Science & Literacy Activity

ACTIVITY OVERVIEW

This activity, which is aligned to the Common Core State Standards (CCSS) for English Language Arts, introduces students to scientific knowledge and language related to animals and their habitats.

This activity has three components:

- BEFORE YOUR VISIT, students will read a content-rich article about animals
 found in Cuba and their habitats. This article will provide context for the visit,
 and also help them complete the post-visit writing task.
- 2. AT THE MUSEUM, students will read and engage with additional texts (including printed text, digital and physical/hands-on interactives, video, diagrams, models). This information will help them complete the post-visit writing task.
- 3. BACK IN THE CLASSROOM, students will draw on the first two components of the activity to complete a CCSS-aligned explanatory writing task about what they have learned about the animals of Cuba and their habitats.

Materials in this packet include:

For Teachers

- Activity Overview (p. 1-2)
- Article (teacher version): "Caribbean Island Wildlife: Animals of Cuba" (p. 3-8)
- Graphic Organizer (p. 9)
- Answers to student worksheets (p. 10-12)
- Assessment rubric for student writing task (p. 13)

For Students

- Article (student version): "Caribbean Island Wildlife: Animals of Cuba" (p. 14-19)
- Graphic Organizer (p. 20)
- Student worksheets for the ¡Cuba! exhibition visit (p. 21-23)
- Student writing task and rubric (p. 24-25)

1. BEFORE YOUR VISIT

Students will read a content-rich article about animals found in Cuba and their habitats. This article will provide context for the visit, and help them complete the post-visit writing task.

Preparation

- Familiarize yourself with the student writing task and rubric (p. 24-25).
- Familiarize yourself with the teacher version of the article (p. 3-8), and plan how to facilitate the students' reading of the article.

Instructions

- Explain the goal: to complete a writing task explaining how animals in Cuba depend on their habitats. You may want to read through the writing task with students at this point.
- Tell students that they will need to read an article before visiting the Museum, and read additional texts during the visit.
- Distribute, read, and discuss the article, using the teacher notes to facilitate.

Common Core State Standards

RI.4.1: Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

RI.4.2: Determine the main idea of a text and explain how it is supported by key details; summarize the text.

W.4.2: Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

New York State Science Core Curriculum

LE 3.1c

Next Generation Science Standards

LS4.D: Biodiversity and Humans

 Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

SEP 8: Obtaining, Evaluating and Communicating Information

- Obtain and combine information from books and/or other reliable media to explain phenomena.
- Communicate information in written formats.

2. DURING YOUR VISIT

At the Museum, students will read and engage with additional texts (including printed text, digital and physical/hands-on interactives, video, diagrams, models). The information they'll gather from these multiple sources will help them complete the post-visit writing task.

Preparation

- Review the Educator's Guide to see how themes in the exhibition connect to your curriculum and to get an advance look at what your students will encounter. (Guide is downloadable at amnh.org/cuba/educators)
- Familiarize yourself with the student worksheets (p. 21-23) and the map of the exhibition (p.3 of the educators' guide).

Instructions

- Explain the goal of the Museum visit: to read and engage with texts
 (including printed text, digital and physical/hands-on interactives, video,
 diagrams, models), and to gather information to help them complete the
 post-visit writing task.
- Distribute and review the worksheet and map. Clarify what information students should collect. and where.

Supports for Diverse Learners

This resource has been designed to engage all learners with the principles of Universal Design for Learning in mind. It represents information in multiple ways and offers multiple ways for your students to engage with content as they read about, discuss, view, and write about scientific concepts. Different parts of the experience (e.g. reading texts, or locating information in the Museum) may challenge individual students. However, the arc of learning is designed to offer varied opportunities to learn. We suggest that all learners experience each activity, even if challenging. If any students have an Individualized Education Program (IEP), consult it for additional accommodations or modifications.

Alternate Version of Article

Another version of the same article with a lower lexile level is available for download at **amnh.org/cuba/educators**. You can use this same activity with that article.

Additional Suggestions for Facilitating the Museum Visit

- Have students explore the exhibition in pairs, with each student completing his or her own student worksheet.
- Encourage student pairs to ask you or their peers for help locating information. Tell students they may not share answers with other pairs, but may point each other to places where answers can be found.

