As Alaska statehood approached, ecological science and evolving public sentiment made possible a more direct appeal for ecosystem preservation. A confluence of events focused attention on a remote corner of the territory to become the Arctic National Wildlife Range. Relatively unspoiled and rich in wildlife, the land had not yet demonstrated industrial potential. Just as important, the campaign to save the land depended heavily on the talents of three uniquely qualified conservationists: Bob Marshall and Olaus and Margaret Murie.

Ongoing losses of wildlife and wildlands gradually tipped the balance of American public values from aggressive exploitation toward preservation of some elements of Nature. Motives varied; some wanted to conserve water, soil, and timber, as in the Adirondacks; some to protect favored species of wildlife, as in the brown bear reserves; others to secure recreation sites, as in most national parks. A few in the 1930s, led by Aldo Leopold, began to acquire an ecological perspective on wildlands, seeing them as integrated complexes of life valuable both in themselves and for the well-being of human communities. Leopold and his colleagues launched a wilderness movement to safeguard large tracts of
wildlands. Several of the leaders had strong ties to Alaska, although, compared
to the Boone and Crockett founders, they lacked high standing in Washington.
Marshall and the Muries knew northern Alaska and envisioned preservation
on a regional scale. Their efforts eventually paid off in protective legislation for
much of the North, including the Arctic National Wildlife Range.

**BOB MARSHALL, WILDERNESS ADVOCATE**

John Muir’s view of Nature came alive in large measure during the 1930s
through another prominent figure in Alaska’s environmental history. Robert
Marshall (1901–1939) never met Muir, nor did he emerge from Boone and
Crockett, Audubon, or other established conservation groups. His love for
Nature flowed from reading, hiking, mountain climbing, and exploring rather
than from hunting, fishing, or observing wildlife. Like most early environmental
leaders Marshall grew up in privilege, his father, Louis, a prominent civil rights
attorney in New York City. A conservationist who knew Theodore Roosevelt,
Louis helped establish and fought to defend the state’s Adirondack Park.

While the family vacationed in the Adirondacks, Bob spent his leisure hours
in the woods. At age eleven, confined to bed by pneumonia, he encountered
*Pioneer Boys of the Great Northwest*, an adventure tale about the Lewis and Clark
Expedition. It so absorbed him that he read it as often as three times a year for
the next ten years. His sorties into the woods grew more frequent; he eventually
climbed the 46 highest mountains in the Adirondacks. He climbed 28 Alaskan
peaks (mostly first ascents), went on more than 200 hikes of over 30 miles a day,
and once hiked 70 miles without sleep.

By age fifteen Marshall had resolved upon a career in forestry. Degrees
from New York State School of Forestry and from Harvard, and a PhD in
plant physiology from Johns Hopkins, followed. He joined the Forest Service
and, at his request, received an assignment to the Northern Rocky Mountain
Forest Experimental Station in Missoula, Montana, during 1925–1928. There
he took full advantage of the opportunity to explore the mountains. Seeking
ever-wilder areas to roam, he headed for Alaska. In summer 1929 he adventured
and studied tree growth (in that order of preference) in the Brooks Range, en-
joying it so much that he returned for a year in 1930–1931 to live in the upper
Koyukuk town of Wiseman. *Arctic Village*, his portrayal of the social lives of the
sourdough miners and Natives, won literary acclaim. He wrote more than 100
books and articles about Alaska, forestry, and wilderness preservation.

Several aspects of Marshall’s upbringing appear to have set the pattern for
his life work and philosophy. His father instilled a sense of social responsibility
that showed in Bob’s earnest efforts to improve society. The family’s interest in
art gave the boy an aesthetic orientation reflected in his appreciation of natural
beauty. Louis read to his children the works of James Fenimore Cooper and other romantic writers who conveyed a message of the superiority of Nature over civilization in building character. Bob enthusiastically participated in athletics. He adopted as a role model Verplanck Colvin, a scientifically oriented explorer of the Adirondacks who loved studying Nature and reveled in the hardships of outdoor life. Bob Marshall evolved a pattern of activity that put him in the wilds as much as possible and combined activity, aesthetics, and benefit to society in his reverent views of Nature.

The more he saw of wilderness, the more convinced Marshall became that it must be cherished. Large tracts of wild continued to disappear, not least through the Forest Service’s utilitarian conservationist emphasis on logging. Gifford Pinchot, the first Forest Service director, perceived “conservation” as requiring sustained-yield management of forests on a scientific basis for the benefit of the people as a whole—the greatest good for the greatest number—as distinct from uncontrolled exploitation. Also a Progressive, Marshall nevertheless saw that utilitarian “conservation” would put an end to wilderness. He found a solution in a theory enabling wilderness to rival other amenities by demonstrating its usefulness to modern humans. Wilderness, he asserted, is a source of health, physical independence from civilization, satisfaction of longing for exploration, independent thought, rest and relaxation, and beauty. Such values are important for democracy, he argued; people need escape from the strictures of civilization, which, at its worst, transmutes the quest for adventure into war.

“In the wilderness,” wrote Marshall, “with its entire freedom from the manifestations of human will, that perfect objectivity which is essential for pure esthetic rapture can probably be achieved more readily than among any other forms of beauty.” By definition, wilderness could not be readily accessible to the masses, Marshall acknowledged. To avoid charges of elitism he presented the utilitarian-sounding argument that “fundamentally, the question is one of balancing the total happiness which will be obtained if the few underdeveloped areas are perpetuated against that which will prevail if they are destroyed.” He believed that “quality as well as quantity must enter into any evaluation of recreation, because one really deep experience may be worth an infinite number of ordinary experiences.” He considered it appropriate to set aside areas to be visited by few people, considering that unrestricted access would demolish their unique values for everyone.

Beyond the abuse of forests by government, Marshall expressed alarm over the status of those in private ownership. Private forests comprised the bulk of 83 million acres in “ruin,” increasing by nearly a million acres annually, and of 200 million acres in a state of “deterioration.” He concluded that the nation’s forests and their related values of recreation and soil and water conservation could be
guaranteed only through public ownership. Accordingly, he advocated public acquisition of 562 million of the 670 million existing acres of forest. Forests, he thought, constituted a national resource and should be treated as such: “The time has come when we must discard the unsocial view that our woods are the lumbermen’s and substitute the broader ideal that every acre of woodland in the country is rightly a part of the people’s forests.” In Alaska Marshall’s views informed a raging debate over the Tongass National Forest enduring through the second half of the century.

