

OUR CITY FOREST

Power of Pollinators

Feel free to do some research to fill out this activity. Utilize the internet, friends, family or books to answer the questions. We don't expect you to know it all off the top of your head. You can even email us at outreach@ourcityforest.org if you have questions. Take your time and take the opportunity to learn about pollinators!

Part I: Pollinator Basics

Pollinators come in all shapes and sizes, with each uniquely suited to carry and spread pollen among their favorite plants. Most plants can only produce seeds or fruits from the pollen that the pollinators bring with them. If you look very closely when you garden or go for a walk, there are pollinators working hard to help produce new flowers, not to mention the fruits and vegetables that we enjoy so much. Pollinators on a larger scale play a vital role in our ecosystems, as they are responsible for 75% of our wildflowers and one out of every three bites of food you eat.

1) Define parts of a flower



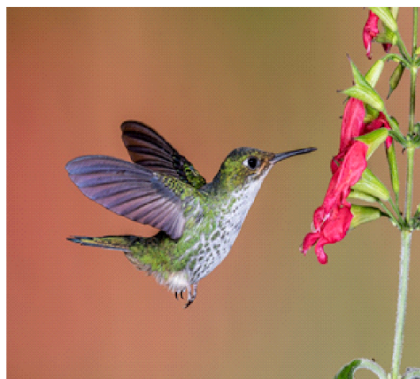
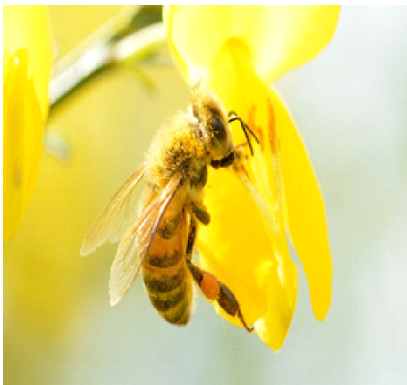
Define parts of a flower

- 1.
- 2.
- 3.

2) In what ways does a flower attract pollinators?



3) Which one does not belong and why? (hint: one does not attract pollinators)



**4) Out of the three pictured, which is the most efficient pollinator and why?
(Bonus Question: Can you identify that Butterfly?)**



5) Out of the three pictured above, which ones are considered pollinators?

(Zelkova City Sprite)

(Natchez Crepe Myrtle)

(Eastern Redbud)



6) Quite a few trees at Our City Forest Nursery attract pollinators. From the pictures above, can you find out which trees attract pollinators?

Part I: Pollinator Basics Answer Key

1) Define parts of a flower

1. Anther
2. Filament
3. Petal

2) In what ways does a flower attract pollinators?

Answer: Flowers use attractants such as color patterns, aromas, conspicuous anthers, and the flavors of nectar.

3) Which does not belong and why?

Answer: The picture on the right. There are no flowers!

4) Out of the three pictured, which is the most efficient pollinator and why?

Answer: The picture on the left. Bees are the most efficient pollinator. A single bee colony can pollinate 3 million flowers a day.

Bonus Question: Can you identify that Butterfly?

Answer: Monarch Butterflies

5) Out of the three pictured above, which ones are considered pollinators?

Answer: All of them are pollinators!

6) Quite a few trees at Our City Forest Nursery attract pollinators. From the pictures above, can you find out which trees attract pollinators?



Answer: White Crape Myrtle and Eastern Redbud attract pollinators.

Part II: Tree Identification


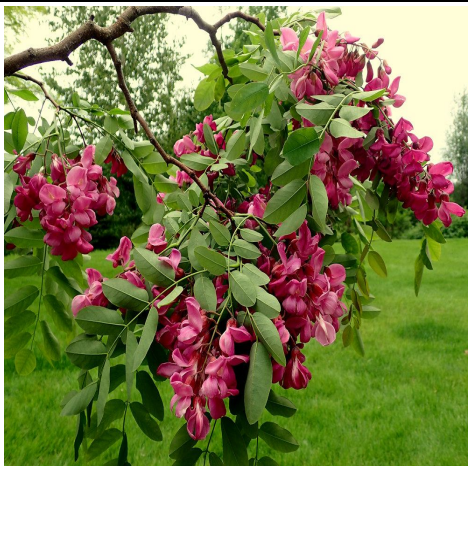
At Our City Forest we believe in the POWER of TREES. There are countless benefits to planting a tree in our urban environment, from producing clean air, providing shade, saving groundwater, and even crazier, trees can raise property value! But what pollinators love the most about the trees is their beauty, as trees can produce extravagant flowers with rich and vibrant colors.

In this section, fill in the boxes and learn as you go through each tree. Remember to take your time with it so the new facts sink in. And have fun!

