



In the Spotlight

Grades
K-2, 3-5

by | Carol S. Surges

Summer Birds: The Butterflies of Maria Merian
by Margarita Engle. Henry Holt, 2010.

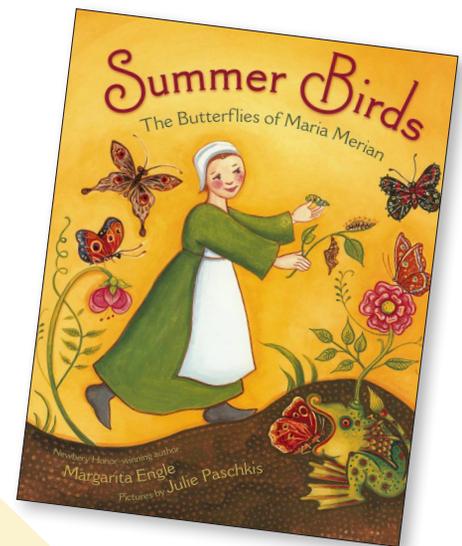
When Butterflies Were Birds

In *Summer Birds: The Butterflies of Maria Merian*, Margarita Engle writes about thirteen year-old Maria Sibylla Merian, a girl fascinated with butterflies—or the “birds of summer,” as butterflies were known in the 1600s. Maria studies butterflies surreptitiously, catching the mysterious creatures and observing their secrets, knowing that her neighbors would think she was a witch if they found out. The book alludes to Maria’s life’s work as she dreams about traveling to faraway lands and publishing books to share her discoveries with the world. An author’s note adds context and more details about Maria’s life.

Julie Paschkis’ beautifully rendered illustrations depict Maria as she collects, observes, and paints the colorful insects. Vivid colors and patterns, swirling lines, and insects and amphibians with intriguing faces all evoke the artistic styles and culture of Maria Merian’s time.

More about Maria Merian

Back in the day when people believed that mice grew from dirty underwear and maggots sprang from meat, Maria Sibylla Merian broke social taboos. She studied insects. In doing so she risked her reputation and maybe more (her hobby was considered witchcraft), but the beautiful butterflies living near her home in 17th century Germany were too irresistible. Maria was both an artist and a budding naturalist, drawn to both beauty and truth. In the process of collecting and caring for these delicate beauties, she began to notice their changing life forms, and she documented them in her artwork.



Maria Sybilla Merian had the good fortune to be born into a family of artists. Her father was a printmaker who gave her access to the training and tools of an artist. When her father died, her mother married another craftsman who recognized Maria’s talent and took her under his wing, continuing her training in the arts of painting and printing.

As she got older, her fascination with insects persisted. Merian’s portrayal of their life cycles, often alongside the plants they inhabited, was groundbreaking and has been noted as the earliest ecological compositions. After she married, she published books of floral arrangements (with insects) meant as patterns for embroidery, a popular pastime for women in the 1600s. In 1699, long after her marriage had ended, she traveled with an adult daughter to Suriname, an unheard of and extremely difficult undertaking for unaccompanied women, particularly at Maria’s age of 52. There she collected, painted and returned to Europe with enough material for two more self-published books.

In the Spotlight

It was these final works that sealed her lasting impact on the world of biology and art. The accuracy and content of her artwork caught the attention of scientists including Carolus Linnaeus, who led the development of a system for classifying plants and animals that is still used today. Maria was ahead of her time in many ways, but she is best known for her beautifully rendered compositions. Most of her work from Suriname was purchased by the Russian tsar Peter the Great, and given to the Academy of Science in Russia when he died in 1725.

Online Resources: Curriculum Connections

Science

Every elementary science curriculum includes insects and their unique life cycles. *Summer Birds* will provide a wonderful introduction to the study of metamorphosis. For a visual representation to the common beliefs during Maria's childhood, you may want to share this depiction of spontaneous generation: <http://www.youtube.com/watch?v=WNByRghR6sw>

The shift from a belief in the spontaneous generation of life to the current Law of Biogenesis (which states that life comes from previously existing life) took nearly a century and was finally put to rest by Louis Pasteur in 1859 when he proved that microorganisms reproduced.

Although the information at the following sites is probably too advanced for young students, share the visual representations of the experiments used by scientists like Pasteur to refute the old beliefs.

