

Herbicide



A farmer in New York
sprays herbicide on a field
and kills the milkweed.

Building Bliss for Butterflies

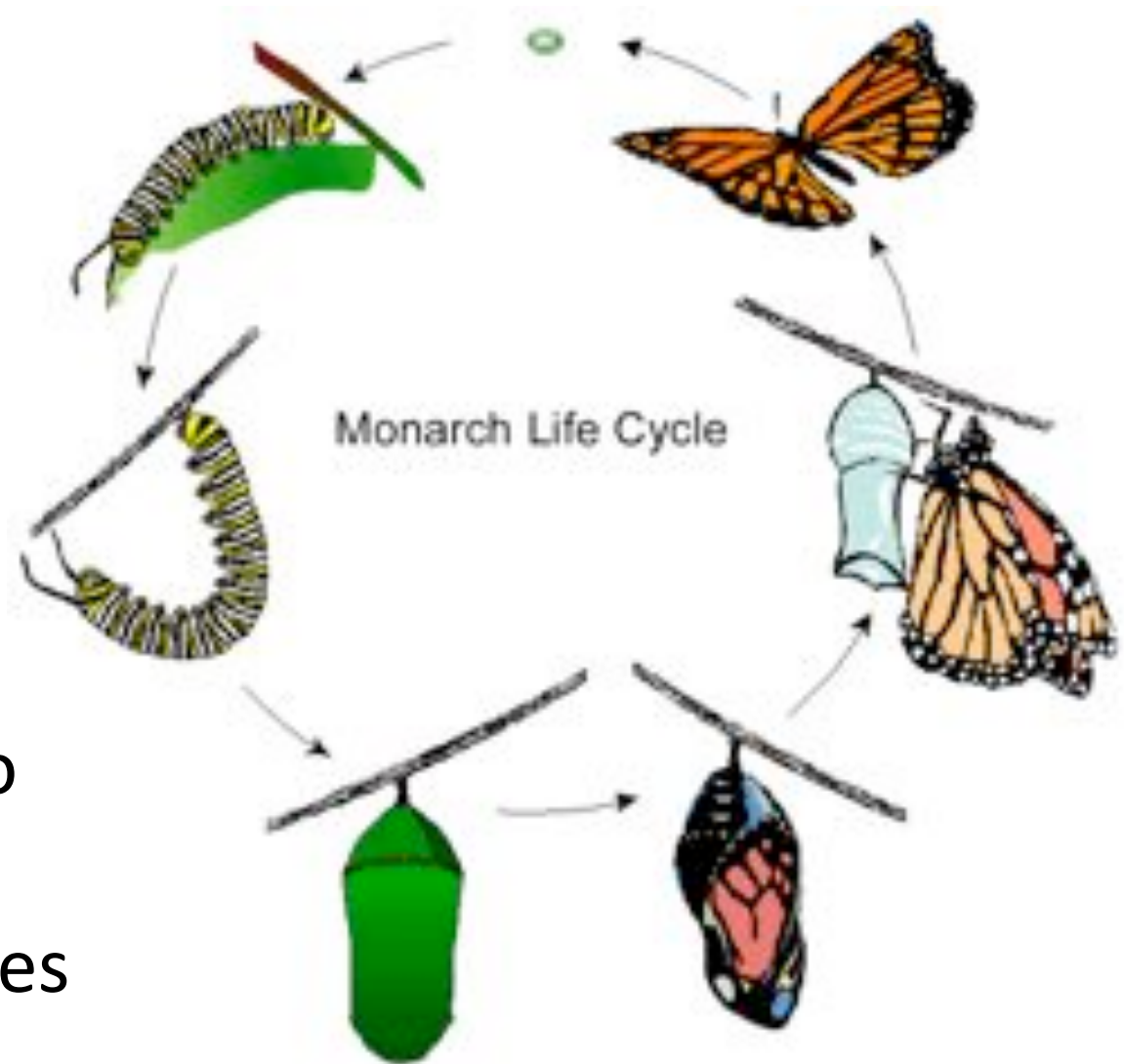
- Explore the plight of the monarchs!
- Learn how to help the butterflies!
- Create your own butterfly garden!



