the dollar. As an electronics specialist when he served in the U.S. Navy, he was confident he could install the inverter, controller, batteries and panels. He bought the discounted panels and wired the batteries himself. Since then, there has been a revolution in battery technology thanks to Tesla, he said. But the six panels he started with are still there and still working.

The couple purchased battery-powered tools for the vineyard, plus an electric golf cart. Even the light fixture on their shed is powered by solar.

That was just the beginning.

Since then, they've added solar panels to the roof of their wine-making facility and two free-standing ground solar arrays by their residence. The ground panels are 58 and 52 feet long, mounted to concrete pads, and stand three feet (standard height) off the ground. Both arrays were installed by professional solar installers that provide service to central Pennsylvania.

Investing in solar throughout their property has paid off even more than they had hoped.

"Our output has always exceeded specs for the system," Elwin said. The panels have always outperformed expectations. "It proved to Barb and me that State College IS a place for solar," he added. "The sun shines



here more than you think. We proved to our satisfaction that solar panels were a worthy investment.”

Their house electric bill during the summer is at most \$5 – 7 a month. They also power AC or heat in two buildings, with an 80 percent savings overall.”

The cost of installation is in the thousands. Elwin and Barb have seen the pros and cons of both roof and ground installations.

“The roof-mounted solar panels are not functional when covered with snow, though Barb notes, “You can see the heat generated from the panels.”

“You can lose power just like anyone else,” Elwin said.

Being easier to reach, the ground-mounted panels are also easier to maintain, from removing bees’ nests to accumulated snow.

Elwin and Barb also take advantage of net metering, a billing mechanism that credits them for the electricity they add to the grid. “What you produce, you use,” Elwin said, “but the utility will pay you for any excess power you produce.”

This is permissible on a preserved farm because Elwin and Barb invested in solar to support their agricultural and residential energy needs, rather than contract with a commercial solar provider and be paid to supply other customers on a grid. But when the system outperforms, as it usually does, energy credits are available. “It doesn’t amount to a whole lot, but it helps,” Elwin said.

Investing in solar offers both short- and long-term benefits. In addition, the USDA Rural Energy for America Program (REAP) offers guaranteed loans and grants for renewable energy systems and energy efficiency improvements, including solar and wind power.

Link to additional information here:

ENERGY EFFICIENCY LOANS

<https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-renewable-energy-systems-energy-efficiency-improvement-guaranteed-loans>

GUIDE TO SOLAR OPTIONS ON YOUR PRESERVED FARM

Follow this link on the Centre County website:

<https://centrecountypa.gov/DocumentCenter/View/24728/Guide-to-Solar-Options-on-Your-Preserved-Farm?bidl=>



ANNUAL MONITORING VISITS

Late this summer, we will begin scheduling annual monitoring visits of our 60 preserved farms. You will be mailed an official notification.

Weather permitting, we will schedule inspections at your convenience, understanding how busy you are.

While you don’t need to be present for the inspection, and we are happy to conduct drive-through visits, we love seeing you in person and encourage you as the landowner to schedule time to meet with us.

We’re also happy to meet with your farm operator if you have one.

This is an opportunity to show us around your farm, ask any questions you may have, and advise us of any changes or upcoming plans.

We’d also like to make you aware of any new resources available to you.

Looking forward to seeing you in the fall!

Late summer appointments are also encouraged.

Our municipal partners help leverage funds, preserving as many farms as possible

Centre County Agricultural Land Preservation Coordinator Diana Griffith presented on the Municipal Partnership Program at the Centre County Association of Township Officials' Spring Convention at CPI on April 19, explaining how municipal partners help the Centre County Agricultural Land Preservation Board leverage funds to preserve prime farmland within their municipalities.

She noted that this year's generous State allocation for farmland preservation in Centre County illustrates the vital role of municipal partners in empowering the Centre County Commissioners to certify the highest funding threshold since 2017, when the Commissioners certified **\$375,834**.

