

# SCIENTISTS IN THE FIELD

WHERE SCIENCE  
MEETS ADVENTURE

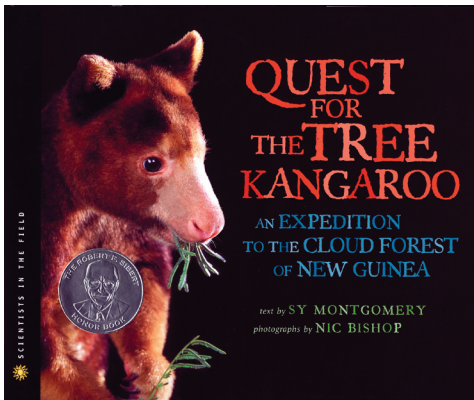
DISCUSSION AND ACTIVITY GUIDE

*Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea*  
By Sy Montgomery Photographs by Nic Bishop



### *About the Series*

*Quest for the Tree Kangaroo* is part of the award-winning Scientists in the Field series, which began in 1999. This distinguished and innovative series examines the work of real-life scientists doing actual research. Young readers discover what it is like to be a working scientist, investigate an intriguing research project in action, and gain a wealth of knowledge about fascinating scientific topics. Outstanding writing and stellar photography are features of every book in the series. Reading levels vary, but the books will interest a wide range of readers.



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Cloud Forest of New Guinea*  
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### *About the Book*

One of the rarest creatures on earth looks like a plush children's toy and lives in one of the most remote places on our planet. Until recently, very little was known about tree kangaroos. One of the scientists studying them, Lisa Dabek, went for seven years without seeing any on her yearly expeditions. Then in 2003, Lisa discovered a part of New Guinea where the tree kangaroos hadn't been hunted in many years and had lost some of their fear of humans. Lisa planned an expedition there to capture tree kangaroos and outfit them with a radio collar which she hoped would provide much-needed information on the tree kangaroos and their habits. The author Sy Montgomery and photographer Nic Bishop were invited to accompany the team on their expedition far into remote New Guinea to chronicle this remarkable research work. *Quest for the Tree Kangaroo* is their fascinating account of Lisa Dabek and her team's expedition into the cloud forest and the important work they are doing to understand and preserve this rare and enchanting animal.

### *About the Author and Photographer*

Sy Montgomery's life would make a fascinating book. While researching some of her many books, she has been bitten by a vampire bat, hugged by an octopus, and hunted by a tiger, and she crawled into a pit with 18,000 snakes! She has written more than fifteen books for adults and children and has won many honors, including the Orbis Pictus Award, the Robert F. Sibert Award, the Henry Bergh Award for Nonfiction, and many more.

Montgomery is an ardent conservationist. Besides writing books, she is a screenwriter for film and television, a columnist for the *Boston Globe*, and a popular speaker. She works with many organizations to preserve and protect nature. Montgomery lives on a farm in New Hampshire with her husband and many animals.

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## Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea

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Nic Bishop is the photographer for *Quest for the Tree Kangaroo*. He is also the author of more than sixty books and holds a PhD in biology from Canterbury University. Nic's parents were biologists too, and because of their jobs, Nic grew up in Bangladesh, the Sudan, and Papua New Guinea. He started taking pictures as a child with his sister's Brownie camera and he has been taking pictures of animals and the wild and remote places they live ever since. Nic and his wife moved to the Kalamazoo, Michigan, in 1994. Nic has won many awards for his books, including a Robert F. Sibert Medal (and three Honor Awards), the Orbis Pictus Award, and the Boston Globe-Horn Book Award.

### Pre-Reading Activity:

Students may have fun reading a Dr. Seuss book such as *If I Ran the Zoo*, since Dr. Seuss is mentioned by Lisa Dabek on page 7.

With classmates select several favorite animals. Combine favorite features from each animal to create an extremely lovable creature. Write a description of your new animal and give it a common name. Design a habitat for your composite creature that would be something, say, found in the elvish country in Tolkien's *Lord of the Rings*. Use other students' animals to create companions for your creature. As a class, invent a food chain with these animals.

Now watch this National Geographic video on tree kangaroos "Adorable Tree Kangaroos Fitted with Tiny Video Cameras": [www.youtube.com/watch?v=5WAIbL\\_b2cE](http://www.youtube.com/watch?v=5WAIbL_b2cE). Finally do a picture walk through the book. Compare your creature and your habitat to the video and the pictures found in the book.

### Discussion Questions

Think about why some states regulate hunting, such as the deer hunting regulations in Michigan and other states, for example. What is the age and sex of deer that are especially targeted for these hunts and why?

