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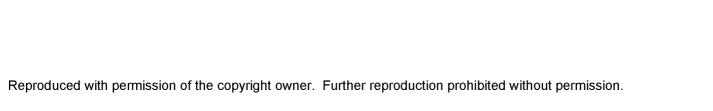
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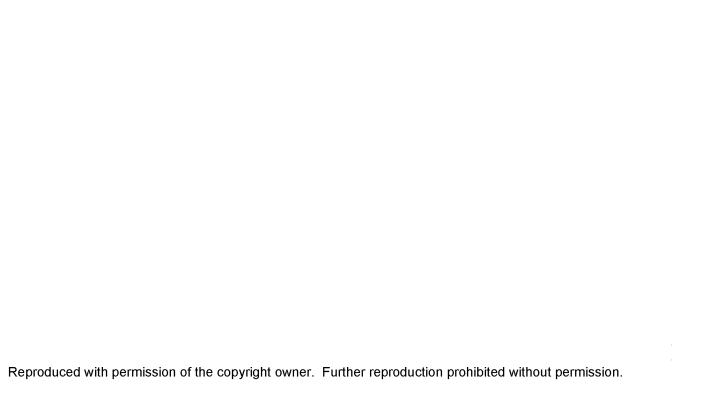
ALASKA'S FIRST WOLF CONTROVERSY:

PREDATOR AND PREY IN MOUNT MCKINLEY NATIONAL PARK, 1930-1953

by

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Α

THESIS

Presented to the Faculty of the University of Alaska Fairbanks

in Partial Fulfillment of the Requirements for the Degree of

MASTER OF ARTS

By

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Fairbanks, Alaska

August 1994

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ABSTRACT

The decision in the 1930s by the National Park Service to quit eliminating predatory animals in parks arose from evolving attitudes among scientists toward predation, but had little public support. Of the various parks, only Mount McKinley National Park still held wolves, and the National Park Service received considerable opposition to wolf protection from the eastern Camp Fire Club of America and from Alaskans. The former desired permanent protection from wolves for the park's Dall sheep, while the latter could not understand protecting wolves when, throughout Alaska, efforts were made to minimize wolves. Using material from the National Archives and Alaskan sources, this historical study examines the role of public opinion as the Park Service attempted to respond to its critics and still adhere to its protective faunal management philosophy, in what was the nation's first argument over offering sanctuary to our most charismatic predator.

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ACKNOWLEDGEMENTS

I hold a large measure of gratitude to the staff members of the libraries and archives used in researching this thesis. The Rasmuson Library at the University of Alaska Fairbanks provided many of my materials. In particular, Joanna Phillips, Library Technician, helped me locate government documents, and Gretchen Lake, Archivist, and Marge Heath, Library Technician, provided consistently patient assistance as I searched through the various archival materials in the Alaska and Polar Regions Department. In Juneau, archivists Dean Dawson and Al Minnick guided me through the pertinent holdings of the Alaska State Archives. Mr. Robert Bates, esteemed mountaineer and author, forwarded my query on Belmore Browne to the Dartmouth College Library, where Philip Crononwelt, Curator of Manuscripts, made sure I received photocopies of relevant materials from the Browne Collection. Materials from the National Archives were accessed with the kind help of R. Bruce Parham, Assistant Director of the Alaska Regions office in Anchorage, and the staff at the National Archives in Washington, D.C.

The National Park Service provided support and assistance as I researched this question of its background. At the Regional Office in Anchorage, Sandra Faulkner, Regional Historic Preservation Officer, provided initial enthusiasm for this project, and Frank Norris, Regional Historian, graciously read initial drafts and gave me valuable responses. Jennifer Wolk, Museum Technician, and Cindy Alvidre-Lattin, Administrative Assistant, aided me in finding obscure files and materials at Denali National Park and Preserve headquarters.

Thanks go to my graduate advisory committee for their patience and understanding as I pursued this topic: Dr. Karen Erickson, Assistant Professor in the Political Science Department; Dr. Colin Read, Associate Professor in the Economics Department; and especially to my friend and mentor Dr. Terrence Cole, Associate Professor in the History Department.

Other people at the University of Alaska Fairbanks deserve recognition as well. Dr. Judith Kleinfeld, Director of the Northern Studies Progam, contributed her staunch support to me as to all the program's unconventional graduate students pursuing their various research objectives. Dr. Stephen MacLean, Professor in the Biology/Wildlife Department and under no obligation except that of friendship, provided a keen ecologist's perspective and many helpful comments. Kevin Turnbough provided computer expertise at a critical time.

My friends Katherine Bellows in Arlington, Virginia, and Freddy Lafarga in Juneau provided lodging and hospitality during my travels.

Most importantly, I could not have completed this project without the support of my wife, Alison Cojocar, who has endured the hours I spent on this during the past eighteen months.

To all, many thanks.

INTRODUCTION

Cloudy skies dominated the northern slopes of the Alaska Range during August 1948. Gray stratus clouds grudgingly cleared during only three days to reveal the soaring white peaks punctuating the southern skyline. By month's end the tundra plants turned their autumnal shades of red and yellow, providing visual relief to the monotony of drizzling skies. Winter made an early visit, with six inches of snow falling on the twenty-second only to melt away, allowing the tundra colors to again brighten the hills. Four men gathered together in Mount McKinley National Park that August, drawn together not out of friendship but from their experience with the large wild animals of the world. These men had skill and savvy in the mountains; they could exchange the fountain pens and reading glasses of town life for rifles and skinning knives with an ease befitting their years in pursuit of game. Invited by the Park Service because of their divergent opinions, they came on an easily-stated yet eventful mission: to assess the condition of the Dall sheep, caribou, and wolf populations of the park and recommend a management plan. The Park Service had endured attacks on its wildlife philosophies and policies in McKinley Park for twenty years, because national parks had evolved—ahead of society—into places where both predators and prey received sanctuary and protection. Wolves, however, ate the wild sheep of McKinley's foothills, arousing the deep enmity of sportsmen. These four men came together for ten days in an attempt to define a strategy to resolve the longstanding conflict, to solve a problem of attitude and opinion toward wolves.

From New York came Ralph Friedman, a businessman representing no organization but present as a lay naturalist and longtime collector of specimens for the American Museum of Natural History. Directly from the museum came its curator of mammals, Harold Anthony, a member of New York's influential Boone and Crockett Club and the National Park Service Advisory Board. Returning to the scene of near-triumph high on McKinley's slopes in 1912, Belmore Browne traveled to Alaska from his home in Banff, Alberta, where his painting career had flourished. His youthful experience as a big-game hunter and pioneer climber in Alaska gave him the credibility he felt needed to be an expert on wolves. As a member of the Camp Fire Club of America, another New York sportsmen's group, Browne had led a campaign two years earlier to place the management of McKinley Park's game in the hands of Congress rather than trusting the Park Service and its scientists to preserve the herds of wild sheep. Browne's primary verbal target during testimony at Congressional hearings ended up sleeping next to him in a tent as the August rains drummed on taut canvas. Biologist Adolph Murie had spent two years watching McKinley's wolves and sheep and produced the first monograph of large predator/large prey ecology, a milestone in wildlife science. His conclusions, namely that animal populations regulated themselves over time despite temporary fluctuations, coincided with a Park Service philosophy that regarded parks as places where a balance of nature could be sustained with a minimum of human intervention.

That such a balance included protection of wolves in park lands ran counter to engrained cultural attitudes toward predators, making the Park Service a little-understood and easily-attacked agency. Policies based on science had proven vulnerable to public opinion, and for two decades the Park Service

had been on the defensive over their management of McKinley's animals. Weary of the conflict, Park Service officials hoped that bringing together a bipartisan group for an onsite investigation would result in recommendations that would appease their critics.

This study examines the role of public opinion in the management of wildlife, specifically wolves, in Mount McKinley National Park. Policy decisions by public agencies are subject to the judgment of interested citizens and groups who may not share the agency's objectives, and policies supposedly based on science have often been overwhelmed by public opinion. Wolves have always inspired strong feelings in people, and only since the 1950s has widespread public opinion changed toward the wolf, from millennia of antipathy to slow acceptance and recently, in many people, to virtual consecration as a living symbol of wilderness. Mount McKinley National Park provided the backdrop for the nation's first encounter with an attitude of protection rather than persecution of wolves. The Park Service took this stance from scientists, not public support, and thus found itself isolated from other federal agencies, the people of Alaska, and the majority of Americans. The controversy in the 1930s and 1940s emerged from the clash between attitudes toward wolves rooted in cultural tradition and ideas emerging from scientific models of nature. National parks became places to

¹ A note on nomenclature: Mount McKinley received this name in 1897 from a prospector who favored William McKinley in the upcoming presidential election, and the park's name followed with little consideration to the irrelevance of an Ohio politician to Alaska's tallest peak. The Athapaskans of Alaska's interior called the mountain Denali, usually translated as the High One, and in the 1960-70s this Native name gained increasing popularity. In 1980 the park was enlarged and renamed Denali National Park and Preserve, but the mountain itself officially retains its Anglo name, due to the stubborn intransigence of Ohio's congressional delegation. To avoid confusion with period sources, I have consistently used McKinley rather than Denali in this paper, except in footnoting park files.

experiment with the 'balance of nature,' and the Park Service became the agency to experiment with making predators palatable to a skeptical public.

The McKinley wolf-sheep conflict has been outlined by others, though in scant depth. William Brown, in his recent history of the park, provided several pages based on archival records but supplies little detail of the reasons the conflict lasted so long and of the Park Service's many vacillations between wolf protection and wolf killing. Durward L. Allen, Morgan Sherwood, John Ise, Gerald Wright, James Trefethen, and Rick McIntyre have briefly addressed the controversy and the significance of Adolph's Murie's studies. Donald Worster and Thomas Dunlap have provided useful analyses addressing the larger view of changing attitudes toward predators and nature and the concurrent development of ecology, yet their writings focused on the role played by the coyote in the contiguous states with but brief mention of the events in Alaska. 3

This study does not change what is known of the outcome of the wolf-sheep controversy: in the 1950s, Park Service officials finally were able to resist public pressures that had caused them to kill wolves, and could offer McKinley's wolves the "preservation of all native fauna" that had been articulated as

² William E. Brown, A History of the Denali-Mt. McKinley Region, Alaska (Washington, D.C.: GPO, National Park Service, 1991); Durward L. Allen, Our Wildlife Legacy (New York: Funk & Wagnalls, 1962); Morgan Sherwood, Big Game in Alaska: A History of Wildlife and People (New Haven: Yale Univ. Press, 1981); John Ise, Our National Park Policy: A Critical History (Baltimore: Johns Hopkins Press, 1961); Gerald R. Wright, Wildlife Research and Management in the National Parks (Urbana: Univ. of Illinois Press, 1992); James B. Trefethen, Crusade for Wildlife: Highlights in Conservation Progress (Harrisburg, Pa.: Stackpole Co., 1961); Rick McIntyre, A Society of Wolves: National Parks and the Battle Over the Wolf (Stillwater, Minn.: Voyageur Press, 1993).

³ Donald Worster, *Nature's Economy: A History of Ecological Ideas* (Cambridge: Cambridge Univ. Press, 1977); Thomas R. Dunlap, *Saving America's Wildlije* (Princeton: Princeton Univ. Press, 1988); Thomas R. Dunlap, "Values for Varmints: Predator Control and Environmental Ideas, 1920-1939," *Pacific Historical Review* 53:2 (May 1984): 141-61; Thomas R. Dunlap, "Wildlife, Science, and the National Parks, 1920-1940," *Pacific Historical Review* 59:2 (May 1990): 187-202.

national park policy decades earlier. I have attempted to explicate this story using previously-uncombined archival materials and provide an Alaskan context to demonstrate the extent to which protection of wolves by the Park Service was a radical and unacceptable notion to a wide variety of people, from wealthy eastern sportsman to the Alaska's sourdoughs. The backlash against this notion proved powerful enough to cause the Park Service to modify its wildlife management ideals and actively seek to quiet its critics.

The wolf-sheep controversy is not a simple story. It involves animal populations, economic and ecological forces, cultural attitudes, government agencies, and an abundance of human emotion. The initial chapters of this thesis provide background on the issues, agencies, people, and animals leading up to the controversy. The first chapter addresses the history of the national parks and park wildlife management in general, and specifically the creation of Mount McKinley National Park. Chapter two introduces the wolf: its natural history, role in human culture, and demise over the United States. The third chapter examines how changes in some of Alaska's large animal populations affected Alaskan attitudes toward the wolf. The genesis of the wolf-sheep controversy appears in the fourth chapter, as efforts by Alaskans to minimize wolves encountered increasingly-favorable attitudes toward predators by the National Park Service. With the wolves in McKinley Park thus receiving the benefits of a protective philosophy, the fifth chapter details the pressures placed upon the Park Service by opponents of wolf protection. Chapter six outlines the Park Service response to pressures, culminating in their assignment of Adolph Murie to study the ecology of predator and prey in McKinley Park and provide a scientific rationale for game management. World War II interrupted the wolfsheep controversy, but not the ongoing dynamics that led to its renewal after the war when the issue moved to the halls of Congress; chapters seven and eight cover these years. The ninth chapter brings the narrative to a close following further attempts to reduce the park's wolf population, and subsequent easing of the pressure against the wolf. A final chapter presents analysis and conclusions on the role of public opinion in shaping this history of policies and predators.

The four men assembled in the rain of August 1948, walking together in the tundra hills of the park, spanned the range of twentieth-century attitudes toward the wolf. One day they spotted a large grey male on the Teklanika River. "'For god's sake, kill it,' shouted Browne. 'Wait a minute, let me see it,' exclaimed Friedman. The wolf disappeared in the brush but he was briefly the object of opposing philosophies." Differences of opinion and conflicts over wolf management are still very much alive in Alaska, though the conflicts now center on wolves outside Alaska's national parks. Debate has increased in volume over the introduction of wolves in other national parks where they once live, such as Yellowstone. Again, the ecological issues hold far less importance than the perception of the public. Reams of scientific research and expanded knowledge of predator/prey interactions have not altered the fundamental questions: how do we value animals, and how shall we coexist? The wolf-sheep controversy in McKinley Park was the first national argument over wolves and marks a significant turning point in our culture's attitude toward them.

⁴ "Monthly Report of the Superintendent of Mount McKinley National Park to the Director of the National Park Service," August 1948 (hereafter Superintendent's "Monthly Report"). These are bound and available to the public at the Denali National Park and Preserve library and files, hereafter designated DENA.

CHAPTER 1

MT. McKINLEY, NATIONAL PARKS, AND PARK WILDLIFE

The Alaska Range stretches six hundred miles across the midsection of south-central Alaska, a formidable barrier of glaciated mountains separating the great valley of the Yukon River from tidewater at Cook Inlet and Prince William Sound. Most of the mountain summits rise two miles above sea level, with a central massif culminating in the 20,320 foot height of Mount McKinley and 17,400 foot Mount Foraker. The mountains bear the brunt of weather systems sweeping northward unimpeded from the North Pacific, forcing the moist air masses upward, cooling them and causing the release of tremendous amounts of precipitation. The vegetation below three thousand feet is lush: poplar and birch and spruce forests interrupted by bottomless bogs of muskeg in the summer months and covered with a deep snowpack during the winter. The snowfall in the high mountains feeds the huge south-flowing glaciers, remnants of the kilometer-thick Pleistocene ice masses that once covered the area far beyond today's coastline.

The climatic influence of the mountains kept south-central Alaska inhospitable for animal life during the Pleistocene, while at the same time creating favorable conditions to the north. With the ocean's moisture blocked, interior Alaska remained free of extensive glaciation, with semiarid summers and modest snows in winter. Twenty thousand years ago wind-swept grasslands formed what we now call the Beringian steppe, an ecosystem that extended contiguously to the Old World. Across the land connection to Asia came various

types of herbivores now extinct: mammoth, steppe bison, ground sloths, camels and horses. Accompanying the grazing animals came their predators, including saber-toothed cats, short-faced bears, and humans. The warming of global climate at the end of the Pleistocene caused the south-side glaciers to recede back to the mountains, brought trees to interior Alaska, and an extinction of many of the large mammal species, leaving the fauna we know today: the solitary moose of the forests, the restless herds of caribou, the sheep of the crags, and the packs of wolves roaming after their prey. While the broad valleys filled with trees, the foothills on the north side of the mountains changed from grasslands to their current tundra vegetation and continued to offer treeless expanses for abundant grazing animals.¹

The discovery of gold in the Yukon River drainage during the 1890s brought an influx of Europeans and Americans to interior Alaska. Their travel routes avoided confrontation with the Alaska Range, seeking ingress from the Bering Sea up the Yukon River or from the fjords and passes that led into the headwaters of the Yukon in Canadian territory. The town of Fairbanks sprang up near the Tanana River in 1903, providing a base for nearby gold exploitation.

Lone prospectors and military surveyors seeking transportation routes and more gold explored the rivers flowing down the north slopes of the mountains. While they found few mineral resources, they did find the game animals.²

¹ An introduction to Alaska's geology and ice age life is found in the first two chapters of *Interior Alaska: A Journey Through Time* (Anchorage: Alaska Geographic Society, 1986): Robert M. Thorson, "The Ceaseless Contest," and R. Dale Guthrie and Mary Lee Guthrie, "Pleistocene Rhymes and Seasonal Reasons." The moose colonized Alaska from the south, following the spread of herbaceous browse.

² A good starting point on late 19th century Alaska is Morgan Sherwood, *Exploration of Alaska*, 1865-1900 (New Haven: Yale Univ. Press, 1965). On Fairbanks, see the interesting but brief book by Terrence Cole, *Crooked Past: The History of a Frontier Mining Camp: Fairbanks, Alaska* (Fairbanks: Univ. of Alaska Press, 1991).

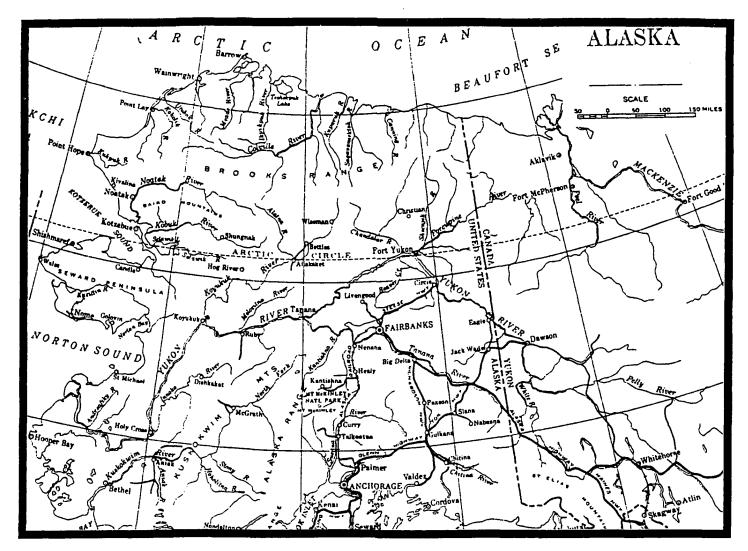


Figure 1. Mainland Alaska in 1953. Source: Stanton, William J. Analysis of Passenger Travel to Alaska with Special Reference to Tourists (Seattle: University of Washington, for the National Park Service, 1953), frontispiece.

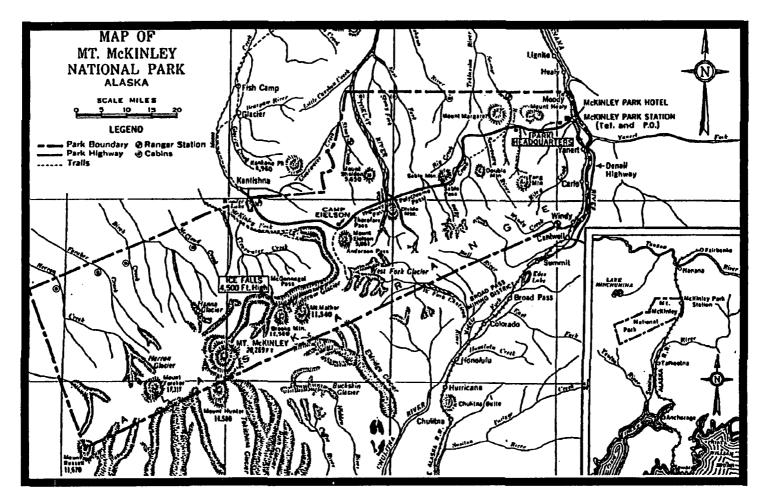


Figure 2. Mount McKinley National Park in 1953. Source: Brown, History of Denali, 213.

Early white explorers consistently commented on the game to be found on the north slope of the Alaska Range. The first group to traverse these slopes was a U.S. Geological Survey party led by Alfred Hulse Brooks. In 1902 this group started with pack horses from Cook Inlet, ascended the Susitna and Skwentna Rivers, crossed the Alaska Range, and traveled northeast through the broad tundra meadows to the Nenana River, which they took north to the Yukon River. The arduous travel through the swamps and forests south of the Alaska Range was in contrast to the ease of travel on the drier northern slopes, and they commented that game animals there "were unusually plentiful. . . . The party was never without fresh meat." The following year federal judge James Wickersham and four others attempted the first ascent of Mount McKinley, approaching from Fairbanks after the ice left the rivers. Although the formidable defenses of McKinley's north wall—later named after the judge—prevented any significant altitude gain, Wickersham wrote that the "beautiful, rolling grasslands and moss covered hills" made the area a "hunter's paradise." The year 1903 saw another attempt on Mount McKinley, the first by Frederick Cook, who repeated the southern approach of the Brooks expedition, and Cook's group became the first to circumnavigate the McKinley massif. As they trekked northeast along the easy hills after failing to climb the mountain, Cook wrote,

³ Alfred H. Brooks, An Exploration to Mount McKinley, America's Highest Mountain (Washington, D.C.: GPO, 1904), 460.

⁴ James Wickersham, *Old Yukon: Tales, Trails*, *Trails* (Washington, D.C.: Washington Law Book Co., 1938), 275. The broad Wickersham Wall, dominating the view of McKinley from Wonder Lake, rises 14,000 feet in an unbroken forty degree slope, one of the largest mountain walls in the world. It is infrequently ascended.

"Here along the northern slope of the McKinley ground, we crossed the best game country in America." 5

Reports of the white mountain sheep of the McKinley area drew to the north a man who would play a central role in the establishment of Alaska's first national park, Charles Sheldon. A vigorous amateur naturalist and experienced hunter, he was able to retire at a young age and pursue his hunting interests undistracted by family or finances. His forays led him into the Sierra Madre mountains of Mexico between 1898 and 1902, where he became fascinated by the desert bighorns and sought specimens from different mountain ranges in the Sonoran and Chihuahuan deserts. The wild *Ovis* became his passion, and he set out to collect further species of sheep and other game along the western ranges. Numerous trips were taken between 1904 and 1906 to the Canadian Rockies, the Coast Ranges, Vancouver Island, and the distant ranges of Yukon Territory. He had little in common with the typical guided hunter and earned commendation the hard way, with a combination of physical prowess, enthusiasm, skills, observational powers, and writing abilities. None other than George Bird

⁵ Frederick Cook, "Round Mount McKinley," *Bulletin of the American Geographical Society* 36:6 (1904), 326. Further reading on the 1903 trip is found in Robert Dunn, *The Shameless Diary of an Explorer* (New York: Outing Publishing, 1907), and *To the Top of the Continent* (New York: Doubleday, 1908), Cook's account of his successful summit attempt in 1906 from the southern side of the range. Cook would go on to fleeting fame as the first ascender of Mount McKinley and the first to the North Pole before being discredited as a fraud. A plethora of writings exist on Cook; arguably the best analysis of his McKinley hoax is by Bradford Washburn, Adams Carter, and Ann Carter, "Dr. Cook and Mount McKinley," *American Alpine Club Journal* (1958): 1-30. An updated bibliography by Washburn for the mountain is expected to be available in late 1994: *Mount McKinley and the McKinley Massif in the Literature*, 1741-1989 (Fairbanks: University of Alaska Press).

⁶ Accounts of the northern trips are in Charles Sheldon, *The Wilderness of the North Pacific Coast Islands* (New York: Charles Scribner's Sons, 1912), and *The Wilderness of the Upper Yukon* (New York: Charles Scribner's Sons, 1911).

Grinnell called him "our most famous big-game hunter," significant praise coming from hunting and conservation's most respected authority.⁷

Sheldon hunted in the tradition of nineteenth century, when to study an animal necessitated shooting it. Zoological societies sponsored many of his trips, particularly the American Museum of Natural History, whose scientists needed hides and bones to study and specimens to display. Vertebrate biology in the early 1900s was not behaviorally oriented, as it would evolve, but largely taxonomic, the classification of animals by morphological comparisons. Valuable as Sheldon's field notes were, the scientists wanted tangible pieces of animals to examine. The national pride of the Gilded Age affected naturalists as well as politicians, and museum directors sought to build their collections of animals from the globe's most distant locales. Although Sheldon loved the thrill of the stalk and the kill, he was far more than a hunter of trophies, and combined his hunting skills with the aims of science. A gifted writer, Sheldon faithfully recorded his observations by candlelight each evening, demonstrating an eye for the variety and minutiae of the natural world as well as the game animals he so patiently stalked.

Sheldon first visited the McKinley area in the summer of 1906. In Fairbanks he engaged the services of two packers, including the well-regarded Harry Karstens, who had come north with the gold rush and would gain later

⁷ From the "Introduction" of Charles Sheldon, *The Wilderness of Denali* (New York: Charles Scribner's Sons, 1930), which was posthumously edited from his field journals by the prominent biologists C. Hart Merriam and E.W. Nelson. Grinnell had ridden with Custer, spoke several Plains Indian tongues, witnessed the bison's demise, and returned to New York to edit the influential magazine *Forest and Stream*; see John F. Reiger, *American Sportsman and the Origin of Conservation*, 2nd ed. (Norman, Oklahoma: Univ. of Oklahoma Press, 1986).

renown as a member of McKinley's first ascent party in 1913.8 The men traveled by boats to the gold mining area of Kantishna, and pushed on with their pack horses to the base of Mount McKinley. Alone, Sheldon climbed slopes near the Peters Glacier to 8,900 feet, discovering remnants of both Wickersham's and Cook's expeditions, and sat spellbound as avalanches roared down the mountain's flanks. In search of sheep, the party moved northeast along the natural fault line that separates the high glaciated mountains from what became known as the Outer Ranges, a lower belt of treeless hills that gave way to the lowland forests to the north. Along their way they shot caribou for camp meat and bears for specimens, and eventually found the sheep that would make the area world famous. As winter set in they left the area and Sheldon returned south, yet his interest had been piqued; recognizing how little was really known of the sheep, he vowed to "return and devote a year to their study."

Harry Karstens again accompanied Sheldon on his return to the sheep ranges. In August 1907 they built a small cabin on the Toklat River, caching provisions and firewood for the winter. While still collecting museum specimens, Sheldon attempted to learn the habits of the sheep and caribou and wrote detailed field notes on all the mammals and birds of the area. His writings reveal a man in the tradition of Thoreau and Muir, as he described the "wild sublimity of the mountains . . . the haunting mystery and isolation of the deep recesses of the unknown wilderness and . . . happiness so intense that not even the imagination of a poetic genius could adequately express it." Thoughts of making this area a national park and game preserve were put into his journal on January

⁸ A brief and entertaining biography of Karstens by his protégé and later superintendent of McKinley Park is Grant H. Pearson, *The Seventy Mile Kid* (Los Altos, Calif.: By the author, 1957).

⁹ Sheldon, Wilderness of Denali, 13-16, 103.

12, 1908, when he anticipated the "enjoyment and inspiration visitors will receive." ¹⁰ This consideration was preceded by discussions of the idea with Karstens, beginning on the previous trip, about the "beauties of the country and of the variety of the game and wouldn't it make an ideal park and game preserve. . . . We would talk over the possible boundaries of a park and preserve which we laid out practically the same as the present park boundaries." ¹¹ After a winter and summer of adventure and hunting, Sheldon was "leaving forever this region . . . leaving the joys I have tried to describe," but his sorrow was mitigated by his commitment to seeing this area turned into a game preserve. ¹²

Charles Sheldon returned from Alaska to New York City in August 1908 and proposed his idea for a national park in Alaska to his fellow members of the Boone and Crockett Club, where he was the chair of the Game Committee. ¹³ The Boone and Crockett Club originated with 29-year old Theodore Roosevelt, fresh back from his adventures in the west, during a dinner he hosted in December of 1887. ¹⁴ Sport hunting, with its emphasis on codes of conduct and supposed

 $^{^{10}}$ Sheldon, *Wilderness of Denali*, 261, 272. The National Park Service would later name a peak near the cabin Mount Sheldon.

¹¹ Quoted in William Brown, A History of the Denali-Mt. McKinley Region, Alaska (Washington, D.C.: GPO, National Park Service, 1991), 85.

¹² Sheldon, Wilderness of Denali, 385; Madison Grant, "The Establishment of Mt. McKinley National Park," in *Hunting and Conservation: The Book of the Boone and Crockett Club*, George Bird Grinnell, ed. (New Haven: Yale Univ. Press, 1925), 438.

