THIS INCOMPERABLE LANDE

A Book of American Nature Writing

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A Taxonomy of Nature Writing

". . . this incomperable lande"

JEAN RIBAUT, *The Whole & True Discouerye of Terra Florida* (London, 1563)

IF WE FIRST DESCRIBE nature writing in quasi-taxonomic terms, that in a general way can help us see what is important about the genre and how its themes are developed. I must introduce a cautionary note, though, before laying out a proposed classification scheme of American nature literature: the types I have listed tend to intergrade, and with great frequency. This may be somewhat irritating to lovers of neatness who would like their categories to be immutable, but nature writing is not in truth a neat and orderly field. Nevertheless, we can make a few sound and, I hope, helpful generalizations. First and most fundamentally, the literature of nature has three main dimensions to it: natural history information, personal responses to nature, and philosophical interpretation of nature. The relative weight or interplay of these three aspects determines all the permutations and categories within the field. If conveying information is almost the whole intention, for example (see the left edge of the spectrum in the chart on p. 4), the writing in question is likely to be a professional paper or a field guide or handbook, most of which are only intermittently personal or philosophical and also, perhaps, literary only in spots. A good example is Roger Tory Peterson's *A Field Guide to Western Birds* (1961). The brief description of the canyon wren's song, among other little gems in the book, immediately suggests something more than just accuracy. "Voice: A gushing cadence of clear curved notes tripping down the scale."[1] That single line may evoke the entire ambience of a shaded, slickrock canyon somewhere in the Southwest on a June morning. But few people would expect a field guide to be a literary effort.

Writing About Nature: A Spectrum

			Essays on Experiences in Nature			
Field Guides and Professional Papers	*Natural History Essays*	*Rambles*	*Solitude and Back-Country Living*	*Travel and Adventure*	*Farm Life*	*Man's Role in Nature*
Clarence King, *Systematic Geology* (1878)	John Muir, *Studies in the Sierra* (1874–1875)	John D. Godman, *Rambles of a Naturalist* (1828)	Henry David Thoreau, *Walden* (1854)	William Bartram, *Travels* (1791)	Hector St. John de Crèvecoeur, *Letters from an American Farmer* (1782)	John Burroughs, *Accepting the Universe* (1920)
Olaus Murie, *A Field Guide to Animal Tracks* (1954)	Rachel Carson, *The Sea Around Us* (1950)	John Burroughs, *Wake-Robin* (1871)	Henry Beston, *The Outermost House* (1928)	Henry David Thoreau, *The Maine Woods* (1865)	Liberty Hyde Bailey, *The Harvest of the Year to the Tiller of the Soil* (1927)	Joseph Wood Krutch, *The Great Chain of Life* (1956)
Roger Tory Peterson, *A Field Guide to Western Birds* (1961)	Ann Zwinger and Beatrice Willard, *The Land Above the Trees* (1972)	John K. Terres, *From Laurel Hill to Siler's Bog* (1969)	Sigurd F. Olson, *Listening Point* (1958)	Charles Sheldon, *The Wilderness of the Upper Yukon* (1911)	Wendell Berry, *A Continuous Harmony* (1972)	John Hay, *In Defense of Nature* (1969)
	John Hay, *Spirit of Survival* (1974)	Annie Dillard, *Pilgrim at Tinker Creek* (1974)	Edward Abbey, *Desert Solitaire* (1968)	Edward Hoagland, *Notes from the Century Before* (1969)		
				Barry Lopez, *Arctic Dreams* (1986)		

When expository descriptions of nature, still the dominant aspect of a book, are fitted into a literary design, so that the facts then give rise to some sort of meaning or interpretation, then we have the basic conditions for the natural history essay. The themes that make natural history information into a coherent, literary whole may be stated by the author in the first person, as in John Hay's *Spirit of Survival* (1974), where Hay found in the life histories of terns wonderfully cogent statements of the beauty and vulnerability of life itself — the life we share with these birds; or they may emerge from the facts as related in a third-person, more or less objective fashion. This latter way was Rachel Carson's choice in *The Sea Around Us* (1950, 1961); she arranged the facts of oceanography and marine biology tellingly,

so that the drama and interplay of forces pointed inescapably toward a holistic, ecological view of nature. William O. Pruitt used a similar artistic strategy in *Animals of the North* (1967). By concentrating upon the central fact of the cold of the Arctic and showing the myriad adaptations such a climate requires, he brought out the theme of relationship, which is perhaps the essence of ecology.

The defining characteristic of the natural history essay is that whatever the method chosen for presentation, the main burden of the writing is to convey pointed instruction in the facts of nature. As we move toward the right on the spectrum, the role and relative importance of the author loom a bit larger: experience in nature — the feel of being outdoors, the pleasure of looking closely, and the sense of revelation in small things closely attended to — takes an equal or almost equal place with the facts themselves. Where the natural history and the author's presence are more or less balanced, we have the "ramble." This is a classic American form. The author goes forth into nature, usually on a short excursion near home, and records the walk as observer-participant. Almost the entire work of John Burroughs, to take a prominent example, fits into the category of the ramble, from his earliest published bird walks in *Wake-Robin* (1871). Burroughs's own personality and way of responding to the natural scene were very much a part of his writing and were important to his popular success. His intense feeling for the woods and fields of his home ground — there may never have been such a homebody, in all of American literature, as Burroughs — is also a distinguishing mark of the "ramble" type of nature writing. Burroughs became identified with the patchwork of farms and woods in the vicinity of the Catskill Mountains in New York. The writer of rambles usually does not travel far, and seldom to wilderness; he or she is primarily interested in a loving study of the near, and often the pastoral. To say that the ramble is local, however, or that it often takes place on worked-over ground, is not to imply that it is in any way superficial. As Annie Dillard showed in *Pilgrim at Tinker Creek* (1974), deep familiarity with the most ordinary landscapes can blossom into immense themes.

