

Local Solutions to Global Problems

As the pandemic becomes endemic, we look back towards the broader issues our society has in relation to the land. The various ecological systems in New Mexico and worldwide have been dealing with the effects of the climate's rapid shift, and in turn, so have we. Even slight changes to the delicate balance of ecological feedback loops can lead to positive trophic cascades, or collapse them entirely. For millennia, these systems have maintained dynamic equilibrium, but with the rapid climatic evolution occurring due to human activity, adaptations cannot be made quickly enough. Ergo, changes must be made in our relation to the land.

I have seen the results of this climatic turmoil firsthand, having lived in many places where water was scarce due to severe droughts, leading once flourishing backyard ecosystems to become dry and nearly sterile deserts. As full creeks and pools dry up, fewer quails and mountain cottontails come through year after year. Wildfires increasingly wreak devastation across the forests and valleys of Los Alamos that I used to hike, leading to more deterioration of our local ecosystem.

“By and large, our present problem is one of attitudes and implements.”¹ Written over 70 years ago, this still holds true to today's climatic dilemma. No change can be made instantaneously; however, our attitudes and responses can culminate in a collective response to the issue. Personally, I have taken Leopold's insight to heart, whether through my own small actions, or by taking part in something much larger. For example, taking a little extra time to recycle, or spending more time outside in my yard building supports for bird nests on our porch and tending to our garden. In the words of Howard Zinn, “Small acts, when multiplied by millions of people...can transform the world.”² Spending more time in nature has helped me better understand how climate change has and will continue to affect the delicate yet enduring

¹ Leopold, Aldo. *A Sand County Almanac: With Essays on Conservation from Round River*. Penguin Classics, 2020.

² Zinn, Howard. *A Power Governments Cannot Suppress*. City Lights, 2007.

ecosystems of New Mexico. Overall, the planet will survive, but its inhabitants may not, unless we as the creators of this shift begin to reverse it.

Through this I have also seen not only how individuals can have an effect on the change we seek, but how we can come together as part of a group or organization contributing to beneficial change in our communities, state, and world. Many different organizations have sprouted throughout the years, with the goal of raising awareness, donations, or volunteers to help solve local problems relating to climate change. Whether through designing new sustainable power systems for New Mexico, or working in public gardens to grow sustainable food for New Mexicans, such actions help improve our local effect on the global climate. Individually, I've tried my best to contribute to state-wide sustainable causes for the welfare of New Mexico's ecosystems: firstly, by designing a wind turbine that would filter out CO₂ from our atmosphere while still providing power to local communities, and secondly, collaborating on the development of a prototype outdoor smoke detector that could prevent wildfires, thus limiting CO₂ loss, better preserving our beautiful landscapes that I often trek. These projects may not have come to fruition yet, but they might have a large scale impact in the future.

In these times, we've had many struggles, from Covid to the massive shadow of our impact on the climate. Despite this, the best way to make change is not to wallow in helplessness in the face of still looming threats, but rather to learn and adapt our methods to lessen our negative impacts, slowly but steadily.