

“Bee”hind the Scenes of Hawaii

“The keeping of bees is like the direction of sunbeams.” To me, this quote by Henry David Thoreau means that a bee’s work is vital to the survival of all things on earth. Similar to the role the sun plays for us because without the sun, most living organisms would not be able to survive. Bees are like sunbeams because without bees, humans, plants and animals would not be able to live in this world. Despite their importance, bee populations are continuing to decline all throughout the world and here in Hawaii.

This is not a widely discussed problem in Hawaii unlike problems of homelessness or high living costs. However, it is a very important problem that needs to be addressed. I didn’t know that this problem existed until I participated in my school’s beekeeping program. Through the program, I got hands-on experiences with the bees and learned a lot about them. I watched the bees produce honey over the course of a few months and was lucky enough to harvest the honey from start to finish. This was an eye-opening experience for me to see the important work that bees play in our lives.

For the first time in history, in 2017, seven species of Hawaiian yellow-faced bees have been added to the Endangered Species list. It is estimated that 38% of Hawaii’s bee colonies have collapsed according to the latest survey. Bees help to pollinate nearly 75% of our crops and without enough bees, fewer plants and crops will be pollinated. This means that less food will be produced for our growing population and there won’t be enough fresh fruits and vegetables. According to the Whole Foods Newsroom, in 2013, Whole Foods removed all fruits and vegetables that were dependent on pollinators such as bees and after the removal of about 237 items off their shelves, the shelves were nearly empty. One-third of everything that we eat on a day-to-day basis depends on the pollination of bees. The number of bees disappearing continues

to rise which means that our economy will be impacted. When residents and tourists go to the fresh produce section of their local farmer's market, the shelves and tables will start becoming barer and prices will eventually rise. This price inflation will strongly affect our economy. We will no longer be able to taste the sweet pineapples in Dole Plantation or the locally grown avocados that you see in farmer's markets. A stable population of bees is very important for our island because our economy and flora depend on them.

If nothing is done about this problem, in 50 years, bees could go extinct. If the bees go extinct, the first people to experience it would probably be the farmers and their crops. When the crops aren't pollinated by bees anymore, the animals that depend on those crops as their food will start to die. The food chain could collapse because in Hawaii, without the bees, we couldn't produce our own food and be self-sufficient. Some people say bees aren't the only pollinators and there are other pollinators such as butterflies. However, here in Hawaii, the Hawaiian yellow-faced bees are the critical pollinators of many of our endangered native plants and without them, those plants could go extinct. If nothing is done about this problem, in 50 years, Hawaii wouldn't have the beautiful flora that we have today.

Three solutions for this problem are more education and awareness about the declining bee population, starting to keep bees in your own backyard, and the state should create conservation areas where bees can flourish. Schools like Mililani Middle School and Punahou School are taking steps in teaching their students about bees. Both schools have students that care for the school's own population of bees while learning about the importance of them. Other schools should learn from their examples and implement a science curriculum about bees stressing their importance to our island and the world. The second solution that I have thought of is to start keeping bees in your own backyard so that you can do your part in protecting the bees

in Hawaii. When schools start a curriculum about bees, they can educate families about beekeeping which would inspire families to keep bees in their homes. Lastly, the state of Hawaii should work to get the seven species of Hawaiian yellow-faced bees off of the Endangered Species list by setting aside conservation areas to aid in their population growth.

Clarence T.C. Ching was very ambitious and worked hard throughout his entire life. He cared deeply about his community. He wanted Hawaii to be a better place not just for him, but for everyone around him. He was also known for his humbleness and strong determination. He especially would have concerned for our local farmers and laborers because they aren't the wealthiest people on our island. Clarence T.C. Ching would have wanted to make their lives as best as can be. If he was alive today, he would want our state to spread awareness and help one of the most important laborers on our island; the bees. He was someone who cared deeply about others and their happiness and this connects with the work of bees because bees don't work for themselves, they work for others. Clarence T.C. Ching had the same philosophy as the bees of Hawaii.

Although the decline of bees is a worldwide problem, it is an especially big problem in Hawaii because we are isolated. If we work to save the bees of Hawaii now, we will be able to preserve the natural beauty of our island that we call our home. Although it may be a lot of work, acting now will benefit future generations of our families because they will be able to enjoy the delicious fresh fruits and beautiful flora of our island for many years to come.