# Building Backyard Pollinator Habitats



Meredith Gilbert



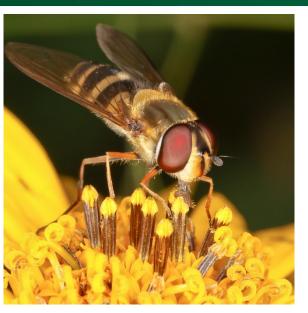
## What are Pollinators?

- Animals that move from plant to plant while searching for protein-rich pollen or high-energy nectar to eat.
- Fertilize plants as they move, allowing the plant to form seeds, berries, fruits and other plant foods.
- Over 100,000 invertebrates
   (butterflies, wasps, moths, bees, flies, beetles) and over 1,000 mammals, birds, reptiles, and amphibians act as pollinators.



# What are Pollinators?













# Common Ohio Bee Species



# Common Ohio Butterfly Species





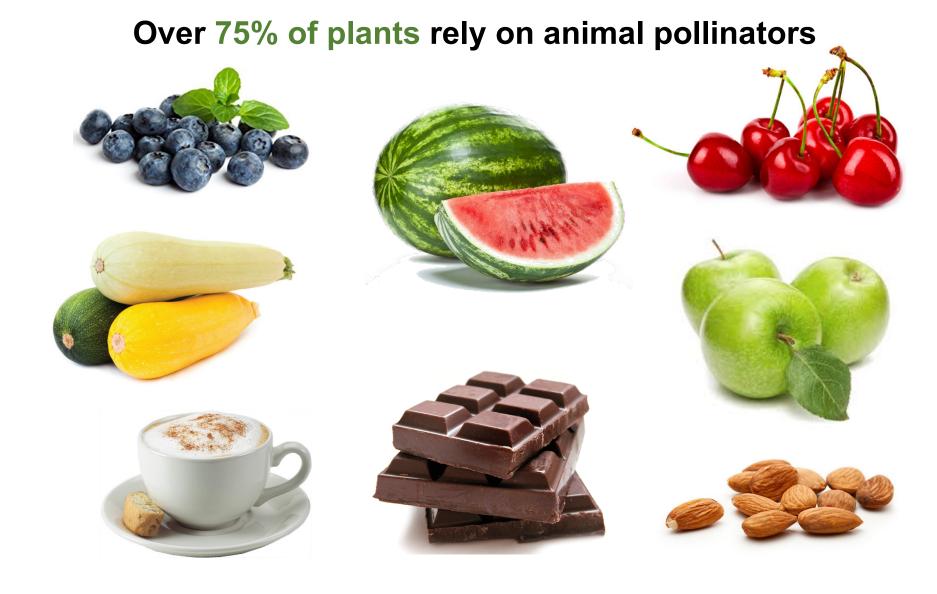




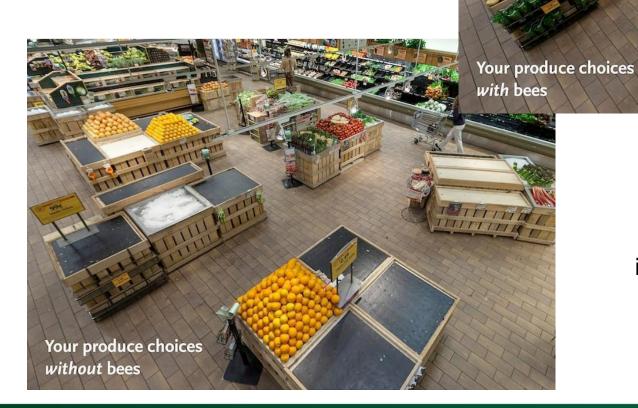




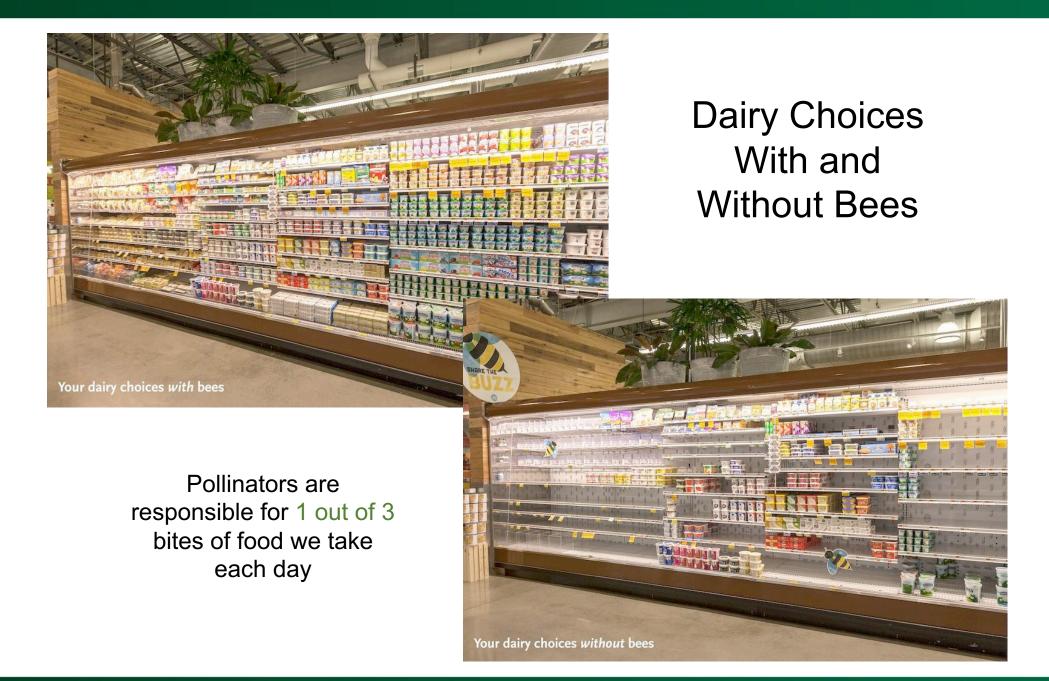
# Why We Love Pollinators



Produce
Choices With
and Without
Bees



More than 150 food crops depend on pollinators, including almost all fruit and grain crops



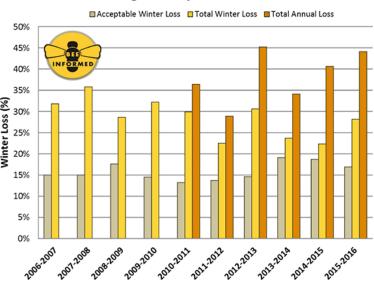
