



Butterfly for a King: Saving Hawai'i's Kamehameha Butterflies

written by Susan L. Roth and Cindy Trumbore collages by Susan L. Roth

## **About the Book**

**Genre:** Juvenile Nonfiction

**Format:** Hardcover, \$20.95 48 pages, 9" W | 10-3/4" H

**ISBN:** 9781620149713

Reading Level: Grade 4

Interest Level: Grades K-6

**Guided Reading Level:** R

**Accelerated Reader® Level/Points:** 

N/A

Lexile™ Measure: N/A

\*Reading level based on the ATOS Readability Formula

**Themes:** Animal/Biodiversity/Plant Adaptations, Animals, Collaboration, Environment/Nature, Human Impact on Environment/Environmental Sustainability/Citizen Scientists, Kindness/Caring, Nature/Science, Nonfiction, Responsibility

#### Resources on the web:

leeandlow.com/books/butterfly-for-a-king

All guided reading level placements may vary and are subject to revision. Teachers may adjust the assigned levels in accordance with their own evaluations.

## **SYNOPSIS**

The beautiful Kamehameha butterfly lives in Hawaii and nowhere else on Earth. Named to honor the great king who united the Hawaiian Islands, the insect is one of only two butterfly species native to Hawaii.

After the Kamehameha butterfly became the state insect—thanks to a group of fifth graders--people noticed that the butterflies were disappearing. So a team of dedicated professional and citizen scientists began working together to restore the butterfly's natural habitat and reintroduce butterflies in places where they were once found.

From the Sibert Medal-winning team that created *Parrots Over Puerto Rico* comes another nature adventure. Discover the captivating story of the Kamehameha butterfly and the people from all around Hawai'i who are helping it survive.

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## **BACKGROUND**

### **Afterword from Co-authors Susan L. Roth and Cindy Trumbore**

"Hawai'i has eight main islands and many smaller ones that together stretch about 1,500 miles (2,414 kilometers) across the Pacific Ocean. Scientists once thought the islands were settled over hundreds of years, starting sometime between the years 300 and 600. More recent research suggests that the islands were settled later and in a shorter time period: between about 1219 and 1266.

The first people to reach the islands traveled in canoes from islands in West Polynesia thousands of miles away. Several different kingdoms existed across the chain until King Kamehameha (ca. 1758–1819) unified the islands into a single kingdom in 1810. His reign is celebrated every June 11 in Hawai'i as a state holiday featuring parades and ceremonies. Statues of the king are decorated with colorful wreaths of flowers called lei.

In the Kumulipo, the sacred Hawaiian creation chant that tells how life began on the islands, the butterfly is one of the first creatures named. The Kumulipo includes these lines about the Pe'elua (caterpillar):

The Pe'elua was born and became parent; Its offspring was a flying Pulelehua.

Ancestors of the Kamehameha butterfly arrived in Hawai'i millions of years ago. The butterfly was first described by scientist Johann Friedrich von Eschscholtz in 1821. Its scientific name is *Vanessa tameamea*.

The fifth-grade students who asked to have the butterfly named the state insect of Hawai'i in 2009 attended Pearl Ridge Elementary School on the island of O'ahu. They said the butterfly represented the beauty and history of their islands and the unity among them.

There are millions of species of insects in the world, and they are disappearing from Earth at an alarming rate. Climate change, habitat loss, the introduction of non-native predators, and the use of pesticides all contribute to declines of insect species; and when insects disappear, the animals that eat them and the plants they pollinate also suffer. Some of these conditions contributed to the decline of the Kamehameha butterfly, the first Hawaiian insect to be the subject of a captive breeding and reintroduction program.

Hawai'i's Department of Land and Natural Resources (DLNR), which protects and preserves the state's incredible range of insects, plants, and animals, provided the funding for the Pulelehua Project. The DLNR's Division of Forestry and Wildlife includes a program that studies Hawai'i's invertebrates, animals that do not have backbones, including all insects. Cynthia B. King, who coordinates the state's Hawai'i Invertebrate Program, approached entomologist Dr. Will Haines to lead the reintroduction efforts for the Kamehameha butterfly. The project now has a dedicated insectary for breeding the butterflies and other rare insects.



