

Part I

Foundations of American Environmental Thought and Action

About twelve to twenty-five thousand years ago, when the sea level was substantially lower than it is today and Asia and North America were still connected by a land bridge in the area of the Bering Strait, a few Asian hunters and gatherers crossed this narrow stretch of land, between what are now Russia and Alaska, and became the first humans to set foot in the Western Hemisphere.¹ Like other people who migrated to the Americas during the ensuing millennia, these prehistoric men and women probably came in pursuit of food or more hospitable surroundings. Possibly, when they ventured into this vast unpeopled land, they were tracking game animals. As word of good hunting in the newly discovered region filtered back into Asia, additional groups of migrants made their way to the Western Hemisphere. Some of these people drifted south along the western coast of the great land mass, and within about a thousand years, a few bands had roamed as far as South America.

By the time Columbus arrived in the “New World” in 1492, the indigenous population had grown to an estimated seven million

See notes on page 416

people, living throughout North and South America and the Caribbean. The approximately one million inhabitants of North America occupied every part of the continent, from the ice-bound north to the dry southwest and the luxuriant lands of the Gulf Coast, from the forests of the northwest to those of the northeast, and from the grassy central plains down to the rich, watery lands of the southeast. In the Great Plains region, it is estimated, there were about 225,000 people, and west of the Rocky Mountains perhaps 350,000 people.² Most tribes throughout the continent practiced some form of farming and relied on hunting, fishing, and foraging to satisfy the balance of their material and dietary needs. Among the crops they cultivated was maize, which had been developed (beginning about nine thousand years ago in southern Mexico) from wild teosinte.³ They had no iron for tools, no horses or wheels for transportation, and in the northern regions (in what would become the United States and Canada), no written language or knowledge of higher mathematics.

THE CONTACT BETWEEN EUROPE AND AMERICA

Across the Atlantic Ocean in Europe, a great renaissance had begun in the fourteenth century. A surge of economic growth and an intellectual blossoming during this period resulted in advances in science and mapmaking. The increased intellectual openness, as well as the spread of knowledge that followed the invention of printing with movable type in about 1450, made possible the technological advances, including key advances in maritime technology, which in turn led to an expansion of maritime trade, and the great voyages of discovery of the late fifteenth and sixteenth centuries.

Spanish explorers established bases in the Caribbean region early in the sixteenth century. By the middle of the century, they had sailed up and down the Atlantic and parts of the Pacific coasts of North America, had made forays into much of the territory that eventually became the southern part of the United States, and had set up a permanent colony at St. Augustine, Florida. They had also tried, unsuccessfully, to establish permanent settlements along the Atlantic coast as far north as what is now South Carolina. Other explorers, sailing under the flags of various European states, including England and France, had also explored the Atlantic seaboard. Both the French and the English had attempted to establish colonies along the Atlantic shore during the sixteenth

See notes on page 416

century, but resistance from the native inhabitants, disease, and lack of food proved to be insurmountable obstacles to the survival of these colonies. It was not until 1609 that the English gained a permanent foothold on the western shores of the Atlantic with the establishment of a settlement at Jamestown, Virginia.

During the century that followed the successful colonization of Jamestown, the landscape of North America was transformed by an influx of permanent settlers from western Europe. Colonies were established all along the Atlantic seaboard, and traders, trappers, and missionaries traveled deep into the interior of the continent. By 1700, the territory that would eventually form the thirteen rebellious British colonies had a population approaching 300,000.

THE CLASH OF CULTURES

The vast majority of the fifteenth- to eighteenth-century explorers and colonists of North America—whether they came from Spain, England, France, the Netherlands, or elsewhere in Europe—brought with them very similar attitudes about the relationship between humans and the natural world. Predominant among these was a belief that humanity is at the center of creation, that people have a right to use the resources of the land for human benefit, and that it was their divine duty to subdue the land they had discovered and the non-Christians who occupied it. For the most part, the natural world was seen as either a beneficent garden with riches created for the exclusive use of humans, or as a savage, evil wilderness to be conquered and tamed. Those parts of the world that had been occupied and cultivated were viewed as potential gardens while the uninhabited wilderness was looked on with fear and mistrust.

The European explorers' and colonists' worldview was shaped by the Bible and the classics as well as by local customs and traditions. The Bible, a work familiar to all of the early explorers and fundamental to the education of the colonists, was a primary sourcebook [see Document 1]. Over the centuries, a wide range of other writings had also greatly influenced the mind-set of the Europeans, including classics such as the *Eclogues* of Virgil [see Document 2] and the scientific and philosophical writings of Francis Bacon [see Document 8] and Isaac Newton. It is doubtful that many of the colonists would have been familiar with the writings of St. Francis of Assisi,⁴ whose vision of the brotherhood of all creation closely paralleled the views of many North American Indians, but was an anomaly in European thought until recently.

See notes on page 416

The Europeans considered the Native Americans as either merely another resource created for the use of civilized humans (Europeans) or as savage, uncivilized creatures to be Christianized. However, despite the European interlopers' condescending attitude toward the Indians, the explorers and colonists were clearly dependent on the natives for knowledge about the weather, plants, and animals in the New World [see Document 7].