3. BACK IN THE CLASSROOM

Students will use what they have learned from the pre-visit article and at the Museum to complete a CCSS-aligned explanatory writing task about how animals in Cuba depend on their habitats.

Preparation

• Plan how you will explain the student writing task and rubric (p. 24-25) to students.

Instructions

• Distribute the student writing task and rubric. Explain that they will use it while composing, and also to evaluate and revise what they have written.

Suggestions for Facilitating Writing Task

- Before they begin to write, have students use the writing task to frame a discussion around the information that they gathered at the Museum. They can work in pairs, small groups, or as a class, and can compare their findings.
- Referring to the writing task, have students underline or highlight all relevant passages and information from the article and from the notes taken at the Museum.
- Students should write their essays individually.

ARTICLE: TEACHER VERSION

About this Article

Lexile: 875 Wordcount: 1,176

Text Complexity: The Lexile level for this text falls in the middle of the 4-5 CCSS grade complexity band. This text is suitable as a read aloud for students in grades 3 through 5. You should use your professional judgement and knowledge of students' independent reading levels regarding assigning this text for independent reading.

Note: You will find a graphic organizer at the end of this text. Its purpose is to provide a tool for students to gather information that they will use to complete the writing task, the culminating activity of the Science and Literacy Activities. Use your professional judgement and knowledge of your students to decide how to facilitate the completion of the graphic orga-

nizer. It can be done with the teacher guiding students in note taking, in partners, or independently. It is advisable to assign partners prior to reading so that students are aware of who their partner is for Think-Pair-Share.

When the instructions direct you to facilitate Think-Pair-Share, listen in and select a student to share out with the whole group.

Caribbean Island Wildlife: Animals of Cuba

Pack your bags for an exciting journey. We're heading to Cuba, the largest island nation in the Caribbean Sea. Cuba is home to many kinds of animals, and we're going to meet three of them. Each animal lives in a different habitat—a place where a living thing lives and grows. We'll travel across the country and visit forests, wetlands, and a coral reef. Some of these habitats and its animals are in trouble. Along the way, we'll find out how people can help.



Lizards of the Forest

Our first stop is Humboldt National Park in the eastern mountains of Cuba. This park stretches for miles across rainforests, pine forests, grasslands, and rivers. It provides a home for many animals, including some found nowhere else on Earth.



Key for Teacher Notes

- Green text specific strategies
- Regular text instructions for teachers
- Italicized text teacher's instructions to students
- <u>Underlined text</u> important domain-specific words

Think-Pair-Share: What have you learned about Cuba so far? What more do you expect to learn from reading this article? How does the article define "habitat"?

Refer to the map and point to where the three habitats mentioned in the above paragraph are located. (You might revisit the map throughout your reading of the article to point out locations of the different habitats that are described.)

Think Aloud: Let's read the subheadings so that we have a preview of the text before we start reading. It is helpful for readers to know what they can expect to learn from a text. Read the subheadings aloud and say that readers can expect to learn about the three types of habitats in the subheadings (along with animals that live in them). You might combine thinking aloud with eliciting students' thoughts. Introduce the graphic organizer for note-taking. Explain to students whether they will take notes independently or with a partner when you prompt them, or as a whole class with you guiding them ("shared writing"). You might vary your approach, perhaps starting out talking as a class, and gradually releasing the task to students as you read on.

Visualize all of the different environments listed in the second sentence. You may want to pause briefly for each (rainforest, pine forest, grassland, rivers) and allow students to tell a partner what they see in their minds. What does this make you think about Humboldt National Park? Students should notice that there is a surprising diversity of habitats within one area. This is important because diversity of ecosystems is a distinct feature of Cuba. We'll head into the forest in search of lizards called **anoles** that live in and around trees. This forest is home to at least 21 kinds of anoles. Some live high in the treetops. Others live on the moist ground around the trees. Each of these areas is a different habitat. Different kinds of anoles live in each one. Let's meet a few of these lizards,

The Cuban bearded anole lives on branches in the treetop.

The treetop.

You might find a **brown anole** near the base of a tree trunk. This lizard has long back legs for jumping and sprinting. It moves fast when it spots an insect to eat or a possible mate. But if it sees a predator looking for its next meal, it may stay completely still. When it's not moving, this small, brown anole is camouflaged, blending in with the tree's trunk and branches.

