

Stage 2: Research

Due beginning of class May 18th

Fill this out for each solution

What is your problem (at least 2 paragraph)? More detail the better

Our problem is deforestation. It is the main factor to air pollution and is having a very big impact on our environment. Deforestation occurs because people are clearing the land for agriculture, livestock, or urbanization.

Deforestation is the permanent destruction of forests to make the land available for other uses. An estimated 18 million acres are cut down each year. Forest loss contributes between six to twelve percent of global CO2 emissions.

Current limitations, why has it not been solved already?

This problem hasn't been solved because humans are in need of the materials and space for building new homes. This is because of the growing population and having to accommodate for the people coming into the country.

Proposed solution. More detail the better

Our proposed solution is to create a flame repellent spray that is bio friendly to spray onto trees during the dry season when they are more

prone to forest fires. Aloe vera is a naturally occurring plant that contains traits that make it fire repellent.

Mentor, why did you choose them, their credentials and contact info.

Our mentor is the ranger department at Yosemite National Park. Their number is (209)-372-0200. We chose them because they are very well versed in fire protection and can help with any questions we have.

Citations

<https://www.nps.gov/yose/contacts.htm>

<http://www.denverpost.com/2012/06/16/wildfire-red-slurrys-toxic-dark-side/>

<http://readyforwildfire.org/Fire-Safe-Landscaping/>

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Proposed solution. More detail the better

Our idea is to add a fertilizer to the soil to help with the regrowth of areas that has suffered from deforestation due to unfit soil conditions. This fertilizer would promote growth in the trees making them develop in the most prime conditions. The fertilizer would contain the needed supplements that are not given to the trees in the natural environment.

Mentor, why did you choose them, their credentials and contact info.

Our mentor is Ellen Bergfeld. She has a PhD and her contact information is ebergfeld@soils.org or her number is (608)-268-4979. They specialize in soil conditions. We believe that with their knowledge and our work we can create a successful model to be implemented in the future.

Citations

<https://www.soils.org/contact>

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Proposed solution. More detail the better

Our proposed solution is to genetically modify plants to grow food faster and more abundant. This will increase the amount of food being produced, and will allow us to cut down less trees for agricultural use.

Mentor, why did you choose them, their credentials and contact info.

Our mentor is Dr. Bruce Blumberg. He is a professor that specializes in GMO's. His email is blumberg@uci.edu.