

A stylized illustration of a blue owl with large, yellow, circular eyes. The owl's body is a textured blue, and its wings and tail are decorated with dark blue 'V' shapes. The background is solid black. The word 'HOW' is written in large, bold, yellow, sans-serif capital letters, with the 'H' positioned above the owl's head and the 'O's and 'T' integrated into the owl's face.

HOW

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NGS
MAGNIF/ED

NOVEL
STUDY

CARL HIAASEN

Novel Studies in the Science Classroom: Developing Science Literacy Skills

Today struggling readers face many long-term challenges and are more at risk of falling behind. However, science is a great way to engage students, no matter their background. NGS Magnified has created novel studies for teachers to use in the science classroom to help bridge that gap. Novel studies help build rapport with students while supporting and fostering independent learning. In addition, we believe that using novel studies in the science classroom will expose students to different perspectives and help them understand how science vocabulary applies to so many events in their lives.

Research shows that connecting content and skills from other subjects enhances students' learning and improves their comprehension.

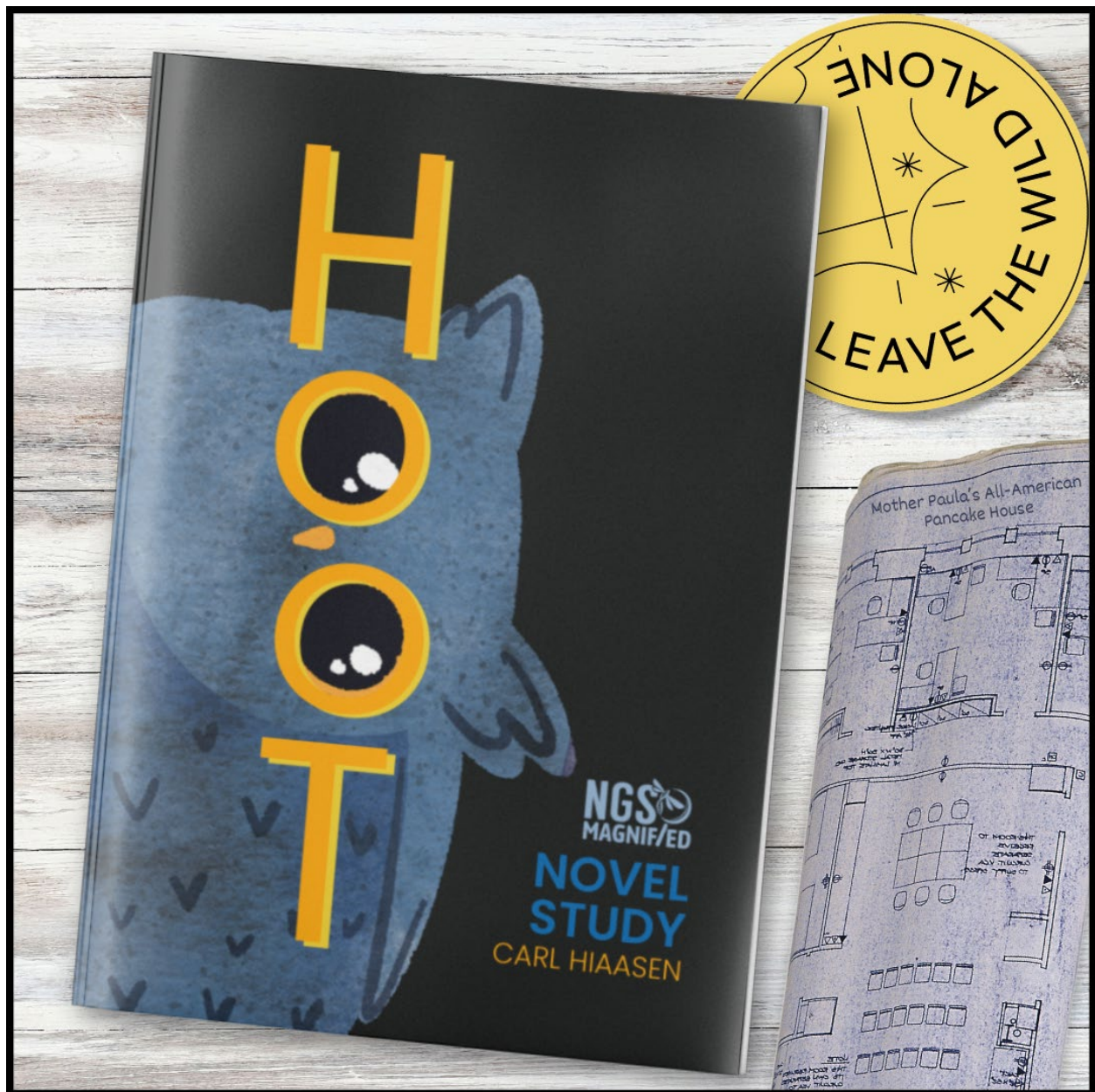
- *The literacy from reading can easily come from non-fiction and fiction novels that surround a science-related topic and are far more of a high-interest read for the majority of students than reading a textbook (Anderson & Hite, 2010; Batchelor, 2017; Coiro, 2012; Freudenrich, 2000).*
- *Science fiction novels are an excellent way to engage students in science ideas while also helping students improve their literacy skills. (Creech and Hale, 2006)*
- *Teachers can add in other readings from the internet and news articles which brings the reading level down to a more manageable level, however students are more willing to learn and spend the time to learn new vocabulary when highly engaged in what they are reading (Weinbugh et al., 2014).*

