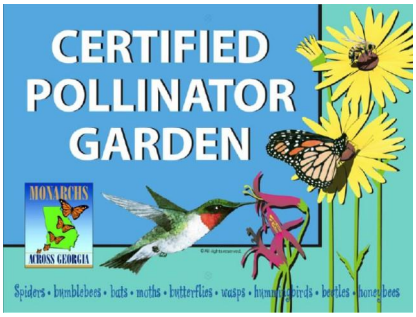


Lesson: Why a Butterfly Garden?
Seeking Pollinator Certification for a Butterfly Garden

1. What is the primary threat to most endangered species?

2. Why is our butterfly and pollinator population declining?
   a.
   b.
   c.

3. Why create a butterfly garden?
   a.
   b.
   c.
   d.

4. Why are pollinators important? What kind of crops do they affect?

5. What do butterflies need?
   a.
   b.
   c.
   d.
   e.
   f.

6. How do plants support pollinators?

7. How do plants support birds?

8. Insects are our most important pollinators. What are our top three pollinators?
   a.
   b.
   c.

d. Other pollinators:

9. What is a host plant?

_____
_____

10. Why is a host plant important to a pollinator?

_____
_____

11. The female part of a flower is called a _____.

12. The male part of a flower is called a _____ and has multiple grains of _____.

13. How do pollinators spread pollen?

_____
_____

Pollinators - True or False:

14. _____ Flowers are designed in such a way that insects can not avoid getting pollen on them and carrying it away.

15. _____ Most flowers are self pollinating.

16. _____ Some plants can be pollinated by the wind.

17. _____ Insects are attracted to flowers based on their shape.

18. _____ Flowers use their scent to attract insects.

19. _____ Insects see the same colors that we see.

20. _____ Flowers use their colors to attract insects.

21. _____ Insects are especially attracted to red flowers.

20. _____ Birds especially like red flowers.

21. _____ Nighttime creatures such as bats are attracted to white flowers.

22. _____ Bees, butterflies, birds, and beetles look for pink, yellow, white, blue, and purple flowers.

23. _____ Colors are nature's way of separating the plants for different pollinators. The colors of the flowers will determine which pollinators find them.

24. _____ Flowers have nectar guides patterns on their petals to direct the pollinators to the nectar.

25. _____ Humans can see the nectar guides on all flowers.

26. _____ Any pollinator can extract nectar from a flower.

27. _____ A "moon garden" has predominately white flowers.

Qualifying as a Certified Pollinator Garden

A pollinator garden must have at least 6 plants that support caterpillars or butterflies, flowering plants for different seasons, host plants, a water source, shelter to make the pollinators feel safe, and reflect conservation practices.

(Note: The following is for teaching purposes only and does not represent a valid or complete application.)

Directions:
List six plants and the butterfly/caterpillar that the plant supports that you could put in your pollinator garden. One of your six plants must include butterfly milkweed plants to support the monarch butterflies and caterpillar (already listed):

Plants to support caterpillars & Butterflies:

(Go to www.monarchsacrossga.org/documents/GWFhostplants.pdf for a list.)

	Name of Plant	Butterfly or Caterpillar it Supports
1.	Milkweed plants	Monarch butterflies/caterpillars
2.	_____	_____
3.	_____	_____ _____
4.	_____	_____ _____
5.	_____	_____
6.	_____	_____

Pollinator gardens support pollinators through spring, summer, and fall with an array of plants that provide nectar plants during these seasons.
(Go to http://www.monarchwatch.org/garden/nectar.htm for a list of plants by seasons)

List four plants that bloom in the spring:
1.
2.

3.
4.

List four plants that bloom in the summer:
1.
2.
3.
4.

List four plants that bloom in the fall:
1.
2.
3.
4.

Butterflies will only lay their eggs on the plant that their young caterpillars will eat. These plants are necessary for survival of the species and are called *host plants*. Host plants are very important for pollinator gardens. (Go to http://www.monarchwatch.org/garden/bfly.htm for a list.)
Name 5 host plants you could have in your garden.
1.
2.
3.
4.
5.

Water or Puddling Source:

Pollinators like a water source. What could you put in your garden for a water or puddling source for the butterflies and other pollinators?

_____

Basking Site: What could serve as a basking site in your garden? (A basking site is an area where the pollinators could rest in the direct rays of the sun.)

_____

_____

Shelter:
What types of cover or shelter could pollinators find on your property to protect them from weather, predators, or human activity?

____ Dense shrubs ____ Evergreens ____ Brush piles
____ Log piles ____ Ground covers

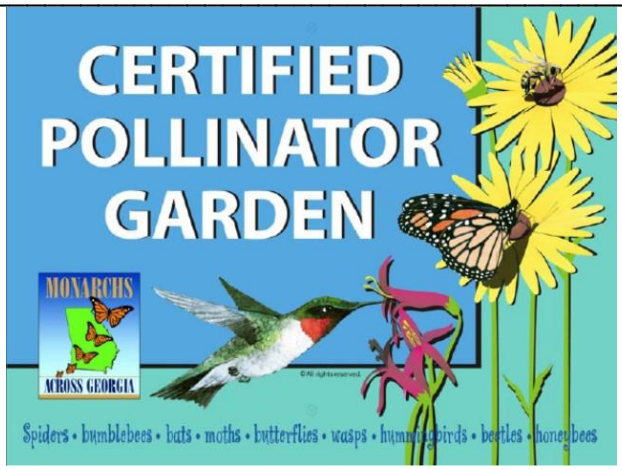
Conservation Practices: List four practices that you would use to conserve water, enhance the soil, and prevent problem-prone plants.

_____

_____

_____

_____



Pollinators and Colors

Take a close look at this sign that was designed by an artist at the Fernbank Science Center. In order to qualify for the designation of certified pollinator garden, one has to show evidence of providing for the needs of pollinators in a garden. This sign offers a lot of clues as to what a pollinator garden needs.

Look at the sign first to determine some of the many pollinators that exist. List the pollinators shown on the sign:

1.
2.
3.
4.
5.
6.
7.
8.
9.

Pollinators and plants co-evolved over time to share resources and work together.

10. What is the shape of the flower or petals that hummingbirds need?

11. What is the shape of the flowers or petals that the butterflies need?

12. Notice the color of the flowers in the sign. What color attracts hummingbirds?

13. What is the bee doing on the yellow flower?

14. **Why are the monarch butterflies shown flying over Georgia on the sign?**