

# THE LEOPOLD WRITING PROGRAM

2020 ALDO LEOPOLD WRITING CONTEST AWARD WINNER

## MATTHEW OSCHWALD

BEST ESSAY, GRADES 10-12

In his seminal essay *The Land Ethic*, Aldo Leopold elaborated on how the economy could be understood from an ecological perspective. He explains that an economy develops between individuals and groups of individuals when they forsake dog-eat-dog competition in favor of cooperation and collaboration. Economies are complicated webs of these symbioses and competitive relationships. But while informative, this perspective on economics does not help us solve our environmental problems.

Instead, we can look at the evolution of ecology in the context of economics. Primitive ecology developed as an economic imperative. A greater understanding of the land and our interactions with it helped early agricultural societies survive and thrive. An early example of ecology comes from the Paiute people, a tribe of indigenous Americans. Between two to four thousand years ago, they learned to farm wild grasses. This was different from merely harvesting the grasses in a key way: instead of merely collecting and eating all the grass seeds, they set some seeds apart and spread them out over the ground. The Paiute benefited by having stable sources of food, and the grass was able to spread and survive.

Another step in the development of ecology occurred in the Middle Ages when European farmers began to rotate their crops. Growing different crops during different years or seasons prevented the land from being drained of important minerals. The ecological study of nature and our interactions with it brought about these discoveries in sustainable farming.

The relationship between the success of ecology and the economy is further illustrated in an example from *The Land Ethic* where shortsighted economic interest has disregarded ecology to its own detriment. In commercial forestry, many types of trees are seen as undesirable because they grow slowly, or are not valuable timber crops. Many of these trees, especially birch, are important in building up essential minerals in the soil, helping other trees in their ecosystems to grow stronger. When foresters replace these vital trees with higher priced ones, it harms the natural environment and ultimately cuts into the profits of the forester.

The detrimental effects of removing natural birch to grow other trees might not be seen immediately. Short-term profits are higher because more profitable trees can be grown in the same space, but the gradual degradation of the soil will, after a few generations of trees, lead to unhealthy and less profitable trees. Ecology has an important relationship to economics. In this case, it could help prevent future losses by providing a long-term perspective.

Economic decisions that are informed by ecology avoid adverse future consequences. It's important to the health of our economy and our planet to integrate ecology in the economy. We have to keep in mind, though, that this is a delicate task to complete. While restricting all economic activity that is deemed harmful may seem like a good solution to the environmental problems of our day, we have to inform our restraining of the economy with economics.

One of the most powerful forces for protecting and preserving nature is the economy. The economy can and will solve many of our environmental problems. One such problem is overpopulation. Ecologists and many ecologists think of human population growth as a menacing threat that will result inevitably in poverty and famine. This idea was the argument in the 1968 book by biologist Paul Ehrlich *The Population Bomb*. In October of 1980, an economist named Julian Simon bet Ehrlich that, over the course of ten years, the price of several commodities would decrease. Simon won the bet, which seemed shocking. Over the ten years, the population had increased. Shouldn't the commodities have gotten scarcer, at the expense of people and planet? They did not, as the global free market had developed more and more efficient ways to produce the commodities, in greater volume than ever.

Today, we are faced with an array of menacing environmental problems. In order to solve them, we must make sound economic decisions that are informed by ecology. We need to protect our natural world, but at the same time we mustn't handicap the free market, with its almost limitless potential to bring about solutions to our problems.