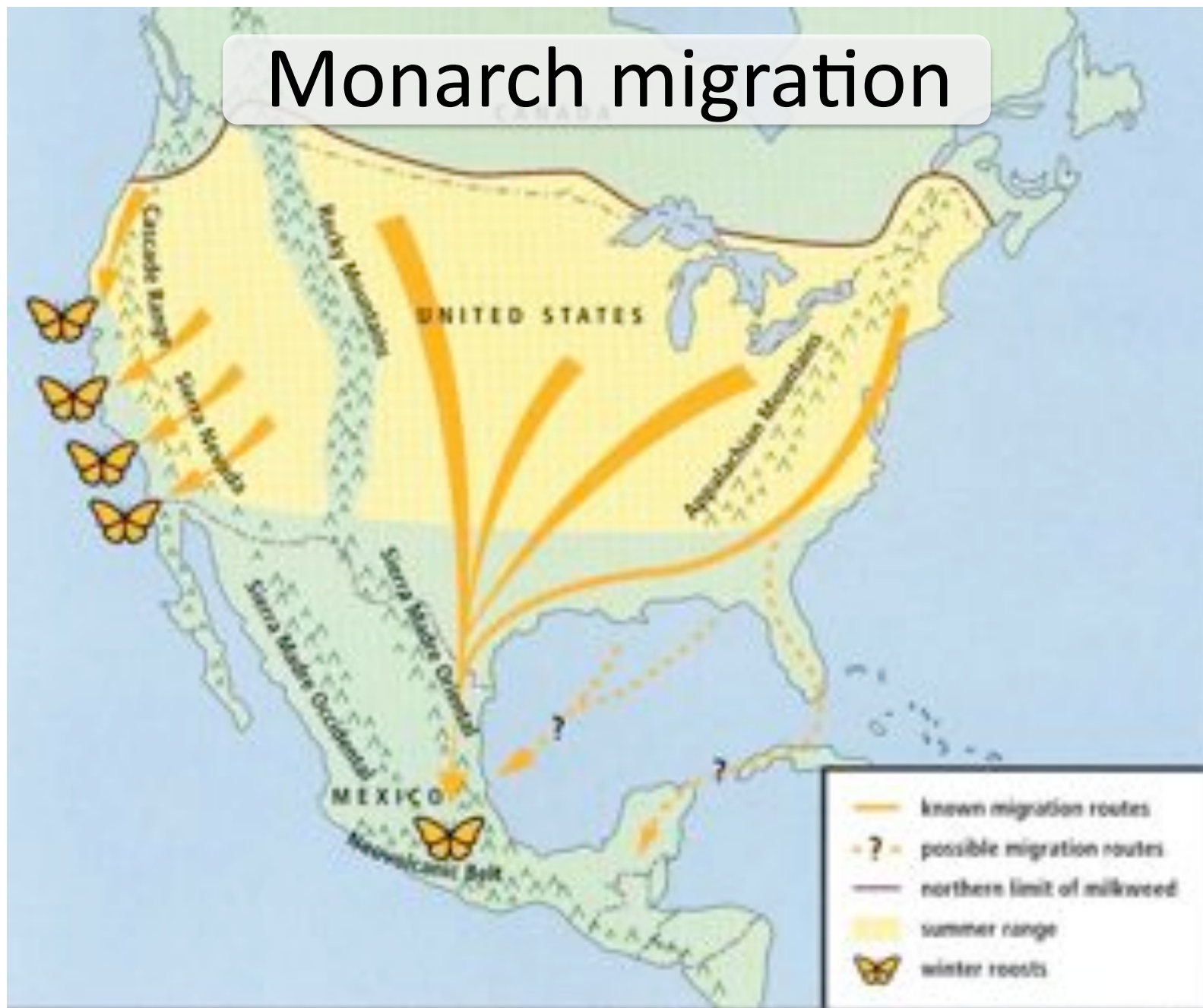
The monarch life cycle



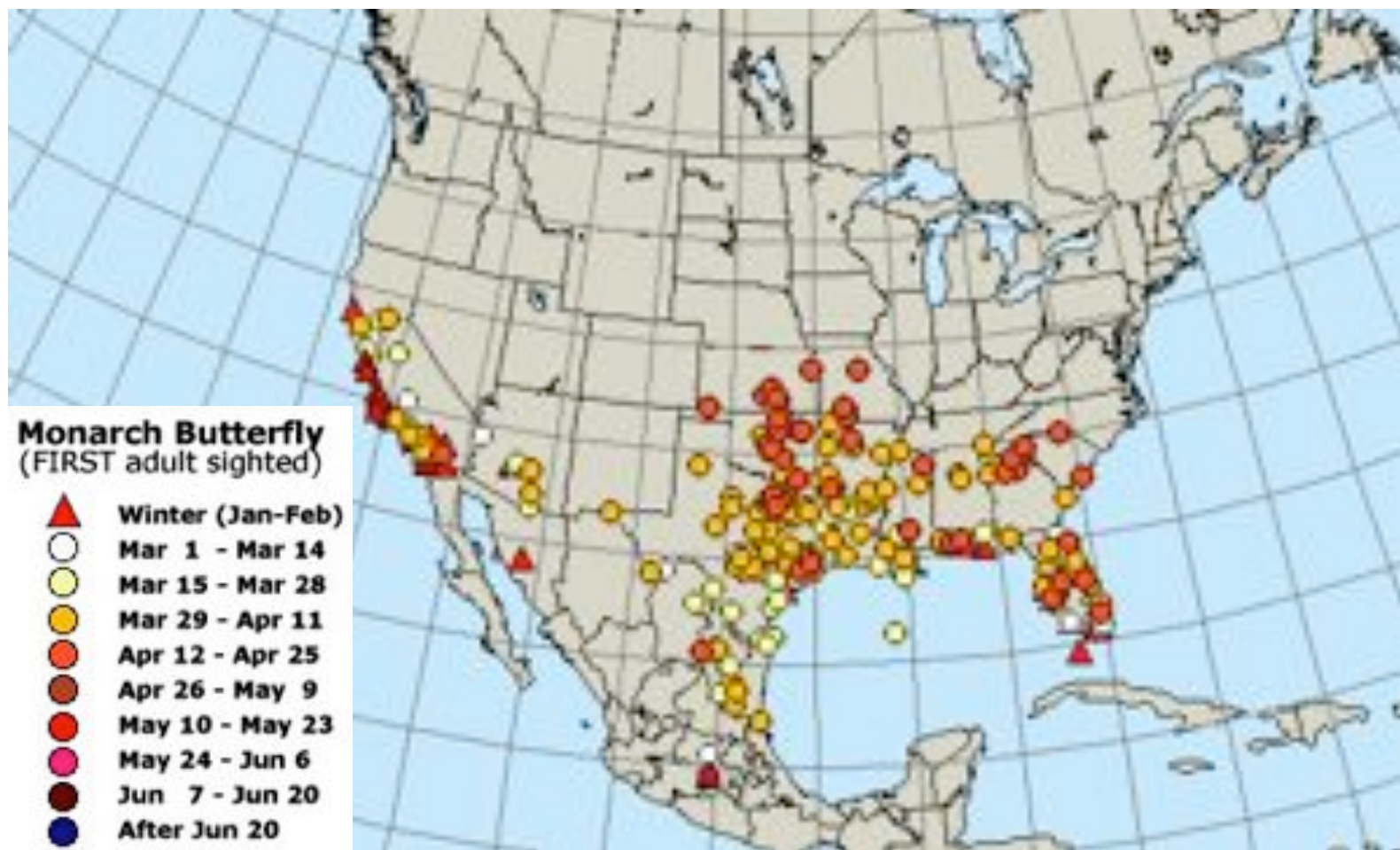
Monarchs have to migrate over the course of their lives



Monarch migration



You can track migration!



