

## A Bleached Ecosystem is no Ecosystem at all

Hawai'i is my home. It's where I was born and where I intend to grow, surrounded by my kupuna and the rich culture behind our islands. While our home may still be one of vast beauty, however, so many people fail to recognize that within Hawai'i a-whole-nother world is rapidly becoming extinct. The ocean, the reefs, the coral and fish have given life to not only Hawai'i but many other island nations and countries - providing food, medicine, clothing and even homes to countless of individuals. However, due to coral bleaching, millions of reefs are dying; the balance of marine life, and our life, being gravely threatened as we know it.

Growing up in Hawai'i, one can't help but to have a fascination for the Ocean; and seven-year-old me was no different. I loved spending my time swimming by the reefs, trying to catch fishes and hermit crabs. And finding out that not only were our coral reefs these enormous, colorful and fantastic structures, but were actually living organisms that gave life to other marine animals just enthralled me. Although, even at the young age that I was, even I could tell that something was wrong with the coral reefs; they were dying. Getting smaller and smaller, discolored and withering away. I didn't understand it. It wouldn't be until my eighth-grade year, that I really understood what exactly was happening to the world below our own.

In the past three years, Hawai'i's coral reefs have suffered up to 90% of coral bleaching, and research shows that even the most protected areas of the Hawaiian Coast are being ravaged by bleaching. A recent survey of Hanauma Bay disclosed that an average of 47% of its coral reefs experience bleaching, nearly 10% dying. Additionally, in the past 30-or so-years, the world has lost up to 80% of its coral reef populations, disrupting its symbiotic relationship with millions of species. And in the next 50 years, if nothing is done, coral reef ecosystems will be severely undercut, estimating that around 90% of the world's coral to be demolished.

While it's near impossible to bring back dead coral, I think there is definitely a way for humans to further prevent drastic coral bleaching; and that way is through education and experience. Without understanding just how significant coral bleaching is, it's difficult for people to want to help or to even know of its existence. Youth program, Teens4Oceans which was created by Zachary Rago, gives students a stimulating VR (virtual reality) experience of coral reefs, provides nationwide reef tours to students and demonstrates how impactful global warming is to our Ocean ecosystem. Despite that Hawai'i may not be able to utilize this specific program, the education system and federal government can look at this initiative for inspiration to educate our keiki about coral bleaching and the rise of global warming in general.

I propose that to stimulate youth into becoming activists for the ocean environment and to provide insightful education regarding coral bleaching, semi-annual youth conferences, open to all schools - statewide -, should be held. These conferences would be structured with several committees that students would be able to select, all of which would have to create a charter or declaration to improve the coral bleaching crisis. Committees would include: a crisis update committee - students in that particular committee would create a short and periodic live broadcast to update other committee members with incoming updates, regarding coral bleaching or global warming -, integration committee - students would work together to provide solutions as to how the public can be made more aware of coral bleaching -, and an action committee - similar to Model UN's general assembly, students in this committee would be representing countries or state governors within the US and would work to find possible solutions for the district or federal government to take legal action to prevent further coral bleaching.

I think that this solution example would be able to stimulate students into learning more about how they can create a positive impact on the ocean environment because they would really be able to participate firsthand in creating possible solutions that could actually become a reality. From this conference, students could take initiative on their own to educate their peers, family and even teachers; and as mentioned before, find a way to implicate their theoretical solutions in real life. This conference would also allow students from varying schools to work together and share their opinions and solutions, in regards to coral bleaching, which I think is the most valuable outcomes. The sharing of ideas, especially from youth, is so important in creating solutions, not just for one particular subject, but for almost everything in life. What this conference would be able to do is allow students to be in an environment, where they would be able to suggest whatever they deem as significantly impactful in finding solutions for coral bleaching.

Furthermore, through education and the implementation of this solution, Hawai'i's youth would be able to collectively communicate with each other to create group solutions as to how the coral bleaching crisis can be alleviated. What is important for people to understand, is that essentially it's not too late for coral reefs. It's still possible to save and bring back the coral that brings diverse beauty to Hawai'i's oceans, and it's all within our individual capability and power, today. If more people are aware of what's going on, and are committed to take action, not only could we save the coral, but we could save the world.