# Animals of Ecuador and Virginia

Curriculum Project
Fulbright-Hays Seminars Abroad
Sustainability in Action: Ecuador as a Case Study
Summer 2005
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#### **Animals of Ecuador and Virginia**

#### Summary

This unit is designed for beginning English speakers of other languages (ESOL). The most effective way for students to learn English is to use meaningful materials, and not grammar books. I teach high school students who read English on a primary-grade level. However, most of the literature at that level is designed for younger students. My project is geared toward all students at a primary reading level who find animals interesting and the animals of Ecuador are especially engaging.

Students will view a PowerPoint presentation of the "Animals of Ecuador." Then they will read their own copy of a booklet version of the PowerPoint. The vocabulary is simple, except for the animal names and about ten more advanced vocabulary words. This way, the reading is easy to understand. After the readings, they will complete a graphic organizer about the animals, including a description, where they live, what they eat, and an illustration. Next, the teacher will read aloud the beautifully illustrated *Galápagos Means Tortoises* by Ruth Heller. And this section will focus on the fascinating Galápagos Islands.

Then the guidelines will be explained for their project, which is to create a PowerPoint of the "Animals of Virginia." The teacher will do a shared reading of *Virginia Plants and Animals* by Karla Smith (different versions of this book are available for many other states). Each student will choose three animals of interest to research. Using the "Animals of Ecuador" as a model and also a graphic organizer, they will research where their animals live and what they eat. Next, they will create a PowerPoint and present it to the class. After this, the students will compare a similar animal in Ecuador to one in Virginia. For example, a student could compare the giant tortoise of the Galápagos to a snapping turtle in Virginia.

The period for which these lessons are designed is a one hundred minute block. So if the period is shorter, then each lesson might actually take two periods.

In addition to teaching English, I am preparing the students to take high school level courses, such as biology. Virginia requires a state end-of-course exam for biology, a core curriculum course. There are usually questions that include animals native to Virginia. I have discovered that the students arriving from other countries are unfamiliar with our states' fauna. So this will prepare them for biology later and help them to become critical thinkers as they compare and contrast the fauna of different locations. A natural extension of this unit would be for students to research animals native to their home countries.

Since the reading and writing skills of the beginning English speakers is at the primary level, this unit is also appropriate for English-speaking primary-level students.

### Fairfax County Public Schools Curriculum Standards and Virginia State Standards of Learning (SOL)

Standard 1 – Know and apply knowledge of the structure of English, including vocabulary, grammar, and usage.

Benchmark 9.1.1 Students use conventions of language in writing and speaking. (SOL 9.6)

Benchmark 9.1.2 Students revise writing and speaking to clarify meaning. (SOL 9.6)

Benchmark 9.1.3 Students use knowledge of vocabulary, language form, and reading processes to aid communication and comprehension. (SOL 9.6)

Standard 2 – Know and understand the variety and range of communication forms and strategies in the English language.

Benchmark 9.2.1 Students use reading, listening, and viewing for a variety of purposes. (SOL 9.4)

Benchmark 9.2.2 Students use their knowledge of forms to make appropriate choices in their literary, informational, and technical reading and writing. (SOL 9.3)

Benchmark 9.2.3 Students recognize media productions as forms of communication and expression. (SOL 9.1)

Standard 3 – Know and apply the techniques of effective communication in writing and speaking.

Benchmark 9.3.1 Students plan before writing and speaking (SOL 9.2)

Benchmark 9.3.2 Students select writing and speaking strategies to match purpose, context, and form, adapting their language accordingly. (SOL 9.1)

Standard 4 – Do effective research.

Benchmark 9.4.1 Students use currently available research tools and methods to acquire information. (SOLs 9.7-8)

Benchmark 9.4.2 Students develop methods to organize and communicate information effectively and ethically. (SOL 9.2.7)

Standard 5 – Read and understand major literary types, genres, and traditions of the English language.

Benchmark 9.5.1 Students read and respond in a variety of ways to literature. (SOLs 9.3,5)

#### **Animals of Ecuador and Virginia**

#### **Key Questions:**

- 1. What are some of the animals of Ecuador?
- 2. Where do they live?
- 3. What do they eat?
- 4. What are some of the animals of Virginia?
- 5. What are the similarities and differences between the animals of Ecuador and Virginia?

#### LESSON 1

Students will locate Ecuador on a map (Mapmaker's Toolkit) and view a PowerPoint presentation of the "Animals of Ecuador." Then we will do guided reading with their printed copies. They will complete a graphic organizer with information from the presentation.

