

Essentials of ecology assignment



**ASSIGN
BUSTER**

This method describes how scientist estimates extinction rate: first, the extinction of a species typically takes such a long time that it is not easy to document. Second, we have identified only about 1. Million of the world's estimated 4 million to 1 00 million species. Third, scientists know little about the nature and ecological roles of most of the species that have been identified. These are the reasons why extinction experts believe that human activities are now causing the sixth mass extinction: First, the projected growth of the world's human population and resource use per person and climate change caused mostly by global warming. Second, current and projected extinction rates are much higher than the global average in parts of the world that are highly endangered centers Of biodiversity.

Third, we simplifying many biologically diverse environments-?? such as tropical forests, tropical coral fees, wetlands, and estuaries for the emergence of new species. Lastly, we may be limiting the long-term recovery of biodiversity by reducing the rate of speciation for some species. An endangered species has so few individual survivors that the species could soon become extinct over all or most of its natural range and as for a threatened species (also known as a vulnerable species) which is still abundant in its natural range but, because of declining numbers, is likely to become endangered in the near future.

Here are characteristics indicating species vulnerable to extinction: low productive rate, specialized niche, narrow distribution, feeds at high atrophic level, fixed migratory patterns, rare, commercially valuable and large territories. 3. What are two reasons for trying to prevent the premature extinction of wild species? What is the instrumental value of a species? List

six types of instrumental values provided by wild species. How are scientists using DNA analysis to reduce the illegal killing of elephants? What is the intrinsic (existence) value of a species?

We should prevent the premature extinction of wild species because of the economic and ecological services they provide and because they have a right to exist regardless of their usefulness to us. The instrumental value of species is their usefulness to us in providing many of the ecological and economic services that make up the earth's natural capital. There are types of instrumental values provided by wild species: use values and non-use values. Under use value is genetic information and under non-use value are existence, aesthetic, bequest and lastly, ecological value.

Scientists began developing a DNA-based map of elephant populations that allows them to use DNA analysis of seized illegal ivory to determine where the elephants were killed. They hope to use such data to identify poaching hot spots and help international law enforcement authorities to focus their anti-poaching efforts. Each wild species has intrinsic or existence value based on its inherent right to exist and play its ecological roles, regardless of its usefulness to us. 4. What is bibliophile? Why should we care about bats?

According to Biologist Edward Wilson, we have an inherent genetic kinship with the natural world that he calls bibliophile. We should care about bats because bats play an important ecological role. About 70% of all bat species feed on crop-damaging nocturnal insects and other insect pest species such as mosquitoes. 5. What is HIPPO? In order, what are the six largest causes of premature extinction of species resulting from human activities? Why are

island species especially vulnerable to extinction? What is habitat fragmentation, and how does it threaten many species?

HIPPO is an acronym about the important causes of premature extinction. HIPPO means: Habitat destruction, degradation, and fragmentation; Invasive species; Population and resource use growth; Pollution; Climate change; and Overexploitation. These are the top 6 causes of premature extinction: loss or degradation of its habitat, harmful invasive species, human population growth, pollution, climate change, and overexploitation. Island species are vulnerable to extinction when their habitat are destroyed, degraded and fragmented.

Habitat fragmentation is when large, contiguous area of habitat is reduced in area and divided into smaller; more scattered, and isolated patches, or habitat islands. Species with specialized niches and species that are sought by people for furs, food, medicines, or other uses are also especially threatened by habitat fragmentation. 6. Describe the threats to bird species in the world and in the United States. List three reasons why we should be alarmed by the decline of bird species.

The primary threat of bird species is habitat loss and degradation. After habitat loss, the intentional or accidental introduction of nonnative species such as bird-eating cats, rats, snakes, and mongooses is the second greatest danger, affecting about 28% Of the world's threatened birds. Another threat is that, U. S. Hunters kill about 121 million birds a year, as many as 1 billion birds n the United States die each year when they fly into glass windows, especially those in tall city buildings that are lit up at night.

Other threats to birds are oil spills, exposure to pesticides, herbicides that destroy their habitats, and ingestion of toxic lead shotgun pellets, which fall into wetlands, and lead sinkers left by anglers and the greatest new threat to bird species is climate change. We should be alarmed by the decline of bird species because with the decline of birds, it will affect the economic and ecological services in ecosystems. Birds also help control populations of rodents and insects,