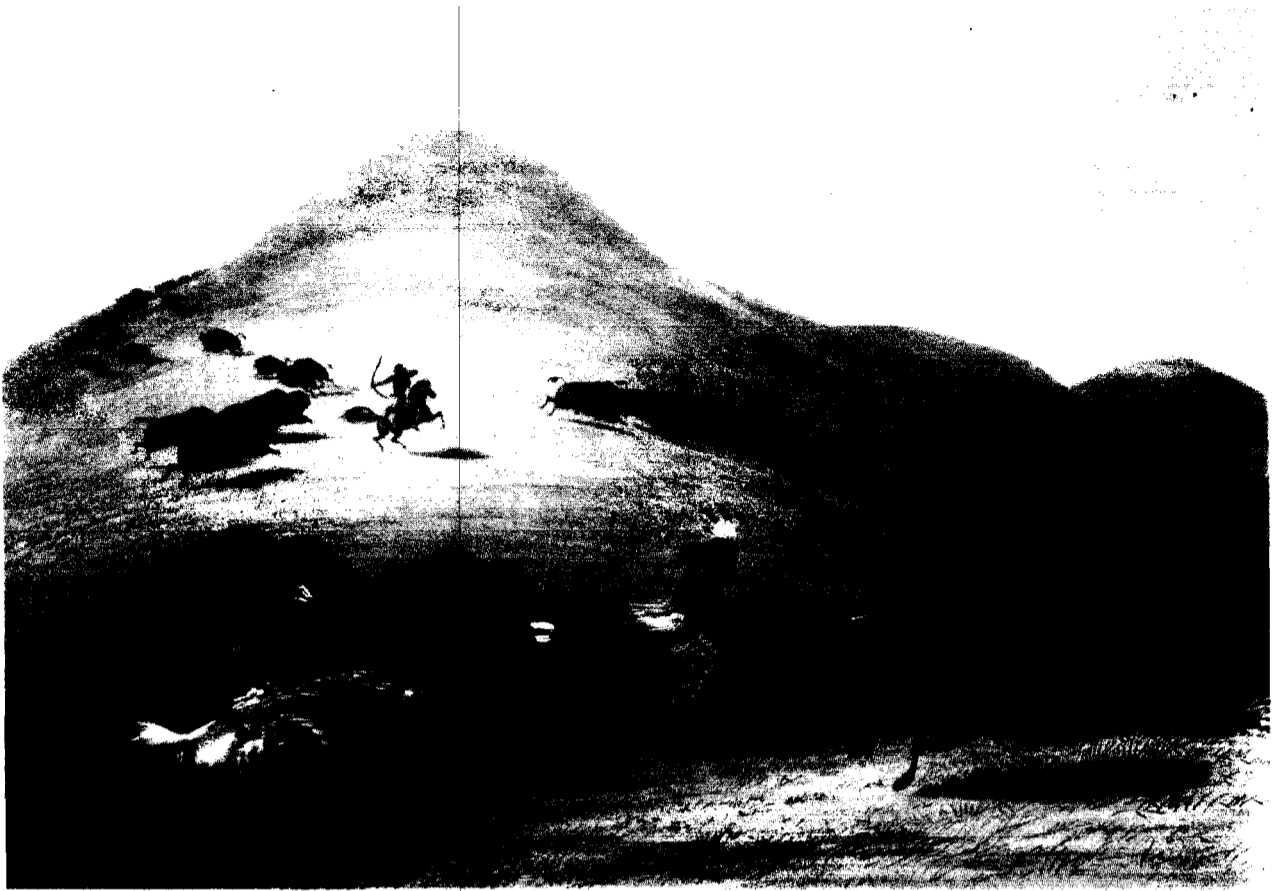

NORTH AMERICA

Distinct, influential, and sometimes conflicting philosophical images and values about what humans are, what nature is, and what the relationship between humans and nature is and should be have been at the root of environmental controversies in North America over the last 500 years. Before European contact and the subsequent settlement of North America very different philosophical images and values reigned; those perspectives persisted, along with modifications of them. The confluence of those distinct philosophical ideas shaped both the



George Catlin, Buffalo Chase Over Prairie Bluffs, 1844. *Scholars are undecided as to the environmental impact of the first populants of Native America (beginning roughly 14,000 years ago). Although it is commonly assumed that North American Indians had an environmental ethic similar to that of contemporary philosophers, others claim that their population of the continent caused mass destruction of native flora and fauna.* THE ART ARCHIVE.

environmental attitudes of North Americans and the landscape of the continent.