Applying his extraordinary zeal to government policy, Marshall set out to move government agencies to safeguard wildlands. As early as 1928 he publicly advocated protective regulations. Regardless of whether he influenced the decision, the Department of Agriculture adopted rules in 1929 for specifying primitive areas. A swelling national interest in outdoor recreation made possible by automobiles and roads suggested that the Forest Service needed to accommodate it. The service undertook a comprehensive forest policy review in 1932, just as Marshall finished his PhD program. The survey coordinator, a friend of Marshall’s, invited him to participate in writing the sections on recreation. Marshall seized the opportunity and incorporated his idea that 45 million of the 506 million acres of national forest lands should be earmarked for recreation. Between 1933 and 1939, 5.4 million acres received protective status, much of it probably as a result of Marshall’s persistent efforts.

Marshall emerged as the government’s best-known wilderness proponent. In his position as forestry director in the Interior Department’s Office of Indian Affairs between 1933 and 1937, he succeeded in getting 4.8 million acres on Indian reservations designated as roadless or wild. He thought Indians, affected by whites in many negative ways, needed connections to their wildlands for economic reasons and to prevent the loss of cultural traditions. He pointed to the fact that before the Allotment Act of 1887, Indians had owned 138 million acres of reservations. The act, intended by proponents to help Indians become economically independent through ownership of individual plots, instead resulted in land grabs by white men. By 1933 Indians owned 48 million acres of the poorest lands, not sufficient to support their populations. Environmentally unsustainable grazing and logging took place, degrading the lands and further impoverishing the Indians. Marshall advocated governmental purchase of land to be given to Indians, who would otherwise remain in a state of dependency at continuing cost to the government.

In 1937 Marshall returned to the Agriculture Department to assume the directorship of the Recreation and Lands Division. Continuing to push for forest preservation, he proposed a set of revised rules known as the “U” regulations by which the secretary of agriculture could minimize damage to wildlands. Specifically, no logging would be permitted on tracts classified as wilderness
(over 100,000 acres) or as wild areas (of smaller size). Shortly before Marshall’s death in November 1939 the department adopted the regulations, eventually applying them to about 14 million acres of national forest lands. The process presaged the 1964 Wilderness Act.

Alaska stirred exhilarating feelings within Bob Marshall. In the Brooks Range he fulfilled his dreams of tramping through unspoiled rugged wilds. On what he recalled as “in many ways the greatest one day I have spent,” in March 1931 he and sourdough friend Ernie Johnson snowshoed to the pass between the Clear and Hammond rivers:

I do not know what may be the supreme exultation of which a person is capable, but for me it came that moment I crossed the skyline and gazed over in to the winter-buried mystery of the Arctic, where great, barren peaks rose into the deep blue of the northern sky, where valleys, devoid even of willows, led far off into unknown canyons. Below me lay a chasm so many hundreds of feet deep it seemed no sunlight could ever penetrate its depths. From its upper reaches, bathed in sunshine, a white pinnacle rose into the air for almost a mile at a slope of not less than sixty degrees.

Returning from a climbing expedition accompanied by Nutirwik (also known as Harry Snowden) he wrote, “[N]o man by high-powered instruments and machines can get the thrill which we got with our pocket compass and our field glasses as we made the first rough map of an unknown empire.” He named dozens of mountains, creeks, and other places, but none for himself. Of the names he proposed, some of which he made up and some preexisting, the Board of Geographic Names adopted 167. Many names he chose may have replaced those given long ago by Eskimos and Indians. Marshall Lake on Mt. Doonerak became his namesake, as did later the Bob Marshall Wilderness in the North Cascades.

Reflecting on 20th-Century explorations, Marshall judged that they did not add to human happiness as a whole: “In fact, the net result of these activities is to make mankind a little poorer because in each case a slightly diminished possibility for the joy of exploration is left in the world after the exploration is finished.” His predominantly egalitarian views contradicted his justification for exploration, “a perfectly laudable pastime in spite of its selfishness because the competition is open, and one person is entitled to enjoy it as much as another.” Nor did he confront another irony of his position: his conquest, mapping, and publicizing of wild places accelerated the utilitarian process of cataloging, exploiting, managing, and thereby eroding the mystery and integrity of wilderness areas he so loved. But the mapping would have taken place anyway, and he far more than compensated for the discrepancy in his philosophy by his phenomenal success in wildland preservation.
Marshall returned to the Arctic in the summers of 1938 and 1939. Life in Wiseman confirmed his belief that the simple life offered a surer path to happiness than did modern civilization. Just as wilderness represented the last stand for outdoor adventure, Alaska offered the last chance to avoid the resource management mistakes made in the States. Its wild areas would become ever more valuable as recreation replaced minerals, fur, and fishing in Alaska’s economy. “Alaska is unique among all recreational areas belonging to the United States because Alaska is yet largely wilderness,” Marshall pleaded. “In the name of balanced use of America’s resources, let’s keep northern Alaska a wilderness.” He proposed that everything north of the Yukon, including Native villages and excepting Nome, be set aside as a park.14

Perceiving wilderness in anthropocentric rather than biological terms, Marshall valued it for its benefits to humans. The opportunity to experience primitiveness, or connection to unspoiled land, constituted its paramount appeal. A frontier park in northern Alaska, he reasoned, would retain for local inhabitants the values of independence and self-reliance, recognition of the individual, and adventure he had observed on the upper Koyukuk. Visitors to the proposed park could seek adventure without disrupting the lifestyles of...
residents. Marshall believed or hoped these values, fast disappearing under the crush of civilization, could survive in northern Alaska.

Marshall participated in another, atypical, debate involving Alaska’s wilderness. While the pre–World War II turmoil in Europe worsened, FDR asked the Interior Department to identify places where refugees might be resettled. Interior’s report suggested Alaska could play a large role and that the United States should help develop Alaska’s resources. Marshall’s response captured the essence of the debate over Alaskan development, both past and future:

World history for the last hundred years has been the story of the rapid development of untapped resources which represent the accumulated natural processes of eons, yet the opening of new frontiers has seldom brought more than transient prosperity for the vast majority of those engaged in it. The only reason we have as high a standard of living as we do today is that the more primitive people of past ages saw nothing immoral about leaving resources undeveloped. . . . Although lauding the fact that Alaska is perhaps the last country in the world where a hermit can build a cabin and never see a tax collector, the report fails to recognize that this is due to the scanty population which gives land almost no value, except around a few municipal centers, farming areas and mineralized zones. Furthermore, increasing the population would almost certainly lessen the contribution that wild life now makes to the subsistence of many Alaskans. It would also take away from people the unique possibilities of individuality found in scantily populated countries where men are few and each one is distinctive.

Viable growth, he argued, would be strictly limited by the combination of distance from markets and foreign competition.

