**Handle with Care: an Unusual Butterfly Journey**

**AUTHOR:** Loree Griffin Burns  
**PUBLISHER:** Millbrook Press  
**COPYRIGHT DATE:** 2014  
**GENRE:** Nonfiction, Informational Text  
**LEXILE:** 850

**SUMMARY:**  
Butterflies grow in a four-stage life cycle. At El Bosque Nuevo in Costa Rica, farmers raise butterflies to send to museums and other places that teach people about the life cycle of butterflies. This book teaches us how El Bosque Nuevo raises butterflies and about the life cycle of butterflies.

**BOOKTALK:**  
Have you ever noticed a butterfly flying through the air on a sunny summer afternoon? Have you ever been to a museum or a zoo that has a butterfly area? El Bosque Nuevo is a farm in Costa Rica that raises butterflies to send to places like museums and zoos so that we can learn more about the magical life cycle of butterflies. Read this book to discover the delicate and amazing process that the farmers at El Bosque Nuevo use to raise butterflies through the chrysalis stage and deliver them to museums and zoos for us to enjoy and learn from.

**AUTHOR’S NAME:** Loree Griffin Burns  
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**Other books written by the author:**  
*Tracking Trash*  
*The Hive Detectives*  
*Citizen Scientists*  
*Beetle Busters*

**CHALLENGING WORDS**

larva (p. 5) *noun*—the worm-like stage of an insect’s life after it has hatched from an egg (a caterpillar is an example)

pupa (p. 5) *noun*—the stage of an insect between the larva and adult stages; this stage usually occurs in a case-like form and is a time when the insect changes from the larva (worm-like stage, like a caterpillar) into the adult form of the insect (like a butterfly)

chrysalis (p. 6) *noun*—the specific name for the pupa stage of a butterfly
ingenious (p. 6) adjective--very clever or original

greenhouse (p. 9) noun--a glassed or screened in room (including the walls and roof) that is usually used for raising plants

exoskeleton (p. 12) noun--the hard protective layer on the outside of an insect’s body

molting (p. 12) verb--to shed skin or outer covering that will be replaced by a new layer of skin or outer covering

stranded (p. 12) adjective--left alone with no way to escape

interior (p. 20) noun--inside

destination (p. 25) noun--the end of a journey or the place that something is sent

**DISCUSSION QUESTIONS:**

1. What are some types of butterflies you know?
2. What are some other insects that go through a four-stage life cycle?
3. What do you think is the most interesting stage of a butterfly’s life cycle?
4. We cannot see inside the chrysalis. Describe what you think the caterpillar is doing. How do you think a caterpillar changes into a butterfly?
5. Which job at El Bosque Nuevo do you think would be the most interesting?
6. What do you think you could do to attract more butterflies to the yard at your home or school?

**ACTIVITIES WITH STANDARDS:**

**Language Arts:**

- Butterflies are not the only insects that have a four-stage life cycle. Research at least one more insect with a four-stage life cycle, using print and digital resources. Then, use words and illustrations/photographs to clearly communicate the similarities and differences between the life cycles of these insects.

**CCSS.ELA-Literacy.RI.4.3**

Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

**CCSS.ELA-Literacy.RI.4.9**

Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

**CCSS.ELA-Literacy.RI.5.7**

Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem
efficiently.

**CCSS.ELA-Literacy.RI.6.7**
Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

**Mathematics:**

- Purchase a live butterfly garden. (There are a few companies that will sell kits that include a habitat and live caterpillars to “raise” to adulthood.) Observe and collect data about the caterpillars, chrysalises, and adults: their length over time, the amount of time they are caterpillars before forming chrysalises, the amount of time they are chrysalises, the length and width of the butterflies once they hatch, etc. Make a graph or chart to clearly communicate the collected data.

  **CCSS.Math.Content.4.MD.B.4**
  Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

  **CCSS.Math.Content.6.SP.B.5**
  Summarize numerical data sets in relation to their context.

**Science:**

- Many kinds of butterflies eat and/or lay their eggs on specific plants. Research examples of these and discuss what would happen if these kinds of plants were eliminated from an environment. Also, research butterflies that are native to your area and the kinds of plants they depend on. Make a plan to plant these kinds of plants at home or at school.

  **4.2.6** Describe ways in which humans have changed the natural environment. Explain if these changes have been detrimental or beneficial.

  **4.3.4** Describe a way that a given plant or animal might adapt to a change arising from a human or non-human impact on its environment.

  **6.3.1** Describe specific relationships (i.e., predator and prey, consumer and producer, and parasite and host) between organisms and determine whether these relationships are competitive or mutually beneficial.

  **6.3.2** Describe how changes caused by organisms in the habitat where they live can be beneficial or detrimental to themselves or to native plants and animals.
Social Studies:

- Research the relationship between Indiana or the United States and Costa Rica. What are some goods that we export to them and some goods that we import from them? Are there any cultural exchanges between your state or town and Costa Rica?

4.3.11 Examine Indiana's international relationships with states and regions in other parts of the world.

- Research the major physical and cultural characteristics, the climate regions, and the biomes of Costa Rica. Compare and contrast these with the physical and cultural characteristics, the climate regions, and the biomes of the United States.

6.3.3 Describe and compare major physical characteristics of regions in Europe and the Americas.

6.3.4 Describe and compare major cultural characteristics of regions in Europe and the Western Hemisphere.

6.3.7 Locate and describe the climate regions of Europe and the Americas and explain how and why they differ.

6.3.8 Identify major biomes of Europe and the Americas and explain how these are influenced by climate.

Others:

- Visit the White River Gardens’ butterfly garden and/or exhibit in Indianapolis (or visit a similar exhibit close to your house/school) to learn about and observe various kinds of butterflies and plant sources that attract butterflies that are native to Indiana. Visitors can see the chrysalises in the screened cabinets as they are in the book.

RELATED INTERNET SITES:

Insect Lore (one resource for live butterfly gardens)

White River Gardens in Indianapolis
There are a few additional websites listed at the back of the book that would be good for further information.

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