CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY

Name(s)

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Project Number

34691

Project Title

Effect of the Great Pacific Garbage Patch on the Phoebastria immutabilis

Abstract

Objectives/Goals

The objective of this research project was to study the effect of the Great Pacific Garbage Patch on the Phoebastria immutabilis population and to bring awareness to this growing problem. Ninety percent of the world Phoebastria immutabilis population is located on the island of Midway Atoll found near the Great Pacific Garbage Patch. This is an area of debris that circulates in the North Subtropical Pacific Gyre of the Pacific Ocean causing the birds to ingest the garbage. Therefore, we hypothesized that if the amount of trash is not contained and minimized, then the Phoebastria immutabilis population will become extinct.

Conclusions/Discussion

From the effective research collected, we proved our hypothesis correct. The research displays how future generations of the Phoebastria immutabilis population will contain several birth defects due to the toxins and carcinogens found in the debris.Through the research collected it can be seen that if the ingestion of plastic garbage continues, the new generation of Albatross chicks will be born with birth defects and the death rate will escalate inevitably. The research can be used to understand the effect of the trash on the increasing endangerment of the Phoebastria immutabilis population, and help prevent any further damage to the species.

Summary Statement

The objective of this project was to analyze the growing endangerment of the Phoebastria immutabilis population due to the Great Pacific Garbage Patch.

Help Received

Data was collected from correspondences with Captain Charles Moore and the Algalita Marine Research Insitute