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### Worldwide Deforestation

Deforestation, the intentional removal of forested land, is a topic of heavy debate around the world. Although much of modern deforestation takes place in South America and tropical rainforests, the positive and negative effects are evident across the globe. Defenders of deforestation support the increase of agricultural space and the abundance of timber, which benefit the global economy. Those against the practice are enraged over the increasing risks of greenhouse gas emissions, destruction of indigenous lands, and animal habitat loss, which can lead to extinction. Both viewpoints have been fighting for their beliefs for many years (“Deforestation”).

The main idea of deforestation is to clear land of trees to make room for agriculture and ranching to support the rapidly growing global population and to use the discarded trees for timber, fuel, and other manufactured products. In earlier times, deforestation occurred mostly through fires, both controlled and uncontrolled. As humanity developed and the population grew, deforestation increased, not only to create more agricultural space but to decrease the difficulty of hunting game. In 5000 BC, deforestation was popular in Africa, Asia, and Europe as a way to provide shelter and homes (Cohen).

Thousands of years ago, most of the Earth was covered in thick forests. Two thousand years ago, over 80% of Western Europe had forests. That number has decreased to just 34% in

modern times. In China, where forests used to be abundant, only 20% of the land is forested (“Deforestation:”). Although the practice has actually been occurring for thousands of years, deforestation did not become a topic of global debate until the 1800s, during the Industrial Revolution (Cohen). The largest increase in deforestation began in the 1950s in the rainforests of South America. Since then, as the global population continues to grow, the demand for deforestation has increased significantly. Over 30.1 million acres of tropical rainforests were cleared in 2020 alone, which is comparable to the size of the state of Pennsylvania (“Rainforest Trust Saves Rainforest”). Clearly, deforestation is heavily practiced today.

We believe that, in spite of the advantages deforestation may bring, the benefits simply do not outweigh the costs. We oppose deforestation. We believe that deforestation is a short-term solution to a long-term problem: killing trees cannot and will not be a sustainable practice compared to the rate at which the global population is increasing. We stand against the encouragement of extinction, the growing rates of greenhouse gas emissions, and the robbery of lands from indigenous peoples.

According to the World Wildlife Fund, over 70% of the planet’s plants and animals live in forests. Deforestation leads to a tragic average extinction rate of 137 plants and animals every day, totaling to over 50,000 species becoming extinct each year. This number is steadily increasing as deforestation rates increase (“Deforestation: Clearing The Path For Wildlife Extinctions”). This is unacceptable. Entire ecosystems are being destroyed. Animals are losing their lives rapidly. The golden lion tamarin, a native of the rainforests of Brazil, has lost over 95% of its original habitat, and as only an estimated 1,000 remain in the wild, they are considered critically endangered of extinction (“Golden Lion Tamarin at Belfast Zoo”). In Indonesia, the Javan Rhino is dangerously close to extinction. In fact, only an estimated 67

remain in the wild. They are confined to living in one location, the Ujung Kulon National Park (“Rhino”). And Rafflesia, also known as the corpse flower for its foul odor, is critically endangered as well. It is the largest flower in the world, weighing up to six pounds and measuring over one meter in diameter. Although these flowers are also collected for traditional remedies in Southeast Asia, deforestation is the biggest factor towards the endangerment of this plant (“Rafflesia Threats”). These are just a few of the hundreds of examples of endangerment that animals and plants face every day that deforestation continues.

A decrease of trees in forests directly contributes to higher rates of greenhouse gas emissions. Trees absorb carbon dioxide; without the trees, carbon dioxide remains in the air, traps heat, and retains air pollution (“Effects of Deforestation: The Pachamama Alliance”). Increased carbon dioxide in the air leads directly to global warming. Slashing-and-burning also contributes to higher carbon dioxide levels in the air. When the trees are cut and burned, the carbon dioxide they had stored is released, creating greenhouse gas emissions. Deforestation alone is the source of over 10% of all greenhouse gas emissions (“Tropical Deforestation and Global Warming”). An increase in greenhouse gases is unhealthy for the global environment because trapping heat and air pollution leads to an increase in weather disasters, famines or droughts, and wildfires (Nunez). These conditions are a danger to all of humanity and all forms of life on this planet.