NGS Magnified novel studies heavily focus on the following:

- vocabulary
- reading comprehension
- simple research
- cross-curricular connections
- culminating final project

Students will focus on inquiry skills such as comparing and contrasting, summarizing, making inferences, cause/effect relationships, fact and opinion, and critical thinking.

Happy reading,
Erica



This Newbery Honor winner and #1 *New York Times* bestseller is a beloved modern classic. *Hoot* features a new kid and his new bully, alligators, some burrowing owls, a renegade eco-avenger, and several extremely poisonous snakes.

A PARADE BEST KIDS BOOK OF ALL TIME!

Everybody loves Mother Paula's pancakes. Everybody, that is, except the colony of cute but endangered owls that live on the building site of the new restaurant. Can the awkward new kid and his feral friend prank the pancake people out of town? Or is the owls' fate cemented in pancake batter?

Welcome to Carl Hiaasen's Florida—where the creatures are wild, and the people are wilder!

Hyperlinked Table of Contents

Hoot Novel Study	
Description	Page #
Before You Read	3
Word Study: Chapters 1-4	4-7
Reading Check: Chapters 1-4	8
Word Study: Chapters 5-8	9-12
Reading Check: Chapters 5-8	13
Word Study: Chapters 9-12	14-17
Reading Check: Chapters 9-12	18
Word Study: Chapters 13-16	19-22
Reading Check: Chapters 13-16	23
Word Study: Chapters 17-21	24-27
Word Study: Epilogue	28
Final Project	29-31

Check out the following sample pages
focusing on science vocabulary, reading
comprehension, and literacy-based projects!

Teacher Guide included!

Before You Read

Directions: Florida has many types of habitats, like freshwater lakes, rivers, wetlands, beaches, and forests. These habitats include both living things and nonliving things. Answer each of the questions below.

1. Draw a river, lake, wetland, or pond and label 3 living things and 2 nonliving things.

Find out what students already know.

WORD STUDY: Chapters 1-4

2. Draw a forest and label 3 living things and 2 nonliving things.

1. Soles

Draw a picture that correctly depicts where the *soles* of your feet are located.

2. Scalp

What is the function of the scalp?

3. How might a forest be affected by a fire?

4. How does a forest help the environment?

5. What might a forest be affected by a fire?

3. Vandalism

Definition:

WORD STUDY: Chapters 1-4

7. Humidity

Humidity is the amount of water _____ in the air.

8. Everglades

The Everglades can best be described as _____.