¹³ Grant, Establishment of Mt. McKinley, 439.

¹⁴ The history, motives, members, and actions of the club are well described in James B. Trefethen, *Crusade for Wildlife: Highlights in Conservation Progress* (Harrisburg, Pennsylvania: Stackpole Co., and the Boone and Crockett Club, 1961). This was revised as *An American Crusade for Wildlife* (New York: Winchester Press, and the Boone and Crockett Club, 1975). The former contains more material on Alaska, especially the role of the club in the early Alaska game laws of 1902, 1908, and 1925, and in its involvement with McKinley Park.

character-building qualities of the pursuit, had a small following in America. Disdained by the Puritans and fanciful to those seeking wild game as food, its European roots were sustained in the fox hunting tradition of the social aristocracy of the southern states. 15 Ideas of gentlemanly behavior and hunting for sport rather than food coincided with the depletion of game by market hunters and the increasing distance from the cities one needed to go in order to find any game. Roosevelt's burgeoning interest in the new ideas of conservation found an early outlet in the organization of like-minded men who could work politically to promulgate ideas of fair play and legislative protection of animal numbers. Membership in the Boone and Crockett Club was limited to one hundred regular members, and one of the criteria was that a member had killed at least one species of big game in "fair chase" (later increased to three species). The club's goals were to "promote manly sport with the rifle," to promote exploration, game preservation, and natural history knowledge, and to exchange information among members.¹⁶ They were a homogenous group, being gentlemen of the monied class, educated, traveled, and dominated by New Yorkers; its membership was a who's who of political and economic influence, and the club has been considered the first group to effectively address national conservation issues.¹⁷ Alaskan issues had previously been addressed by the club,

¹⁵ Hans Huth, *Nature and the Americans: Three Centuries of Changing Attitudes*, 2nd ed. (Lincoln: Univ. of Nebraska Press, 1990), 54-6.

¹⁶ Trefethen, *Crusade for Wildlife*, 358, from the 1888 club constitution. See also Madison Grant, "Brief History of the Boone and Crockett Club," in *Hunting at High Altitudes*, George Bird Grinnell, ed. (New York: Harper & Bros., 1913): 435-91.

¹⁷ Reiger, *American Sportsmen*, 120. East Coast hunting clubs formed as early as the 1850s, but the Boone and Crockett led the way in taking their agenda to Congress; see Peter J. Schmitt, *Back to Nature: The Arcadian Myth in Urban America* (New York: Oxford Univ. Press, 1969), 11-12.

with its active involvement in the passage in Congress of protective game bills in 1902 and 1908. The memories of the depletion of western game herds was fresh among sportsmen, and the Alaska Territory held the promise of acting with foresight to prevent a recurrence. Much to the dismay of Alaskans, the club was successful in establishing the precedent of federal control of Alaska's game. Sheldon's proposal for a McKinley game reserve was enthusiastically endorsed by the club after his address to the annual dinner on January 26, 1909, yet with an upcoming presidential election the members decided to wait before bringing a proposal to Congress.

In the interim, the Camp Fire Club of America, another New York conservation group, included the creation of a national park in the McKinley area on its agenda. Founded in 1897, this group was less concerned with hunting than with camping skills, although its bylaws included working for the preservation of forests and wildlife for future generations. As a way for men to escape on weekends to its camp in Westchester County, the club maintained a local profile until the formation of its conservation committee in 1909, when it began to address national issues.²⁰ The group had already worked with the Boone and Crockett Club on related matters, such as the 1912 migratory bird legislation,²¹ but had developed its mission to save the game of Mount McKinley

¹⁸ Morgan Sherwood, *Big Game in Alaska: A History of Wildlife and People* (New Haven: Yale Univ. Press, 1981), 32; Trefethen, *Crusade for Wildlife*, 128-144.

¹⁹ Trefethen, Crusade for Wildlife, 186.

²⁰ George Reiger, "Golden Oldies," Field & Stream 98:6 (October 1993): 18-20; Trefethen, Crusade for Wildlife, 122.

²¹ Trefethen, *Crusade for Wildlife*, 169. The 1912 Weeks-MacLean Law eliminated spring hunting seasons and allowed the Secretary of Agriculture to impose closed seasons on particular bird species.

independently and in parallel fashion, due to the experience and insistence of one of its members, Belmore Browne.

Browne's experiences in Alaska spanned his lifetime, from a boyhood family steamer cruise in 1889 in the Panhandle, to climbing expeditions on Mount McKinley, to advising the National Park Service on its wolf problems after World War II. Browne established a national reputation as a painter and Alaska provided many subjects, right up to his death in 1954 as he was painting the background for a museum arrangement of Alaskan bears at Yale. Like Sheldon, he first trekked through Alaska's mountains as a specimen hunter for the American Museum of Natural History in 1902 and 1903, gaining wilderness skills and an interest in Mount McKinley.²²

Browne's first two expeditions to the mountain involved controversy. He accompanied Frederick Cook on the 1906 trip for all but the most important part of that expedition, when Cook made an unexpected final assault and claimed victory. Another member of that expedition left behind while Cook dashed back was Dr. Herschel Parker, a physics professor at Columbia University, with broad experience in the Canadian Rockies. Both men were skeptical of the claimed ascent, and in 1910 Parker and Browne retraced Cook's alleged route and brought back tantalizing evidence that cast Cook's claim into disrepute. When the 1910 Sourdough Expedition's failure to reach McKinley's highest point became known, Browne in 1912 again teamed up with Parker and Merl LaVoy and mounted a strong attack on the peak, ascending from the north via the

²² Biographic information is from Michael S. Kennedy, "Belmore Browne and Alaska," Alaska Journal 3:2 (Spring 1973): 96-104, and Robert H. Bates, Mountain Man: The Story of Belmore Browne (Clinton, N.J.: Amwell Press, 1988). The latter focuses mostly on Browne's earlier years in Alaska and on his subsequent painting career.

Sourdough's route up the Muldrow Glacier. In one of the great disappointments in mountaineering history, they were beaten back twice from within several hundred yards of the summit by abrupt, vicious storms.²³ The mountain was finally climbed the following year by a party of four led by Episcopalian Archdeacon Hudson Stuck, with much of the team's strength and savvy resulting from the inclusion of Harry Karstens on the team.²⁴ Browne's involvement with McKinley was by no means over, yet following the 1912 expedition he returned to the states, married, and pursued his writing and painting careers.²⁵ At some point upon his return from Alaska in 1912 he met with Secretary of the Interior Fra 1klin K. Lane to discuss making McKinley a park, but the political situation was not yet conducive to such an idea. Browne and the Camp Fire Club waited for an appropriate opening.²⁶

²³ Details of Browne's three McKinley expeditions are most easily found in his *The Conquest of Mount McKinley* (New York: G.P. Putnam's Sons, 1913). The complete story of the unique Sourdough Expedition, when four gold miners audaciously climbed the lower north peak, can be found in Terrence Cole, ed., *The Sourdough Expedition* (Anchorage: Alaska Northwest Publishing, 1985). A comprehensive work on all the early McKinley climbs is Terris Moore, *Mount McKinley: The Pioneer Climbs* (Fairbanks: Univ. of Alaska Press, 1967). All the early expeditions depended on the area's abundant game for provisioning before tackling the actual climbing.

²⁴ The complete account of this trip is Hudson Stuck, *The Ascent of Denali (Mount McKinley)*, A Narrative of the First Complete Ascent of the Highest Peak in North America (New York: Charles Scribner's Sons, 1914; reprinted *The Ascent of Denali* (Seattle: The Mountaineers, 1977). The key ridge leading from the Muldrow Glacier to the upper reaches of the peak was later named Karsten's Ridge, with the granite prominence at its head named Browne's Tower.

²⁵ Bates' biography handsomely reproduces a collection of Browne's paintings and reprints of popular magazine articles. Browne wrote three adventure books directed at boys, based on his experiences and stories collected in Alaska, all published by G.P. Putnam's Sons: The Quest of the Golden Valley: A Story of Adventure on the Yukon (1916), The White Blanket: The Story of an Alaskan Winter (1917), and The Frozen Barrier: A Story of Adventure on the Coast of the Behring Sea [sic] (1921).

²⁶ Bates, Mountain Man, 179.

Railroads had played an important role in helping establish and make accessible previous national parks in the American West.²⁷ A railroad provided the impetus for the creation of Mount McKinley National Park, though less for reasons of tourist accessibility than fears of the railroad's impact on the area's game populations. Alaska had gained territorial status through passage of an organic act in 1912, which included the creation of a territorial legislature, as well as the directive to build a railroad to Alaska's interior to spur development of the area's coal and gold resources. Among several alternatives, the route from Seward to Fairbanks was chosen, leading past the McKinley area via the Nenana River canyon, one of the few breaks in the rampart of the Alaska Range. In 1914 President Wilson signed the Alaska Railroad Act, putting the federal government in the place of private companies in the building and financing of the line. Construction crews began laying track, and contractors were faced with the problem of feeding workers in a region that lacked agriculture. Crews of hunters supplied the railroad camps with meat, thereby threatening the game resources that had already absorbed the demands of thousands of gold-seekers and the growing populace of Fairbanks.

Market hunters in the United States were the "reapers of the primeval crop," playing a role parallel with prospectors or sodbusters.²⁸ Occupational hunting was made possible by the combination of urban populations, rail shipping, and an initially-abundant resource availability. Commercial meat

²⁷ See Alfred Runte, *Trains of Discovery: Western Railroads and the National Parks* (Flagstaff, Ariz.: Northland Press, 1984).

²⁸ Curt Meine, *Aldo Leopold: His Life and Work* (Madison: Univ. of Wisconsin Press, 1988), 18. A brief work containing interesting anecdotes is David and Jim Kimball, *The Market Hunter* (Minneapolis: Dillon Press, 1969), with reminisces from Chesapeake Bay and Minnesota.

hunting in the north started with the Klondike gold rush in 1898, as 30,000 stampeders intent on the diggings flooded into the Yukon valley and hunting as an ancillary service industry became an economic necessity. The gold rush to Fairbanks began in 1903, and by 1905 the town had eight thousand people at the tenuous end of a supply line from Seattle. Miners testified to a federal subcommittee about the absence of fresh meat except for wild game in the interior, and freight rates by steamers brought the price of a fifty pound sack of flour to \$10.29 Caribou, the most widely distributed game animal, were the "staples of the interior," selling for as little as \$.15/lb. in Fairbanks. Moose were a similar price, while sheep meat was considered the premium fare, fetching \$.40/lb.³⁰ Entrepreneurs tried to supply domestic meat: Jack Dalton drove several herds of stock from tidewater on Lynn Canal over the mountains to Fort Selkirk, where they were loaded onto scows and floated down the Yukon River to Circle City and on to Fairbanks via the Tanana River. Two such herds arrived in Fairbanks in 1906, comprising four hundred sheep, eighty cattle, and ten hogs. While consumers were willing to pay higher prices for this meat, it failed to curtail the sale of wild game. The local Tanana Valley Railroad, constructed in 1905 to supply the gold camps near Fairbanks, provided a precursor of what was

²⁹ Congress, Senate, Subcommittee of Committee on Territories, *Hearings on Conditions in Alaska*, 58th Cong., 2nd sess., 22 July 1903.

³⁰ From Adolph Murie's diary, 17 December 1940, from a conversation with a former market hunter; A. Murie Collection, Box, "Field Notes on Wolves," Rasmuson Library, University of Alaska Fairbanks (hereafter RL).

feared on a larger scale with the Alaska Railroad: in November 1907 alone, one hunter shipped almost six thousand pounds of caribou.³¹

Memories of the passenger pigeon and the "holocaust of the Great Plains" involving the bison were still vivid in the minds of conservationists.³² A new code of outdoor conduct called "sportsmanship" sought to offset the destruction of game populations by substituting the virtues of hunting for pleasure by strict rules.³³ From the sportsman's viewpoint, the market hunter was "disgusting . . . selfish . . . unmanly . . . heartless," a "disagreeable character that a well-bred sportsman is likely to be thrown into contact with," while the rural market hunter perceived the imposition of class discrimination on the historically egalitarian access to game.³⁴ The sportsmen of the Boone and Crockett Club and the Camp Fire Club decried market hunting and sought restrictive legislation wherever it threatened game or bird populations. Few could fail to be moved by descriptions of Alaska's white sheep, where "a young ram, shot through the neck, turns end for end and falls, and an old ewe, paunched by the same softnosed messenger, staggers slowly downhill. The slaughter is on. . . . but a few

³¹ Audrey Loftus, "Tom Gibson—Meat Hunter," *The Alaska Sportsman* 33:8 (August 1967): 20-21. This is a three part article on this trade, with the first installment in the June 1967 issue.

³² Trefethen, Crusade for Wildlife, 134.

³³ Sherwood, *Big Game in Alaska*, 20-2; Reiger, *American Sportsmen*, 28-9, 68-72. That Alaska's development and ability to feed itself imported foodstuffs lagged decades behind the rest of the country was rarely appreciated by the eastern sportsmen.

³⁴ James Tober, *Who Owns the Wildlife? The Political Economy of Conservation in Nincteenth-Century America* (Westport, Conn.: Greenwood Press, 1981), 46, 53. The first quote is from an 1851 publication. Tober frames his discussion using three groups: sportsmen, market hunters, and landowners.

frantic forms survive . . . "35 The threat to McKinley's game herds caused by the proximity of the Alaska Railroad's tracks spurred the park proponents into action.

Following a formal endorsement by the Boone and Crockett Club in September 1915, Charles Sheldon wrote to Alaska's Congressional delegate, James Wickersham, inquiring about the latter's views on the creation of a park. Wickersham was not keen on inhibiting mineral exploration and development in the Alaska Range, but Sheldon convinced him that the two were compatible and that the game resource deserved protection. Shortly afterwards, Belmore Browne, on behalf of the Camp Fire Club, traveled to Washington to propose park legislation and was surprised to find that others had preceded him. The groups quickly joined forces, and on April 16, 1916, Delegate Wickersham and Senator Pittman of Nevada introduced identical bills to create a park.³⁶

At a Senate hearing on May 5, 1916, were William Greeley and Belmore Browne representing the Camp Fire Club, Charles Sheldon speaking for the Boone and Crockett Club, and James Wickersham present on behalf of Alaska.³⁷ As with previous attempts to convince senators to create national parks, proponents carefully noted that the area had few usable resources: it was unsuitable for agriculture, would not attract homesteaders, had few mineral resources, and no timber. Economic arguments highlighted the potential

³⁵ From an article by Belmore Browne, "Where the White Sheep Roam," *Outing* (May 1912); reprinted and quoted from Bates, *Mountain Man*, 243-257.

³⁶ Trefethen, Crusade for Wildlife, 187-90.

³⁷ The following quotes are from the twenty-two pages of testimony of Congress, Senate, Committee on Territories, *Hearing on the Establishment of Mount McKinley National Park*, 64th Cong., 2nd sess., 5 May 1916.

attraction to tourists: Greeley noted that with completion of the railroad the area would be accessible in three weeks from New York, and Sheldon followed by arguing that since the government was spending thirty million dollars to build the railroad it should seek to "exploit everything that will be of value near that railroad." They also considered a park vital to preserve the game herds, to create a sanctuary for breeding so there would be game to replenish adjacent unprotected areas, a sanctuary Browne said was "beaten flat by the herds of big game." Numerous times in the questioning the scenic value of the glacier-clad mountains was mentioned, but the overarching theme to the arguments concerned the game animals, with the proposed park boundaries barely including Mount McKinley itself, but reaching to the north to protect the Outer Range where the caribou "gave one the impression of being on a cattle range in the West." Wickersham stated that Alaskans were in favor of the park as long the prospectors could still hunt for their needs, and he was successful in obtaining language in the bill that protected that right. Included in the testimony was a written plea by Browne, who put the matter in unmistakable terms:

Slowly but surely the white man's civilization is closing in, and already sled loads of dead animals from the McKinley region have reached the Fairbanks market. Unless a refuge is set aside in which the animals that remain can breed and rear their young unmolested, they will soon 'follow the buffalo.'

The park bill failed to pass in that Congress, due to a procedural delay in the House. Further efforts on the bill's behalf were evident as the Congressmen returned to session in 1917, as they were presented with a copy of a *National Geographic* article by Stephen R. Capps of the U.S. Geological Survey, in which he outlined the "last chance for the people of the United States to preserve,"

untouched by civilization, a great primeval park in its natural beauty."³⁸ Capps again raised the fear of commercial hunting, citing several hunters as saying that 1,500 to 2,000 sheep were taken from the area for the Fairbanks market each winter. A National Parks Conference held for the benefit of legislators helped sway votes, and with virtually no opposition the legislation passed on February 24. President Wilson signed it into law, reserving 2,200 square miles as Mount McKinley National Park.

Little changed in the McKinley area, though, since Congress had not appropriated any funds for personnel to protect the park. The territorial game wardens ostensibly in charge of enforcement of game laws were notoriously lax in their duties. The warden in Fairbanks was reportedly "perfectly helpless . . . Everyone knows that he never made an arrest and never will. . . . Whenever I went away on a trip he promptly went on a drunk." A visiting easterner described hunter's cabins surrounded by heaps of "old antlers of sheep and caribou, while the ground for several hundred yards around was well carpeted with discarded skins of the same animals." The Boone and Crockett Club and the Camp Fire Club both submitted resolutions in 1919 urging an appropriation for the park, but war debts were cited as the delay in funding. The actions of

³⁸ Stephen Capps, "A Game Country Without Rival in America," *National Geographic* 31 (1917): 69-84. Given the longevity of the phrase "last chance" in arguments for the preservation of land areas in Alaska, it is amusing to speculate that this may have been its public origin.

³⁹ O.J. Murie, Assistant Biologist and Fur Warden, to E.W. Nelson, Chief of the U.S. Biological Survey, 26 October 1921; MS 51, Box 4, Folder 1, Alaska State Historical Library (hereafter ASHL).

⁴⁰ William N. Beach, *In the Shadow of Mt. McKinley* (New York: Derrydale Press, 1931), 211.

⁴¹ Brown, History of Denali, 94.

the sportsmen's groups finally came to fruition in 1921, with an eight thousand dollar appropriation. At the urging of Charles Sheldon, repaying debts to his faithful packer, Harry Karstens was appointed the first superintendent of the park.⁴²

The national park system has been called one of the few ideas originating in the United States of "world-wide significance," and many countries have adopted similar types of park areas. 43 The park system has roots in European tradition, where the aristocracy reserved areas of undisturbed nature for the hunting pleasure of nobility. 44 By the early 1800s European countries had established urban park areas for public use, an idea adopted in the planning and creation of numerous city parks in America by the late nineteenth century as part of an increasing appreciation for nature by urban planners. 45 The New World had the opportunity to create what Europe could not, however, as vast tracts of public lands undisturbed by agriculture, resource extraction, or white settlement became available for dispensation by the federal government. Preserving natural areas for public use, far from urban centers, became the distinctly American contribution to park variety.

⁴² Sheldon to George B. Grinnell, 5 March 1917; Stephen Mather to Sheldon, 27 January 1921, Sheldon Collection, Box 2, RL. See also Brown, *History of Denali*, 135-7.

⁴³ John Ise, Our National Park Policy: A Critical History (Baltimore: Johns Hopkins Press, 1961), 1; William Everhart, The National Park Service (Boulder, Colo.: Westview Press, 1983), Chapter 11, "Parks Around the World."

⁴⁴Michael J. Bean, *The Evolution of National Wildlife Law* (New York: Praeger, 1983), 10-11.

⁴⁵ Huth, Nature and the Americans, 65-9; Schmitt, Back to Nature, 70.

The underlying ideals for a national park system took several decades to evolve, although several patterns can be discerned in the post-Civil War era. While Yellowstone is celebrated as our first national park, having been withheld from private development in 1872, the precedent had been set eight years earlier in a Congressional act placing the Yosemite Valley under the management of the California governor for "public use, resort and recreation." 46 Yellowstone began and remained under federal control, however, and became the paradigm of an American national park: of large size, located in the West, seemingly unsuited for agriculture or industry, and containing curiosities of geology and topography that conformed to a scenic ideal of monumentalism.⁴⁷ Lacking a clear mandate or an administrative structure in Washington, D.C. to coordinate these new land areas, the early parks were primarily the creations of activist individuals with particularly local interests rather than "agencies, groups or prescient plans." 48 While in later years the national parks would be viewed as a democratic American reaction to the closed and guarded European hunting preserves author Wallace Stegner called the nation's parks "absolutely American, absolutely democratic"49—there were few people other than the wealthy who

⁴⁶ Roderick Nash, *Wilderness and the American Mind*, 2nd ed. (New Haven: Yale Univ. Press, 1973), 148.

⁴⁷ This principle, along with that of park withdrawals being approved by Congress only if the lands were considered to be essentially worthless, forms the backbone of Alfred Runte's *National Parks: The American Experience*, 2nd ed. (Lincoln: Univ. of Nebraska Press, 1987). Additional views are available in "The National Parks: A Forum on the 'Worthless Lands' Thesis," *Journal of Forest History* 27:3 (July 1983): 130-145.

⁴⁸ Jenks Cameron, *The National Park Service: Its History, Activities, and Organization* (New York: AMS Press, 1974), 8; originally No. 11 of Service Monographs of the United States Government, 1922; Everhart, *The National Park Service*, 9.

were involved in the creation of the parks or in their use, since parks were far away and accessible only by train travel. Ultimately, the creation of a federal administrative unit for national parks came from a need to define their role in the spectrum of public lands.

Proposals to create a park management bureau began in 1900, but little effective action ensued for a number of years. ⁵⁰ Chief opponent to the creation of a park service had been Gifford Pinchot, Theodore Roosevelt's Chief Forester and ideologue for the ideal of utilitarian conservation. Pinchot opposed mere preservation of lands, especially for recreational purposes, believing that scientific development for commercial purposes was the best use of lands and resources, and he sought to place the national parks within the jurisdiction of the Forest Service and Department of Agriculture. ⁵¹ However, the utilitarian conservationists lacked support from the burgeoning ranks of aesthetes who increasingly sought to preserve lands from the economic activities of timber

⁴⁹ Quoted in John C. Freemuth, *Islands Under Siege: National Parks and the Politics of External Threats* (Lawrence, Kans.: University of Kansas Press, 1991), vi. In 1927 a Socialist Representative from Wisconsin, Victor Berger, proposed legislation that would establish in each state a national park and national forest, but this went against the arguments that only certain areas were worthy of elevation to national park status; see Ise, *National Park Policy*, 299.

⁵⁰ The most detailed account of the creation of the National Park Service is Donald C. Swain, "The Passage of the National Park Service Act of 1916," Wisconsin Magazine of History 50:1 (Autumn 1966): 4-17. Other accounts are in Cameron, National Park Service; Ise, National Park Policy; Runte, National Parks; Horace Albright, The Birth of the National Park Service: The Founding Years, 1913-33 (Salt Lake City: Howe Brothers, 1985); Ronald A. Foresta, America's National Parks and Their Keepers (Washington, D.C.: Resources for the Future, 1984); Robert Shankland, Steve Mather of the National Parks, 2nd ed. (New York: Alfred A. Knopf, 1970); Donald C. Swain, Wilderness Defender: Horace M. Albright and Conservation (Chicago: University of Chicago Press, 1970).

⁵¹ A complete examination of this attitude is in Samuel P. Hays, Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920 (Cambridge: Harvard Univ. Press, 1959).

companies, ranchers, miners, and irrigation developers.⁵² Pinchot went out of office after the election of President Taft, clearing the way for legislation in 1910 to create a park service. This remained blocked for several years by a combination of Pinchot-trained Forest Service men and western congressmen, until Interior Secretary Lane enlisted wealthy California businessman Steven Mather for the parks campaign in 1915. A mountain-climbing Sierra Club member, Mather brilliantly used his business contacts, the popular media, and his flair for promotional trips to unify the preservation-minded groups in the cause of aesthetic conservation. President Wilson signed a National Park Service Act on August 25, 1916, unifying the existing twelve national parks and nineteen national monuments under the Department of Interior, with Mather becoming the first service director, a post he would hold until 1929.

The early national parks owed their existence to scenic features rather than protection of wildlife. Yellowstone was created to highlight its geysers and canyons, not its fauna, and its enabling legislation prohibited only "wanton" destruction of wildlife, while allowing hunting, trapping, and fishing for park residents or visitors.⁵³ Sawmills in 1877 in the park's vicinity, for example, requested 20,000 pounds of meat for their workers, and the little-trodden hills of Yellowstone were obvious destinations of the market hunters.⁵⁴ Civilian

⁵² Donald C. Swain, *Federal Conservation Policy*, 1921-1933 (Berkeley: University of California Press, 1963), 5.

⁵³ Ise, *National Park Policy*, 19. His biographer would credit the eventual Park Service Director Horace Albright, Mather's young assistant, with aggressively protecting Yellowstone's wildlife during Albright's 1920s superintendency in the park; see Swain, *Wilderness Defender*, 169. Adolph Murie, though, in a diary entry during a national park conference (21 September 57) quoted Albright as saying "our wilderness friends say that Yellowstone was created to save wilderness and wildlife. That is not so. It was created to save the natural wonders, the geysers, and the canyon." A. Murie Collection, Box 11, Folder "Old Notes on Fish," RL.

administration was unable to curtail the pervasive vandalism and poaching, and in 1886 the First Cavalry of the U.S. Army assumed control of the park. They diminished harmful activities by visitors, but could do little more than expel miscreants from the park, for no laws existed by which they could be prosecuted. George Bird Grinnell, through his *Forest and Stream* magazine, had since the late 1870s urged the protection of Yellowstone's animals, particularly the bison, which had been hunted almost to extinction. He articulated the benefits of creating a game sanctuary that would allow the surplus animals, breeding undisturbed in the park, to spill out into the adjacent areas that had been depleted by hunters, an idea that would later be applied to the McKinley area. A measure of protection was received with the passage of legislation in 1894 which banned the killing of birds and animals in Yellowstone.

Aside from such champions as Grinnell, park fauna were secondary to the scenery. Director Mather regarded parks as being "for the people," and he had little sense of a wildlife ideal until late in his administration, when he "came to see that wildlife, like everything else in a national park, should be maintained in as nearly natural conditions as possible." Mather and his assistant, Horace Albright, had been given charge of a park system that had "accumulated" rather

⁵⁴ Reiger, *American Sportsmen*, 104. Conventional histories of U.S. conservation invoke the early names of Thoreau, Marsh, Muir, Pinchot, and Roosevelt; Reiger's work argues for recognition of the hunting and fishing fraternity's inspiration for much of conservation's success.

⁵⁵ Aubrey Haines, *The Yellowstone Story: A History of Our First National Park*, vol. 2 (Yellowstone Library and Museum Association, in cooperation with Colorado Associated Univ. Press, 1977), 55; Ise, *National Park Policy*, 582.

⁵⁶ Reiger, *American Sportsmen*, 99-104. Grinnell is the central figure of Reiger's book, written in part to provide recognition for a previously-ignored figure in American conservation.

⁵⁷ Swain, Wilderness Defender, 53; Shankland, Steve Mather, 271; Ise, National Park Policy, 320.

than being systematically planned, and their quest for appropriations from Congress necessitated clear goals for the Park Service. This resulted in a set of principles published in a 1918 letter from Interior Secretary Lane to Mather, which established the ambiguous language of the parks being maintained "in absolutely unimpaired form for the use of future generations," yet preserved for the "use, observation, health, and pleasure of the people." The only animals mentioned in these park principles were cattle, which were permitted to graze in all parks except Yellowstone. Albright realized the public appeal of visible wildlife after becoming the superintendent at Yellowstone, and he established a small display of caged animals and nightly bear feedings at hotel garbage dumps, complete with bleachers for tourists. For Park Service administrators, the lesson was clear: grand scenery was good, but scenery and animals were better.

Predators were not included in the animals protected in national parks.

Organized efforts to eliminate wolves, coyotes, and mountain lions had occurred since the 1890s in Yellowstone. After the resumption of civilian control in the park in 1915, rangers worked specifically on predator control, adding bobcats, foxes, minks, weasels, otters, and fishers to the list of undesirable park animals.⁶¹

⁵⁸ Foresta, America's National Parks, 11.

⁵⁹ The full text of the 1918 principles can be found in Ise, *National Park Policy*, 194-5. Ise, like most authors, thought that Mather probably wrote the letter, but Albright claims authorship in his autobiography, *Birth of the National Park Service*, 69-73.

⁶⁰ Swain, Wilderness Defender, 170.

⁶¹ John Weaver, The Wolves of Yellowstone: History, Ecology, and Status (National Park Service, Natural Resources Report No. 14, 1978), 7; Victor H. Cahalane, "The Evolution of Predator Control Policy in the National Parks," Journal of Wildlife Management 3:3 (July 1939): 230-1.