NORTH AMERICA BEFORE 1492

Both the practices and the environmental ethics of pre-Columbian North Americans are contested. Roughly 14,000 years ago Asian big game hunters crossed the exposed land bridge between what is now Russia and Alaska and also sailed along the western coast of North America to populate or greatly increase the population of North America. According to one theory (Martin 1967), those skilled hunters quickly swept across North America, Central America, and part of South America, slaughtering the unfamiliar megafauna; indigenous populations were drawn by the easy pickings of unwary animals, leaving extinguished species in their wake. Other scholars (Krech 1999) have suggested that although the arrival of big game hunters and the disappearance of many North American species corre-

sponded, the demise of those species was attributable as much to changes in climate and perhaps other factors as it was to the newly arrived human hunters.

In environmental circles it commonly is assumed that before contact North American Indians (First Nations in Canadian parlance) had an inclusive environmental ethic on a par with the most inclusive contemporary environmental ethics, such as Deep Ecology and Aldo Leopold's land ethic. Although details varied from tribe to tribe, North American Indians considered nonhuman animals, rocks, rivers, mountains, and traditional myths and stories to have direct moral standing (Callicott and Nelson 2004). Contemporary ideas about the behavior of native North American Indians range from the assumption that they were skilled and intensive managers of the land to the belief that they were passive denizens of North America, a perspective that seems inconsistent with prevailing ethnographic and archaeological evidence. How is it possible to reconcile an inclusive ethic with the Pleistocene

extinction hypothesis or the overshoot of ecological carrying capacity, such as overuse of water resources in the Southwest six to eight centuries ago? N. Scott Momaday (1976) suggested that a profound ethical change occurred when the big game hunters gradually came to see the land of North America as home, then as beautiful, and then as intrinsically valuable.

Although the argument about an indigenous North American land ethic is an ongoing debate, knowledge about the extent of Indian impact is becoming more extensive. Many assumptions about Indian environmental ethics are premised on what is known about what pre-Columbian Indians did. In the last two decades of the twentieth century and the first decade of the twenty-first, however, much of the dogma surrounding those practices was challenged. For example, until recently the dominant figure for the North American human population was approximately 1 million. Currently, it is known that there were at least 4 million and up to 16 million inhabitants in 1491. Researchers also have come to appreciate that those humans affected the North American continent for over 14,000 years, sometimes in a very intensive fashion. For example, in the midwestern United States it is known that there were large agricultural complexes, each of which covered up to 200 to 300 acres, that supported thousands of people. It also is known that humans, through the intensive use of fire, actively and continually maintained much of what is considered the original prairie of North America and determined the composition and shape of forest ecosystems throughout the continent. Additionally, vast complexes of ceremonial and burial mounds, complex systems of trading, and cities housing tens of thousands of people (e.g., Cahokia in Illinois, which eventually overshoot its carrying capacity and scattered its residents) existed in North America.

However, the myths, stories, and legends of precontact Indians seem to indicate very inclusive systems of ethics that guided and continue to govern subsistence practices of hunting, fishing, and gathering; those practices cumulatively shaped species distribution, diversity, and productivity (Blackburn and Anderson 1993, Frey 2001). Arguably, it was the animism—the belief that nature and/or natural entities are imbued with an indwelling spirit (Nelson 2004) and therefore possess what might be considered a kind of intrinsic value—of native North Americans that undergirded that inclusive ethic.

