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Amazon Rain Forest Protection Benefiting to Earth

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Abstract

The ecological environment of the Amazon rainforest has attracted people's attention. I propose that the protection of the Amazon rainforest is conducive to the development of the earth. Because biodiversity is closely related to the global ecosystem, it is also decisive for global climate regulation. Its role and its importance in global freshwater resources, and finally the tropical rainforest climate is closely related to the development of biology and the impact on the earth. Finally, I hope that everyone will protect the Amazon rainforest for the development of the earth and humanity.

Keywords

primitive, climate, biodiversity, climate, tropical rainforest, freshwater resources, development.

1. Introduction

Amazon rain forest always has its irreplaceable seat in the global environment, because Amazon Rain forest is the biggest, occupy 5.5 million square kilometers, and contain the most various species in the world. In the global environment, no matter for the global climate adjusting, animal variety, and resource supply.

Since Amazon rain forest's irreplaceable seat in global and it is now facing unprecedented environmental damage recently. In recent 40 years, its rain forest square has been decreased 763000 square kilometers, which equal to 2 German square. Because of the global environment protection and its irreplaceable seat in the global environment, Amazon Rain Forest protection gain its popularity. For me, I believe that Amazon Rain Forest protection is beneficial to earth, because it has crucial role on global climate, contains huge freshwater resource, preserves variety of animals and has irreplaceable seat for animals' development and survive.

First, we start with biodiversity. As we all know, the Amazon contains half of the Earth's species. It is called the Earth's gene pool. Several factors lead to this: the Amazon rainforest is close to the equator, so it is controlled by the equatorial depression, and due to the gap between the highlands of Guyana and Brazil, the precipitation of the Hugh, wet air is conducive to the Atlantic entering the plains; Due to the southern equatorial warm current, the influence of trade winds in the Southeast and Northeast, and the rise of the Western land mountains, the Amazon has a humid and rainy climate. There are millions of insects, plants, birds and other creatures in the Amazon Rainforest, many of which still have no scientific record. On the basis of the data recorded, experts estimate that there may be more than 75,000 trees and 150,000 species of advanced plants on one square kilometre of land and 90,790 tons of live plants on one square kilometre of land. Amazon's vast genetic system has also created a complex relationship of mutually beneficial cooperation among multiple species, forming an unbreakable biological system in the fierce competition for limited resources. In complex ecosystems, each species seeks not only the survival of individuals, but also the continuation of population genes. At the same time, the survival of a species requires the cooperation of multiple species to achieve a mutually beneficial balance. Some species will sacrifice themselves in exchange for the

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continuation of their own populations. For example, in the Amazon region, there is a Brazilian nut tree, which depends on several varieties. One of them is a ground-level rodent called agouti, whose teeth are so sharp that it can bite through the nuts 'shells the size of grapes. Agouti will eat the seeds of some Brazilian nut trees, and colleagues will have seeds that go far underground. Those buried in the underground seeds will take root, but when Aguti returns to the lower level to find seeds to eat, he will not hesitate to pull out, but in the long history of the species, there is no lack of sacrifice for the continuation of individual races. Brazilian nut tree colleagues need bees to pollinate, and these bees are also one of the animals that cooperate with the nut tree. In these complex and stable food chains, the extinction of any one species has huge and irreversible consequences. In the Amazon Rainforest, which has a large number of biological species, each plant and animal has to find its own unique competitiveness and survival model under the pressure of limited resources. There are trees in the Amazon rainforest that can move 20 meters a year, but this tree is not really able to walk, in order to find its place in the limited Amazon rainforest resources, behind the roots, with the roots of the roots. Corrosion, The tree will tilt its ideal position according to its own needs for water and sunlight. In the process of slowly abandoning the old root, the new root will slowly move to a new position in the new soil. This is how the tree survives in the Amazon rainforest through its ability to adapt. Some plants choose to live in symbiosis with animals. In the Amazon Rainforest, many books have huge ant nests. Ants keep trees from being eaten by other animals, and their secretions feed ants. Of course, the genes of some animals continue to develop some survival skills. In the Amazon, which chooses the right place to raise yellow-footed turtles, there can be as many as dozens of eggs. The place where they store eggs will have some requirements, such as temperature, 30 degrees of sand. A little wet. Colleagues and relatively hidden places, some factors can ensure that eggs hatch and can increase the survival rate of offspring, which is the probability of their genetic potential. The animal kingdom is inextricably linked to the plant Kingdom, and humans are also part of nature. If animals and plants are extinct due to human destruction, some other creatures will correspondingly lose their food sources and places of residence. At the same time, As the complex ecosystem of the Amazon is destroyed, humans will also lose their main source of food and plant sources. According to statistics, more than 2,000 species of fish live in the Amazon River, and one-fifth of the world's birds are in the Amazon rainforest. There are at least 3,000 kinds of fruits in the rainforest, 80 % of the world's food, and 438,000 kinds of economically beneficial plants. Found in the Amazon. If people do not protect the Amazon Rainforest, it is not only the survival of animals and plants that will be in danger. As people's resources are scarce, people's survival will also be threatened. The entire world is an ecosystem, a complex and unbreakable system. The loss of one species may cause the extinction of several species. At the same time, the Amazon rainforest is an important part of the ecosystem. The protection of the Amazon rainforest has an indescribable interest in the survival of the earth's species and an unimaginable relationship with people's survival.