Following the creation of the National Park Service in 1916, Director Stephen Mather understood the need to cultivate a public image for the parks and realized that public support—particularly from the sportsmen's groups, who were essential to retain as local allies—would follow from a policy that protected game animals and minimized predators. The Bureau of Biological Survey was conveniently poised to assist in clearing parks of predators, as this agency had taken responsibility for predator control on federal lands. A cooperative agreement was signed in 1918 between the Park Service and the Biological Survey to aid in the "extermination of wolves, coyotes, and mountain lions" in Yellowstone. Its wolves soon became virtually a memory: the last ones killed were two pups in 1926, making a total of 136 in the previous twelve years, and wolves were sighted only occasionally in subsequent years. The last cougar was killed in 1925, and coyote control continued until 1934, when predator control was formally halted in all national parks. Public opinion pressures soon forced a revision of this protection in Mount McKinley National Park, however.

Similar patterns of predator control prevailed in other national parks. A trapping and poisoning campaign in Glacier National Park in the 1920s almost eliminated its wolves, although occasional sightings continued.⁶⁴ The same decade saw the elimination of wolves from Crater Lake, Death Valley, Grand Teton, Mount Rainier, Olympic, Rocky Mountain, Sequoia, Yosemite, and Grand

⁶² Quoted in Alston Chase, Playing God in Yellowstone: The Destruction of America's First National Park (New York: Harcourt Brace Jovanovich, 1987), 123.

⁶³ Cahalane, "Evolution of Predator Control," 234-5; Weaver, Wolves of Yellowstone, 11.

⁶⁴ Francis J. Singer, "Status and History of Timber Wolves in Glacier National Park, Montana," in *The Behavior and Ecology of Wolves: Proceedings of the Symposium on the Behavior and Ecology of Wolves Held in Wilmington*, N.C. 23-24 May, 1975, edited by Erich Klinghammer, 19-42. (New York: Garland STPM Press, 1979), 28-9.

Canyon parks, despite Director Mather's 1926 statement that "it is contrary to the policy of the Service to exterminate any species native to a park area." Such campaigns had less to do with malevolence on behalf of the Park Service administration than with the need to follow dominant public attitudes—and hence continue Congressional appropriations—and ignorance of the functioning of biologic systems. Predator control was firmly in the tradition of progressive conservation, for wolves, coyotes, and pumas had no economic value while livestock and hunting ranges adjacent to national parks did. Priorities for the Park Service involved protecting their lands from such obvious threats as logging and mining; nature was considered robust and able to take care of itself. 66

For the tourist wishing to observe game animals, Yellowstone's managers deserved commendation, for in the absence of hunting and the diminution of predators the elk, bison, and sheep had multiplied into a spectacle available nowhere else. However, park boundaries had not been drawn with regard to its animals, and with their ancestral winter ranges blocked by ranches (whose owners expected the government to keep the game out of the hayfields), the animals were forced to stay on inferior winter ranges and soon degraded their limited forage. Attempts to cull elk populations by shipping them away for transplant into nearby national forests was costly and insufficient to stop the growing population.⁶⁷ Harsh winters in 1916-17 and 1919-20 caused the death of thousands of elk (an estimated 14,000 in the latter), yet public opinion would not

⁶⁵ Wright, Wildlife Research and Management, 138; Cahalane, "Evolution of Predator Control," 235.

⁶⁶ Foresta, America's National Parks, 98.

⁶⁷ Haines, Yellowstone Story, Vol. 2, 79.

tolerate liberalized hunting regulations, preferring instead to support feeding programs, which only perpetuated high herd numbers.⁶⁸ The Park Service was caught in the conventional dichotomy between 'game' and 'vermin,' and the sanctuary of Yellowstone looked more and more like a trap for its grazing animals.

A further jolt to prevailing game management models followed in Arizona. The Kaibab National Forest flanks Grand Canyon National Park to the north and south, and following several trips in the area to hunt pumas, President Roosevelt in 1906 created a national game preserve to protect the deer herd on the northern plateau, estimated to number four thousand. A reduction of domestic grazing combined with predator control by forest rangers followed, and between 1907 and 1924 the estimated take of predators consisted of 679 pumas, 3,025 coyotes, 21 wolves, and 120 bobcats.⁶⁹ The deer expanded to an estimated 100,000 by 1924, and sixty percent of them died during the following two winters. Range denudation had been reported by 1918, but recommendations to expand sport hunting had been ignored, while predator reduction continued by wildlife managers caught in the trap of Pinchot-era conservation philosophies.⁷⁰ Ever the promoter, Park Service Director Stephen Mather opposed culling the herd because they were a tourist attraction adjacent to his national park, and public sentiment disallowed bullets as a control

⁶⁸ Chase, *Playing God in Yellowstone*, 20. The National Parks Association, founded in 1919 to champion park causes, found its first public challenge in Yellowstone's elk situation, and considered its defeat of hunting proposals to be a victory; see John Miles, "Charting the Course," *National Parks* 67:11-12 (November-December 1993), 40.

⁶⁹ John P. Russo, *The Kaibab Deer Herd: Its History, Problems, and Management* (Phoenix: Arizona Game and Fish Department, Wildlife Bulletin No. 7, 1964), 126.

⁷⁰ Worster, Nature's Economy, 270.

measure despite unequivocal evidence of the damage to the flora needed by the deer for survival. A too-late effort by government hunters to cull excess deer in 1928 met with opposition from sportsman, animal lovers, and Arizona's governor and game wardens.⁷¹ Exemplifying the utilitarian stance of the Forest Service, its officers continued to urge predator control by arguing that Grand Canyon National Park would serve as a breeding ground for predators who would leave the park's environs to hunt in the game preserve.⁷² While subsequent wildlife biologists have questioned the validity of the simplified story of predator-prey relations on the Kaibab Plateau,⁷³ the drama of the wolf-less forest littered with starving deer provided game wardens with "the greatest lesson of their lives" in animal mismanagement.⁷⁴

Yellowstone and the Kaibab were the most prominent examples of the problems facing wildlife managers as the National Park Service attempted to set policies and establish practices concerning park fauna. Mount McKinley National Park holds a special place in park history, created not to protect its scenic

⁷¹ Swain, Federal Conservation Policy, 50; Russo, Kaibab Deer Herd, 49; Dunlap, Saving America's Wildlife, 67.

⁷² From the 1932 *Game Report* of the Kaibab National Forest, quoted in Russo, *Kaibab Deer Herd*, 126-7.

⁷³ See Graeme Caughley, "Eruption of Ungulate Populations, with Emphasis on Himalayan Thar in New Zealand," *Ecology* 51:1 (Wnter 1970): 53-72. Caughley prefaces his thar study with a discussion of the evolution of the story of the Kaibab deer into something akin to a myth, and reasons that deer population estimates of the time were too speculative to conclude an obvious cause-effect relationship between predator control and prey population explosion. Donald Worster is one who accepted the classical tale to support his story of the role of predators in the development of ecology; *Nature's Economy*, 271. Thomas R. Dunlap sketches the effect of the simplified lessons of the Kaibab story on first and second generation game managers in "That Kaibab Myth," *Journal of Forest History* 32:2 (April 1988): 60-8.

⁷⁴ Quote by Arizona Game Warden K.C. Kartchner, in Barry C. Park, "Problems From Creation of Refuges for Big Game," in *Transactions of the Eighth North American Wildlife Conference* (Washington, D.C.: Wildlife Management Institute, 1943), 342.

wonders but for its wildlife. It had been established upon the urging of sportsmen to provide a refuge for its game animals from human hunters. Protecting the sheep and caribou from wolves followed without question, since predators had been eliminated from other parks in consonance with prevailing attitudes and practices. The Park Service attempted to protect McKinley Park's wolves in the 1930s and found itself embroiled in controversy, for in the long history of humans and wolves a protective attitude had no precedent.

CHAPTER 2

WOLVES, HUMANS, AND PREDATOR CONTROL

The dog family, Canidae, of the order Carnivora, includes the dingo, jackal, foxes, coyote, wolf, and domestic dog.¹ Current theory holds that dogs descended from tamed canids in various regions of the world some twelve thousand years ago.² Taming became domestication as humans began controlling breeding patterns to produce varying types of dogs for specific purposes, resulting in their extreme range of physical forms and functions. While dogs can be bred not only to protect livestock from other canids but also to hunt them, dogs, wolves, and coyotes have virtually identical molecular protein and chromosomal structures which allow interbreeding and viable offspring, thus blurring the definition of species differentiation.³

The wolf, *Canis lupus*, originally ranged across the Northern Hemisphere from the Arctic coasts to the Arabian peninsula and subcontinent of India, making it an extraordinarily successful species, second only to human mammals

¹ An effective summary of this family is in Jennifer W. Sheldon, *Wild Dogs: The Natural History of the Nondomestic Canidae* (San Diego: Academic Press, 1992); extensive bibliography.

² Howard J. Stains, "Distribution and Taxonomy of the Canidae," in *The Wild Canids: Their Systematics, Behavioral Ecology, and Evolution*, ed. M.W. Fox (New York: Van Nostrand Reinhold, 1975), 6.

³ U.S. Seal, "Molecular Approaches to Taxonomic Problems in the Canidae," in *The Wild Canids: Their Systematics, Behavioral Ecology, and Evolution,* ed. M.W. Fox (New York: Van Nostrand Reinhold, 1975), 37; A.B. Chiarelli, "The Chromosomes of the Canidae," in *The Wild Canids: Their Systematics, Behavioral Ecology, and Evolution,* ed. M.W. Fox (New York: Van Nostrand Reinhold, 1975), 43.

in the size of its global range.⁴ The British Isles, the less mountainous countries of northwest Europe, Scandinavia, and Japan no longer host the wolf, but it still roams in most of its Eurasian range.⁵ While North Americans consider the wolf a symbol of the distant and inaccessible northern wilderness, in eastern Europe and Italy wolves are seen on the outskirts of cities, a difference resulting from North America's more vigorous and organized wolf-hunting tactics.⁶ Thirty-two subspecies are recognized worldwide for *C. lupus*, generally categorized according to geographic areas, with gradations between types occurring at the boundaries of their ranges.⁷ A separate species of wolf is recognized in the southcentral United States, the red wolf *C. rufus* (or *niger*); an estimated three hundred individuals currently live in a small area on the Texas-Louisiana Gulf Coast.⁸ The gray wolf, *C. lupus*, originally ranged across the continent as far south as the central Mexican highlands, but it has been extirpated over much of its range, with extant populations in northeastern Minnesota, Lake Superior's Isle Royale National Park, Montana's Glacier National Park, and perhaps in the

⁴ Sheldon, Wild Dogs, 39.

⁵ Erkki Pulliainen, "Wolf Ecology in Northern Europe," ibid., 292-99, passim; L. David Mech, *The Wolf: The Ecology and Behavior of an Endangered Species*, 2nd ed. (Minneapolis: Univ. of Minnesota Press, 1981), 32.

⁶ Erik Zimen and Luigi Boitani, "Status of the Wolf in Europe and the Possibilities of Conservation and Reintroduction," in *The Behavior and Ecology of Wolves: Proceedings of the Symposium on the Behavior and Ecology of Wolves Held in Wilmington, N.C. 23-24 May, 1975*, edited by Erich Klinghammer (New York: Garland STPM Press, 1979), 45.

⁷ Mech, *The Wolf*, 30. Subspecies definitions are a matter of dispute among taxonomists; an early and still-cited attempt to summarize these is Edward A. Goldman, "Classification of Wolves," Part II of Stanley P. Young's *The Wolves of North America* (Washington, D.C.: American Wildlife Institute, 1944).

⁸ G.A. Riley and R.T. McBride, "A Survey of the Red Wolf (*Canis rufus*)," in *The Wild Canids*,: *Their Systematics, Behavioral Ecology, and Evolution*, ed. M.W. Fox, (New York: Van Nostrand Reinhold, 1975), 264-5.

Yellowstone area. Canada and Alaska both host considerable populations, with wolf numbers in the latter estimated as high as twenty-five thousand. Previous works listed four subspecies of *C. lupus* in Alaska, but a more recent examination of this issue concludes that only two subspecies are justified, the wolf of southeastern Alaska (*C. l. ligoni*) and of the interior and tundra (*C. l. pambasileus*). 10

The wolf is the largest canid and averages from 80 to 100 pounds, with a record weight of 175 pounds recorded for an Alaskan specimen. 11 They stand 26 to 32 inches tall and 4.5 to 7.5 feet in length. The pelage can vary from white to black, including buff and reddish tones, with the thickness of underfur corresponding to the wolf's geographic range, thicker in northern areas. Large feet allow for travel in deep snow, and on hard surfaces wolves can attain speeds up to forty-five miles per hour. Powerful jaws, slashing canine teeth, a keen nose, and sensitive ears comprise an expressive face, similar to that of the husky sled dog.

Wolves are social animals, exhibiting many traits that make dogs so useful to humans: recognition of hierarchy, a cooperative spirit, and ties that can be called affectionate. Wolf packs function primarily to increase the ability to kill

⁹ Mech, *The Wolf*, 33. The following basic information about the wolf is summarized from this text. Written by a scientist of worldwide renown, this is the best single source of information about this animal. The literature on the wolf is extensive and best documented in Erich Klinghammer, Monty Sloan, and De Wayne R. Klein, *Wolf Literature References: Scientific and General Books and Articles Listed Alphabetically by Author* (Battle Ground, Indiana: North American Wildlife Park Foundation, Inc., 1990); this group provides addenda at two year intervals.

 $^{^{10}}$ Sverre Pedersen, "Geographical Variation in Alaskan Wolves (*Canis lupus l.*)" (M.S. thesis, University of Alaska Fairbanks, 1978).

¹¹ Young, *Wolves of North America*, 69. This wolf was taken in 1939 by professional wolf hunter Frank Glaser, who subsequently played a role in wolf control programs in Mount McKinley National Park.

prey animals much larger than individual wolves. Packs are typically two to eight individuals, although groups of up to thirty-six have been reliably reported. The nucleus of a pack is a breeding pair, the so-called alpha male and female, and the pack is built by their offspring. Four to six pups form an average litter, born in a den in the spring. Social bonding is enhanced by the participation of all pack members in the raising of young, whether by feeding or playing. Wolf packs are largely territorial; in the north where caribou are the primary prey these territories can be many hundreds of square miles in size.

The wolf's ecological niche, or "its place in the grand scheme of things," 12 is to be a predator upon large mammals in the Northern Hemisphere, a role shared only with the large cats and to a certain extent with humans. Wolves will eat carrion if available, making them susceptible to poisoning; they will drive other animals, such as grizzly bears, away from food sources; they will eat virtually anything that moves, from flightless ducks taken from their nests to domestic dogs; they will eat each other, if one is wounded, trapped, or dying; but their physical and social structures have evolved for the pursuit, capture, and digestion of large prey. The most important prey species are hares and rabbits, beaver, deer, mountain sheep, elk, moose, and caribou. 13

¹² Paul Colinvaux, Why Big Fierce Animals are Rare: An Ecologist's Perspective (Princeton: Princeton University Press, 1978), 11. Numerous textbooks on ecology are available; this condensation of ecological principles is brief and informative.

¹³ Farley Mowat, with his purportedly-factual book *Never Cry Wolf* (New York: Dell Publishing, 1963) and the 1981 movie of the same name, can be credited—or blamed—with the misconception that wolves exist in large part on mice, a species much less the subject of human sympathy than the more charismatic megafauna. After reviewing a number of wolf stomach-content studies, Mech concludes that "in the total perspective of the wolf's food habits, predation on small animals is seen to play only a minor role . . ." *The Wolf*, 180. Perspective on Mowat's work can be found in A. W. F. Banfield, "Review of F. Mowat's *Never Cry Wolf*," *Canadian Field Naturalist* 78:1 (1964): 52-54; D. H. Pimlott, "Review of F. Mowat's *Never Cry Wolf*," *Journal of Wildlife Management* 30:1 (1966): 236-37; Jim Rearden, "Fairy Tales and Wolves," *Alaska* 51:1 (January 1985): 27, 74-5.

The hunting behavior of wolves has been the subject of centuries of misconception; only since the 1940s have scientists produced dispassionate observations. Former government predator hunter Stanley Young collected many of these folk tales, such as how wolves would chase prey all night until the prey fell to exhaustion, a tactic never witnessed and verified.¹⁴ To be successful—to live long and breed often—a predator must gain more calories from its prey than it expends in pursuit of the prey, which means that wolves will kill whatever individual of a prey population is most readily available. Many hunting trips result in failure: in an aerial study of a wolf pack on Isle Royale over the course of three winters, David Mech observed 131 encounters between wolves and moose, yet only six moose kills resulted. 15 A modern misconception concerning wolves is that they prey only on the sick, diseased, inferior, or old animals; while these may be the easiest animals to catch, and thus constitute the bulk of the kills, wolves are capable of killing healthy adults of any prey species. 16 Domestic livestock, lacking the natural defenses of wild prey, are easy subjects of wolf attacks, producing the fundamental conflict between pastoral humans and wild wolves.¹⁷ The wolf is an animal that has far transcended its ecological niche as

¹⁴ Young, *Wolves of North America*, 74. This book is an uncritical compilation of wolf information, interesting now for insight into human attitudes toward the wolf before modern predator science. Although Young spent many years in wolf control work, he admitted he would hate to see them totally eliminated from the continent.

¹⁵ The complete study is David Mech, The *Wolves of Isle Royale*, Fauna Series No. 7 (Washington, D.C.: GPO, National Park Service, 1966).

¹⁶ A summary of research on this question in Alaska can be found in Ronald Skoog, "Ecology of the Caribou in Alaska" (Ph.D. diss., Univ. of California-Berkeley, 1968), 612-14.

¹⁷ Barry Lopez's intriguing book is unequaled for addressing the complex role the wolf has played in the human world, and how our attitudes have been reflected in actions against the wolf; *Of Wolves and Men* (New York: Charles Scribner's Sons, 1978).

the focus of a rich mythology and superstition. European settlers brought not only new prey species to the wolves of North America, but ancient fears, deeply-embedded folklore, and the ability to eliminate the wolf as a competitor.

Paleolithic humans and wolves shared some characteristics as competitors for their prey: small social groups of hunters, roaming the landscape around a fixed home in search of animal prey, working together in order that the group should eat and raise their young. 18 Ethnologic studies, both of vanished and extant hunting societies, indicate admiration, respect, and emulation of wolves by human hunters. Numerous religious ceremonies of Native Americans revolved around the totem of the wolf, who could imbue human hunters with strength and courage. 19 The wolf became the enemy when Neolithic humans adopted the pastoral existence in the Middle East, with the vulnerable herds of livestock being not only a food source, but also representative of social prestige and wealth.²⁰ The Christian symbolism that emerged from Judea reflected the wolf as competitor and destroyer: unfaithful leaders of the Israelites were "in the midst of her [Israel] like wolves tearing the prey" (Ezekiel 22: 27), and the Savior to the Israelites would alter the world so radically that "The wolf also shall dwell with the lamb" (Isaiah 11: 6). The Christ that came served as the Shepherd to his flock in need of protection from the beasts of idolatrous society that would

¹⁸ Ibid., 85.

¹⁹ Robert Stephenson and Robert T. Ahgook, "The Eskimo Hunter's View of Wolf Ecology and Behavior," in *The Wild Canids*, 288; *Encyclopedia of Religion*, 1987 ed., s.v. "Wolves," by Ann Dunnigan.

²⁰ Erik Zimen, *The Wolf: A Species in Danger*, trans. Eric Mosbacher (New York: Delacorte Press, 1981), 295.

destroy Christ's kingdom. He warned His disciples, as He sent them out to preach in the towns, that "I send you out as sheep in the midst of wolves" (Matthew 10: 16), and that His protection would be temporary, for "after my departure fierce wolves will come in among you, not sparing the flock" (Acts 20: 29). The wolf would be associated with the Devil, who dwelt in the wilderness, and the Christian duty was to eliminate both. Such associations continued in the Medieval church and related literature: the narrator of Dante's *Inferno*, beginning his spiritual journey in the shadowed forest, encounters a she-wolf that has "already brought despair to so many;" for the aspirant to "leave this savage wilderness," the wolf must be sent "back again to Hell." Such metaphorical use of the wolf as a creature of dread and death fixed the dominant image of the wolf into the collective subconscious until the late twentieth century.

The depth of wolf antipathy was likely reached in pre-Renaissance Europe, as the Black Death of the late 1340s and the subsequent Hundred Years War resulted in lands being abandoned, shrinking human populations, and likely expanding wolf numbers, who were popularly supposed to feed upon cadavers on the outskirts of the walled cities.²³ As human population rebounded in the 1400s, the forests of Europe diminished as lands were reclaimed or cleared anew; the remaining forests became the playgrounds of the aristocracy, who came to regard the forest as sylvan rather than savage,²⁴ especially when they

²¹ Dante Alighieri, *Inferno*, trans. Allen Mandelbaum (Berkeley, University of California Press, 1980), 1-6.

²² Lopez, Of Wolves and Men, 208, 210.

²³ Ibid., 208, 228.

²⁴ Matt Cartmill, *A View to a Death in the Morning: Hunting and Nature Through History* (Cambridge: Harvard University Press, 1993), 59. As Cartmill elaborates, the forest portrayed by Dante was far different from the forest of Robin Hood.

had been cleared of wolves. Systematic wolf hunting occurred in Europe since the days of Charlemagne, who employed hunters with specially-bred dogs.²⁵ Trapping wolves dates back to at least the fourteenth century, for a French hunting manuscript shows a picture of a wolf caught in a toothed device.²⁶ In the Scotland of James I (1427) attendance by tenants was mandatory at the quarterly baronial wolf hunts. The earliest historical record of a wolf bounty is from Plutarch's *Lives*, in which a male wolf was worth five drachmas, or the price of an ox. In England rewards have been paid since King Henry III (1216-1272) awarded land tracts to those willing to clear them of wolves.²⁷ England's landscape underwent a drastic change in the 1500s, with the forest clearing caused by population growth, increased agricultural production, and the demands of shipbuilders for wood to build a merchant fleet.²⁸ Habitat diminishment, in conjunction with organized wolf hunting and bounties, eliminated wolves by the end of the sixteenth century, though they lingered in the wilds of Scotland until 1743.²⁹

The Puritans came to the New World to do God's work, to bring the light of civilization to the distant shores which were "'a waste and howling

²⁵ Zimen, The Wolf, 296.

²⁶ Richard Gerstell, *The Steel Trap in North America* (Harrisburg, Penn.: Stackpole Books, 1985), 26.

²⁷ Young, *Wolves of North America*, 339; his full discussion of the history of bounty systems is in pages 337-368.

²⁸ Robert G. McCandless, *Yukon Wildlife: A Social History* (Edmonton: University of Alberta Press, 1985), 9. McCandless begins his discussion of wildlife laws in the Yukon with a chapter devoted to English game laws and hunting practices.

²⁹ Zimen, *The Wolf*, 310.

wilderness, / Where none inhabited / But hellish fiends, and brutish men.'"30 The adjective seems to have been common (and remains such), but eventually "'that which was . . . a howling Wilderness . . . became a pleasant Land,'"31 where, at least in Boston, the "'admirable acts of Christ' had in a few decades transformed the 'hideous Thickets' where 'Wolfes and Beares nurst up their young' into 'streets full of Girls and Boys sporting up and downe.'"32 Wild Indians and wild wolves held parallel roles in colonial fears; writers often mentioned them in the same sentence, as they bemoaned the forces arrayed against them and their mission. A direct metaphor was made during the Indian War of 1675 by Increase Mather, who wrote of the settlers fearing the Indians which were "'ravening Wolves, who lye in wait to shed blood.'"33

The Puritans easily recognized that wolves were direct competitors for the deer in the woods surrounding their fields, and blamed the wolves for keeping deer populations low, little realizing their own livestock quite possibly helped boost wolf numbers.³⁴ Their English forebears provided the Puritans various models for clearing the countryside of wolves, including the bounty payment. The first bounty law was passed in the Massachusetts Bay Colony in 1630, followed by the Grand Assembly of Jamestown in 1632, and other colonies

³⁰ Nash, Wilderness and the American Mind, 36.

³¹ From Increase Mather, 1639; quoted in Peter Carroll, *Puritanism and the Wilderness* (New York: Columbia Univ. Press, 1969). Other examples of "howling wilderness" are on pages 83, 196, 197.

³² Nash, Wilderness, 37, quoting from Edward Johnson's Wonder-Working Providence, 1654.

³³ Carroll, Puritanism, 208-9.

³⁴ William Cronon, Changes in the Land: Indians, Colonists, and the Ecology of New England (New York: Hill and Wang, 1983), 132; Trefethen, Crusade for Wildlife, 35.

soon passed similar laws. Bounty payments consisted of cash, grain, or powder and shot; contributions to the bounty fund came from livestock owners. Indians were brought into the new market for wolf heads and made eligible for the receipt of bounties, although their reward sometimes fell short of that given to settlers. Fraudulent bounty claims were present even in Puritan New England, and Connecticut found it necessary to pass laws against the submittal of wolves killed outside the colony's boundaries and against raiding another's traps or pits in order to claim the bounty on caught wolves. The combination of moral justification, economically motivated hunting, and habitat alteration reached the same end as they had in western Europe; by the American Revolution no wolves remained near the settled areas of the east coast. Set 100 and 100 and

Wolf killing was as much a part of settlement as clearing trees and tilling soil, and traps, pits, poisons, and organized hunts accompanied the westward expansion. Group hunting proved more efficient than individual efforts, and wolfing could help knit newly-made communities on the frontier's edge. A series of "Wolf Meetings" in 1843 united Oregon settlers against the wolf as well as against British sovereignty.³⁷ Strychnine in crystalline form appeared in the trading posts of the Great Plains in the mid-1800s, a lightweight, easily-used tool against the wolves. Professional wolfers followed the buffalo herds, killing some

³⁵ Preceding information from Cronon, Changes in the Land, 132-33; Young, Wolf in North America, 63-9; Carroll, Puritanism and the Wilderness, 200; Peter Mathiessen noted that New Jersey allowed a bounty of twenty shillings to colonists, but only ten to Indians; Wildlife in America (New York: The Viking Press, 1959), 58.

³⁶ Tober, Who Owns the Wildlife?, 23-4.

³⁷ Young, Wolves of North America, 310; Ray Allen Billington, The Far Western Frontier, 1830-1860 (New York: Harper and Brothers, 1956), 114.

and burying strychnine in the carcasses, and then collecting and selling the pelts from the wolves attracted by the scent of freshly-killed meat.³⁸

Mass production of the steel trap in the mid-eighteenth century provided a widespread tool for wolf control. Traps had for centuries been hand-forged, slowly and laboriously. A trapper and trap-making blacksmith named Sewell Newhouse joined the utopian religious Oneida community of upstate New York in 1848, and his talents combined with others to create a mass production system.³⁹ A group of Oneida machinists enlarged the blacksmith's shop into a factory by bringing water power and stamping presses; production rose rapidly, from 25,945 traps in 1857 to 275,532 traps in 1864, and Oneida, under the market name of Newhouse traps (and the later Victor line), dominated the North American market.⁴⁰ Eight primary sizes of traps covered the range of target animals, from rats to bears; the No. 4, with a 6 1/2 inch jaw, became the standard wolf trap. Market competition led Oneida to publish *The Trapper's Guide*, a series ostensibly written by their company figurehead, Sewell Newhouse. These books blended tall tales, how-to trapping information, and a sales pitch for Newhouse traps. The company viewed itself as playing a vital role in history, for the trap, along with the axe and plow, "forms the prow with which iron-clad civilization is pushing back barbaric solitude; causing the bear and beaver to give place to the wheat-field, the library, and the piano." Newhouse traps would spread

³⁸ Young, Wolves of North America, 327-9.

³⁹ Stanley P. Young, *The Wolf in North American History* (Caldwell, Idaho: Caxton Printer, 1946), 50-58; contains a section on the development of the Oneida wolf trap, but a more credible source is Gerstell, *The Steel Trap in North America*; he constructed the history of the Oneida Community's trap business, which comprises much of this book.

⁴⁰ Gerstell, The Steel Trap, 177.

civilization around the world: the caption to the drawing of the forty-two pound Great Bear Trap trumpeted that "it ought to go wherever ferocious animals exclude man from the soil. India . . . needs it to exterminate the Tiger. Africa needs it in her long battle with the Lion. South America needs it for grappling with the Jaguar and the Boa Constrictor. There is not an animal living that can defy it. . . . "41 As wolf control efforts burgeoned on the Great Plains with the livestock industry, Oneida introduced an enlarged trap for western conditions, and in 1895 the No. 4 1/2 Newhouse traps became the standard tool used by ranchers and professional trappers alike. 42

Guarding livestock from depredation is a venerable human occupation, yet the North American grasslands offered an opportunity not previously encountered by European settlers: the ability to make money from cattle and sheep roaming unattended much of the year. The primary grassland herbivore, the bison, were slaughtered in the 1860s and 1870s and were almost gone before anyone realized what had happened. Their niche, as both grazers upon the grasses and prey for wolves and coyotes, was filled by domestic livestock. The lobo, or buffalo, wolf of the plains went about doing what wolves do, which to one Iowan's mind was "'a stain, a foul stigma, on the civilization and enterprise of the people." Centuries of habituated attitudes led to extensive campaigns against the predators; ranchers organized private bounty funds, and encouraged

⁴¹ Sewell Newhouse, *The Trapper's Guide*, 6th ed. (New York: Oakley, Mason & Co., 1874), 212, 215.