Continuing rightward on the spectrum, we begin to move away from the primacy of natural history facts to a clear emphasis on the writer's experience. In essays of experience, the author's first-hand contact with nature is the frame for the writing: putting up a cabin in the wilderness (as Richard Proenneke did, in *One Man's Wilderness*, 1973), canoeing down a clear, wild river (John McPhee, *Coming into the Country*, 1977), walking the beach at night (Henry Beston, *The*

Outermost House, 1928), rebuilding the soil of a rundown farm (Louis Bromfield, *Malabar Farm,* 1948), or contemplating a desert sunset (Edward Abbey, *Desert Solitaire,* 1968). And much else. Instruction in natural history is often present in the "nature experience" essay, but it is not what structures the book. We are placed behind the writer's eyes here, looking out on this interesting and vital world and moving through it with the protagonist.

Within the broad category of the essay of experience in nature, there are three fairly well-defined subtypes, each with a distinctive avenue for philosophical reflection. Essays of solitude or escape from the city, as might be expected, work much with the contrast between conventional existence and the more intense, more wakeful life in contact with nature. This subtype, like the ramble, is a classic American form, but it tends to be much more critical and radical — compare Thoreau at Walden, anathematizing the false economy of society, and Abbey in the desert, waiting until the engineers drive away in their jeep, then pulling up and throwing away the stakes they had pounded into the ground to mark the location for a new, paved road.

Accounts of travel and adventure (which usually have a strong element of solitude in them) often present the same sort of contrast between the too-safe, habituated existence left behind and the vivid life of discovery. The travel and adventure writer often seems like a ramble writer gone wild; there is less emphasis on natural history and more on movement, solitude, and wildness. Often, the account is framed on the great mythic pattern of departure, initiation, and return,[2] and always the account gains meaning from the basic American circumstance that wilderness, where the traveler and adventurer usually go, has always in our history been considered a realm apart. It is true that some travelers, such as William Bartram, have been deeply interested in the natural history of the new territories they explored: for example, in the *Travels* (1791), Bartram made extensive lists of the species he encountered. Nonetheless, the exhilaration of release from civilization, the sense of self-contained and self-reliant movement, and above all, the thrill of the new, are the prominent qualities here.

The farm essay, with its rooted and consistent emphasis upon stewardship and work (rather than study, or solitude, or discovery), may seem at first to be unrelated to the nature essay. It might be argued, too, that since farming is "only" about ten thousand years old, whereas our connections with wilderness are unimaginably deeper, the entire sensibility may be different. The sublime, so important to the aesthetic of the traveler, and even to the rambler, seems somehow foreign to the farm. But we should be alert to blendings. In practice, American farm writers from Hector St. John de Crèvecoeur in the late eighteenth century to Wendell Berry in the present day have paid close attention to the wildlife on and around their places, and have conveyed the deep, poetic pull of nature on the spirit. Berry, for example, describes how observing some birds at his family's land in Kentucky became instrumental in his development of a "placed" point of view. Stewardship, so prominent in farm literature, also has ecological ramifications; the common understanding of American farm writers is that fitting into natural patterns, rather than imposing some sort of abstract order upon them, is the farmer's proper role. In this ethical commitment, nature writers with an agrarian point of view join with the mainstream philosophy of American nature writing.

On the right-hand edge of the spectrum are the analytic and comprehensive works on man and nature. In these works, interpretation predominates, and the natural history facts or the personal experiences are decidedly secondary. They are illustrations for the argument. Here, philosophy is all. The actual points that are made, typically, are not different from those made in natural history essays, or personal-experience essays, but the mode of presentation tends to be more abstract and scholarly.

I need to add here that the usual terminology covering all of the forms of nature writing tends to lump them. They have all, at one time or another, been called "natural history essays" or "nature essays" interchangeably. I see no real problem in this state of affairs, and not much practical benefit in any attempt to promote an academically rigorous classification. Nature writing itself, in any case, would not rest easily in any static system, prizing as it does vitality and variety, the virtues of its subject. The categories offered here are meant simply to show the breadth of the spectrum and to help indicate some of the special powers each type within the genre may possess.

Whatever the artistic means chosen, and whatever the type of essay we may choose to call a certain piece of nature writing, the fundamental goal of the genre is to turn our attention outward to the activity of nature. This is so, across the spectrum. The literary record time and again displays the claim that there is a lifting and a clarifying of perception inherent in this refocusing, which opens up something like a new world. The sense of wonder conveyed is perhaps very much in the American grain; it may eventually be seen as a more important discovery beyond the finding of new lands.

