

# Environmental Conflict

*In Search  
of Common  
Ground*



*Jeffrey J. Pompe  
and James R. Rinehart*

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*To our spouses, Kathy and Elaine, who not only provided moral and material support, but as artists appreciate the beauty of our environment and the necessity of preserving it.*

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# Chapter 1



## Introduction: More than You Know

The enterprise within the social sciences best poised to bridge the gap to the natural sciences, the one that most resembles them in style and self-confidence, is economics.

—E. O. Wilson<sup>1</sup>

Imagine a cavernous warehouse with shelves filled with art of all types—paintings, photographs, sculptures, and etchings. Now imagine government agents scuttling down the aisles slashing canvases, smashing sculptures, and shredding graphic works. Sounds like a scene from a futuristic story of society gone mad. But instead it's Holland—birthplace to Rembrandt, van Gogh, and Vermeer—circa 1998. Can we blame such events on the legalization of marijuana in Holland? Hardly.

With the best of intentions, the Dutch government began an arts subsidy program in 1949. To assist struggling artists, the Dutch government agreed to pay a modest stipend to talented artists in exchange for two or three works of art a year. The Beeldende Kunstenaars Rageling (BKR), the agency in charge, purchased the art based on the “needs” of the artist rather than the merit of the work, and guaranteed payment regardless of whether the art was valuable or not. With a strong economy (thanks mostly to North Sea oil revenues) and strong support from a society that appreciates the arts, little public criticism surfaced. By 1982, the popular program

had expanded to include more than 3,000 artists who were receiving \$70 million in annual subsidies.

By 1987, the Dutch government owned 220,000 works of art, most of it sitting in warehouses, and most of it never shown in public or private. Everyone agreed that much of the art was inferior or worse. Good artists didn't want to hand over their "good" art to the government, only to have it sit around in warehouses, and bad artists gladly "sold" their art to the government, the only purchaser willing to buy. A crushed dish rack and a smashed shopping cart are representative of some of the "art." Stories of artists turning in their children's finger paintings or a table top hastily separated from the base and splattered with paint were common.

Beginning in the 1980s, the government began budget-cutting, and the art subsidy was one victim. Although 1,000 artists still receive stipends, the government slashed the program drastically. Despite the cuts in the art subsidy budget, a problem still remained—what to do with warehouses full of art that nobody wanted? Selling the art—even those works that might be marketable—was challenged by the Artists Union, who reasoned correctly that increasing the supply of art would decrease the price of all works of art. In 1994, the BKR permitted artists to retrieve their art free of charge, but predictably less than one-third responded.

A compromise solution is currently being implemented. The government absorbed much of the work in Amsterdam's Artoteek—an art lending library, and slashed, smashed, and shredded the remaining works, to make certain that the works didn't reappear on the market. The director of the collection, Sya van't Vlie plans to use paper shredders on the graphic art, so, "That way we can recycle the paper."<sup>2</sup>

Now, the moral of the story is not that we should recycle, although recycling can be a good thing. The moral is that when you offer someone money and you don't care what they give you in return, you'll get something like graphic "art" suitable only for recycling. Pay more for a certain behavior and you'll get more of it. Also true is that a misunderstanding or lack of understanding of important economic principles can result in poor policy and inferior outcomes.

What is true for the arts is also true for the environment. Subsidize the delivery of “junk” mail as the U.S. Postal Service does, and you’ll get trashcans filled with paper heading for recycling centers or trash dumps. Either way, however, resources are being misdirected. We must consider such economic realities to successfully deal with the environmental problems we face. An understanding of simple economic principles would have allowed one to predict the Dutch dilemma and assist in avoiding similar mistakes in other important areas, some environmental.

### **The Environment and Economics**

Few would deny the importance of maintaining some level of environmental quality. The environmental problems society faces are substantial and are of growing concern to Americans and people around the globe. Consider a brief litany of some pressing environmental concerns offered by well-known environmentalist E. O. Wilson: approaching limits of food and water supplies, loss of species diversity, ozone layer depletion, overfished oceans, polluted air and water, global warming, shrinking forests, and spreading deserts.<sup>3</sup> The question is not whether the earth has environmental problems; rather, it is a question of how severe the problems are, what level of environmental quality is desired, and what courses of action should be taken.

