

Pollinator Palooza



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Agenda

What today will look like

- 15 minutes
 - Pollinator overview
 - *Activity – Perfect Partners*
- 15 minutes
 - Importance of pollinators to humans
 - *Activity - Pollinator Plant Product Pair-Up!*
- 15 minutes
 - How we can help
 - *Activity – Hop To It!*



Objectives

By the end of today, we should:

- Information on pollinators including the ones found in our area as well as why they are important.
- What the Houston Zoo is doing to help pollinators
- What they can do in their backyard or schools to help pollinators



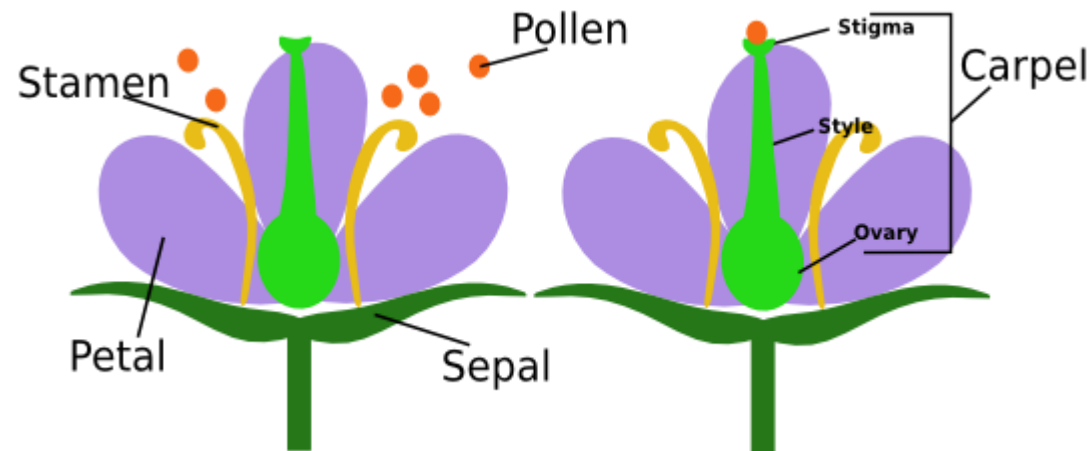
Pollination

- Act of transferring pollen grains from the male anther of a flower to the female stigma.
- The goal of every living organism, including plants, is to create offspring for the next generation



Pollination

- But how does it happen?
- Sometimes accidental...



The star of the show

- Pollinators!
 - An animal that transports pollen from one plant to another
 - As plants cannot walk, run or fly; this is an extremely valuable service
 - Bees
 - Birds
 - Butterflies
 - Bats
 - Flies
 - And more!



True Texans

- Many of our pollinators have been “Texans” before there was even a Texas
- One of the best ways we can help them is with Texas plants



True Texans

- A quick word about bees, our most important pollinators:
 - European honey bees
 - Social nesters
 - Sting to defend hive
 - Introduced species
 - Imported for ecosystem services: honey and pollination



True Texans

- A quick word about bees, our most important pollinators:
 - Native bees
 - Over 1000 species in Texas & 4000 in the U.S.
 - More efficient, less picky, and better adapted than introduced species
 - Safer around people
 - 90% are solitary
 - Many don't have a stinger that penetrates skin
 - No known allergic reactions



Activity – Perfect Partners

- Two ways to play
 - For Pollinators
 - For our friends!



Why care about animal pollinators?

- Pollinators sustain our ecosystems and produce our natural resources by helping plants reproduce.



Why care about animal pollinators?



- Without pollinators, agricultural economies, our food supply, and surrounding landscapes would collapse
- We have pollinators to thank for up to 30% of what we eat!



Why care about animal pollinators?

- About 87.5% of wild flowering plant species and three of four of the world's major food crops are increased by animal pollination.



Why care about animal pollinators?

- It's estimated that in the U.S., insect pollinators produce \$40 billion dollars worth of products annually!



Why care about animal pollinators?



- Foods produced with help from pollinators include apples, blueberries, chocolate, coffee, melons, peaches, potatoes, vanilla, almonds, and agave nectar for tequila!



Activity – Pollinator Plant Product Pair- Up!



- Find your matches
- Complete the puzzle!



Pollinators in Trouble

- Observations from around the globe indicate the widespread loss of animal pollinators in many regions with North America as one area of particular concern.



Pollinators in Trouble

- Contributing factors to pollinator loss include climate change, pesticide use, invasive species, and especially habitat loss.



Pollinators in Trouble

- Urbanization
 - Population explosion
 - Green spaces have become ‘islands’
- Think about the little guys!
 - Many of our smallest pollinators can not fly between green spaces
 - Food deserts



Hop to it!



How the Houston Zoo Helps

- Around the Zoo are pollinator friendly plants with signs identifying the type of plant.
 - *These are here for you to take pictures of and to bring to your local nursery to help you find pollinator friendly plants to place in your own garden.*
- The Houston Zoo provides habitats for pollinators through Pollinator Stations and butterfly gardens located throughout the Zoo.



How we can help - Plant those natives!

- Helping ecosystems from the ground up (literally)
- Far reaching impact from little hands
- Texans helping Texans
- Wildlife friendly practices



Pollinators in the classroom

- Gardens – no matter how big or small!
- Increasing the native plants available
- Practicing wildlife friendly habits in the garden
- Spreading the word!



Pollinator Pals!