An American Chronology

1492 Columbus makes landfall in the Bahamas. "All is so green that it is a pleasure to gaze upon it."

1524 Giovanni Verrazzano, cruising the eastern coast of North America, stops in southern New England for two weeks, in present-day Rhode Island; goes inland and sees "champaigns [great meadows] twenty-five to thirty leagues in extent, open and without any impediment of trees. . . ."

1528 Cabeza de Vaca begins a journey across much of the Southwest; in eight years and something over 2,000 miles of wandering, he is out of sight of Indians for only a few days.

1539 Hernando De Soto begins his expedition into the Southeast. Accompanying him are 600 troops, 213 horses, a pack of fighting hounds, and 13 pigs, to be bred along the way as a source of food.

1542 De Soto dies on the banks of the Mississippi River; his share of the swine herd is reckoned at 700 animals.

1562 Jean Ribaut coasts along Florida and South Carolina, looking for a site for a dissenters' colony. He responds with joy to the abundance of wildlife.

1585 Thomas Heriot, member of a voyage to Virginia sponsored by Sir Walter Raleigh, makes observations in his "briefe and true report of the new found land of Virginia," cataloguing some of the prominent trees and wildlife species.

1622 Thomas Morton arrives in New England and makes a survey of natural resources.

1624 The first cattle ("three Heifers and a Bull," according to John Josselyn) are brought to New England.

1629 William Wood begins a four-year residence in New England; he keeps notes on trees, soil, wildlife, and Indian methods of land use.

1632 Thomas Morton's *New English Canaan* is published.

1634 William Wood's *New England's Prospect* is published.

1638 John Josselyn makes his first voyage to New England.

1649 According to Josselyn's chronology (published in 1672), "This year a strange multitude of caterpillars in New England."

1672 Josselyn's *New England's Rarities Discovered* is published. It includes a list of twenty-two weeds introduced into the New World by the Europeans, including dandelion and plantain.

1678 John Banister ("America's first resident naturalist," according to his biographer) arrives in Virginia; he begins collecting plants and insects and sending them back to England.

1691 In England, John Ray publishes *The Wisdom of God Manifested in the Works of Creation,* signaling a new, higher status for scientific nature study and promoting a non-anthropocentric view.

1709 John Lawson, a surveyor, publishes *A New Voyage to Carolina,* which has been described as "the first major attempt at a natural history of the New World."

1712 Mark Catesby arrives in Virginia from England and begins a seven-year visit to the colonies.

1718 Massachusetts declares a three-year moratorium on deer hunting.

1722 Catesby begins a four-year study of the natural history of Carolina, Florida, and the Bahamas, including expeditions to areas uninhabited by Europeans.

1731 Catesby, having returned to England, begins serial publication of *The Natural History of Carolina, Florida, and the Bahama Islands.* The artistic quality is praised, and the natural history accounts are regarded as the most detailed and comprehensive attempted to date in the colonies.

1734 John Bartram of Pennsylvania (William Bartram's father — see p. 36) begins collecting plants for his English patron Peter Collinson.

1735 The Swedish naturalist Linnaeus publishes *Systema Naturae,* rationalizing the nomenclature of natural history and stimulating its study.

1743 Benjamin Franklin proposes the organization of the American Philosophical Society, saying that "the first drudgery of settling new colonies" is now "pretty well over," leaving leisure for the pursuit of knowledge.

1748 Peter Kalm, one of Linnaeus's best pupils, begins his travels in the colonies, making extensive natural history notes over the next two and a half years.

1749 Pennsylvania pays bounties on 640,000 gray squirrels.

1755 John Bartram proposes a geological map of the colonies. By systematic "borings" into the earth, he suggests, "we may compose a curious subterranean map."

1759 William Bartram (John's son) writes to the British ornithologist George Edwards that "many animals, which abounded formerly in settled parts, are now no more to be found, but retire to the unsettled border of the province; and that some birds, never known to early settlers, now appear in great numbers, and much annoy their corn-fields and plantations."

1773 William Bartram begins four years of travel into the wilds of the Southeast.

1782 Crèvecoeur publishes *Letters from an American Farmer* in London, an evocative appreciation of rural life, nature, and America.

1784 Thomas Jefferson's *Notes on the State of Virginia* is published in Paris. It includes natural history information and dismisses certain theories of the Comte de Buffon (see p. 36) on New World animals.

1790 The first United States Census records a population of 3,929,214.

1791 William Bartram's *Travels* is published to lukewarm reviews, but several British and European editions and translations follow.

1794 Samuel Williams, a Rutland minister, publishes *A Natural and Civil History of Vermont.*

1799 The last bison in the East is killed, in Pennsylvania.

1802 Alexander Wilson, who had arrived in America in 1794, begins his study of American birds.

1803 John James Audubon, eighteen, arrives in Pennsylvania.

1804 Lewis and Clark begin their expedition to the Pacific with thirty men; on the way, they will collect several hundred specimens of western flora and fauna.

1807 Cedar waxwings sell for twenty-five cents a dozen in Philadelphia meat markets.

1808 Thomas Nuttall arrives in Philadelphia; he begins botanizing the day after his arrival.

William Maclure completes the first geological survey of the United States.