⁴² Gerstell, *The Steel Trap*, 192. Ernest Thompson Seton, the noted writer and naturalist, helped design and market this trap, which differed from the No. 4 wolf trap in the addition of toothed jaws.

⁴³ Young, The Wolf in North American History, 123.

territorial and state legislatures to do the same. Since stockmen were virtually the only taxpayers in the newly-settled areas, their legislative demands could not be ignored. The bounty system was a popular political tool, serving to disperse cash to rural voters, but it was ultimately ineffective in eliminating wolves. Professional bounty hunters could obtain a modest living by killing wolves and coyotes, yet they were concerned less with protecting herds of livestock than with roaming to where the predators were numerous, and hence profitable; they realized that if they were too thorough, their livelihood would disappear. Stockmen and local governments attempted and failed to organize a unified bounty system in the western states in 1899, and growing disillusionment with bounties led them request federal predator control efforts. Under federal coordination, the howling of wolves in the American states would be eliminated in only one generation, two hundred fifty years after the Puritans began the campaign.

The federal agency that assumed responsibility for predator control began in 1886 as the Division of Economic Ornithology and Mammalogy within the Department of Agriculture. Its first director, C. Hart Merriam, came from a background in ornithology and justified the creation of a new agency on the premise that research on birds would be beneficial to the nation's farmers.⁴⁶

⁴⁴ Mech, *The Wolf*, 332-3; Stanley P. Young and Hartley H.T. Jackson, *The Clever Coyote* (Harrisburg, Penn.: Stackpole Company, 1951), 182.

⁴⁵ Young, Wolves of North America, 380-1.

⁴⁶ See Keir B. Sterling, *Last of the Naturalists: The Career of C. Hart Merriam* (New York: Arno Press, 1977), and "Builders of the U.S. Biological Survey, 1885-1930," *Journal of Forest History* 33:4 (October 1989): 180-7.

While Congress intended the division to engage in applied research of economic value, Merriam's primary interest turned to the biogeography of North American mammals.⁴⁷ He directed his field collectors to systematically obtain specimens in order to create species distribution maps, as well as conduct research on the food habits of birds and mammals through analysis of stomach contents.⁴⁸ The vast numbers of specimens flowing into Washington, D.C. from field agents allowed an expansion in the distinction and naming of species and subspecies, one way to achieve fame in biologic circles. Merriam held controversial theories on speciation: in modern parlance, he was a 'splitter,' naming new species on arcane skeletal differences.⁴⁹ His longtime friend and amateur naturalist Theodore Roosevelt, among others, objected to Merriam's "excessive multiplication of species based upon trivial points of difference." Appreciating his friend's vanity, Merriam promptly 'discovered' a new species of elk in Washington's Olympic Peninsula, *Cervus roosevelti* Merriam, which flattered Roosevelt for a short time.⁵⁰

⁴⁷ Jenks Cameron, *The Bureau of Biological Survey: Its History, Activities, and Organization* (Washington, D.C.: GPO, 1929; reprint New York: Arno Press, 1974), 25 (page numbers are to reprint edition).

⁴⁸ Sterling, *Last of the Naturalists*, 66-67; Paul G. Redington, "The United States Bureau of Biological Survey," *The Scientific Monthly* 37 (October 1933): 293.

⁴⁹ For example, Merriam wrote a 1918 monograph on brown and grizzly bears in which he listed 86 species in North America; *A Review of the Grizzly and Big Brown Bears of North America*, North American Fauna No. 41, (Washington, D.C.: GPO, 1918). As taxonomy evolved, biologists tended to minimize species differences and converge previously differentiated animals. A current classification of the world's Ursidae lists only three species on our continent: *Ursus americanus*, *Ursus arctos*, and *Ursus maritimus*; see W. Chris Wozencraft, "Classification of the Recent Carnivora," in John L. Gittleman, ed., *Carnivore Behavior*, *Ecology*, *and Evolution* (Ithaca: Cornell University Press, 1989), 569-93.

⁵⁰ Sterling, Last of the Naturalists, 173, 178-9. Sterling deals at length with the intellectual questions of the speciation controversy. Citing the need to protect his namesakes, Roosevelt created Mount Olympus National Monument in 1909; see Ise, National Park Policy, 383.

Merriam's division published extensively and widely on all mammals and birds, providing a valuable foundation of information for twentieth century biologists.

Expansion of activities occurred at the turn of the century, with wildlife surveys in Alaska, Canada, and Mexico. The Lacey Act of 1900, which forbade the interstate commerce of game meat, imposed a shift in emphasis on the division, as it gained responsibility for enforcement. Congress upgraded and renamed the division as the Bureau of Biological Survey in 1905, still within the Department of Agriculture. Increasing scrutiny followed, as bureaucrats questioned Merriam's scientists on the usefulness of their basic research to the needs of agriculture. In addition to research on biogeography and food habits, the survey conducted disease investigations in wild animals, fur resources development, rodent control, and the protection of animals that were "not only valuable but delight the nature lovers and attract sportsmen to their haunts in proper season." 52

Additional duties came with increasing evidence of the ineffectiveness of bounty incentives—with payments estimated at \$100 million up to World War II—at eliminating predator populations in the western states.⁵³ The ranching industry felt deserving of federal action on the problem, since most of the grazing lands were in the public domain.⁵⁴ Merriam had already publicly

⁵¹ Cameron, Bureau of Biological Survey, 37; Swain, Federal Conservation Policy, 32; A. Hunter Dupree, Science in the Federal Government: A History of Policies and Activities to 1940 (New York: Harper & Row, 1957), 253.

⁵² Redington, "Biological Survey," 292.

⁵³ Young noted that in no other country in the world had so many laws been passed against an animal, yet the wolf's demise was caused more by habitat alteration by human settlement than by bounty hunting; *Wolves of North America*, 338-9.

⁵⁴ Robert H. Connery, Governmental Problems in Wildlife Conservation (New York: Columbia Univ. Press, 1935; reprint New York: AMS Press, 1968), 85 (page numbers are to reprint)

criticized state bounty programs on raptors and questioned the negative opinions popularly held toward 'chicken hawks' and their kind, but he took an aggressive stance towards western predators to appease the ranching industry and convince Congress of the value of his agency.⁵⁵ In 1905 Merriam loaned veteran field biologist and brother-in-law Vernon Bailey to the Forest Service to investigate the wolf problem on government forest lands. After finding "enormous losses" of both livestock and game animals, Bailey wrote a pamphlet, Wolves in Relation to Stock, Game and the National Forest Reserves, to "put in the hands of every hunter, trapper, forest ranger, and ranchman directions for trapping, poisoning, and hunting wolves and finding the dens of young."56 Forest rangers were issued traps and instructions for their use, and became the first government predator control agents; in 1907 they took 1,800 wolves and 23,000 coyotes from western forest reserves.⁵⁷ Bailey's pamphlet received widespread publicity in a short National Geographic article, which noted that Biological Survey men were working out the best methods for killing wolves in order to reduce stock losses and the destruction of game on forest reserves and national parks.⁵⁸ This "fierce warfare"

edition); Nathaniel P. Reed and Dennis Drabelle, *The United States Fish and Wildlife Service* (Boulder, Colorado: Westview Press, 1984), 75.

⁵⁵ Sterling, Last of the Naturalists, 79-80, 258. Merriam is likely unique in his gustatory appreciation for some predators. Vernon Bailey, a protege and highly effective field agent who married sister Florence Merriam in 1899, wrote back to family while on a Grand Canyon trip with his boss: "Merriam killed a big wild cat last night + we have had it cooked for breakfast + dinner. . . . Skunks and cats are his favorite meat + he is especially fond of Eagle." Ibid., 115.

⁵⁶ Vernon Bailey, Wolves in Relation to Stock, Game, and the National Forest Reserves (Washington, D.C.: GPO, Department of Agriculture, 1907), 5.

⁵⁷ Cameron, Bureau of Biological Survey, 46; David E. Brown, ed. The Wolf in the Southwest: The Making of an Endangered Species (Tucson: Univ. of Tucson Press, 1983), 48.

was virtuous in 1907, and served to keep the Biological Survey in business, to the detriment of its broader scientific programs.

Merriam resigned as head of the Biological Survey in 1910, and his successor, Henry Henshaw, continued the direction toward national predator control.⁵⁹ Sportsmen's groups and the livestock industry recognized the success of forest rangers in diminishing predator populations, and their pressure on Congress resulted in the authorization of the Biological Survey to exert direct efforts in "experiments and demonstration in destroying wolves, prairie dogs, and other animals injurious to agriculture and animal husbandry," with a 1915 appropriation of \$125,000.60 Biological Survey agents organized western areas into control districts and supplied advice, traps, poison, and hunters. Newhouse traps became the major tool: in 1911 the Oneida Company developed a new double-spring wolf trap, the No. 44, for government use, and after 1916 the Biological Survey was Oneida's largest single customer. In 1925 the No. 44 sold for \$15.62/dozen, and Oneida shipped them to the federal government and western states in "carload lots."61

⁵⁸ "Wolves," *National Geographic* 18(2), 1907: 145-7. Merriam had served on the founding committee of the National Geographic Society in 1888, and quite possibly used the magazine as his ally in the public opinion stakes.

⁵⁹ For years Merriam had struggled in his work with a government salary of \$3,500. He had accompanied the lavish scientific excursion to Alaska organized by millionaire Edward Harriman in 1899, subsequently editing the official summary of that trip; see *Alaska: The Harriman Expedition*, 1899 (New York: Dover Publications, 1986, originally Doubleday, 1901). Upon Merriam's retirement, Charles Sheldon and Theodore Roosevelt convinced Harriman's widow to endow him a lifetime salary and research funds of \$17,000 annually for independent research; Sterling, *Last of the Naturalists*, 281. Among Merriam's later works was the posthumous editing of Charles Sheldon's diaries into *The Wilderness of Denali*.

⁶⁰ Cameron, Bureau of Biological Survey, 47.

⁶¹ Gerstell, The Steel Trap, 198, 203, 214, 297.

Henshaw's replacement in 1916, Edward Nelson, had joined the Biological Survey in 1890 following his ground-breaking ethnological studies of Alaska Eskimos between 1877 and 1881 and subsequent biologic field investigations.⁶² World War I increased demand for beef and wool, justifying further predator control efforts. 63 In 1917 Nelson reported that 175 to 300 "expert hunter and trappers" worked for the benefit of both livestock and game populations, and he confidently stated, "There is little question that in five years we can destroy most of the gray wolves and greatly reduce the numbers of other predatory animals."64 The development and distribution of poisons for predators and rodents was an important advance in animal control; in 1923 1.7 million poisoned baits were used in this "fine art." 65 Economic concerns dominated the survey's work through the 1920s, with little emphasis on basic research: in 1923, it received \$24,000 for biological studies, and \$502,240 for economic research projects, the bulk of the latter going toward animal control.66 From 1915 to 1928 federal hunters killed 366,981 coyotes and 6,958 wolves, and even more died unwitnessed and unrecovered from poisons.⁶⁷ In light of the effectiveness of federal control and declining populations of wolves, as well as the continuous

⁶² Nelson's contributions to ethnology are summarized in Margaret Lantis, "Edward William Nelson," *Anthropological Papers of the University of Alaska* 3:1 (December 1954), 5-15. He also collected animal and bird specimens during his Alaskan years and is credited with the formal discovery of *Ovis dalli*, the white mountain sheep of Alaska which subsequently attracted Sheldon to the McKinley region.

⁶³ Brown, ed., The Wolf in the Southwest:, 57.

⁶⁴ Trefethen, American Crusade for Wildlife, 165.

⁶⁵ Cameron, Bureau of Biological Survey, 52.

⁶⁶ Swain, Federal Conservation Policy, 40.

⁶⁷ Cameron, Bureau of Biological Survey, 315.

fraud perpetrated in attempts to claim bounties, most western states withdrew their bounty programs. Stockmen continued to offer private incentives on the few remaining wolves, many of which gained national notoriety through the popular press.⁶⁸

The legislation enabling predator control encouraged Biological Survey agents to assist private trappers, as well as spending time themselves in the field in pursuit of predators on the public domain. More extensive cooperative predator control projects followed, involving stockmen's groups, states, and other federal agencies, including the Forest Service, the Office of Indian Affairs, and the National Park Service. Effective lobbying in Washington, D.C., by western interests resulted in a 1928 proposal by the Department of Agriculture for a ten-year program of expanded cooperative predator control projects. Conservation groups and naturalists opposed this, fearing that survey actions would result in the final extinction of predators, although the survey claimed it merely sought control, not eradication. Nevertheless, by 1929 the survey's historian concluded that "the end of the wolf is in sight."

Alaska seemed poised to recapitulate this history of wolf control.

Settlement of the frontier areas in the states involved replacing wild animals as primary food sources with the products of agriculture and ranching, and part of the success in the livestock industry included minimizing predators. The territory of Alaska lagged decades behind the American west in this evolution,

⁶⁸ Lopez, Of Wolves and Men, 191-3.

⁶⁹ Cameron, Bureau of Biological Survey, 60.

⁷⁰ Swain, Federal Conservation Policy, 44; Dunlap, "Values for Varmints," passim.

⁷¹ Cameron, Bureau of Biological Survey, 51.

although post-gold rush optimists promoted agricultural possibilities and a northern livestock animal, the reindeer. Notwithstanding the potential these represented, game animals formed a vital food source and their populations were matters of serious import to Alaskans. Although wolves had been virtually eliminated over the contiguous states by 1930, Alaska was experiencing both increasing wolf numbers and the recent spread of coyotes into the territory. Humans and wolves competed as predators for the game animals and reindeer, providing ample reason for Alaskans to be interested in wolf control.

CHAPTER 3

ANIMALS AND ATTITUDES IN ALASKA

When needing answers to questions of animal population ecology, modern wildlife biologists can take advantage of tools that would seem to maximize the accuracy of their conclusions: airplanes and helicopters to allow the scientist to soar like the raven, pharmacologic tricks to make animals go to sleep and then wake up, tracking of collared individuals and remote radio sensing to allow distant surveillance. Even today, though, seemingly straightforward questions about animal populations are answered with large degrees of uncertainty. Attempting to answer such questions for the decades preceding aerial and electronic sensing is to engage in speculation bordering on recklessness, involving the credibility of eyewitness sources, cultural biases, political motives, forest fire histories, and the variations of climate, abundance, and scarcity that affect most animal populations in northern latitudes.¹ Others have attempted similar reviews, attempting to relate current animal populations to historic levels.² Questions of animal populations are fundamental to decisions of management policy: how many caribou can be taken by hunters this year?

¹ A brief and interesting attempt to verify the conventional wisdom concerning the "recent" spread of moose in Alaska by using the records of early European explorers and Indian linguistic evidence was done by Harold J. Lutz, *History of the Early Occurrence of Moose on the Kenai Peninsula and in Other Sections of Alaska* (Juneau: Alaska Forest Research Center, U.S. Department of Agriculture, 1960).

 $^{^2}$ I make no claims to have covered the available primary sources in an attempt to supply definitive statements, depending rather on previous efforts.

How many sheep are in McKinley Park? How many wolves represent a threat to game populations? The wildlife ecology of large mammals was poorly understood in the early twentieth century, and management decisions were subject to both insufficient data and political vicissitudes. With game meat vital to the diet of many Alaskans and the rituals of hunting firmly embedded in the regional culture, the dynamics of prey populations directly affected human attitudes toward wolves, and thus the politics of animals in Mount McKinley National Park.

Moose (*Alces alces*) are the largest prey animal in McKinley Park, and number in the hundreds. Moose remain in the park year round, spending winters in the valleys, able to travel in deep snow with their long legs and browse on tree bark and branches, primarily willow. Market hunters harvested moose and may have depressed their numbers, for they were considered scarce in 1922-23, yet by the late 1920s their numbers increased.³ Crusted snow in the spring of 1932 led to difficulties and deaths; rangers reported that the ice crust caused bleeding and damage to the legs of the moose. Nevertheless, a survey of park fauna in 1932 found the moose population to be healthy.⁴ Moose are an important prey species for wolves in Alaska, yet moose have played a less significant role in the wildlife politics of McKinley Park than other species. The wolves also pursue the white sheep of the crags and the caribou of the tundra, and these animals have found

³ Adolph Murie, *The Wolves of Mount McKinley* (Washington, D.C.: GPO, National Park Service, Fauna Series No. 5, 1944; reprint, Seattle: Univ. of Washington Press, 1985),184 (page numbers are to reprint edition).

⁴ Joseph Dixon, Fauna of the National Parks of the United States: Birds and Mammals of Mount McKinley National Park, Alaska (Washington, D.C.: GPO, National Park Service, Fauna Series No. 3, 1938), 198.

many more human protectors than has the homely, solitary moose among the willows.

The Dall sheep (*Ovis dalli*) are found in Alaska's mountains from the Brooks Range to the Chugach Range and eastward into Canada, but McKinley Park is one of the few places a tourist can readily observe them in their natural habitat. Living in bands in the unglaciated mountains that flank the ice-covered peaks, sheep eat grasses, sedges, willows, and various forbs and shrubs. Seasonal variation in ranges is common, the winter spent on windblown ridges where underlying vegetation is available, with wider dispersal to areas of good forage during summer months. Their defense against predation consists of visual acuity and maneuverability in steep, rocky terrain that defeats the running ability of wolves.

The McKinley Park area is virtually the only location where numbers of sheep were estimated and recorded in the early 1900s, a result of its proximity to Fairbanks, the natural corridor for travel through the midst of the sheep range (where the park road now runs), and the interest accorded the sheep by hunters and park personnel. Market hunters, active until about 1921, found the sheep abundant enough to make the harvest and transport to Fairbanks profitable, but they don't seem to have posed a threat to the overall population. Based on the observations of Charles Sheldon and early park rangers, sheep populations were healthy until 1928, with estimates of five, ten, and even twenty-five thousand.⁵ Heavy snows in April 1929, a month when the sheep's fat reserves and forage

⁵ A. Murie, *Wolves of Mount McKinley*, 64-5; his was the first systematic collection of references on animal populations in the park. See also Gordon C. Haber, "Socio-Ecological Dynamics of Wolves and Prey in a Subarctic Ecosystem" (Ph.D. dissertation, University of British Columbia, 1977), which provides historical population summaries up until the 1970s; for pre-WWII information, Haber depends heavily on Murie's work.

were at their minimum, resulted in a large die-off. An even greater kill was reported during the winter of 1931-32, as record-setting snows in February were followed by rain, which formed an ice crust that prevented efficient feeding. The sheep population dropped to an estimated 1,500 in the summer of 1932 and continued declining until 1945. The sheep herds were the primary reason for the park's creation, so when reports filtered back to the east coast about declining numbers, the Park Service began to receive inquiries as to the status of the sheep and the steps taken by park rangers to protect the remaining survivors. Indignation followed when the Park Service indicated that predator control would not be one of the measures used to rebuild sheep populations.

The caribou of the north have long been likened to the bison of the plains, with their vast numbers darkening distant hillsides, their unpredictable migration patterns, their ceaseless movement across the open lands, and their ability to supply human hunters with food and skins for clothing and shelter. Two subspecies are present in Alaska, Grant's caribou (Rangifer tarandus granti) of the Alaska Peninsula, and Stone's caribou (R. t. stonei), which range across the mainland, excluding southeast Alaska. Their dominant foods are the ground-covering lichens, as well as grasses, sedges, and browse in season. Gregarious animals, caribou are typically found in aggregations of ten to several hundred individuals, with larger gatherings in the spring and fall when herds are migrating between their calving and wintering grounds. Alaskan herds are named and associated with geographic areas: the Nelchina herd, the Porcupine, the McKinley, and others. 'Home' territories, hundreds of square miles in size, have been more useful for nomenclature convenience than respected by the caribou; one of the problems faced by researchers constructing herd histories is

knowing whether the absence of caribou in a particular place and time is because the animals have died or because they have changed ranges. For example, in the 1930s the bulk of the Fortymile herd moved north of the Yukon and became part of the Porcupine herd, which winters in Yukon Territory and calves in Alaska's Arctic National Wildlife Refuge.⁶ Residents of the mining towns of Fairbanks, Eagle, and Circle, however, thought the herd had been wiped out. While researchers have speculated over the triggers to these sorts of shifts, there is general consensus that broad herd movements allow forage to grow and renew overall range health.

The McKinley Park caribou form one of the smaller recognized herds, and this herd's position in the center of Alaska has allowed it contact and influence from surrounding areas. When reindeer were brought to the Bering Sea coast in the 1890s, the coastal tundra was virtually devoid of caribou, although they were considered abundant in the Norton Sound area by Americans in 1866-67. Wildlife biologist Ronald Skoog speculates there may have been a population shift to the east and north in the 1880s, thus adding to the herds in the Yukon/Tanana drainages. Shortly after this, white explorers entered the McKinley area and early reports of caribou seem to indicate increasing numbers, with estimates of up to 30,000 by the 1920s. While the home territories of McKinley Park's moose and sheep are small enough to be contained by the park's boundaries, the

⁶ Skoog, "Ecology of the Caribou," 309. This work quite ably summarizes historical references to caribou numbers in reconstructing past cycles. Haber's caribou history summary in "Socio-ecological Dynamics," 161-69, depends heavily on Skoog's.

⁷ Olaus Murie, *Alaska-Yukon Caribou* (Washington, D.C.: GPO, Bureau of Biological Survey, 1935), 60; Skoog, "Ecology of the Caribou," 233.

⁸ Skoog, "Ecology of the Caribou," 234-5.

caribou—and the wolves—have moved fluidly across the straight lines drawn to protect them. Wide variance in summer and winter ranges have been reported for the McKinley herd, from Lake Minchumina to Broad Pass and northwards to the Tanana River, thus resulting in varying population estimates for the park's caribou. Evidence indicates that a large-scale migration to the Western Arctic herd occurred in the 1940s, and caribou populations in the park since then have not reached previous levels.⁹

Caribou were a staple food source for Alaskans (excluding the Panhandle), and the history of the Fortymile herd of east-central Alaska is relevant because of its proximity to McKinley Park and pre-WW II Alaska's population centers. Olaus Murie, an eyewitness to the fall migration in 1920, estimated the Fortymile herd at five hundred thousand animals, and he considered an estimate of one million to be well within reason. This herd, crucial for feeding the miners of the gold rush along the Yukon River and its tributaries, apparently maintained a large population through the 1920s, yet by the end of that decade caribou numbers seemed to be dwindling. The last large herd seen on the Steese Highway, northwest of Fairbanks, was in 1934; residents of Eagle reported caribou scarce since the mid-1930s; the last seen large herd crossing of the Yukon River was in 1938. The population low, in the early 1940s,

 $^{^9}$ A. Murie, Wolves of Mount McKinley, 146-48; Skoog, "Ecology of the Caribou," 236.

¹⁰ O. Murie, *Alaska-Yukon Caribou*, 6. This estimate has been accepted by subsequent researchers.

¹¹ These are from a variety of primary sources summarized by Ronald O. Skoog, "Range, Movements, Population, and Food Habits of the Steese-Fortymile Caribou Herd," (M.S. thesis, University of Alaska, 1956), 57.

was estimated at ten to twenty thousand animals, a precipitous change from Murie's half million.

Postulated reasons for the declining caribou numbers were many. Some blamed the Natives, newly-armed with repeating rifles and lacking the "sportsman's code" that ostensibly controlled white hunter's excesses. Others blamed white hunters; Alaska's game laws allowed prospectors to shoot game as needed for human or dog food. Wolf predation was a popular theory at the time. More recent theories focus on population shifts to other ranges and the effects of fires and logging on the wooded winter habitat needed by the caribou. Skoog dispenses with hunting theories by noting that Eskimos along the Bering Sea did not have enough rifles and ammunition to seriously affect caribou numbers, and the herds had deserted the coast well before 1900. With the Fortymile herd, he estimates a human harvest of thirty-five thousand annually in the 1930s, and concludes this level of hunting insufficient to impact a herd of half a million. Skoog also notes that caribou numbers across Alaska increased at the height of gold-mining operations, from 1897-1930, rather than decreasing, as would have been the case if hunting were an important factor. 12 His explanation for caribou population changes revolves around "centers of habitation," from which herds disperse into less optimal ranges when population densities exceed a certain point.¹³ Not all scientists agree with Skoog, and given the variability of the animal and its changing environment, we are unlikely to really know what caused previous patterns.¹⁴ What is important for this study is how the declining

¹² Skoog, "Ecology of the Caribou," 245, 332; Skoog, "Steese-Fortymile Caribou," 60.

¹³ Skoog, "Ecology of the Caribou," 356-7.

caribou herds of the 1930s and 1940s affected Alaskan attitudes toward wolves, for few understood why the National Park Service would protect wolves when game animals were in decline. And the issue was not just game animals, for Alaska was thought to be on the verge of developing its own livestock industry.

Olaus Murie was a biologist, not a stockman, and his bias toward the wild over the domestic was plain when he wrote, "The caribou's greatest menace is not the wolf, nor the hunter, but man's economic developments, principally the reindeer." To a stockman's mind, reindeer were the answer to Alaska's need for economic diversification. Senator Thomas Kendrick of Wyoming, who had gone west as the transition was made from bison to cattle, recognized "the strongest kind of a parallel between this particular venture [Alaska's reindeer industry] and the old range cattle days." An entrepeneurial reindeer owner, Carl Lomen, regarded the animal as "among the earliest and best friends man has ever had." Frank Dufresne, a fur warden who became the Executive Director of the Alaska Game Commission, predicted, "If there is any hope of making a stock country out of interior Alaska, there must first be a lot of wolf killing done." Olaus Murie feared genetic dilution of the caribou, but overly so; Kendrick and Lomen were to see their pastoral dreams foundered by poor range management and

¹⁴ For an opinion which upholds predation by wolves and humans together as the cause of caribou declines, see Arther T. Bergerud, "Decline of Caribou in North America Following Settlement," *Journal of Wildlife Management* 38:4 (October 1974): 757-70.

¹⁵ O. Murie, Alaska-Yukon Caribou, 7.

¹⁶ Department of the Interior, *Hearings Before the Reindeer Committee in Washington*, D.C., February- March 1931, 2.

¹⁷ Carl Lomen, Fifty Years in Alaska (New York: David McKay Co., 1954), 28.

¹⁸ From a 1926 report by Frank Dufresne, a fragment of which was in the A. Murie Collection, Box "Field Notes on Wolves," Folder "Wolves 4/28/40-7/31/41," RL.

racial politics; Dufresne was to see interior Alaska fail to become a stock country, but not for lack of killing wolves for protection of reindeer.

The reindeer has been intimately associated for centuries with Old World humans from Norway to Chukotka, yet has only recently become part of the New World landscape. In response to his perception that the Eskimos of northwest Alaska faced imminent starvation, Dr. Sheldon Jackson, a Presbyterian churchman, imported 1280 reindeer from Siberia and Norway between 1892-1902, as well as Siberian and Lapp herders to instruct the Eskimos in the care of this new animal. 19 Already in cultural decline from contact with European and American whaling crews and reacting to the diminution of coastal caribou herds during the preceding several decades, the Eskimos were expected to use the reindeer for food, clothing, and a way to achieve financial self-determination and an entrance into the ways of the western world. Using the starvation threat, Jackson convinced churches and the federal government to finance the initial importation of the reindeer. Within a few years no further mention was made of imminent starvation, and Jackson sought the development of a domestic food industry for the territory, a change hastened by the gold rush in Nome and the resultant need for meat.²⁰ The reindeer range eventually spread from the Alaska

¹⁹ James and Catherine Brickey, "Reindeer, Cattle of the Arctic," Alaska Journal 5:1 (Winter 1975): 16. Another useful summary is Margaret Lantis, "The Reindeer Industry of Alaska," Arctic 3:1 (April 1950): 27-44. The most comprehensive history of Alaska's reindeer industry is Richard Olav Stern's "'I Used to Have Lots of Reindeers'—The Ethnohistory and Cultural Ecology of Reindeer Herding in Northwest Alaska" (Ph.D. dissertation, State University of New York at Binghamton, 1980). Also useful is Stern's A Selected Annotated Bibliography of Sources on Reindeer Herding in Alaska, Occasional Papers on Northern Life, No. 2. (Fairbanks: Institute of Arctic Biology, University of Alaska Fairbanks, n.d.). For a brief account of reindeer history with photos, see Alice Postell, Where Did the Reindeer Come From? Alaska Experience, the First Fifty Years (Portland, Oregon: Amaknak Press, 1990).

²⁰ Dorothy Jean Ray, *The Eskimos of Bering Strait 1650-1898* (Seattle: University of Washington Press, 1975), 237. Ray's analysis of Jackson was that he had only a superficial understanding of the Natives, and they certainly didn't need an imported food source.

Peninsula to the Arctic coast and inland to the edge of the spruce forest, with the industry centered on the Seward Peninsula.

