

Marshall County, The Garden Gate

Published by: Marshall County Extension Staff,
Ag & Natural Resources Educator

Krystyna Hyczyk, Stephanie Hunt
ANR Support Staff

Phone: 574-935-8545 Email: marshces@purdue.edu



DROP BOX AVAILABLE!!!
At the South entrance of the county building is a drop-box, labeled **payment box**. Label whatever you are putting in it for the Extension office and you can drop things off **AFTER HOURS!**



Purdue Extension Marshall County Ag & Natural Resources
www.facebook.com/marshallanr



Marshall County Master Gardeners
www.facebook.com/marshallcountymastergardeners



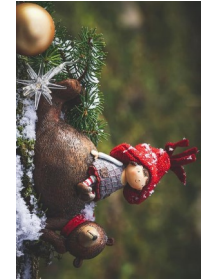
Find our Website: <https://extension.purdue.edu/Marshall>



Extension - Marshall County

PURDUE EXTENSION
MASTER GARDENER PROGRAM

Purdue University is an equal access / equal opportunity / affirmative action institution



Extension - Marshall County

PURDUE UNIVERSITY COOPERATIVE EXTENSION SERVICE

Marshall County

112 W. Jefferson St. Rm. 304

Plymouth, IN 46563

Cooperating with U.S. Department of Agriculture

Address Service Requested

Garden Gate

NEWSLETTER

Marshall County Master Gardener November Meeting Recap

Our Dinner started with a blessing by Roy Danforth for the year we had and food before us. Thanksgiving Harvest Meal by all, as we shared what each of us had brought. Amy and Roy had come early and decorated the room with a fall fare. All was great and we shared the take home leftovers.

Brianna's education topic-Timely Fall Soil Testing is from now to a few weeks more. Taking five samples from an X pattern, Mixing and drying about a quart of soil per test. Then bring it to the extension office and they will then process and send it off to the lab. The results from the normal test will save you money and give you the same results you need to make soil corrections or enrichments.

Brianna also handed out this year's volunteer awards to Caitlyn Spencer for becoming a Certified Master Gardener, and mentioned that Beth Cashen has achieved Bronze Level.

Photo Contest-still accepting photos as some were displayed, Elizabeth is off to an early lead with her chicken feeder garden photo. Let's get photos in to the extension office or print them off and bring them to the December Breakfast meeting as we will have 1st, 2nd and 3rd prizes.

Carrol brought up an idea for a Garden Apron from "Baileys" for \$1.99 that she had discovered. A sample was shown and went over well. With some sewing work from Deborah and Donna to make pockets and some applications of our name and fun items by heat transfer it may fill our elusive T-shirt quest. We had a motion from Amy and a second from Shirley to buy 50 of them, it was voted and approved. Carrol volunteered to return to "Baileys" to get them.



December

2—Holiday Breakfast

22—25 Office Closed

January

1st, and the 15th Office Closed

8th MG Monthly Meeting

February

12th MG Monthly Meeting

Submit your Volunteer and Educational Hours!

In order to stay an active member you will need 12 hours of volunteer time, 6 hours of educational hours, and you will need to fill out the Annual Agreement each year!

<https://www.purdue.edu/mg-volunteer/login.php>

If you would like to turn in or call in your hours in to our office to be recorded you send them to:

**Marshall Co. Extension
Office
574-935-8545**



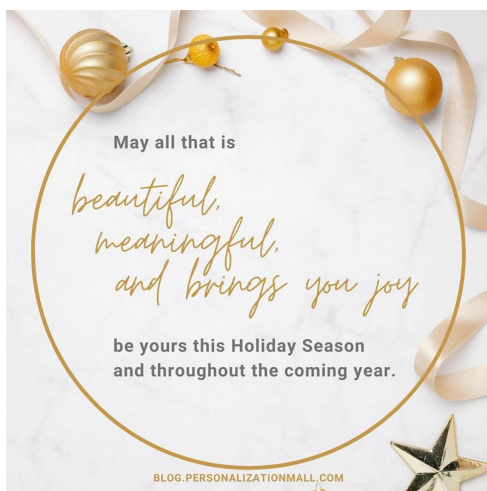


 www.facebook.com/marshallcountymastergardeners

 www.facebook.com/marshallanr

 <https://www.smore.com/u/purdueboilmaker>

 Extension <https://extension.purdue.edu/Marshall>



2023 Master Gardener Officers

President: Harold Diedrich 574-936-4546
 Vice President: Barbara White, 574-936-6725
 Secretary:
 Treasurer: Carol Nelson, 574-315-5577

Board Members

Amy Heinke
 Ken Waite
 Deborah Howard
 Lynn Fitzpatrick

Inside this issue...