2. Amazon's Natural Ecological Climate and its Freshwater Resources

In this section, we are discussing Amazon's natural ecological climate and its freshwater resources. Amazon's impact on climate is also very much known that trees can absorb carbon dioxide directly, and this carbon dioxide content is increasing, partly because of Amazon. Trees caused by massive deforestation can produce a lot of oxygen, which is the basic condition for almost all animals on the planet.Give a example. If there is no oxygen, you can imagine that almost all animals on the planet will face the threat of death. But there is no doubt that the Amazon can produce almost a third of the oxygen for our planet. In this respect, it plays an important role in regulating the climate and providing bio-respiration on the lower globe, but in addition to this role, it can also prevent the serious erosion of soil and water, and play a very good role in purification. Of course, it can also promote the balance of the whole earth's

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biosphere and ensure the stable cycle of the biosphere's material. It has also made remarkable achievements in maintaining the diversity of biological resources. This point will be introduced in the next section. For the ever-increasing demand for human timber, this place has been able to solve, even alleviate, the problems of energy and other aspects, as well as solve some economic or political disputes in many neighboring countries. It has made great contributions to the sound development of our entire human race. When a good foundation. It's like a huge circulation system. It's also a system and a water cycle. It's estimated that the largest water cycle affects the climate and natural environment. So, on the whole, Amazon can be very helpful to the development of the history of the earth.The second thing we have not done is to protect this friend's year and let him continue to contribute to the saving of our furture human development. On the left, Amazon's abundant water resources have an impact on natural climate. Amazon River is hot and rainy all year round. Because of planty of heat and abundant water resources, I want to go online to form a continuous growing season. Tall and dense trees are mainly scattered. So if we evaluate you from the perspective of natural ecology, we should have a strong biological cycle and grow fast. This is the car. TThe performance of high production area is different from other ecosystem advantages. Driven by a strong business chain and the activities of the earth's organisms, it is necessary to grow rapidly if the ecosystem is to be recycled vigorously. The nutrients he grows are stored almost entirely in the plants on the ground, so the paper on the ground is called the most important and crucial part of the Jade Emperor system, but it is also the most destructive part of human beings. Last time I mentioned that the impact of water resources is so great that once the Yulin generation is destroyed, the nutrient squirrels needed to grow will collapse and quickly lose, which makes it difficult to restore the ecosystem. As a recent example, the latest research report shows that the dramatic changes in climate around the world have brought many changes to the Amazon forest. Many bibliographic types are changing gradually. The research team continues to collect relevant information about vegetation here. And the relevant follow-up analysis, the results unexpectedly found that the growth of trees here, from the 1980s to the present, because the global climate is constantly changing, so it has brought a lot of impact. It can be said that the changing climate has brought great side effects to the forests here. This is due to the climate change, many trees here are difficult to survive, especially those who prefer dark and humid environment. These trees often die in large areas due to the reduction of precipitation. This mortality rate is far greater than the law, and the rest can adapt to these dry climate, but These trees are relatively few, so they can't completely replace the trees that like wet environment. As a result, the mortality rate of these vulnerable tree species affected by climate is increasing. Analogy. Let's take an analogy, just like the survival of animals, if this number is compared with that of animals. You will find that vegetation, like animals, is affected by climate. Animals can't find food with the influence of climate, and this food is basically less than 15, they will face the threat of death, and this kind of green is actually a great surplus of the probability of being killed by human beings, which is quite terrible. So if this climate change can not be effectively curbed, it is possible that these forests will gradually disappear in the future, including the recent Amazon fire. This point, Xiamen will mention that the consequences of that time are immeasurable, not only affecting the residents living around them, but also the global residents. People will be affected. Research shows that from now on, until 2030, forests in the Amazon region will continue to degrade over the past decade, and this degradation will release their carbon dioxide, estimated to be the largest volume, reaching 961 tons, which is now the total of global greenhouse gases in two years, greenhouse gases. It's bound to destroy the entire global climate system, and of course the climate system will do it again, three years from Amazon. From this you can see that the role of climate is to influence each other's climate. Amazon forest affects Amazon forest. Amazon forest adapts the climate and will return to the earth. Encountering problems can even lead to drought, and of course, forests will continue to