The newcomers were intent on claiming for themselves—both as representatives of their sovereigns and as individuals—as much of the land and its wealth as they could lay their hands on [see Documents 3-5]. However, the Native Americans were steadfast in their desire to continue to farm, hunt, and fish on the lands and in the rivers where they had done so traditionally. As the growing white population appropriated more and more of America's land and wildlife, the native tribes found themselves with access to fewer of the resources essential to their well-being and continued existence, and the conflict between the Indians and the Europeans intensified.

The Indians, who had no concept of private property rights and did not consider land and water to be transferable assets, probably assumed that they would continue to have access to the resources of a place as long as the land was unoccupied, even if it was sold [see Document 32]. They viewed themselves as part of a great whole, as just one of the many inhabitants of the earth, along with the birds and the four-legged animals, and they saw the wilderness as an integral part of the natural order.

Europeans and colonists, on the other hand, had little appreciation of or respect for the wilderness. This was true even of the great naturalists of the eighteenth century, both European- and American-born. Although they may have been impressed with the variety of plants found in the wilderness, they considered the wilderness's major value to lie its potential as a source of plants that could be cultivated on farms and in gardens, or as land that could be transformed into farms and gardens [see Documents 15, 17, and 19].

In spite of their belief that the resources of the land were a God-given gift to humans, and their sense of being separate from the natural world, the colonists were forced to recognize, within just a few decades of their arrival in America, that, without planning, some of the resources of their new land might soon become scarce. By the mid-seventeenth century the colonists had begun to institute laws regulating the use of timber, fish, and game animals [see Documents 9, 10, and 13], and even to limit pollution [see Document 12]. In the English colonies, it was standard practice to set aside common land for grazing and timber [see Document 13], but

the commons had to be regulated to ensure that no individuals would use more than their allotted share of the common resources.

THE CLASH OF ECOSYSTEMS

The arrival of the Europeans in the Americas produced a clash not only of two very distinct cultures but also of two separate ecosystems. In the holds of their ships, the Europeans carried horses, pigs, cattle, sheep, and chickens, as well as crop seeds and fruit trees [see Document 5]. They also brought, on their clothes and boots, the seeds of blue grass, dandelions, and daisies and in their bodies, the microorganisms that cause smallpox and measles. When they returned to Europe they took with them beans, maize, potatoes, and tomatoes. In America, the horse (first brought to the “New World” by the Spaniards in 1493) gave the Europeans a huge military advantage, and then transformed the lives of the Indians. But it was European diseases as much as the European’s military strength that caused the decimation of the Native American population [see Document 6]. Some scholars have estimated that as much as one-half of the precontact population of the Americas had died of smallpox within a few decades of Columbus’s landing. In Europe, on the other hand, the introduction of the potato changed the continent’s agricultural base and helped to fuel population growth.⁵

The increase in Europe’s population created a need for more agricultural and grazing lands, while the expanding maritime industry required increasing amounts of timber. As a consequence, the great forests that at one time covered much of England and the European continent slowly began to fall to the ax. Simultaneously, European industrial growth produced a need for increasing quantities of raw materials for its factories and mills. The Western Hemisphere provided a haven for Europe’s burgeoning and increasingly urban population, a source of raw materials, and a market for its industrial products.

FORGING A NEW NATION

While the immediate cause of the American Revolution was resistance to taxation without representation, the revolutionary spirit had long been fostered by colonial resentment of England’s dumping of manufactured goods and unwanted people (including criminals) on American land, imposed limits on manufacturing, and a

See notes on page 416

sense that the exploitation of America was being carried out for the benefit of England with little regard for the colonies' inhabitants.

In spite of their differences with England, the rebellious colonists looked to England, as well as to France, for legal precedents and philosophical values as they prepared to launch a new nation. And when they required a philosophical and legal basis for defining the human relationship with the land, they turned to the writings of Europeans such as Thomas Hobbes [see Document 11], René Descartes, Jean-Jacques Rousseau, John Locke [see Document 14], and William Blackstone [see Document 18].

DOCUMENT 1: Biblical Views of Nature and Humanity

Many believe that a religious foundation for human abuse of the environment lies in the story of creation at the beginning of Genesis, where humans are directed to subdue the earth and exert dominion over it. Although there has been extensive debate about the meaning of “dominion,” there is little doubt about the interpretation given to the term by the newcomers to North America. The new Americans were to become skilled at “subduing” the earth, but adept at “replenishing” it only with increasing numbers of people.

However, the biblical story of Noah, which describes Noah’s management of the flood according to God’s instructions, suggests another role for humanity in relation to the natural world. The sort of dominion Noah exercised over the creatures that he took onto the ark indicates respect for the inherent value of nature and a sense of a reciprocal relationship between living things. If this act of saving all living things can be considered “dominion,” it surely contrasts with the interpretation given the biblical injunction by the colonists and later Americans.

In Isaiah, as well as elsewhere in the Bible, the contrast between the garden and the wilderness is vividly described. The language and concept of this dichotomy, with its preference for cultivated land over “wilderness” and “waste places,” and which was also to be found in the writings of Virgil, Hobbes, Locke, and many of the early naturalists, traveled across the Atlantic and became embedded in the thinking of the colonists.

A. Genesis: The Story of Creation

So God created man in his own image, in the image of God created he him; male and female created he them.

And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it; and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

And God said, Behold, I have given you every herb bearing seed, which *is* upon the face of all the earth, and every tree, in the which *is* the fruit of a tree yielding seed; to you it shall be for meat.