USDA Unveils updated Plant Hardiness Zone.....	4-5
USDA updated map.....	6
MG Basic Training Opportunity.....	7
Cranberry Harvest Tour.....	8-9
18th Annual Garden Show and Spring Expo.....	10-11
2023 Holiday Photo Contest.....	12
2024 MG Association Application.....	13

Unity Garden Follow-up, Roy and I met with Janis Holiday and Tina at the Life Enrichment Center, 1305 W. Harrison St., Plymouth. They welcomed the help of Master Gardeners as their lead gardener is leaving after this year. We talked about having Roy as our lead contact person at the center to see if we could increase the size of the garden and the community participation. Janis suggested that we have 3-4 classes, like lunch and learns, put on by Master Gardeners at the center. Seeds are available from the South Bend Unity Garden and the Parks Board may be able to help with some of the materials and heavy lifting. More to come as this idea grows the group took a vote and our group involvement was supported.

Cranberry Harvest Tour sharing was done well with all that attended fielding questions from the floor, we all learned a lot, great trip and more to come in an article.

Nominations Committee-Barb White is the chair, positions are open, we vote in December. Breakfast Meeting Saturday December 2nd at 9:00AM at Fritas in Culver. HPD/11-20-23

Master Gardeners Harvest Dinner attendees.

Ken Waite, Deborah Howard, Barbara White, Amy and Roy Heinke, Liz Bottorff, Janet Manuwal, Paul W. Daves. Carol Nelson, Harold Diedrich, Donna Napier, Caitlin Spencer, Tamara Libersky, Roy Danforth, Lynn Fitzpatrick, Shirly Dematteo

USDA Updated Plant Hardiness Zones

WASHINGTON, DC, Nov. 15, 2023—The U.S. Department of Agriculture (USDA) today released a new version of its Plant Hardiness Zone Map (PHZM), updating this valuable tool for gardeners and researchers for the first time since 2012. USDA's Plant Hardiness Zone Map is the standard by which gardeners and growers can determine which plants are most likely to thrive at a location. The new map—jointly developed by USDA's Agricultural Research Service (ARS) and Oregon State University's (OSU) PRISM Climate Group—is more accurate and contains greater detail than prior versions.

It is available online at <https://planthardiness.ars.usda.gov/>. In addition to the map updates, the Plant Hardiness Zone Map website was expanded in 2023 to include a "Tips for Growers" section, which provides information about USDA ARS research programs of interest to gardeners and others who grow and breed plants.

The 2023 map is based on 30-year averages of the lowest annual winter temperatures at specific locations, is divided into 10-degree Fahrenheit zones and further divided into 5-degree Fahrenheit half-zones. Like the 2012 map, the 2023 web version offers a Geographic Information System (GIS)-based interactive format and is specifically designed to be user-friendly. Notably, the 2023 map delivers to users several new, significant features and advances. The 2023 map incorporates data from 13,412 weather stations compared to the 7,983 that were used for the 2012 map.

Furthermore, the new map's rendering for Alaska is now at a much more detailed resolution (down from a 6 ¼ -square-mile area of detail to a ¼ square mile). "These updates reflect our ongoing commitment to ensuring the Plant Hardiness Zone Map remains a premier source of information that gardeners, growers and researchers alike can use, whether they're located in the continental United States, Alaska, Hawaii or Puerto Rico," said ARS Administrator Dr. Simon Liu.



Approximately 80 million American gardeners and growers represent the most frequent users of the USDA Plant Hardiness Zone Map. However, they're not the only ones with a need for this hardiness information. For example, the USDA Risk Management Agency refers to the map's plant hardiness zone designations to set certain crop insurance standards. Additionally, scientists incorporate the plant hardiness zones as a data layer in many research models, such as those modeling the spread of exotic weeds and insects.

2024 MEMBERSHIP APPLICATION MARSHALL COUNTY MASTER GARDENER ASSOCIATION

FISCAL YEAR JANUARY 1 - DECEMBER 31.