1492 TO 1776

Although Europeans had made forays into North America for perhaps 500 years, European settlement (or invasion) began to affect North American inhabitants and landscapes more seriously in the early part of the sixteenth century. Most immediately, waves of European-introduced diseases, generally introduced accidentally,

began to decimate the populations of native North Americans. Because that anthropogenic disease regime effectively reduced the native population by as much as 90 percent and because the disease spread ahead of the settlers, Europeans felt justified in concluding that North America was a wilderness of continental proportions that was theirs for the taking. That assumption was affirmed by a tendency to perceive native peoples as having more the status of nonhuman wildlife than that of full-fledged humans worthy of moral consideration and respect. In light of the Puritan religious background of the early New England colonists, it may be safe to say that the conquest of the North American inhabitants and landscape was more than a consistent proposition; it was an expected and highly moral vocation. The Puritan leader and witch hunter Cotton Mather summarized this mentality when he asserted that “what is not useful is vicious.”

At the same time that that internal pressure created a willingness to affect the North American landscape with little regard for the land or its native inhabitants, a more global market created a lucrative outlet for the products of the relatively unexploited North American continent, and that confluence had a major impact on the fish and wildlife populations. North Atlantic cod, which when dried provided a rich and easily transportable source of protein, and beaver pelts from English and French colonies, which when felted provided sought-after hats, are two notable examples. Exploitation also occurred in Spanish colonies, but it existed alongside traditions of caring for the common good; for example, water resources were shared as a community responsibility in places such as California and New Mexico. Although all Europeans participated in global market arrangements, the British did so with the greatest enthusiasm and the steepest ecological costs.

The meeting between native North Americans and the newly arrived Europeans was as much a clash of ideologies and ethics as it was a clash of technologies. Europeans brought with them not only the ability to alter the landscape but also the willingness to do that. Native North Americans, in contrast, had the ability to alter their landscape more seriously than they did but lacked the willingness and need to do so. Inclusive native ethics were inconsistent with the narrowly anthropocentric ethic of the European settlers. Although tempered, that Euro-American ideology is still in operation.

1777 TO 1899

In 1893 the historian Frederick Jackson Turner pronounced that the American frontier had closed three years earlier. Although historians have challenged that interpretation, the idea of a closed frontier resonated with Americans who saw the transition from the completion of Manifest Destiny (the belief that westward expansion

and territorial acquisition all the way to the western coast of the United States was inevitable) to the beginnings of a new and gentler ethic of relationship with nature. Analogously, Canadians linked the development of their nation to the exploitation of raw natural resources—staples such as furs and wheat—but did not develop a strong conservation ethic from that economic precariousness. Temporally and effectively corresponding to the beginning and the height of the Industrial Revolution, the late eighteenth and early nineteenth centuries saw the most brazen exploitive environmental practices that the technology of the time would allow. In the early part of that period North Americans of all types seemed limited only by their technical ability to affect nature and not at all by their willingness to do so. However, arising with these exploitive customs were challenges to that prevailing environmental ethic.

After the American Revolution the United States began purchasing and conquering what is now the Lower 48, a process that was complete by 1853 and that established the geography needed for accelerated economic exploitation. Canada, remaining until the present under the sovereignty of the British Crown, effectively emerged from British colonialism by 1873. Farmers moved quickly to fill the temperate North American continent and displaced native peoples and their environmental practices, except in the subarctic and arctic northern territories of Canada and Russian-owned Alaska. Laws such as the U.S. Homestead Act of 1862 and the Canadian Dominion Lands Act of 1872 served as powerful examples of a philosophical and ethical predisposition that manifested itself first legally and then on the land. These and similar laws privatized the public domain with an emphasis on small farmers, but often corporations such as railroads and mining companies fraudulently took advantage of the laws and wreaked ecological havoc for short-term economic gain.