Allison's anole lives on tree trunks, especially on palm trees. This lizard has big toe pads that help it cling to the trunk. It can climb straight up (or straight down!) trunks in search of insects.

Up in the treetops, or canopy, a **Cuban bearded anole** scurries between the branches that form the leafy roof of the forest. This anole moves slowly using its short legs to grasp fragile twigs.

Think Aloud: While we just learned that Humboldt National Park is home to four different habitats, now we know that this section of the article will focus on one: the forest. Let's think about what we know about the forest based on the text.

GRADE 4

Prompt students to reread the previous paragraph and think-pair-share about features of the forest (high tree tops, moist ground). Ask students to jot notes in the appropriate place on their graphic organizer.

The Cuban knight anole lives near the top of the leafy branches.

bottom of the tree.

Allison's anole lives on tree trunks. Near the top of the canopy, a Cuban knight anole is defending its territory. If another animal gets close, it has different ways to say, "Keep out!" It does push-ups and bobs its head up and down. It sticks out a large pink flap under its throat called a dewlap. It also changes color! As the largest anole, it eats more than just insects. It will devour tree frogs, tarantulas, and even birds.

Forests and other ecosystems in the Caribbean are filled with anoles. These lizards are not threatened like some other reptile species. Protected areas like Humboldt National Park help keep them safe.

Sea Turtle of the Coral Reef

Let's head to the beach! Our next stop is Gardens of the Queen, a line of tiny islands along southern Cuba. These islands are keys, small islands of coral or sand. We'll dive into the warm, shallow water to explore the coral reefs. Thousands of kinds of animals make their home among the reefs. It is a colorful community of fish, sea fans, sea sponges, and other ocean life.



Keep an eye out for the hawksbill sea turtle. This sea turtle is fast, and has a bright shell. With its narrow head and jaws, the hawksbill can reach food in tiny spaces in the reef. Then it uses its sharp "beak" to rip and chew whatever it finds. It likes to eat squid, shrimp, and especially sea sponges, animals with soft bodies that live among the coral.

Think Aloud: Wow, we just learned about four different species of anoles. Let's select one to think more about... Can you choose one anole and reread the paragraph that describes it? What information are you getting about the way(s) in which this animal relies on its forest habitat?

Prompt students to jot notes on the appropriate place in their graphic organizer.

Think-Pair-Share: What does the text (and the picture) tell us about this habitat?

Prompt students to jot in the appropriate place on their graphic organizer.



The hawksbill is at home around the reef, but this is not its only home. This sea turtle is born on the sandy beach where females bury their eggs. After they hatch, they head for the water. The hatchlings float together in the shelter of seagrass or seaweed. As they grow, hawksbills move among different habitats-from rocky beaches to shallow bays and estuaries, rivers that connect to the sea.



This striking sea turtle is a key part of the coral reef community. But it's also endangered. The hawksbill is hunted for its beautiful shell. People use the shell to make jewelry and combs. Cuba has banned hunters from catching hawksbills, but some people still hunt illegally. Tourism is also putting the hawksbill at risk. Divers, boats, and pollution can damage the coral reefs. As more people visit Cuba, the country will need to continue to protect areas like Gardens of the Queen.

Think-Pair-Share: What does the text (and the picture) tell us about the the sea turtle that lives in the coral reefs? About threats posed to this animal or its habitat?

Prompt students to jot in the appropriate place on their graphic organizer.

¡Cuba!



Crocodile of the Wetlands

Our last stop is the Zapata Peninsula on the southwest coast of Cuba. We'll explore the Zapata Biosphere Reserve, the largest area of wetlands in the Caribbean. Many habitats are found here, from marshes to mangrove forests. These habitats support many kinds of animals, including some birds, bats, rodents, and reptiles that live only in Cuba. That's why we've come here—to spot the rare **Cuban crocodile**. Only a few thousand of these crocodiles are living in the wild, and most of them are in the Zapata wetlands.



Think-Pair-Share: What does the text (and the picture) tell us about this habitat?

Prompt students to jot in the appropriate place on their graphic organizer.

Cuba!