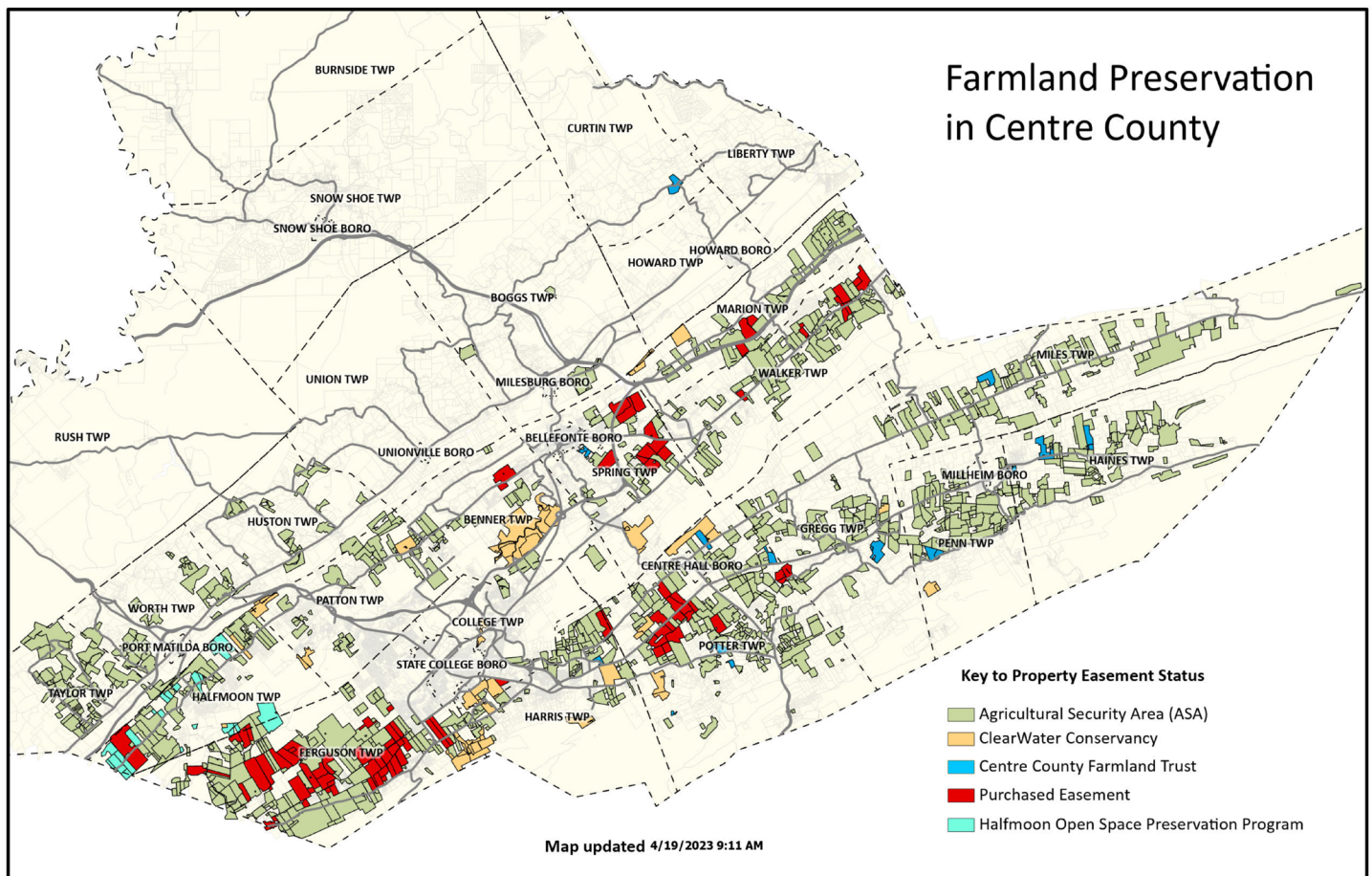
The Centre County Commissioners certified **\$352,184** (rounded) in farmland preservation funding for 2023, resulting in a State allocation of **\$727,350** (rounded) from the Bureau of Farmland Preservation, for a combined total of **\$1,079,533** in State and County funds.

As in 2017, the significantly higher amount allocated for Centre County this year was largely determined by the commitment of Halfmoon Township as well as municipal contributions from Potter Township and Ferguson Township. She recognized and thanked all three townships for participating in the Municipal Partnership Program.

Municipal contributions help reduce the amount the Commonwealth has to pay to preserve farms — freeing up funds to preserve even more farms.

Speaking with representatives of College, Harris, Worth, and other townships, she encouraged them to work with the Centre County Agricultural Land Preservation Board as farms are preserved in their municipalities.

The Centre County Planning and Community Development office's sponsorship of this event also permitted us to display our educational materials and answer individual questions. We look forward to participating in the association's fall convention.



Which path to preserving your farmland is best for you?