Name(s): _____

Address: _____ City: _____

State: _____ Zip: _____

E-Mail Address: _____

Phone number: Home (____) _____

Work (____) _____ Cell (____) _____

Phone numbers will be published only to club members. If you wish your number to NOT be published, check here

I am a: New member Renewal Associate Member

Transfer from _____ County

This is an Individual membership: (\$10)

Family membership: (\$15)

Please mail this form along with check payable to *Marshall County Master Gardeners* by **January 31** to: Carol Nelson, 915 Sunrise Drive Bremen, IN 46506 or bring to next meeting.

Cash: _____ Check #: _____ Amount \$ _____

Please share activities for association i.e. trips, programs, etc.

Community Service Project _____

Marshall County Master Gardener

FRIENDLY PHOTO CONTEST

Master Gardeners and associate members are invited to bring one or more 8.5"x11" photo(s) of anything that is "Master Gardener" related.

Bring your photo to the December Breakfast

A minor prize will be given to the winner



PRIVATE PAGE just for our Master Gardeners
www.facebook.com/groups/217503359656977

PUBLIC PAGE for our community
www.facebook.com/marshallcountymastergardeners

Plant hardiness zone designations represent what's known as the "average annual extreme minimum temperature" at a given location during a particular time period (30 years, in this instance). Put another way, the designations do not reflect the coldest it has ever been or ever will be at a specific location, but simply the average lowest winter temperature for the location over a specified time. Low temperature during the winter is a crucial factor in the survival of plants at specific locations.

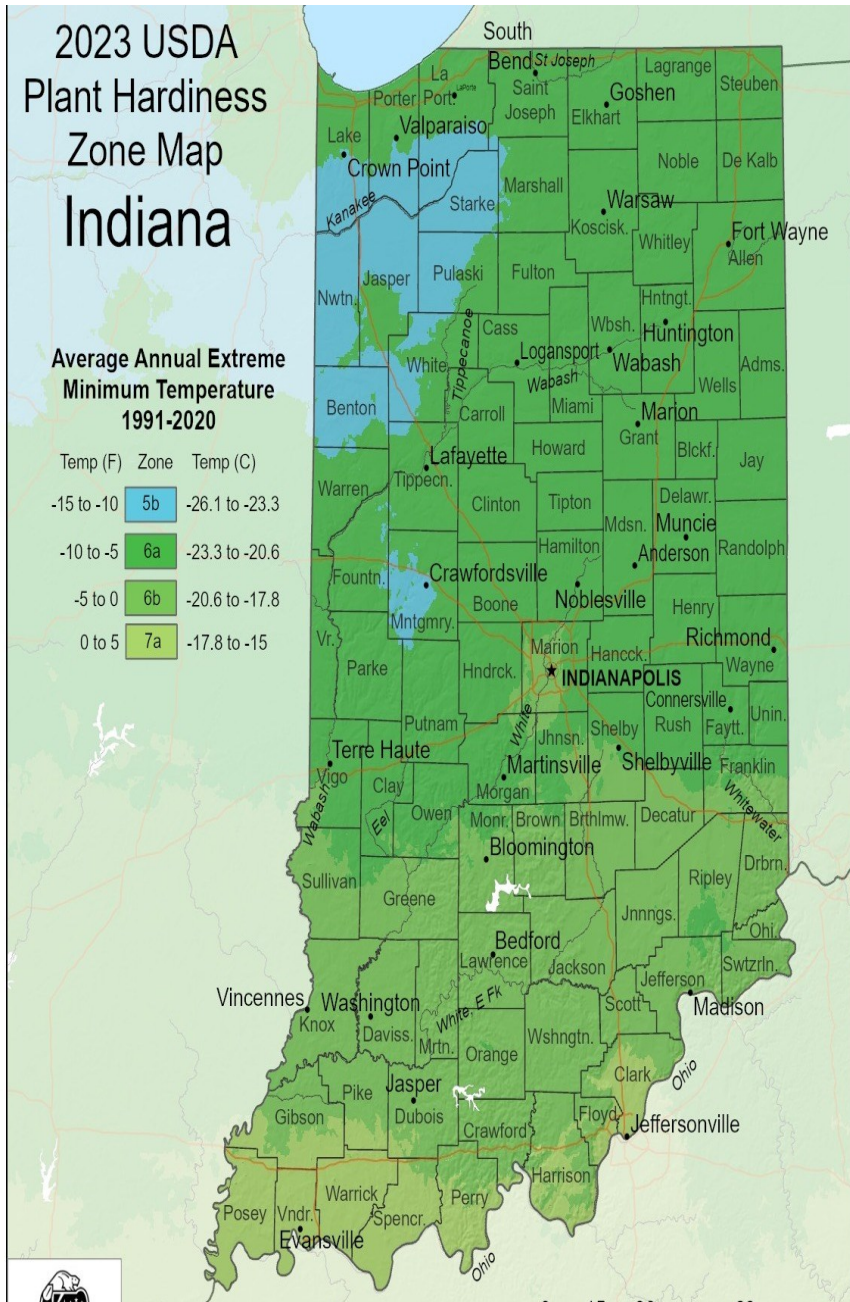
As with the 2012 map, the new version has 13 zones across the United States and its territories. Each zone is broken into half zones, designated as "A" and "B." For example, zone 7 is divided into 7a and 7b half zones. When compared to the 2012 map, the 2023 version reveals that about half of the country shifted to the next warmer half zone, and the other half of the country remained in the same half zone. That shift to the next warmer half zone means those areas warmed somewhere in the range of 0-5 degrees Fahrenheit; however, some locations experienced warming in the range of 0-5 degrees Fahrenheit without moving to another half zone.