- <http://biology.clc.uc.edu/courses/bio114/spontgen.htm>
- http://www.microbiologytext.com/index.php?module=Book&func=displayarticle&art_id=27

Scientific Illustration

- There have been many technological advances since Maria Sibylla Merian's time, yet illustrations of the natural world remain a very important part of the scientific record. Two illustrators at the Smithsonian's National

Museum of Natural History share their work process in a fascinating video at <http://www.youtube.com/watch?v=KYloTy-2rYc>

History and Visual Arts

For more information on Maria Sibylla Merian (1647–1717) and her work, visit these sites with students:

- Visuals from her works and further historical information are included at <http://www.getty.edu/art/exhibitions/merian/>
- For more examples of her work, including the commemorative U. S. postage stamps from the 1990s, visit http://www.morning-earth.org/ARTISTNATURALISTS/AN_Merian.html
- Larger prints can be found at the image gallery on this site: http://www.audubonart.com/01_MER26bio_01.asp

Print Resources

There are numerous books about metamorphosis. You'll easily find many that focus on frog and butterfly life cycles, but books that feature insects' life cycles are not as readily available. Try these for starters. They're arranged from easiest to most difficult:

- *Bug Babies* (from Comparing Bugs series) by Charlotte Guillain. Heinemann Library, 2010.
- *Lives of Insects* (from Six Legged World) by Lynn M. Stone. Rourke Book Company, 2001.
- *The Life Cycle of Insects* (From Egg to Adult series) by Richard and Louise Spilsbury. Heinemann Library, 2003.

Note: An excellent biography for adults *Chrysalis: Maria Sibylla Merian and the Secrets of Metamorphosis* by Kim Todd. Harcourt, 2007, can be found in most public libraries.

❖ ❖ ❖

Carol S. Surges has been a Library Media Specialist for more than fifteen years. She currently works at McKinley Elementary School in Wauwatosa, Wisconsin. In her spare time she also writes book reviews for LMC and School Library Journal. You can contact her at surgesca@wauwatosa.k12.wi.us.

Writer: Margarita Engle

Summer Birds is a departure from Margarita Engle's usual work. She was first published only five years ago and her five novels, to date, are written in free verse for young adults. A two-time winner of the Pura Belpré Award, and the 2009 recipient of the Newbery Honor award, she studied agronomy and botany in college and was the first woman agronomy professor at Cal Poly Pomona. Her life plan changed course when she took a creative writing seminar from Tomás Rivera. Fortunately for her readers, she found her new calling writing poetry and books for young people.

For more information and curricular links to Engle's YA novels and poetry, look for articles in the January 2010 and 2011 issues of *Book Links* an ancillary publication of *Booklist*.

Other books by Margarita Engle:

- *The Firefly Letters: a Suffragette's Journey to Cuba*. Henry Holt, 2010.
- *Hurricane Dancers: the First Caribbean Pirate Shipwreck*. Henry Holt, 2011.
- *The Poet Slave of Cuba: A Biography of Juan Francisco Manzano*. Henry Holt, 2007.
- *The Surrender Tree: Poems of Cuba's Struggle for Freedom*. Henry Holt, 2008. (2009 Newbery Honor book.)
- *Tropical Secrets, Holocaust Refugees in Cuba*. Henry Holt, 2009.

**Illustrator: Julie Paschkis**

Julie Paschkis graduated from The School for American Craftsman in RIT. Her vivid work includes posters, paints, cut paper, textiles and since 1993, picture books. Other books illustrated by Julie Paschkis:

- *Building on Nature: The Life of Gaudi* by Rachel Rodriguez. Henry Holt, 2009.
- *Glass Slipper, Gold Sandal: A Worldwide Cinderella* by Paul Fleischman. Henry Holt, 2008.
- *Pablo Nerudo: Poet of the People* by Monica Brown. Henry Holt, 2011.
- *Through Georgia's Eyes* by Rachel Victoria Rodriguez. Henry Holt, 2006.
- *Yellow Elephant: A Bright Bestiary* by Julie Larios. Harcourt, 2006. Boston-Globe honor book.

Her entire list of publications can be found at: <http://www.juliepaschkis.com/index.html>