

Friends of NCTC Program Activity

Butterflies!

(ages 5-10; can be adapted to older children)

Butterflies are a common sight in the summer! Learn more about them and plant a butterfly garden.

Background

Butterflies come in an array of colors and size. They are found all over the world and recognized globally for their beauty. The largest butterfly in the world is the Queen Alexandra's Birdwing Butterfly (almost 10") that lives in New Guinea. The smallest butterfly is the Western Pygmy Blue Butterfly (½") that lives in the western United States.

Butterflies are insects. All insects are defined by having 6 legs and 3 body parts (head, thorax, abdomen). Butterflies also have antennae, wings, and an exoskeleton. Caterpillars, like their adult versions, are considered insects. That means that they only have 6 legs (attached to the thorax). The other "legs" are actually pseudo-legs.

Butterflies are like moths but have key differences. Moths have fuzzy antenna, an extra wing section, and are active at night whereas butterflies have thin antenna and are active during the day. When resting, butterflies close their wings high above their backs, but can't fold them. Moths fold their wings down on top of their backs when resting. Butterflies usually have long slender bodies. Moths have fat, often fuzzy bodies. Although there are differences between the two, they do share some similarities. Both butterflies and moths go through metamorphosis. That means they go through these stages: egg, caterpillar, chrysalis (butterfly) or cocoon (moth), and adult.

Butterflies use different strategies to survive in nature. Butterflies cannot bite although some caterpillars sting as a defensive tactic. They use barbed spines or hairs, that are easy to see, to sting. Butterflies can glide (not flap their wings) to save energy. Butterflies must have a body temperature of 81°F before they can fly. Some butterflies, migrate to avoid cold weather. Can you think of any examples of butterflies that do this? The most well-known migratory butterfly is the Monarch. Other examples include the Cloudless Sulphur, Painted Lady, Red Admiral, and different types of Skippers. All of these species are native to West Virginia. When migrating, butterflies can fly up to 250 miles a day, usually with the help of the wind. Another strategy butterflies will use is mimicry. Mimicry is when a species looks like another, more dangerous species, to avoid predators. Some butterflies, such as the Viceroy (nontoxic) use their color as a strategy to avoid predators by mimicking the appearance of the Monarch Butterfly (toxic). Interestingly, some species of butterfly also use coloration to differentiate sexes. You can tell if the Cabbage White Butterfly (a common West Virginia species) is a male or female by the dots on its wings—1 for males and 2 for females.

Butterflies are fascinating insects. We hope that you will enjoy these activities dedicated to them.

What You Will Need for These Activities

Butterfly outline (see below) Crayons or colored pencils Bandana
Echinacea, Aster, or Coreopsis seeds (available at garden stores in the spring)

What to Do

Camo Butterflies: Color the butterfly shape (below). (Kids can copy a real butterfly or use their imagination.) Cut out the shape. The challenge is to take the image and find a place where the butterfly could blend in (the room or outside). Remind kids that they are not trying to "hide" the butterfly, but find a place where it is hard to see because it is the same color as the things around it.

Egg, Caterpillar, Butterfly Game (Works best with a group): This game uses "rock, paper, scissors" (RPS) as the basis. Everyone starts as an egg (crouched down). Two "eggs" play RPS. The winner becomes a caterpillar (crawling) and begins looking for another caterpillar to play RPS against. The loser stays an egg and

looks for another egg to play RPS. After the caterpillar wins a RPS, they become a chrysalis (stand up) and can find another chrysalis to play against. Once they finally become a Butterfly, they can extend their arms and fly about.

Butterfly Migration Challenge (Works best with a group): (Based on the 1-2-3 Red Light game) The “Bird” stands with their back to the Butterflies who are at the baseline about 30’ away. The Bird has a bandana hanging down from their back pocket. The Bird counts “1-2-3, food for me” with their back turned, then quickly turns to face the Butterflies. The Butterflies move toward the Bird while his back is turned. Any Butterflies that the Bird sees moving go back to the baseline and start over. The first Butterfly to take the bandana out of the Bird’s pocket is the new Bird.

Plant a Butterfly Garden: Butterfly gardens can grow in a small (6-8” pot) or larger areas in a yard. Easily grown flowers that attract butterflies are Echinacea, Aster, and Coreopsis. Add dirt to the pot then place a flower seed or two on top of the dirt and lightly cover with soil. (Seeds do not like to be buried very deep.) Water the dirt lightly and place the pots near a window. The seeds will need to be watered when the top of the soil begins to dry out. When plants are large enough, they can be transferred outside. Feel free to send us photos of your garden.

Helpful Hints for Adults
(books to read, other websites, links)

“Waiting For Wings” (Lois Ehlert, ages 4-6)

“Hurry and the Monarch” (Antoine O Flatharta, good for any age, but especially ages 5-10))

“Butterfly Count” (Sneed Collard, ages 5-8)

Monarch Websites www.monarchwatch.org or journeynorth.org