These national differences in zonal boundaries are mostly a result of incorporating temperature data from a more recent time period. The 2023 map includes data measured at weather stations from 1991 to 2020. Notably, the 2023 map for Alaska is "warmer" than the 2012 version. That's mainly because the new map uses more data representing the state's mountain regions where, during winter, warm air overlies cold air that settles into low-elevation valleys, creating warmer temperatures.

The annual extreme minimum temperature represents the coldest night of the year, which can be highly variable from year to year, depending on local weather patterns. Some changes in zonal boundaries are also the result of using increasingly sophisticated mapping methods and the inclusion of data from more weather stations.

Temperature updates to plant hardiness zones are not necessarily reflective of global climate change because of the highly variable nature of the extreme minimum temperature of the year, as well as the use of increasingly sophisticated mapping methods and the inclusion of data from more weather stations. Consequently, map developers involved in the project cautioned against attributing temperature updates made to some zones as reliable and accurate indicators of global climate change (which is usually based on trends in overall average temperatures recorded over long time periods).

Although a paper version of the 2023 map will not be available for purchase from the government, anyone may download the new map free of charge and print copies as needed.



To read the full article visit:

<https://tinyurl.com/2024PlantHardinessZones>

PURDUE
UNIVERSITY

Extension

PURDUE EXTENSION
MASTER GARDENER PROGRAM

Michiana Master Gardeners Association

5th ANNUAL GARDEN EXPO

Think Spring



Saturday, February 24, 2024

8:00 a.m. — 4:00 p.m. EST



Faith United Methodist Church
22045 County Road 18 (corner of CR 17)
Goshen, IN 46528

Tickets \$10 at the door or our website
michianamastergardeners.com

*Michiana Master Gardeners' Association holds this event in cooperation with Purdue Extension.
Please see <http://www.michianamastergardeners.com> for more information.*

*If you are in need of accommodations to attend this event, please email nborkhol@purdue.edu
or call Purdue Extension - Elkhart County at 574-533-0554 by February 9, 2024*

Purdue University is an affirmative action, equal access/equal opportunity institution.



**PURDUE EXTENSION ST.
JOSEPH COUNTY**

***MASTER GARDENER
BASIC TRAINING
CLASS***

Topics include: Plant science,
soil fertility, vegetables, shrubs,
flowers, pesticide safety,
diseases, weeds, insects,
invasive plants



**CLASSES HELD
WEDNESDAYS, 1-4PM
FEB 14 - MAY 22, 2024
ST. JOSEPH COUNTY
FAIRGROUNDS**

Application Deadline: Feb 7, 2024
For more information, contact
Emily Evers, 574-235-9605,
everse@purdue.edu



PURDUE EXTENSION
MASTER GARDENER PROGRAM

**EDUCATIONAL
HOUR
OPPORTUNITIES**

New Master Gardener Educational Videos
have been posted! You can view these
videos at:

www.purdue.edu/hla/sites/master-gardener/continuededhours/


 A simple line-art icon of a lit lightbulb, representing an idea or educational content.