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degenerate, and more than 60% of the forests will probably be destroyed by that time. Imagine that if this happens all the time, Amazon will be destroyed in the future, and some scientists even predict that by 2030, there will be a possibility that precipitation will continue to decline, or even 10% less than the current total. If this happens, then Amazon will face the drought problem. The problem is even more serious, perhaps because of this reason, which will lead to the destruction of the remaining forests. That is to say, the situation of global warming may also lead to the destruction of this place. In addition to the large-scale decline in Amazon forests, there is also a growing climate in this area, there is the possibility that the average height of the temperature to 2 degrees Celsius, and some of the more serious parts of the region. Of course, if you say that the Amazon has been destroyed, then it will affect the global climate. The global climate will certainly be automatic. The Amazon will also lead to the reduction of precipitation in many areas, the less oxygen content, and the destruction of ecosystems. Then, the North and South Americas of Amazon are likely to face the causes. The problems of food inspection for precipitation affected not only the climate, but also our human life. So we stop the destruction of this region, not only to stop the barriers here, because the important thing is to reduce the emissions of ten gases and give him a good climate environment. If developed countries do this well, they can delay the global warming, such as driving and so on. Road greenhouse gases are welfare, carbon dioxide, etc.

3. The Future of Rain Forests

However, the future of rain forests is a problem for South America and even the whole world.

An unprecedented blaze broke out in Brazil, for example, in 2019 and intensified in August.There have been more than 74,000 fires so far this year, the highest number recorded by the country's national space research institute (INPE).That's about an 80 percent increase over the same period in 2018.More than half of those fires are in the amazon.the most of the fires are blamed on deforestation and a practice called slash-and-burn farming.people cut down forests and burn vegetation after it is dried and burned land softens to make room for agriculture or other development. They may also set fire to replenish soil and encourage cattle ranches.Brazil is the world's largest beef exporter, according to the U.S. department of agriculture.

"These fires are deliberately clearing forests," Careline Stoof, coordinator of The fire central at wageningen university (WUR) in The Netherlands, told The Verge:"People want to get rid of forests, make agricultural land, let people eat meat." "There is no doubt that the increase in fire activity is associated with a sharp increase in deforestation," Paulo Artaxo, an atmospheric physicist at the university of SAO Paulo, also told science. He explained that fires are expanding along the boundaries of new agricultural development, as is often the case with fires associated with deforestation.

Brazil's government, which has promised to open up the amazon to more development, is trying to divert attention from deforestation. Yair bossonaro initially accused non-governmental organizations of deliberately setting fires in protest against his policies, without providing any evidence to support his claims. In August, he fired the director of the national space institute after it published disputed data showing a sharp rise in deforestation since Bolsonaro took office.

On August 20th Ricardo Salles, Brazil's environment minister, tweeted that dry weather, wind and heat had caused the fires to spread so widely.But even in the dry season, fires are not a natural phenomenon in the amazon's tropical ecosystem.