[Monarch Migration Tracker](#)





2003

27.48 acres



2006

16.98 acres



2010

9.93 acres



2013

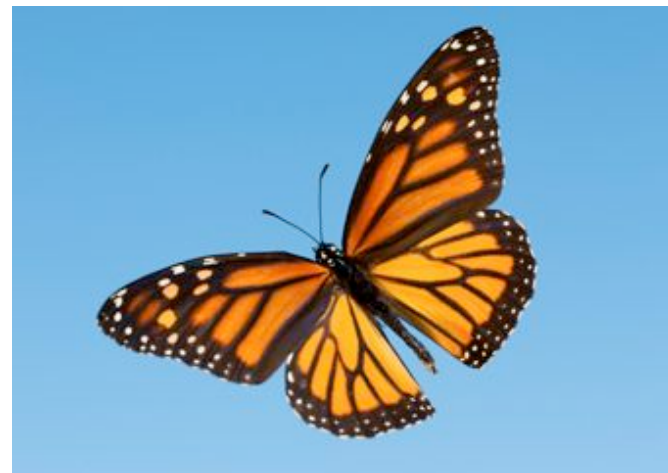
1.65 acres

Monarch butterfly populations
are rapidly declining.

Butterfly population is relative to number of acres inhabited during seasonal hibernation.

What's causing monarch decline?

- Deforestation in Mexico
- Severe weather
- Herbicide-based agriculture destroying crucial milkweed flora in the Midwest

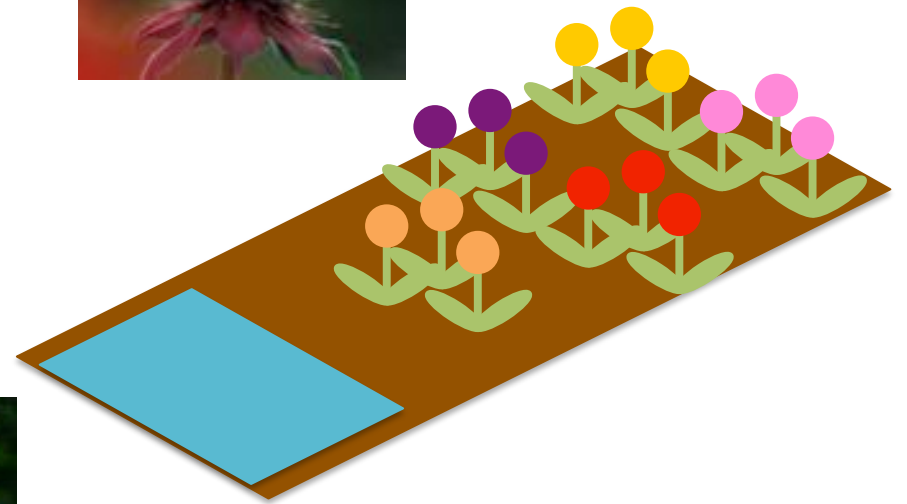


What can we do?