Although environmental problems are not new, the environmental movement is a relatively recent development. Numerous voices such as those of Thoreau, Muir, and Leopold expressed important conservationist concerns before the 1960s, but the modern environmental movement coincided with the appearance of books by Rachel Carson (*Silent Spring*, 1962), Paul Ehrlich (*Population Bomb*, 1968), Barry Commoner (*The Closing Circle*, 1971), and the Club of Rome (*Limits to Growth*, 1972). Even the first Earth Day didn’t occur until 1970.

The field of environmental economics has evolved along with environmental worries, although many of the economic

principles that help us understand environmental choices are not recent. Boulding (1966), Ayre and Kneese (1969), and Daly (1971) were some of the first economists to recognize the interrelationship between economics and the environment. Perhaps the first economist to examine environmental issues was Thomas Malthus, who worried in 1798 that we were running out of cropland to feed the rapidly increasing world population. In his *An Essay on the Principle of Population*, Malthus observed that because population grows at a faster rate than labor productivity, population growth would outstrip food production. Populations would increase until food limits were reached, standards of living would fall, and pestilence and famine would follow. No wonder Carlyle labeled economics the “dismal science.” Although right sometimes in the short run, Malthus was wrong over the long haul because he miscalculated the benefits of technological innovation. Neo-Malthusians continue to warn us about population growth and caution that Malthus may yet be correct.

Natural scientists have raised public awareness about the seriousness of environmental problems through numerous well-publicized books and articles. However, environmental issues pose special challenges for scientists because understanding environmental problems and formulating policies to deal with them require an interdisciplinary approach. The hard sciences such as ecology, biology, geology, chemistry, and physics are primarily focused on the laws controlling the natural environment but provide little ground for an analysis of human behavior. On the other hand, social scientists such as economists, sociologists, political scientists, and psychologists study human behavior, but often demonstrate little understanding of the functions of ecological systems. Cooperation between natural scientists and social scientists is necessary if we expect to make the best environmental decisions. Environmental economists are attempting to bridge this gap by examining how economic decisions interact with the environment.

Most scientists in their graduate education programs specialize in a single field or discipline, thereby failing to ac-

quire knowledge in other important fields that may bear on the problem. Psychologists, biologists, geologists, chemists, physicists, sociologists, political scientists, ecologists, economists, and others can legitimately claim a stake in the environmental debate, yet each expert comes to the table with myopic eyes. It is not surprising that so many participants in the debate speak half-truths, are biased in their analysis, and demonstrate unnecessary levels of hostility and rancor in debating the issues. One environmentalist revealed such hostility when he said “economics, and economists are traditional enemies of the environment.”<sup>4</sup> This brings us to the purpose of this book.

The authors of this book are economists by training, who are drawn to environmental issues because of personal appreciation for the environment. We have a personal stake, as does most everyone else, in the loss of trees, wetlands, species, wildlife habitat, and in the pollution of land, water, and air. But as we have followed the national discourse over the past three decades, it has become crystal clear to us that first, the debate has been largely devoid of the most rudimentary understanding of simple economic principles, especially in the public arena at the layperson’s level; and second, economics has an important role to play in clarifying the issues and in formulating solutions.

We’ve written this book because we believe that Americans want some level of environmental protection, and want to better understand the nature of the economic forces that affect the environment. We hope to make a positive contribution to the debate by explaining in layperson terms what economics has to offer.

As far as we can tell, the average, well-educated citizen has little comprehension or appreciation of where economics fits into the environmental debate. Yet, we ask these same individuals to vote for congressmen, senators, governors, mayors, local and state legislators, vice presidents, and presidents who craft clean air and water bills, wetland legislation, and multitudes of other environmental measures too numerous to list here. We believe this book will fill some of this void.

In the early 1800s, English economist David Ricardo, in several articles in the public press, changed the way the British viewed the corn laws and changed the way the world looked at international trade. Free trade followed and for at least one hundred years, the British dominated world trade and expanded the Commonwealth to the far corners of the world. As demonstrated by the Ricardo example, understanding basic economics can have powerful, positive effects on the welfare of mankind. We believe a grasp of basic economic concepts can raise the level of discourse regarding environmental issues and thereby improve the effectiveness of environmental policy and the welfare of us all.