Once the presumed Eskimo starvation was averted, there was little plan for the reindeer's future. They were initially government property, with loans of one hundred animals made to the Lapp herders and interested Eskimos, to be repaid in five years with the increase belonging to the herder. Harvests were local affairs for local food needs. The situation changed in 1914, however, as a Norwegian-American family, the Lomens of Nome, received permission from the government to buy a herd. Reindeer numbers increased spectacularly: the Lomens wanted to create an export industry of reindeer meat to stateside markets, and to this end they sought stateside investment, built corrals and abattoirs, and purchased refrigerator ships. They also employed almost six hundred Eskimos as herders and laborers. From their perspective they were providing a valuable service to Alaska and its Natives. Despite the shipping of 257,000 pounds of meat in 1920, reindeer numbers increased, as did controversy over the direction of the industry.²¹

Lomen & Company was a complex operation that few understood and many envied. Father Gudbrand Lomen, appointed federal judge for the Nome district in 1921, had four sons; all were active in the business, which included commercial stores and lighterage companies, and sons Ralph and Alfred were elected to the Territorial Legislature. As the Lomens built their reindeer industry, they began to attract criticism.²² Objections to a white-owned, profit-making

²¹ Brickey, "Reindeer," 18.

²² See Lomen, Fifty Years in Alaska, for his family's side of the story.

industry in what was to have been an Eskimo improvement project found sympathetic ears in Washington, D.C., culminating in the 1937 Alaska Reindeer Act, which granted all future reindeer ownership to Natives. Testimony given by Carl Lomen to Senator Kendrick's 1931 Committee on Reindeer revealed Lomen's bewilderment at being accused of perfidy in his business:

The original policy of the Government to create interest through apprenticeship of the Eskimos in the reindeer industry has completely broken down and been abandoned. The Eskimo has lost personal interest in the reindeer. . . . They [Eskimo] have failed to mark their herds and have kept only desultory records. . . . Demoralization became chaos. . . . The white herds have received proper care and enjoyed their natural increases. 23

Regardless of the quality of herding, reindeer numbers increased rapidly. The government's reindeer experts assumed a range capacity of up to four million animals, so little alarm was raised as the estimated population surpassed one half million.²⁴ As the reindeer population began to mushroom, concern grew over the deterioration of the range. Reindeer and caribou feed primarily on the ground-covering lichens of tundra and taiga areas, and because of the slow growth of lichens a grazed-out range needs up to twenty-five years to recover; slaughter and export was one way to reduce the impact of excess reindeer on their feeding grounds, but it proved insufficient to check overpopulation.²⁵ The herd reached an estimated maximum of 614,000 in 1932 before abruptly

²³ Hearings Before the Reindeer Committee in Washington, D.C., 20 February 1931, 73.

²⁴ Lawrence J. Palmer, *Raising Reindeer in Alaska* (Washington, D.C.: GPO, Department of Agriculture, 1934), 5.

²⁵ A. Starker Leopold and F. Fraser Darling, Wildlife in Alaska: An Ecological Reconnaissance (New York: Conservation Foundation and Ronald Press Co., 1953), 70; Lomen, Fifty Years in Alaska, 72-3. See also Bob Callan, "The Lomens of Nome," Alaska Life 9:3 (March 1946): 8-10, 35-7.

declining. The reduction in reindeer numbers was almost twice as fast as the buildup, as by 1950 there were only 25,000 remaining.²⁶ The ecologic catastrophe contained within those fifty years was explained by a variety of factors, including predation, but also contained a clash of human as well as animal ecology.²⁷

Much as the Lakota and Cheyenne were expected to become farmers and ranchers on their reservations in the American West, the Eskimo were expected to follow the examples of the Lapp herders and become tied to the reindeer herds. A fundamental problem was that "close herding" of the reindeer was needed, an Old World husbandry practice in which the reindeer herders literally lived with the herd. This practice was successful for several reasons, as it encouraged the rotation of ranges, positive ownership claims, and protection from predators. America's western livestock industry followed a different "loose" pattern, with open ranges and large numbers of livestock cared by relatively few people, a model which seemed appropriate for Alaska's tundra. Close herding was done by some of the Native reindeer owners initially, but herds were neglected in the late 1920s because of inability to sell their animals, opportunities for wage labor, and the continued multiplication of animals in spite of neglect. Most Eskimos were reluctant to abandon their sea-coast culture, dominated by the annual cycles of marine mammal subsistence hunting, when it was easy to shoot a few reindeer whenever desired without spending one's days following the herds.²⁸ The white culture of the time could not grasp how a

²⁶ Herd numbers from Skoog, *Ecology of the Caribou*, 340. Skoog cites his sources in his tabulation of reindeer numbers; others estimate an even greater maximum number.

²⁷ Lantis, "The Reindeer Industry," 31; Leopold and Darling, Wildlife in Alaska, 79.

²⁸ Stern, "Ethnohistory and Cultural Ecology," 134; Lantis, "Reindeer Industry," 31.

subsistence lifestyle was preferable to getting rich by accumulating a large herd of livestock, and much disparagement of the Eskimos resulted as the reindeer populations plummeted.

The Bureau of Biological Survey played a major role in Alaska's reindeer industry as part of its emphasis on economic mammalogy. E.W. Nelson, chief of the survey, visited the reindeer ranges in 1920, and that year an experimental laboratory was established at Unalakleet. Research projects examined forage and range management, carrying capacities, disease and parasite protection, and improvement of stock by breeding.²⁹ Both reindeer and caribou comprise *Rangifer tarandus*, but the caribou of North America are larger than the imported reindeer. Nelson commissioned Olaus Murie to secure caribou bulls from McKinley Park, and in 1923 Olaus and his half-brother Adolf tried to capture caribou, with little success.³⁰ Bulls were eventually secured and transported to Nunivak Island for breeding with reindeer, with promising crossbred bulls then placed in the mainland reindeer herds.

Some people thought the interbreeding to be a threat to Alaska's wild caribou, however. Nelson had stated privately that there was "no justification" for bringing reindeer inland to caribou country, but this did not prevent William Lopp, Supervisor for the Bureau of Education, from deciding to send a herd to the Broad Pass area, where he had seen potential grazing grounds near the

²⁹ T. S. Palmer, *Progress of Reindeer Grazing Investigations in Alaska*, Department Bulletin No. 1423 (Washington, D.C.: GPO, Department of Agriculture, 1927), 3.

³⁰ James M. Glover, "Sweet Days of a Naturalist: Olaus Murie in Alaska, 1920-26," Forest & Conservation History 36:3 (July 1992): 135.

Alaska Railroad and its markets.³¹ Starting from Goodnews Bay in southwest Alaska in October 1921, 1,162 reindeer were escorted by six herders. They traveled through the winter and calving season along the northern flanks of the Alaska Range, thence south on the Nenana River to Broad Pass, arriving in August 1922. While some shipments of reindeer carcasses went to market via the railroad, the herd was gone by 1928, a victim of poor herding practices, predation by wolves, and intermingling with the migrating caribou herds.

While Olaus Murie helped with breeding efforts to better the reindeer, he opposed the mingling of reindeer with Alaska's wild caribou, which were "a splendid type . . . coming near at least to being the largest on the continent." Concern over the genetic diminution of caribou reflected Murie's understanding of the role of the caribou as an important wild food source for residents of Alaska. Another concern was for the genetic purity of the caribou that migrated through nearby Mount McKinley National Park, for the Park Service recognized its role in preserving examples of native flora and fauna "unimpaired." Reindeer and suspected reindeer-caribou crossbreeds were observed in the park in 1926, and park rangers had standing orders to shoot them.³² Adolph Murie thought it "fortunate" that the Broad Pass reindeer were exterminated. Another proposal to drive reindeer through the park to Broad Pass surfaced in 1928, a result of conversations between the Alaska Railroad's director and the Lomen brothers, who brought their proposal to Washington, D.C., for discussion with federal

³¹ Nelson to O. Murie, 15 April 1921, MS 51, Box 4, Folder 1, ASHL; Jack R. Luick, "The Cantwell Reindeer Industry 1921-1928," *Alaska Journal* 3:2 (Spring 1973): 108; subsequent summary from this.

³² O. Murie, Alaska-Yukon Caribou, 7; Dixon, Birds and Mammals of Mount McKinley, 209.

agencies. ³³ This idea failed to gain support, as both Biological Survey Director Paul Redington and Park Service Director Horace Albright registered strong disapproval, fearing the reindeer would cause genetic damage and undesirable hybrids among the caribou. ³⁴ Albright echoed previous suggestions to segregate the reindeer and caribou herds, an unlikely prospect in the varied terrain of Alaska with animals capable of long migrations. ³⁵ Other Park Service naturalists opposed the proximity of reindeer to McKinley's caribou and the American Society of Mammalogists went a step further in a resolution about the problem, urging that "reindeer not under complete control of herders" be killed rather than letting them run with the caribou of McKinley Park. ³⁶ Such fears reflected the contemporary understanding of genetics and natural selection, and a fundamental preference for the wild over the tame by Park Service personnel. ³⁷

The scientific and aesthetic appreciation of the wild fauna by biologists and Park Service people neatly captures the distinction between preservationists

³³ A. Murie, Wolves of Mount McKinley, 163; William H. Wilson, "Railroad and Reindeer," Alaska Journal 10:1 (Winter 1980): 56-61.

³⁴Hearings Before the Reindeer Committee, 9 March 1931, 29; Redington's stance in a letter from Arno Cammerer to Horace Albright, 11 May 1929, RG 79, Entry 7, File 719, Box 1415, NA.

³⁵ L.J. Palmer recommended this in 1926, recognizing the "great intrinsic value" of caribou, in *Raising Reindeer*, 5.

³⁶ George M. Wright, Joseph S. Dixon, and Ben H. Thompson, Fauna of the National Parks of the United States: A Preliminary Survey of Faunal Relations in National Parks; Fauna Series No. 1 (Washington, D.C.: GPO, National Park Service, 1933), 50; "General Notes," Journal of Mammalogy 16:3 (August 1935): 239; Adolph Murie was, at this time, chairman of the Committee of Economic Mammalogy of the Society.

³⁷ Ronald Skoog concluded that reindeer had no deleterious effects evident today on wild caribou, arguing that physical characteristics of reindeer would have been genetically recessive when crossed with caribou, and that had these characteristics—shorter legs, size, pelage color—been truly inferior, they would have been selected out of the reindeer populations in favor of more fit animals; *Ecology of the Caribou*, 342.

and those with more utilitarian views toward conservation, such as the people responsible for game management in the territory. While appreciating the fine wild vigor of caribou was easy for anyone who had watched their great herds roam across the landscape, transferring that feeling to predators placed the aesthetes in a very small minority. Frank Dufresne echoed the majority opinion: the wolf was the "master killer of all wildlife," the "villain in Alaska's pageant of wildlife," and the "worst natural enemy" of the sheep, moose, caribou, and reindeer. The population status of Alaska's large prey animals, combined with Alaska's attempt to develop a livestock industry, provided ample justification for wolf control efforts.

While early estimates of Alaska's big game populations were made more by reckoning than quantifiable evidence, people had enough concern over the meat animals to attempt keeping track of them. For predator populations, little can be said with any degree of certainty except the number claimed for bounty. Available evidence indicates that wolves were relatively low in numbers during the first quarter century, and increased thereafter. A Biological Survey agent, who followed the gold rush trail from tidewater to White Pass and down the Yukon River to St. Michael in 1900, wrote, "The country along the Yukon is not well suited for wolves and they are seldom seen there." A follow-up survey in the Yukon-Tanana area by the same biologist in 1903 produced a similar conclusion: "wolves are seldom reported, except in limited numbers in winter." 39

³⁸ Frank Dufresne, *Alaska's Animals and Fishes* (New York: A.S. Barnes, 1946), 80-83.

³⁹ Wilfred H. Osgood, Results of a Biological Reconnaissance of the Yukon River Region, North American Fauna No. 19 (Washington, D.C.: GPO, Division of Biological Survey), 40; Biological Investigations in Alaska and Yukon Territory, North American Fauna No. 30 (Washington, D.C.: GPO, Bureau of Biological Survey, 1909), 28.

Belmore Browne, who spent months afield in various locations during five hunting trips between 1902 and 1910, saw but one wolf. Charles Sheldon, in over a year on the flanks of the Alaska Range in what would become Mount McKinley National Park, rarely mentioned wolves, and only once saw tracks in the area. He also reported that the tracks of a wolf in the Kantishna area occasioned comment from the residents. A market hunter pursuing sheep in 1915-16 in the McKinley area did not see any wolves. 40 The annual reports to Washington, D.C., filed by Alaska's governors contain no mention of wolves in mainland Alaska until 1919. A deputy fur warden in 1920 reported that wolves were seen "only rarely by trappers from the valleys of the Yukon and Kuskokwim."41 Olaus Murie was initially dispatched to Alaska as a fur warden for the Biological Survey in 1920, with explicit instructions to "be sure and get all the information you can concerning the predatory animals and their relations to game." During a year's travel throughout interior Alaska, including the McKinley area, he made no comment on wolf predation in his reports and saw only one wolf in 1921.42 Younger brother Adolph Murie accompanied Olaus in 1922-23 on an extensive dog-sled trip to investigate reindeer herd conditions. Their route led from

⁴⁰ Belmore Browne, "In the Caribou Country," Outing (June 1910); in Bates, Mountain Man, 237; Sheldon, Wilderness of Denali, 315, 299; A. Murie, Wolves of Mount McKinley, 65.

⁴¹ Lee R. Dice, "Notes on the Mammals of Interior Alaska," *Journal of Mammalogy* 2:1 (February 1921): 21. Dice would become a professor at the University of Michigan and have Adolph Murie as one of his students in the late 1920s.

⁴² Nelson to O. Murie, 3 Dec. 1920, MS 51, Box 4, Folder 1, ASHL; copies of Murie's reports are in this box; A. Murie, *Wolves of Mount McKinley*, 13.

Nenana to the Alatna River, east to the Chandalar River, and south through Fort Yukon and Circle to Fairbanks; they saw not even a wolf track.⁴³

The situation seems to have changed in the mid-1920s, however. The governor of Alaska reported in 1919 that "wolves are commencing to appear in unprecedented numbers and are becoming a great menace to game." After a six year absence, wolves again appeared in the 1926 governor's report, "increasing in spite of the bounty . . . doing much damage to fur and game." From 1926, a predator update would become an annual feature in these reports. Following their winter inspection in 1923 Olaus Murie received reports that wolves were "rather plentiful in some sections now," and that poison had been requested by local men for the wolves, an idea that did not meet with his approval. In another report some years later, he noted that "wolves were never alarmingly numerous, although more recently they have been seen in greater numbers." A long-time Alaskan trapper, Oscar Vogel, recalled that wolves were scarce in the 1920's, but "by the early '30's they had arrived in force." From 1925, wolves were reported as increasingly common in McKinley Park and throughout interior Alaska.

Predator populations are, quite obviously, related to those of their prey.

Whatever "natural" cycles may have existed among animal populations in

Alaska were undoubtedly altered by the importation of reindeer. Unlike bison,

⁴³ A. Murie, Wolves of Mount McKinley, 14.

⁴⁴ Department of the Interior, Annual Report of the Governor of Alaska on the Alaska Game Laws, 1919; reprint in RG 126, Entry 1, File 9-1-33, Box 304, NA; Annual Report of the Governor of Alaska to the Secretary of the Interior, 1926, 63 (hereafter Governor's Annual Report).

⁴⁵ O. Murie to Nelson, draft "Report on Game and Fur Animals," 18 July 1923, MS 51, Box 4, Folder 5, ASHL; O. Murie, *Alaska-Yukon Caribou*, 8.

⁴⁶ Oscar Vogel, "My Years with the Wolves," *Alaska* 38:5 (May 1972): 11; A. Murie, Wolves of Mount McKinley, 15, 65.

which had been replaced in their habitat by cattle, reindeer had augmented the total prey population in western Alaska, since the caribou were still roaming in large herds. The irresistible question then concerns wolves: was their population trend of the 1920s related to the soaring reindeer numbers, which were easy prey and not receiving the benefit of close herding? Biologists Leopold and Darling flirted with the notion in their 1952 report, writing of "the wolves fattening and increasing on the thousands of strays."⁴⁷ The popular story of the time, however, held that wolves had not been present at the start of the reindeer industry.

The earliest report on western Alaska wolf numbers came from E.W. Nelson, who spent 1877 to 1881 in the western areas of Alaska prior to becoming head of the Biological Survey. He had seen numerous wolf skins at the trading post in St. Michael and established that wolves followed the great caribou herds during their large-scale wanderings. Yet these caribou are supposed to have shifted to the interior in the 1880s, leaving the reindeer ranges relatively predator-free. A 1922 Department of Agriculture bulletin said that depredations along the coast were not extensive and few wolves were present; a 1926 bulletin doesn't even mention wolves. Carl Lomen wrote of the wolf, "that great scourge of the North," appearing on the reindeer ranges in the 1920s. Other sources indicate that wolves moved into the western ranges in the 1930s,

⁴⁷ Leopold and Darling, Wildlife in Alaska, 62.

⁴⁸ A. Murie, *Wolves of Mount McKinley*, 12-13. Murie concluded from Nelson's comments that wolves were plentiful in Alaska, which seems a rather large extrapolation. Skoog summarizes historical references to caribou movements in "Ecology of the Caribou," 216-359.

⁴⁹ Seymour Hadwen and L.J. Palmer, *Reindeer in Alaska*, Bulletin No. 1089 (Washington, D.C.: GPO, Department of Agriculture, 1922), 52; T.S. Palmer, *Progress of Reindeer Grazing Investigations*.

when predation against reindeer herds became noticeable.⁵⁰ The importation of reindeer to Broad Pass was followed several years later by increased sightings of wolves in McKinley Park. Questions of causality in population ecology are rarely answered with high degrees of certainty and the evidence available for this question permits only provocative speculation. Nevertheless, the evidence points to increased wolf populations in the 1930s.

While increasing reindeer numbers may have been a factor in increasing wolf numbers, did the increase in wolves cause the collapse of the reindeer herds in the 1930s? Despite having as little proof to answer this question as the previous one, wolves offered the most convenient and popular explanation, since blaming the wolf cast no doubt on the ability or desire of the Natives to care for their herds, allowed for sympathetic appeals to the Territorial Legislature for bounty appropriations, and convinced the federal government to supply predator control agents.⁵¹ Although Leopold and Darling were willing to speculate that wolves increased because of reindeer, their conclusion concerning reindeer decline was definite: overgrazing of the range, not wolves, caused the population crash.⁵² Regardless of range problems, protection of the reindeer from wolf depredations would justify control efforts for years.

⁵⁰ Lomen, Fifty Years in Alaska, 284; Skoog, "Ecology of the Caribou," 333.

⁵¹ Alaska's newspapers were full of stories concerning reindeer killing by wolves, many of which will be cited later in this study. A 1942 history blamed the increase in wolves for the decrease in reindeer; see Brian Roberts, "The Reindeer Industry in Alaska," *Polar Record* 3:23 (January 1942): 569. A survey in 1948 of Natives and whites in the reindeer areas found that both listed wolves as the leading cause of decline of the herds; see Lantis, "The Reindeer Industry," 36.

⁵² Leopold and Darling, *Wildlife in Alaska*, 74; they noted the population cycle of reindeer on islands lacking wolves in the Bering Sea.

Predator-prey relations were complicated in this century by the dispersal into Alaska of the nonindigenous coyote, Canis latrans. Their species is thought to have been kept distinct from the wolf since the Pleistocene by geographic, behavioral, and ecologic boundaries, although coyotes can interbreed with wolves and dogs.⁵³ While pack structure can occur, coyotes are somewhat less socially organized than wolves; persecution by humans seems to play a factor in pack organization, as livestock ranges are usually populated by breeding pairs, while in protected areas such as national parks a greater degree of social bonding occurs.⁵⁴ Originally found on the plains and prairies, coyotes are opportunistic in diet, less able to bring down large prey animals and more dependent on scavenging, rodents and plant materials. Domestic sheep are easy prey, and coyotes became the primary target of informal and government predator control once wolves were eliminated. Despite control efforts, the adaptability of the coyote and its willingness to live in proximity with humans has allowed it to spread into areas cleared of forest cover by agriculture and the opening of predator niches caused by the elimination of the wolf.⁵⁵ By the 1850s coyotes had spread east into Illinois and Michigan, and west to the Pacific Northwest; by 1925, they were found in New England, the Hudson Bay region, and the Florida

⁵³ H.T. Gier, "Ecology and Behavior of the Coyote (*Canis latrans*)," in *The Wild Canids: Their Systematics, Behavioral Ecology, and Evolution*, ed. M.W. Fox, 247-62 (New York: Van Nostrand Reinhold, 1975), 260.

⁵⁴ Summary information from Sheldon, *Wild Dogs*, 30-39.

⁵⁵ Henry Hilton, "Systematics and Ecology of the Eastern Coyote," in Marc Bekoff, ed., Coyotes: Biology, Behavior, and Management, 209-28 (New York: Academic Press, 1978), 216.

peninsula. Coyotes are currently found from the Arctic coasts of Alaska to Nova Scotia and as far south as Panama.⁵⁶

Details of the spread of coyotes to Alaska is speculative, as various explanations have been offered with little evidence; a connection seems to exist between the sudden influx of humans to the north following the 1897 discovery of gold in the Klondike and the northward expansion of the coyote. An 1829 account placed the boreal maximum of the coyote as northern Alberta and Saskatchewan, but coyotes were killed near Whitehorse in 1907 and the Pelly district (Yukon) by 1912.⁵⁷ Lacking, however, is evidence of whether this extension of range was a gradual dispersal or, as is more colorfully assumed, coyote populations moved north suddenly, drawn by the trail of dead horses and garbage left by prospectors rushing north overland from Telegraph Creek and the Cassiar District of British Columbia.⁵⁸ Frank Dufresne, Executive Officer of the Alaska Game Commission from 1935 to 1944, supplied inconsistent reports: he wrote variously of the first coyotes appearing in southeastern Alaska at the turn of the century, of their first Alaskan appearance in 1925, and of their spread through half of Alaska's land area between 1913 and 1938.⁵⁹ Another account had

⁵⁶ Gier, "Ecology and Behavior," 248. Changing faunal distribution patterns still occur: puma (or cougar) tracks and sightings near Aklavik, Yukon Territory, in 1993-94 may indicate a northward spread of this carnivore; *Fairbanks Daily News-Miner*, "Migration of Cougar Draws "Wow," 7 February 1994.

⁵⁷ Young and Jackson, *The Clever Coyote*, 44-6. Young does here for the coyote what his 1944 work did for the wolf.

⁵⁸ J. Frank Dobie, *The Voice of the Coyote* (Boston: Little, Brown, and Company, 1949), 41-2; Gier, "Ecology and Behavior," 248; the dead horse theory appears frequently in the popular literature on the coyote.

⁵⁹ Dufresne, Alaska's Animals and Fishes, 84; Dufresne to Ernest Gruening, 14 January 1943, RG 101, Box 470, ASA; Annual Report of the Alaska Game Commission to the Secretary of Agriculture, July 1938 to June 1939 (hereafter AGC Annual Report).

the coyotes entering interior Alaska from the south by following the construction camps of the Alaska Railroad, a theory that fails to explain the genesis of coyotes in southcentral Alaska. 60 Their first mention in the annual reports filed by Alaska's governors occurred in 1916. The 1919 report postulated another route of immigration, from Canada via the White River into the Chisana and Nizina River valleys, where coyotes were reportedly harrying sheep and caribou. A trapper from the Kenai Peninsula, writing to the Alaska Game Commission, reported the arrival of coyotes in 1928. 61 In the Mount McKinley area, Charles Sheldon's keen eye failed to see any coyotes in 1907-8, but they were present in 1926, and by 1932 coyotes had increased in the park to become a "serious competitor" with the native carnivores, the wolf, wolverine, and fox. 62 The 1931 governor's report described a "heavy infestation" of wolves and coyotes with substantial losses of game in the McKinley region, and noted that coyotes had spread westward as far as Stony River on the Kuskokwim River and Marshall on the Yukon River. 63

Scientists and trappers alike viewed with alarm the spread of the coyote. Reports came back from Alaska of coyotes killing foxes, which were a valuable fur resource; of coyotes diminishing the populations of other carnivorous furbearers, such as marten and lynx, by competing for the smaller mammals and birds that formed their common prey; of coyotes killing the prized mountain

⁶⁰ Dixon, Birds and Mammals of Mount McKinley, 163.

⁶¹ Governor's Annual Report, 1916, 63; Governor's Annual Report, 1919, 62; AGC Annual Report, 1928.

⁶² Dixon, Birds and Mammals of Mount McKinley, 163-4; first reported by Dixon in "General Notes: A Coyote from Mount McKinley, Alaska," Journal of Mammalogy 9:1 (February 1928): 64.

⁶³ Governor's Annual Report, 1931, 84-5.

sheep; and of the threat to nesting waterfowl posed by this new four-legged "archpredator."⁶⁴ Known examples of the introduction of foreign species to North America carried unpleasant lessons—the English starling, the Norway rat—and the popular classification of coyotes as vermin put them in the same category. The coyote added ample justification for bounty appropriations and federal predator control projects in Alaska.

For Alaskans who counted on game as a food resource, the increased predator numbers of the 1930s represented a threat that had to be countered. Adolph Murie offered a biologist's explanation for the increased number of wolves: they were rebounding to a more usual level after being depressed, not simply increasing because of the introduction of reindeer. He speculated that recently-introduced canine diseases—mange, distemper, perhaps rabies—had reduced wolf populations following the influx of gold miners and their dogs at the turn of the century.⁶⁵ There may also have been perceptual differences: by the mid-1930s, the "wolf problem" had been effectively eliminated in the contiguous states by federal control programs (with the exception of the Great Lakes area), leaving Alaskans still confronting this wilderness denizen. Wolves and coyotes represented a symbolic threat, for their abundance cast doubt on the progress of civilization in Alaska. Euroamerican settlers expected a repeat of the familiar chronology of North American frontier development, which included

⁶⁴ E.A. Goldman, "The Coyote—Archpredator," *Journal of Mammalogy* 11:3 (August 1930): 328-9. Goldman was with the Biological Survey, which was engaged in aggressive coyote control in the western states.

⁶⁵ A. Murie, *Wolves of Mount McKinley*, 15-16. At least one contemporary wolf researcher disputes this theory, since the literature offers no positive evidence of Alaskan wolves being stricken with a canine disease; see Haber, "Socio-Ecological Dynamics," 28.

elimination of the wolf. Alaskan perceptions of their faunal resources can be illustrated by combining the general trends of the animal populations.

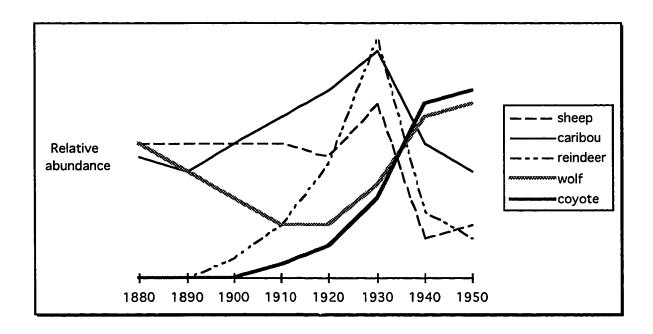


Figure 3. Prey and predator population trends in interior Alaska, 1880-1950.

These population trends of Alaska's prey and predators are approximate, summarized from historical references rather than from techniques available to modern wildlife biologists. No accurate counts of these animals existed prior to the widespread use of airplanes in Alaska's game management following WW II. The vertical axis is ambiguous, since the actual populations of the species vary widely, from over a million caribou to perhaps twenty thousand wolves, and because the guesses on total populations are only that. Olaus Murie, arguably as able a field biologist as any in the 1920s, estimated two million caribou in Alaska, but also estimated the Fortymile herd to range from one half million to one

million, a variation of one hundred percent. We don't know the actual populations, but the illustrated trends show what Alaskans thought was happening.

The relationships between these animals and Alaskan residents brought the wolf into prominent disrepute in the 1930s. The numbers of Dall sheep in McKinley Park, the animal so prized by sportsman and the reason for the park's creation, experienced a sharp decline well after the cessation of market hunting. The caribou herds of interior Alaska, important as a food source for residents of Alaska's largest town, Fairbanks, and others in the Yukon River drainage, dwindled markedly for no apparent reason. The reindeer, an animal predicted to have significant economic benefit to the territory, died by the hundreds of thousands after showing decades of promising increase. At the same time, wolf populations rebounded and the newly-arrived coyote became ubiquitous.

Subsequent advances in wildlife science allow us to recognize the variety of factors that led to some of these changes in animal populations. Climatic pressures and diseases curbed the excessive population of Dall sheep. Habitat alteration by humans and hunting with increasingly-effective weapons helped blunt caribou numbers; the herds also changed what humans regarded as traditional ranges, leaving hunters wondering where the caribou had gone. Overgrazing of available range caused starvation in the reindeer herds. The coyotes found abundant prey and a predator niche between the foxes and wolves. The wolf increase is still a mystery. But these explanations arose only in retrospect; game management was a young science in the 1930s, and the basic facts of predation seemed sufficient cause to blame declining prey populations on the coyotes and wolves.