GRADE 4

The Cuban crocodile prefers freshwater wetlands, which are farther inland than the salty wetlands near the ocean. You might spot this crocodile hunting for food. It can lurk underwater waiting to attack a passing animal. It may even use its strong back legs to jump out of the water and catch an animal in midair! With its long, powerful legs, it can also run fast to chase prey on land.



This crocodile is also an attentive parent. Like some other crocodiles, it carries its tiny hatchlings in its mouth or on top of its head to keep them safe in the water.

Unfortunately, the Cuban crocodile is endangered. They are quickly vanishing and someday they could become extinct. Human activities are their biggest threat. People hunt them to make crocodile-skin purses, shoes, and other goods. People also clear wetlands for agriculture and urban development, destroying the crocodile's wetland habitat.

Working to Protect Cuba's Animals

Today, Cuba's population is growing, and more people are traveling there. Cubans are working to make sure that the growing population doesn't put the island's habitats in greater risk. The government has set up nature preserves like the ones in Humboldt, Gardens of the Queens, and Zapata. Cuban scientists, along with scientists from all over the world, are studying and recording the plants and animals, and are working to protect Cuba's diversity. Because of these efforts, we can keep learning about animals like the anoles, the hawksbill sea turtle, and the Cuban crocodile, and even discover new ones.

Think-Pair-Share: What does the text (and the picture) tell us about the the Cuban crocodile that lives in the freshwater wetlands? About threats posed to this animal or its habitat?

Prompt students to jot in the appropriate place on their graphic organizer.

Think-Pair-Share: Tell your partner something interesting that you learned from the article. What would you like to learn more about?

IMAGE CREDITS: Humboldt National Park, @AMNH/C.Raxworthy; Brown Anole, @H.Hillewaert/CC-BY-SA-3.0; tree, dumbmichael/Vecteezy.com; Allison's Anole, @Lezumbalaberenjena/CC-BY-SA-3.0; Cuban Bearded Anole, @L.Leszczynski/CC-BY-SA-3.0; Cuban Knight Anole, @O.Shvadchak/CC-BY-SA-3.0; coral reef, ©J.Brooks/NPS; Hawksbill swimming, ©R.Dirscherl/AGE Fotostock; Hawksbill on beach, ©B.Spragg/CC-BY-SA-3.0; wetlands, @M.Melissen/CC-BY-SA-3.0; Cuban Crocodile, @Shutterstock; crocodile jumping, @T.Quine/ CC-BY-SA-3.0.

Cubal

GRAPHIC ORGANIZERWHAT WE ARE LEARNING ABOUT CUBA

	Describe habitat: What are some of its natural features?	Describe one way this animal depends on the habitat in which it lives/	Describe a threat to this habitat (or an animal that lives in it) that you learned about OR describe one way people can help ensure that these habitats do not disappear.
Humboldt National Park: Forests	high tree-topsmoist ground	The brown anole's home is the base of a tree trunk. It depends on the trees of the forest for shelter.	The anoles in Humboldt National Park are well protected because of the park. People can help protect it by supporting national parks.
Gardens of the Queen: Coral Reef	 The coral reefs are on small islands called "keys." Coral can be found in warm, shallow water. 	The hawksbill sea turtle can reach food in the tiny spaces in the coral reef because of its narrow head and jaws. It relies on the organisms living in the coral reef for food.	People visiting the coral reefs can damage it (for example: by diving, using boats, adding to pollution).
Zapata Biosphere Reserve: Wetland	• marshes • mangrove forests	Cuban crocodiles rely on the wetlands for food and shelter.	Cuban crocodiles are endangered from people hunting them for their skin (for example: to make bags and shoes).

¡Cuba! GRADE 4

STUDENT WORKSHEET

Name:	1	IS	V	V	ER	KE
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1. Humboldt National Park (Forest Habitat)

In the box below, **draw** a tree and **label** the crown (uppermost branches), trunk, and ground. **Draw** and **label** an animal that lives in each of these places.

