2015 Natural Resources Essay Midterm   
 C. Kohn, Agricultural Sciences, Waterford WI

Names (F&L): Hour: Date:

**Directions**: with a partner or alone, read and respond to the questions below. You may use a 3x5 notecard on this quiz.   
**+ = all space is completely used w/ legible answers. ✓= expectations were met but not exceeded. - = redo test**

1. A person has a daily choice between drinking from a bottle of water that they purchase from a store or drinking tap water from a reusable bottle. In the space below, describe which option is the more sustainable choice. Then explain why it is more sustainable in regards to each of the three types of sustainability.  
     
   Which is the more sustainable option? (circle one) Bottled Water Tap Water  
     
   *How is this option more Ecologically Sustainable?*

*How is this option more Economically Sustainable?*

*How is this option more Socially Sustainable?*

1. You have gone back in time to Oklahoma in the 1920s. As you step out of your time machine, you see farmers plowing up the prairies to plant corn and wheat. You explain that you have come from the future to prevent them from creating the worst ecological disaster in American history. **What are they doing that is a problem, and what will their actions cause if not stopped?**   
     
     
      
     
      
     
      
     
   **Next, explain why they should care whether or not their actions are sustainable.**  
      
     
      
     
      
     
   **Why might it be hard to convince these people to change what they are doing? List three reasons why they might ignore your warnings about their lack of sustainability.**  
   Reason 1:   
     
   Reason 2:   
     
   Reason 3:   
     
   **Aldo Leopold was hired at UW-Madison in 1920s, and his ideas on the Land Ethic were being shaped at this time. Explain what is meant by the “Land Ethic” and how it relates to sustainability.**  
   The “Land Ethic” is the idea that   
     
      
     
      
     
   After nearly a century, have we as a society improved? Are we any better at sustainability now than we were back then? Give society a grade for its current level of sustainability and justify this grade.   
     
   **Modern society’s sustainability grade: A B C D F Justify your choice of this grade:**

1. Listed below are a number of species native to Wisconsin. Of the species listed, choose the one that you think has the greatest potential of becoming invasive in another part of the world. Then defend your answer.   
     
   *Species native to Wisconsin*: Timber Wolf Black Bear Brown Bat Elk   
     
   Beaver Cottontail Rabbit American Badger Cougar Northern Flying Squirrel   
     
   **Which of these is most likely to become invasive outside of Wisconsin?**   
     
   **Why did you choose this species? List and describe 3 traits that increase the potential for becoming invasive:**  
   Trait 1:   
     
      
     
   Trait 2:   
     
      
     
   Trait 3:   
     
      
     
   **What location outside of North America is most susceptible to this potential invasive species?**  
   Most susceptible location:   
     
   Why did you choose this site?   
     
      
     
   **Why are invasive species a problem? How to they affect ecosystems and biodiversity?**  
      
     
      
     
      
     
   **How do invasive species become established in new locations? List and describe the two most important factors that affect the spread of invasive species:**  
   1.   
     
   2.
2. **In the space below, list the four things about modern society that are the least sustainable and defend your choice using evidence. Then suggest a substitute that could replace this unsustainable aspect of society.**  
   1. Unsustainable Aspect of Modern Society:   
     
   Why Unsustainable?   
     
      
     
   What could replace it?   
     
   2. Unsustainable Aspect of Modern Society:   
     
   Why Unsustainable?   
     
      
     
   What could replace it?   
     
   3. Unsustainable Aspect of Modern Society:   
     
   Why Unsustainable?   
     
      
     
   What could replace it?   
     
   4. Unsustainable Aspect of Modern Society:   
     
   Why Unsustainable?   
     
      
     
   What could replace it?
3. **Should individuals seek to make their own lives more sustainable? How would this help anyone?**