Politically, these trends were a potent brew. While no one could control the weather conditions, or caribou dispersal, or the growth rate of lichens, people could hunt predators.

CHAPTER 4

BOUNTY HUNTING AND WOLF PROTECTION IN ALASKA

If the history of predators in the western states had been repeated in Alaska, the National Park Service would be seeking to reintroduce the wolf to its lands. A familiar sequence started in Alaska, with wolf shooting by white settlers a matter of course, followed by a government bounty system that didn't seem to curb predator numbers, a livestock industry which suffered depredations, and finally the arrival of the formal organization, expertise, and tools of the Biological Survey hunters. No one seriously expected to eliminate wolves from Alaska, with its vast size, amount of forest cover, and sparse human population, but the government experts were fully confident of their ability to eliminate the wolves from the areas of white settlement, preserve the herds of caribou and moose for human use, and protect the reindeer industry. The National Park Service had been a partner in this campaign in the states, but took a new attitude toward park predators in the 1930s. Mount McKinley National Park became the testing ground for their protective stance toward the wolf.

Alaska Natives held no particular antipathy toward to wolf, regarding it with a measure of respect as another hunter upon the landscape and as a source of useful fur. Trapping methods predated European contact, as Georg Wilhelm Stellar, the naturalist aboard the Bering/Chirikov expedition of 1740, found a wooden torsion trap washed up on the beach of the posthumously named Bering

Island, where the expedition foundered on its way back to Russia.¹ These traps, using the power of twisted sinew to drive a spike into the animal's head, remained in use even after the introduction of metal traps in Alaska. Inupiaq Eskimos softened a pointed strip of whalebone, bent it into an 'S' shape, concealed the bone inside a piece of blubber, and let it freeze; the bone would straighten out inside the wolf's stomach and eventually kill the animal. Yupik Eskimos used pit traps with camouflaged tops insufficient to hold the wolf's weight.² Another type of Eskimo trap was described in an 1829 report as a box made of slabs of ice, into which the wolf was lured by a bait and killed by a triggered deadweight slab.³ Ingenious as these methods were, they posed no threat to wolf populations.

Even though the bounty system had, by the turn of the century, proven a costly failure in the western states, Alaskans enthusiastically adopted bounties on unwanted animals. The 2nd Territorial Legislature in 1915, in its third act, appropriated twenty thousand dollars in order to pay a ten dollar bounty on wolves, the act specifically to "preserve the food supply of Alaska." This was raised to fifteen dollars in 1917, twenty dollars in 1935, thirty dollars in 1945, and

¹ Gerstell, *The Steel Trap*, 23.

² Edward W. Nelson, *The Eskimo About Bering Strait* (Washington, D.C.: GPO, 1899; reprint, Washington D.C.: Smithsonian Institution Press, 1983), 121-3 (page numbers are to reprint edition).

³ Young, Wolves of North America, 297. This may be one of the stories Young accepted uncritically.

⁴ Alaska Legislature, An Act to Preserve the Food Supply of Alaska, Placing a Bounty on Certain Wild Animals and Providing for the Payment of Same, 2nd sess., 1915, S.B. 11.

fifty dollars in 1949, where it would remain.⁵ A further indication of changing wolf and coyote populations may be gained from bounty records: 467 wolves were turned in for payment in 1921-22, while about 1,300 wolves and coyotes were claimed in 1925-26, prior to organized control efforts.⁶

Bounties were created for other animals as well. The bald eagle was placed on the list in 1917, initially worth fifty cents. Although protected in the states since 1940, the eagle was legally hunted in Alaska until 1953, when federal legislation finally overturned the ability of the Territorial Legislature to offer a bounty for them. Between 93,000 and 103,000 eagles were killed, and over \$164,000 paid for them. Alaska Governor Ernest Gruening, appointed in 1940, opposed the eagle bounty from the beginning of his tenure. His arguments to the legislature cited scientists as well as the deleterious effect on public opinion created by the eagle bounty, such as a 1949 *Denver Post* article: "The Alaska Legislature, hoping to become the 49th state under the wings of the eagle, nevertheless voted Wednesday to place a bounty on eagles." Eagle bounty appropriations were consistently passed by the Territorial Legislature with near unanimity, indicating the fiscal popularity of this activity in Alaska's narrow economy. Persecution of the eagle was promoted and partially paid for by the salmon industry, which was also responsible for starting bounty appropriations

⁵ Donald E. McNight, *The History of Predator Control in Alaska*, (Juneau: Alaska Department of Fish and Game, 1970), passim. Subsequent details on animals bountied and payments are taken from this nine-page summary unless otherwise indicated.

⁶ McNight's report lists 1,467 wolves bountied in 1925-26, while an earlier report from a Biological Survey predator agent lists 1,111 wolves and coyotes for those years; Harlan H. Gubser, "Report to the Governor of Alaska on Cooperative Predatory Animal Investigations and Control in Alaska," 1 March 1931, RG 101, Box 470, Alaska State Archives (hereafter ASA).

⁷ Gruening to Speaker of the House, 21 March 1949, RG 101, Box 470, ASA.

for hair seals (1927) and Dolly Varden char (1933). These three animals were thought to be hurting potential fisheries profits, and the public popularity of bounties easily convinced legislators that helping the salmon industry meant helping Alaskans. The fishing industry could not be ignored, either: in 1931 and 1932 it accounted for eighty-one percent of the territory's revenues, and in 1933 added \$15,000 to the char bounty fund, doubling the government's contribution.8 Dried trout tails were accepted by storekeepers as tender in Bristol Bay villages, and over one million tails, worth 2 1/2 cents each, were turned in to the Bureau of Fisheries in 1938.9 The char bounty was dropped in 1941 because of rampant fraud, with many thousands of rainbow trout, steelhead, and grayling tails submitted for payment. 10 Coyotes were added to the official bounty list in 1929, as was the wolverine in 1953. Governor Gruening had proposed eliminating all bounties during the war years, calling them an "expensive and short-sighted territorial delusion," but they persisted. 11 Almost three million dollars were cumulatively paid in bounties prior to statehood in 1959, with bounties on wolves, coyotes, and seals accounting for ninety percent of the payments.

⁸ "Message of Gov. George Parks to the Eleventh Session of the Alaska Territorial Legislature," n.d., RG 101, Box 349, ASA; Gov. John Troy to Hans Seversen, Iliamna, 28 June 1933, RG 101, Box 349, ASA.

⁹ Editor's response to letter, *The Alaska Sportsman* 5:6 (June 1939): 4; "From Ketchikan to Barrow," *The Alaska Sportsman* 4:11 (November 1938): 19.

¹⁰ An article apologizing for the "occasional" rainbow trout taken for bounty is Joseph Lester, "Come and Get 'Em," *The Alaska Sportsman* 4:11 (April 1940): 8-9, 24-25. Alaskan Russell Annabel castigated the char bounty in "Flying in for the Big Ones," *Field and Stream* 46:9 (January 1942): 16-18, 57, 68-9. Annabel recounts spending a day with a gill-netter who caught 700 rainbow trout, lopped off their tails, and threw them overboard, which yielded \$10 for his efforts.

¹¹ Ernest Gruening, Many Battles: The Autobiography of Ernest Gruening (New York: Liveright, 1973), 318.

Bounty hunting had significant economic and social impacts, becoming a source of cash in rural Alaska. Numerous arguments in favor of bounties noted that Alaska Natives would be the principal recipients; this held particular importance before the late 1940s, when significant federal aid monies began to flow to Natives. 12 While furbearing animals had long been the sole significant income for many Alaska Natives, bounties allowed wolves to serve as a source of money. 13A white trader in the Copper River Valley, John McCrary, commented that "There has been no Wolves or Cyotes Dug out or Shot Since the Bounty Money run out Natives refuse to hunt them if the money is not in Sight There fore we Will have More Wolves and Cyotes Next season" [sic]. 14 Some Native groups changed their hunting patterns from winter—when wolf fur was at its best—to spring, since finding a litter of pups in a den was far more lucrative. 15 Pups paid full value: one miner near Fairbanks found a litter of thirteen and proudly posed for a picture, the pups worth twenty dollars each. Another claimant with tiny pup hides and attached front leg bones (required for a bounty claim) made some calculations with the wildlife agent and concluded the bones

¹² Robert F. Scott, "Wildlife in the Economy of Alaska Natives," in *Transactions of the Sixteenth North American Wildlife Conference* (Washington, D.C.: Wildlife Management Institute, 1951): 514. A game warden calculated in 1954 that bounty payments in the village of Anaktuvuk Pass amounted to \$44.40/person; Ray Tremblay, *Trails of an Alaskan Game Warden* (Anchorage: Alaska Northwest Publishing Company, 1985), 130. Also Leopold and Darling, *Wildlife in Alaska*, 44.

¹³ A Koyukuk Native recalled that his village began broadcasting poison baits for wolves in 1926 specifically because of the bounty incentive; Sidney Huntington, "Koyukuk and Yukon Valley Wildlife, Yesterday and Today," *Alaska* 51:1 (January 1985): 62. The Alaska Game Commission outlawed use of poison in the 1930s because of its indiscriminate harvest of other furbearing animals.

¹⁴ Alaska Game Commission, Annual Report of the Executive Officer to the Alaska Game Commission, 1938, 84; hereafter Exec. Officer's Annual Report to AGC.

¹⁵ Stephenson and Ahgook, "The Eskimo Hunter's View," 287.

were worth forty times their weight in gold. 16 Trapping was the most popular method of obtaining wolves, as good shooting opportunities were usually spontaneous rather than calculated. Following World War I, the Oneida company developed a special trap for the Alaskan market, the double long spring, 8 1/2 inch toothed-jaw No. 114. Magazine advertisements urged trappers to "Cash in!" and "Be sure of your share of the bounty." Game wardens distributed No. 114s at Seattle cost, \$32.28/dozen, to "bona fide trappers who will use them exclusively for predatory animal work," as well as free of charge to Natives in the reindeer areas.¹⁸ The financial incentive for wolf trapping included the price paid for the pelt, which was as high as fifty-five dollars in the 1930s, but more typically stayed in the twenty-dollar range. 19 Alaska's bounty system was lucrative enough to entice both whites and Natives to smuggle wolf and coyote pelts from the adjacent Yukon Territory, where bounty payments had been halted between 1933 and 1946. To curb these, Alaskan game wardens conducted joint patrols with their Canadian counterparts, confiscating pelts and often banned strychnine.²⁰

¹⁶ "From Ketchikan to Barrow," *The Alaska Sportsman*, 6:10 (October 1940): 21; "From Ketchikan to Barrow," *The Alaska Sportsman*, 8:9 (September 1942): 17.

¹⁷ Gerstell, *The Steel Trap*, 200; Oneida ads were common in *The Alaska Sportsman* in the 1930s and 1940s.

¹⁸ Memorandum to wardens from Clarence Rhode, Alaska Game Commission, 6 May 1931; Harlan Gubser, "Report of Predatory Animal Control, Alaska District, 1 July 1937 to 31 December 1937;" both in RG 101, Box 475, ASA.

¹⁹ C.R. Snow, "The Trap Line," *The Alaska Sportsman* 1:6 (December 1935): 20.

²⁰ Bernard L. Smith, "The Status and Management of the Wolf in the Yukon Territory," in *Wolves in Canada and Alaska*, Ludwig N. Carbyn, ed. (Edmonton: Canadian Wildlife Service Report Series Number 45, 1983), 48. Wildlife Agent Sam White gained renown for his pioneering use of aircraft in game management. His month-long aerial patrol with an RCMP constable allowed the speedy prosecution of violators in either Eagle or Dawson, saving "a considerable

Bounty hunting was a way to get some cash, and the Depression forced many Alaskans to the forests and hills in search of wolves. In the dusty 1930s the images of the forests and waterways in Alaska, where a straight-shooting man could go where he pleased, answer to no boss, and hunt varmints all day, must have been powerfully appealing in the states. Articles in The Alaska Sportsman magazine lauded the life of the bounty hunter and implied that an adequate income could be obtained from the pursuit, at least in southeast Alaska. "Adventurous Life" and "The Life that Never Knows Harness" are typical of the genre: "My ambition had been to find an isolated spot where I could make a living without working for someone else;" "I like to fish and hunt—particularly to hunt for these highwaymen of the sea and air and forests." The magazine offered regular 'how-to' articles on wolf trapping and claiming bounties, as well as placing bountied animals in the same category of economic resources as salmon, mink farming, prospecting, and logging.²¹ Appropriations for wolf and coyote bounties rose from a low of \$7,000 in the 1921-22 biennium to \$165,000 by the 1937-38 biennium, a not insignificant amount of money spread over a population of only 70,000.²² Bounties provided a public service where opportunities were limited. Few politicians in Juneau could fail to be moved by a

sum which would have gone toward illegal bounty claims." From White, "Report of Cooperative Boundary Patrol, March 9 to April 7, 1939," RG 101, Box 474, ASA.

²¹ From *The Alaska Sportsman*, see Harold Snyder, "Adventurous Life," 6:10 (October 1940): 10; D.L. Sancrant, "The Life that Never Knows Harness," 7:5 (May 1941): 12; Elmer Perkins, "Bounty Hunter," 4:5 (May 1938); William Putvin, "Wolves, Eagles, and Seals," 6:1 (January 1940); C. R. Snow, "The Trap Line," 1:6 (December 1935); Frank North, "Wilderness Opportunities," 6:7 (July 1940).

²² McNight, *History of Predator Control*, 4. Alaska's 1939 census showed a population of 72,524, from George W. Rogers and Richard A. Cooley, *Alaska's Population and Economy* (College, Alaska: University of Alaska, 1963), Table P-3.

plea from the director of an orphanage in Seward to increase bounties so that his young men could "take advantage of this opportunity to earn a livelihood and at the same time help the salmon and game birds and aminals [sic]"²³

The New Deal came at an opportune time for conservation projects, as the recognition of resource exigencies and an available work force needed only federal money for action. In Alaska, the Civilian Conservation Corps (CCC) not only built public works such as recreation cabins in national forests, but also participated in predator control. The government offered thirty dollars per month exclusive of board and clothes for predator control workers in the Kotzebue area and had difficulty recruiting workers because they were not permitted the proceeds from the sale of pelts. Thirty dollars was enough to convince someone to take the malodorous job of manning the CCC-constructed scent-bait building; scent-baits, composed of both "natural" and "fetid" materials, were distributed free to trappers, and the caretaker had to keep the fire stoked in the building to "hasten the aging of the scent." 24 As many as fifty CCC men were proposed to work in southeast Alaska, to remove them from the "relief rolls" and from "competition" with the residents of the towns, although it is likely the supervisors, who were paid \$2,500 annually and were veteran trappers, were responsible for most of the wolf kills.²⁵

²³ Charles T. Hatten to Gov. Troy, 22 May 1933, RG 101, Box 349, ASA.

²⁴ Harlan Gubser, "Report of Predatory Animal Control, Alaska District, 1 July 1937 to 31 December 1937;" D. Wood, Jr., "Report of Predatory Animal Control, Alaska District, 1 January 1938 to 31 March 1938;" both in RG 101, Box 475, ASA.

²⁵ "A Plan for Special Wolf Control Work in Southeastern Alaska under Federal Emergency Relief Administration Funds," n.d., RG 101, Box 475, ASA; Albert Schueneman, "I Match Wits With Wolves," *The Alaska Sportsman* 7:4 (April 1941): 18.

These CCC crews were not the first wolf hunters on the federal payroll, however. The government first came to Alaska's aid against the wolf in 1923, when the "most expert hunter" of the Biological Survey came to the islands of southeast Alaska to determine if control could be done "as successfully as has been done . . . in the Western States." A combination of trapping and poisoning was deemed a success, with further success possible when federal funds would become available. 26

Funds became available three years later, and federal wolf control moved to mainland Alaska in 1927. A cooperative agreement was signed that summer between the Territorial Governor, the Alaska Game Commission, the Forest Service, and the Biological Survey.²⁷ The Territorial Legislature provided \$10,000, the game commission offered information collected by its fur wardens, the Forest Service loaned a ranger boat in southeast Alaska, and the survey contributed an additional \$2,000 and a wolf hunter, one R.K. Stewart. His mission was to "eradicate the wolves and coyotes in Alaska" and to provide demonstrations of technique for others. Private trappers would be provided with traps and scents and ostensibly spurred by the incentives of bounty payoffs, although these had been reduced from \$15 to \$10 in order to fund the territorial contribution to this control project.²⁸ Stewart spent two years on an initial survey, traveling widely

²⁶ Governor's *Annual Report*, 1923, 50; Governor's *Annual Report*, 1924, 33. The hunter was Stanley Ligon, a veteran survey agent; in one of the ironies of history and nomenclature, the wolf subspecies of the Alexander Archipelago would be named *C. lupus ligoni*.

²⁷ Following information taken from Stewart's "Report to the Governor of Alaska on Cooperative Predatory Animal Investigations and Control in the Territory, March 1, 1929," File 639.9, St3r, ASHL.

²⁸ Territorial appropriation for bounties were \$30,000 in 1927-28 and \$25,000 in 1929-30, rising to \$40,000 in 1931-32 with a \$15 bounty for both wolf and coyote; see McNight, *History of Predator Control*, 4.

and contacting hunters, wardens, traders, and trappers, noting that many traveled considerable distances at their own expense for "personal contact with the leader." Governor George Parks, while approving this effort, plead for further federal assistance for a "comprehensive program," and suggested that a funding level three times greater would allow for effective action "while there is still time to destroy these animals."²⁹

During his inspection tours, Stewart was joined in McKinley Park for two days in the summer of 1928 by Paul Redington, Chief of the Biological Survey, to survey the situation with Harry Karstens, the park's superintendent. Redington subsequently sought to enlist the cooperation of the National Park Service in the control effort by writing to Acting Director Arthur Demaray, informing him of the "bad condition of affairs," that the wolves had scattered the mountain sheep so that it was "more and more difficult for tourists to observe them," and suggesting the financial support of the Park Service to aid in the "eradication of predatory animals." Demaray offered the services of a ranger patrol in the park, but little else. Governor Parks put the matter more bluntly to Demaray the following summer, describing the cooperation between the territory and the Biological Survey, their \$20,000 budget, the "encroachment" of wolves and coyotes on the park, and the inability to protect the park's game animals unless financial cooperation was available. Demaray again had nothing to offer. With

²⁹ Governor's Annual Report, 1928, 10; Governor's Annual Report, 1929, 12.

 $^{^{30}}$ Redington to Demaray, 19 November 1928; RG 79, Entry 7, File 719, Box 1415, NA.

³¹ Quoted in "Résumé of Principal Correspondence on Sheep-Wolf Relations at Mount McKinley National Park," no author; RG 79, Entry 7, File 719, Box 1415, NA.

³² Redington to Demaray, 7 June 1929; Demaray to Redington, 20 June 1929, RG 79, Entry 7, File 715, Box 1415, NA.

or without the Park Service, R.K. Stewart had completed his surveys, the 1929 Territorial Legislature appropriated \$30,000 for the predator control project for the next biennium, and the campaign began in earnest.

The town of Chitina became Stewart's base of operations for two reasons: its rail access to the port of Cordova, and the supposed coyote migration route from Canada through the nearby White River. Stewart hired trappers to work in the Talkeetna Mountains, and in July, 1929, he hired two men to assist him directly: C.L. Gelsinger, 45-years old, and Ed Steen, a 26-year old ex-Marine. The three men traveled the Kotsina, Kluwesna, and Kuskulana Rivers, with a trip north to the Nabesna River, trapping and living with Natives to instruct them in trapping. Stewart wrote a brief progress report to Governor Parks in November in which he noted that private trappers were harvesting coyotes in increasing numbers after his "coaching," and emphasized that salaried hunters would not be as effective as the cooperative method between his team and private trappers. The response of the trappers led him to optimistically state that "the problem may be worked out well and that we may confidently look for a practical solution of this rather serious matter."³³

Six months later, however, Stewart was relieved of his duties. Discontent surfaced first from Ed Steen, who took the time on Christmas Day to write to Governor Parks about being fired by Stewart. Steen cast doubt on Stewart's trapping ability, noting that during their six months of field work they had trapped only two coyotes, one fox, two bears, and several lynx. Steen predicted the following season of trapping would yield little, and felt the entire predator menace existed only on paper. In contrast to Stewart's reports, Steen claimed that

³³ Stewart to Parks, 2 November 1929, RG 101, Box 303, ASA.

Stewart was in "hot water" with the private trappers because of the reduction in bounty, costing him "confidence and cooperation." In Steen's eyes, Stewart's chief asset was a ability to "compose an elaborate and convincing report." The letter to Watson was not the only penned that day by Steen, for his trapping partner Gelsinger also received the news of Steen's dismissal.

The general store in Copper Center had a typewriter and Gelsinger used it to inform Steen that he had resigned December 26.

... Ed sure appreciate having all I want to eat onc more and as soon as i get out i am going to have a medical board examine as to sanity for there must be something seriously rong with a fellow to go back there where we went and go through what we went through for what we got out of it... if what I went through is training a man to trap I am a siwash and dont know it... Ed if you took his typewriter away from him he would be like a men without arms or legs and half a head and helpless but also harmeless to the Territory which would be a good thing for the people here. we dont kneed him here... is about as mutch use to us here as six tails would be to a dog... I took the trouble to show him the facts and figures where the whole system was a huge joke on the Territory... it would not only be a waste of my time but a waste of Territory funds to continue farther under the present system." 35

Stewart had previously noted that the trio spent most of their time traveling, doing camp chores, or administrative duties, rather than trapping or teaching. Salary differences may have fueled resentment, for while Steen and Gelsinger each earned \$471 for their efforts Stewart was receiving an annual salary of \$3,600.36 Gelsinger's letter found its way to the governor's office in late

³⁴ Steen to Watson, 25 December 1929, RG 101, Box 303, ASA.

³⁵ Gelsinger to Steen, 13 January 1930, RG 101, Box 303, ASA. The apparent errors in my transcription are those of the original.

³⁶ Stewart, "Fiscal Summary Report," November 1931, RG 101, Box 303, ASA.

February, and by May Stewart had been reassigned with the Biological Survey to duties outside Alaska.

Another trapper working under the indirect reins of Stewart in the winter of 1929-30 was Harlan Gubser, who had led wolf surveys in the Talkeetna Mountains and eastwards to Chisana. Gubser had been no more successful than Stewart at finding wolves and coyotes, but he assumed leadership of the territorial project—at the same salary—amidst growing controversy over wolf control. The reduction in bounty money was unpopular and trappers claimed there was insufficient incentive for trappers to seek wolves, an argument game warden Sam White found "absurd;" he criticized them for operating solely with "mercinary" [sic] motives rather than a "sense of loyalty" toward the "campaign on the predatory animals."³⁷ Trappers in the interior complained they were running out of ammunition for defense against the packs, and that wolves were eating everything including lynx and fox.³⁸ From the western part of the state, reports increased about the reindeer herds being severely depleted by wolves, and Gubser made a trip to the reindeer areas to verify these in the summer of 1930.

Gubser's initial report to Governor Parks confirmed the reports of localized depredations, but also observed that appropriate herding of the reindeer was ignored by their owners and much of the losses were simply due to scattering of the animals. Since the region was so large, Gubser recommended against employing salaried hunters, but instead proposed working with the

³⁷ White to H.W. Terhune, 29 January 1930, RG 101, Box 303, ASA.

³⁸ Fairbanks Daily News-Miner, "Wolves Depleting Fur Bearers Thru Interior District," 8 February 1930.

Natives to increase trapping productivity.³⁹ A hunter began control duties in September in the lower Yukon, and Gubser's participation with setting up his initial camp by backpacking supplies up to 60 miles through a "continuous downpour" may have contributed to his comment that year to E.W. Nelson that even if large numbers of predators were taken, it would not justify the expense of "operations of this character in remote sections."⁴⁰

Nevertheless, Gubser's report on activities through 1930 cast the program in a positive light, noting that while one man could hardly halt depredations in the entire reindeer country, the Native trappers had been receptive to his demonstrations and gifts of scent baits. Overall, he claimed an increase of 88 per cent in wolves taken in the four years following the inception of the control program. Although he claimed success at his mission, he warned of the predators "waiting like a smouldering fire" for favorable conditions to increase their activities against their prey. In May 1931, however, Governor Parks offered office space and clerical help for Gubser's work, but declined to contribute further funds to the cooperative project. He had been advised by H.W.

Terhune, the Executive Officer of the Alaska Game Commission, that the reports of wolf depredations by the reindeer supervisors had "no real foundation,"

³⁹ Gubser to Parks, 6 July 1930, RG 101, Box 318, ASA.

⁴⁰ Gubser, "Report to the Governor of Alaska on Cooperative Predatory Animal Investigations and Control in Alaska, 1 March 1931;" Gubser to Nelson, n.d. 1930; both RG 101, Box 318, ASA.

⁴¹ Gubser, "Report to the Governor of Alaska on Cooperative Predatory Animal Investigations and Control in Alaska, 1 March 1931;" RG 101, Box 318, ASA.

⁴² Telegram from Redington to Parks, 4 May 1931, RG 101, Box 318, ASA.

based on the field reports of Terhune's wardens.⁴³ Parks expressed regrets that this "very necessary work" should end, but realistically concluded it would be up to local people to halt the depredations.⁴⁴ The cooperative project officially ended when Gubser transferred all of the equipment—traps, sleds, tents, pots, and pans—to the Alaska Game Commission. Yet the plea for wolf control would continue from western Alaska, and Harlan Gubser would soon be back on the reindeer ranges.

The National Park Service stood alone among federal agencies in not cooperating with the predator control project, despite having previously been a partner with the Biological Survey in ridding other national parks of predators. The Biological Survey's Paul Redington once again solicited the Park Service in a 1932 letter to Director Horace Albright:

At the proper time, if you desire any help in regard to any special predatory animal problem in the Park, I wish you would let us know. We might be able to have Mr. Gubser of our organization, now working in Alaska, aid in the control of the wolves and other animals that are destroying the beneficial wildlife of the Park.

Scrawled across the page was a reaction from Harold C. Bryant, Assistant Director of Research and Education: "Why designate game in a national park as any more beneficial than predators. Think we need to take a broad view on this, N.P.S. is the only bureau that can."

⁴³ Terhune to Parks, n.d.; Mark A. Winkler to Terhune, 25 April 1930, RG 101, Box 303, File 25, Folder 4, ASA.

⁴⁴ Parks to Redington, 5 April 1932, RG 101, Box 333, Folder 4, ASA.

⁴⁵ Bryant marginal note on Redington to Albright, 15 March 1932, RG 79, Entry 7, File 719, Box 1415, NA.

Horace Albright was no friend of park predators; he had overseen the elimination of the wolf in Yellowstone during his superintendency in the 1920s. Writing in 1929 on "Our National Parks as Wild Life Sanctuaries," he described the threat posed to McKinley's sheep by wolves, who were "rapidly increasing in northern Alaska, following the reindeer south, and overrunning Mt. McKinley Park." Predators needed controlling to enhance the "species of animals desirable for public observation and enjoyment."46 Albright visited McKinley Park in 1931, primarily to inspect the road and hotel construction, yet he also surveyed the game situation and learned that sheep populations were healthy. In his annual report, Albright noted that park rangers were "watching this situation carefully and control measures will be taken as necessary."47 Harry Liek, an Albright protégé from Yellowstone days, hosted his boss in McKinley Park; Albright had made sure Liek became the park's second superintendent in 1928. Liek had plenty of experience shooting predators in Yellowstone, and continued that standard practice in Alaska, making "determined efforts to stamp out the predatory animals." Albright authorized McKinley's rangers to "kill wolves on sight."48

⁴⁶ Horace M. Albright, "Our National Parks as Wild Life Sanctuaries," *American Forests* 35:8 (August 1929): 536.

⁴⁷ Department of the Interior, Annual Report of the Director of the National Park Service to the Secretary of the Interior, 1931, 64; Albright's visit is described in Brown, History of Denali, Chapter 8.

⁴⁸ Harry Liek, out on coyote patrol in Yellowstone, had once received a taste of his own medicine when a fellow ranger mistakenly put strychnine rather than baking powder in the flapjacks; see Haines, *The Yellowstone Story*, 313. See "Report of Supt. Harry J. Liek," in Department of the Interior, *Annual Report of Director of the National Park Service to the Secretary of the Interior* (1930). Authorization to shoot wolves recounted in a letter, Albright to W.B. Bell (of the Biological Survey), 16 November 1931, RG 719, Entry 7, File 719, Box 1415, NA.