- a. a tropical wetland ecosystem
- b. a desert ecosystem
- c. a mountain range
- d. all of the above

9. Windpipe

What is another name for your windpipe?

10. Perspiration

Humans release sweat through perspiration to help regulate body temperature.

True

False

11. Lake

Draw a picture that correctly shows the definition of a *lake*.

12. Skull

The skull is a _____.

- a. group of muscles that help move the head from side to side
- b. hard structure that protects the brain
- c. flexible joint that allows the head to move
- d. layer of skin that covers the head

Reading Check: Chapters 1-4

Directions: Answer the following questions in complete sentences.

1. A simile is a comparison between two things using like or as. "The soles of his bare feet looked as black as barbecue coals." Create your own simile below.

2. The police officer asks what is going to happen to the owls when the bulldozing begins. How can the disruption of an animal's habitat harm an ecosystem?

3. How are the climates of M

4. A reptile wrangler safely h
What scientific skills or kno
their job safely and effect

5. Garret makes a comment
all the bones in his body. Ho

Sections include
reading
comprehension
questions,
sequencing, and
drawing activities
to track student
progress and
understanding.

Reading Check: Chapters 5-8

Directions: Answer the following questions in complete sentences.

1. Describe characteristics of cottonmouth moccasins.

2. Roy talks about Montana's thin air. Why might someone who moves from Florida to Montana feel short of breath at first?

3. Describe a Mullet fish.

4. What does it mean if a company is publicly traded?

5. What traits make Rottweilers and Dobermans good guard dogs?

6. What correlation does Roy see between himself and the ospreys?

Novel Project option

HOOT

Final Project - Save This Species

Directions: In the novel *Hoot*, Roy discovers that burrowing owls are at risk of losing their habitat due to human development. Rather than ignoring the problem, Roy takes action to protect the species.

In this project, you will apply affected by habitat loss. You about the species, explains th realistic solution.

Your campaign should combin

HOOT

Required Campaign Components:

Your campaign must include all of the following elements:

☐ Species Introduction

Introduce your chosen species by name and include an image or illustration. Provide

1. Select a Species

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Save This Species - Rubric

Campaign Component	4 - Advanced	3 - Proficient	2 - Developing	1 - Beginning
Species Introduction	Clearly introduces the species with accurate information, a detailed description, and an appropriate visual.	Correctly introduces the species with accurate basic information and a visual.	Species identified, but description is vague, incomplete, or contains minor inaccuracies.	Species introduction is missing, unclear, or inaccurate.
Habitat Description	Thoroughly explains the habitat with specific details about environmental features and survival needs.	Correctly describes the habitat and its importance for the species.	Habitat is mentioned, but the explanation is vague, overly general, or incomplete.	Habitat description is missing or incorrect.
Explanation of Habitat Loss	Clearly explains habitat loss, its specific causes, human activities, and the direct effects on the species.	Correctly explains habitat loss and its impact on the species.	Habitat loss is mentioned, but the explanation lacks clarity or detail.	Habitat loss is poorly explained, inaccurate, or missing.
Ecosystem Importance	Provides strong scientific reasoning explaining why the species matters (food webs, biodiversity, ecological role, etc.).	Explains ecosystem importance using correct scientific reasoning.	States importance, but reasoning is weak, vague, or partially incorrect.	Ecosystem importance missing or lacks scientific reasoning.
Realistic Solution	Proposes a practical, well-explained solution directly connected to the habitat problem.	Provides a reasonable solution connected to habitat protection.	Solution present but vague, unrealistic, or weakly connected.	Solution missing or unrealistic.
Awareness Message	Persuasive message is clear, compelling, and strongly supports the campaign purpose.	Message is clear and connected to the campaign topic.	Message present but weak, vague, or unclear.	Message missing or unrelated.
Campaign Communication & Clarity	Campaign is highly organized, visually clear, and effectively communicates scientific ideas.	Campaign communicates ideas clearly with logical organization.	Campaign somewhat clear but cluttered, confusing, or inconsistent.	Campaign difficult to understand or poorly organized.

Total Score _____ / 28



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