Proposals for settlement of European, mostly Jewish, refugees from Hitler’s Germany had first surfaced in early 1938. They met resistance from most potential host nations, including the United States. In fall 1938 a Denver group put forward a plan to place refugees and unemployed persons in Alaska; it reappeared in essence in the Interior Department’s Slattery Plan of 1939. Alaskan newspapers voiced overwhelming disapproval, despite their repeated previous claims that Alaska possessed abundant resources needing exploitation. Boosters had vigorously objected to Marshall’s idea of prohibiting industry north of the Yukon. Marshall, himself Jewish, spoke against the settlement plan. He argued that Alaska could not accommodate large influxes of people, in contradistinction to the 48 states where resources and factories went underutilized. Resistance from Alaskans helped doom the settlement bill in Congress.

Marshall felt an urgent need for a small and dedicated private group to spearhead an effort to maintain wilderness by applying outside pressure on government:
It will be only a few years until the last escape from society will be barricaded. If that day arrives there will be countless souls born to live in strangu-lation, countless human beings who will be crushed under the artificial edifice raised by man. There is just one hope of repulsing the tyrannical ambition of civilization to conquer every niche on the whole earth. That hope is the organization of spirited people who will fight for the freedom of the wilderness.18


Marshall echoed John Muir as a self-styled advocate of wilderness. Like Muir he cast his appeals more in the form of aesthetical, sociological, psychological, and spiritual values than in terms of ecological science. Unlike Muir, he envisioned a wilderness preserve including humans living at low levels of technology and consumption. This rather fanciful prescription for the Alaskan Arctic underwent an endless series of tests in the ensuing decades, centering on questions of land ownership and subsistence rights.

Also, unlike Muir, Marshall displayed little interest in wildlife, nor did he emphasize species preservation or nonhuman rights. Yet his family background and experience tied him to the relatively holistic concepts that inspired the Adirondack preserve, only a step or two away from modern ecosystem sustainability.

Marshall deeply treasured and promulgated nonconsumptive use of Nature. His government positions empowered him to act on his values, setting precedents in wildland management. He argued that government should not only be responsible for but should be the direct steward of the nation’s great forests. In founding the Wilderness Society he added a significant element of public participation, albeit somewhat elitist along the lines of Boone and Crockett. The society, in turn, employed and further popularized Marshall’s ideas in its central roles in the establishment of the Arctic Refuge and the 1964 Wilderness Act. National support for wilderness ultimately shaped Alaska land status outcomes, as Marshall hoped it would, and fortified notions of ecological sustainability and wilderness values within the Alaskan public.
MR. WILDERNESS: OLAUS MURIE

“The out-of-doors is our true home, and being there gives us solitude and leisure to speak to ourselves and not to others. When we speak to ourselves, we are apt to be more honest.” A lifetime of immersion in Nature earned Olaus Johan Murie (1889–1963), a Wilderness Society colleague of Bob Marshall’s, the ability and right to speak such words. Another landmark environmental figure, Murie displayed wilderness skills rivaling the most experienced Alaskan outdoorsmen. Yet his philosophy and accomplishments measurably furthered preservationist values.

Murie grew up on a Moorhead, Minnesota, farm and worked hard from age eight because his father died. In his spare time he and his brother Martin built a canoe and traveled the rivers observing wildlife. Ernest Thompson Seton’s books kept him busy reading. After study of biology at Fargo College and graduation from Pacific University (Forest Grove, Oregon) in 1912, he served two years as a game warden in Oregon. Then he researched wildlife in Hudson Bay (1914–1915) and Labrador (1917) as a field naturalist and curator of mammals for the Carnegie Museum of Natural History. He over-wintered in 1914–1915 and honed his skills of survival in the North. During World War I he served in the Balloon Corps but did not go to Europe. Bureau of Biological Survey (BBS) chief Edward W. Nelson noticed his Canadian work and thought he might be the right person to survey caribou in Alaska. By 1920 Murie found himself traveling the Arctic and subarctic by dogsled, making the first counts of the northern caribou herds. Other work focused on birds and grizzly bears.

Remaining in Alaska until the fall of 1926, Murie returned south to earn a master’s degree at the University of Michigan. At Jackson Hole, Wyoming, he conducted research on elk, coyotes, and other creatures. In 1936–1937 he returned to Alaska to direct the first thorough study of fauna in the Aleutians, where Murie Islets in the Shumagin Islands bear his name.

Nelson, a sober and demanding taskmaster, expected much of Murie. He accompanied the young biologist to Alaska in 1920 and assigned him multiple tasks: collector of bird and mammal specimens, fur warden, and caribou researcher. Enforcement of fur laws, newly assigned to the BBS, did not go well for Murie. His first seizure of illegal furs alienated most of the Fairbanks community. Reflecting the Agriculture Department’s orientation, the bureau planned to capture caribou for an experiment to improve reindeer by cross-breeding. A strenuous effort at Mt. McKinley Park in 1922 by Olaus and his brother Adolph (“Ade”) ended in failure. They caught three bulls, a cow, and a calf, but one bull died in a wire fence entanglement, a second died for unknown reasons, and the third escaped.

However, Murie excelled as a field scientist and collector. Applying his dog-teaming experience from Hudson Bay and Labrador, he traveled exten-
Bob Marshall, Olaus and Margaret Murie, and the Arctic Refuge

sively around northern Alaska. Often alone and through the winter months he carried out surveys of caribou. Usually he packed no stove or tent and slept in a rabbit-fur bag. Early trips took him around Fairbanks, Eagle, and Mt. McKinley National Park. From October 1922 through April 1923 he and Adolph ventured into the Brooks Range to Wiseman and the headwaters of the Alatna River. On his fall 1924 honeymoon trip, he and Mardy (Margaret) visited Wiseman and ascended the Koyukuk River. Earlier in 1924 he had dogsledded 700 miles to the Yukon Delta to study waterfowl. In 1925 he went to the Alaska Peninsula to observe and collect land and sea birds and mammals.22 He visited Amak Island and recommended that it be set aside as a bird sanctuary. President Herbert Hoover signed an executive order adding it, the Sea Lion Rocks, and other small islands to the Aleutian Islands Reserve.23

Murie contributed to the evolution of ecology as a biological science and core of an ecological ethic, and he disapproved of the BBS policy on predator control. A 1923 letter to Nelson expressed his doubts: “I have a theory that a certain amount of preying on caribou is beneficial to the herd, that the best animals survive and the vigor of the herd is maintained. Man’s killing does not work in this natural way, as the best animals are shot and inferior animals are left to breed.” The theory almost certainly influenced Adolph, with whom Olaus constantly shared perspectives on wildlife.24 In addition to the research of his colleague Lawrence J. Palmer and that of Adolph on coyotes and wolves, Olaus had observed the case of 700 caribou dying on Unimak Island after overgrazing their range. No wolves had been present. His account of this case did not get published, nor did his later work criticizing federal coyote control policy. Resultant frustration contributed to his resignation from the Fish and Wildlife Service in 1945 to become staff director of the Wilderness Society, a position he occupied until 1962. He correctly predicted that ecological research would help create a shift in public opinion toward predators,25 and he worked to change the government’s policies.