Note for Educators: This section of the exhibition features live animals. It is a small area, and cannot comfortably accommodate large groups. If you are visiting with a large	Write the names of each animal you drew and take notes on any interesting facts you learned about them: In the tree crown:
group of students that can't be split into smaller supervised groups, omit this page of the worksheet and just have	iii tile tiee clowii.
students enter this area and observe some of the anoles they read about in the article without stopping to take notes.	Answers may include: Cuban knight anole,
	bearded anole, Cuban tree frog
	bearded arrote, cubarritee riog
	On the tree trunk:
	Answers may include: Smallwood anole,
	Allison's anole, green anole
	-
	On the ground:
	Answers may include: brown anole, Cuban boa

¡Cuba! GRADE 4

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2. Gardens of the Queen (Coral Reef Habitat)

In the box below, draw and label the habitat and at least three of the animals that live in it.

Note for Educators: In racks near the entrances of this section, you'll find information cards about some of the animals shown in the diorama.
Take notes on what the habitat is like:
Answers will vary but may include: marine coral reef environment; many types of corals closely packed on rocks
and each other; some light filtering down from above
Write the names of three animals you drew and take notes on what they are like:
Animal 1: Answers may include but are not limited to:
• spotted eagle ray: flat winglike fins, dark blue with light blue spots, long thin tail
Animal 2: • tiger shark: large shark with sharp teeth, lighter color underside and darker colored back
• hawksbill turtle: smallish sea turtle, tan with brown spots, long flippers
Animal 3: • goliath grouper: huge brown fish with a big mouth, eats smaller fish
• bluehead (info on card): young ones are yellow and white, adults turn green with blue head

¡Cuba! GRADE 4

Name:

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3. Zapata Biosphere Reserve (Wetland Habitat)

In the box below, draw and label the habitat and at least three of the animals that live in it.

	ucators: In racks near the entrances of this section, you'll find information cards about some of the wn in the diorama.
Take notes or	what the habitat is like:
Answers will va	ry but may include: shallow fresh water with plants growing out of it; water lilies, grasses,
and mangrove	trees
Write the nam	nes of three animals you drew and take notes on what they are like:
Animal 1: A	nswers may include but are not limited to:
•	Cuban gar: armored fish that can breathe air
A : 10 a	
Animal 2:	roseate spoonbill: rosy pink color; uses its long and spoon-shaped bill to sift the mud for small prey
•	Cuban parakeet: nests in dead palm trees
Animal 3: •	Cuban crocodile: powerful jaw; can leap out of water to catch prey in mid-air

ESSAY SCORING RUBRIC: TEACHER VERSION

	Exceeds	Meets	Approaches	Needs Additonal Support
	4	3	2	1
Research: "Caribbean Island Wildlife: Animals of Cuba" Article	Accurately presents information relevant to all parts of the prompt with paraphrased details from the article	Presents paraphrased information from the article relevant to the prompt with sufficient accuracy and detail	Presents information from the article mostly relevant to the purpose of the prompt with some lapses in accuracy or completeness AND/OR information is copied from the text	Attempts to present information in response to the prompt, but lacks connections to the article or relevance to the purpose of the prompt
Research: ¡Cuba! Museum Exhibition	Accurately presents information relevant to all parts of the prompt with paraphrased details from the exhibition	Presents paraphrased information from the exhibition relevant to the prompt with sufficient accuracy and detail	Presents information from the exhibition mostly relevant to the purpose of the prompt with some lapses in accuracy or completeness AND/OR information is copied from the text	Attempts to present information in response to the prompt, but lacks connections to the exhibition content or relevance to the purpose of the prompt
	Integrates relevant and accurate science content with thorough explanations that demonstrate in-depth understanding of the animals of Cuba and their habitats	Presents science content relevant to the prompt with sufficient accuracy and explanations that demonstrate understanding of the animals of Cuba and their habitats	Presents science content mostly relevant to the prompt; shows basic or uneven understanding of the animals of Cuba and their habitats; some errors in explanation	Attempts to include science content in explanations, but understanding of the animals of Cuba and their habitats is weak; content is irrelevant, inappropriate, or inaccurate
Science Explanations	Uses labeled illustrations of animals in two habitats in Cuba that effectively communicate relevant information	Uses labeled illustrations of animals in two habitats in Cuba that sufficiently communicate relevant information	Illustrations have no labels OR only one animal and its habitat is illustrated, OR only animals are illustrated without their habitats	No illustrations
	Consistent use of precise and domain-specific language where appropriate	Some use of precise and domain-specific language	Little use of precise and domain-specific language	No use of precise and domain-specific language
	Includes an opening section that clearly introduces the topic of animals' reliance on their habitats	Includes an opening section about animal habitats in Cuba	Includes an opening section that is insufficient or irrelevant	Does not include an introduction
Development	Essay includes more than two examples of animals in Cuba to clearly explain in detail how they depend on their habitats	Essay includes two examples of animals in Cuba to sufficiently explain how they depend on their habitats	Essay only includes one example to explain how animals in Cuba depend on their habitats	Essay does not include examples to explain how how animals in Cuba depend on their habitats
	Provides a relevant concluding paragraph	Provides a relevant concluding section	Provides a concluding statement	Provides no sense of closure
Conventions	Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors; response includes language and tone consistently appropriate to the purpose and specific requirements of the prompt	Demonstrates a command of standard English conventions and cohesion, with few errors; response includes language and tone appropriate to the purpose and specific requirements of the prompt	Demonstrates an uneven command of standard English conventions and cohesion; uses language and tone with some inaccurate, inappropriate, or uneven features	Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics

