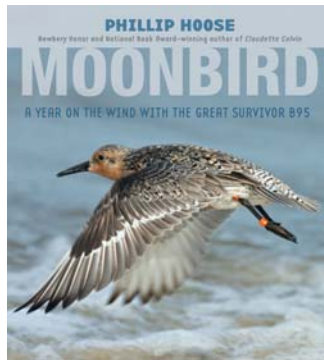


Teacher's Guide

MOONBIRD: A Year on the Wind with the Great Survivor B95 by Phillip Hoose

Grades 5 and up; Ages 10 and up; ISBN: 9780374304683;
Published by Farrar Straus Giroux & Macmillan Children's Publishing Group

ABOUT THE BOOK



B95 can feel it: a stirring in his bones and feathers. It's time. Today is the day he will once again cast himself into the air, spiral upward into the clouds, and bank into the wind. He wears a black band on his lower right leg and an orange flag on his upper left, bearing the laser inscription B95. Scientists call him the Moonbird because, in the course of his astoundingly long lifetime, this gritty, four-ounce marathoner has flown the distance to the moon—and halfway back! B95 is a robin-sized shorebird, a red knot of the subspecies *rufa*. He can fly for days without eating or sleeping, but eventually he must descend to refuel and rest. However, recent changes at ancient refueling stations along his migratory circuit—caused mostly by human activity—have reduced the food available and made it harder for the birds to reach. Since 1995, the worldwide *rufa* population has collapsed by nearly 80 percent. Most perish somewhere along the great hemispheric circuit, but the Moonbird wings on. He has been seen as recently as November 2011, which makes him nearly twenty years old. Shaking their heads, scientists ask themselves: How can this one bird make it year after year when so many others fall?

National Book Award–winning author Phillip Hoose takes us around the hemisphere with the world's most celebrated shorebird, showing the obstacles *rufa* red knots face, introducing a worldwide team of scientists and conservationists trying to save them, and offering insights about what we can do to help shorebirds before it's too late. With inspiring prose, thorough research, and stirring images, Hoose explores the tragedy of extinction through the triumph of a single bird.

ABOUT THE AUTHOR

Phillip Hoose is the widely-acclaimed author and winner of the National Book Award and the Boston Globe-Horn Book Award and earned the honors of Newbery Honor Book, YALSA Finalist for Young Adult Fiction, ALA Best Book for Young Adults, and National Book Award Finalist, among other honors. Mr. Hoose lives in Portland, Maine.

ABOUT THE GUIDE AND COMMON CORE STATE STANDARDS

This guide was created in alignment with the Common Core State Standards. Questions and activities develop skills outlined in Reading Standards for Informational Text and Literacy in History/Social Studies, Writing, and Speaking and Listening. In an effort to support educators, reference is made to specific anchor standards where appropriate.

VOCABULARY WORDS

migratory circuit, *rufa* red knot, molt, gorge, plight, conservation, red tide, archipelago, navigable, ecology, evolutionary biology, invertebrate, mud flats, restinga, spat, band, sentinel, plumage, primary & secondary feathers, cannon net, secretion, gizzard, sinew, vortices, pistons, intertidal zone, geolocator, spawning, saturated, tundra ponds, ecosystem, inlet, optic nerve, receptor cells, centrifuge, tidal wrack, bisected, “twinkling”, muslin tarp, calipers, rakes, dredge, larvae, barren, hectares, limestone, odyssey, longitude, sheath, microorganisms, ornithologist

INTERNET RESOURCES

www.arubewithaview.com
www.stopextinction.org
www.volunteermatch.org
www.horseshoecrab.org
www.icpawards.com
www.friendsoftheredknot.org
<http://fws.gov/sssp>

TEXT-BASED ACTIVITIES

Music/Speaking: Research songs from different genres written about the environment, including Phillip Hoose's "The Delaware Bay Blues". Divide the class into groups. Each group analyzes its song's lyrics and techniques and prepares for and holds a class debate to argue which song is most effective in sending its message about the environment. R.1, R.4, R.9, W.1, W.7, SL.1, SL.4, L.1, L.3, L.5

