Biomes



Biomes Name: Tutor: Course: Date: Name: Tutor: Course: Date: Biomes Biomes comprise comparable climatic regions scattered around the earth. These regions constitute communities of animals as well as vegetation and soil life forms. Typically, biomes gain description as major ecosystems. Various factors define biomes in scientific context. Such factors typically comprise aspects such as plant configurations, leaf categories, plant spacing and climate.

Additionally, specific patterns of ecological sequence and pinnacle vegetation assist in identifying biomes. Thus, such identification categorizes biomes into two distinct groups. These groups comprise Terrestrial biomes and Aquatic biomes. However, the modern environment complicates the longevity of these biomes. Currently, the significant increase in activities among humans disrupts these ecosystems. Such activities only lead to implications that affect the global climate as a whole. Furthermore, such changes remain affixed and thus, are difficult to straighten in the long-term.

One biome that is under threat is the Tropical Forest. Tropical forests face various challenges that affect the survival of certain plant and animal species. Tropical forests comprise one of the most significant biomes of the global ecosystem.

The importance of such systems is evident in their role as habitats for most sundry biotic communities. Thus, these forests contain the largest biodiversity within the global scene. Tropical rainforests are mainly located within Africa, Southeast Asia and South America. They usually collect 60 to 160 inches of rainfall distributed evenly annually. Additionally, the

Biomes – Paper Example

amalgamation of consistent warmth and plentiful moisture enhances the suitability of this biome as an appropriate environment for numerous biotic communities. This is evident according to the number of plant and animal species that live in this biome, which comprise 15 million (Holzman 78). Accordingly, the searing and moist conditions in these biomes make the forests ideal for microorganisms such as bacteria.

This is because these microorganisms stay dynamic during the year. They decompose matter on the forest floor rapidly. Furthermore, the decomposition relays nutrients to the soil.

Plants quickly consume these nutrients and become contained in trees. Additionally, tropical forests are important based on their role in climate determinacy. Accordingly, tropical forests possess a universal climatebuffering capability. Thus, they have a role in determining the global climate.

Tropical forests also provide significant habitats for most animal and plant species. As among the oldest global ecosystems, these forests house a significant amount of biodiversity especially among animals. Furthermore, tropical forests possess a larger variety of trees. In this biome, hundreds of species of trees exist. Tropical forests also supply oxygen. Usually, they regulate the gaseous atmosphere by allowing more oxygen within the atmosphere and less carbon dioxide. Thus, this biome cleans the atmosphere by increasing oxygen and reducing carbon dioxide. Usually, tropical forests absorb carbon dioxide during the day and expel oxygen.

The intake of carbon dioxide allows the trees to manufacture food through photosynthesis. Therefore, by increasing oxygen presence in the https://assignbuster.com/biomes/

Biomes – Paper Example

atmosphere, animals and other organisms are able to gain an increase in oxygen intake. However, tropical forests are under threat especially in this contemporary age. New biological threats that pose a threat on both plants and animals within such forests have increased presently. Nonetheless, one threat that affects tropical forests globally is habitat fragmentation.

Habitat fragmentation illustrates the appearance of discontinuities within the preferred surrounding of an organism. This leads to fragmentation in population as well. Usually, habitat fragmentation arises from natural activities such as geological procedures (Holzman 101). These geological procedures modify the design of the physical surrounding. Additionally, human activities also possess considerable influence in creating habitat fragmentation. For instance, the conversion of land for agricultural processes modifies the existing environment.

Modification of the environment occurs at a rapid rate and necessitates extinction among animal and plant species. The implications arising from habitat fragmentation especially in tropical rainforests are problematic. The increase in shifting plate tectonics aligns new settlements for animals and plants.

This poses a considerable impact especially on animals and plants. For instance, animals such as New World Monkeys possess attributes that allow them to adapt to rainforests. New World monkeys have long hanging tails that allow them to traverse through the forest terrain for locomotive and food purposes. Therefore, a change in such landscape modifies the landscape of such animals leaving them unable to adapt to new surroundings. Additionally, plants such as orchids have tendrils that allow them to grow on trees. Similar implications from habitat fragmentation will also affect such plants from using their tendrils to grow on trees due to change in suitable landscapes.

Habitat fragmentation also poses various problems on tropical forests. One of the main problems involves smaller populace. Usually, habitat fragmentation creates smaller populations. Tropical forests provide considerable ranges of habitats for biodiversity. However, habitat fragmentation leads to the creation of smaller quantities of habitat. The displacement of a large number of habitats also displaces biodiversity populations.

Another implication arising from this habitat fragmentation involves susceptibility towards inbreeding. This poses the risk of a loss in genetic diversity especially among animals. Furthermore, habitat fragmentation also leads a probable increase in parasites, competitors as well as parasites.

This issue is one of the main factors affecting animal populations in tropical forests. One animal species facing threat due to increase in parasitic organisms is the amphibian, the frog. Frogs used to exist in considerable populations in tropical forests.

However, the factors accompanying habitat fragmentation increased specific parasitic organisms such as the Chytrid Fungus that have since decreased amphibian populations within tropical forests (Allendorf 14). The effect of the Chytrid Fungus on amphibians illustrates the negative impact of habitat fragmentation in tropical forests concerning biodiversity. The Chytrid Fungus causes Chytridiomycosis.

Chytridiomycosis happens within the outer skin cells, which comprise a protein called Keratin. Keratin toughens amphibians' skins making them defiant to injury. Thus, the disease makes the outer skin excessively thick.

The change in skins creates abnormal degrees of electrolytes leading to suffocation and heart failure (Pessier 2013). Nonetheless, it is still possible to conserve tropical forests from habitat fragmentation. One way in which conservation is possible involves reserves. Establishing reserves and corridors is important especially for plant and animal species. Reserves and corridors will allow plants and animals to live in an environment suited perfectly for their adaptations.

Additionally, conserving tropical forests is also possible through rehabilitation and reforestation. Since habitat fragmentation reduces the number of trees, rehabilitating and planting trees provides a platform for the recovery of lost trees and an increase in forest cover. In conclusion, tropical forests, just as any other biome, are significant for the world's state. Biomes mostly comprise Aquatic and Terrestrial ecosystems. They are important since they possess a significant effect on the global climate. However, biomes such as tropical forests face threats from natural activities such as habitat fragmentation. Habitat fragmentation affects biodiversity by inducing extinction especially among animal species such as amphibians.

However, various conservation efforts such as reserves, corridors, rehabilitation and reforestation allow the protection of these biomes https://assignbuster.com/biomes/ irrespective of the dynamic environment. Works Cited Allendorf, F. W. " High Dispersal in a Frog Species Suggests that it is Vulnerable to Habitat Fragmentation." Biology Letters. 2007, Vol. 1: 13-16.

Print. Holzman, B. A. (2008). Tropical forest biomes.

Westport: Greenwood Press. Pessier, Allan. " Chytrid Fungus." Amphibian Ark, 2013. Web.

1 Jul. 2013.