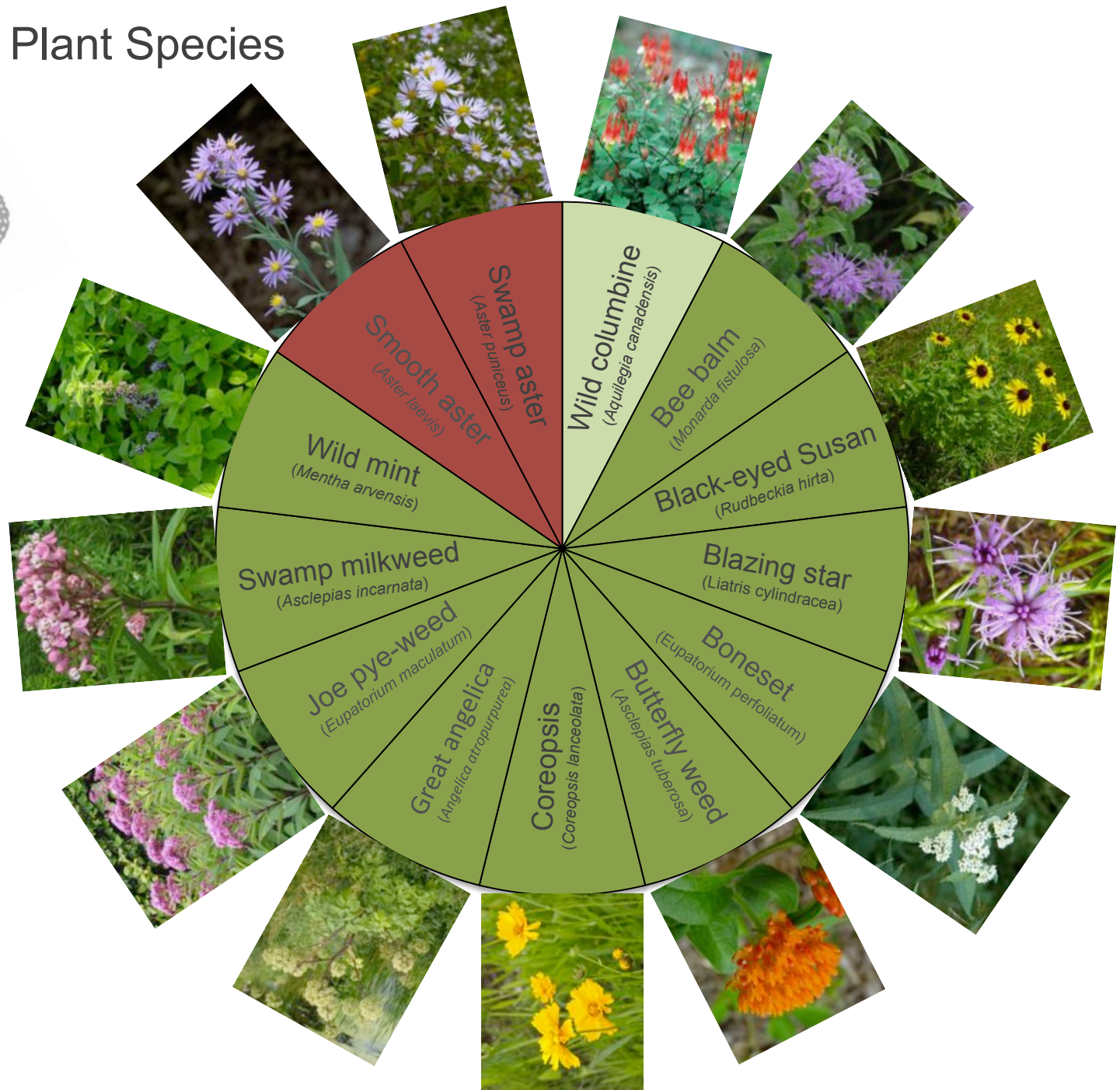
What attracts butterflies?

- Sun
- Water
- Flower color: pink, red, purple, yellow, orange
- Tubular flowers
- Flower with large, flat petals