Cranberry Harvest Tour

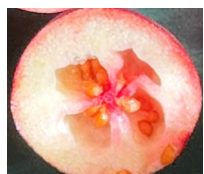
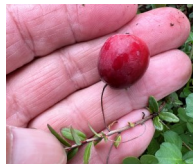
Harold Diedrich

The Marshall County Master Gardeners traveled to the DeGrandchamp's Farm in South Haven, Michigan to meet with Mike DeGrandchamp one of the owners/managers and Nancy Mensinger a grower/propagator to learn about growing and harvesting cranberries. Master Gardeners and Associate members that attended were: Paul Davis, Roy Danforth, Ken Waite, Diana Smith, Ebony and Michah Nava, Pat Kaiser, Joyce McFadden, Pat Popa, Caitlin Spencer, Marion Ellis, Dean Schmidlapp, Liz Bottorff, Janet Manuwal, Amy and Roy Heinke, and Harold and Sheryl Diedrich.



The Farm has 42 acres of cranberry bogs in production that took 5 years to build in the early 2000's. They are now replacing the plants to newer hybridized varieties, Stevens and Pilgrim, that produce twice the crop production and are using plant starts they produce on site themselves.

Nancy educated us on the, Crane Berry found by the pilgrims in early days due to the look of the blossom now pronounced Cranberry and how it was one of three fruit plants native to our area as all other fruits were brought in to our area from Europe and around the world. She showed us cut open berries to show the four air pockets that enable them to float. We then were offered to taste the berries they were sour at first but Mike noted once you get past the first few you can eat them all day and the bitter taste goes away. The berries take about 3 years to grow to maturity and bloom in mid-June to July, then set fruit and grow rapidly all summer. They are ready to harvest in October and use



much of the same equipment as Blueberries in July to process so they get dual use out of the machines and keep the farm help on staff longer. Most of the 600,000 pounds crop goes to Ocean Spray juice in Wisconsin with some dry harvested bigger berries going to dehydrators to make Cranberry Raisins in Traverse City, Michigan. They bring in Bumble and Honey Bees to help with pollination each spring. The plants are very low growing and develop into a mat of plants with heavy fertilization the first few years then throttling back the nitrogen when they start producing so you get more berries not plant growth.



Mike added that the bogs are laser leveled to within a thousandth of an inch over the 150 by 1320 feet beds, about 4 acres of area each that will produce 60,000 pounds of berries and will take about a day and a million gallons of water to flood to a depth of one foot. They add

an inch or two of sand to cover the new hair roots each year while they are first growing and need to prune out invasive plants each year so they don't take over. In the early winter they will reflood the bogs and let ice develop to 6-8 inches then drain the water from underneath the ice to add a protective layer on top of the plants. They need to remove the water so the plants do not drown from lack of oxygen. In Early Spring they may need to frost protect the plants once or twice in Michigan and 20-30 days in Wisconsin. They also need to spray fungicides at bloom time to prevent fungus from entering the berries and causing soft rot tissue that causes poppers, a berry that is rotten inside



and sprays liquid if pressed between your fingers at harvest. They use helicopters to fertilize or spray chemicals so they don't damage the plants. They need to water once to twice a day all summer, but have to drain off any standing water as the roots are in sandy soil and can dry out or drown quickly.

Cranberries float and have a string like attachment to the plant and at harvest you need to break the string so they float up to the flooded water surface. The machine they use is a tracked Harrow and it is driven up and down the bogs on top of the mat of plants and releases the berries. They need to drive in the same direction each year as the plants become trained and if you go backwards you will damage them. It only takes about one-half hour per bed to release the berries. The color of the berries can be red to white, but they are all ripe and taste the same as some in the sun turn red and ones deeper in the growth stay white, when you cook them, they all turn deep red. At harvest time they use floating booms to sweep over the water and bring in the berries to a pump that pushes them into a sorting device and on to a large trailer and off to the processing plant. To capture all the cranberries they use rakes and leaf blowers to get all the wild berries over to the pump area. Then off to the plant where process 14,000 pounds of berries per hour, then off to the freezer where it takes three days to cool them down before shipping.



We were able to buy fresh berries and other related items from their farm store to enjoy at home with our family and friends, I would bet most of us will make a return trip as we all learned a lot about a topic not normally thought to be in our area.