Volume 1 of Alexander Wilson's *American Ornithology* is published; when complete in 1814, the study fills nine volumes and covers 260 species, in prose both precise and affecting.

1821 *A Journal of Travels into the Arkansa Territory, During the Year 1819*, by Thomas Nuttall, is published.

1825 The Erie Canal opens, facilitating midwestern and Great Lakes development.

1826 John D. Godman's *American Natural History*, a text with a progressive view of predation, is published.

1829 The first locomotive in America proves too heavy for the tracks during a trial run in Pennsylvania.

1831 John James Audubon commences publication of the *Ornithological Biography*, which includes essays on American scenes and citizens.

1832 Thomas Nuttall's *Manual of the Ornithology of the United States and Canada*, a handbook that will be in use throughout the nineteenth century, is published.

1834 Nuttall crosses the continent in company with a commercial expedition; the natural history studies he undertakes in California in 1835 are the first conducted there by an American.

The last elk in the Adirondacks is killed.

1836 Ralph Waldo Emerson publishes his immensely influential *Nature.*

1841 The artist George Catlin, after a venture into the western wilderness, proposes a "*nation's Park.*"

1845 On July 4, Henry David Thoreau moves into the "tight shingled and plastered" 10′ × 15′ house he had built at Walden Pond for $28.12½.

1849 The Gold Rush begins the rapid transformation of much of the accessible California landscape.

John Muir's father brings his young family from Scotland to wild Wisconsin, and begins clearing land for a farm.

1851 Henry David Thoreau delivers his lecture on "The Wild" for the first time.

1854 Henry David Thoreau's *Walden* is published.

1859 In England, Charles Darwin publishes *The Origin of Species.*

1860 The population of the United States is 31,443,321.

United States railroad tracks total 30,000 miles.

1862 Henry David Thoreau dies. His last words are ". . . moose . . . Indian."

1864 George Perkins Marsh publishes *Man and Nature*, a study of the decline of cultures following the abuse of their environment.

1867 Alaska is purchased.

The last elk in Pennsylvania is killed.

1869 John Wesley Powell, with a crew of nine men in four boats, descends the Green and Colorado rivers. On his explorations of the West, Powell describes the Escalante and the Henry

Mountains (both in Utah Territory), the last river and mountain range to be discovered.
In this year of the "Golden Spike," American locomotives are estimated to have burned 19,000 cords of wood per day.
John Muir spends his first summer in the Sierra.

1871 John Burroughs' first book of nature essays, *Wake-Robin*, is published.

1872 Yellowstone National Park, the first such reserve in the world, is established.
From this year to 1883, the last bison hunts are conducted, in something very like frenzy: "never before in all history were so many large wild animals of one species slain in so short a space of time" (Theodore Roosevelt).

1878 Barbed wire comes to Texas.
The last Labrador duck is killed on December 12, on Long Island.

1882 Clarence Dutton's *Tertiary History of the Grand Cañon District* is published.

1883 The gasoline engine is developed.

1890 The United States Census Bureau declares the frontier closed.
Yosemite National Park is created, drawn on boundaries suggested by John Muir.
The population of the United States is 62,947,714.

1893 Frederick Jackson Turner delivers his influential thesis, "The Significance of the Frontier in American History."

1894 The last pair of wild whooping cranes to have nested in the United States is seen at a marsh near Eagle Lake, Iowa.
John Muir's first book, *The Mountains of California*, is published.

1900 On March 24, the last passenger pigeon to be seen in the wild is killed at Sargents, Ohio.

1901 John C. Van Dyke's *The Desert* is published.

1903 The "nature-fakers" controversy (see p. 66) begins with an article by John Burroughs attacking anthropomorphism.
The nation's first federal wildlife refuge is created, in Florida.
Mary Austin's first book, *The Land of Little Rain*, is published.

1904 The last Carolina parakeet is seen in the wild.
The American chestnut blight breaks out in the Brooklyn Botanical Garden following an importation of Oriental plants, and quickly spreads.

1906 *The Writings of Henry David Thoreau* are published, in twenty volumes.
The United States Forest Service is established.

1911 Enos Mills' *The Spell of the Rockies*, one of the comparatively small number of natural history books from that region, is published.

1914 The last passenger pigeon dies in the Cincinnati Zoo.

1915 Liberty Hyde Bailey publishes *The Holy Earth*, a radical agrarian text.

1916 The National Park Service is established.

1920 John Burroughs' *Accepting the Universe* is published.
Rockwell Kent's *Wilderness* is published.

1921 John Burroughs dies on a train somewhere in Ohio. His last words are "How far are we from home?"

1924 The first wilderness reserve within a National Forest is established in New Mexico, in part due to the efforts of Aldo Leopold.

1925 The last cougar in Yellowstone to be killed in the Park Service's "control" program is dispatched.

1928 Henry Beston's *The Outermost House* is published.

1930 The population of the United States is 122,775,046.

1932 The last heath hen is seen on Martha's Vineyard, Massachusetts.

1934 Hawk Mountain, Pennsylvania, a ridge on a noted raptor migration route, is leased by conservationists, and two wardens are hired.
Over this year and the next, predator control within Yellowstone National Park comes to an end.