Gifted with an intense, childlike curiosity, Olaus Murie forever observed—questioning what animals were thinking, why they behaved as they did, why the world functioned as it did. In this mind-set he envisioned a form of salvation for humankind: “A poetic appreciation of life, combined with a knowledge of nature, creates humility, which in turn becomes the greatness in man.”26 Murie could hardly be described as a cheechako, or a naive “outsider,” yet he displayed a charitable, preservationist attitude toward unpopular animals: “I think we should go beyond proving the rights of animals to live in utilitarian terms. Why don’t we just admit we like having them around? Don’t we realize that something exciting and satisfying will be gone from the world if we no longer hear coyotes howling?” Asked whether he feared meeting grizzlies unarmed, he replied, “Not much—a little, sometimes. But I never let them know it. I respect
them and I meet them on equal terms. They are natural and good. I try to understand them. They have never hurt me.”

An acquaintance observed that Murie “exemplified the gentleness and natural wisdom that some sensitive people seem to derive from close association with the earth and its creatures . . . a highly civilized being who had acquired an aura of nobleness from the wilds that he loved.” Wilderness Society director Howard Zahniser, who also died just before he could celebrate the fruits of his labor on the Wilderness Act, described Murie as “the one person who best personified wilderness in our culture.”

As did John Muir, Murie criticized materialism and its impact on Nature:

I would say that the dollar sign is out of place when it undertakes to ride roughshod over the sensibilities of people who have dedicated a piece of country for the inspiration of its wilderness. . . . It has been pointed out repeatedly that the most dangerous influence we have in our society is not the criminal. We can deal with him more or less. We need to fear much more the half truths, the rationalizations, and the business ethics that are just below par but so universal that we shrug them off with a humorous remark.

“Probably because of our exuberance in coming to a new continent,” he thought, “we have acted like children getting into a pantry well-stocked with goodies. We are still exploiting our resources wildly.”

He regarded wilderness as “the material of poetry, art and science. Nature gives spiritual values none of us can live without. How can we measure the elation of being in high country in free surroundings?” Destruction of wilderness represented more than the disappearance of wildlife; it also meant the loss of vital heritage: “It is a fragile thing, this natural wilderness, consisting of the material for poetry and art and vigorous clean living. It is easily degraded or destroyed by heedless men. It is not for a single agency, or a single organization, to make ruthlessly a decision which affects the future. Surely it is wisdom to guard the original material on which our culture is founded—and save some of it.”

This did not mean all people should have access to all of Nature. Echoing Bob Marshall, he believed some wild areas should be reserved “for those who crave a true wilderness experience, for those who can stand weather, who have the stamina to deal with the vicissitudes of camp life, and still enjoy the experience. We surely need this element in American civilization. It should not be lowered to a common denominator to accommodate mass numbers.” The Arctic National Wildlife Range fit perfectly his ideal of a wilderness to be left in its natural state.

One of the original governing council members of the Wilderness Society, Murie presided from 1950 to 1957 and served on the council until his death. He wrote scientific and popular works on elk, coyotes, and caribou and on wildlife management, appreciation, and preservation. The activity of the Wilderness Society grew rapidly in the 1950s; through it Murie left a telling impact on the
future of Alaska lands. Tirelessly lecturing, testifying, and writing in the cause of wilderness preservation, he won a national and an international reputation.

Olaus Murie earned repute as a writer, artist, lecturer, and conservation leader, as well as a top field biologist. His wife, Margaret (1902–2003), shared his writing and conservation work. Born in Seattle and brought up in Fairbanks from age nine, she majored in English at Reed and Simmons colleges and became the first woman graduate of the University of Alaska in 1924. Her famous book *Two in the Far North* told of dogsled travels with Olaus, including a winter honeymoon trip in the Brooks Range, and of their love for Nature in Alaska. Mardy accompanied Olaus on field expeditions, even after the birth of their son Martin.

Like Muir and Marshall, the Muries discovered in the North a vital connection between its isolation from civilization and a high spiritual quality of life:

[Mardy and I] often spoke of it even then, as we traveled among scattered villages, trading posts, missions, camps, associating with the men and women of several races—swarthy white men who hardly dared to speak in the presence of a woman for fear of what words might slip out, well-read prospectors who could discuss the classics and philosophy with wisdom, Indian youths (beyond the influence of liquor peddlers) whom we admired for their forth-right-ness and obvious integrity, Eskimos who contributed the brightness of laughter and optimism. I am speaking now of the time previous to the present industrial boom in Alaska.

The Muries found “cold beauty and infinite warmth; physical hardships, as well as times of plenty and fun. We believe it is a life not to be ashamed of, a life of rugged endeavor and high spiritual reward, not to be lightly discarded in the modern reach for ease and gadgets. Surely somewhere in the north we should find it possible to dedicate an area or two to this kind of life.”

In May 1926 BBS chief Nelson assigned Olaus to band waterfowl up the Old Crow River on the Yukon side, and Mardy went along. Friends advised against taking the eleven-month-old baby and described the Old Crow as “the worst mosquito place in Alaska,” warning that “even the Indians stay out of there in the summer.” The party set out up the Porcupine River. Upon ascending the Old Crow to Black Fox Creek they broke a propeller shaft. Undaunted, Olaus and boatman Jess Rust resolved to complete the journey. They transferred the gear, Mardy, and the baby to a barge and poled and lined it for more than 150 miles to the river’s headwaters in the Davidson Mountains, stopping to band birds all along the way. Recovering their boat on the way back, they poled it through a dangerous stretch of rapids, descended the Porcupine, and returned to Fairbanks.

Mardy participated in Wilderness Society work as a partner to Olaus. She promoted the efforts to set aside the Arctic National Wildlife Range, a goal she
and Olaus had shared since 1924. Following Olaus’s death she grew more active, devoting most of her time to wilderness and wildlife preservation through the Wilderness Society and Sierra Club, working from her home at Jackson Hole. She stayed connected to Alaska, visiting in 1975 as a guest of the National Park Service and meeting people around the state to urge a strong Alaska Lands Act. The University of Alaska awarded her an honorary doctorate in 1976. During later visits she worked for the defense of the Arctic National Wildlife Refuge from oil development.

