

Phenology Flipbook

Do you look forward to seeing certain flowers every year? Do they always appear at the same time? Phenologists study the timing of events in nature, including when flowers bloom. Phenologists also study when leaves appear on trees, when snow melts in the spring, when migrating birds arrive in the south, and so much more.

Recently, global climate change has caused many spring events to happen earlier and fall events to happen later in the year. These shifts significantly impact plant and animal populations. For example, birds arriving in the spring may find that peak insect populations have already passed and food is scarce. How plant and animal populations adapt to changes in phenology can help scientists predict how they will respond to climate change more broadly.

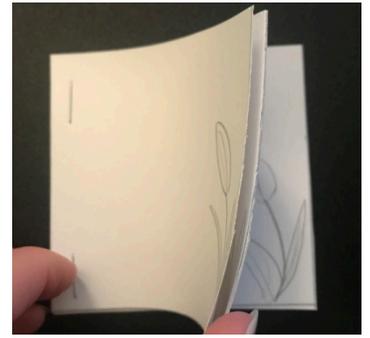
You can be a phenologist in your own outdoor space! Record your daily observations in a flipbook to make your science come alive in animation.

Materials needed:

- Scissors
- Paper
- Stapler
- Drawing utensils
- A living flower bud

Step-by-step instructions:

1. Cut 10 pieces of 3x3 inch cardstock.
2. Staple the paper stack together along one side.
3. Find a flower bud in your backyard or local park.
4. Draw the flower bud on the first piece of paper near the unstapled edge.
5. Return the next day and draw the flower again on the second page.
6. Return every day for 8 more days to observe and draw the flower.
7. After 10 days, flip through your paper stack to show a blooming flower bud in motion!



Additional explorations:

- Make a phenology flipbook for other plants in your area, like grass, trees, cattails, and more!

Discussion questions:

- Did your flower bud bloom during your 10-day observation period?
Why might some flowers take longer to bloom?
- How could other art forms, such as photography, help phenologists?
- Do you think the same plant would flower at the same time next year? Why or why not?

Additional resources:

- Want to help climate researchers at HJ Andrews Experimental Forest? Join Oregon Season Tracker and observe plant phenology and precipitation from your home or neighborhood natural area:
<https://extension.oregonstate.edu/ost>