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The project also uses a software program to analyze data and create a distribution map. The map shows where Kamehameha butterflies have been seen. It also indicates the places in Hawai'i that have living conditions—plants, temperatures, sunshine, rainfall, and other resources—the butterflies need to survive. With this information, scientists can pinpoint areas where reintroductions are most likely to be successful. Scientists count a release a success if afterward they spot butterflies and caterpillars in a native habitat where the insects had once disappeared.

As the project continues, the scientists try new techniques to help the butterflies survive and reproduce. The Honolulu Zoo has its own population of Kamehameha butterflies, and the scientists learn from the work done at the zoo too.

The Pulelehua Project still relies on citizen scientists for sightings of the Kamehameha butterfly in all stages of its life cycle. If you live in or visit Hawai'i and spot a Kamehameha butterfly, caterpillar, egg, or chrysalis, you can become part of the project by taking a photo. Add a description of the sighting location and the date, and then visit the Pulelehua Project webpage (https://www.inaturalist.org/projects/pulelehua-project) for information about how to submit your photo.

Mahalo-thank you!"

#### Illustartor's Note from Susan L. Roth

I have been completely humbled by the Kamehameha butterfly: by its beauty and its precision and its intricacies.

This is how I made the butterflies for the pages of this book. I started by assembling the following: two very good color photographs of the Kamehameha butterfly (one female, one male); two pairs of sharp scissors (one very small with thin, slightly curved blades and one a little bit larger with pointy, straight blades); one pair of sharp, pointy tweezers with tips that meet precisely; colored papers (black, orange, white, and brownish-orange); and double-sided adhesive tape. Then I studied the photographs for all the details they provided. After that I very carefully cut out the shapes I needed in each color and arranged them to form butterflies. Last, I used the adhesive tape to stick the cut pieces of colored papers together. KAMEHAMEHA BUTTERFLIES!

It is with amazement and in total awe of the real butterflies that I ask you to accept my images as pretty close representations. But if you want to see these beautiful butterflies as they really are, you'll just have to visit them in Hawai'i!

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## **BEFORE READING**

### **Prereading Focus Questions**

(Reading Standards, Craft & Structure, Strand 5 and Integration of Knowledge & Ideas, Strand 7) (Speaking & Listening Standards, Comprehension & Collaboration, Strands 1 and 2)

Before introducing this book to students, you may wish to develop background knowledge and promote anticipation by posing questions such as the following:

- What do you know about butterflies? Where do they live? What do they eat?
- Sometimes animal species start to disappear from places they have always lived. What are some of the reasons why this happens? How can people protect animals and the places where they live? Why do scientists work hard to protect and manage different species of animals?
- Locate Hawai'i on a map. What kinds of plants and animals do you think live there?

### **Exploring the Book**

(Reading Standards, Key Ideas & Details, Strand 1; Craft & Structure, Strand 5; and Integration of Knowledge & Ideas, Strand 7) (Speaking & Listening Standards, Comprehension & Collaboration, Strands 1 and 2)

- Book Title Exploration: Talk about the title of the book, *Butterfly for a King: Saving Hawai'i's Kamehameha Butterflies*. Then ask students what they think this book will most likely be about and whom the book might be about. What do they think might happen? What information do they think they might learn? What makes them think that?
- Read Cindy Trumbore's Biography: Read about Cindy Trumbore on the jacket back flap as well as on her website (http://cindykane.net/). Where do you think Cindy Trumbore gets ideas for her books? How do you think she gets inspired for her books?
- Read Susan L. Roth's Biography: Read about Susan L. Roth on the jacket back flap as well as on her website (http://susanlroth.com/). Susan L. Roth co-wrote the book with Cindy Trumbore, and Susan also created the illustrations. How do you think she creates her collages? What kinds of materials do you think she uses?
- Encourage students to stop and jot in their reading notebooks during the read-aloud when they: learn new information, see a powerful image, have an emotional reaction or an idea, have a question, or hear new words.
- Have students quickly write a feeling in their notebooks during reading. After reading, ask students why they wrote down that feeling and have them write a journal entry about it.

## **Setting a Purpose for Reading**

(Reading Standards, Key Ideas & Details, Strands 1–3)

#### Have students read to find out:

- which butterfly is unique to Hawai'i and why
- how the Kamehameha butterfly became the state insect
- why the Hawaiian people came together to save the Kamehameha butterfly



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- how scientists and the Hawaiian community worked to preserve and help the Kamehameha butterfly population grow and survive
- the theme of the story
- how the title fits the theme of the story

Encourage students to consider why the authors and illustrator, Susan L. Roth and Cindy Trumbore, would want to share this story with young people.