In 1977 Mardy published Island Between, a work based on notes taken of Eskimo life at St. Lawrence Island by Alaskan scientist Otto Geist, whom the Muries had known since the 1920s. Four years later she put together The Alaska Bird Sketches of Olaus Murie. Her ongoing activity in environmental protection gave her national standing. Presidents Lyndon Johnson and Jimmy Carter invited her to the signing ceremonies for the 1964 Wilderness Act and the 1980 Alaska Lands Act, respectively. President Bill Clinton phoned on her 93rd birthday to promise a veto of any congressional bill to open the Arctic Refuge to oil. The Grand Old Lady of the wilderness movement, Mardy Murie endured as the nation’s living icon of wildland advocacy.

Olaus Murie possessed a rare outlay of credentials relevant to Alaskan environmentalism: biologist, frontier explorer, scientific researcher, government official, writer, philosopher, artist, and political activist. He bridged several gaps in the evolving environmentalism of his time. Simultaneously he held the respect of hunters, settlers, government officials, and the publics of both Alaska and the States. He incorporated the hands-on knowledge of a Frank Dufresne and the aesthetic sensitivity of his colleague Bob Marshall. Well ahead of his time, he understood the value of predators and acquired an ecocentric view of the Earth. He articulated and gave force to nonconsumptive use values of the wolf and coyote and, in essence, affirmed the right of species to exist. He worked for ecosystem sustainability, as in his plea for the Arctic National Wildlife Range. He valued and practiced science as a building block for environmentally responsible natural resource management. By no means least, he and Mardy successfully modeled public participation, through the Wilderness Society, in resource management. Their close ties to Alaska, and effective educational work in the Lower 48, registered in Alaska land designations and, eventually, environmentalism in the Alaskan public.

More than any other person, Olaus Murie made possible the Arctic National Wildlife Range. He arranged for the society’s 1963 annual meeting to be held in Alaska to focus attention on its wilderness issues and once again made a visit to the Arctic. Three months later he died, not living to see the adoption of the 1964 Wilderness Act to which he had given years of effort.
THE ARCTIC REFUGE

Few lands hold a more exalted ranking in the Alaskan environmental panoply than the Arctic National Wildlife Range (ANWR). Encompassing the northeast corner of the state, it is one of the most remote regions of the United States. It cannot be reached by road; it is almost entirely unpopulated by humans. It contains at least two ecosystems divided by the Brooks Range: the tundra-covered Arctic and the heavily wooded lands to the south. Aborigines first appeared on the South Slope about 11,000 years ago and more recently on the North Slope. Two distinct cultures exist: the Tagmiugmiut Eskimos, who hunt sea mammals and caribou along the Arctic coast, and the Kutchin (or Gwitch’in) Athabaskan Indians, hunters of caribou who live on the South Slope. Both cultures traded along the Arctic coast, connecting the Canadian and Siberian Natives in the 17th to 19th centuries.41

Euro-American Explorers

In 1826 British explorer Sir John Franklin initiated the wave of Europeans to visit the coast. He traveled westward from the Mackenzie River Delta in the first of his Arctic expeditions that ultimately led to disaster in his quest for the Northwest Passage. Franklin named Camden Bay for a lord of the Admiralty and another bay for Admiralty hydrographer Captain (later Admiral) Sir Francis Beaufort.42 The Arctic Ocean above Alaska ultimately took on the name Beaufort Sea.

Later in the 19th Century came more Hudson’s Bay Company explorers, searchers for Franklin, and whalers. Advancing civilization left its mark on Arctic ecology. During the commercial whaling era, lasting from 1854 to about 1916 along the north Arctic coast, traders introduced guns to Eskimos. To supply the whaling crews, hunters pursued caribou, mountain sheep, and other mammals far inland, to the point of scarcity. Ernest de K. Leffingwell, a U.S. Geological Survey officer posted to Flaxman Island between 1906 and 1914, reported, “The native hunters have long been furnished guns and ammunition in abundance by the whale ships wintering at Herschel Island. . . . [E]very native in the country has a modern repeating rifle and one or two thousand cartridges every year. As they have no better knowledge of conservation than white men, they soon drove the caribou out of the country.” Thereafter, Leffingwell noted, Eskimos sewed most of their clothing from reindeer hides imported from Siberia: “As the caribou decreased in numbers, the natives began to hunt the mountain sheep more energetically. Dall’s sheep formerly were abundant everywhere in the mountains, but they have already been cleaned out from the lower part of the larger rivers.” Eskimos regarded polar bears as pests and shot them as they attempted to make dens on the high banks ashore. Bear populations
dwindled. Whalers and other visitors to the Arctic killed polar bears for their fur or for sport.

Roald Amundsen crossed the divide in the Davidson Mountains by dogsled in 1905–1906 during the first navigation of the Northwest Passage. His ship froze in for the winter, and whale men in over-wintering vessels wanted to send and receive mail and request supplies. Not least, Amundsen planned to telegraph word of his achievement to the outside world. Without money to finance the 1,000-mile round trip to Fort Yukon and Eagle, he accompanied Captain Billy Mogg, who would lead the expedition. Mogg commanded the whaling vessel *Bonanza*, driven ashore by ice while wintering east of Herschel Island. He planned to return to San Francisco and sail another vessel north for spring whaling. A seasoned Arctic whaler, Mogg had wintered at Herschel Island almost every year since 1890. In 1892 he made a round trip by dog-sled to the Yukon Valley, the first known traversal of the mountains by a non-Native.

The mail expedition left Herschel Island in late October. Indian guides Jimmy and his wife, Kappa, known for their reliability and competence, served as guides and drove two dog teams. Mogg rode on Amundsen’s sled or traveled on snowshoes; Amundsen used Norwegian skis. Mogg pointed out a place where deserting whalers had camped in midwinter on their way to the gold-fields. When ordered to surrender they fired on the pursuing officers who returned fire, killing two of them. Two more surrendered, and the rest fled toward Fort Yukon. Five got there, but several perished on the way.

Mogg and Amundsen’s party reached Fort Yukon on November 20. They hired another Indian guide, Charlie, to accompany them on the 200-mile trip to Eagle. Upon arrival Amundsen wired the historic news to the king of Norway over the newly installed Alaska telegraph system. On February 3, 1906, Amundsen left Eagle, rejoined the Indians at Fort Yukon, and returned north to his ship and crew, arriving on March 12. The following summer he sailed the *Gjoa* along the Arctic coast on the way to Nome. On that coastal plain, in oil seeps discovered by Eskimos and explorers, lay the seeds of future strife in the Arctic.

An Arctic Ecosystem

Cold, wild, and vast, the Arctic Refuge is a land of awesome beauty and vibrant life. In the words of Averill Thayer, refuge manager from 1969 to 1981, “No other refuge or park encompasses such a continuum of undisturbed, biologically self-sufficient arctic and subarctic habitats—from the interior boreal forest and the central Brooks Range to the coastal plain bordering the Arctic Ocean. No other area affords habitat protection for so many healthy populations of national interest species.” He described the caribou herd migration as
“the most spectacular wildlife phenomenon on Canadian and American soil.”