1935 Donald Culross Peattie's *Almanac for Moderns* is published.

1938 Hawk Mountain, Pennsylvania, is purchased by conservationists and becomes the world's first sanctuary for birds of prey.

1939 In Mount McKinley National Park, Adolph Murie begins the first scientific study of wolf behavior in the wild.

1944 Sally Carrighar's *One Day on Beetle Rock* is published.
Adolph Murie's *The Wolves of Mount McKinley* is published.

1948 Fairfield Osborn's *Our Plundered Planet*, one of the first post-World War II environmental alarm calls, is published.

1949 Aldo Leopold's *Sand County Almanac* is published.
J. Frank Dobie's *The Voice of the Coyote* is published.

1951 *The Sea Around Us*, by Rachel Carson, is published; the book becomes a major best seller.
Edwin Way Teale's *North with the Spring*, the first of the "American Seasons" series, is published.

1954 *The Voice of the Desert*, by Joseph Wood Krutch, is published.

1956 Robert Marshall's *Arctic Wilderness* is published.

1959 Peter Matthiessen's *Wildlife in America,* a comprehensive history of extinctions and protective measures, is published.

1960 John Graves' *Goodbye to a River* is published.

1962 Rachel Carson's *Silent Spring* is published; the book inaugurates a new era of environmental concern.
Margaret Murie's *Two in the Far North* is published; the final section directs attention to Alaskan wilderness concerns.

1964 The Wilderness Act, establishing a National Wilderness Preservation System, becomes law after eight years of legislative struggle. By 1986, 3.78 percent of the United States is under protection as legal wilderness, with more than half of that located in Alaska.

1967 Roderick Nash's *Wilderness and the American Mind* is published, helping to establish wilderness as a field for historical scholarship.

1968 Edward Abbey's *Desert Solitaire* is published.
The National Wild and Scenic Rivers System is created. By 1986, 72 rivers or parts of rivers are included, totaling somewhat more than 7,000 miles of flowing water, out of 356,000 possible within the United States.

1969 A notable year for the literature of nature: Wendell Berry's *The Long-Legged House,* John Hay's *In Defense of Nature,* Edward Hoagland's *Notes from the Century Before,* Josephine Johnson's *The Inland Island,* Gary Snyder's *Earth House Hold,* and John and Mildred Teal's *Life and Death of the Salt Marsh* are published.

1970 On January 1 the National Environmental Policy Act of 1969 becomes law, mandating consideration of the environment before any major federal action is taken.
The first "Earth Day" is celebrated, heightening public awareness of environmental issues.
The Clean Air Act of 1970 establishes nondegradation of existing clean air as a principle, and for the first time requires the states to attain air quality of specified standards within a specified time.

1972 The Federal Water Pollution Control Act of 1972 becomes law, establishing regulatory programs.

1973 The Endangered Species Act becomes law, requiring both protection of listed species and recovery programs.

1974 Annie Dillard's *Pilgrim at Tinker Creek* is published.

1977 Wendell Berry's *The Unsettling of America* is published.

1978 *Of Wolves and Men,* by Barry Lopez, is published.
Peter Matthiessen's *The Snow Leopard* is published.

1980 Paul Brooks publishes *Speaking for Nature.*
The Alaska National Interest Lands Conservation Act becomes law, increasing by nearly four times the size of the National Wilderness Preservation System and more than doubling the size of the National Park and National Wildlife Refuge systems.
The population of the United States is 226,504,825.

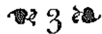
1982 Paul Shepard's *Nature and Madness* is published.

1984 The National Academy of Sciences reports that approximately 53,500 synthetic chemicals are in use in the United States. Fourteen percent of these have been tested sufficiently to allow a partial hazard assessment.

1985 In *An Environmental Agenda for the Future,* the chief executive officers of the ten largest American environmental organizations write, "Continued economic growth is essential."

1986 *Arctic Dreams,* by Barry Lopez, is published.

1987 As part of a captive breeding program, the last wild California condor is captured and taken to the San Diego Zoo.
John Hay's *The Immortal Wilderness* is published.



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The American Setting

THE FIRST AND GREATEST INFLUENCE on nature writing, of course, is the land itself. The major temperate ecosystems are represented beautifully in America, and the sheer variety is staggering. Just to name a few of the places that have inspired excellent nature writing is to get the sense of an amazing range of possibilities for experience: Cape Cod, that spare and vivid arm of land crooking out into the North Atlantic; the richly mulched eastern deciduous forest, pealing with the songs of thrushes; the bright green of the Florida peninsula, where William Bartram derived a vision of paradise unspoiled; the plains and prairies, over which massed and rumbled one of the world's primary symbols of wild abundance, the bison; the wide, still deserts of the Southwest, with their daunting and exhilarating space; sublime, sacred Yosemite; and the Grand Canyon, of which so much has been written, although almost every writer at last has declared in despair the inadequacy of words.

