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

2012-2013 Biodiversity Assessment Form C

1. A factory located near a stream pumps heated water into the stream. The heated water decreases the amount of oxygen in the stream. A biology class is discussing what this decrease in oxygen would do to the stream. Carlos thinks less oxygen would change the type of organisms that live in the stream. Megan thinks the type of organisms would stay the same, but there would be a lot less organisms.

Who do you agree with? ☐ Carlos ☐Megan ☐both Carlos and Megan

Why are they right? What would happen if oxygen in a stream decreases?

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2. Do these organisms eat?

   Do algae eat? ☐ Yes ☐ No

   Do bacteria eat? ☐ Yes ☐ No

   Do decomposers eat? ☐ Yes ☐ No

   Do fish eat? ☐ Yes ☐ No

   Do fungi eat? ☐ Yes ☐ No

   Do insects eat? ☐ Yes ☐ No

   Do plants eat? ☐ Yes ☐ No

What is the difference between organisms that eat and organisms that don't eat?

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Why do organisms eat?

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3. 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.

a. 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? DON'T make a list of organisms. Tell us how you would make your predictions. Be as detailed as you can in your answer.

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b. What are some *interactions (relationships) with other living things* that could affect if an insect can survive and reproduce on the newly formed stream? _____

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Pick one specific interaction that you provided and describe how that would work.

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c. What are some *environmental (abiotic) factors* that could affect if an insect could survive and reproduce on the newly formed stream? _____

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Pick one specific factor that you provided and describe how that would work.

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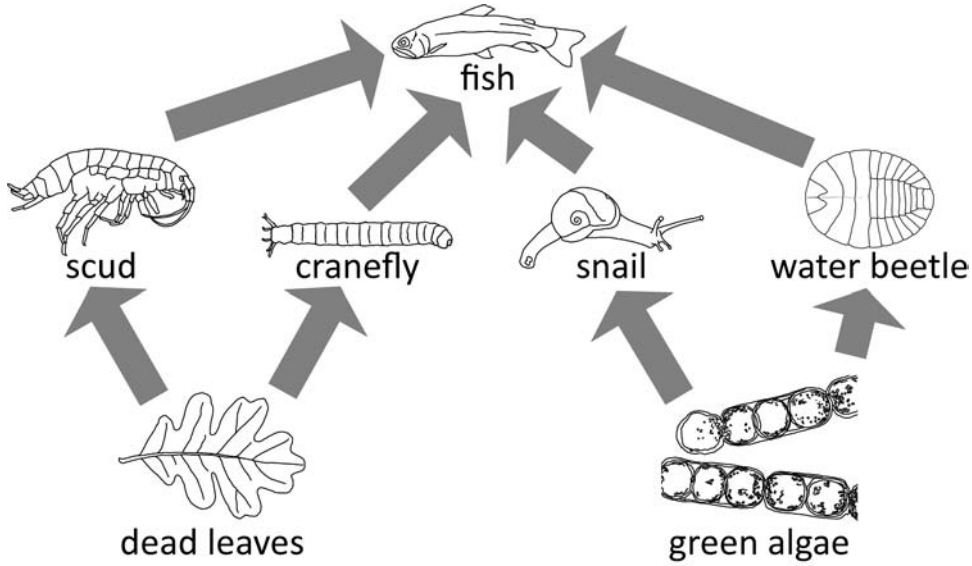
4. Bob's lab group wants to increase the number of snails in a stream. They made this food web showing how the snails are connected with other organisms.



Which of the following actions would affect the number of snails?

Adding more fish to the stream?
☐ Increase number of snails
☐ Decrease number of snails
☐ No effect on number of snails
Explain your reasoning._____

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Removing scuds from the stream?
☐ Increase number of snails ☐ Decrease number of snails ☐ No effect on number of snails
Explain your reasoning._____

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Removing trees from the shore of the stream?
☐ Increase number of snails ☐ Decrease number of snails ☐ No effect on number of snails
Explain your reasoning._____

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Adding nitrogen fertilizer to the stream?
☐ Increase number of snails ☐ Decrease number of snails ☐ No effect on number of snails
Explain your reasoning._____

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