ARTICLE

Caribbean Island Wildlife: Animals of Cuba

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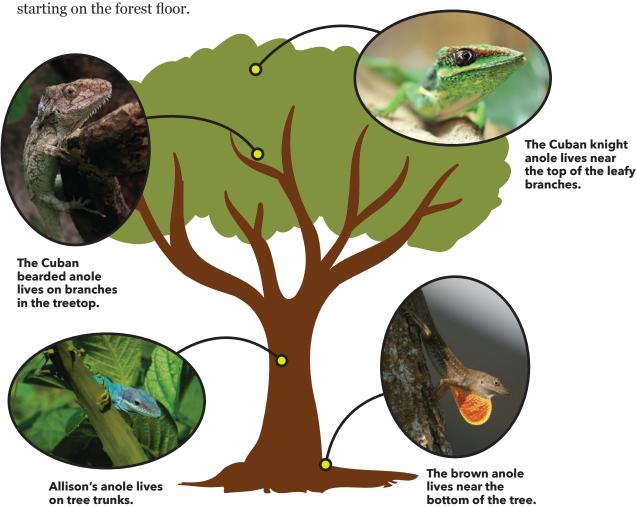


Lizards of the Forest

Our first stop is Humboldt National Park in the eastern mountains of Cuba. This park stretches for miles across rainforests, pine forests, grasslands, and rivers. It provides a home for many animals, including some found nowhere else on Earth.



We'll head into the forest in search of lizards called **anoles** that live in and around trees. This forest is home to at least 21 kinds of anoles. Some live high in the treetops. Others live on the moist ground around the trees. Each of these areas is a different habitat. Different kinds of anoles live in each one. Let's meet a few of these lizards,



You might find a **brown anole** near the base of a tree trunk. This lizard has long back legs for jumping and sprinting. It moves fast when it spots an insect to eat or a possible mate. But if it sees a predator looking for its next meal, it may stay completely still. When it's not moving, this small, brown anole is camouflaged, blending in with the tree's trunk and branches.

Allison's anole lives on tree trunks, especially on palm trees. This lizard has big toe pads that help it cling to the trunk. It can climb straight up (or straight down!) trunks in search of insects.

Up in the treetops, or canopy, a **Cuban bearded anole** scurries between the branches that form the leafy roof of the forest. This anole moves slowly using its short legs to grasp fragile twigs.

Near the top of the canopy, a **Cuban knight anole** is defending its territory. If another animal gets close, it has different ways to say, "Keep out!" It does push-ups and bobs its head up and down. It sticks out a large pink flap under its throat called a dewlap. It also changes color! As the largest anole, it eats more than just insects. It will devour tree frogs, tarantulas, and even birds.

Forests and other ecosystems in the Caribbean are filled with anoles. These lizards are not threatened like some other reptile species. Protected areas like Humboldt National Park help keep them safe.

Sea Turtle of the Coral Reef

Let's head to the beach! Our next stop is Gardens of the Queen, a line of tiny islands along southern Cuba. These islands are keys, small islands of coral or sand. We'll dive into the warm, shallow water to explore the coral reefs. Thousands of kinds of animals make their home among the reefs. It is a colorful community of fish, sea fans, sea sponges, and other ocean life.



