

What I am Doing:

Throughout the past semester at Mount Mansfield Union High School in Jericho, I developed this project for a class called Complex Systems. We were to approach a current issue/topic from a series of different angles: political, economical, social, etc. I decided to focus on shark finning, and the adverse effect that it has on our world. We were also required to generate a final product that would represent our research; I wrote a bill for your consideration that negates the possibility of the sale of shark fin products in Vermont, in hopes that I could actually make a positive change through this project, rather than just earn a high school credit for a bit of research.

Why I Am Doing It:

Sharks are the most prominent victims of media sensationalism. Every year when Shark Week is broadcast, people are stunned by the *apparent* animosity, viciousness, and lack of mortality that sharks exhibit. Sharks act aggressively when provoked. The way that they catch their food and eat it may seem gory, but everyone eats. Sharks are apex predators, and they are required to play that role in order to maintain ocean ecology. It is a proven statistic that on average, 11 people are killed by sharks per year. Compare that to an average of *11,417 sharks killed per hour*. 100 million sharks killed per year. The ongoing slaughter of sharks is not sustainable; some species have declined in population by up to 99%. The eradication will result in negative ecological impacts worldwide.

Ecological Impacts:

Sharks are a necessary species in every marine ecosystem. They are “a balancing act”, according to Dr. Brian Howes of the School of Marine Sciences at UMASS. What that means is, they manage the health and populations of all other species. They eliminate the possibility of overpopulation, minimize the risk of repopulation of unhealthy species (by preying on smaller, weaker animals), and promote the population of:

- shellfish (filter feeders, vital to our oceans' health, and a primary food source for humans as well as smaller marine creatures.)

- sea grass (stabilizes ocean floor, provides nutrition for animals, and maintains oxygen levels in water)

- phytoplankton (produces between 50-85% of Earth's oxygen from beneath the ocean's surface)

Without a large population of sharks all over the world, human life would undoubtedly be negatively affected as ecosystems collapse and the balance provided by sharks as an apex predator disappears.

Financial Impacts:

In Vermont? None. I checked the menus to all Asian food restaurants that I could find online, and not a single restaurant in Vermont sells Shark Fin Soup. Vermont will *not* lose money if this bill is passed.

Social Impacts:

Shark Fin Soup is considered a delicacy in most Asian countries. It is sold for sometimes more than \$100 dollars per bowl, and the fin itself has no nutritional value. In fact, it contains dangerous amounts of BMAA (a neurotoxin that has been linked to Lou Gehrig's Disease, Alzheimer's, and other neurological diseases), mercury, and arsenic. It doesn't even have flavor. The only reason the soup is still sold is because it has been a part of an Asian tradition since the Ming Dynasty. It is served at special get-togethers that mark important times of the year. The brutality behind the soup's ingredients is not acknowledged. Many Asian people are against the slaughter of sharks and sale of the soup, and are fighting to get it off of menus. That must be very difficult in Asia, where most fancy restaurants serve it. However, since there are no places in Vermont that currently serve the soup, this is a great opportunity to be proactive and get ahead of the problem.

How Does It Affect Vermont?

If shark populations diminish much more than they already have, less oxygen will be produced in our oceans. We will not be able to find healthy, safe fish to eat. Mankind will have singlehandedly destroyed an animal that has been around since the dinosaurs. Nine individual states have passed bills that ban the sale of shark fin products within their territories. Those states are: Hawaii, Oregon, Washington, California, Illinois, Maryland, Delaware, New York and recently Massachusetts. If Vermont will join the growing campaign to stop the merciless slaughter of innocent animals, then we will be doing something that's morally, ethically, and scientifically, *smart*.