

Pollinators: Benefits and Risks

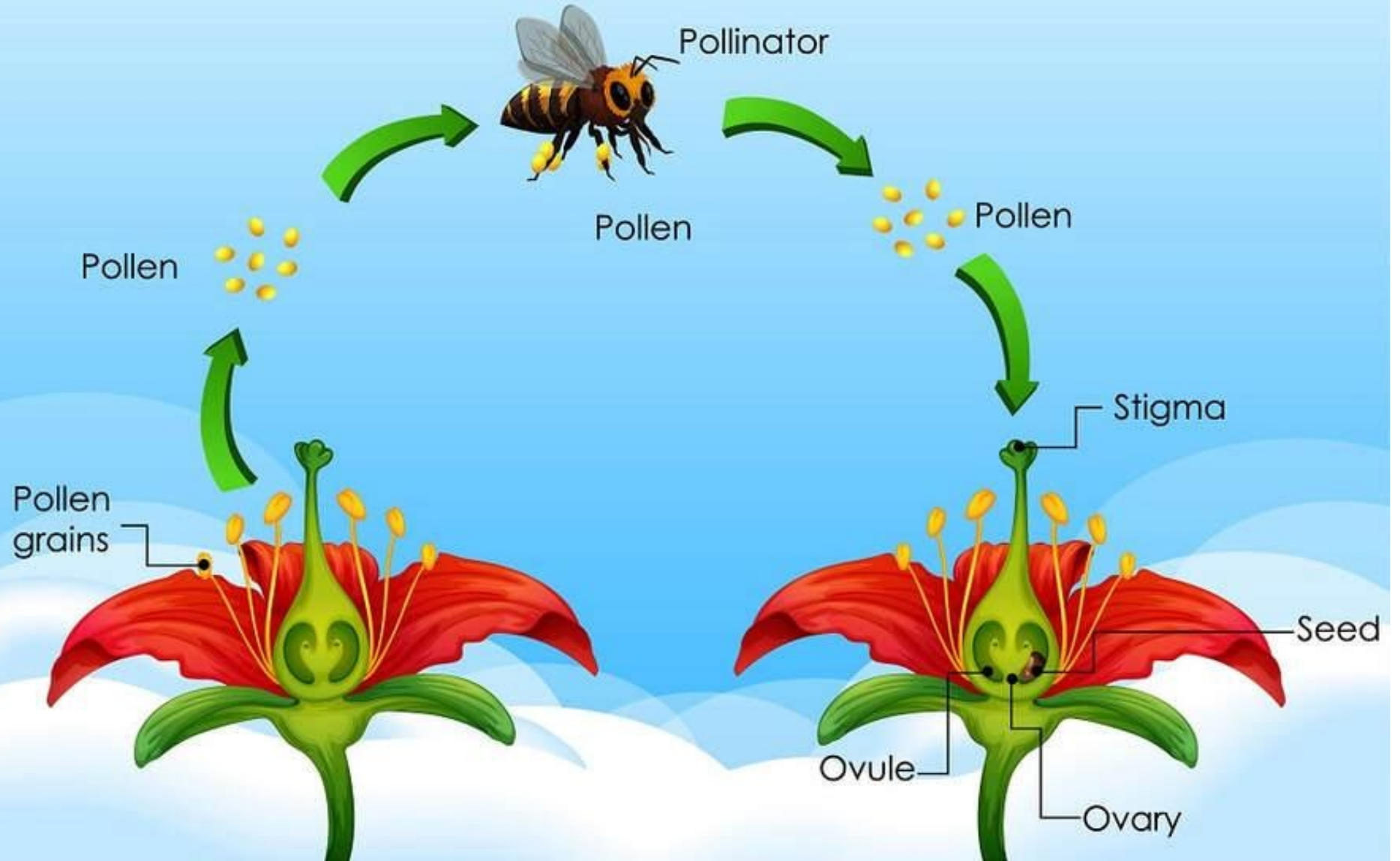
Brooke Decker
Pollinator Health Specialist
Vermont Agency of Agriculture Food and Markets