Considerable sheep mortality occurred in 1932, the year of the severe ice-crusting, yet Liek blamed the sheep losses on the wolves and coyotes and urged their eradication.⁴⁹ Shortly afterward, Harold Bryant voiced his dissent on wolf management in the park. In response to Liek's views, Bryant argued:

The National Park Service needs to champion the idea that there is interrelation between living forms, and that the best attitude is to believe that they each have a function and that the chain of interrelation is easily broken by man's interference. With that view, instead of emphasizing the protection of one species as against another, we should cherish and protect all forms of life. Any move to destroy wolves in McKinley will have to be made over my continued protest."50

Albright responded one month later, in a memorandum to the wildlife staff. He felt it "absolutely necessary" that wolves be controlled. Given the vast size of Alaska, wolves could never be eliminated, and there was no reason to make the park a "wolf preserve." On the basis of his visit, Albright felt "the sheep constitute about the only interesting thing for the tourist to see in this park when the mountain [Denali] is enveloped in clouds, as it often is." Bryant reacted vigorously and succinctly six days later. "I stand firm on my protest against control of wolves in Alaska. My argument is based on a broad biological viewpoint rather than on the limited one of wishing to display sheep to the public." The following day, Albright again turned to the wildlife staff for advice. "Why should we take any chances on having our magnificent display of sheep lost to the public?" While criticism might be received from scientists, "if we lose

⁴⁹ Superintendent's "Annual Report," 1932, DENA.

⁵⁰ Bryant to Albright, 17 December 1932, RG 79, Entry 7, File 719, Box 1415, NA; emphasis in original.

those marvelous bands of sheep we are going to be criticized by the public at large, and rightly so."51

Albright and Bryant were not even arguing the same issue. Albright had been with the Park Service from its inception and had played a central role in educating and enthusing Americans about national parks. To ensure the success of the parks, they needed visitors who would become park supporters, and Albright excelled at park promotion. His concerns over animals focused on their availability for public viewing. Yellowstone's fame resulted from its thermal features and game herds; McKinley's fame rested on a mountain rarely seen and its game herds, especially the sheep which could be seen nowhere else by the tourist. Harold Bryant's background and professional affiliations were in science, and he felt preservation to be the highest motive of the national parks. He too encouraged public use of the parks, yet he wanted visitors to reach an understanding of natural processes, not merely view a sanitized version of nature.

Bryant was the highest ranking biologist in the Park Service and clearly sought to keep science at the forefront of policy development, rather than allowing public opinion to dictate how parks should be managed. His attitude toward predators did not arise whimsically from his pen, nor was he the first to raise a voice in defense of wolves, but his position with the Park Service was important in causing it to be the first government agency to propose protecting wolves rather than killing them. Bryant's stance was the result of evolving

⁵¹ Albright to staff, 17 January 1933; Bryant to Albright, 23 January 1933; Albright to staff, 24 January 1933; all RG 79, Entry 7, File 719, Box 1415, NA.

attitudes in the scientific community toward predation, which resulted in a redefinition of the role of animals in the national parks.

Harold Bryant earned a doctoral degree in zoology from the University of California Berkeley in 1910. His dissertation advisor was Joseph Grinnell, a seminal figure in American vertebrate biology; one of his legacies, through his students, was a profound impact on wildlife management in the national parks.⁵² Born in 1877 in Indian Territory of Quaker parents, Grinnell's predeliction toward natural history showed early. A self-described "bird-fiend," by age eighteen he catalogued his first avian collection, taken from the Pasadena area where his family had settled, and he had established his reputation as a field ornithologist by the time he entered Stanford for graduate work in 1900.⁵³ A private benefactor endowed the Museum of Vertebrate Zoology at the University of California, and Grinnell became its first director in 1908, a post he held to his death in 1939. While questions of species distributions and the habits of birds dominated his research, he increasingly took an interest in conservation matters during his later life.⁵⁴

⁵² The ecologist G. Evelyn Hutchinson stated "Joseph Grinnell was perhaps the greatest student of North American birds and mammals whom the continent has yet produced;" quoted in Steven G. Herman, The Naturalist's Field Journal: A Manual of Instruction Based on a System Established by Joseph Grinnell (Vermillion, South Dakota: Buteo Books, 1986), 3. Herman's book describes one of Grinnell's legacies, a standard field notation system still taught in American universities.

⁵³His widow, Hilda Wood Grinnell, contributed a biography to the journal Joseph had long edited, which describes well his vigorous and prolific scholarly life; see "Joseph Grinnell: 1877-1939," *The Condor* 42:1 (January-February 1940): 3-34. Grinnell's second bird collection came from Alaska, on a youthful 18-month adventure with friends to the gold rush on the Bering Sea. They didn't find much gold, but upon return he published *Birds of the Kotzebue Sound Region*, Pacific Coast Avifauna No. 1 (Santa Clara: Cooper Ornithological Club, 1900). The "bird-fiend" is from this, page 3.

⁵⁴ Grinnell, "Joseph Grinnell: 1877-1939," 16-17.

Areas that then or later became California's national parks—Yosemite,
Death Valley, Lassen, Sequoia—were well-known to Grinnell from his field
forays. National parks had been founded for scenery's sake rather than to protect
wild animals in their haunts, but for scientists they functioned as natural
laboratories for taxonomic work on classifying species and for testing theories on
population dynamics. Even before the establishment of the Park Service by
Congress, Grinnell recognized an important value of parks to scientists: "they
furnish samples of the earth as it was before the advent of the white man." He
recommended the "rigid exclusion" of domestic animals from parks, and the
minimization of roads, buildings, and other human modifications. What Grinnell
and his students sought to retain would become a central concept of wildlife
management in national parks, the notion that "from the plant and animal life of
the parks, their original balance should be maintained."55 For these biologists, the
parks represented an unprecedented opportunity to preserve not just scenery,
but the balance of nature itself.

Significant changes in the balance of nature concept in the western world occurred had recently occurred, changes which would result in the discipline of ecology. Extending from ancient Mediterranean cultures through early Christianity to the mid-1800s was a cosmology of a world shaped by the gods for the good of humans.⁵⁶ This was unchallenged by the leading natural historians of

⁵⁵ Joseph Grinnell and Tracey Storer, "Animal Life as an Asset of National Parks," *Science* 44 (15 September 1916): 377, 379, 377.

⁵⁶ See Frank N. Egerton, "Changing Concepts in the Balance of Nature," The Quarterly Review of Biology 48:2 (June 1973), and Clarence J. Glacken, Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century (Berkeley: University of California Press, 1967).

eighteenth century Europe. As two examples, the Swede Carl Linnaeus, remembered by posterity for his system of taxonomic organization, was fully convinced of the divine origin of the natural order and of man's place in it: everything seemed "intended by the Creator for the sake of man." A French natural historian of the era, Count Buffon, saw humankind as the necessary and beneficial agent in transforming the face of the globe, replacing "wild nature" with "new nature." In the nineteenth century, however, Charles Lyell's 1830 Principles of Geology and Charles Darwin's 1859 Origin of Species cast doubt on the idea of an orderly world divinely-created for humans. In 1864 American George Perkins Marsh published Man and Nature, a book that would presage much of the conservation movement in this country. Marsh argued that human activity largely determined the health of the landscape, and that cumulative human activities usually resulted in large-scale degradation of the earth, to the eventual detriment of society:

But man is everywhere a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned to discords. The proportions and

⁵⁷ Quoted in Worster, *Nature's Economy*, 36; this book concerns the cultural history of the science of ecology, and his debt to Linnaeus' thought is clear from the title of Linnaeus' 1749 book, The *Economy of Nature*.

⁵⁸ Quoted in Glacken, Traces on the Rhodian Shore, 663.

⁵⁹Worster's *Nature's Economy* provides good access to these intellectual questions.

⁶⁰ Conservationist and former Secretary of the Interior Stewart L. Udall in *The Quiet Crisis* (New York: Avon Books, 1963) devotes a chapter to Marsh titled "The Beginning of Wisdom." Also David Lowenthal, introduction to George Perkins Marsh, *Man and Nature* (Cambridge: Harvard University Press, centenary edition 1965), xxii; orginally New York: Charles Scribner's Sons, 1865; also Paul Brooks, *Speaking for Nature: How Literary Naturalists from Henry Thoreau to Rachel Carson Have Shaped America* (Boston: Houghton Mifflin Co., 1980), 90.

accommodations which insured the stability of existing arrangements are overthrown. $_{61}$

The second edition of his book contained the plea that would be echoed by Joseph Grinnell, as Marsh urged the protection of large primitive areas as sanctuaries for animals and study areas for students of natural history.⁶²

Predators benefited from a view of the natural world that considered it balanced in the absence of humans and from the development of the study of ecology. The originator of the word *oecologie*, Ernst Haeckel, described it in 1866 as "the science of the relations of living organisms to the external world."⁶³ Theories which sought order and predictability in a pristine natural world needed to account for all components of the native fauna, forcing acknowledgment of some sort of beneficial role for predators. Grinnell reserved his place in the history of ecological ideas by contributing the durable concept of the niche—an animal's role— in a 1917 paper.⁶⁴ Recognition of the niche concept included predators, and Grinnell published one of the earliest pleas for predator protection (1916), stating that in national parks, "predaceous animals should be left unmolested and allowed to retain their primitive relation to the rest of the

⁶¹ Marsh, Man and Nature, 36.

⁶² Brooks, *Speaking for Nature*, 93. For Marsh's role in the development of ecology, see Frank N. Egerton, "Ecological Studies and Observations Before 1900," in *History of American Ecology*, ed. Frank N. Egerton (New York: Arno Press, 1977).

⁶³ Quoted in Worster, Nature's Economy, 192.

⁶⁴ Joseph Grinnell, "The Niche-Relationships of the California Thrasher," *The Auk* 34:4 (1917): 427-33. Despite the importance of Grinnell's contributions to biology, the niche was his only significant contribution to ecology, according to Dunlap. Grinnell even opposed ecological studies by his students under his direction, preferring they stay in taxonomy or distribution studies; *Saving America's Wildlife*, 54.

fauna." While he agreed that certain animals could be reduced in situations of economic damage to crops, he firmly opposed the "extermination" of any vertebrate species.⁶⁵

Some of Grinnell's students at Berkeley—who would soon play roles in McKinley's wolf controversy—followed their mentor's lead. Joseph Dixon, in an agricultural bulletin, pointed out in 1920 that "a coyote is not necessarily a bad citizen," and emphasized the excessive rodent numbers that followed systematic coyote killing. 66 Lee R. Dice, who spent two years in Alaska as a fur warden before receiving his Ph.D. at Berkeley, spent the bulk of his illustrious career at the University of Michigan, where he came out in opposition to predator control efforts in Michigan by declaring all animals to have significance: "the extermination of any species, predatory or not, in any faunal district, is a serious loss to science." 67

In the same article, Dice also argued for predators on evolutionary terms, since the carnivores and their prey had developed over the centuries together, an idea that gave a more sophisticated rationale for predator maintenance and carried profound implications for prey management. Competition within and between species was a central tenet of Darwin's thought, given its enduring

⁶⁵ Grinnell and Storer, "Animal Life as an Asset of National Parks," 378; Grinnell, "A Conservationist's Creed as to Wild-Life Administration," in Alden H. Miller, ed., *Joseph Grinnell's Philosophy of Nature: Selected Writings of a Western Naturalist* (Berkeley: Univ. of California Press, 1943), 165.

⁶⁶ Walter P. Taylor, review of *Control of the Coyote in California*, by Joseph Dixon, in *Journal of Mammalogy* 2:3 (August 1921): 176-77. Both Taylor and Dixon were students while at the Throop Polytechnic Institute in Pasadena, where Grinnell taught from 1904-07.

⁶⁷ See "Lee Raymond Dice, 1887-1977)," *Journal of Mammalogy* 59:3 (August 1978): 635-44. His Alaskan experience is summarized in a manuscript, "Interior Alaska in 1911 and 1912: Observations by a Naturalist," copy in Dice Collection, RL. Lee R. Dice, "The Scientific Value of Predatory Mammals," *Journal of Mammalogy* 6:1 (February 1925): 27.

summation in Herbert Spencer's phrase "survival of the fittest," which defined endless struggle in positive terms for the health of species.⁶⁸ Henry Fairfield Osborn, of the American Museum of Natural History, addressing the 'fittest' members of American society at the elite Boone and Crockett Club, presented the conventional Victorian view: "You have all read your Darwin carefully enough to know that neither camels, horses, nor deer, would have evolved as they did except for the stimulus given to their limb and speed development by the contemporaneous evolution of their enemies in the dog family."69 The idea occurred to Olaus Murie, traveling through interior Alaska's forests and mountains: "I have a theory that a certain amount of preying on caribou by wolves is beneficial to the herd, that the best animals survive and the vigor of the herd is maintained."70 Charles Adams, who received one of the country's first Ph.D. degrees in ecology, thought it desirable that predators kill "the weaklings among the game in our parks and forests."71 The concept found an advocate in England, as the eminent ecologist Charles Elton included it in the first edition of his *Animal Ecology*.⁷² While maintaining the fitness of prey through predation made intuitive sense to biologists, its general acceptance lay far in the future.

⁶⁸ Worster, Nature's Economy, 214.

⁶⁹ Henry Fairfield Osborn, "Preservation of the Wild Animals of North America," in George Bird Grinnell, ed., *American Big Game in its Haunts* (New York: Forest and Stream Publishing, 1904), 354.

⁷⁰ O. Murie to E. W. Nelson, 18 July 1923, MS 51, Box 4, Folder 5, ASHL.

⁷¹Charles Adams, "The Conservation of Predatory Animals," *Journal of Mammalogy* 6:1 (February 1925): 92.

 $^{^{72}}$ Charles Elton, *Animal Ecology* (London: Sidgwick & Jackson, Ltd., 1927), 115, 119. While Grinnell proposed the niche concept, Elton was responsible for its subsequent development.

Despite the early glimmerings of attitudinal change toward predators among animal ecologists, widespread changes in American attitudes did not occur until the 1960s.⁷³ In early twentieth century America, the wolf still preyed on the sheep, cattle, and imaginations of the populace. Although most Americans had never seen a wolf, they read magazine and newspaper stories about government trappers pursuing the Custer Wolf or Old Three Toes; such stories were not limited to the pages of sportsmen's magazines, but appeared in the Ladies Home Journal, Literary Digest, Popular Mechanics, and the New York Times.⁷⁴ Influential nature writers such as Theodore Roosevelt, John Burroughs, and William Hornaday drew public attention to diminishing animal populations and promoted appreciation and protection for mammals and birds. Predators, however, received no sympathy. Wolves were dangerous and noxious animals, "the beast of waste and desolation," and provided manly sport for Roosevelt and his ilk.⁷⁵ Burroughs, perhaps the most popular nature writer in America, brought anthropomorphized song-bird stories to readers, and in his idealized world "the fewer of these [predators] there are, the better for the useful and beautiful game."76 William Hornaday, a hunter turned animal protector who became director of the New York Zoological Society in 1896, published widely in defense

⁷³ Thomas Dunlap's graceful book, *Saving America's Wildlife*, traces these changes through the twentieth century.

⁷⁴ See Lopez, Of Wolves and Men, 193; historian Lisa Mighetto provides a useful chapter, "Working Out the Beast," in Wild Animals and American Environmental Ethics (Tucson: University of Arizona Press, 1991). Also useful is the bibliography of "Popular Articles on the Gray Wolf" in Erich Klinghammer, Monty Sloan, and De Wayne R. Klein, Wolf Literature References: Scientific and General Books and Articles Listed Alphabetically by Author (Battle Ground, Indiana: North American Wildlife Park Foundation, Inc., 1990).

⁷⁵ Mighetto, Wild Animals, 79.

⁷⁶ Quoted in Brooks, Speaking for Nature, 126; Dunlap, Saving America's Wildlife, 27.

of animals. His 1913 book, Our Vanishing Wild Life, took aim at hunters, immigrants, African-Americans, fashion-conscious women, ranchers, and the lower social strata in general for causing the demise of the continent's fauna.⁷⁷ Hornaday's concern for animals never included the large carnivores, however: he described the wolf as "sanguine, crafty, dangerous and cruel," "the most degenerate and unmoral species on earth." Hornaday's 1920 proposal to Congress to strengthen game laws in Alaska included "regulations to provide for the wholesale killing of wolves, by poison or otherwise."78 Another enormously popular nature writer provided an alternate perception of wolves. Ernest Thompson Seton, who had once trapped wolves in New Mexico, did not diminish the carnivorous realities of wolves in his writings and paintings, but he differed from his literary peers in describing wolf characters with attractive traits: emotional, courageous, dignified, monogamous, a justifiable part of a natural world. Nevertheless, Seton's greatest triumph as a wolf trapper occurred when he killed Lobo, King of the Currumpaw, by using his mate's carcass to lure the old hunter, and his account by that name became a bestseller. For all of Seton's self-identification and affection for the wolf, his paintings—La Poursuite, The Black Wolf of Currumpaw, The Triumph of the Wolves—emphasized their wildness and

⁷⁷ William T. Hornaday, Our Vanishing Wild Life; Its Extermination and Preservation (New York: New York Zoological Society, 1913).

⁷⁸ William T. Hornaday, *The Minds and Manners of Wild Animals* (New York: Charles Scribner's Sons, 1927), 17, 223; Hornaday, A *New Game Act for Alaska for the Better Protection and More Rational Utilization of Alaska's Game Animals* (New York Zoological Park: Permanent Wildlife Protection Fund, Bulletin No. 6, 15 February 1920), 30.

ferocity, and did not portray the wolf as the kind of animal people wanted living in a civilized land.⁷⁹

While Grinnell and others argued over the theoretical questions concerning predators and the balance of nature, Harold Bryant began working for the National Park Service. Following his graduation from Berkeley he worked for the California Fish and Game Commission and in his spare time volunteered to give evening lectures and nature walks to visitors at Tahoe and Yosemite parks. Activities to enable park visitors to understand the natural history of parks received the enthusiastic approval of Director Stephen Mather, and in 1920-21 a formal summer program of interpretive activities in Yosemite began, along with establishment of a park museum, under Bryant's guidance. Horace Albright, in 1920, had hired the Park Service's first year-round naturalist in Yellowstone. During the next four years most of the western parks designated staff naturalists, yet California remained the center of park naturalist training. In 1925 the Park Service created its Educational Division, headquartered at the Yosemite Field School at the University of California Berkeley. This center

⁷⁹ Mighetto, Wild Animals, 77; Brooks, Speaking for Nature, 209; Dunlap, Saving America's Wildlife, 25. Lisa Mighetto champions Seton in beginning the rehabilitation of the wolf's reputation; see "Wolves I Have Known: Naturalist Ernest Thompson Seton in the Arctic," Alaska Journal 15:1 (Winter 1985); Thomas R. Dunlap regards Seton's sympathies as "limited;" see "Values for Varmints," 145. In another article Dunlap notes that humans were often cast as intruders into a balanced natural world; "The Realistic Animal Story: Ernest Thompson Seton, Charles Roberts, and Darwinism," Forest & Conservation History 36:2 (April 1992): 60.

⁸⁰ Harold C. Bryant and Wallace W. Atwood, Jr., Research and Education in the National Parks (Washington, D.C.: GPO, National Park Service, 1932): 47-8; Harold Bryant, "Nature Lore for Park Visitors," American Forests 35:8 (August 1929): 501.

⁸¹ C. Frank Brockman, "Park Naturalists and the Evolution of National Park Service Interpretation Through World War II," *Journal of Forest History* 22:1 (January 1978): 35; Bryant and Atwood, *Research and Education*, 50.

coordinated educational and training activities for park personnel, as well as providing a close connection to Grinnell's Museum of Vertebrate Zoology. Also in 1925 Director Mather indicated his support for this branch of the service with a firm directive to park superintendents on the importance of the Educational Division, yet within the hard-bitten ranger ranks the naturalists were regarded as 'posy pickers' and 'Sunday supplement scientists.' Rangers in the expansive early park years spent their time in trail and road construction, poaching patrols, fire fighting, and predator hunting, and found it easy to disdain the interpreters—whose ranks included women—who provided less rugged services to the park clientele. With its success assured by public popularity, the Educational Division found a need to educate within their ranks, to confirm that nature guiding consisted of "matters for manly interest." 82

The success of the Yosemite Field School and increasing needs to coordinate such activities across the Park Service led to the creation of the Branch of Research and Education at park headquarters in Washington, D.C. Bryant left his Berkeley home in 1930 to assume this administrative duty as Assistant Director, holding responsibility for the Park Service's general educational policy, publication of scientific and historical literature, public relations, and wildlife matters.⁸³ Horace Albright left Yellowstone and became Park Service director the

⁸² Although women comprised a significant percentage of students at the Yosemite Field School, Bryant and others actively discouraged the hiring of women as naturalists in the parks; see Polly Welts Kaufman, "Challenging Tradition: Pioneer Women Naturalists in the National Park Service," Forest and Conservation History 34:1 (January 1990); also Chase, Playing God in Yellowstone, 235. Charles Adams bluntly regarded biologically ignorant park rangers as a "menace," in a statement preceding the creation of the Educational Division, given at the Second National Conference of State Parks in 1922; reprinted as "The Administration of Wild Life in State and National Parks," in Naturalist's Guide to the Americas, ed. Victor E. Shelford, 45-51 (Baltimore: Williams & Wilkins Co., 1926), 46.

⁸³ Bryant and Atwood, Research and Education, 55-6.

same year, and while he recognized the importance of wildlife in the parks, his major interest and legacy to the Park Service was in historic preservation, as during his tenure the service added battlefields and monuments previously managed by the military.⁸⁴ This left Bryant as the primary administrator with academic training and interest in wildlife at a time when the Park Service began using science, rather than sentiment, to address its management of animals.⁸⁵

Another Berkeley graduate with an interest in park wildlife exerted a profound impact on the acceptance of predators in national parks. George Wright took a degree in forestry but also studied under Joseph Grinnell with a minor in vertebrate zoology. In 1926, while still a student, he took a trip to Mount McKinley National Park with Grinnell's assistant, Joseph Dixon, to survey the park's animals. Following this, Wright took Park Service training and joined the Park Service as a naturalist in Yosemite. Independently wealthy and farthinking, he proposed an ambitious, multi-year project to Bryant and Albright: a national survey of park fauna. With their blessing and his own money, Wright hired Dixon and another Yosemite employee, Ben Thompson, a Stanford graduate, and in 1929 the trio set out on a two-year tour of the national parks. In the proposed of the national parks.

Their travels resulted in prescient, thoughtful analyses of the status of animals in parks and recommendations that would resound for decades in park

⁸⁴ Swain, Wilderness Defender, 197; Wright, Wildlife Research, 18.

⁸⁵ Dunlap provides a summation of this in "Wildlife, Science, and the National Parks," 187-202.

⁸⁶ Biographic information on Wright from Harold Bryant, "George M. Wright, 1904-1936," *Bird-Lore* 37:2 (March-April 1936): 137; Harold Bryant, "Obituary Notices: George Melendez Wright," *Journal of Mammalogy* 17:2 (May 1936): 191-2.

⁸⁷ Chase provides a lively account of the formation of the Wildlife Division in *Playing God in Yellowstone*, 233-39; see also Wright, *Wildlife Research*, 14-16.

policy. 88 Their first two publications provided the Park Service with a philosophic foundation for policy, firmly based on preservation of all native fauna managed through science-based methods. A Preliminary Survey of Faunal Relations in National Parks appeared in 1933, followed a year later by Wildlife Management in the National Parks. 89 The authors urged that human modification of parks be minimized, and that intervention be primarily for the sake of maintaining or restoring the primitive condition existing at the time of Euroamerican settlement. They repeatedly discussed the preservation of wilderness at a time when, with New Deal monies, the parks expanded their roads, campgrounds, and accommodations for tourists: "Our national parks are a great philosophical venture in which we are attempting to pry open for ourselves the intricate and delicately balanced system of wilderness values . . . "90"

These biologists offered policy suggestions that addressed the issue of predators:

"That the rare predators shall be considered special charges of the national parks in proportion that they are persecuted everywhere else. That no native predator shall be destroyed on account of its normal utilization of any other park animal, excepting if that animal is in

⁸⁸ Committees appointed in the 1960s to investigate faunal conditions in national parks found themselves repeating the recommendations of these surveys conducted thirty years earlier. See F. Fraser Darling and Noel D. Eichhorn, *Man & Nature in the National Parks: Reflections on Policy* (Washington, D.C.: The Conservation Foundation, 2nd ed., 1969), 67; also Freemuth, *Islands Under Siege*, 14-16.

⁸⁹ George M. Wright, Joseph S. Dixon, and Ben H. Thompson, Fauna of the National Parks of the United States: A Preliminary Survey of Faunal Relations in National Parks; Fauna Series No. 1 (Washington, D.C.: GPO, National Park Service, 1933); George M. Wright and Ben H. Thompson, Fauna of the National Parks of the United States: Wildlife Management in the National Parks; Fauna Series No. 2 (Washington, D.C.: GPO, National Park Service, 1934).

⁹⁰ Wright, Wildlife Management, 55.

immediate danger of extermination, and then only if the predator is not itself a vanishing form."₉₁

They recognized the significance of McKinley Park's wolf population, and urged that "every effort should be made to save it," although the coyote was fair game as a non-native. 92 This attitude toward predators eventually became policy, distinguishing the Park Service from the bulk of society and other agencies. A measure of this distance can be gained by comparing the writings of these men to those of Vernon Bailey, the Biological Survey agent who initiated ranger predator control in Yellowstone, and who dismissed the idea of a balance of nature. Writing in 1930 on Yellowstone's mammals, he described how man had become the protector of the bighorn sheep by controlling predators; how the pronghorn antelope increased in 1927 due to the active control of wolves and coyotes, and how they were the "enemies" of the elk; and how each wolf would kill a game animal each day, so that it was "evident that wolves and game can not be successfully maintained on the same range."93 Bailey's attitudes were those of a different generation, and the young men of the Park Service saw them as the product of the different time, when "one spoke of campaigning against the carnivores as though they were something devilish, just as one did of Huns in the World War and with as little reason." Wright and his partners predicted that fifty

⁹¹ Wright, Preliminary Survey, 147.

⁹² Ibid., 148, 45.

⁹³ Dunlap, Saving America's Wildlife, 40; Vernon Bailey, Animal Life of Yellowstone National Park (Springfield, Illinois: Charles C. Thomas, 1930), 29, 30, 59, 135. Ten years later, Bailey demonstrated a modification of his views on wolves, concluding a retrospective article on Wyoming wolf control with "Few animals are more devoted in their home life, braver, or more intelligent. Yes, they were cruel killers, but not half as cruel as we have been. . . . They are an enemy we can well admire." From Vernon Bailey, "The Home Life of the Big Wolves," Natural History 46:2 (September 1940): 122.

years hence "we shall still be wrestling with the problems of joint occupation of parks by men and mammals,"⁹⁴ yet their inclusion of all animals in the natural balance of parks became the still-existing policy.

The efforts of Wright, Dixon, and Thompson bore fruit with the creation of the Wildlife Division within Harold Bryant's Research and Education branch. Park Service Director Horace Albright had a firm supporter of national parks in Interior Secretary Harold Ickes, and from 1933 the Park Service expanded in many directions. Young George Wright became director of the Wildlife Division, headquartered at Berkeley, and within two years Wright had recruited twenty-seven biologists into its ranks. Science became the method by which animal problems would be solved, rather than depending on the variously-trained ranger corps, which represented a victory for Bryant's struggle to find respect for nature study within the ranks of the Park Service. Wright died in a car accident in 1936, cutting short a brilliant career. The following two successors to his position with the Wildlife Division maintained the far-reaching influence of Joseph Grinnell: Carl Russell was a Berkeley graduate in zoology, and Victor Cahalane studied under Lee Dice at Michigan.

The Park Service gained important allies in the professional organizations of animal biologists, which from an early date opposed indiscriminate predator control. The Ecological Society of America, organized in 1915, comprised a broad

⁹⁴ Wright, Wildlife Management, 15, 25.

⁹⁵ See Donald C. Swain, "Harold Ickes, Horace Albright, and the Hundred Days: A Study in Conservation History," *Pacific Historical Review* 34:4 (November 1965), and Swain, "The National Park Service and the New Deal, 1933-1940," *Pacific Historical Review* 41:3 (August 1972).

⁹⁶ Chase, *Playing God in Yellowstone*, 236-39, provides detail to this, as does Dunlap, "Wildlife, Science, and the National Parks," 193-95, and Wright, *Wildlife Research and Management*, 14-17.

variety of plant and animal scientists mostly connected with the growing body of academicians across the United States and held representation on the Council on National Parks, Forests, and Wildlife during the late 1920s. 97 The more important opponent to predator control was the American Society of Mammalogists, an organization which since its inception in 1919 held academicians among its members, but also the game managers of the Park Service and Biological Survey, allowing for opposing federal organizations to dispute within the context of a professional group.

Vigorous predator control in the 1920s by the Biological Survey provoked dissension within the mammalogist's society, aired out at a symposium on predatory mammals during the society's 1924 annual meeting. Joseph Dixon and Lee Dice presented papers on the scientific value of predators, and Charles Adams plead for management policies based on science rather than the "vicious propaganda" that accompanied policies made by public opinion. National parks, according to Adams, should be "without question . . . our main sanctuaries for predacious animals," and he invoked the disturbance of the primitive balance of nature caused by white settlement of the continent. ⁹⁸ E. A. Goldman presented the Biological Survey's response: predators in national parks were untenable because they would eat the game in the park and then spread to adjacent settled areas in search of livestock, and Goldman concluded that predators "no longer

⁹⁷ For a summary history of this group, see Robert L. Burgess, "The Ecological Society of America," in *History of American Ecology*, ed. Frank N. Egerton (New York: Arno Press, 1977).