Two programs differ in many ways

In Pennsylvania, farm owners can permanently preserve their farmland with the help of private, charitable land trusts, or through the Commonwealth's **Purchased Agricultural Conservation Easement (PACE)** program, jointly administered by the state and county agricultural land preservation boards. Both private and public approaches have long-standing and proven records of preserving farmland.

The Centre County Planning and Community Development Office manages the **Pennsylvania Department of Agriculture's PACE program**, which pays applicants approved by the Centre County



Agricultural Land Preservation Board for their development rights so that the land can never be developed. The Board has been preserving farms since 1991.

The **Centre County Farmland Trust**, founded in 1994 as a private, non-profit organization, permanently preserves farms using the WeConservePA land trust model. ***The program is not affiliated with Centre County's PACE program.***

Both programs offer a path to farmland preservation that differs in many ways. Landowners are encouraged to explore which approach will best meet their needs and goals.

For example, land trust applicants usually donate their development rights, rather than receive financial compensation, although this can depend on the financial resources available to each land trust.

How long does the process take?

State/County Programs: Most counties have long backlogs of qualified farms seeking to be placed under easement. The highest ranked farms are protected first, and lower-ranked farms may have to wait years to be protected. Once a farm ranks high enough for funding, there is a multi-month, sometimes multi-year, process of completing the transaction.

Centre County has a current queue of 31 active applicants that have met the minimum PACE program requirements. Applicants who have yet to obtain an approved NRCS approved conservation plan are on hold. The process of moving a farm's application forward once it has been approved typically takes up to a year and a half.

Land Trusts: Generally, donated easements take a few months. The amount of time will vary depending on whether an appraisal or other preparation work are needed.

WeConservePA has produced a comprehensive guide to understanding the differences between these two approaches to farmland preservation. We have adapted their Paths to Farmland Preservation guide for Centre County farm owners interested in preservation. [Link to it from the Centre County website, where you'll find links to additional resources.](#)

Why donate development rights to woodland to preserve as part of your easement?

Our farmland appraiser will tell you that woodland, while an agricultural asset, is valued at about 60 percent of the value of the tillable acres being used for crop production.

When we evaluate a PACE applicant, we're looking first and foremost at the prime farmland. How high is the farm's soil value? What percentage of the farm is productive cropland? Understandably, because there are not enough financial resources to preserve every farm in the State, the Commonwealth of Pennsylvania gives priority to preserving the best farmland. Applicant scores typically will be lower if we include the woodland in their assessments.

Each year, the PACE applicants with the highest ranked scores — the soil values alone are weighted 40 percent — move up on our waiting list, bringing them closer to preserving their farms.

We have found that excluding their woodland from our evaluation can significantly improve their ranked score. When the evaluation excludes their woodland, their score hinges on their willingness to preserve the prime farmland and woodland all in one easement, while donating the rights to their woodland.

Thus, their agricultural conservation easement will contain a purchased easement area for their prime farmland and a donation easement area for the woodland excluded from their evaluation.

The benefits to donating woodland development rights

- **Increases the landowner's PACE ranked score, ensuring that the farm meets the minimum criteria for selection.**
- **Improves the farm's opportunity to be selected.**
- **No penalty for excluding the woodland from the evaluation. The Pennsylvania Department of Agriculture welcomes the exclusion of the woodland from the evaluation if it helps to improve the applicant's score and results in a donation of development rights to the woodland, otherwise known as a bargain sale. In the last two years, six Centre County landowners have agreed to donate the development rights to their woods. The donation of woods on a 381-acre farm amounted to more than 50 percent of their acreage.**
- **Reduces the tax burden on the landowner, who is advised to consult a tax adviser or attorney. *Note: The appraisal completed for farmland preservation purposes does not conform to the standards as used for that purpose. Therefore an independent appraisal by the landowner would need to determine the final value of the donation to meet IRS requirements.***
- **Pays the landowner(s) for the purchased easement area (prime farmland). The joint holders of the agricultural conservation easement — the Commonwealth, Centre County, and any municipality contributing through the Municipal Partnership Program — each write checks to the landowners for the prime farmland acres.**
- **One transaction, one easement, one oversight agency. When the entire farm is preserved under one easement, the process of preserving, monitoring and stewarding the land is simplified. Establishing a donation easement area also reduces the cost of preserving the entire farm, freeing up funds to preserve even more farms.**
- **All required maps of the farm, its farmland preservation survey, and the landowners' deed of easement will clearly show the donation easement area and include separate legal descriptions.**

Managing Forests— Our Biggest Natural Climate Solution

Six of the last eight farms preserved in Centre County have significant wooded areas that are being protected in one agricultural conservation easement along with the prime cropland and pasture.

