

What is Phenology?

The term Phenology is derived from the Greek word “phaino”, meaning to show or appear. Phenology is the study of the

reoccurring life cycle stages of plants and animals; such as bud break, leafing, bird migrations and insect emergence.

Phenology also includes the study of how the timing of these events

relate to biotic and abiotic forces.

Phenology drives the application and timing of many management related activities.

Invasive species abatement, fisheries restoration, migratory bird arrival and departure, habitat management, timing of hunting and fishing seasons, and agricultural plantings and harvests are all dependent on phenology.



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Join Us!

Register with the USA-NPN Nature's Notebook program, partner with the ATC and become an observer.

Some questions we'd like to answer include... How are bloom dates affected by temperature? Do some species bloom twice in a given year? How are different species impacted by changing moisture conditions?

We need your help! Collecting data on selected species will help us build a long-term data set to answer these questions and many others!

Your data, and data from scientists will help to develop tools to support a wide range of decisions made routinely by citizens, managers, scientists, and others, including decisions related to plant, animals, water, and conservation.

Data is available for exploration and visualization at www.usanpn.org/results/visualizations.

To download visit www.usanpn.org/results/data.



For more information on the ATC Phenology Program please contact Marian Orlousky, ATC Northern Resource Management Coordinator

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Phenology Program



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Why Monitor Phenology?

It is important that we understand how plants and animals are responding to their environments. Since species respond differently to changing conditions and climate, food webs may become uncoupled and competitive relationships may be altered under warmer seasonal conditions.



Studying these responses and timing may also give insight as to how our climate and ecological systems are changing both in the long term and the short term. Plant phenology has been closely tracking seasonal changes in climatological variables. Spring phenophases in the northeastern U.S. are clearly showing earlier activity.

Taking the pulse of our planet

ATC/NPS Goals

- Establish sites along the A.T. where citizen scientists can go to monitor specific plant species.
- Engage club members, volunteers, members of the community, educators and students.
- Promote a broad understanding of plant phenology and the relationship among phenological patterns and environmental change.
- Use in-situ observations to detect patterns of phenology not observable using other platforms.
- Use data to empower scientists, resource managers, and the public in their decision making and adaptation to variable climates and systems along the A.T.



The USA National Phenology Network (USA-NPN) is a nationwide partnership among federal agencies, schools, universities and volunteers which began in 2007. The program monitors the influence of climate on the phenology of plants, animals and landscapes while working closely with researchers and engaging the public in monitoring.



On the USA-NPN website at www.usanpn.org you can access the Nature's Notebook Program and...

- Register to be an observer
- Select ATC as your partner organization
- Watch "how to observe" training videos
- Print data forms
- Enter your observations online