(All trees and shrubs listed in this section are available at Our City Forest Nursery)

#1		<p>Latin Name:</p> <p>Common Name:</p> <p>Trident Maple</p>	<p>Traits:</p>
#2		<p>Latin Name:</p> <p><i>Pistacia chinensis</i></p> <p>Common Name:</p>	<p>Traits:</p>

<p>#3</p>		<p>Latin Name:</p> <p>Common Name:</p>	<p>Traits: A deciduous small canopy tree, great for yards, flowers in the summer are vibrant white. Attracts pollinators, such as birds. (hint: you've seen it before)</p>
<p>#4</p>		<p>Latin Name:</p> <p>Common Name:</p> <p>Carolina Cherry Laurel</p>	<p>Traits:</p>

#5			<p>Latin Name:</p> <p><i>Quercus shumardii</i></p> <p>Common Name:</p>	<p>Traits:</p>
#6			<p>Latin Name:</p> <p>Common Name:</p>	<p>Traits:</p> <p>This high-canopy, deciduous tree can grow up to 40 ft. This tree is also robed in incredible clusters of beautiful purple flowers. Attracts pollinators, such as birds and bees.</p>

#7



Latin Name:

Traits:

Common Name:

Sterling Linden

#8



Latin Name:

Traits:

*Sambucus
mexicana*

Common Name:

9) Now without looking at the previous pages can you Match the Tree with its Latin name?

A _____

B _____

C _____



Pistacia chinensis *Lagerstroemia x f. Natchez* *Tilia tomentosa sterling*

Cercis canadensis

Quercus shumardii

Robinia pseudoacacia



D _____

E _____

F _____

Part II: Tree Identification Answer Key

- 1) Latin name: *Acer buergerianum*

Common name: Trident Maple

Traits: Dark green leaves, which change to yellow, orange, red in the fall. This is a shade tree, featuring a spreading canopy capable of blocking sunlight. The trident maple grows to a height of 20–35 feet and a spread of 20–30 feet at maturity.

(<https://www.arborday.org/trees/treeguide/TreeDetail.cfm?ItemID=1096>)

- 2) Latin name: *Pistacia chinensis*

Common Name: Chinese Pistache

Traits: Provides good fall color, with leaves turning beautiful shades of orange and red. Produces panicles of greenish flowers in April and May, but they are not showy. Will withstand heat and drought extremely well. The crown is quite round and symmetrical on older specimens when grown in full sun but becomes misshapen in too much shade - best for full sun areas. This is an ornamental tree, typically planted for the visual interest and beauty it can bring to landscape. The Chinese pistache grows to a height of 25–35 feet and a spread of 25–35 feet at maturity.

(<https://www.arborday.org/trees/treeguide/TreeDetail.cfm?ItemID=1073>)

- 3) Latin name: *Lagerstroemia x f. Natchez*

Common Name: "Natchez" Crepe Myrtle

Traits: A long period of striking white summer flower color, attractive fall foliage, superior bark exfoliation, good disease and insect resistance and good drought tolerance. Height is 20-30 ft and width is 15 ft.

(http://hort.ufl.edu/database/documents/pdf/tree_fact_sheets/lagxe.pdf)

- 4) Latin name: *Prunus caroliniana*

Common Name: Carolina Cherry Laurel

Traits: A small evergreen tree with white flowers that may easily grow to 35 feet tall. The fresh leaves of this plant have a maraschino cherry fragrance when crushed and glands on the lower surface of the leaves. Full sun is preferred but it is tolerant of shade

as long as the soil is moist and well-drained. Height is 15 ft-35 feet and width is 15 ft-20 feet, (<https://plants.ces.ncsu.edu/plants/prunus-caroliniana/>)

- 5) Latin name: *Quercus shumardii*

Common Name: Shumard oak

Traits: A medium sized, deciduous tree of the red oak group. Pyramidal in youth but spreads to a broad open crown with age. Typically grows at a moderately fast rate to a height of 40-60 feet (to 100 feet in the wild). Shiny, dark green leaves with deep, spiny lobes (usually 7-9 lobes). Fall color appears late, but is often a respectable brownish red. Insignificant flowers appear in early spring as the leaves emerge. Fruits are acorns which are usually not produced until the tree has reached the age of 25 years.

(<http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=280724>)

- 6) Latin name: *Robinia pseudoacacia*

Common Name: Purple Robe Black Locust

Traits: A medium sized, deciduous tree that typically grows to 30-40 feet tall with an oval-upright habit. It is noted for its attractive leaves and violet purple pea-like flowers. Leaves emerge an interesting bronze-red in spring, but eventually turn an uneventful yellow in fall. Fragrant wisteria-like violet purple flowers in pendant racemes (to 8" long) bloom in mid to late spring. Bees are attracted to the flowers.

(<http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=c142>)

- 7) Latin name: *Tilia tomentosa*

Common Name: Silver Linden

Traits: Beautiful shade tree with light gray, smooth bark and leaves that are a dark, radiant green on top, shimmering silver beneath. Extremely fragrant clusters of yellow-white flowers bloom in late June to early July. Pollution tolerant. Grows 50 to 70 feet with a 25 to 35 foot width. Serves as a great source of nectar and pollen for bees and other pollinators. Offers great shade due to a dense crown. Grows in an oval shape.