What seems to have made the deepest — indeed, indelible — impression, on both explorers and settlers in the beginning, was simply the morning freshness of the continent. The New World, as they called it, was ecologically intact, and exuded the beauty of health. We did not come to an abused land. We can now see that the fact that a continent which had been occupied for many thousands of years appeared, to European eyes, as the quintessence of virgin nature is a tribute of the highest order to America's native inhabitants, but the point, for our literature and perhaps indeed for our whole American sense of the world, was that wild freshness. What it offered to us was a chance for renewal.

The French Huguenot sailor Jean Ribaut, looking over coastal South Carolina in 1562 with a colony for dissenters in mind, responded to the unspoiled landscape so strongly that his account, written almost a year afterward and not in his native tongue, still sings:

> . . . on the other side, [we] enterd and veued the cuntry therabowte, which is the fairest, frutefullest and plesantest of all the worlde, habonding in honney, veneson, wildfoule, forrests, woodes of all sortes, palme trees, cipers, ceders, bayes, the hiest, greatest and fairest vynes in all the wourld with grapes accordingly, which naturally and without mans helpe and tryming growe to the top of the okes and other trees that be of a wonderfull greatnes and height. And the sight of the faire medowes is a pleasure not able to be expressed with tonge, full of herons, corleux, bitters, mallardes, egertes, woodkockes, and of all other kinde of smale birdes with hartes, hyndes, buckes, wild swyne, and sondery other wild beastes as we perceved well bothe then by there foteing there and also afterwardes in other places by ther crye and brayeng which we herde in the night tyme. Also there be cunys, hares, guynia cockes in mervelus numbre, a great dele fairer and better then be oures, silke wormes, and to be shorte it is a thinge inspeakable, the comodities that be sene there and shal be founde more and more in this incomperable lande, never as yet broken with plowe irons, bringing fourthe all thinges according to his first nature, whereof the eternall God endued yt.[1]

The discoverer's note of rejuvenation sounds again and again in American nature literature, even to the present day when the official wilderness area is a remnant that has to stand for the world in its once and former wholeness. Coming upon an abundance of wild animals or birds, or a sweep of rugged country with not a mark of diminishment on it — experiences described in the works of Robert Marshall and Barry Lopez, to name just two representative figures from recent times — may bring a shock of recognition, a sense of reentering a world greater and older than anything dominated by humans. The mind, as if suddenly given back its accustomed scope, becomes alert to the moment.

But the history we have created here as a culture quite obviously does not reflect this inner, new life as anything more than a minority response. We have not, in the main, been so alive to the country. No doubt there are many reasons for our comparative numbness; in what follows I propose just one speculation, attempting to focus on what it might be that distances and dulls perception so pervasively that in order to see the world as new and living we have to be hit over the head, as it were, with pure wilderness.

The great traditions of Western civilization that stand behind our history, identified succinctly by Matthew Arnold as "Hebraism" and "Hellenism," are traditions of a powerfully dualistic cast, both philosophically and psychologically, tending to enforce the separation of mind from matter, self from surroundings, and man from nature.

Both the Christian and rationalist influences deriving from Hebraism and Hellenism promote a centralized, isolated sense of identity for the individual and for man in general. The Christian concept of man as a special creation and the Aristotelian concept of reason as the best and distinguishing part of man alike foster egoism and its collective form, anthropocentrism. This is not to "blame" Christianity and the Greek inheritance; they no doubt merely embody human predispositions of much earlier origin. The sense of self as a separate and distinct entity, that sense which seems to place nature at a distance, may indeed trace all the way back to one of the innate features of human consciousness, the ability to perceive objects in one-at-a-time, sequential fashion. This ability may give rise to a certain logic: if there is a world of separate and distinct objects out there, then in here, behind these eyes, there must be a likewise distinct entity — a subject. Every moment of perception on the one-at-a-time basis generates anew the consciousness of "I" or "ego." The other givens of human consciousness, especially the sense of the world that Freud referred to (rather scornfully) as the "oceanic," seem to decline in use before the persuasiveness of the egoistic vision. Again, to state the obvious, there should be no particular fault or blame declared here — clearly, the universe grew the human ego just as naturally as it grew columbines and wood thrushes.

It seems equally clear from the historical record, however, that the Mediterranean and European culture known to the world as Western civilization has put a sharp point, in effect, on the egoistic sense of life. The perceived distinctiveness of the individual self, and man's separateness from the rest of the world, were given what amounted to cosmic sanction in Christianity's theology of special creation. As success reinforced the Western mentality, particularly during the great period of European expansion from the sixteenth through the nineteenth centuries, a certain heedlessness also became characteristic.