Keep an eye out for the **hawksbill sea turtle**. This sea turtle is fast, and has a bright shell. With its narrow head and jaws, the hawksbill can reach food in tiny spaces in the reef. Then it uses its sharp "beak" to rip and chew whatever it finds. It likes to eat squid, shrimp, and especially sea sponges, animals with soft bodies that live among the coral.



The hawksbill is at home around the reef, but this is not its only home. This sea turtle is born on the sandy beach where females bury their eggs. After they hatch, they head for the water. The hatchlings float together in the shelter of seagrass or seaweed. As they grow, hawksbills move among different habitats—from rocky beaches to shallow bays and estuaries, rivers that connect to the sea.



This striking sea turtle is a key part of the coral reef community. But it's also endangered. The hawksbill is hunted for its beautiful shell. People use the shell to make jewelry and combs. Cuba has banned hunters from catching hawksbills, but some people still hunt illegally. Tourism is also putting the hawksbill at risk. Divers, boats, and pollution can damage the coral reefs. As more people visit Cuba, the country will need to continue to protect areas like Gardens of the Queen.



Crocodile of the Wetlands

Our last stop is the Zapata Peninsula on the southwest coast of Cuba. We'll explore the Zapata Biosphere Reserve, the largest area of wetlands in the Caribbean. Many habitats are found here, from marshes to mangrove forests. These habitats support many kinds of animals, including some birds, bats, rodents, and reptiles that live only in Cuba. That's why we've come here—to spot the rare **Cuban crocodile**. Only a few thousand of these crocodiles are living in the wild, and most of them are in the Zapata wetlands.



The Cuban crocodile prefers freshwater wetlands, which are farther inland than the salty wetlands near the ocean. You might spot this crocodile hunting for food. It can lurk underwater waiting to attack a passing animal. It may even use its strong back legs to jump out of the water and catch an animal in midair! With its long, powerful legs, it can also run fast to chase prey on land.



This crocodile is also an attentive parent. Like some other crocodiles, it carries its tiny hatchlings in its mouth or on top of its head to keep them safe in the water.

Unfortunately, the Cuban crocodile is endangered. They are quickly vanishing and someday they could become extinct. Human activities are their biggest threat. People hunt them to make crocodile-skin purses, shoes, and other goods. People also clear wetlands for agriculture and urban development, destroying the crocodile's wetland habitat.

Working to Protect Cuba's Animals

Today, Cuba's population is growing, and more people are traveling there. Cubans are working to make sure that the growing population doesn't put the island's habitats in greater risk. The government has set up nature preserves like the ones in Humboldt, Gardens of the Queens, and Zapata. Cuban scientists, along with scientists from all over the world, are studying and recording the plants and animals, and are working to protect Cuba's diversity. Because of these efforts, we can keep learning about animals like the anoles, the hawksbill sea turtle, and the Cuban crocodile, and even discover new ones.

IMAGE CREDITS: Humboldt National Park, @AMNH/C.Raxworthy; Brown Anole, @H.Hillewaert/CC-BY-SA-3.0; tree, dumbmichael/Vecteezy.com; Allison's Anole, ©Lezumbalaberenjena/CC-BY-SA-3.0; Cuban Bearded Anole, @L.Leszczynski/CC-BY-SA-3.0; Cuban Knight Anole, @O.Shvadchak/CC-BY-SA-3.0; coral reef, @J.Brooks/NPS; Hawksbill swimming, @R.Dirscherl/AGE Fotostock; Hawksbill on beach, @B.Spragg/CC-BY-SA-3.0; wetlands, @M.Melissen/CC-BY-SA-3.0; Cuban Crocodile, @Shutterstock; crocodile jumping, @T.Quine/ CC-BY-SA-3.0.