Misunderstandings between economists and noneconomists are sometimes the result of the two groups approaching issues from different perspectives. Environmentalists often view actions in strictly moral terms, following imperative standards, which hold that certain acts are right or wrong in and of themselves, regardless of the costs. Barry Commoner contends that “Nature knows best.” Carl Pope, associate executive director of the Sierra Club, is quoted as saying “the environment is an ethical issue.”<sup>5</sup> Economists on the other hand are more likely to be concerned about end results, comparing options and looking for the best outcome, often from many alternatives. “Society should construct a dam if the benefits are greater than the costs,” an economist might reason. Society makes the ultimate decision through elected government officials about how to use resources and may follow either the moral or practical guideline, or take an approach that combines the two. For instance, a compromise approach could be, “We will construct a dam if the benefits are greater than the costs, as long as we do not destroy a species.”

While recognizing that we have serious environmental problems, the authors try to consider the issues from a dispassionate and constructive standpoint. In this book, rather than suggest what environmental choices society *should* make, we present some irrefutable economic principles that must be considered in any reasoned approach to solving environmental problems. We examine how and why people

make choices, rather than discuss values that society should follow when making choices. We analyze human behavior when confronted with choice, and how humans respond to change. We show how economics can be used to help solve environmental problems, although we also note environmental problems to which economics may not provide adequate solutions.

In order for environmental policy to work, we must understand the economic forces that explain why people damage the environment in the first place. In the final analysis, environmental degradation is essentially an economic problem. Companies choose to dump sulfur dioxide in the atmosphere rather than control it because they make more profit. Developers fill in a wetland because people pay more for a lot to be used as a construction site than for wildlife habitat. Fishers choose to hunt tuna towards extinction because buyers pay high prices and the individual fisher gains nothing by leaving the tuna for someone else to catch.

### **The Importance of Economics**

When human beings must choose between basic items such as food, clothing, and housing on the one hand or protecting the environment on the other, the environment loses almost every time. That is a fact. Some of the most serious environmental problems the world faces are in the poorer nations. The two countries with the most plant and animal species are Brazil and Indonesia. Yet, Brazilians sacrifice rain forest for food production, and Indonesians, reacting to the recent economic crisis, are hunting to extinction species that are found nowhere else in the world.<sup>6</sup> Although the issues are much more complex than this simple presentation, if we had limitless resources, we wouldn't need to make such tough choices.

Even when choices are between less important things, we still incur costs with every choice we make. Trade-offs do exist between environmental products and other products that we need or want. For instance, if we protect an old

growth forest, we lose jobs for lumberers. If we fill a wetland for a housing development, we lose valuable wildlife habitat. If we stop the incidental catch of endangered sea turtles by requiring turtle exclusion devices on fishing nets, shrimpers suffer decreased profits and consumers pay higher prices for shrimp. If we impose restrictions on the pollutants that a power plant can emit, we raise the cost of electricity. As a practical matter, we have no alternative but to consider the materialistic side of the environmental issue.

Technology can solve some problems, but we can't expect an engineer to invent a new filter that will eliminate all air pollutants. Biologists can explain why an insect is important to an ecosystem, but can't show society why the insect is more important than a golf course. Lawyers can sue for damages from an oil spill, but they can't stop countless automobiles from spewing noxious fumes. And politicians pass new laws that, even when well-meaning, produce disappointing results because of the machinations of special interest groups. Economics holds the key to resolving many environmental problems because economics focuses primarily on the consequences of choices. To solve environmental problems we must alter the choices we make.

All too often we select easy targets to blame. Business firms are often condemned for the environmental harm they cause. This may be understandable when we see smokestacks belching pollutants into the atmosphere, scarce water being used on golf courses, and tropical forests being cut and burned. As Mark Twain said, "Nothing so needs reforming as other people's habits." However, the problems are more complex and interesting than they first appear, since in addition to businesses, consumers and governments also play major roles.

The Environmental Protection Agency estimates that in 1997 adhering to federal environmental regulation cost the United States \$170 billion.<sup>7</sup> If this estimate is correct, the cost of environmental compliance is 2.2% of Gross Domestic Product (GDP).<sup>8</sup> No other country spends as much on environmental protection. As a consequence, we face growing acrimony over the size of the bill and who should pay. Perhaps