

The Melting Point of ChocoLATE

By Leslie Tehuastle-Zamora

Do you like chocolate? What if it disappears? Scientists predict that chocolate is going extinct by 2050. Chocolate comes from cacao plants. The places that grow cacao plants are unique and are only in certain parts of the world. As a result of Global Warming causing climate change, the warmer conditions are preventing cacao plants to grow in their normal environment. Earth's weather patterns are affecting all living things that have already adapted to their normal temperature. There are many different ways to prevent this.

According to the National Oceanic and Atmospheric Administration, cacao plants are sensitive and only grow in specific conditions. Cacao plants need rainforest conditions like high humidity and abundant rain. They also need nitrogen-rich soil and protection from wind. An article by Michon Scott (2016) states that most of the cacao plants used to make chocolate can be found 20 degrees North and South of the equator. Côte d'Ivoire (Ivory Coast) and Ghana produce over half of the world's chocolate. Ivory Coast is 124,504 mi² big and Ghana 92,099 mi²; when both are together it's similar as the state of Texas. Cacao plants are only found in a small area which they can't be grown in other places. This is important because if climate changes, it will affect cacao plants since they are very delicate to weather.

Global Warming is happening, and is causing significant changes to our climate. This shift can increase coastal flooding by icebergs melting, causing ocean water to raise up to a higher level. There are wet areas becoming wetter and dry areas becoming drier. This weather change can cause wildfires and hurricanes. Insect-borne disease depends on warm weather and if Global Warming is changing its overall temperatures, the insect-borne disease can spread more easily. Each time the temperature is raising by two degrees it will be too hot for cacao plants to grow according to a study from Colombia-based International Centre for Tropical Agriculture. To summarize, Global Warming is not only affecting cacao plants but it's also affecting the ecosystem around the cacao plants. Global Warming is affecting many things and we must be concerned about it.

Although we have done all of that research, some people still don't think that Global Warming is happening. Those who deny Global Warming exists point out that they don't experience planetary climate change. Global Warming is happening very slowly, and the temperature is changing locally year by year, within the last decade. The evidence on NASA's website, states how since the 19th century temperatures have risen up to 2.0 degrees Fahrenheit. Heat rises around the Earth affecting the weather patterns. Due to climate change the areas where cacao plants are grown are becoming not ideal. Temperature changes have led to many chocolate companies looking into gene-editing technology to make artificial chocolate.

Do you want artificial chocolate? If you do not want to see chocolate disappear, there are a couple of things that you can do to help prevent this. When we burn oil, coal, and other fossil fuels for energy they release carbon dioxide, which is the Earth's worst enemy. Carbon dioxide is harmful, and we can help prevent it by being aware of the energy that we use. You can help by buying better bulbs, reducing water waste, using renewable energy for your home, and by

driving a fuel- efficient vehicle. These little things can help stop Global Warming and chocolate from extinction. You can spread the word and go green by talking to your family and friends, starting a Green Club, and being aware of the materials that you use. In order to prevent chocolate from going extinct, you can take a few steps in your daily life to help stop Global Warming.