Invasive Species FRQ

November 13, 2019 Unit 2: Biodiversity Where: Unit

Invasive species is the number two reason for biologically diversity decline. In the Great Lakes region of the U.S., many invasive species have caused considerable damage to the native populations and the ecosystems as a whole. One organism in particular, the zebra mussel, has caused considerable damage. These non-native mussels attach to solid substrates and are filter feeders. Adult zebra mussels can survive for several or even weeks out of the water if the temperature and humidity are favorable. An adult female zebra mussel can produce as many as one million eggs per year. The recent range of occurrence of zebra mussels in the U.S. can be seen in the map below.

1. **Justify** why zebra mussels are located primarily in areas in the eastern United States rather than the western U.S

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| Your Answer |  |
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1. **Explain** how zebra mussels are introduced into isolated lakes and **propose a solution** to prevent this from happening.

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1. **Identify** and **explain** one impact that zebra mussels can have on an aquatic ecosystem.

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1. **Identify** and **explain** one impact that zebra mussels can have on an industry and/or recreation.

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1. **Identify** another invasive species, either terrestrial or aquatic, and **describe** one negative impact it has had.

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1. **Describe** TWO specific characteristics of invasive species that enable them to thrive in a new environment.

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1. One strategy for controlling an invasive species has been to introduce another non-native species to control it; this strategy can often have unintended consequences or results. **Identify** a specific example of the use of this strategy and **describe** the impact of that introduction. (This could be a positive or negative impact.)

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