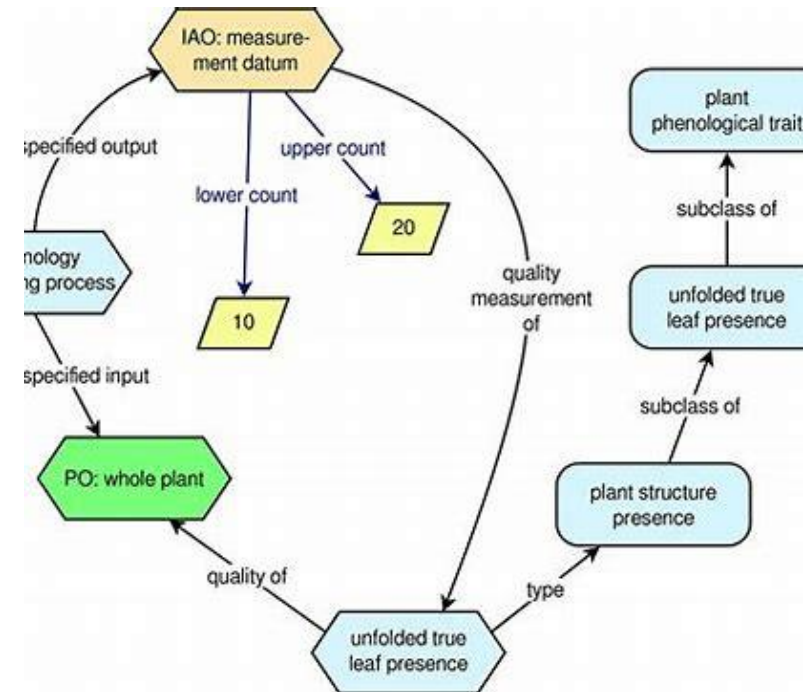


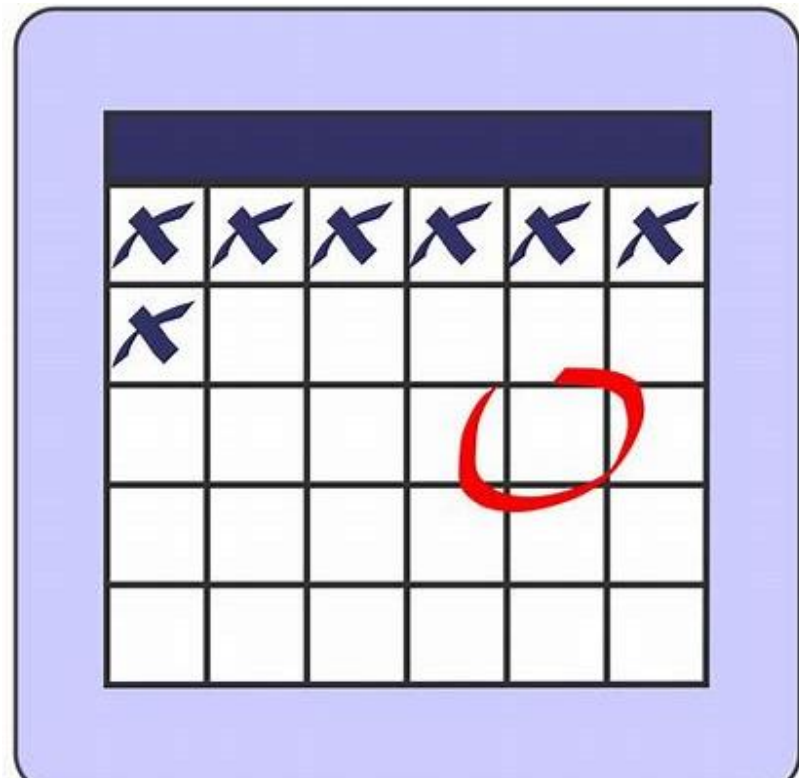
Nature's Calendar

Seasons and cycles



What is phenology?

Phenology is the study of recurring plant and animal life cycle events=phenophases, such as leafing and flowering, maturation of agricultural plants, emergence of insects, and migration of birds. It is nature's calendar.



What phenology observes

Phenology observes the relationship between:

- 1) separate phenological events,
- 2) events and the seasons,
- 3) events and local weather conditions,
- 4) events and climatic changes.