## **VOCABULARY**

(Reading Standards, Craft & Structure, Strand 4) (Language Standards, Vocabulary Acquisition & Use, Strands 4–6) (Speaking & Listening Standards, Comprehension & Collaboration, Strands 1 and 2)

The story contains several content-specific and academic words and phrases that may be unfamiliar to students. Based on students' prior knowledge, review some or all of the vocabulary below. Encourage a variety of strategies to support students' vocabulary acquisition: look up and record word definitions from a dictionary, write the meaning of the word or phrase in their own words, draw a picture of the meaning of the word, create a specific action for each word, list synonyms and antonyms, and write a meaningful sentence that demonstrates the definition of the word. (Many of the Spanish words can be found in the book glossary, but there are also some that are not included. Students could be encouraged to create a log of these words—they will not be listed here.)

## **Content Specific**

caterpillar, Hawaiʻi, lava, Pacific Ocean, volcano, island, continent, kilometers, nectar, sap, koa tree, Halleyʻs Comet, King Kamehameha, pollinate, *aloha*, Hawaiʻi Department of Land and Natural Resources, University of Hawaiʻi, Pulelehua Project, *Pulelehua*, citizen scientists, māmaki, mandibles, chrysalis, proboscis, data, marsh, Oʻahu, Manoa Cliff Restoration Area

#### **Academic**

magnificent, spiny, residents, emerges, dangling, flexes, analyze, fulfilled

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## **AFTER READING**

#### **Discussion Questions**

After students have read the book, use these or similar questions to generate discussion, enhance comprehension, and develop appreciation for the content. Encourage students to refer to passages and/or illustrations in the book to support their responses. **To build skills in close reading of a text, students should cite textual evidence with their answers.** 

### **Literal Comprehension**

(Reading Standards, Key Ideas & Details, Strands 1-3)

(Speaking & Listening Standards, Comprehension & Collaboration, Strands 1-3 and Presentation of Knowledge & Ideas, Strand 4)

- **1.** How does the story begin?
- 2. What is lava? How did it form islands?
- **3.** How were plants able to grow on Hawai'i? What happened?
- **4.** How is the butterfly that was special to Hawai'i unique? What does it look like?
- 5. When was Halley's Comet first seen? What did people of the Hawaiian Islands say about it?
- **6.** Who is King Kamehameha and what was he like?
- 7. When did King Kamehameha rule in Hawai'i?
- **8.** Why was the special butterfly named after King Kamehameha?
- **9.** What happened in 2009?
- **10.** How did the students work together to propose that the Kamehameha butterfly should be the state insect?
- **11.** What did students tell Hawaiian lawmakers about the butterfly?
- **12.** How was the butterfly like sharing *aloha*?
- **13.** What did the lawmakers decide to do? What happened after?
- **14.** What did the Hawaiian residents realize about Kamehameha butterflies? What was happening to them?
- **15.** Who created the Pulelehua Project? What was its mission?
- **16.** What does pulelehua mean?
- **17.** What did the citizen scientists do to help the Pulelehua Project?
- **18.** How do Kamehameha butterflies lay eggs?
- **19.** For what did the citizen scientists look?
- **20.** Why are the caterpillars' shelters important?
- **21.** How do the caterpillars hatch and shed their skins?



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- **22.** When does the butterfly emerge from the caterpillar?
- 23. How do female Kamehameha butterflies differ from male Kamehameha butterflies?
- **24.** How were the project's scientists working to breed and reintroduce the Kamehameha butterflies? What different strategies did they use?
- **25.** How did the project's scientists analyze and present all the data that was collected?
- **26.** Where did the people from the Department of Land and Natural Resources take the butterflies? What did they continue to do?
- **27.** Why did scientists decide to release eggs in the wild instead of actual butterflies?