#### <u>Materials</u>

PowerPoint presentation of the "Animals of Ecuador" Software program, *Mapmaker's Toolkit* Printed copies of "Animals of Ecuador" Graphic organizer "Animals of Ecuador" (see attachments)

#### **Procedure**

Start the class with a writing warm-up asking the students "What is your favorite wild animal?" Describe it. Why do you like this animal?" Explain they should not be writing about pets, like cats or dogs, but an animal they might see in a zoo, in nature or in a book. Give the students eight minutes to write. Note, the teacher also writes along with the students about her favorite animal. Then ask if anyone wants to share their writing.

Explain that they will be viewing a PowerPoint about the wild animals of a country that is south of the United States. Display the world map using *Mapmaker's Toolkit* (if not available, use any world map). Have someone come up to the map and show what area is south of the U.S. Ask which continent is the United States on (North America). Give them a hint that the country is in South America. Have someone locate South America. Can they guess which country in South America the animals I will show them are from? Give a clue, such as "Someone in our class is from this country or the equator runs through this country." Show how the equator runs through Ecuador. Review the meaning of the equator. Use *Mapmaker's Toolkit* to look at the political and physical maps of Ecuador. Briefly point out the four regions, Galápagos islands, coast, mountains, and the Amazon.

Show the PowerPoint, "Animals of Ecuador." The title slide includes a map of Ecuador. Ask what do they think the triangles in the middle of the country represent (mountains). Do they remember the name of the islands (Galápagos). Have someone come up and point out the coast and the Amazon region. Show the slides, which the teacher first

reads, then asks students to read. Discuss the animals and new vocabulary on each slide (cabbage, nectar, nest, courtship, bill, marine, algae, vegetation, rainforest).

Next, distribute individual printed copies of the "Animals of Ecuador" to each student. Depending on the size of the class, form reading groups. Each group should take turns reading the text aloud, while other members assist if needed. After this, distribute two pages of the "Animals of Ecuador" graphic organizer. Each page has room for six animals and there are twelve on the presentation. The students should use their copy of the presentation to complete the chart and the PowerPoint should also be displayed to view in color. The students may use colored pencils for their illustrations.

#### Assessment

Could the student read the text during guided reading? Note at this point they have heard the teacher and other students read it. Does the chart have twelve entries, are all entries complete, and is the information correct? Give two points for each box for a total of 96 (do not count the illustrations). Comment on descriptive words and illustrations.

#### **Extensions**

Students can use computers to create their own graphic organizer (or copy the teacher's from Blackboard if available). Then they can find pictures of each animal using clip art or a search engine. This gives them computer practice in creating and using a table, as well as Internet skills. Also, just using the computer is motivating for students. Another extension is for students to write a question they have about each animal on their copy and later research the answer.

#### LESSON 2

Students will view the PowerPoint, "Four Regions of Ecuador." The first viewing is for an overview. Then during the second viewing the students will use their copy of "The Animals of Ecuador" to match each animal with its corresponding region. Next, the teacher will read aloud Ruth Heller's *Galápagos Means Tortoises*. Then each student chooses a favorite poem from the book and copies the first stanza to read to the class.

#### Materials

PowerPoint presentation of the "Four Regions of Ecuador"
Printed copies of "Animals of Ecuador"
Galápagos Means Tortoises by Ruth Heller
Birds, Mammals, & Reptiles of the Galápagos Islands by Andy Swash and Rob Still
Galapagos Islands Born of Fire by Tui de Roy
Oral presentation rubric (see attachments)
Paper
Colored pencils

#### **Procedure**

Start the class with a writing warm-up asking the students "What is your favorite animal in the presentation 'Animals of Ecuador?' Explain why you chose this animal." Students may use their copy as reference. Give students ten minutes to write. The teacher writes also. Then they may share.

Explain that today they will view a PowerPoint of the "Four Regions of Ecuador." On the title slide, ask the students to notice the icons for each region, a fish for the coast, mountain for the mountains, a parrot for the Amazon, and a lizard for the Galápagos. Discuss the second slide which includes a map with the symbols for each region, as well as a small outline map of South America. Show the presentation, reading each caption, and discussing each slide. Have students try to discover the meaning of new vocabulary from the photos as the words are encountered, such as mangroves, festival, highlands, weaving, traditional, dwarf, ruins, and interior. Use English dictionaries and bilingual dictionaries for some of the words for dictionary practice.