Other mammals in the refuge include moose, Dall sheep, muskoxen, polar and grizzly bears, wolves, wolverines, lynx, porcupines, and Arctic foxes and hares. Offshore are ringed, bearded, and largha seals; occasionally walruses; and gray, belukha, and bowhead whales. Golden eagles, peregrine and gyrfalcons, rough-legged hawks, snowy owls, geese, ducks, loons, and swans are among the 57 species of breeding birds in the area; at least 135 bird species have been seen. Twenty-four species of fish—four freshwater, nine anadromous, and eleven marine—exist in the refuge. This wildlife is a vital source of food for the North Slope Eskimo village of Kaktovik and for Athabaskan villages near the caribou migration routes.

Central to the wildlife complex is the Porcupine caribou herd, named for the Porcupine River in its migration route. Often compared to Africa’s Serengeti plain, the coastal tundra of the refuge is the scene of caribou calving in mid-
May. This culminating stage of the long spring migration provides abundant food and relief from predators and insects. In late summer the caribou return to the foothills to resume their annual trek of up to 2,700 miles between the coastal plain and their wintering grounds near the Chandalar River to the south or the Ogilvie Mountains in the Yukon. To natural and human predators their biannual journey is part of the pattern of survival. For the reflective observer privileged to behold, it could be a profound aesthetic and philosophical experience. Photographer Wilbur Mills portrayed a herd of advancing caribou at Camden Bay as

a tight seething mass so dense I could not see the ground beneath it. I heard the approaching thunder of their hooves pounding the tundra. It was more than a sound . . . caribou were coming toward me along an unbroken front perhaps a quarter of a mile wide. Their clicking hooves clattered in the air like a thousand castanets. The air was saturated with the energy of sound. The herd enveloped me. Cows and calves, and bulls with long, velvet-coated antlers reaching high above their heads, rushed by a few yards away as if I were not there.
Lois Crisler described the fall migration in the western Brooks Range as

a spectacle like none other left on earth now. It had power over the spirit.
The power lay not only in what you saw—this slender column driving on-
ward into wilderness. It also lay in what you knew. Arctic night and hunger
coming. In-gathering far away somewhere of individuals into this traveling
column, driven by the great seasons. Knowledge of danger and darkness and
fear, built into their tissues by the centuries. Life and the cold Arctic before
you for a moment in one silent sweep of land and moving animals.51

Ecologist John Milton hiked 300 miles across the Brooks Range in 1967. At
the junction of Green Willow Creek and the Aichilik River he found wolf
tracks superimposed on those of caribou and mused, “I hope man has the vi-
sion to keep his civilization from at least a few such wildernesses as this—wil-
derness on the old, vast scale—so that wolf and caribou can continue to live as
they always have; and for their sake, not ours. . . . And if this wilderness can
also be an incidental reservoir for restoring man’s spirit, then fine. But that is
not the purpose of this place. Its purpose it to be. Man’s role should be . . . let
it be.”52
Establishment of a Refuge

Such an ecosystem as described by Mills, Crisler, and Milton embodied part of Bob Marshall’s dream of a grand national park north of the Yukon. Similarly oriented National Park Service recreation officer George L. Collins and biologist Lowell Sumner investigated the region as part of a general recreational survey of Alaska directed by Collins. Sumner visited the northeast corner in 1951 and wrote Wilderness Society director Olaus Murie suggesting that it be preserved.53 Collins went to see John Reed, a Naval Arctic research official who had explored oil prospects on the North Slope. Reed advised that any park be located “east of Pet 4,” the Naval Petroleum Reserve occupying the central North Slope. Collins and Sumner then flew around the northeast corner in 1952, assisted by the Naval Arctic Research Laboratory at Barrow. “The scenery was magnificent. It was simply stupendous, beyond description,” recalled Collins. The two men began to draft boundaries for a proposed national park. They returned in 1953 accompanied by Starker Leopold and Frank Fraser Darling.54 They wrote to Murie requesting that he lead a campaign for a wildlife refuge. Collins then wrote to Alaska governor B.F. Heintzelman assuring him that the Park Service did not want to make the area a national park or monument, which would close the area to mining and other development.55 He and Sumner contacted Joe Flakne of the Arctic Institute of North America. Flakne in turn advised Murie, “If you fellows want to save some wilderness in Alaska, you had better begin to do something now.”56

In a 1953 *Sierra Club Bulletin* article Sumner and Collins highlighted the scientific value of the refuge. Nearly all other areas had been altered, they said. Northeast Alaska presented an opportunity to study the ecology of an essentially undisturbed ecosystem and acquire knowledge applicable to land and wildlife management elsewhere. The refuge should be “planned and dedicated now for perpetual preservation as a scientific field laboratory and also for the education, enjoyment, and inspiration of all outdoor-minded people.”57 As government officials, Sumner and Collins could not freely organize a citizen support effort. In 1954 they formally proposed to the Interior Department the creation of an Arctic reserve, to extend into Canada and be jointly managed.

Olaus Murie and Sigurd F. Olson had flown over the Brooks Range in the fall of 1951. Accompanied by a U.S. Geological Survey official, Murie flew to the Arctic again in 1953. The Wilderness Society had committed itself to the Arctic refuge project, as would the Sierra Club. Others prominently involved included the Conservation Foundation, Isaac Walton League, and Wildlife Management Institute. Funded by the Conservation Foundation and the New York Zoological Society, Murie planned a trip to the region in 1954. His illness forced a postponement until 1956. He and Mardy then undertook an expedi-
tion to the Sheenjek River Valley. It reminded them of their travels in the 1920s, but the trip had a political purpose: to publicize the idea of a wildlife refuge. It proved an effective plan. Reporters and other well-chosen people including Justice William O. Douglas and his wife, Mercedes, visited the campsite, and a short film full of life and beauty emerged to counter the image of the Arctic as an icy wasteland. Upon leaving the Arctic the Muries made a series of low-key presentations to Alaskan groups. Sensing the importance of local sentiment, they cautioned the national environmental organizations not to exert pressure prematurely. They returned in 1957, meeting all potentially sympathetic groups and thousands of individuals around the territory. Their respectful approach and solid Alaska credentials stood them in good stead. In the vital Fairbanks area they won the endorsements of the Tanana Valley Sportsmen’s Association, Fairbanks Garden Club, Fairbanks Chamber of Commerce, and Fairbanks Daily News-Miner.

