

Birds in Trouble



In Hawaii, conservationists are using drones to save endangered birds.

LEXILE: 1030L

SCIENCE (NGSS) STANDARD: From Molecules to Organisms

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.2, RI.6-8.3, W.6-8.8

ENGAGE THE READER

Start the lesson by asking students how they feel about mosquitoes. Write some opinions on the board and ask for students to elaborate, as needed. Did anyone say that mosquitoes can be dangerous? Explain that in today's article, students will read about how mosquitoes are a threat to native birds in Hawaii. Do students have any predictions about what the efforts to protect the birds might be? How do they or their families try to limit their exposure to mosquitoes?

QUESTIONS FOR CLOSE READING AND DISCUSSION

- How have mosquitoes affected the honeycreeper population? Why does it matter?
- Describe the process conservationists are using to help protect honeycreepers from mosquitoes.
- What is Birds, Not Mosquitoes? What does its formation indicate?

EXTEND LEARNING

After reading, ask students if they were surprised by the method used to control mosquitoes. Does anyone have questions or concerns about the process? Allow students to share, and make a list on the board. As a class or independently, consult the FAQ page from Birds, Not Mosquitoes, at birdsnotmosquitoes.org/faq, to address the questions and/or concerns. Then have a discussion about why it's important to protect honeycreepers.

After discussing mosquitoes' impact on honeycreepers, open up a discussion about the effects that mosquitoes have on humans. Invite students to research diseases that are passed from mosquito to human and where these are most prevalent. What are some solutions to this problem? Encourage students to also research how mosquitoes benefit the environment. Close by returning to how students feel about mosquitoes. Have any opinions changed?

COVER STORY QUIZ + ANSWER KEY

The cover quiz can be found on page 2 of this guide.
To create a digital quiz, you can use our template [here](#).

1. A (RI.4) **2. B** (RI.1) **3. C** (RI.3) **4. A** (RI.6) **5. B** (RI.2)
6. A (RI.7) **7. Answers will vary.** (W.2)

Name _____ Date _____

Use this week's cover story, "Birds in Trouble," to answer the questions below. For questions 1–6, circle the letter next to the best answer. If you need more space to write your response to question 7, use the back of this page.

<p>1. What does it mean that honeycreepers are native to Hawaii?</p> <p>A. Hawaii is where they are originally from.</p> <p>B. They were introduced to Hawaii by humans.</p> <p>C. They do not belong in Hawaii.</p> <p>D. They have adapted to living in Hawaii over time.</p>	<p>4. What does the writer mean by saying mosquitoes are "not good neighbors"?</p> <p>A. Mosquitoes harm native honeycreepers.</p> <p>B. Mosquitoes and honeycreepers compete for food.</p> <p>C. Honeycreepers are taking over mosquito habitats.</p> <p>D. Mosquitoes are noisy.</p>
<p>2. What is avian malaria?</p> <p>A. an adventure-type movie</p> <p>B. a disease spread to birds by mosquitoes</p> <p>C. the area in Hawaii where native birds live</p> <p>D. a way to save honeycreepers</p>	<p>5. What's the main problem described in the article?</p> <p>A. Mosquitoes are an invasive species.</p> <p>B. Mosquitoes carry a disease that's killing birds.</p> <p>C. Temperatures in Hawaii are warming.</p> <p>D. It's difficult to fly helicopters into Hawaiian forests.</p>
<p>3. Which detail explains how releasing mosquitoes solves the problem caused by mosquitoes?</p> <p>A. Delivering mosquitoes by drone is quieter, costs less, and allows more flexibility.</p> <p>B. As temperatures have warmed, mosquitoes have moved higher into the mountains.</p> <p>C. They carry a natural bacteria that prevents them from reproducing with wild females.</p> <p>D. Mosquitoes love muddy, wet areas.</p>	<p>6. The photos included with the article help the reader understand which detail?</p> <p>A. The mosquitoes dropped into the forest are in biodegradable pods holding 1,000 insects each.</p> <p>B. Adam Knox jumps into a four-wheel-drive pickup and climbs to a forest high in the mountains of Hawaii.</p> <p>C. There used to be more than 50 species of honeycreepers.</p> <p>D. Christa Seidl will continue tracking mosquito numbers.</p>

7. Christa Seidl says "it is our responsibility, our *kuleana*, to save these birds." What is your *kuleana* with respect to the environment? Explain one thing you will commit to doing to help the planet.