### **Extension/Higher Level Thinking**

(Reading Standards, Key Ideas & Details, Strands 2 and 3 and Craft & Structure, Strands 4 and 6) (Speaking & Listening Standards, Comprehension & Collaboration, Strands 1–3 and Presentation of Knowledge & Ideas, Strand 4)

- **1.** What does the title *Butterfly for a King: Saving Hawai'i's Kamehameha Butterflies* mean to you after reading the book? Why do you think the authors chose this particular title?
- 2. How is the process of saving the Kamehameha butterflies unique? How do the citizen scientists and project scientists work together to preserve and help the butterflies survive? How might these procedures be used as a model for other projects to help save endangered species?
- **3.** Why were the fifth-grade students critical to the Kamehameha butterflies' survival? What did they do to help protect the butterflies? How did they work with state lawmakers and the surrounding community to promote awareness about the butterflies? How is this critical to the future of the species?
- **4.** Why do you think the butterfly's name is important? How did King Kamehameha and his legacy inspire the naming of the butterfly?
- **5.** What impact do the citizen scientists have in the project? How do they demonstrate that the entire community, and not just the project's scientists, could contribute to the health and survival of the Kamehameha butterflies?
- **6.** What did you learn from the Pulelehua Project? How did their work and collaboration inspire you? What can you do differently after reading about the citizen scientists and project scientists and their dedication to helping the butterflies?
- **7.** How did plants and animals that came to Hawai'i from other places affect the Kamehameha butterflies? How did those external plants and animals threaten the butterflies' survival?
- **8.** How do butterflies, including the Kamehameha butterflies, help their environment? What would happen to the Hawaiian environment if the Kamehameha butterflies became extinct?
- **9.** Describe the Hawaiian environment. What makes Hawai'i different from other states in the United States? Why?
- **10.** What other animals do you know about that are disappearing from places where they always lived, such as endangered animals? How do you think scientists and communities can help keep them alive?



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**11.** Explore the structure of this text. Does the story describe events chronologically, as comparison, as cause-and-effect, or as problems and solutions? Why do you think the authors structured the text the way they did? How does this story compare to other texts you have read?

### **Reader's Response**

(Writing Standards, Text Types & Purposes, Strands 1–3 and Production & Distribution of Writing, Strands 4–6)

Use the following questions and writing activities to help students practice active reading and personalize their responses to the book. **Suggest that students respond in reader's response journals, essays, or oral discussion.** You may also want to set aside time for students to share and discuss their written work.

- 1. What is one big thought you have after reading this book? Think about the fifth-grade students in the story as well as the scientists. What is your takeaway from the book? What would you tell a friend about the book?
- **2.** What do you think is Susan L. Roth's and Cindy Trumbore's message to the reader? Think about possible motivations behind the authors' intentions for creating this book. What do you think they wanted to tell their readers?
- **3.** Have students make a text-to-self connection. What kinds of connections did you make from this book to your own life?
- **4.** Have students make a text-to-text connection. Did you think of any other books while you read *Butterfly for a King: Saving Hawai*'i's *Kamehameha Butterflies*? Why did you make those connections?
- **5.** Have students make a text-to-world connection. What kind of connections did you make between this book and what you have seen in the world, such as online, on television, or in a newspaper? Why did this book make you think of that?
- **6.** What does caring for animals mean to students after reading? After reading *Butterfly for a King: Saving Hawai'i's Kamehameha Butterflies*, how did your perspectives change about what it takes to maintain and preserve an animal species?
- **7.** What does community mean to you after reading this book? How did the Hawaiian community come together to help the butterflies? How can this model be used around the world?
- **8.** Describe a time when you or someone you know did something to take care of an animal or the environment. What was causing harm and how did you or the other person solve the problem? What can people do at home to help take care of the environment?
- **9.** Why is it important to learn about disappearing animal species and animal sanctuaries? How can we help animal species in the future?

## **ELL Teaching Activities**

(Speaking & Listening Standards, Comprehension & Collaboration, Strands 1–3 and Presentation of Knowledge & Ideas, Strands 4–6) (Language Standards, Vocabulary Acquisition & Use, Strands 4–6)



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These strategies might be helpful to use with students who are English Language Learners.