Why is understanding phenology important?

Changes in phenological events such as flowering are sensitive biological responses to climate change. Today many spring events are occurring earlier—and fall events later—than they did in the past. Not all species are changing at the same rate.

The timing of phenological events is important for:

- health (allergens and infectious diseases)
- recreation (wildflower displays and fall colors)
- agriculture (planting and harvest times, pest control)
- management of natural resources (water and timber)
- understanding hazards (monitoring and prediction of drought and fire risk)
- conservation (abundance and diversity of plants and animals)

Plants and animals are doing different things in different times of the year.

Thistle

March-May--stems, stalks and flower heads

June-August--flowers and seeds

September-February--seeds disperse, plants become dormant



Goldfinch

March-May--migration north, mating, choosing a place to nest

June-August--building nest, eggs, hatching, feeding nestlings, fledglings

September-February--migration south



Phenology melody *Coming Around the Mountain*

We'll be following the seasons as they
go,

Movement patterns and for blooming
they will show.

Living creatures, vegetation,

Both creation and stagnation,

Are responses to the seasons fast and
slow.



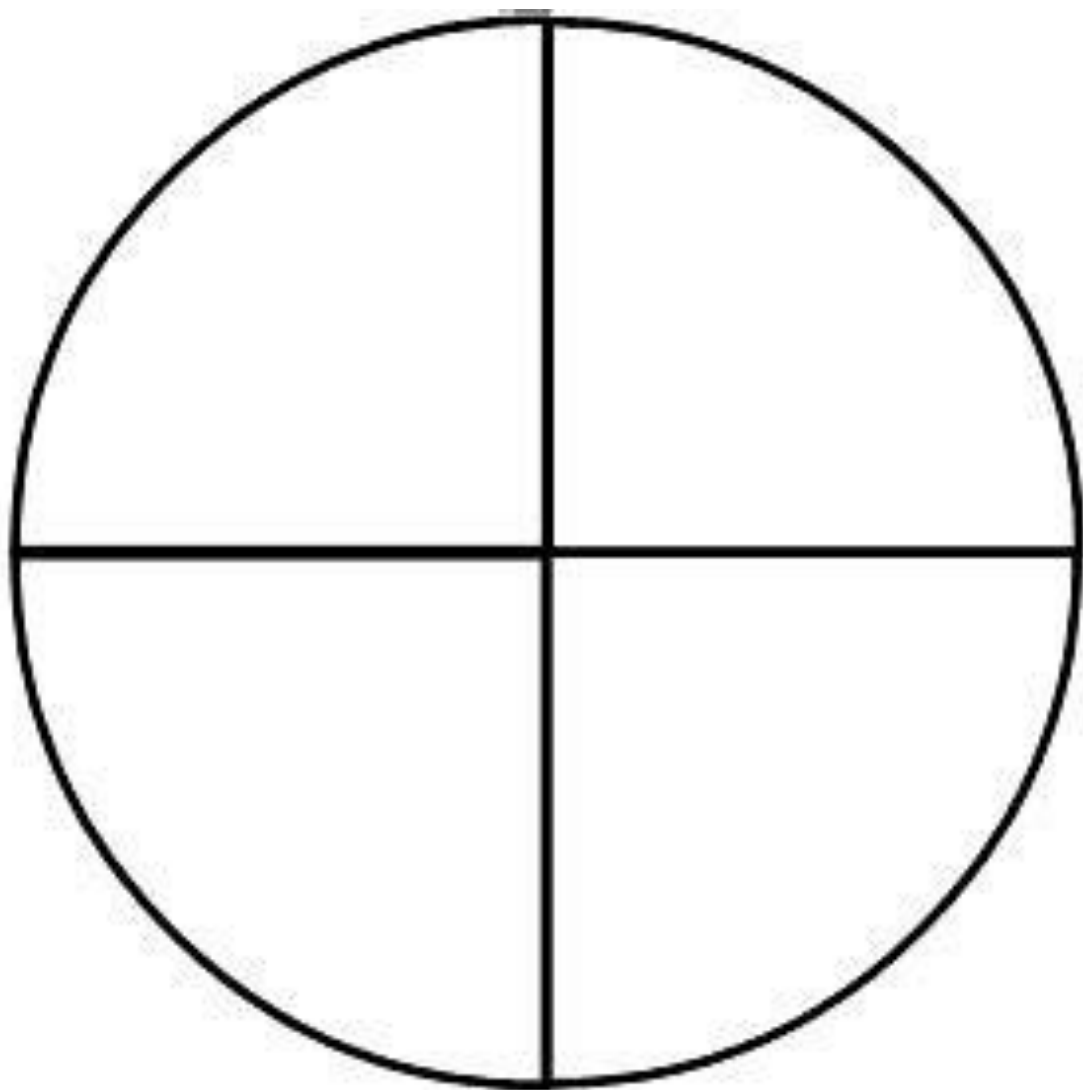
Phenology fun

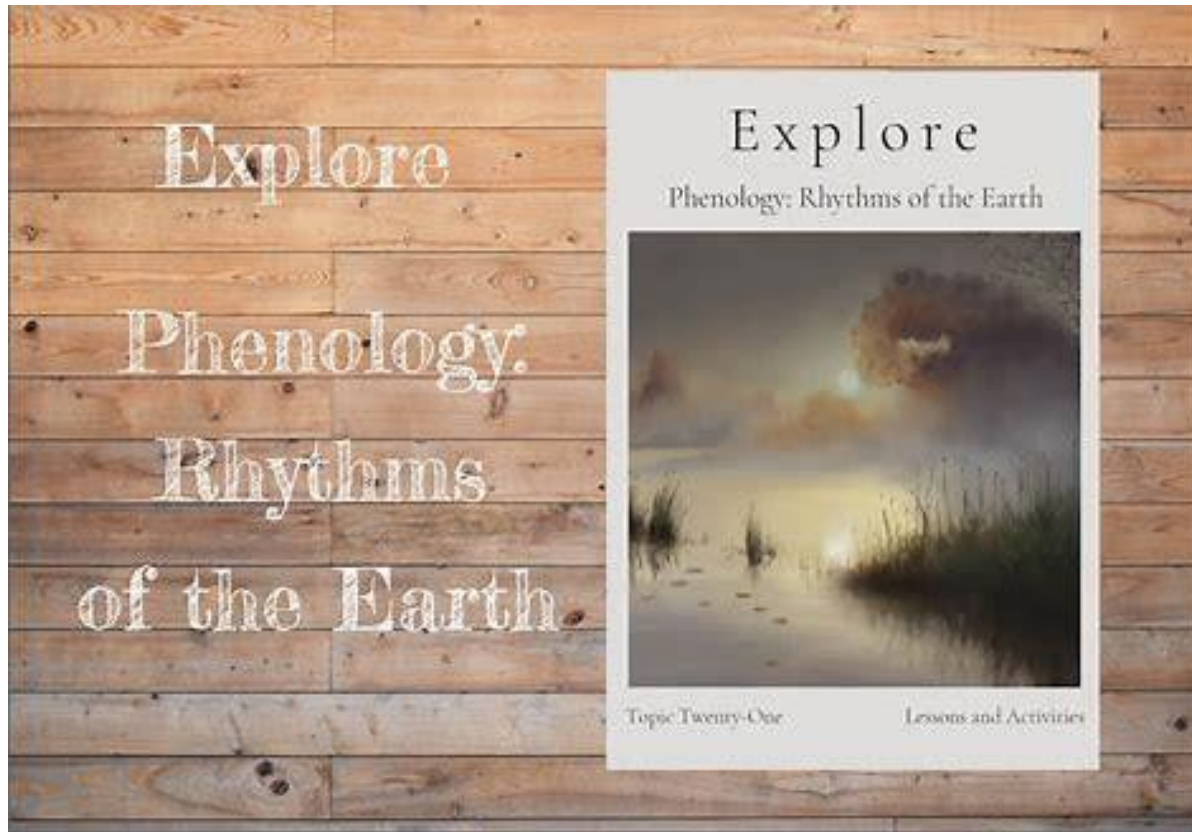
As you walk through the park what evidence of seasonal change do you see?

What foods could you use to represent the seasons—perhaps white, pink, yellow, brown jellybeans or red, green, white, pink M&Ms?

Can you make a season circle?







Rhythms
of nature