**Biodiversity – Reading Questions (Ch. 18)**

1. How do we know that we are “in the middle of a 6th mass extinction”?
2. Why would global declines in the genetic diversity of wild organisms be problematic?
3. What do you think is driving a global decline in the diversity of crops and livestock, even as the volumes of crops and meat produced increase?
4. What does it mean for a species to be endangered? Which types of species do you think are most vulnerable?
5. Complete the following chart regarding the major causes of biodiversity loss:

|  |  |  |  |
| --- | --- | --- | --- |
|  | How does it threaten biodiversity? | Underlying causes? | Solutions |
| Habitat Loss |  |  |  |
| Invasive Species |  |  |  |
| Overharvesting |  |  |  |
| Pollution |  |  |  |
| Climate Change |  |  |  |

1. What are the major pieces of conservation legislation when it comes to the single-species approach, and what does each of those laws protect?
2. What are the advantages to biodiversity conservation through an ecosystem-based approach instead of a species-based approach?
3. What are the most important characteristics of an effective biosphere reserve?
4. The average lifespan of a species is just 1-10 million years. Why do you think there are such a high rates of speciation and extinction constantly occurring throughout the history of life on Earth? (**Ch. 5, pp. 136-139**)
5. If extinctions are generally a result of changes in the environment that a species is unable to adapt to, what do you think this indicates about the 5 previous mass extinctions and the 6th one occurring now? (**Ch. 5, pp. 136-139**)
6. What characteristics do you think give ecosystems high resistance and high resiliency against change? (**Ch. 3, pp. 73-81)**
7. Describe each of the major types of ecosystem services, and how their value can be measured: (**Ch. 3, pp. 73-81)**

**Biodiversity - Vocabulary List**

|  |  |  |
| --- | --- | --- |
| **TERM** | **DESCRIPTION** | **EXAMPLE** |
| Extinction |  |  |
| Inbreeding depression |  |  |
| Endangered species |  |  |
| Invasive species |  |  |
| Overharvesting |  |  |
| CITES |  |  |
| IUCN Red List |  |  |
| Endangered Species Act |  |  |
| Marine Mammal Protection Act |  |  |
| Convention on Biological Diversity |  |  |
| Lacey Act |  |  |
| Habitat corridor |  |  |
| Resistance |  |  |
| Resilience |  |  |
| Restoration Ecology |  |  |
| Intermediate Disturbance Hypothesis |  |  |
| Instrumental Value |  |  |
| Intrinsic Value |  |  |
| Provisions |  |  |