Arctic reserve advocates knew that Alaskans would more readily accept a wildlife refuge than a national park. And a park meant roads and tourist facilities that would destroy wilderness preservation values. By 1957 the Interior Department publicly backed the creation of an Arctic refuge, and in 1958 it
filed a formal request to Congress. Alaska’s state and congressional politicians, however, tried to stop the refuge. So did the Anchorage Chamber of Commerce and the Territorial Department of Mines, which termed it “an effort to create a 9,000,000-acre playground at the expense of possible industrial development.” The new Alaska state legislature adopted a resolution against the proposal in 1959.60

*National Parks Magazine* ran a series of articles in 1958 touting the refuge proposal. Olaus Murie recounted the exhilarating experience he and Mardy had shared in the Sheenjek country two years earlier. He related vignettes of scenic beauty and wildlife encounters and expressed “a fervent hope that others, a few at a time, can enjoy the spiritual uplift of such a place. We human beings must muster the wisdom to leave a few places on earth strictly alone, to leave them for such esthetic adventures for the next generation.” Mindful of the importance of Alaskans’ approval, he paid tribute to garden clubs, outdoor sporting organizations, “certain groups of forward-looking teachers at the University of Alaska, and many individuals.”61

Secretary of the Interior Fred Seaton, who moderately favored preservation of wildlands, contributed an article to the series. Having been shown the proposed refuge by Clarence Rhode, he firmly endorsed it. Adjacent to the 9-million-acre refuge, he noted, the Canadians might set aside 5 million acres of their territory. Straddling the fence on industrial development, Seaton asserted that “no substantial mining or mineral values exist in the Wildlife Range” but added that mineral leasing might be permitted under guidelines protecting the land and wildlife. The refuge would be open to wilderness recreation, scientific study, and hunting and trapping. His recent modification of the 1943 order withdrawing the North Slope would permit oil and mining access to 20 million acres west of the refuge. Thus, Seaton concluded, “it is likely that this American region near the top of the world will contribute as never before to the growth of the Alaskan economy and the recreational enjoyment of United States citizens.”62

Seaton possessed the legal power either to permit mining and oil and gas drilling under existing laws or to prohibit them entirely. But he wanted to keep the door open for oil and gas while banning mining that would more severely disrupt the surface. This third alternative required congressional approval, and bills to accomplish it appeared in Congress. In addition, he preferred the legislative route to avoid having Alaskans blame the Republicans for an executive withdrawal and to divide the Democrats in Alaska. The designation itself would please environmentalists and reduce criticism of the Eisenhower administration for being too close to the oil industry.63

Before a sympathetic House Committee on Fisheries and Wildlife Conservation in spring 1959, representatives of the Interior Department, Wildlife
Management Institute, Wilderness Society, National Wildlife Federation, Citizens Committee on Natural Resources, and Isaac Walton League testified in favor of the refuge bill. Alaska representative Ralph Rivers stated that, in light of the widespread approval in Alaska, he would withdraw his objections if a highway funding problem could be resolved. The distribution formula linked funds to the amount of unreserved lands in a state; therefore, reservation of the Arctic could reduce Alaska’s share.64

Testifying on June 30 before a Senate subcommittee chaired by Senator Bob Bartlett, refuge advocates received a polite reception. Speaking for himself, Senator Gruening, and many Alaskans, Bartlett said, “[W]e favor a conservation policy but we are increasingly, over the years, alarmed by the fact that the federal government . . . when it desires to make a withdrawal in Alaska, makes it of such a huge size.” Appended letters from Gruening, the Alaska Miners Association, Governor William Egan, and Alaska commissioner of fish and game Clarence Anderson registered opposition to the refuge. Anderson wanted to prevent federal control of fish and game: “The only real threat to the wildlife and wilderness of the Alaskan Arctic stems from a handful of wilderness extremists and federal officials.” The Juneau Chamber of Commerce objected to the refuge, but the National Audubon Society added its endorsement. Gruening’s letter cited five reasons for opposition: (1) the size of the refuge, (2) the possibility of losing highway funds, (3) interference with state selection of lands guaranteed by the Alaska Statehood Act, (4) loss of state control over fish and wildlife, and (5) lack of need to protect such a remote area.65

The Sierra Club’s biennial 1959 wilderness conference focused in part on the refuge issue. Robert A. Rausch of the Arctic Health Research Center pointed out that little true wilderness remained in Alaska and only a tiny percentage of it had been protected. Excepting the Arctic Wildlife Range, he said, “Nature conservation has enjoyed few advocates in Alaska, as compared with the many spokesmen for those who anticipate monetary gain from exploitation of natural resources.” He predicted that the state’s economy would increasingly depend on tourism and therefore on protection of natural assets.66 Notwithstanding the impacts of oil development, Rausch’s argument carried on into the 21st Century, slowly gaining force.

In the fall of 1959 hearings took place in Alaska. A.W. “Bud” Boddy of the Alaska Sportsmen’s Council, Dixie Baade, Celia Hunter, and Virginia “Ginny” Hill Wood, among others, spoke for the refuge. Hunter testified that “Alaska is considered to be a mining state—mining is our tradition and the first justification for exploration and settlement,” and “the whole tone for our state administration is set by the mining interests.” She called for recognition of the “decline in the importance of mining, and the increasing emphasis on tourism.” Wood, who had first publicly endorsed the refuge proposal in 1954, articulated the
environmentalist position that made up part of nearly every Alaska land dispute for the next several decades:

The rising cry for more wilderness areas, national parks, and recreation sites is more than the pleas of a few starry-eyed nature lovers or bird watchers—it is a changing trend in values for a Nation that is finding material goods and higher standards of living not the whole answer to the quest for the good life. . . . Alaska’s wilderness and wildlife will become its most valuable asset economically as wild country disappears elsewhere—if we conserve it now. And we don’t have to invest vast sums to develop this asset, just maintain the status quo. . . . Always before in history there have been new frontiers to push onto: first the New Hemisphere, then the West, and finally the North, to which those who found life too crowded, exploited and regulated could go.

Now we have come to the end of the line.

We Alaskans must reconcile our pioneer philosophy of conquer, cut, shoot, plow, mine, and move on, to the realization that the wild country that lies now in Alaska is all that is left under the flag.

Otherwise, she warned, wild Alaska would “become a myth found only in books, movies, and small boys’ imaginations as the Wild West is now.”

In early 1960 legislation to create an Arctic National Wildlife Range passed the House. In the Senate, Ernest Gruening and Bob Bartlett, assisted by Rep. Rivers, blocked it. They fought any move that might restrict mining or other forms of economic activity. Hearings had demonstrated local approval for the refuge; of Alaskans testifying, 73 favored and 53 opposed it. Bartlett stopped the bill in committee in August. Representatives from Alaskan conservation groups went to see him but failed to change his mind.