There are two consequences of the dominant Western view of the world that have had particular impact on the American context, both on the land itself and on the intellectual and moral climate of this country. One is that egoism tends to inspire the expansionist behavior associated with "the frontier": the logic in this case seems to be that from a perceived position of isolation, the ego, or identity, needs to secure itself, but that each success at creating security only enlarges the zone needing security. The other consequence is that the one-at-a-time mind does not see context and relation very well, and thus tends not to notice the "side" effects of its activities, overlooking

information that could urge self-restraint. The "frontier" mind does not perceive things as an ecological whole. Working from the commanding need to secure itself, a task that has a strong, innate tendency to grow and keep growing, the frontier mind becomes preoccupied with use. From this narrowed outlook, nature consists merely of "natural resources." The focus on utility not only seems to hinder perception of basic, practical relations — between forest clearing and the drying up of springs, for example — but also to limit the possibility of empathy. In America, the cutting and burning of the largest deciduous forest on earth proceeded rapidly and without notable hindrance on either practical or ethical grounds. The expropriation and indeed extirpation of the native inhabitants over much of their territory was accomplished with few serious objections; the extermination of the most magnificent assemblage of birds, the passenger pigeons, and the near extinction of the most astounding assemblage of large herbivores, the bison, were, so the records seem to show, largely matters to which most Americans were indifferent, on an ethical level. What happened, in essence, was that a people with a strong tradition of righteousness carried off an invasion of "the frontier" with remarkable success and little apparent reflection.

Within such a history, naturalists and nature writers make up a distinctly nonconforming, even heretical minority. The principal cultural heresy expressed in American nature writing is the refocusing of vision outward from the self, individually, and from the corporate self, our species. A radical proposal follows on the widened vision: that the environment, nature, is the ground of a positive and sufficient human joy. Nature writers and naturalists do not appear to have conceptualized America as "a vast body of wealth without proprietors," in the phrase of one student of the frontier period;[2] on the contrary, they very often recognized the priority of the Indians' claims and sympathized with them. John Lawson (who, ironically, was killed by Indians), William Bartram, Henry David Thoreau, Mary Austin, and Bob Marshall are a few of those who shared this concern. Though some naturalists, to be sure, pursued the morally anomalous practice of "collecting," that is, killing animals for specimens, well into the twentieth century, no one in this group took part in the casual slaughter of wildlife.

It is probably not coincidental that the nature essay developed as a distinct genre only toward the close of the eighteenth century, after the Romantic movement in philosophy and literature had helped give the individual experience of nature, in all its intuitive and emotional vagueness yet penetrating insight, some credibility and stand-

ing. Many of the values seen in nature writing are shared with Romanticism: affirmation of the world as congenial to man, in essence; skepticism toward purely rationalistic (that is, logical and sequential, as opposed to intuitive) thought; scorn for materialism; love for what is spontaneous, fecund, and life-giving; and a predilection for the simple and primitive.

But nature writing is not simply Romantic; it also owes much to science, both in its use of the empirical findings of scientists and in its incorporation, over more than two hundred years, of scientific theories. Edgar Allan Poe, who perhaps is representative of many Romantic thinkers, complained of science's demystification of the world, but Henry David Thoreau stated clearly the accommodating attitude of most nature essayists: "Let us not underrate the value of a fact," he wrote; "it will one day flower in a truth."[3] Nature writers have been inveterate and important synthesizers, indeed, from the time of the early "Argument from Design" (the proof of God's wisdom and beneficence as shown by the intricate workings of nature) through the Darwinian revolution, seeking always to express the possible meanings and implications of new data. John Muir, for example, working in the very early years of the science of glaciology, made painstaking studies of moraines and striations and "erratic" boulders in the Sierra Nevada, discovered sixty-odd small, active glaciers high in the range, placed stakes in some of them to measure their movement, and organized all of his findings into a narrative of the mountains' glacial history. Then he went the crucial step further and described the work of the glaciers as only one element in a grand evolutionary process, a process that, for Muir, expressed the divine activity. For Muir, there was no conflict between science and religion in the highest, nonsectarian sense; any new scientific finding simply filled in the sacred pattern a little more completely.

Muir's synthesis may be instructive. It happens that some of the most important scientific discoveries of the last two centuries, the evidence for ecological relationship and evolutionary change (as opposed to the old theories of immutable entities — species — walking across stagelike settings) are remarkably consonant with the intuitive and experiential theory of holism espoused by many Romantics and transcendentalists. The Romantic listens to the heart and hears that it beats in profound cooperation with all else; the follower of the scientific method sees in nature undeniable evidence of relationships and symbioses, patterns strongly suggesting the inadequacy of any theory based upon separate entities. There is a true convergence here. But of course not all nature writers share John Muir's ultimate

confidence in the divine pattern, or even see pattern as necessarily divine. The important point demonstrated in the literature of nature since late in the eighteenth century is that the experience and detailed study of nature may both lead toward an ecological understanding of the world.

In the eighteenth century and through much of the nineteenth, the enlarged scope of scientific attention retained a theistic or deistic premise. What science was building then, as many thought, was a conclusive Argument from Design; indeed, it was on just such a basis that science had entered mainstream Christian culture, showing that the marvels of nature — the circulation of the blood, the movements of the planets, the incredibly intricate lives of social insects, for example — were further evidence of the omniscience of the Deity, making Him, in our awakening eyes, all the more worthy of awe and worship. William Bartram's view was typical of this period: "Perhaps there is not any part of creation, within the reach of our observations, which exhibits a more glorious display of the Almighty hand, than the vegetable world. . . . The animal creation also, excites our admiration, and equally manifests the almighty power, wisdom and beneficence of the Supreme Creator and Sovereign Lord of the universe. . . . "[4]

The ability to see pattern, and thus, for many, to see the "Almighty hand" as William Bartram did, was considerably enhanced in the eighteenth century by the development of a logical system of classification for the world's flora and fauna. The major figure in this endeavor was the Swedish systematist Linnaeus, whose arrangement of class, order, genus, and species, with the species itself to be known by just two Latin names, not only made a disciplined approach to nature study possible (and possible even for the layman, an important point), but also focused attention upon likenesses and thus upon pattern in nature. Plants and animals began to sort out into recognizable groupings and possible lines of descent — though the mechanism for any such descent was as yet undiscovered. The logical categorization of nature increased the likelihood of seeing relationships of all kinds, and it is no exaggeration to say that Darwin, and indeed all subsequent investigators into evolution, stood on the shoulders of Linnaeus. The debt remained even though Linnaeus's particular arrangement was later supplanted.