As you can see, due to improper development and unfavorable protection, the amazon rainforest is being seriously damaged. In 2005, the amazon entered its second year of drought after experiencing its worst drought in 100 years.On July 23, 2006, the website of the

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independent reported that the Wood hole research center concluded that the amazon river drought caused by massive deforestation is rapidly pushing the whole region to a "tipping point" where rain forests will start to die nonreturnable.Forests are already on the brink of desertification and will have a catastrophic impact on the global climate and the world may end. The area of tropical rainforest is decreasing at an alarming rate, and the forest coverage rate has been reduced from 80% to 58%. As a result, animal and plant resources are destroyed, causing a series of environmental problems such as soil erosion, rainstorm, drought and desertification.Experts say the situation could pose a threat to species conservation and the global climate balance.They estimate that the loss of 44,000 square kilometers of rainforest since 2000 is three times the Brazilian government's estimate.Deforestation is happening at an alarming rate in the amazon, where on average a football field-sized forest disappears every eight seconds.The amazon rainforest is suffering its second major destruction in its history, which has drawn the attention of South American and international environmental groups.According to satellite data, more than 20,000 square kilometers of forest have disappeared since August 1999.The worst deforestation in history occurred in 1995, when 29,000 square kilometers of forest were destroyed.So far, the amazon has been stripped of 582,000 square kilometers of forest, an area larger than the entire state of Bahia in Brazil.If deforestation is not brought under control, the world wildlife fund warns, the amazon will leave its name blank in the near future.And apparently, destroying the amazon is also destroying local biodiversity. 1/5 of all birds are found in the amazon,and there are 25% of plants being active against cancer cells are ONLY exist in the rain forests,it will be a large A major loss in biology.Environmentalists are concerned not only about the damage to biodiversity caused by forest destruction, but also that carbon released by plants as a result of forest destruction may accelerate global warming.The evergreen forests of the amazon rainforest account for 10 percent of the world's terrestrial carbon production and 10 percent of the ecosystem's carbon storage -- about 1.1 x 1,011 metric tons of carbon.Between 1975 and 1996, an estimated 0.62±0.37 tons of carbon was accumulated every year per hectare of amazon rainforest.The deforestation of the amazon rainforest caused by fires has made South America one of the highest emitters of greenhouse gases.Brazil emits about 300 million metric tons of carbon dioxide a year, of which 200 million comes from cutting down and burning the amazon rainforest.

The reasons for the large area loss of forests are firstly due to the influx of large Numbers of immigrants into the amazon region in recent years, which leads to the shortage of agricultural farmland. Therefore, the phenomenon of deforestation and land reclamation in the peripheral amazon region is very common.

In addition, due to the lack of effective management, unplanned mining, road construction and building are another reason for large-scale deforestation. At the same time, man-made or natural fires are also reducing forest area.Faced with the grim situation, the voice against deforestation is increasingly strong.Environmentalists point out that forests, as the main body of terrestrial ecosystem, play an irreplaceable role in water conservation, water and soil conservation and drought and water-logging reduction.They argue that the unique natural conditions of the amazon region should be fully utilized to develop ecotourism, which can promote the local economic development and protect the ecological environment at the same time.

4. Conclusion and Discussion

To put into the nutshell, Amazon rain forest, lung of earth, protection is beneficial to the earth, because it could absorb the carbon dioxide, which have the vital on global warming, thus play a role of cooling effect, which effectively stem the global warming. On the other hand, the huge

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mount of moister released by Amazon Rain Forest is the vital part of precipitation cycle. For the biodiversity, it contain the 54% animal species on the earth and in the Amazon River, there are different species of fish which is more than Atlantic Ocean. For the resource supply, 20% global oxygen are provided by the Amazon Rain Forest, also it provide the large mount of word using.

In this day and age, Amazon Rain Forest has been destroy severely, in recent 40 years, almost 20% Rain Forest has been chop down, many people despoil the tree or the animals to sell them for money or satisfy their livelihood, use them to make furniture or clothes. Even in Brazil, the Government build a big dam to satisfy the requirement of electricity, this dam may lead to river change their trail, then submerging the 500 square kilometer, thus Forced local aborigines to move . Although many people are try their best to protect the Amazon, some of them even recruit the volunteer every three mouth, however, the force emit by them are not big enough to influence the world or change the mind of poacher. There days, a big news shocks the worldwide individuals——Amazon Rain Forest fire, On August 18, 2019, the amazon rainforest on the border of Brazil, Peru and Bolivia caught fire for 16 days, burning more than 80 hectares, an 85% increase over the same period in 2018.There are several reasons for this fire: 1. Due to limited resources, people have been unrestrained in exploiting tropical rainforest resources in order to cultivate and graze. They have exploited tropical rainforest resources through fire prevention, logging and other means.2. Due to the dry weather, the weather around September is dry with less rainfall, and due to the dense vegetation in the amazon jungle, it is easy to cause fires.