- 1. Assign ELL students to partner-read the story with strong English readers/speakers. Students can alternate reading between pages, repeat passages after one another, or listen to the more fluent reader. Alternatively, ELL students could read the larger text and strong English readers/ speakers, the smaller text.
- **2.** Have each student write three questions about the story. Then let students pair up and discuss the answers to the questions.
- **3.** Depending on students' level of English proficiency, after the first reading:
  - Review the illustrations in order and have students summarize what is happening on each page, first orally, then in writing.
  - Have students work in pairs to retell either the plot of the story or key details. Then ask students to write a short summary, synopsis, or opinion about what they have read.
- **4.** Have students give a short talk about the fifth graders and their quest to raise awareness about the plight of the Kamehameha butterflies.
- **5.** The book contains several content-specific and academic words that may be unfamiliar to students. Based on students' prior knowledge, review some or all of the vocabulary. Expose English Language Learners to multiple vocabulary strategies. Have students make predictions about word meanings, look up and record word definitions from a dictionary, write the meaning of the word or phrase in their own words, draw a picture of the meaning of the word, list synonyms and antonyms, create an action for each word, and write a meaningful sentence that demonstrates the definition of the word.

## Social and Emotional Learning

(Reading Standards, Key Ideas & Details, Strands 1-3 and Craft & Structure, Strands 4-6)
(Speaking & Listening Standards, Comprehension & Collaboration, Strands 1–3 and Presentation of Knowledge & Ideas, Strand 4)
(Writing Standards, Text Types & Purposes, Strands 1–2 and Production & Distribution of Writing, Strands 4–6)
(Language Standards, Vocabulary Acquisition & Use, Strands 6)

Social and emotional learning involves being aware of and regulating emotions for healthy development. In addition to understanding one's own feelings, strong socio-emotional development allows individuals to develop empathy for others and to establish and maintain relationships.

Use the following prompts to help students study the socio-emotional aspects of this book.

- **1.** How does the community, including the fifth graders, citizen scientists, and project scientists, demonstrate problem-solving in *Butterfly for a King: Saving Hawai'i's Kamehameha Butterflies*? What were some of the obstacles they came across and how did they come up with solutions?
- **2.** How do the butterflies reflect the concept of *aloha*? How is *aloha* important to the people of the Hawaiian Islands, and how do you think *aloha* relates to the butterflies? How can we spread *aloha* in our school and community?
- **3.** Choose an emotion that interests you: happiness, sadness, fear, anxiety, frustration, hope, perseverance, and so on. Illustrate or act out what that emotion looks like in *Butterfly for a*



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King: Saving Hawai'i's Kamehameha Butterflies.

## INTERDISCIPLINARY ACTIVITIES

(Introduction to the Standards, page 7: Students who are college and career ready must be able to build strong content knowledge, value evidence, and use technology and digital media strategically and capably)

Use some of the following activities to help students integrate their reading experiences with other curriculum areas. These can also be used for extension activities, for advanced readers, and for building a home-school connection.

### **English/Language Arts**

(RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.) (RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.) (RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.) (RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence). (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.) (RI.4.8 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.) (RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.). \*Please note that these standards apply to all Interdisciplinary Activities.

- Have students read other Lee & Low titles about animal conservation and preservation. These books include Parrots Over Puerto Rico (leeandlow.com/books/parrots-over-puerto-rico), Prairie Dog Song: The Key to Saving North America's Grasslands (leeandlow.com/books/prairie-dog-song), Puffling Patrol (leeandlow.com/books/puffling-patrol), and Everglades Forever: Restoring America's Great Wetland (leeandlow.com/books/everglades-forever). What do these areas of the world have in common? What are their differences? How do people work together to preserve the wildlife and environment? What are the obstacles they face to make sure the animals and the ecosystem are preserved? Have students write an essay about their findings.
- Ask students to read through the text as well as the Afterword of Butterfly for a
   King and to then create an informational poster about Kamehameha butterflies.
   Using information from the book and additional research, students can create posters using photographs, facts, diagrams, and informative captions. What does the Kamehameha butterfly look like? Where does it live? What does it eat? Students can share their posters with small groups, the whole class, or the school at large.
- The book has a poetic main idea sentence at the top of each spread and narrative prose in the main text at the bottom of each spread. How is each of these an example of nonfiction writing? Which type of writing do you think is more effective in explaining complex information? Which is more enjoyable to read? Which type helps a reader retain information better? Why do you think the authors, Cindy Trumbore and Susan L. Roth, chose to employ several nonfiction writing styles to present the history of the Kamehameha butterflies?
- Conduct a Cindy Trumbore and Susan L. Roth author and illustrator study with their other Lee & Low titles Parrots Over Puerto Rico (leeandlow.com/books/parrots-over-puerto-rico), Prairie Dog Song: The Key to Saving North America's Grasslands (leeandlow.com/books/prairie-dog-song), and The Mangrove Tree: Planting Trees to Feed



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**Families** (leeandlow.com/books/the-mangrove-tree). Make connections among the three texts. What themes do Cindy Trumbore's and Susan L. Roth's books have in common? How are the topics similar? How are they different? What do you think the authors' message is to their readers across all their books? What do you think their interests are? How are the illustrations the same and how do they vary across the four books?