This era also saw the boom and eventually the bust of many of the extreme extractive practices in North America. For example, the end of Great North Woods lumbering and massive commercial hunting occurred during that period. That era also witnessed the removal of American Indians from some would-be park areas and the relegation of most American Indians in the United States to reservations. The abuse of the environment in the form of the intentional slaughter of the herds of buffalo that fed certain Indian tribes (arguably a kind of biological warfare) is an example of the indifference and even contempt that the inhabitants of European descent in North America had for both the rights of nature and the rights of the native peoples. Similarly, mining rushes in the West extracted immense mineral wealth from the earth without considering the attendant environmental damage, such as deforestation, erosion, pollution, and habitat destruction (Isenberg 2005). The end of those practices, however,

was due primarily to the end of the readily accessible resources that were the focus of the cut-and-run practices of the extractive industries. However, two separate and at times competing natural resource philosophies—resourceism and preservationism—were emerging at that time, neither of which allowed for the types of abuses seen in the past. The era of unthoughtful and uncontested resource exploitation in North America came to an end at about the turn of the twentieth century.

Largely in response to the profligacy of nineteenth-century capitalist development, many Americans began to question practices and reform policies, especially those concerning public lands. Figures such as George Perkins Marsh and John Wesley Powell warned of the social and economic harm that was likely to result from continued environmental degradation. Fearing that privatizing public lands was proceeding without a plan and in wasteful ways, reformers moved the federal government toward protecting land in addition to selling or giving it away. In 1872 the U.S. Congress reserved the first national park at Yellowstone; Canada followed in 1887 by reserving Rocky Mountain Park, later renamed Banff National Park. By 1891 the U.S. president had the power to reserve lands from settlement in what were known as forest reserves and now are called national forests. By the early twentieth century the Canadian Forest Service began recognizing problems with traditional harvest practices, but its regulatory presence remained weak for decades. Still, government-protected areas such as the national parks and forests were limited in terms of the types of economic activities that could be pursued there. Thus, the reforms initiated government involvement in checking economic exploitation and effectively announced that some environments were better left alone or managed with a longer-term perspective.

Besides government reform, private individuals and organizations instituted change in environmental practices. Early in the nineteenth century a few reform-minded farmers recognized the problem of soil erosion and attempted to initiate new practices on their farms that would yield long-term economic benefits without the ecological costs associated with most farming techniques (Stoll 2002). Organizations were even more active. In 1887 the Boone and Crockett Club was established by Theodore Roosevelt, a complex environmental figure known as much for setting aside vast tracks of land for national forests as he was for slaughtering vast numbers of African wildlife for American museums. Equally complex was the mission of the Boone and Crockett Club. Although its focus was the conservation of dwindling game populations and the habitats in which they lived, the foundational value of the club seems anthropocentric. That changed, however, in 1892 when John Muir founded the Sierra Club. Although Muir's Sierra Club

did not shun activities that humans enjoyed, it had an ultimate goal of preserving wild nature. The Sierra Club operated under the philosophy that exposure to wild nature would increase people's knowledge of a place and thus prompt in them a love for wild areas and a willingness to act on their behalf.

In an important early paper in environmental ethics the historian Lynn White, Jr. (1969), argued that the environmental abuses visited upon the North American continent by its denizens of European descent were simply the manifestation of a certain interpretation of their imported religious tradition, Christianity. Although White blamed the despotic interpretation of the human-nature relationship in the Christian tradition (the interpretation that informs humans that the earth is there for their use and abuse, that it is God's desire that people "dominate and subdue" His creation), he did not blame Christianity itself, a point that often is missed in reactions to his argument. Hence, for White and for environmental philosophers after him it was the philosophical and ethical predisposition, coupled with the emerging technological power, of the Old World arrivals that facilitated the radical alteration of the North American landscape in that period. By the end of the nineteenth century North America thus had experienced both massive ecological devastation and the roots of philosophical shifts that would thwart or at least complicate continued the pursuit of profit at the expense of nature.

