

Name: \_\_\_\_\_

Pd. \_\_\_\_\_

Date: \_\_\_\_\_

**The Academy of Natural Sciences of Drexel University***What's history got to do with it? An Exploration in Google Earth*

Read through the expeditions of Dr. Katriina Ilves and Dr. Mark Sabaj Perez in the “Bicentennial” Google Earth file. Using what you’ve learned, answer the following questions about their research.

**Dr. Katriina Ilves:**

1. What are the two goals of Dr. Ilves’ research in the Bahamas?

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\_\_\_\_\_
- \_\_\_\_\_  
\_\_\_\_\_

2. How are Dr. Ilves and her team going to determine if the reef fish community has changed over the past 50 years? \_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

3. What is phylogeography? Explain in your own words: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

4. What kind of habitat do reef fishes live in? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

5. What does “an increase in algal cover and dead coral” mean for the aquatic community?

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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. What is an invasive species? (You will have to look it up – [try http://accessscience.com](http://accessscience.com).)  
Please explain in your own words:

\_\_\_\_\_  
\_\_\_\_\_

7. Name some plants or animals that might be considered “invasive species” if they were introduced to our community:

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8. Choose one of the plants or animals you listed above, and give examples as to how this species would disrupt our community. You may either write a comprehensive paragraph below or use the space to illustrate your answer. If you choose to draw, be sure to label all parts of the drawing.

9. Based on the photograph from the placemark titled, “Communities and Phylogeography,” draw a picture of how the ichthyologists store and label their fish. Label each part of your drawing:

10. Brainstorm some reasons why the results of Dr. Ilves’ study were different than Dr. Böhlke’s.

**Dr. Mark Sabaj Perez:**

1. What is taxonomic research? (You will have to look it up – try <http://accessscience.com>.) Please explain in your own words:

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2. How do you think Dr. Sabaj Perez and his team collected their catfish specimens?

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3. Visit the ACSI website (the link is available in the placemark titled, “The All Catfish Species Inventory”) and click on the link “Project Summary.” Read through the “OVERVIEW” at the bottom of the page, and describe (in your own words) the importance of this research, why it is being done, and what it will produce.

- Some things to think about: how could this catalogue of specimens be useful in the future? Why is it important to collect every specimen of catfish? What kind of research could these specimens be used for once they are catalogued?