- Have students write an essay answering the following questions: Do you think it is
  important for communities and governments to save threatened or endangered species? Why
  do you think so? What might happen if we don't promote children's education programs or
  create safe places for wildlife? Have students share their beliefs with a partner, a small group,
  or the whole class.
- **Encourage students to conduct more research on the meaning of** *aloha*. What does *aloha* mean? How is it important to Hawaiian people? How does the meaning of *aloha* relate to the quest to save the Kamehameha butterflies? Have students write a poem or another written reaction to *aloha* and what it might mean in their life. Students can also create posters to display in the classroom about *aloha* and how it relates to their classroom community. For additional information see this website: <a href="https://www.skylinehawaii.com/blog/the-meaning-of-aloha">https://www.skylinehawaii.com/blog/the-meaning-of-aloha</a>
- Provide students with the opportunity to explore the cause and-effect structure
  of the text. Students can create a graphic organizer with "cause" on the left-hand side and
  "effect" on the right-hand side. Have students start with the large-type text at the top of the
  spreads as a model. How does the text on each left-hand side affect the text on the right-hand
  side? What is the cause, and what is the effect? Then students can examine the additional
  details in the text at the bottom of the spreads for more details. Have students share their
  findings with a partner or small group.
- How was reading a picture book different from reading a newspaper article about Kamehameha butterflies? Have students read the article "Reviving the Kamehameha butterfly population at Tantalus" (http://www.manoanow.org/kaleo/news/reviving-the-kamehameha-butterfly-population-at-tantalus/article\_39134810-0a26-11e8-8b05-d318d2728572.html http://www.manoanow.org/kaleo/news/reviving-the-kamehameha-butterfly-population-at-tantalus/article\_3913). After reading, students can create a Venn Diagram with the headings "Picture Book Nonfiction: Butterfly for a King" and "Expository Nonfiction: 'Reviving the Kamehameha butterfly population.'" Students can compare and contrast the different formats of the texts and the information they learned in each.
- Tell students to imagine they will be interviewing members of the Pulelehua Project for a local newspaper or talk show. Ask students to develop a list of five interview questions they want to ask. What do they want to learn about the scientists' daily work, their interactions with the butterflies, and more? Lead a class discussion, creating a combined list of questions and then narrowing that list down to ten essential questions.
- Come up with questions to interview the authors and illustrator, Cindy Trumbore and Susan L. Roth. What was their process behind creating Butterfly for a King: Saving Hawai'i's Kamehameha Butterflies? What was their inspiration for writing the story about the Kamehameha butterflies? Read the Afterword and Illustrator's Note with students and have



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them discuss what they learned and how it made them think about the book differently. Why did you think they created this book for young readers? What was it like to collaborate on their other books? Consider reaching out to Cindy Trumbore and/or Susan L. Roth for a virtual author and or/illustrator visit (http://cindykane.net/) and (http://susanlroth.com/).

• Encourage students to watch the book trailer (https://www.youtube.com/watch?v=9vCdcJEGHy4&feature=youtu.be) for Butterfly for a King. If the necessary equipment is available at school or in students' homes, encourage students to record and edit their own book trailers for Butterfly for a King. For ideas, check out this Creating Reading Excitement with Book Trailers lesson plan (http://www.readwritethink.org/classroomresources/lesson-plans/book-report-alternativecreating-c-30914.html) by ReadWriteThink.org

### **Social Studies/Geography**

(Reading Standards, Key Ideas and Details, Strands 1–3, Craft and Structure, Strands 4–6, Integration of Knowledge & Ideas, Strands 7–9, Range of Reading of Text Complexity, Strand 10)

(Writing Standards, Text Types & Purposes, Strands 1–3, Production & Distribution of Writing, Strands 4 and 6, and Research to Build & Present Knowledge, Strands 7–9, Range of Writing, Strand 10)

(Speaking and Listening Standards, Comprehension and Collaboration, Strands 1–3, Presentation of Knowledge and Ideas, Strands 4–6)