1900 TO 1955

The early part of the twentieth century was marked by perhaps the most dramatic environmental battle in North American history and certainly the most continuously recognized one. The battle over the Hetch Hetchy Valley in Yosemite National Park pitted two contrasting environmental philosophies against each other. As early as 1864 George Perkins Marsh, the U.S. ambassador to both Turkey and Italy, had challenged the narrow and ultimately paradoxical anthropocentric justification of resource exploitation that had reigned on the North America continent. Employing the notion of the usufruct (use without destruction), Marsh suggested that it was inappropriate to believe and act as if the earth had been given to humans for "consumption" or "profligate waste" (Marsh 1864, p. 34). In 1905 the equally broad-minded and European-trained Gifford Pinchot was appointed the first chief of the U.S. Forest Service. Both Marsh and Pinchot developed their environmental philosophies in reaction to what they viewed as an overly exclusive and shortsighted human use of natural resources that they encountered in Europe. Although Pinchot argued for a more democratic and far-reaching form of conservation than the one he had encountered in Europe—he suggested that people should

strive for "the greatest good of the greatest number for the longest time" and defined conservation as "the wise use of the earth and its resources for the lasting good of men" (Pinchot 1998, pp. 326–327)—he remained an anthropocentrist, stating that "there are just two things on this material earth—people and natural resources" (Pinchot 1998, p. 326).

In the Hetch Hetchy battle Pinchot argued from the point of view that the valley should be dammed to provide publicly owned water and electricity for San Francisco because those were the higher human benefits of resource use (Richter 2005). That stance pitted Pinchot against his old friend John Muir, who argued that the valley should be left as it was, a position that came to be known as preservation. Muir's position was a manifestation of the nineteenth-century transcendental philosophy of Ralph Waldo Emerson and Henry David Thoreau, who believed that only in nature could one witness the handiwork of God and transcend ordinary existence to find higher truths. Hence, for Muir, to destroy Hetch Hetchy was to display "a perfect contempt for Nature" (Muir 1992, p. 716) akin to destroying temples and churches. Here, for the first time since the European conquest, one can see a North American environmental philosophy suggesting that nature has a kind of value that transcends instrumental and anthropocentric ends, although Muir and his allies believed that tourists should benefit from such preservation (Richter 2005).

In the mid-twentieth century Aldo Leopold attempted to meld those two environmental philosophies. Although he worked to improve farming techniques and secure other human ends, Leopold also argued that people should judge the morality of actions, policies, and laws by their tendency to "preserve the integrity, stability, and beauty of the biotic community" (Leopold 1949, pp. 224–225), a community inclusive of human beings. Perhaps most important, Leopold's environmental philosophy turned away from a Judeo-Christian worldview and toward an evolutionary-ecological one premised on an assumed continuity between humans and the nonhuman world. A good example of Leopold's melded philosophy can be found in his ideas about wilderness preservation. Leopold and other preeminent ecologists of that time suggested that certain places in the United States should be set aside as designated wilderness areas as early as the late 1910s. However, Leopold's early rationale for wilderness preservation was dominated by arguments for human recreation that were common among other early wilderness thinkers. Later in his thinking about wilderness Leopold began to supplement such arguments with nonanthropocentric viewpoints that suggested that wilderness should serve as a place to house otherwise unwelcome wildlife and ultimately as a base datum of healthy land.

Although the moral will to enact a more inclusive environmental ethic was present by the mid-twentieth century, certain distractions prevented its full blossoming. The financial and psychic cost of two world wars that came on either side of the Great Depression, the Dust Bowl, and the New Deal legacy of U.S. President Franklin Delano Roosevelt (employing economic stimulus practices such as the Civilian Conservation Corps that transformed nature in a dramatic and narrowly anthropocentric manner), in combination with the advent of urban sprawl and subsequent forms of pollution, had an impact on the land and served as distractions from the development of an environmental ethic distinct from anthropocentrism. Moreover, the institutionalization of conservation in bureaucracies such as the U.S. Forest Service/Canadian Forest Service, the U.S. National Park Service/Canadian Dominion Parks Branch, the U.S. Soil Conservation Service, and the U.S. Bureau of Reclamation all meant that the North American political economy proved most influential in shaping national environmental policies and practices in both the United States and Canada. The emphasis on resourcism in Canada tended to go unchallenged even longer than was the case in the United States. At the same time, however, the science of ecology was emerging and beginning to influence and alter environmental discourse. This fusion of science and ethics soon would manifest itself in powerful and far-reaching ways.

