

Teacher: _____ Period: _____ Date: _____ Grade: ____ Your Initials: ____

2011-2012 Biodiversity Assessment Form A High School

1A. Please name as many different species living in your backyard/neighborhood as you can (but stop if you fill the box).

1B. Please name as many different species living in your backyard/neighborhood as you can that are *not big enough* to see with your eyes. You might need a magnifying glass or microscope to see these things.

1C. Pick a species living in your backyard/neighborhood. What species did you pick?

1D. What role(s) do they play in the ecosystem?

2A. Pick a species living in your backyard/neighborhood. What species did you pick?

2B. If it goes extinct, what would happen to the other species living in your backyard/neighborhood? Why?

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2C. If it goes extinct, what would happen to the environment (abiotic factors) in your backyard/neighborhood? Why?

2D. If it goes extinct, would that be good, bad or neither good nor bad?

Good Bad Neither good nor bad

2E. Explain your choice. Why would it be good, bad or neither good nor bad?

3. Crane flies are great shredders of leaves in a stream. This means that when they eat, they tear up leaves into little pieces. Imagine the crane fly shredder population has dropped by 80%.



3A. Predict what would happen to the other living things in the stream now that there are fewer crane fly shredders. Name as many consequences as you can.

3B. Predict what would happen to the environment (abiotic factors) of the stream now that there are fewer crane fly shredders. Name as many consequences as you can.

3C. Would you make different predictions if there were many types of shredders, not just crane flies, in the stream? Yes No

How would your predictions change?

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4A. Which of the organisms on the right is most closely related to the organisms in the group on the left?

A B



Related Group



A



B

4B. Why do you say that?

4C. Which traits of the organisms did you use to make your decision?

4D. What does it mean to you to say that two organisms are “closely related”?

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5. The organisms in these pictures have been arranged into three groups. Why do you think they are grouped this way?



Group 1



Group 2



Group 3

Group 1

Group 2

Group 3

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6. A glacier is melting and as a result, a new stream is being formed. Initially the stream has almost no living things in it, but over the next 10 years, more and more living things will be found in the stream.

6A. Imagine you work for the U.S. Fish and Wildlife Service and you need to predict what SPECIFIC living things will be found in the stream in 10 years. How would you predict what organisms would be in the stream in 10 years? Be as detailed as you can in your answer.

6B. What are some *interactions (relationships) with other living things* that could affect whether an insect could survive and reproduce in the newly formed stream? How would that work?

6C. What are some *environmental (abiotic) factors* that could affect whether an insect could survive and reproduce in the newly formed stream? How would that work?

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7. Imagine it has been 5 years since a new stream formed.

7A. Trees like this are now living near the stream after 5 years. What are some possible explanations for how that happened?



7B. Mayflies like this are now living in the stream after 5 years. What are some possible explanations for how that happened?



7C. Fish like this **DO NOT** live in the stream after 5 years. What are some possible explanations for why they don't?