- Have students research the geography of Hawai'i. What is the climate like? What physical features does Hawai'i have? What kinds of plants and animals live there? What makes Hawai'i unique from other states in the United States? Students may present their findings with photographs in a visual presentation format of their choosing. Consult National Geographic Kids' "Hawai'i" page for more information (https://kids.nationalgeographic.com/explore/states/hawaii/).
- Encourage students to learn more about the Manoa Cliff Restoration Area on O'ahu. What is the geography like in this part of Hawai'i? What are other animals and plants that live in the area? How does the environment and geography help the plants and animals to live there? How does the restoration area continue to operate as a completely volunteer-run organization? See the organization's website for more information (https://manoacliffreforestation.wordpress.com/the-manoa-cliff-native-reforestation-project/photogallery/).
- The Pulelehua Project had citizen scientists, people of Hawai'i, as well as trained scientists collect data about the Kamehameha butterflies. They worked together to collect data and educate people about the Kamehameha butterflies, in efforts to create a coexisting environment between the butterflies and humans. Research and discuss with students about a community in the US that has done similar work (https://www.citizenscience.gov/catalog/#). What species was endangered? How did scientists and people in the community help protect the species? How has a relationship been fostered between the animal species and humans? (https://cms.ctahr.hawaii.edu/pulelehua/)



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#### **Science**

(2-LS4-1 Biological Evolution: Unity and Diversity: Make observations of plants and animals to compare the diversity of life in different habitats; 3-LS4-4 Biological Evolution: Unity and Diversity: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change; MS-LS2-5 Ecosystems: Interactions, Energy, and Dynamics: Evaluate competing design solutions for maintaining biodiversity and ecosystem services).

- Encourage students to research a species that is endangered or threatened in your state or area of the country. What does this species eat? What are its predators? How does this species care for its young? What impact have humans had on this species? What is its natural habitat like? What is being done, if anything, to protect or restore the population? Have students brainstorm with a partner, small group, or whole class about ways to help this particular species, and then create signs to hang bringing people's attention to this species.
- **Have students research different animal sanctuaries in their own region.** Are there particular animal sanctuaries in their communities? What species do they help protect? Why were the sanctuaries created? Who maintains them? Consider contacting employees of the sanctuary for students to interview. What would students want to learn about operating a sanctuary? Consult the Global Federation of Animal Sanctuaries for more information (https://www.sanctuaryfederation.org/).
- Inspire students to select an animal species of their choice that is endangered and conduct a research project. Some guiding questions may include: What does the species eat? What are its predators? How does the species travel? Where do the animals live? What impact have humans had on the species? Why are the animals endangered? Why did students pick this particular animal for a research project? Students may present their findings with photographs and other visual elements of their choosing to a partner, small group, or whole class. The World Wildlife Fund lists all endangered species (https://www.worldwildlife.org/species/directory?direction=desc&sort=extinction\_status).
- Conduct a study on the life cycle of a butterfly. How do butterflies grow and develop?
   Using evidence from the text and additional research, have students present their findings
   in a visual format of their choosing, such as an informational poster, collage, or digital
   presentation. National Geographic Kids has a page dedicated to the butterfly life cycle (https://www.natgeokids.com/uk/discover/animals/insects/butterfly-life-cycle/). If possible, students
   may also raise butterflies in their classroom. The Sophia M. Sachs Butterfly House & Education
   Center in St. Louis, Missouri has useful tips on how to get started (http://www.butterflyschool.
   org/teacher/raising.html).
- Research different kinds of butterflies in mainland United States. There are more than 750 species of butterflies in mainland United States. Have students select a species after careful investigation—the Smithsonian has a page dedicated to butterflies (https://www.si.edu/spotlight/buginfo/butterfly) and conduct a research study on the species. What does it look like? Where does this particular species live? What are some of the species' other behaviors? How does the species students chose compare to and contrast with the Kamehameha butterfly? Students may present their findings in a visual presentation format of their choosing.