(<https://www.arboday.org/trees/treeguide/TreeDetail.cfm?ItemID=859>)

- 8) Latin name: *Sambucus mexicana*

Common Name: Mexican Elderberry or Tapiro

Traits: A deciduous shrub to tree with butter yellow flowers in April-August followed by purple berries in September-October. Its bluish-black berries are excellent in jelly, fair in pie. Look carefully as you pass an Elderberry you may see a hummingbird, butterfly, chipmunk, or bird as it is an excellent wildlife plant. It grows 20-30 feet tall and 20-30 feet wide.

(<https://www.laspilitas.com/nature-of-california/plants/620--sambucus-mexicana>)

9) Now without looking at the previous pages can you Match the Tree with its Latin name?

Chionanthus retusus - B

Lagerstroemia x f. Natchez - C

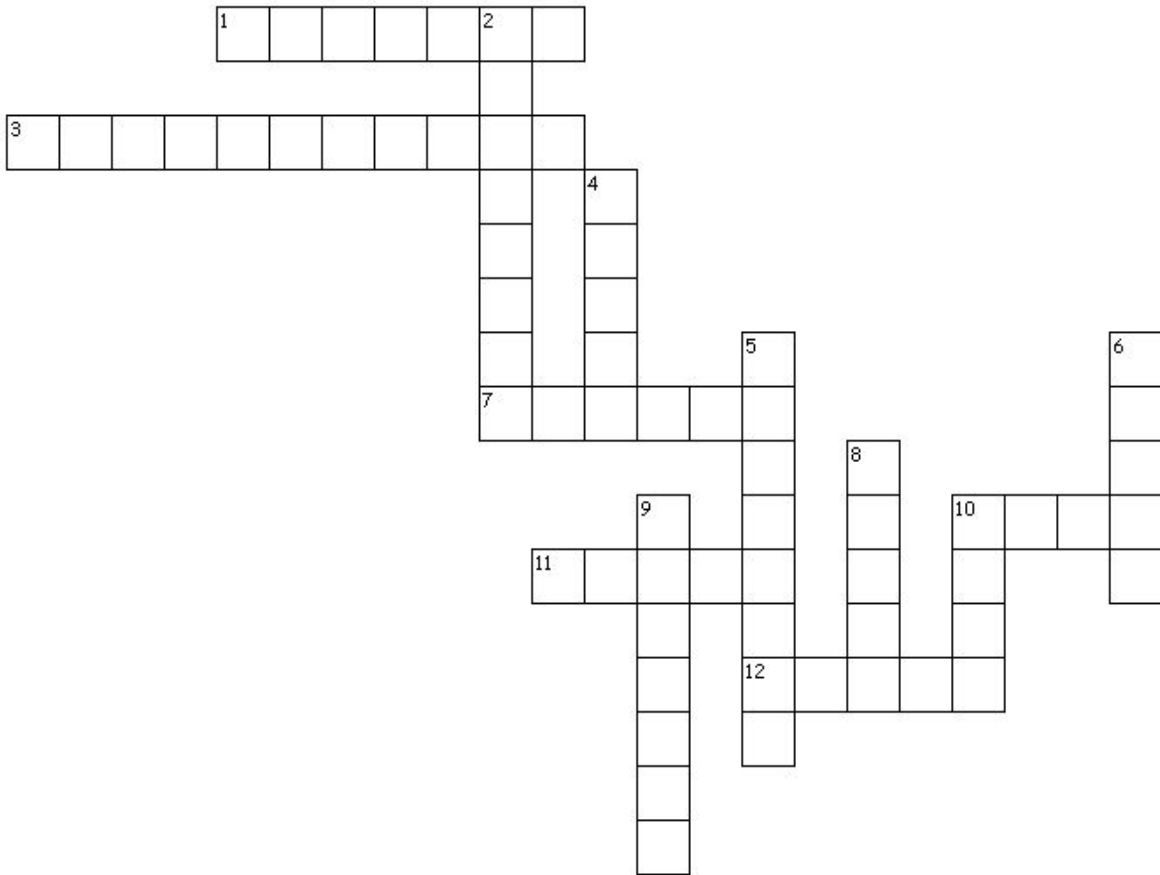
Tilia tomentosa sterling - F

Cercis canadensis - E

Quercus shumardii - D

Robinia pseudoacacia - A

Part III: Pollinator Power Crossword Puzzle



Across

1. Only eats milkweed
3. Pollinators help produce 75% of this
7. On what part of the flower is pollen located or contained?
10. Humming
11. Only during the day can you find this under a tree
12. Produce clean air

Down

2. Cherry laurel
4. One way a flower attracts a pollinator
5. Trees raise the value of this
6. Flowers produce
8. Trident
9. Redbud
10. Buzz

Part III: Pollinator Power Crossword Answer Key

Across

1. monarch
3. wildflowers
7. anther
10. bird
11. shade
12. trees

Down

2. carolina
4. scent
5. property
6. seeds
8. maple
9. eastern
10. bees