Overview

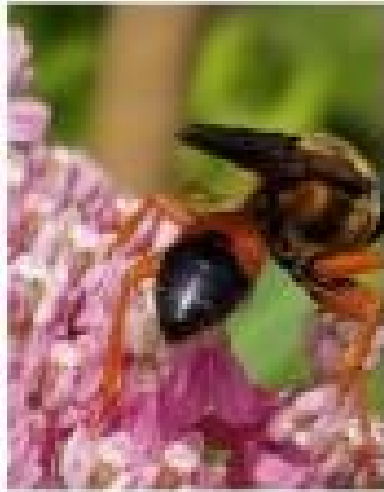
- Pollinators and why they matter
- Pollinator Protection
- When pollinators become Pests

POLLINATION

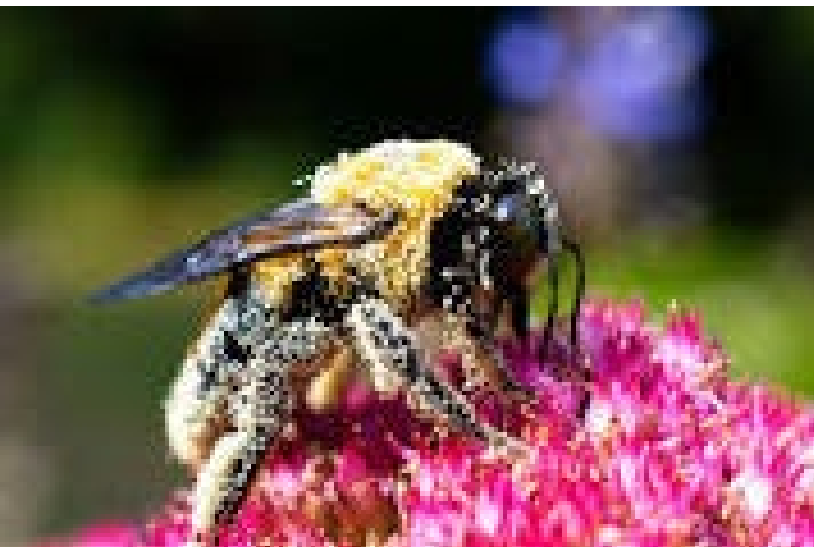
What is
Pollination?



What is a
Pollinator?



Bees are effective Pollinators



Why Protect Pollinators?

1/3 of human food production depends on insect pollinators

- Especially the healthy foods – fruits, nuts, seeds
- Hay crops for livestock (dairy and grassfed meat)

Wild plant species depend on insect pollination to develop berries and seeds

- Important to feed wildlife
- Essential components of the ecosystem

How to Protect Pollinators:

- **READ AND FOLLOW THE LABEL**
 - The label is the law
 - Look for the new EPA Bee Advisory Box
 - Highly toxic to bees
- **Know and follow the VT pesticide rule**
 - Updated pollinator protections
 - New insert in Core Manual
- **Practice IPM**
 - Evaluate based on risk and need

When
Pollinators
become
pests?



What is a pest?

A destructive insect or other animal that attacks crops, food, livestock, etc. (*oxford dictionary*)

Includes humans, pets, homes, buildings...