Native Michigan Plant Species

SUN



Spring




Summer

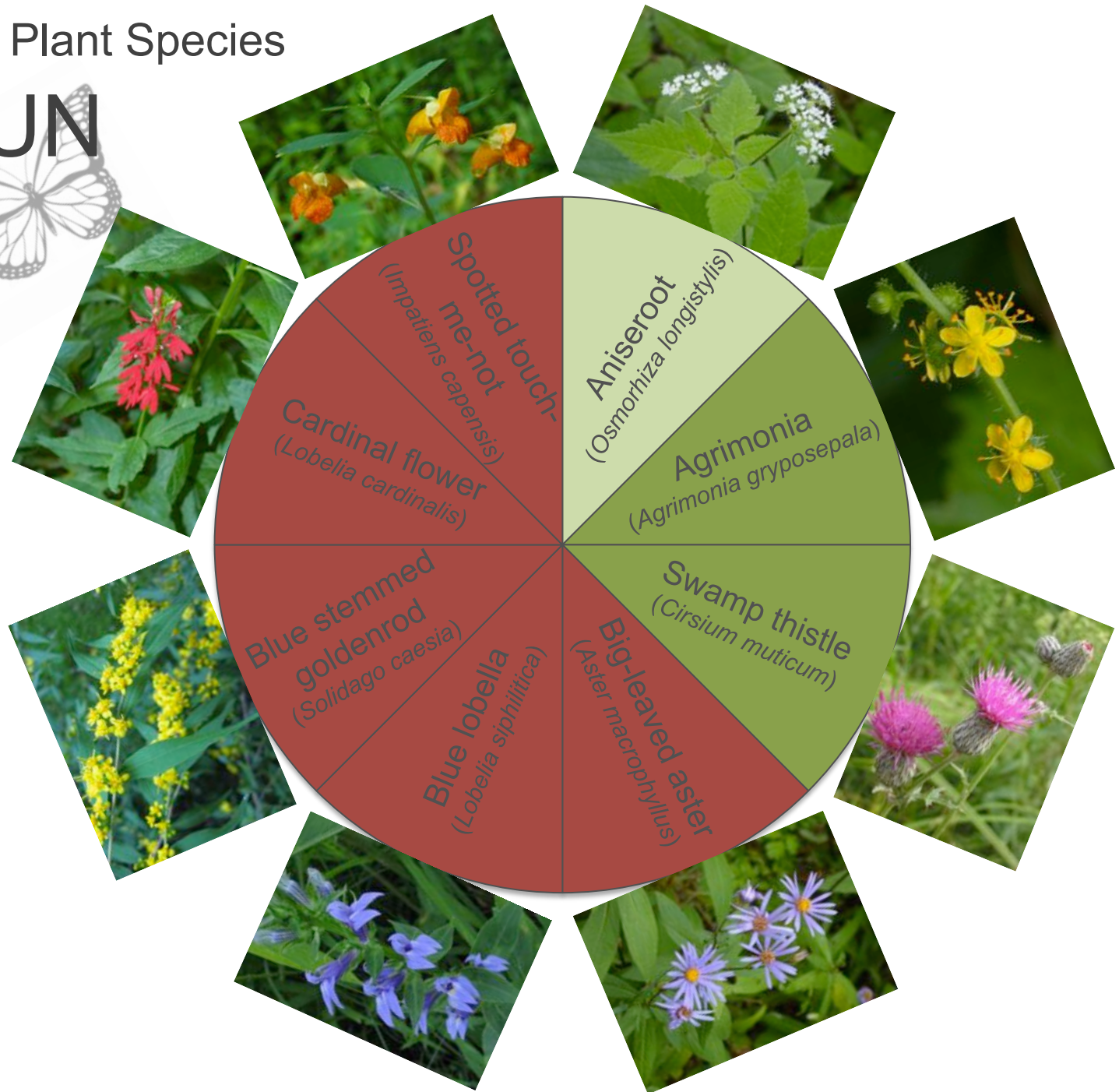
Fall

Native Michigan Plant Species

PART-SUN



-  Spring
-  Summer
-  Fall





Butterfly Garden Bingo

SPRING





Butterfly Garden Bingo

SUMMER/FALL



Focus on Phenology

- Seasonal changes in plants and animals from year to year
- Students make natural history observations
 - When do the insects show up in the spring?
 - When do the plants emerge?
 - When are there flowers?
- Can contribute to citizen science networks
- [National Phenology Network](#)