1955 TO 1970

In the early 1950s a near replica of the battle over Hetch Hetchy Valley occurred at Echo Park within Dinosaur National Monument in Colorado. This time, however, nature won and the dam was not built. The political compromise arising from the debate, though, allowed the construction of Glen Canyon Dam, effectively creating a conceptual cleavage between sacred lands (those within the national park system) and profane lands (those outside the system). This episode, which was fought in Congress and in the national media, marked a revival of wilderness activism and paved the way for an ascendant environmentalism with a focus on particular, local issues and problems.

Environmentalism was becoming a popular, as opposed to an exclusive, concern, at least among many middle-class white Americans. In fact, many people attribute the emergence of their personal environmental concern as well as the dawn of the environmental movement to Rachel Carson's *Silent Spring* (1962). Even though the DDT that the book warned of was not banned until 1972 in the United States and 1985 in Canada, Carson's warning about unrestrained alteration of and impact on the natural world triggered the popular perception that the environment was endangered and worth worrying about. Other debates, such as Paul Ehr-

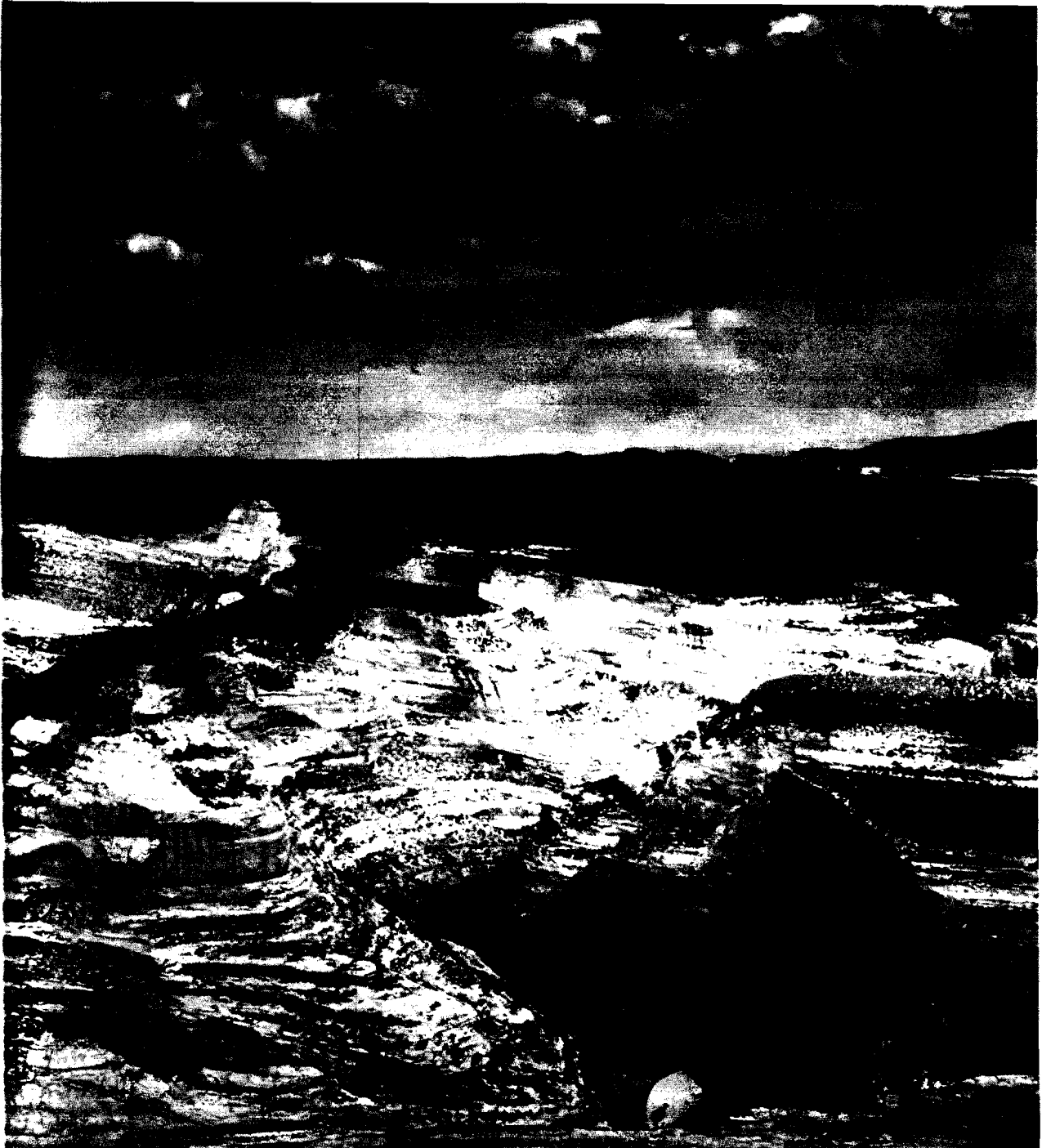
lich and Barry Commoner's debate over whether human population or technological invention was the fundamental environmental issue, also helped popularize environmentalism. More than ever North Americans debated environmental questions publicly and began to challenge narrowly anthropocentric treatments of nature forcefully.