With the Darwinian revolution in the mid- and late nineteenth century, the theistic or deistic premise of science began to be replaced by a naturalistic approach. John Muir, who can be seen as a transitional figure, is instructive. Writing in the late nineteenth and early

twentieth centuries, Muir used the term "God" freely, but with a more diffuse reference, apparently, than William Bartram intended when he spoke of his "Supreme Creator." Muir accepted much of the theory of evolution and natural selection, though he balked at the "struggle for existence," as he said. He preferred to see the elements of the world as a partnership, with God representing more of a divine principle synonymous with the whole than a separate, transcendent Creator.

Most nature writers in the twentieth century have been rather quiet on the subject of deity, according well with the temper of the time, perhaps, but they have without exception maintained a reverential attitude toward nature. Oneness with nature, awe, and the spiritually potent deepening of consciousness beyond the egoistic level brought about by intimacy with an environment remain prominent. So strong are these elements, and so closely linked with the emotion of joy, that nature writing, unlike other genres, did not decline into pessimism or determinism with the so-called "death of God," nor with the ominous development of the modern urban-industrial state. Instead, nature writers have simply become more militant critics of urbanization and industrialization, while maintaining, in the great majority, a consistently affirmative vision.

Besides incorporating great intellectual currents, nature writing in America has also responded to actual historical conditions, in particular the decline of environmental quality, as the country was settled and relentlessly developed. The nation's fall from pristine wholeness burned itself into the mind of nature writers, so resplendent had been the original sightings and reports. John Josselyn, an early student of natural history, noted that between 1638 and 1663, wild turkeys, formerly abundant, had been virtually eliminated from seaboard Massachusetts, and the Swedish visitor Peter Kalm, in the mid-eighteenth century, was alarmed at the profligacy with which Americans treated valuable woodlands. A century later, Henry David Thoreau lamented that the environment he and his generation had been bequeathed was like a book with pages missing, and Wilson Flagg, a near-contemporary of Thoreau's, looked with sorrow upon the importation of modern, citified tastes and modern farming methods into the rural landscape of New England; he made a plea for a modified kind of wilderness preservation as at least a partial corrective to the rush of progress. In the twentieth century, as an already large American population continues to grow and make use of an extraordinary energy subsidy from fossil fuels, to the detriment of the environment, contemporary nature writers continue to take pained note of losses, and more than a few have expressed denunciation. From about the time of World War II, nature writers have mounted detailed critiques and proposed specific corrective measures for environmental outrages: John Graves's portion of *The Water Hustlers* (1971), Edward Abbey's fiery "The Second Rape of the West" in *The Journey Home* (1977), and Barry Lopez's somber account of the American campaigns against wolves in *Of Wolves and Men* (1978) are good examples. Perhaps the most effective critique in the modern era has been Rachel Carson's *Silent Spring* (1962), a supremely careful, even understated thesis against the careless and excessive use of chemical pesticides and herbicides. This book declared, as Paul Brooks has written in *Speaking for Nature* (1980), "the basic responsibility of an industrialized, technological society toward the natural world";[5] its influence on the environmental awakening of the 1960s and 1970s, and upon public policy to some degree, is unquestioned.

In almost every practical aspect, we in the late twentieth century live in a world that would certainly amaze and perhaps dishearten someone as close to us in time as Henry David Thoreau. We have lost a great deal, in just the time since he compared the natural America he inherited to a damaged volume: many rivers, formerly free-flowing; many valuable wetlands;[6] many old-growth forests; and much plain open space and possibility. And we have set in motion trains of cause and effect — notably those arising from the broad-scale use of toxic chemicals and the burning of coal and oil — whose consequences may be enormous and are almost certain to be negative. In addition to having wrought deep changes in our natural surroundings, we have used our mechanical advantage to construct, in the century or so of the oil-powered industrial age, a radically more insulated life than was possible in Thoreau's time. It is highly interesting, a mark perhaps of the true complexity of the American character, that natural history study, and nature writing, persist and perhaps even gain in influence.

Our literature of nature owes a great deal of its content and development, and its currency now, to the major contributions of Romanticism and science. And it has always been morally alive to the circumstances of its environmental moment. But in the end, the deepest influence, the inner life of the nature essay, is still the writer's response to the land itself. In the face of all that has happened, in a modern nation where pavement is now said to occupy as much territory as protected wilderness, the setting that F. Scott Fitzgerald described so memorably as the "fresh green breast of the new world" continues in mythic potency to generate profound allegiance and durable affirmation.