Direct each student to refer to his/her copy of "Animals of Ecuador." View the "Four Regions of Ecuador" again asking the students to identify which region each animals is from. Go back to the slides of the Galápagos tortoise, blue-footed boobies, and marine iguanas. Ask if they have ever seen these animals in person. Explain that they only exist on these islands and no where else in the world (except perhaps in a zoo).

Present Ruth Heller's *Galápagos Means Tortoises*. Preview the book by looking at the cover and the back. Then have the students predict what it will be about. Read the book aloud, have the students hear that it is written in rhyme, and then notice some of the rhyming words in each poem. Review the definition of a stanza. Have the students each select a different animal and copy the first stanza of its poem. While a student is copying, the other students may look at books about the islands' animals. Then they should recopy the stanza on a piece of white paper, illustrate, and practice to present to the class. The students should include, "Poem excerpted from <u>Galápagos Means</u> <u>Tortoises</u> by Ruth Heller." Direct the students to study their poem for homework and be ready to present to the class the next session. Show the students the oral rubric that will be used for scoring (see attachments) for a total of twenty points.

#### **Assessment**

Could the students correctly connect the animals with their habitats? Do the students use a variety of skills when determining the meaning of new vocabulary? Did they follow directions in preparing their poem?

#### **Extensions**

Students can choose more than one stanza to copy. Most poems have five or six stanzas.

Students can copy their stanza(s) into Word and find a photo from the linternet. Students can write sentences for some or all of the twenty-six slides of the "Four Regions of Ecuador."

#### **LESSON 3**

The first part of this lesson is the students' presentations of the chosen Ruth Keller poems from the previous lesson. Then students start examining the animals of Virginia (or another state). The teacher reads *Virginia Plants and Animals* aloud and then the students each choose three animals to research. They begin their research using this book and determine what other resources they need.

#### **Materials**

Virginia Plants and Animals by Karla Smith Graphic organizer for "Animals of Virginia" (see attachments) Oral presentation rubric (see attachments) Software program, Mapmaker's Toolkit

#### **Procedure**

Start the class with a writing warm-up asking the students "Why did you choose your animal from Ruth Keller's book? Why do you like it?" If they chose the same animal from Ruth Keller's book as they wrote about in the previous warm-up, they should choose a different animal. Give students nine minutes to write. The teacher writes also. Then they may share.

Give students time to practice for the poetry presentations. Then, each student presents in front of the class, while the teacher scores the oral presentation using the rubric. Next tell the students, "We will now move north and look at the animals in our state." Use *Mapmaker's Toolkit* to look at a map of Virginia. Discuss the geography, what other states border Virginia, what bodies of water they see, etc.

Ask students what wild animals they have seen outside. Solicit responses of squirrels, various birds, and insects. Explain that they will be choosing three animals of Virginia to include in a PowerPoint. Read aloud portions of *Virginia Plants and Animals*. As we are reading, generate a list of the animals. Students should copy these in their notebooks. We could also look at the Maymont Web site which is a wildlife exhibit in Richmond, Virginia that features native Virginia animals. Students then choose their three animals and record their choices on the "Animals of Virginia" graphic organizer.

#### LESSON 4

Students research information on their three animals using the *Virginia Plants and Animals* books and the Web. The teacher models how to paraphrase information from a source and also demonstrates how to find information on the Web.

#### **Materials**

Virginia Plants and Animals by Karla Smith Graphic organizer for "Animals of Virginia" (see attachments)

#### Computer lab

#### **Procedure**

Start the class with a writing warm-up. "Choose one of the three Virginia animals you chose. Explain what you like about it." Write for a fixed amount of time, then share.

Then the teacher models how to do research. The teacher chooses a Galápagos animal that is not on the PowerPoint, such as the penguin. Use this to demonstrate how to use sources to fill out the information on the graphic organizer. Emphasize that they should write just the key words, but not sentences (this keeps the students from just copying text from the book). Show the students how to cite the source on a reference page. Students are directed to record the reference information as soon as it is used.

Next choose the student who might need the most guidance and use his/her animal as another demonstration. Do this together with the student as a model for the class. Then direct the students to begin working on their own, offering assistance as needed. They should use the text first; then go to the Web to fill in any missing information.

Next the students turn the information on the graphic organizers into sentences for their PowerPoints. They should write this as a draft with the title being the animal's name and then at least two sentences about each creature (but no more than three).

