

February 18, 2019

Good afternoon!

Although it certainly isn't research-based information, we all heard the news that Punxsutawney Phil and Buckeye Chuck did not see their shadows on February 2, signifying that spring is just six weeks away... it will be interesting to watch and see what actually happens! What we can tell you is that there was witch-hazel in bloom at Lake Park last week, bulbs are starting to show above ground in many places, and the hellebore in the phenology garden is starting to send up new leaves and buds – all are harbingers of the end of winter.

This is a preliminary phenology report – even though we are not seeing showy blooms or pollinator activity. We soon will be posting weekly reports on phenological events in Coshocton County and will continue until the calendar of events runs out in late summer. 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 events or 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 that measurement. The formulas for determining GDDs 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 bloom 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.

Here is the data by town/zip code and the number of growing degree day units (GDD units) in our county as of February 18, 2019:

Adams Mills/43821	22
Conesville/43811	21
Coshocton/43812	20
Fresno/43824	18
Walhonding/43843	18
Warsaw/43844	19
W. Lafayette/43845	20

We have a range of 18 to 22 GDD units across the county, disregarding micro-climates, so most areas of our county are at about the same point as far as waiting for plants to start to bloom. Those 4 GDDs do not make much difference at this point, but the ranges will expand as the season goes on. We are, after all, not yet out of winter as demonstrated by the snow flurries and freezing rain we had the last couple of days! Looking at the weather forecast, we will not see a huge jump in GDDs in our area in the next several days.

The first phenological events that you will see 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

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



Lenten Rose, (*Helleborus x hybrida*), is starting to send up buds and leaves.



Witch-hazel (*Hamamelis virginiana*) was in bloom last week at Lake Park.



Many bulbs are starting to emerge – not to worry, they are very tolerant of chilly weather!



Hairy bittercress (*Cardamine hirsuta*) is starting to develop now; it makes an appearance in late winter and early spring. It will bloom with small white flowers, then develop stems of seeds that will fly several feet when disturbed.