Writing: Read the Smithsonian Magazine article "Return of the Sandpiper" by Abigail Tucker (Oct. 2009) and the New York Times article "Casualties of Toronto's Urban Skies" by Ian Austen (Oct. 2012). Watch videos from People for the Ethical Treatment of Animals (PETA). Research how various media influence their audience. Compare and contrast these techniques with those used in MOONBIRD. Using supporting evidence, write a persuasive essay arguing which techniques are the most effective and why. R.1, R.2, R.4, R.5, R.6, R.7, R.9, R.10, W.1, W.4, W.5, W.7, SL.2, SL.3, L.1, L.2, L.5

Multimedia: Research public service announcements, videos, films, podcasts, and other media whose message it is to protect the environment. Analyze *how* they create their message. Divide the class into groups. Each group chooses an environmental issue and creates a multimedia presentation using similar techniques/strategies. The class debates and votes on the most affecting and effective message and shares with appropriate local officials to try to make change in environmental policies. R.3, R.4, R.6, R.7, R.8, R.9, W.1, W.6, W.7, W.10, SL.1, SL.2, SL.3, SL.4, SL.5, SL.6, L.1, L.3, L.5, L.6

Art/Photography: Teacher creates Gallery Walk in the classroom. Hang conservation photographs around the room with poster paper below each. Include photographs from MOONBIRD. Students walk around the room in groups, discuss what methods the photographer uses to move his/her audience and to convey his/her message, and jot notes onto the poster paper. After 3 minutes, the groups continue on to the next photograph and repeat. As a whole class, discuss what messages are conveyed through the photographs, and *how* they are most effectively communicated. R.7, SL.1, SL.6, L.1

Writing: *How* does Hoose make his readers care so much about B95 and the red rufas? Analyze the choices Hoose makes in his nonfiction book to open up our hearts. Find "bird-loving pen pals" at <http://www.fws.gov/sssp> and explain in your letter to them 3 ways Hoose most affected you with his writing and his choices. Be sure to use specific examples. (Consider personification of B95, structure of the book, inspirational quotations opening each chapter, profiles of researchers so we get to know them as real people, photography, addressing of opposing views, connection of nature to human needs, stories about how young people can get involved, etc.) Ask your pen pals what they liked about Hoose's book and look forward to them writing back! R.1, R.2, R.3, R.4, R.5, R.6, W.2, W.4, W.5, W.9, W.10, L.1, L.2, L.3, L.5

Science/Social Advocacy: Set up a banding expedition...in your own classroom! Research the steps, tools and latest inventions used to create a successful expedition. Classroom groups may include the scientists who measure and weigh the birds, the cannon net team, volunteers who help band and transport birds, etc. Record your "findings". Volunteer for a real banding expedition and as a class write an op-ed piece to your school or town's newspaper highlighting knowledge learned and persuading your peers to get involved. R.10, W.1, W.2, W.4, W.5, W.7, W.10, SL.1, SL.6, L.1, L.2, L.6

Art/History/Science: Create an informational packet on the red rufas' migratory circuit. Divide the class into groups. Each group researches a different stop along the circuit and creates a visual representation that informs the reader about that location's geography, climate, environmental policies, history, local industries, pollution levels, etc. and how these all play a part in the success of the red rufas. Also include information about *your* local birds! Look out your window: how are they different from each other and from the red rufas? What are their behaviors? Each group presents to the rest of the class. Combine each group's work to create an informational packet. Mail the packet to another school to help them learn more about the red rufas' remarkable journey and your local winged friends. R.1, R.10, W.2, W.7, W.9, SL.1, SL.4, SL.6, L.1, L.6

History/Writing: What does success look like? Choose an historical figure that you view as "successful". In an essay, explain your definition of "success" and compare and contrast B95's qualities that led to his success with those of this person's from history. Use significant supporting evidence to make your argument. R.1, R.2, R.3, R.10, W.1, W.2, W.4, W.5, W.7, W.8, W.9, W.10, L.1, L.2