

By promoting a healthy native forest ecosystem, I know we will be able to find a healthier Hawaii.

I come from the island of Moloka'i and currently there is only 15% of our native forests remaining. Our island is being smothered by Non-native trees such as Eucalyptus and Strawberry guava which are not only competing (and winning) against the native species but are also causing heavy erosion from our high elevation forests, to our many streams and subsequently our barrier reef where many marine life reside.

I am only aware of this issue due to my passion for the forest and my science fair project that I am currently involved with this year. In my science fair project, I compare the different diversities between the native and non-native forests on Moloka'i through plant growth forms (If it's a vine or a large tree), plant species, moss depths, and litter depths. The results are almost always showing that the native forest have a higher diversity. Having a higher diversity count entails that a greater amount of species (animals, plants, and etc.) can live in that ecosystem jointly. I found that a native overstory filled with 'Ōhia trees, for example, tend to have native species underneath. Sadly, much of the same can be said about non-native overstory having non-native species under their canopy as well. With only 15% of our native forests left, this leads our native species to fight an uphill battle against their non-native counterparts.

I am hoping that through my findings I can make not only make my own community aware of this issue, but also the entire state that native forests are extremely important to not only the present day Hawai'i, but also the future Hawai'i. A saying that I learned as a child and have treasured throughout my life was, "Mauka to makai", meaning mountains to ocean. Whatever happens to the mountains, where our forests are located as well as in other places, will affect the communities underneath and oceans. If we can replace those non-native forests with native species, then we can expect less erosion. Less erosion will allow us to start working on the erosion currently endangering our reef. Once that is at a safe low number, the mangrove that were (theoretically) holding all those sediments from flowing into our reefs entirely, while also taking over the reef themselves, can be removed.

However, none of this can happen if we don't get the community not only aware but also active in this process. I believe that if a community cannot support its environment, then why should outside organizations, such as the Nature Conservancy, put in their time, money, and effort to do so. Community Service Day projects could be created to accomplish these goals and create a healthy native forest ecosystem on the island of Moloka'i. Nevertheless, this idea can also be applied to all the island in the state of Hawai'i. These results will affect us as citizens of this state regardless socially, so if we focus our efforts on our remaining native forests, we will expect positive results for our surrounding environments in the future.