

## Invasive Species

In Hawaii, when you are walking through a garden or exploring a beautiful hike in the mountains, you might see a large vibrant green and red gecko crawling up a tree or a cute little mongoose crossing your path. You have just witnessed an invasive species, and both of these animals are directly destroying the habitat and causing Hawaiian birds and bats to become extinct. Other invasive species such as Miconia, Little Fire Ants, and coqui frogs are costing Hawaii almost a billion dollars annually either from direct damages or a significant decline in property value. This essay is about reasonable options that the government could pursue to help reduce the number of invasive species brought into Hawaii and to help control invasive species which are already here. One option is tightening security and inspections at seaports. Another option is paying private citizens to report or collect invasive species and the last option I will discuss is to make a government group solely dedicated to tracking and capturing these harmful critters. If we do not control invasive species, our island will become like present-day Florida or Guam and all of the native species will only be found in books and museums.

If you have ever flown to Hawaii upon a return trip from elsewhere, you might have wondered why there is so much scrutiny going through customs. Well, the answer to this is very simple. The state government wants to keep invasive species out of Hawaii. Although there is a good plan in place at the airports, security and inspections at our harbors are lacking. My first solution to prevent invasive species from entering Hawaii is to tighten security and inspections at seaports. A method to increase security would be to vigorously examine and probe imported cargo for foreign species brought to Hawaii by ship. The government could also employ more security teams to inspect each ship and not allow the cargo to leave a particular quarantined zone

before it is examined by a thermal camera. One measure that can help to control marine invasive and non-native species would be to look at the underside of ships that have been at sea for a prolonged period of time. Teams would be searching for evidence of something that occurs on the bottom of ships called biofouling which is fish colonizing on the underside of large boats. Biofouling can introduce fish species that are not native to Hawaii and could be harmful to the environment and ecosystem. To stop this, the government should have dive crews inspect the ships that meet the criteria for further scrutiny.

My next approach would be to pay the private sector to capture or report invasive species. Think about how often you see a mongoose. Many people see these species around the island and don't care or think to report them. They definitely wouldn't want to take the time to capture them without compensation, but what if you did pay them. If there was a program where qualified individuals with permits could get paid to capture invasive species, you would both create jobs and also reduce the number of invasive species on the island. There could even be a reward for reports of invasive species that led to their capture. If the government got public cooperation and support, they could help reduce the number of invasive species immensely. By doing this, there would be eyes everywhere and people may actually start to care more about removing these troublesome creatures from our precious and fragile environment.

My third idea is to develop a more robust governmental invasive species program in Hawaii. This program would track, capture, and relocate invasive species. You may have vacationed to Florida or Guam. These places, although geographically separated, have something in common. Their environments were demolished by invasive species and are likely never to recover. Invasive species like the Lionfish, Burmese pythons, and brown tree snakes

have suffocated the ecosystems of these areas. They have caused many birds to go extinct and the once common Florida panther has almost entirely disappeared. In an attempt to control the loss of native species, Florida made a government group called Venom One with the sole purpose of catching, relocating, and reducing the number of invasive species. In Guam, a governmental program was set up to trap and capture brown tree snakes while also educating the public. The problem is that both of these efforts happened too late. If Hawaii made a government program or group that could begin a proactive effort to reduce invasive species, it could help shape our future by stopping invasive species numbers before they got too high and devastating.

Hawaii has a big but solvable invasive species problem. As mentioned earlier, we are not as bad as Florida that has every reptile imaginable, we are also not like Guam that has 5,000 snakes per square mile, but we are not in the clear. If we want to save our ecosystem and our endemic animals, then we have to put a stop to the invasive species problem now. Mr. Ching made this contest so people would think about these problems and help to create solutions that could impact not just themselves, but generations to come. I followed his example and I am trying to help Hawaii and all of its' defenseless animals. To do this, we need to better inspect ships, help encourage the public to take part and care about our animals, and we also should create more of a solely dedicated government group that would work day and night to remove these invasive animals. Now, take a look at that mongoose again. It doesn't look so cute anymore, does it?