



Butterflies

PURPOSE

The purpose of this program is to educate Girl Scouts about the types of butterflies, their life cycle, and migration habits.



LEGACY

This program was developed by Port St. Lucie Junior Troop 30331 to help reestablish butterfly populations devastated during the hurricanes of 2004.

GIRL SCOUT LEVELS / REQUIREMENTS

To earn the Butterflies patch, Girl Scouts need to complete a Take Action Project along with the following requirements. They are encouraged to complete at least one activity from each section: Discover and Connect.

- Daisy Girl Scouts: any 3 activities, (including activity #2)
- Brownie Girl Scouts: any 4 activities, (including activity #2)
- Junior Girl Scouts: any 6 activities, (including activities #2, #3 and #6)
- Cadette, Senior and Ambassador Girl Scouts: any 7 activities, (including activities #2, #3, #6 and #8)

Please review the Girl Scout Internet Safety Pledge for All Girl Scouts.

RESOURCES

- How to Feed Your Caterpillars and Butterflies
 - Nectar can be made by combining 4 parts water with 1 part
 white sugar. Boil the solution until the sugar is completely
 dissolved. Allow to cool. Place sugar solution to nectar feeder.
 Clean the feeder and replace sugar solution every day to
 prevent unwanted bacteria from forming. Extra solution can
 be stored in the refrigerator for up to a week.
 - Another option is to saturate a sponge with the sugar solution but be sure again, to rinse the sponge thoroughly and replace the solution every day.



- Plants for Your Butterfly Garden
 - Host Plants Malva (A weed), Milkweed, Mallow, Sunflower, Passion vine, Ruellia, Parsley, Plumbago, Anise or Fennel, Hollyhock
 - Nectar Plants Lantana, Daisy, Pentas, Porter weed, Butterfly bush or Buddleia, Passion vine
- Useful resources can be discovered online or by visiting your local county library or garden centers. Some resources to get you started are below.
 - o Monarchs and Migration
 - o Butterflies and Moths of North America
 - o Grow a Butterfly Garden
- Butterfly Centers in Florida
 - o <u>Butterfly World</u> Coconut Creek
 - o Cypress Gardens at LEGOLAND Winter Haven

ACTIVITIES

DISCOVER

- ACTIVITY #1: What is a Butterfly?
 Find out more about butterflies by answering the questions below.
 - o What is a butterfly?
 - o Can a butterfly smell? How does a butterfly eat?
 - How many butterfly species are located in Florida? In North America? In the world?
 - $\circ\quad$ What is the official state butterfly for your state?
 - o What is the difference between a butterfly and a moth?
- ACTIVITY #2: Life Cycle Study
 Learn about the life cycle of the butterfly. Begin with the courtship,
 and then continue with mating, egg laying, caterpillar stage, pupae
 stage and finally, their emergence as a beautiful butterfly!
- ACTIVITY #3: Monarch Migration
 Every year millions of Monarch butterflies fly up to 2,200 miles to
 their wintering grounds in Mexico. Environmental problems
 throughout the Monarch's vast range have turned this wondrous
 passage into an endangered biological phenomenon.
 - Find out about the migration of the Monarch! For more information, visit:





www.nhptv.org/wild/monarch.asp https://journeynorth.org/monarchs www.monarch-butterfly.com

- ACTIVITY #4: Colorful Butterfly Wings
 Discover what makes up the color patterns of butterflies' wings. Why
 do butterflies have such vibrant colors and patterns?
- ACTIVITY #5: Endangered! Learn the names of the endangered butterflies in Florida. Try to find a picture of each. Discover what is being done to help protect these butterflies. Have a discussion about what people can do to help.

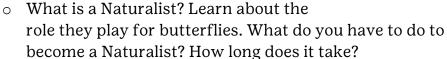
CONNECT

- ACTIVITY #6: Butterfly Gardens
 Design a Butterfly Garden to attract butterflies.
 - Visit your local garden center or online for guidance for types of plants for the garden to attract butterflies. Some ideas are Milkweed, Passion vine, Cassias and White vine. Some other nectar flowers are Mexican Flame, Pagoda Flower and Pentas.
 - What is the difference between a Host plant and a Nectar plant? Flowers will produce nectar and plants can host space for egg laying. You could also place a nectar feeder or other lawn ornaments in your garden and/or relaxing sitting areas.
- ACTIVITY #7: Color and Label a Butterfly Draw and color a butterfly native to Florida, (numerous butterfly color pages can be downloaded for free online). Label the parts of the butterfly.
 - Examples are the Monarch, Zebra Longwing, Queen, Julia, Giant Swallowtail, or the endangered Miami Blue.

Then, using a Field Guide as a reference, compare two or more of the butterflies. How are they same? How are they different?

- ACTIVITY #8: Learn About the Scientists Who Work with Butterflies & Visit a Butterfly Center
 - What is a Lepidopterist? Learn about the role they play for butterflies. What do you have to do to become a Lepidopterist? How long does it take?





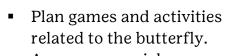
- Visit a butterfly center. See first-hand the breathtaking beauty of a butterfly and its whole life cycle.
- ACTIVITY #9: Butterfly Habitat
 Construct a cage for caterpillars. Remember to supply them with
 plenty of room to move, appropriate food and lots of air circulation.
 Don't leave your cage in the hot sun.
 - You can purchase caterpillars to raise online at retailers like Amazon.
 - Keep a journal of the changes you may see. Release the butterflies once they emerge.

TAKE ACTION

Share what you've discovered while doing this program by completing a Take Action Project. Some suggestions are listed below:

- Plant a Butterfly Garden
 - Design, plant and maintain a Butterfly Garden to attract butterflies for your school, church, nursing home or other locations in your community.
- Write or Tell a Story
 - Daisy and Brownie Girl Scouts Listen to a story about butterflies, and if possible, share that story with other children. Write and/or draw your own story about butterflies and display your work at your local library, school, church, or other community location.
 - Junior Girl Scouts Write a poem or story, factual or "makebelieve", about butterflies. Display your work at your local library, school, church, or other community location.
- Plan a Butterfly Celebration
 - Host a table at a community event or plan a butterfly event for your community.
 - Provide information to educate others about the butterfly and their importance.
 - Make a poster to advertise the endangered butterflies and how we can help.





Arrange a special ceremony to release butterflies.

• Be a Citizen Scientist

 Help Monarchs by reporting your sightings and tracking migration. For more information, visit https://journeynorth.org/monarchs

• Your Choice

 Any other activity that you can create that educate others in your community on butterflies.