A number of legislative successes for environmental causes emerged from that popular concern. In 1963 (2006 in Canada) the United States passed the Clean Air Act. In 1964 the U.S. Wilderness Act was passed, which ultimately would preserve nearly 5 percent of the country (one-half of that in Alaska) as designated wilderness. The National Environmental Policy Act (NEPA) that was signed into law on January 1, 1970, required federal projects to prepare an environmental impact statement (EIS) cataloging expected effects along with various alternatives (the Canadian equivalent went into effect in 1995 and is known as the Canadian Environmental Assessment Act). NEPA also opened the EIS to a period of public comment, giving interested citizens an opportunity to voice their concerns and furnishing the opportunity for lawsuits to compel more environmentally ethical planning. In 1970 Senator Gaylord Nelson of Wisconsin formalized environmentalism as a popular and urgent matter by sponsoring legislation creating an annual Earth Day. Originally established as a day for "teach-ins" focused on environmental problems, it evolved into a celebration of ecological values.

Meanwhile, academia was witnessing a great change. Departments of ecology were springing up at universities all over the European and North American world, supporting research that could be and was being employed in defense of nature. With the dominance of the ecosystem concept, ecology also appeared to have arrived as a full-fledged and quantifiable science. After that period of explosive growth in North Americans' concern for and willingness to act on behalf of the environment, a variety of philosophically astute and environmentally conscientious philosophers and other academics began to get into the game.

1971 TO THE PRESENT

Environmental philosophy and ethics, along with a number of other environmental disciplines (from history to sociology, economics to literary criticism), emerged in the early 1970s. It can be said that North America, along with England, Australia, and Norway, has been a point of origin for the field of environmental philosophy and perhaps its epicenter. Impelled by the first Earth Day, J. Baird Callicott taught the first course in environmental ethics in the world in 1971 at the University of Wisconsin-Stevens Point. In 1979 Eugene Hargrove launched the discipline's first and still preeminent journal, *Environmental Ethics*. Although the University of Georgia took the early



