

Phenology - Commonly Asked Questions/Answers

1. How often should I make my observations?

Monitors should make observations as often as is convenient. Ideally monitors would make observations once a week or even as frequently as every two or three days, particularly during the spring and fall when plant and animal phenology is rapidly changing.

2. What if I missed observing a phenophase?

If you miss the occurrence of a phenophase entirely, and you see evidence that the phenophase did occur, then make a note of this in the comments section of your observations form.

Leaves - The 'Leaves' phenophase is an observation of the entire canopy, not individual leaves

3. Can I still report 'Breaking leaf/needle buds' (trees and shrubs), 'Emerging needles' (pines), or 'Initial growth' (forbs and grasses) once I see 'Leaves/Needles' or 'Young leaves/needles' on the plant?

Yes: as long as some buds or shoots on the plant are still breaking or initiating growth and have not yet produced an unfolded leaf or needle, you are seeing 'Breaking leaf/needle buds', 'Emerging needles', or 'Initial growth'.

4. How do I judge what percentage of the canopy is full with leaves or needles?

To be able to do this requires that you have an idea of what a full canopy looks like for any given deciduous or semi-deciduous species. Once you know what the canopy looks like at 100% fullness, you should estimate the changing percentage of fullness as the leaves grow larger at the beginning of the growing season, and as leaves fall off and the canopy thins at the end of the growing season. The best way to report on this phenophase is to observe the specimen in mid-summer (100% full canopy) and compare future observations to its 100% canopy fullness. This phenophase will vary in appearance from species to species and individual to individual.

5. How do I answer the Increasing Leaf Size question: What percentage of full size are most leaves?

Think of this question as "What percentage to full size are the majority of the leaves?"

Once the majority of the leaves are 100% full leaf-size, you will report 'No' for 'Increasing Leaf Size'. You do not have to report 'Yes' for increasing leaf size until every last leaf is full-size. USA NPN had intended the "majority" to be a clear majority (like 80% of leaves) but taking the instructions literally, it can be interpreted as 'over 50% of the leaves'. Trust your instinct and most importantly be consistent.

6. How do I judge what percentage of the canopy is full with colored leaves or needles?

Consider only the colored portions of leaves and needles and do not include the green portions. For instance, if the plant canopy is 100% full with leaves but about half of them are green and half are

colored, you would report that 100% of the canopy is full with leaves, and 50% of the canopy is full with colored leaves. Some parts of the canopy might be changing color while others are not.

When determining (yes/no) if you have “Colored Leaves” you would check the canopy and the ground for recently colored leaves. For the actual count you should report the percentage of colored leaves that are still on the tree.

When a plant's leaves change color due to environmental stresses (drought, pollution, etc.) this can be recorded as 'colored leaves' just as if it was happening in the fall. Damage from insects, wind, lightning, ice storms, etc. would not be recorded.

7. How do I answer the Falling Leaves question?

For the “Falling Leaves” section you should check the ground for leaves that fell this season. You will probably be able to say yes or no. You do not need to give a value for this section. There are no intensity options for this phenophase because the percentage of leaves that have fallen from your deciduous plant can be calculated from the percentage of leaves or needles that remain on the plant. This is already captured in the value you reported for "What percentage of the canopy is full with leaves/needles?" for the 'Leaves/needles' phenophase.

Flowers and Fruits

8. Why do some species have a phenophase for 'Pollen release' and others do not?

While you should be able to see pollen release from almost all plant species when the mature male or bisexual flowers are shaken or blown, at this time we have only included this phenophase for species that are considered moderate or severe allergens. ‘Pollen release’ should be reported only if you can actually see pollen dust upon blowing or shaking a flower or pollen cone.

9. How do I judge what percentage of flowers are open on a species with inflorescences?

For species where tiny individual flowers are clustered in an inflorescences (flower heads, spikes or catkins), it may seem difficult to estimate the percentage of these individual flowers that are open over the entire plant. If this is the case, you can choose a single inflorescence, estimate the percentage of open flowers on it, and use that value to represent the entire plant.

Notes

You do not need to have a number or percentage every time you choose YES

If there is not a numeric option listed on the Phenophase Definition page then you would leave that space blank. It is also okay to report 'Yes' for a phenophase, but not report a value (quantity or percentage) when it is difficult or impossible to get a good count or estimate.

Remember: once a phenophase has ended continue to look for signs of it and record whether or not it occurs again. Sometimes phenophases occur two or more times in a season.