GRAPHIC ORGANIZERWHAT WE ARE LEARNING ABOUT CUBA

	Describe habitat: What are some of its natural features?	Describe one way this animal depends on the habitat in which it lives.	Describe a threat to this habitat (or an animal that lives in it) that you learned about OR describe one way people can help ensure that these habitats do not disappear.
Humboldt National Park: Forests			
Gardens of the Queen: Coral Reef			
Zapata Biosphere Reserve: Wetland			

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Name:	
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1. Humboldt National Park (Forest Habitat)

In the box below, draw a tree and label the crown (Draw and label an animal that lives in each of these	
	Write the names of each animal you drew and take notes on any interesting facts you learned about them:
	In the tree crown:
	On the tree trunk:
	On the ground:

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2. Gardens of the Queen (Coral Reef Habitat)

In the box below, draw and label the habitat and at least three of the animals that live in it.						
Take notes on what the habitat is like:						
Write the names of three animals you drew and take notes on what they are like:						
Animal 1:						
Animal 2:						
Animal 3:						

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3. Zapata Biosphere Reserve (Wetland Habitat)

n the box below, draw and label the habitat and at least three of the animals that live in it.					
Take notes on what the habitat is like:					
Write the names of three animals you drew and take notes on what they are like:					
Animal 1:					
Animal 2:					
Animal 3:					

STUDENT WRITING TASK

By reading the "Caribbean Island Wildlife: Animals of Cuba" article and visiting the ¡Cuba! exhibition, you have learned about some of the animals in Cuba and the habitats that they live in. Now you will write an essay that explains how these animals depend on their habitats.

Choose two of the habitats that you explored in the reading and in the exhibition. For each habitat, you will describe what it is like. Choose two animals that live in each habitat and explain how they depend on that habitat to live, and how changes to the habitat could affect those animals. Include labeled illustrations of the two habitats and four animals you chose.

ESSAY SCORING RUBRIC: STUDENT VERSION

	Exceeds	Meets	Approaches	Needs Additonal Support	
	4	3	2	1	
Research: "Caribbean Island Wildlife: Animals of Cuba" Article	I have used information correctly from the article to write my essay; I have given a lot of detail to explain the information in my own words	I have used information correctly from the article to write my essay in my own words	I have used information from the article to write my essay, but not all of my information is correct AND/OR I didn't use my own words	I did not use information from the article to write my essay	
Research: ¡Cuba! Museum Exhibition	I have used information correctly from the exhibition to write my essay; I have given a lot of detail to explain the information in my own words	I have used information correctly from the exhibition to write my essay in my own words	I have used information from the exhibition to write my essay, but not all of my information is correct AND/OR I didn't use my own words	I did not use information from the exhibition to write my essay	
	All of the information I included about the animals of Cuba and their habitats is correct	Most of the information I included about the animals of Cuba and their habitats is correct	Some of the information I included about the animals of Cuba and their habitats is correct	None of the information I included about the animals of Cuba and their habitats is correct	
Science Explanations	I included labeled illustrations with captions of two habitats in Cuba that help the reader understand how animals depend on them	I included labeled illustrations of two animals in their habitats	I included labeled illustrations of only one animal and its habitat, OR I included illustrations of only animals, without their habitats, OR I didn't label my drawings	I did not include any illustrations	
	I used all appropriate science vocabulary words correctly	I used most science vocabulary words correctly	I used some science vocabulary words correctly	I did not use any science vocabulary words	
	I included a clear introductory paragraph on how animals depend on their habitats	I included an introduction that relates to the topic of my essay	I included an introduction that doesn't relate to the topic of my essay	I did not include an introduction	
Development	I included descriptions of at least two habitats in Cuba with examples of more than two animals in each habitat, and how changes to the habitat could affect those animals	I included descriptions of two habitats in Cuba with examples of two animals in each habitat, and how changes to the habitat could affect those animals	I included one example of an animal in Cuba and its habitat	I didn't include any examples to show animals in Cuba and their habitats	
	I wrote a concluding paragraph that relates to the information in my essay	I wrote a concluding sentence that relates to the information in my essay.	I wrote a concluding sentence at the end of my essay	I did not write a concluding sentence at the end of my essay	
Conventions	I edited my essay for spelling, punctuation, and grammar; there are no errors	I edited my essay for spelling, punctuation, and grammar; there are some minor errors but the reader can still understand my writing	I did not carefully edit my essay for spelling, punctuation, and grammar; there are errors that may make the essay hard for readers to understand	I did not edit my essay for spelling, punctuation, and grammar; there are many errors that make the essay hard for readers to understand	