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#### **Arts/Media**

(Reading Standards, Key Ideas and Details, Strands 1–3, Craft and Structure, Strands 4–6, Integration of Knowledge & Ideas, Strands 7–9, Range of Reading of Text Complexity, Strand 10)

(Writing Standards, Text Types & Purposes, Strands 1–3, Production & Distribution of Writing, Strands 4 and 6, Research to Build & Present Knowledge, Strands 7–9, and Range of Writing, Strand 10)

(Speaking and Listening Standards, Comprehension and Collaboration, Strands 1–3, Presentation of Knowledge and Ideas, Strands 4–6)

- **Susan L. Roth created collage illustrations for** *Butterfly for a King: Saving Hawai'i's Kamehameha Butterflies*. Have students create a paper collage illustration of butterflies. Students can study Susan L. Roth's style and arrange paper as they see fit to encapsulate the ways they want to present butterflies. Students may create collages to accompany their own butterfly poems using materials such as construction paper, old newspapers, magazines, fabric, and other recycled materials.
- Have students create an artistic representation of a butterfly. Let students choose the artistic mediums they prefer. What did they select to put in their art piece? What do they want to show people about butterflies? What's important to convey about butterflies and their importance in our world? Have students share their artwork with a partner, small group, or whole class.
- At the top of each spread in *Butterfly for a King*, there is a poetic sentence. Have students read through the story again, focusing on just the words at the top of each spread. How does the story read differently when students concentrate on only that text? Afterward, students can create their own poems in response to *Butterfly for a King*. How did the story make them feel? What do they want to convey in their poems?

#### **School-Home Connection**

(Reading Standards, Integration of Knowledge and Ideas, Strands 7 and 9)

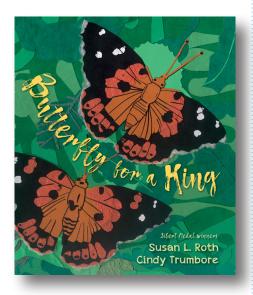
(Writing Standards, Text Types & Purposes, Strands 1-3, Production & Distribution of Writing, Strand 4, and Research to Build & Present Knowledge, Strands 7-9, Range of Writing, Strand 10)

(Speaking and Listening Standards, Comprehension and Collaboration, Strands 1-3, Presentation of Knowledge and Ideas, Strands 4-6)

- Encourage students and their families to participate in Wildlife Watch, the
  National Wildlife Federation's national nature-watching program created for
  people of all ages. Students and families share the details of the wildlife they see in their
  communities to help National Wildlife Federation track the health and behavior of species
  worldwide (www.nwf.org/Wildlife/WildlifeConservation/Citizen-Science.aspx).
- The scientists working to preserve the Kamehameha butterflies demonstrate a lot of persistence and commitment. Ask students to interview their caregivers about a time they faced a significant obstacle to a goal. How did the caregiver overcome it? What made the person persist in reaching for her or his goal? What advice does the caregiver have for someone who must tackle a challenge? Why is persistence important? Students should write down the answers to their interview questions and may wish to share them in class.
- If possible, have students look at Kamehameha butterflies with their families at home. Consult the University of Hawai'i's webpage on Kamehameha butterflies that has information about their life cycle, what they look like, as well as videos to learn more about the butterflies (https://cms.ctahr.hawaii.edu/pulelehua/How-to-Identify/Kamehameha-Butterfly). Ask students what they learned with their grown-ups from researching the Kamehameha



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## **ABOUT THE AUTHORS & ILLUSTRATOR**

**Cindy Trumbore** has been involved with young people's literature for most of her career. A former editor in children's book publishing, she now writes children's books, often collaborating with Susan L. Roth; edits books for classrooms; and teaches writing for children. She and her husband live in Delaware, and you can find her online at cindykane.net.

**Susan L. Roth's** vibrant, unique, mixed-media collage illustrations have appeared in numerous outstanding picture books, including *Parrots Over Puerto* Rico, winner of the Robert F. Sibert Informational Book Medal; Prairie Dog Song; and The Mangrove Tree. all developed and co-written with Cindy Trumbore. Roth and her husband live in New York. Visit her online at susanlroth.com.

#### **REVIEWS**

"Trumbore's engaging writing is saturated with information that is accessible to a broad audience, as a simple phrase runs along the top of each page for young readers that sums up the more detailed paragraphs at the page's bottom. Readers will be excited to see kids playing an important role in the conservation of this butterfly, so be ready with additional resources on local citizen-science opportunities. A beautiful story beautifully told." -Booklist, starred review

"VERDICT: A triumph; highly recommended for all libraries." -School Library Journal

"A beautifully illustrated account of both a butterfly and the people who worked to save it." -Kirkus Reviews

## **ABOUT LEE & LOW BOOKS**

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