Clinton “Pink” Gutermuth of the Wildlife Management Institute visited Seaton and demanded action. Sigurd Olson, Seaton’s most trusted contact in the environmental community, investigated the refuge site and conferred with Canadian officials at Seaton’s behest in the summer of 1960. He recommended action. On December 6 Seaton signed an order to create a 9-million-acre Arctic National Wildlife Range plus the 1.5-million-acre Kuskokwim and 450,000-acre Izembek national wildlife ranges. The Izembek and Kuskokwim ranges, championed by the National Wildlife Federation, had been proposed at the time of the Arctic refuge. Essentially flat and known primarily for migratory waterfowl nesting, they received much less publicity and attention from environmental groups than the Arctic refuge did. Gruening labeled Seaton’s move “a total usurpation and disregard for the rights of the state of Alaska.” Efforts by the Alaska delegation to persuade Seaton’s successor Stewart Udall to rescind the order went nowhere.

Secretary Seaton’s order ended surface mining but enabled oil and gas drilling contingent upon agreement between the Bureau of Land Management and the Fish and Wildlife Service, subject to approval by the interior secretary. Oil
Ginny Hill Wood (left) and Celia Hunter, Fairbanks, ca. 1985. Courtesy Northern Alaska Environmental Center. Active in the Arctic Wildlife Range campaign, they helped organize the Alaskan environmental community.
barrels and other litter and scars marked the sites of early oil exploration and an Air Force DEW (Distant Early Warning) station at Barter Island. But the vast bulk of the refuge ecosystem lay undisturbed.

The Arctic National Wildlife Range stood out among environmental events of its time. One of the first federal land designations in post-statehood Alaska,
it set precedents in being the first land designation issue to be settled largely in Alaska by Alaskans, and the first in the nation to be so openly dedicated to ecosystem preservation. Wilderness specialist Roger Kaye identified the dominant values sought by the proponents as “wildlife, ecological, scientific, recreational, heritage, and bequest values.” While the rules permitted hunting, trapping, and fishing by both Natives and non-Natives, the designation nevertheless imparted a signal victory and inspiration to national environmentalists that carried forth into the Wilderness Act of 1964 and the Alaska Lands acts of 1971 and 1980. It also catalyzed modern environmentalism in Alaska. Celia Hunter and Ginny Wood helped found and lead the Alaska Conservation Society (1960–1981), the state’s first such organization and pioneer of one of the nation’s most successful environmental communities.

Whither the Arctic Refuge?

In terms of environmental values, the Arctic National Wildlife Range represented a triumph for ecosystem sustainability, a goal consciously pursued by Sumner, Collins, Olaus and Margaret Murie, and other advocates of the refuge. Close behind, the designation embodied nonconsumptive use values; many of those favoring it placed a high spiritual value on a land they knew they would probably never see. Bob Marshall’s zealous writing, government activism, and leadership within the Wilderness Society had set the stage for benign treatment of northern Alaska. The Muries’ quiet but firm wisdom, carefully presented, did much to bring the vision to fruition. Public participation, both in the States and in Alaska, came to the fore and tellingly affected the outcome in favor of ecosystem preservation. It demonstrated genuine strength of preservation values in a region better known for aggressive resource exploitation. Timing of the issue, just ahead of the oil companies’ entry into the Arctic, enabled refuge advocates to overcome resistance from mining interests and Alaskan senators.

Yet the refuge’s proclamation left its environmental future in doubt. Most significant, the secretary of the interior could permit oil and gas drilling. Sport hunters or fishers, as well as subsistence users, could seek prey there. Hikers, river runners, bird watchers, photographers, and other sightseers might escalate their visits as economic boosters hoped. Scientists also wanted a presence on the land. At a 1961 symposium in Fairbanks, university biologist William Pruitt portrayed the refuge as a uniquely unspoiled ecosystem crucial for ecological studies, a “control area against which we can evaluate the efficiency of our land practices elsewhere in the Alaskan Arctic.” Anthropologist John M. Campbell pointed out the likelihood that early human migrants from Asia had lived in the region: “[N]owhere in the Americas is there a piece of ground that holds more promise for the eventual establishment of a complete Western Hemisphere
time-scale than the Arctic Slope,” especially the narrow coastal strip bordering the refuge. He cautioned that scientific expeditions could also damage the land: “Let us not spoil the thing that we have set out to save.” Olaus Murie, emphasizing the spiritual and psychological values of wilderness integrity, counseled that “we will be wise to go a little bit slower, to leave a few places on our continent undeveloped, with the fewest possible cabins and other structures built by government.” He added that “on our trips to the Wildlife Range we saw clearly that it was not a place for mass recreation.” Bureau of Sport Fisheries and Wildlife official Urban C. Nelson enumerated the groups hoping to make use of the refuge and advised, “It is not purely wilderness area. It is not a game sanctuary. It is a composite of the interests that are involved.”

Alaska entered its modern oil era after the 1957 discovery on the Kenai Peninsula. A decade later came the strike at Prudhoe Bay and recurring attempts to open the nearby Arctic Refuge to oil exploration. Once among the least-known parts of the nation, the region again drew national attention. Drilling for oil necessitated clarification of land ownership, precipitating the Alaska Native Claims Settlement Act of 1971 and the Alaska National Interest Lands Conservation Act (ANILCA) of 1980. A newly invigorated environmental movement won guarantees of wildland protection in ANILCA. The act doubled the size of the renamed Arctic National Wildlife Refuge and classified nearly half of it as wilderness, in which only recreation and subsistence activities would be allowed. In 1983 the state relinquished a temporary selection of 972,000 acres that became part of the refuge. Congress added 325,000 acres in 1988, bringing the total to almost 19.3 million. Rivers and wildlife attracted visitors to the point where they had to be scheduled to avoid environmental and recreational degradation. On the Canadian side, in 1984 the government set aside the 3-million-acre Northern Yukon National Park (renamed Ivavik) bordering the refuge on the east. As of 1995, 1-million-acre Vuntut National Park bordered Ivavik on the south and the Arctic Refuge on the east.

Among the many compromises between protection and development in ANILCA, an assessment of oil potential would be made within the Arctic Refuge and drilling could proceed by permission of Congress. Oil companies wanted access, and Alaskans looked forward to more oil royalties. And global warming, in part a product of fossil fuel burning, threatened to further destabilize the Arctic ecosystem. Environmentalists and their opponents both adopted the refuge as a cause célèbre, and the struggle intensified as it continued into the 21st Century. The Arctic Refuge became the nation’s preeminent battleground in the debate over exploitation versus preservation, consumption versus sustainability, material production versus wilderness.