Amazon Rain Forest provide huge mount of advantage for human, it could control and absorb some mount of pollution. It contains large mount of plants, which could fixed the soil, thus prevent water and soil loss. Forest has excellent permeability, which could absorb huge mount of water and fixed the soil providing water to the plants, according to the data, Amazon surface contained 23%fresh water world wild, also plants could through photosynthesize turn the carbon dioxide which individuals breath out to the oxygen, which could efficiency control the global warming. If we still incessantly explore the Amazon Rain Forest, the deforestation will cause the soil erosion and soil desertification, then greatly reducing the fixed soil and water ability of field. Such lose will bring severely water and soil loss to us, not only will hurt the forest's plants and turn the forest region to the direst and poorest field in Peru, but also will bring a lot of stand to the downstream, which will pollute the river beside us thus polluting the water we drink. Also in such wetly and rainy environment,landsildes are the most prone to natural disasters, due to a large amount of rain erosion and tropical rain forest climate and more loose soil. During the process of water and soil loss, human could also be one of the worest victims. During 1920-1980, it is frequently to happen landslides, almost to the 4300 times, and the total died person in the disaster up to 46000 people. Landslides will also affect the ocean, there are 0.2 centimeter thick topsoil covering 30,000 square kilometers of land washed to the ocean annually, which will level up the ocean surface thus increase the dangerous of submerging the cities. Amazon Rain Forest is a enormous gene pool, which contain the 4000000 species on the earth, but because of deforestation of forest, one specie disappear from the gene pool everyday, so based on this velocity of species' disappearing, the species on the earth will disappear, and the amount up to 800000 species. Losing such enormous species will cause many perfect biological chain destroyed, even disappear, and the human living will become a tough crux during that time, human may lose food, water and nutrition, even they will have no clothes to wear.

In this day and age, Amazon Rain Forest has been destroy severely, among them, most situation are caused by the human, exploring the Amazon Rain Forest without limitation or satisfying their livelihood .From where I stand, I appeal to you to protect the Amazon Rain Forest. And I always suppose that Amazon Rain Forest protection is beneficial to the earth.

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References

[1] Röös E, Bajželj B and Smith P (2017). Protein futures for Western Europe: potential land use and climate impacts in 2050. Regional Environmental Change, vol.17, no.2, p.367-377.

[2] Iqbal M, Syed J H and Breivik K (2017). E-Waste Driven Pollution in Pakistan: The First Evidence of Environmental and Human Exposure to Flame Retardants (FRs) in Karachi City. Environmental Science & Technology, vol.51, no.23, p.13895.

[3] Avellan C T, Ardakanian R and Gremillion P (2017). The role of constructed wetlands for biomass production within the water-soil-waste nexus. Water Science & Technology A Journal of the International Association on Water Pollution Research, vol.75, no.10, p.2237.

[4] Sampat A M, Martín-Hernández E and Martín M (2018). Technologies and logistics for phosphorus recovery from livestock waste. Clean Technologies & Environmental Policy, vol.20, no.11, p.1-17.

[5] Kevin, MGANGA and Dickson (2018). Determinants and rates of land degradation: Application of stationary time-series model to data from a semi-arid environment in Kenya. Journal of Arid Land, vol.10, no.1, p.1-11.

[6] Sun C, Pan Y C and Liu Y (2017). Nutrient Resources in Livestock Manure and Its Potential of Substituting Fertilizers: A Case Study of Guzhen County,Anhui Province. Journal of Ecology & Rural Environment, vol.33, no.4, p.324-331.

[7] Llonch P, Haskell M J and Dewhurst R J (2017). Current available strategies to mitigate greenhouse gas emissions in livestock systems: an animal welfare perspective. Animal, vol.11, no.2, p.274-284.