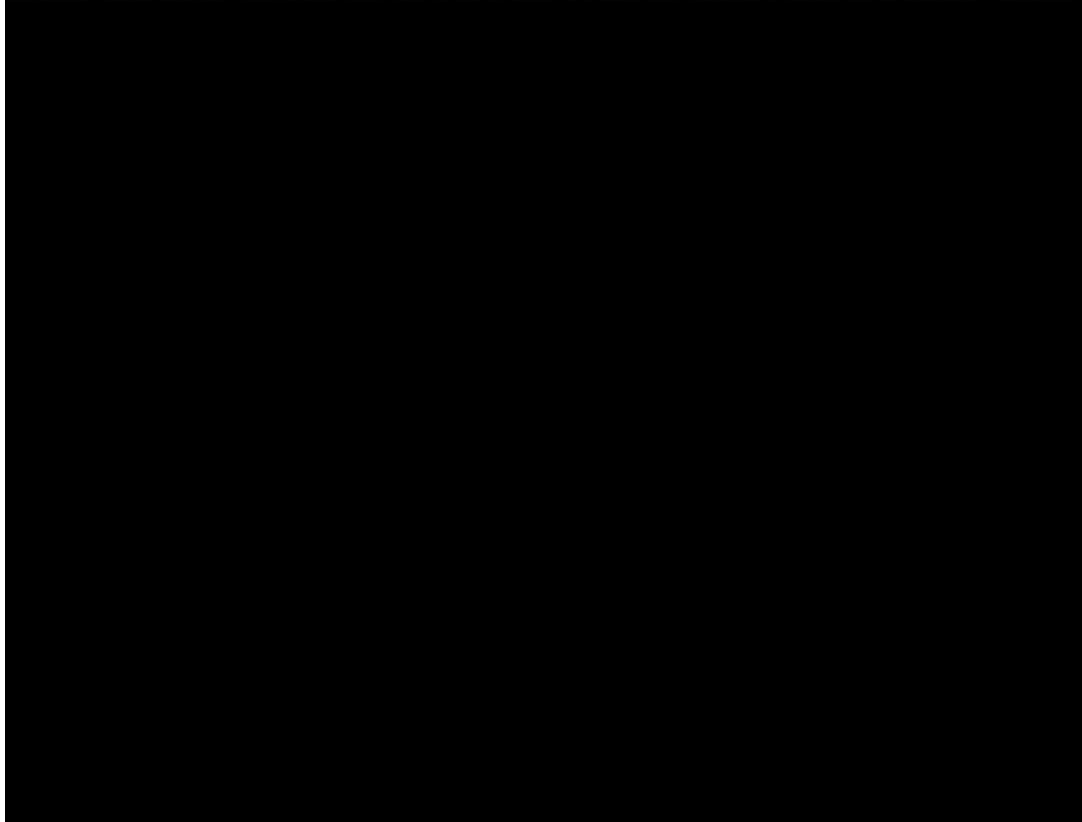


Common structural
'pollinator' pests









- **Outdoor swarms- Lower risk**
 - Likely will move on within a few days
- **Swarms In Buildings- Higher risk**
 - Human health risk
 - Mold
 - Stings
 - Can be sprayed with approved insecticide
 - May require some demolition / extraction / reconstruction work
 - Can attract other pests
 - Fermenting honey, decaying bees



Beekeeping PPE



Things to
consider
before swarm
removal

Proper identification of the pest

- Honey Bees are often mistaken for Yellow Jackets

Determine size and age of the colony

- size can be determined using a stethoscope or a heat camera
 - Smaller/Younger colonies (up to 4 weeks old)
 - Could be eradication by spraying
 - Larger / older colonies (4+ weeks old)
 - Likely should be eradicated through complete nest removal / demolition

Either method of eradication requires securing the site to prevent further entry of bees (chopstick size)

Wasps, Hornets, and Yellow jackets



Honey Bee vs. Yellow jacket



**CARPENTER
BEE**



**BUMBLE
BEE**



BUMBLE BEES:

Fuzzy, Striped, pollen on legs, nest in old rodent nests



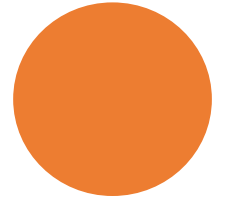
CARPENTER BEE:

Smooth shiny, mostly black, burrow and nest in wood



Mason Bees

- Little to no risk to human health
- Growing in popularity
- Solitary bees that provide excellent pollination
- Use caution when spraying perimeter of buildings



Overview:

- Pollinators and why they matter
- Pollinator Protection
- When Pollinators become Pests

QUESTION

- What is the first thing (most important) to do when responding to a call stating "**THERE ARE BEES LIVING IN MY HOUSE**"?
- A: Hang up the phone
- B: call 911
- C: Positively identify the suspect insect before making the next decision