#### **Assessment**

Does the "Animals of Virginia" chart have three entries, are all entries complete, and is the information correct? Give five points for each box for a total of 60. Did they write complete sentences on the drafts?

#### **Extension**

Before having the students do research on the Web, do a lesson from the green *Reader's Handbook*, "Focus on a Website" (pp. 174-180).

#### LESSONS 5 and 6

Before lesson five, the teacher edits the sentences. Then the teacher guides the students together step by step in creating a PowerPoint.

#### <u>Materials</u>

Students' corrected drafts Computer lab

#### Procedure

For the warm-up, ask the students to correct the mistakes in the following sentences: "the peengueen Swims in the pacific ocean he Loves to eeet fesh"

The teacher has already edited the sentences about their Virginia animals for spelling, punctuation, and grammar. Or if possible, the teacher does the editing together with the students. The teacher demonstrates how to create a PowerPoint presentation. First everyone creates a title page and the next page is a map of Virginia. The teacher has the students create three more pages and a reference page. Once they have the basic five pages, they can work individually to add the map, text, pictures, and references.

Once the teacher has checked the work, they can print out copies to practice for a presentation. The same Oral Presentation rubric will be used, as in lesson three.

#### **Assessments**

Informal observation as students are working on PowerPoints.

#### **Extensions**

A template for the PowerPoint can be created and be accessed by the students in Blackboard (if this is available).

#### LESSON 7

Students first present their PowerPoints. Then we compare animals of Virginia and Ecuador.

#### **Materials**

Animal Comparison chart (see attachments)
Oral Presentation rubric

#### **Procedure**

Warm-up: Students read over their PowerPoint copies to prepare for presentation. Then each student presents, while the teacher scores them according to the Oral Presentation rubric.

Next we will compare animals of Virginia and Ecuador. The teacher chooses an animal from Virginia such as the blue crab to compare to the sally lightfoot crab. Using the "Animal Comparison" chart the teacher and the students fill in the information. Next each student chooses one animal from their three to compare to an animal from Ecuador, for example the cardinal and the parrot. Then they complete the chart and write one or more sentences about the similarities and differences.

#### Assessment

Is the information in the chart complete and accurate? Are the sentences correctly written? Give three points for each entry for a total of 24.

#### **Extension**

Write a comparison paragraph using the information from the chart. The students can rehearse and then present their PowerPoints to another class.

#### References

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Name	Date

#### **Animals of Ecuador**

Name	Description	Where it lives (Habitat)	What it eats	Illustration

#### **Animals of Virginia**

Name	Description	Where it lives (Habitat)	What it eats	Illustration

Name Date
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Rubric	Oral Presentation	20 point	ts total
	Criteria	Points Possible	Points Earned
	duced your writing by g the title and you read with n.	5	
You maintaudience.	ained eye contact with the	5	
	appropriate pace and the right times.	5	
You spoke	loudly and clearly.	5	

Total 20

Comments:

	Animal Comp	<u>arison</u>
	Ecuador Animal:	Virginia Animal:
Colors		
Food		
Habitat		
	tences about how these two animals are si	milar.
Vrite one or more sen	tences about how these two animals are di	ifferent.



## **Animals of Ecuador**





## Land Iguana



This iguana lives in a park. The hotel workers feed it cabbage.



### Pelican



The pelican eats fish from the ocean.



### Llama



The Ilama lives in the Andes Mountains. Llamas eat grass.

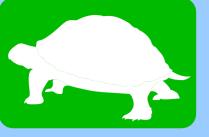


### **Parrots**



Parrots live in the rainforest. They eat seeds, nuts, and fruit.

These are called military macaws.



### **Butterflies**



These butterflies live in the rainforest. They sip nectar from flowers.



## **Blue-footed Booby**



The bluefooted booby only lives on the Galapagos Islands. It eats fish.



## Nazca Booby



The Nazca booby catches fish in the Pacific Ocean and nests on the Galápagos Islands.



### **Waved Albatross**



The waved albatross of the Galápagos are doing a courtship dance. They are hitting their bills together.



# Marine Iguana



The marine iguana eats algae (very small plants) from the sea.



### Sally Lightfoot Crabs



Sally lightfoot crabs live on the rocks in the Galápagos Islands. They also like to eat algae.



## Galapágos Sea Lions



The sea lions live on the sandy beach and eat fish from the ocean.



### Galápagos Tortoises



Some

Galápagos (or giant) tortoises can weigh 500 pounds. They eat vegetation and live on the land.



### Resources

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