# The Issue

### **General Decline in Pollinators**



# Bumble Bees of North America 5 Critically Endangered Endangered Vulnerable Near Threatened Least Concern Data Deficient

### **Total US managed honey bee colonies Loss Estimates**





Bumble bees commercially reared for agriculture are **transmitting diseases** to wild populations.



One of the biggest factors affecting all pollinators is fragmentation and loss of habitat.



Widespread pesticide use further degrades habitat by removing flowering plants and poisoning pollinators.



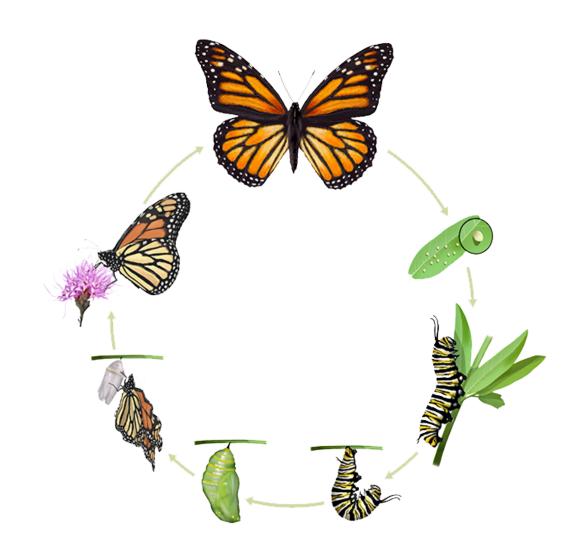
Climate change is affecting bumble bees by changing bloom time and subjecting populations to fluctuating temperatures and weather extremes.

# The Issue

### Monarch Decline



# Butterfly Life Cycle





# Monarch Butterfly Laying Eggs





# Monarch Butterfly Egg Hatching





# Monarch Caterpillar Instars





# Monarch Caterpillar Transforming into Chysalis