Like the prime farmland, this valuable asset, especially when protected by an agricultural conservation easement, can be managed sustainably.

As a forest landowner or manager, the decisions you make affect how well your forest can handle droughts, recover from storms, and cope with insect outbreaks — events that are increasing in frequency and severity as the climate changes. This ability to “bounce back” is often called **forest resilience**.

Your decisions also affect climate change by storing more or less carbon in your woods (carbon stocks) and by changing the rate at which carbon is absorbed by your trees (carbon sequestration).

When forests are lost, they can no longer store or absorb carbon. The most effective thing you can do is to keep your forest as forest. This includes planning ahead for what will happen to your forest after you no longer own it.

How you manage your forest is also important. Forests naturally remove carbon from the air. But the amount they store and the length of time they store it largely depends on you.

The Nature Conservancy has developed a short list of “climate smart” forest management choices featured in **Healthy Forests for Our Future: A Management Guide to Increase Carbon Storage in Northeast Forests**.

Climate-Smart Forest Management Practices

Protect forests. Avoid forest loss. Grow new trees and forests.

Green developed areas. Reforest. Plant trees to increase forest stocking. Reduce stressors. Remove invasive vegetation. Protect seedlings and saplings from deer browse.

Manage forests. Increase time between harvests. Establish forest reserves. Create gaps to promote regeneration. Retain more carbon in a thinning.

LEARN MORE ABOUT MANAGING HEALTHY FORESTS

<https://www.nature.org/en-us/newsroom/healthy-forest-guides-future-foresters-landowners-vt/>



Stewarding healthy soils

Most of our preserved farm landowners practice no-till to ensure healthy soils and high yields

Soil tests reveal the value of no-till versus till

“These samples are the same soil type and have been in a corn-bean rotation for the past 20-plus years, however their treatment has been substantially different.

The soil on the left has not been tilled or had anhydrous ammonia applied for over 20 years and has had a cereal rye cover crop grown after harvest for the last 5 years.

The soil on the right has been tilled each year, as well has had anhydrous ammonia applied in the fall. This picture was taken about 2 minutes after the samples were submerged in water.

The tilled soil essentially “exploded” as soon as it entered the water. Repeated tillage has destroyed the structure of the soil, eliminating pore space and destroying the biological “glue” that helps hold soil together, and as a result the soil has collapsed.

In contrast, due to minimal soil disturbance the tillage-free soil has excellent pore space and extensive biological activity, and as a result has provided the soil with a healthy structure that can withstand the impacts of water. Within five minutes the tilled soil was completely gone, whereas the tillage-free soil remained almost entirely intact.

We decided to see how long it could last and kept adding water to it (to keep up with evaporation) over the course of several weeks. We gave up after six weeks, in which the tillage-free soil sample was still about 95 percent intact.”

Source: Jasper County, Iowa, Soil and Water Conservation District



Keeping dust down and reducing erosion

“One option to keep dust down is no-till agriculture, which uses a specific planter that drills seeds into the ground in tiny furrows, eliminating the need to plow the soil.

Another is cover cropping, which involves planting crops such as oats or hairy vetch during the winter so that fields never lay bare and exposed.

In conjunction, those two methods (cover cropping and no-till agriculture) have been shown to decrease erosion by something like 95 percent.”

Source: Scientific American magazine

LEARN MORE ABOUT DUST STORMS

<https://www.scientificamerican.com/article/more-frequent-dust-storms-could-be-in-our-future/>

AGROFORESTRY

Agroforestry is a land use management system that combines trees and shrubs with crops and/or livestock in a mutually beneficial way. It is a sustainable approach to agriculture that can improve soil health, increase biodiversity, and provide multiple sources of income for farmers.

- CLEAN AIR**
Trees absorb carbon dioxide from the air
- ECONOMICAL BENEFITS**
Production of timber, fruits, nuts, and other non-timber forest products.
- SOIL FERTILITY**
The leaves of the trees fall to the ground and decompose, making the soil moist and fertile.
- FOOD & MEDICINE**
Trees provide food, fruits, and medicine.
- ANIMAL FEEDING**
Trees provide fodder for animals.
- SHADE**
Provide shades for other plants, livestock, and humans
- REDUCE SOIL EROSION**
Trees stabilize the soil and reduce soil erosion.
- FIXATION OF NITROGEN**
The availability of soil nitrogen (N) can be increased by their ability to support microbial N2 fixation.

INTELL