

March 7, 2018

Good evening!

Here is our first 2018 phenology report – we intend to report on phenology events in Coshocton County each week this season until the calendar of events runs out in late summer. We'll start this week with a brief explanation of what phenology is and how it works – our local findings are included too.

What is phenology? Simply put, it is the study of cyclic events of nature and their relationship to weather. Many plants and insects respond to weather changes, especially temperature, in the same general order every year. Studying this phenomenon can help us watch for and deal with potential problems on our own property. Growing Degree Day units are a measurement of plant and insect development based on temperature. Temps between 50 and 86 degrees F. are the range that affects the measurement. The formulas for determining GDDs for a day can be found online at <http://www.oardc.ohio-state.edu/gdd/glossary.asp>

Coshocton County Master Gardener Volunteers maintain and collect data from a garden at Lake Park, located behind the office between the walkway and the ballfield. We monitor plants for first bloom and end-of-bloom and collect data on what kind of pollinators visit each plant. Our findings are then reported to the OSU Phenology Network, which includes about 30 gardens all over the state of Ohio. To follow along on your own, you can find the OSU Phenology Calendar at <http://www.oardc.ohio-state.edu/gdd/CalendarView.asp>. You will find a place to plug in your zip code and the date in order to see what potential events are in your area; pictures of the plants and insects listed; and a list of the events in the order they generally appear.

Our “spring” in the Master Gardener Volunteer Phenology Garden is underway now with our hellebore (common name Lenten Rose) exhibiting first bloom yesterday on March 6. One of our Coshocton County MGVs and member of the phenology committee, Pam Anderson, has been checking the plant for the last week or so to document its first bloom; she also took the picture below. The flowers are gorgeous and will attract some of the earliest pollinators as they emerge this spring. Last year this plant bloomed on Feb. 24 which was a bit early; this year's bloom time is more in line with the average.

Here is the data by town/zip code and the number of growing degree day units (GDD units) in our county:

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|--------------------|----|
| Adams Mills/43821 | 59 |
| Conesville/43811 | 57 |
| Coshocton/43812 | 56 |
| Fresno/43824 | 55 |
| Walhonding/43843 | 55 |
| Warsaw/43844 | 55 |
| W. Lafayette/43845 | 56 |

We have a range of 55 to 59 GDD units across the county, disregarding micro-climates, so most areas in our county are at about the same point as far as plants starting to bloom. We are, after all, still experiencing cold temps at night and we're not quite out of winter yet – and the temperature today was nowhere near 50 degrees as evidenced by the squalls of snow we had! We are at the beginning of the phenology season and calendar so those 4 GDDs do not make a lot of difference, but expect those ranges to expand as the season

goes on. Some folks are reporting a few blooms in certain micro-climates: for example, daffodils and other bulbs that are planted close to foundations or paved areas will be ahead of those that are in more open spaces because those spots are usually a bit warmer.

Some phenological events that you may be seeing now or will see soon are:

- Silver maple, first bloom at 34 GDD units
- Corneliancherry dogwood, first bloom at 40
- Silver maple, full bloom at 42
- Red maple, first bloom at 44
- Speckled alder, first bloom at 51
- Northern Lights forsythia, first bloom at 58

Events that should be occurring next are:

- Japanese pieris, first bloom at 60
- Red maple, full bloom at 75

Crabgrass is not a plant we monitor, but we know that it starts to germinate about the time that forsythia blooms – therefore, if you want to apply pre-emergent crabgrass preventative, put it on the lawn while the forsythia is in bloom.

A quick look at our local forecast indicates that daytime temperatures probably won't be above 50 degrees for several days. Therefore, we won't expect many phenological changes for a little while! Take heart – it won't be long until spring is popping out around us.



Lenten Rose, (*Helleborus x hybrida*), in bloom at the MGV Phenology Garden at Lake Park on March 6, 2018.