On an island that has a history of cannibalism, is there a scale for deciding whether it is acceptable to hunt and eat deer or tree kangaroos? Are there ethical considerations that we must consider before granting approval to any sort of hunting or animal consumption?

Yawit, an elder among the people of Yawan, used to kill as many as ten tree kangaroos a day. He claims to have killed thousands. The Yawan people loved the taste of tree kangaroo. Now he and his people eat chicken quite happily. Yawit says, "I am bound by two laws, one by the church, and one by conservation" (p. 26). How do people change long-standing traditions and habits? How would we begin to change eating habits in this country so that we no longer consume something popular, such as hamburgers?

The research team had to live three weeks without cell phones, social media, Internet, television, radio, or any other communication device. Do you think you could do that?

Lisa Dabek was told all through school that her allergies and asthma would prevent her from doing the work she does today. Yet here she is in charge of the efforts to save tree kangaroos. Why? What obstacles are in your way when you envision your dream career? If some adults discouraged your dreams for a future career, how might you prove them wrong?

### Applying and Extending Our Knowledge

On page 22, "Marsupial Mania" states that marsupials are a special type of mammal.

- Research what factors make marsupials different from other mammals.

Create a picture glossary, as we read through this book, of the animals (and, if you're adventurous, plants too) that are mentioned.

- Indicate which ones are found only in New Guinea; map the locations where others are found.
- Include scientific name, common name, range, animal description, habitat description, diet, and any noteworthy facts (about behavior or endangered status, etc.).
- Group animals by families and then alphabetically by scientific name.
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### Common Core Connections

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.

CCSS.ELA-Literacy.RH.6-8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

CCSS.ELA-Literacy.SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

CCSS.ELA-Literacy.RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts.

Montgomery is compelled to share information about the team. In the section entitled “The Adventure Begins” (p. 14) she provides information about each member of the team.

- Make a class book modeled after these descriptions forecasting what each class member would offer to a scientific team. This is a venture into speculative nonfiction—the goal is to honestly envision ourselves as scientists (regardless of whether or not that is our current career goal). List skills that we have or see ourselves developing that would be of use to the team.
- Encourage students who do have an existing science passion to adapt their biographical entry to fit a project related to their current interest.

### Common Core Connections

CCSS.ELA-Literacy.W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

CCSS.ELA-Literacy.W.7.2d Use precise language and domain-specific vocabulary to inform about or explain the topic.

CCSS.ELA-Literacy.WHST.6-8.1 Write arguments focused on discipline-specific content.

Students often confuse rain forests with cloud forests.

- Have students present an online presentation (or use Power Point or posters) comparing and contrasting the differences and similarities between rain forests and cloud forests.
- Students should focus their presentation on why people are likely to confuse these two habitats by showing visuals or graphics that clearly define the two habitats.

### Common Core Connection

CCSS.ELA-Literacy.RH.6-8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

On page 31, Joshua explains that his song and dance describes the team approach to searching for tree kangaroos. He states that the song and dance are about respecting the forest and working together.

- Encourage students to find music and create a dance that evokes this statement. Students should be prepared to justify their music and dance movements.

Dabek has five pieces of advice for future scientists on page 74. Her advice is general.

- What specific advice would you give to yourself? Make your own list of five items for accomplishing career goals.
- Do this activity also in groups. Have the group select an animal to protect and then generate a list of five starting steps to follow that will maximize the chances for success.

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### Other Websites to Explore

#### Tree Kangaroos

[www.youtube.com/watch?v=5WaiBl\\_b2cE](http://www.youtube.com/watch?v=5WaiBl_b2cE)

National Geographic video showing tree kangaroos

#### Matschie's Tree Kangaroo

[animals.nationalgeographic.com/animals/mammals/matschies-tree-kangaroo](http://animals.nationalgeographic.com/animals/mammals/matschies-tree-kangaroo)

Facts and videos about tree kangaroos from National Geographic.

#### Tree Kangaroo

[www.zoo.org/page.aspx?pid=1909#.USExVegmQt4](http://www.zoo.org/page.aspx?pid=1909#.USExVegmQt4)

Informational site on tree kangaroos from the Woodland Park Zoo in Seattle.

#### Cloud Forests Fading in the Mist

[news.nationalgeographic.com/news/2001/08/0813\\_cloudforest.html](http://news.nationalgeographic.com/news/2001/08/0813_cloudforest.html)

Information on cloud forests and their endangered status from National Geographic

### Guide created by:

Ed Spicer, Curriculum Consultant, and Lynn Rutan, retired middle school librarian, now reviewer and blogger at Bookends: the Booklist Youth Blog

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