Dinosaur National Monument, U.S. *Dinosaur National Monument is a part of the Uinta Mountains, sitting on the border between Colorado and Utah. In the 1950s, a plan was proposed to build a dam in Echo Park, in the middle of the monument. A nationwide campaign of protest prevented construction of the dam, and many consider this event as the start of a successful conservationist era.*
IMAGE COPYRIGHT MARIUSZ S. JURGIELEWICZ, 2008. USED UNDER LICENSE FROM SHUTTERSTOCK.COM.

institutional lead as the seat of environmental philosophy, eventually the University of North Texas became the continent's and eventually the world's leading philosophy

department focused on environmental philosophy. Pioneering Canadian environmental philosophers included Allen Carlson, Peter Miller, and Bob Jickling. Nearly every

North American university now teaches at least one course in environmental ethics (though not always in the department of philosophy), and many have at least one scholar who focuses on the field.

Between 1971 and 1979 philosophers interested in environmental ethics and philosophy worked in relative isolation from one another. By the time they began to discuss their work more publicly, various positions already had emerged. Those positions centered on the matter of who or what deserved direct moral standing and who or what merited only indirect moral standing. The seemingly dominant way to discuss this topic was in reference to who or what had intrinsic value and why. There are dozens of textbooks, five or six journals, thousands of articles, and hundreds of books in the field. Moreover, there are a few graduate degree programs in environmental philosophy, undergraduate majors, and related university programs and courses featuring the works of environmental philosophers. Environmental philosophers also have begun to infiltrate conservation science in various ways.

This period also marked the beginning of what might be called the second wave of the environmental movement, beginning in the mid-1980s. That wave had a much more global and systemic focus than its predecessor, concentrating, for example, on issues such as the precipitous loss of biodiversity and the impending sixth great extinction, stratospheric ozone depletion, acid rain, social justice and human rights, and rapid global climate change as much as it did on more local forms of environmental harms. Old distinctions such as that between conservation and preservation no longer seemed to fit or make sense, although some people still employed them.

At the same time, clearly prompted by environmental philosophies such as Deep Ecology, environmental activism became much more radicalized with activist groups such as Earth First!, whose motto was "No compromise in defense of Mother Earth," and Greenpeace, a Vancouver-based organization that grew to have more than 2.5 million members. Environmental politics also became more polarized as the result of some profound shifts in values. The U.S. (1973) and Canadian (1996) endangered species acts, for example, represent a significant moral shift suggesting that species and other categories of animal populations merit direct moral standing and deserve to exist for their own sake, apart from the impact they may or may not have on more narrowly conceived human economic interests. Dramatic and ongoing battles over owls, wolves, grizzly bears, and salmon have been the direct result of, among other things, this philosophical and ethical change.

A number of current and near future topics promise to occupy North American environmental philosophy in

the coming years. Although historically an exceptionally relevant and respected discipline, philosophy took a turn toward specialization in the twentieth century and, in the opinion of some people, lost some of its relevance and influence. Many environmental philosophers, however, seek to make their work relevant to science and policy. Although it holds great promise, this renewed commitment to relevance and interdisciplinarity will continue to present a challenge to environmental philosophy. Making a commitment to relevance and thinking of ways to account conceptually and ethically for the moral relevance of human and nonhuman individuals as well as the environmental collectives that serve as the focal point of much contemporary environmental concern and navigate between the good of each when they are in conflict are issues that present another challenge to environmental philosophers. Finally, working to craft philosophical and ethical systems that account for the dominant ecological paradigm focused on flux and change presents a particularly difficult problem for environmental philosophy and for much of environmental discourse.

SEE ALSO *Anthropocentrism; Christianity; Conservation; Deep Ecology; Ecology: V. Disequilibrium Ecology; Emerson, Ralph Waldo; Forests; Hetch Hetchy; Land Ethic; Leopold, Aldo; Marsh, George Perkins; Mexico and Central America; Muir, John; Pinchot, Gifford; Pollution; Preservation; Sierra Club; Species; Thoreau, Henry David; U.S. Forest Service; U.S. National Park Service; White, Lynn, Jr.; Wilderness.*

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