Additionally, trees help control the water cycle by pulling water from the ground and releasing it into the air. This process is called transpiration, and it helps increase rainfall around the world and cool down the earth (“How Forest Structure Influences the Water Cycle”). When the trees are cleared, the air becomes drier and depletes water from soil, making it unfit for growing crops. While one aim of deforestation is to increase agriculture, the lack of trees to

regulate the water cycle actually means that after a few seasons, the soil will be too dry to grow crops. This creates a harmful cycle of continued deforestation: looking for wet soil, drying it out, and moving on to the next wet soil plot.

Not only is deforestation harmful to plants, animals, and the environment, it is harmful to humans as well. Many locations of modern deforestation used to be the home of indigenous tribes and peoples. As lands are destroyed, these people are forced to relocate. Too often, people of different tribes move to the same location, which strains their already-limited resources (“Deforestation: The Human Costs”). For many people living in urban areas, the concept of losing their home to agriculture and harvesting is not a familiar subject. Yet indigenous people deal with this situation regularly. Places that they have lived for generations are now being taken away and desecrated. Connections they’ve formed with the land are being forcibly broken. The ways of life of indigenous peoples are constantly under threat (“Effects of Deforestation: The Pachamama Alliance”).

Defenders of deforestation point out the positives. After all, if deforestation was ultimately evil, why would it still be in practice? When acres of trees are cleared, acres of land open up. These empty plots of land provide massive amounts of space for agriculture and ranching. Brazil was the world’s largest exporter of beef in 2020, largely thanks to the amount of land they’ve cleared and used for ranching and raising cattle (Cook). The beef is sent all around the world to feed people from many different countries. However, much of modern deforestation occurs in tropical climates, which is not suitable for the production of cattle. Grasses that the cattle need quickly deplete the soil of nutrients. For the cattle business to remain booming, more and more trees need to be cleared to continue finding soil rich in nutrients. Research shows that for every 1/4lb. of hamburger eaten from cattle raised in deforested rainforests, approximately 55

square feet of forest had to be cleared (*Project Amazonia: Threats*). Imagine how many pounds of hamburger are eaten across the United States in one day. Now consider how many pounds of hamburger are eaten across the *world* in one day. Hundreds of acres of rainforest are being cleared daily. This is severely harming the environment, not only with the removal of the trees but by depleting the soil of its nutrients. It also ensures that trees cannot grow back after being cut down because they will not be able to survive in the weakened soil.

Supporters also mention that the trees are used as lumber and to create materials. Almost one-third of the wood recovered from worldwide deforestation is sold as timber, which contributes greatly towards building housing and commercial businesses (“Wood Products”). The trees that aren’t sold as timber are turned into paper products or manufactured into other materials. This way, the amount of waste created by deforestation can be greatly reduced. The local areas where deforestation occurs can receive a great economic boost by using and selling as much of the trees as possible (Miller). However, these benefits cannot erase the fact that the global environment as a whole is at risk. While economic boosts and paper products seem great, these are only temporary wins. This way of life is not sustainable. Trees are unable to grow back at the same rate that they are being cut down. The demand will soon surpass the supply. What then?

As cattle ranching is one of the biggest causes of deforestation, one solution to help slow the rate of deforestation is to consume less beef. Although it seems like a small act, one person *can* make a difference. If more and more people commit to eating less beef, the ranching industry will slow down and thereby decrease the rate of deforestation. Another feasible solution to reducing deforestation is to purchase recycled paper products and recycle. This slows the consumption of paper products in general, therefore slowing the demand for timber and

deforestation. The biggest step towards reducing deforestation is education. When people are knowledgeable about a subject, they are better able to and more likely to teach others and spread awareness. Imagine the progress that could be made if everyone worked together to slow the consumption of beef and paper products. No action is too small. It's time to work together and take a stand against deforestation once and for all.

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