⁹⁸ A summary of the meeting appeared in "Sixth Annual Meeting of the American Society of Mammalogists," *Journal of Mammalogy* 5:3 (August 1924): 218-21. The interest in this issue may be surmised by the subsequent publication in the *Journal of Mammalogy* 6:1 (February 1925) of the major papers presented at this meeting. Charles Adams, "The Conservation of Predatory Mammals," *Journal of Mammalogy* 6:1 (February 1925): 93, 90, 84.

have a place in our advancing civilization."⁹⁹ Unswayed, the society passed a resolution condemning the "nationwide campaign for the destruction of predatory animals."¹⁰⁰

Other organizations voiced their defense of predators in 1929: the New York Zoological Society (William Hornaday having resigned three years earlier) resolved that the Park Service suspend destruction of predators, and the Boone and Crockett Club resolved that predators be accepted as natural and desirable components of parks. 101 Joseph Grinnell's Cooper Ornithological Club, the Audubon Societies, and numerous other groups added their voices for predator protection. 102 Despite these, the political power of the western livestock industry remained undiluted, and western congressmen sponsored legislation in 1929 for an expanded ten-year campaign by the Biological Survey against predators. 103

As before, the American Society of Mammalogists responded with a predator symposium, held during their annual meeting in May 1930. Charles Adams emphasized that five years had passed since the mammalogists called for research to precede "wholesale destruction and extermination," yet the survey

⁹⁹ E. A. Goldman, "The Predatory Mammal Problem and the Balance of Nature," *Journal of Mammalogy* 6:1 (February 1925): 33.

^{100 &}quot;Sixth Annual Meeting of the American Society of Mammalogists," *Journal of Mammalogy* 5:3 (August 1924): 218.

¹⁰¹ Reported in "Comment and News," Journal of Mammalogy 10:1 (February 1929): 95.

¹⁰² Numerous articles against poisoning appeared in the Audubon Societies' journal, such as "Wild Life in National Parks," *Bird-Lore* 33:1 (January-February 1931): 100-01; "Poisoning Campaigns," *Bird-Lore* 34:3 (May-June 1932): 235-39. The local societies melded into the National Audubon Society in 1940, and *Bird-Lore* changed to *Audubon Magazine* in 1941.

¹⁰³ Cahalane, "Evolution of Predator Control," 235; Swain, Federal Conservation Policy, 44; Congressional bills were S. 3483 (Sen. Norbeck, South Dakota) and H.R. 9599 (Rep. Leavitt, Montana).

spent its money on trappers and poison, not science. With predators still hunted in national parks, Adams asked, "But we are probably the richest nation on earth, and what would be the cost of maintaining one hundred mountain lions in North America? Would it stagger American civilization?" A. Brazier Howell concluded the session by labeling the Biological Survey "not our federal wildlife warden, but the guardian of the sheep men and other powerful interests." Another resolution passed condemning indiscriminate poisoning of predators, yet the following year the Biological Survey received its enlarged appropriation from Congress. The year was 1931, and in the depths of the Depression the opinions of several hundred scientists weren't going to halt efforts to support the livestock industry and create jobs in rural America. 105

The National Park Service, however, appeared to be more receptive to the scientists. Joseph Grinnell spoke to a park superintendent's conference in 1928 on the value of predators in natural systems and they voted to suspend the use of steel traps, followed by Horace Albright's ban on the use of poisons in 1930. After the mammalogists' 1930 symposium, Albright produced a policy statement for predators, published in the *Journal of Mammalogy*. He affirmed that all animals

¹⁰⁴ Charles C. Adams, "Rational Predatory Animal Control," *Journal of Mammalogy* 11:3 (August 1930): 354, 357; A. Brazier Howell, "At the Cross-Roads," *Journal of Mammalogy* 11:3 (August 1930): 388.

¹⁰⁵ Two historians that have examined this controversy over predator control disagree as to its significance. Donald Worster devotes a chapter, "The Values of a Varmint" in *Nature's Economy*, concluding that a changing attitude toward predators lies at the "very center" of the broad ecological consciousness of modern times, and that predator defenders used moral arguments to buttress their stance. Thomas Dunlap argues that a scientific rationale using the balance of nature ideal, although not yet proven, underlain the ecologists' defense of predation, rather than a moral view; "Values for Varmints."

¹⁰⁶ Cahalane, "Evolution of Predator Control," 232, 235; Chase, Playing God in Yellowstone, 125.

had a place in parks, both for the pleasure of visitors and as subjects for scientists. "Predatory animals are to be considered an integral part of the wild life protected within national parks, and no widespread campaigns of destruction are to be countenanced." Nevertheless, coyote and wolf killing proceeded unabated in the parks during Albright's tenure, causing Harold Bryant's dissent, who objected on scientific as well as political grounds, as he desired to "keep mammalogists and ecologists with us rather than against us." 108

Horace Albright left the Park Service in 1933 and Bryant saw his stance on McKinley's wolves adopted by the next director, Arno Cammerer. Cammerer halted wolf killing in 1935, telling Superintendent Liek "Do not be concerned over the cry that wolves are about to sweep the country. . . . Should the reports of an unusual abundance of wolves be correct, then it is to be assumed that game is abundant too." Cammerer instructed tell Liek to answer local criticism of wolf protection by invoking the example of Yellowstone, where starving elk lacked the wolf and cougar. 109 Comparing McKinley to Yellowstone failed to satisfy critics of the Park Service, and a protective stance toward the wolves invoked stiff opposition.

¹⁰⁷ Horace Albright, "The National Park Service's Policy on Predatory Animals," *Journal of Mammalogy* 12:2 (May 1931): 185-6.

¹⁰⁸ Bryant to Albright, 17 December 1932, RG 79, Entry 7, File 719, Box 1415, NA.

¹⁰⁹ Cammerer to Liek, 25 February 1935, RG 79, Entry 7, File 719, Box 1415, NA. Bryant went on to serve as superintendent of Grand Canyon National Park until 1954.

CHAPTER 5

PRESERVING THE SHEEP

Visiting sportsmen regarded Alaska as one of the world's great destinations for big game, whether for the largest bears and moose or the exotic caribou and lordly Dall sheep. The relative democratization of hunting trips to Alaska occurred after WW II, when air travel reduced the amount of time away from work necessary to mount a hunt, although expenses remained high. Before the war, only those with several months and at least five thousand dollars to invest made the journey to Alaska, and a safari in Africa could be less expensive to East Coast sportsmen than a trip to the territory. Charles Sheldon and Belmore Browne brought knowledge of Alaska's Dall sheep and caribou to their social peers, ensuring that McKinley's game became a matter of concern for many outside Alaska. Browne and other members of the Camp Fire Club of America helped it become the chief outside antagonist to the Park Service over wolf policy.

The Camp Fire Club had played a major role in the creation of McKinley Park and continued their involvement with the territory and park. The club helped Territorial Governor Thomas Riggs work toward improved game laws in 1920, and supported legislation in subsequent years to curb the then-legal taking of game in the park by miners, a practice officially outlawed in 1928.² The club

¹ Russell Annabel, Hunting and Fishing in Alaska (Alfred A. Knopf, 1948), 5.

² Governor's *Annual Report*, 1920, 47; Daniel Beard (Park Service Wildlife Division), "A Brief Summary of Camp Fire Club Activities Relative to Mount McKinley National Park," 1939?,

published suggestions for national park standards in 1929 which fit quite well with prevailing Park Service philosophy. Toward animals, the club recommended, "That each park area shall be a sanctuary for the scientific care, study, and preservation of all wild plant and animal life within its limits, to the end that no species shall become extinct." The Camp Fire Club had worked to establish the park specifically as a game sanctuary, and as the wolf-sheep controversy developed it became apparent that "preservation of all wild plant and animal life" did not include wolves.

One of their notable members, William Beach, led the early attack on the Park Service. An 1892 graduate of Yale, he retired in 1926 from a career as a cement company executive, and, childless, spent his remaining years pursuing his hunting passion. Beach made a total of sixteen hunting trips to Alaska, making him a well-known figure in the territory and giving him a measure of self-bestowed credibility when it came to game issues. He also had the blessing of Horace Albright, who regarded him as a friend of the Park Service. While Charles Sheldon earned his reputation by dint of the skills he worked hard to develop and the style in which he hunted, Beach represented another kind of sportsman, one who liked the shooting found on Scottish game preserves where only gentlemen had access, predators were rigorously suppressed, and game

RG 79, Entry 7, File 719, Box 1415, NA. See Brown, *History of Denali*, 146-49 on the issue of legal hunting by miners in the early park.

³ Camp Fire Club, "National Park Standards, as Defined by the Camp Fire Club of America," *American Forests* 35:8 (August 1929): 476.

⁴ "William Beach," obituary, New York Times, 6 May 1955.

⁵ From a 'Beach File' compiled by Harold Bryant about this "self-styled conservationist" and sent to Harry Liek, 29 July 1938, RG 79, Entry 7, File 715, Box 1414, NA.

virtually guaranteed. He first traveled to Alaska in 1921 and returned the following year. He wrote of the wonder of traveling through the park surrounded by herds of sheep, concluding "that this was the greatest ram pasture in the North, in fact the whole world," "a veritable game paradise."

While he was no doubt appreciated in Alaska for keeping guides and packers employed, Beach failed to display the skill or ethics presumably practiced by sporting gentlemen. Prior to his first trip he requested a special permit to hunt in the park, since game was numerous, a request denied by E.W. Nelson of the Biological Survey. Superintendent Harry Karstens wrote back to Nelson that Beach's party "were very much put out that they were not allowed to kill game in the park. In fact, when they arrived in the states again they intend to recommend that this park or a large portion of it be opened to hunters of their class." Karstens rightly noted that this would be ill-received by Alaskans. Nevertheless, Beach shot a sheep in the park on his 1922 trip, afterwards sending new Mauser rifles to Karstens for helping assist his trip and to an Alaskan game warden witness for keeping the poaching quiet. Unfortunately his bragging back home in New York City brought this violation to light and eventual prosecution in Fairbanks—a ten dollar fine.8 In his book Beach recounted a 1925 trip where his party traveled past park boundaries to hunt and included instances of emptying his chamber against far distant animals, and wounding others with

⁶ William Beach, *In the Shadow of Mt. McKinley* (New York: Derrydale Press, 1931), 288, 39; Beach, "Game Marches On," *The Backlog* 11:6 (February 1938): 3. *The Backlog* was the bulletin of the Camp Fire Club.

 $^{^{7}}$ Beach File, Bryant to Liek, 29 July 1938, RG 79, Entry 7, File 715, Box 1414, NA.

⁸ Brown, History of Denali, 156-7.

poor shooting to stagger off or be tracked down by his guides for dispatch.⁹ Beach's early history with McKinley Park hardly made him a credible critic, yet criticism for the Park Service from Beach, with the backing of the Camp Fire Club, could not be ignored, a combination of their previous support in the creation of the park and socially powerful members.

Beach and fellow club members raised questions concerning the park's Dall sheep population even before the hard winter of 1932, when hundreds died. He had wanted to shoot the wolves he saw in the park and wrote, "I realize there are many so-called conservationists who would prefer to have the sheep, caribou, moose, and deer killed off by wolves . . . than to have them hunted and killed by man."10 Although sport hunting was banned in the park, the game animals were supposed to provide a continual supply of new animals to adjacent areas to ensure continued good hunting. Disappointed by the low numbers of sheep seen on a 1931 hunting trip to the White River area just east of the park, Beach wrote directly to Governor Parks in requesting information on sheep numbers and protection from predation. William Greeley, on behalf of the Camp Fire Club's Game Conservation Committee, questioned Horace Albright in 1931 concerning reports of one thousand sheep killed by wolves in the McKinley area and wondered what the Park Service response would be, adding, "the committee does not in the least share the views of those sentimentalists who would rather let the mountain sheep be wiped out by depredators than to destroy any of the depredators."11 The response from Superintendent Harry Liek gave little cause

⁹ Beach, *Shadow*, 83, 85, 183.

¹⁰ Ibid., 70; 285-6.

¹¹ Beach sent a summary report to the Game Commission; see Exec. Officer's *Annual Report to AGC*, 1932; Greeley to Albright, 17 July 1931, RG 79, Entry 7, File 719, Box 1415, NA.

for concern and Governor Parks allayed worries about wolves by noting that Alaska still had large caribou herds despite wolves.¹²

Many members of the Camp Fire Club also held membership in the Boone and Crockett Club, yet the latter did not join in the campaign against McKinley's wolves. The Boone and Crockett Club detailed a committee in 1929 to examine the issue of predators in national parks, and from that study came unequivocal conclusions supporting the Park Service's scientific approach. The club passed a resolution in the 1929 annual meeting recommending that parks protect all their native fauna, and opposed "drawing a line between game animals and those of predatory habits, to the detriment of the latter." 13

Beach returned to McKinley Park in 1937, this time under the aegis of the Smithsonian Institution, which wanted moose and caribou specimens (taken outside the park boundaries) for an exhibit. Upon his return he wrote Park Service Director Arno Cammerer about the decreased numbers of Dall sheep. The sheep population had fallen from its highs in the 1920s and Beach laid the blame on wolves. He predicted the demise of all the park's game animals in ten years unless the wolves were killed. Assistant Director Arthur Demaray responded: "Since this Service is interested in preserving all forms of wildlife in their natural relationship, we are obliged to find out first what the ecological status of some mammalian predators is in the park." Beach preferred the

Following his resignation from the Park Service, Albright became a member of the Camp Fire Club on Greeley's invitation; see Swain, *Wilderness Defender*, 255.

¹² Beach to Parks, 10 November 1931; Parks to Beach, 21 November 1931; Harlan Gubser to Parks, 21 November 1931; RG 101, Box 333, Folder 4, ASA.

¹³ Quoted in Trefethen, Crusade for Wildlife, 299.

opinions of his hunting guides and told Demaray, "I am very sorry to hear that the Park Service is so partial to the retention of wolves." ¹⁴

Dissatisfied with the service's response, Beach submitted a five-page report to the club's Conservation Committee, which Greeley sent to Cammerer. Beach was "terribly shocked" at the low numbers of sheep, and recommended the Camp Fire Club petition the Park Service to destroy its wolves and save the prey species. The park, he argued, should function as a protected breeding ground for game rather than for wolves, which have "run all over the other sections of the Alaska Range." The club's purpose was not to see the wolf exterminated, according to Greeley, but the preservation of the game herds as they had been in the early days of the park. Beach gave his opinions greater publicity by articles in the February and May 1938 issues of *The Backlog*, the Camp Fire Club's bulletin, in which he outlined the differences he perceived in the park's game between his trips in the 1920s and his return in 1937, and castigated the Park Service management for their failure to protect the sheep. He concluded the February article with a call to action: "Are we going to stand aside and permit a huge wolf and coyote breeding-ground to continue?" ¹⁵

The receipt of Beach's five-page report provoked a quick response from Arthur Demaray, who wired a priority telegram to Harry Liek at McKinley Park requesting the latest animal census data before writing a response to Beach. With this information, Demaray told Beach that his 1937 trip in the park had been ill-

¹⁴ Beach to Cammerer, 11 October 1937; Demaray to Beach, 15 October 1937; Beach to Demaray, 10 November 1937; all RG 79, Entry 7, File 715, Box 1414, NA.

¹⁵ Beach to Camp Fire Club Conservation Committee, 1 November 1937; Greeley to Cammerer, 16 November 1937; Greeley to Cammerer, 8 December 1937; Beach to Demaray, 7 December 1937; all RG 79, Entry 7, File 719, Box 1415, NA; Beach, "Game Marches On," 4.

timed to see game, that the sheep were scattered in the high crags and the caribou were summering outside the park, and calmly repeated that all of the native fauna would be preserved. While Beach's strenuous arguments rested on the impressions received during hunting trips spanning twelve years, Demaray's response came from access to the best sources available, his rangers that lived in McKinley Park year-round. The annual animal censuses filed by Harry Liek outlined a different picture than that drawn by William Beach. 17

	1935	1936	1937	1938	
caribou	15,000	25,000	20,000	18,212	
sheep	3,000	3,000	3,000	3,793	
wolf	50	<i>7</i> 5	75	77	

Demaray had confidence in the Park Service's wildlife management philosophy, assuring Beach that "if sheep, wolves, and caribou have lived together for many thousands of years without one exterminating the other then, other things being equal, there seems to be no reason why they cannot now." Demaray recognized McKinley Park's national significance because of its extant wolves, and he accurately forecast that future generations would actively seek places to "see and hear a timber wolf in its native state." Harry Liek also wrote a response to Beach, noting that few wolves had been seen in the park that winter,

¹⁶ Demaray to Liek, telegram, 19 November 1937; Demaray to Beach, 24 November 1937, RG 79, Entry 7, File 715, Box 1414, NA.

 $^{^{17}}$ "McKinley Park Animal Reports," 1935-38, RG 79, Entry 7, File 710-715, Box 1414, NA.

and how during the previous summer almost all visitors to the park had been pleased with the number of animals seen.¹⁸

Carl Russell, Chief of the Park Service's Wildlife Division, had attended the Camp Fire Club Committee on Conservation's monthly meeting in February 1939. He explained the Park Service's policies and thoughts on the wolf-sheep situation, but he couldn't offer a good plan to ensure the health of the sheep population—there was no plan yet. In attendance was another club member of potential influence: Ray P. Holland, editor of *Field & Stream* magazine, published in New York City. After the meeting Holland wrote to Park Service Director Cammerer, "I don't know a great deal about mountain sheep, and my knowledge of wolves is far from extensive, But it does seem to me that the Park Service should do a little wolf killing and do it right away." He had avoided commenting editorially on the McKinley Park situation, despite pressure to "tear into the Park Service" for lack of action against the wolves. He requested a frank statement, but Cammerer successfully convinced Holland to keep the issue out of the magazine. 19

Camp Fire Club members felt a sense of ownership toward Mount McKinley National Park, and reports of declining sheep numbers provoked serious questions. To answer these concerns, Park Service administrators had a new philosophy toward the protection of all native fauna, but little research-based information. Apart from Joseph Dixon's visits in 1926 and 1932, they had

¹⁸ Demaray to Beach, 30 October 1937, RG 79, Entry 7, File 719, Box 1415, NA; Liek to Beach, 17 February 1938, RG 79, Entry 7, File 715, Box 1414, all NA.

¹⁹ Albright to Cammerer, February 1939; Holland to Cammerer, 7 February 1939; Holland to Demaray, 20 February 1939; Holland to Cammerer, 17 March 1939; all RG 79, Entry 7, File 719, Box 1415, NA.

the animal census reports from Harry Liek and his rangers, but these were educated guesses. They did know, however, that sheep numbers had declined markedly over the decade. Although the wolves had received official protection for only one year, the Camp Fire Club expected more vigorous action to protect the sheep, an expectation also held by Alaskan residents.

Alaska's development repeated the American West's in many ways: few people, bountiful resources, and social attitudes molded by three centuries of European spread across the continent. Alaskans needed pragmatic skills and gumption to make a living in a newly-developing territory; fishing, trapping, gold mining, and lumbering dominated local industry. Game meat provided sustenance, and, unlike livestock, game animal numbers fluctuated unpredictably, providing reason to minimize annual mortality by wolves and ensure a stable food supply. Aesthetic and scientific reasons for predator protection didn't fill the stewpot. Long-time trapper Oscar Vogel was once told by a biologist that wolves had an equal right to the game as did humans, to which he replied, "No, they don't. I pay taxes." Few Alaskans understood why taxpayer money went to support a purported sanctuary for wolves right in the middle of the territory when everyone else sought to eliminate the wolf. Pressure on the Park Service by Alaskans came from all sides and with broader justification than concern only for the park's Dall sheep.

The Alaska Game Commission provided the administrative jurisdiction in the territory for fur, bird, sport fish, and game resources. Established in 1925 by congressional action, the five-member commission reported to the Director of the

²⁰ Vogel, "My Years with the Wolves," 57.

Biological Survey (which evolved into the Fish and Wildlife Service in 1939), under the Department of Agriculture. The commission's officers and wardens oversaw the establishment and enforcement of hunting, trapping, and fishing regulations. Like their peers in state game and fish organizations, the Alaska Game Commission sought to maximize human harvest of animal populations without long-term depletion. The commission solicited reports from residents on animal populations, using these and the impressions of its wardens to make rules on hunting and trapping seasons and bag limits. These reports provide a great deal of anecdotal evidence about the increasing numbers of predators during the 1930s. Alarmed by these reports and by the previous year's withdrawal of federal predator assistance, the commission in their 1932 meeting passed a resolution calling upon the federal government to assist with bounty payments and supply more hunters.²¹ At the same time, the commission outlawed the use of poisons in predator control, in order to protect the indiscriminate killing of furbearing animals attracted to poisoned baits. A trapper living near Lake Minchumina responded, "The wolves are going to take the country. This thing of taking all the poison away from everybody isn't working and never was."22

McKinley Park lay just south of Lake Minchumina, and wolf policies there received the scrutiny of the game commission at their 1935 meeting, especially after hearing of the order from Park Service Director Cammerer to cease wolf killings in the park. They voted to contact Superintendent Liek to determine his current control efforts and level of diligence in pursuing wolves; if unsatisfied,

²¹ "Minutes of the Annual Meeting of the Alaska Game Commission," 1932, 29-30; AGC Annual Report, 1932-33, RL.

²² Exec. Officer's Annual Report to AGC, 1934, 64, RL.

the commission would protest through the Biological Survey.²³ Declining game populations in the 1930s were caused by a variety of factors recognized by the game commission—improved rifles, new roads for access—but an increasing wolf population provided a traditional, popular, and nonhuman excuse.²⁴ The commission wanted predators minimized, an attitude consistent with other states and with Alaskans; the Park Service held the anomalous position.

The members of the Alaska Territorial Legislature firmly believed in local control of fish and game. Many in Alaska perceived the game commission, whose members were appointed by Washington, D.C., rather than being elected, to be further evidence of the federal government's unnecessary and restrictive powers over Alaska's resources. This attitude existed despite the willingness of the commission to consider public testimony in creating rules and being comprised of officers who were respected Alaskan residents. The Territorial Legislature in 1933 and 1935 passed joint memorials to Washington, D.C., condemning the game commission as "oppressive and repugnant," accusing the game commission of favoring commercial fur trappers over subsistence trappers, and requesting that all control of game and fur resources be vested in the legislature. The National Park Service had few friends among Alaska's legislators, who saw it as another unnecessary federal imposition. A proposal to

 $^{^{\}rm 23}$ "Minutes of the Annual Meeting of the Alaska Game Commission," 1935, 8, RL.

²⁴ Exec. Officer's *Annual Report to AGC*, 1936, 82, RL For more on the Alaska Game Commission perspective, see Frank Dufresne, "What of Tomorrow?" *The Alaska Sportsman* 3:4 (April 1937): 9; Dufresne, "The Game and Fur Belong to All the People," *The Alaska Sportsman* 10:4 (April 1944): 16-18, 21.

²⁵ Alaska Legislature, Senate Joint Memorial No. 8, 11th Legislature, 1933; House Joint Memorial No. 7, 13th Legislature, 1935; Daily News-Miner, "Senate Favors Game Control By Alaskan," 2 February 1935.

add a fourth park to Alaska's trio—McKinley, Katmai, and Glacier Bay— a bear reserve on Admiralty Island, provoked the legislature in 1939 to state that Alaskans didn't want it and that parks were not in the best interest of the territory, since settlers had been "persecuted and harassed" by park officials and parks had been used as sanctuaries for predators.²⁶

Legislators were especially galled by the protection of wolves in the parks. A 1933 joint memorial to the U.S. Congress pointed out that the territory had expended \$130,000 in bounties in preceding years, that the Biological Survey had at one time supplied predator hunters, yet wolves and coyotes continued to increase. To solve this, the memorial requested matching federal bounty monies and federal action against predatory animals in Mount McKinley National Park. Six years later the legislature unanimously repeated the memorial with even stronger language, accusing all three national parks in Alaska of "incubating" predators and requesting "an aggressive program under competent superintendence" to minimize wolves.²⁷

Alaska's governors were assigned by the president and reported to the secretary of the interior rather than being elected, yet they seemed quite willing to address Alaskan complaints over wolf issues. Complaints and responses followed a predictable pattern. For example, in January 1931 a sourdough named Charles Trundy, from the mining district of Kantishna, wrote to the game commission about the protected park wolves spreading out into the adjacent

²⁶ Alaska Legislature, Senate Joint Memorial No. 16, 14th Legislature, 1939.

²⁷Alaska Legislature, *House Joint Memorial No.* 10, 11th Legislature, 1933; Committee Substitute for Senate Joint Memorial No. 2, 14th Legislature, 1939.

country and killing caribou by the "hundreds." Trundy had spent time as a sheep hunter for the railroad camps and had no trouble justifying that activity.

The game cranks and the partly informed conservationist they made an awful holler about his waste of Game and predicted the extermination of the sheep and caribou heards, yet these same people have very little to say about the wolves and brown bear that kill many times more than these hunters (most of whom were Prospectors selling this meat for Grubstake) would kill.28

Another Kantishna resident wrote the game commission about McKinley's wolves "being farmed by Park Commission in McKinley Park for tourist consumption." Both letters ended up on the desk of Governor George Parks, who subsequently sent them to Park Service headquarters with a query as to the service's response to the charges. Acting Director Arno Cammerer wrote back to the governor with what became the standard response: "We are trying hard to take a sensible view relative to predatory animal control and we have given instruction to our superintendents to gather statistics and information helpful in determining this policy." To Superintendent Liek, Cammerer sent a copy of Trundy's letter, Horace Albright's just-published predator policy outlining a protective stance, and instructions to gather information.²⁹

Anthony Dimond, Alaska's Congressional delegate, also challenged Park Service policy on behalf of constituents. Calling to Director Cammerer's attention the 1939 anti-park memorial of the Territorial Legislature, Dimond wrote:

 $^{^{28}}$ Trundy to Alaska Game Commission, 12 January 1931, RG 79, Entry 7, File 719, Box 1415, NA.

²⁹ Cammerer to Liek, 17 July 1931, RG 79, Entry 7, File 719, Box 1415, NA; Terhune to Parks 8 April 1931, Cammerer to Parks, 2 June 1931, RG 101, Box 318, ASA.

It is useless for the people of Alaska residing anywhere within one hundred miles from the Park to try to protect themselves against the depredations of wolves if they are permitted to increase and be free of molestation within the boundaries of the Park. . . . Measures should be taken at once by the Park authorities to have the wolves in the Park killed off so far as possible. . . . there are bound to be plenty of wolves in Alaska until it attains a population which would entitle it to statehood. 30

In response, Assistant Director Arthur Demaray pointed out that wolves had been subject to control in the park, and invoked the service's philosophy toward a balance of nature: "Survival of the fittest produces good game just as artificial selection produces good domestic stock." He assured Dimond of the value of research and thought that since wolves could be taken for bounty in all of Alaska but McKinley Park, the situation represented a "balance which is fair to all interests concerned." Nevertheless, Dimond continued to decry the Park Service's wolf sanctuaries:

It seems useless for the Territory to continue its control of predatory animals or to pay bounties for their destruction when [the national parks] serve as uncontrolled breeding grounds for the same predatory animals. . . . It will not do to say as has been said in the past that Nature will take care of the balance. 31

The equanimity of the Park Service response fell short of providing satisfaction to Alaskans.

Anti-wolf sentiment gained a significant media voice in 1935 with the founding of *The Alaska Sportsman*, a magazine which historian Morgan Sherwood

³⁰ Dimond to Demaray, 20 February 1935, RG 79, Entry 7, File 719, Box 1415, NA.

³¹ Demaray to Dimond, 21 February 1935; Dimond to Cammerer, 14 April 1937; Dimond to Cammerer, 6 March 39; all RG 79, Entry 7, File 719, Box 1415, NA.

called the "single most important private, institutional influence in the history of game animals and people in the Territory."32 Its founder and editor until 1958 was Emery Tobin, who had worked as a newspaperman for the Boston Ledger supervised by Ernest Gruening, before his government service—and moved with his father, a stampeder to the Koyukuk, to Ketchikan in 1920.³³ The magazine's contents reflected a dual audience. Tobin recognized the allure of Alaska to nonresidents and used the magazine to promote Alaska to potential settlers, writing in the inaugural issue that it was a magazine "by Alaskans for everyone," to give a "true idea of the country." The editorial column "Main Trails and Bypaths" repeatedly extolled the virtues of Alaska's natural resources and its people, and feature articles provided instruction on the territory's geography and 'gee-whiz' lessons on the size of Alaskan potatoes and bears. For local residents, the Sportsman published 'how-to' articles on trapping, making pemmican, salmon fishing, and the like. Another theme for residents concerned "advising intelligent conservation" of animal resources. The magazine served as the mouthpiece for the Alaska Sportsmen's Association, whose motto was "Help keep Alaska the Sportsman's Paradise. Protect and propagate wild life."34

³² Sherwood, Big Game in Alaska, 57.

³³ The magazine's history, and biographic information on Tobin, is found in Ethel Dassow, "The Voice of the Last Frontier," *Alaska* 50:10 (October 1984): 15-21, 85-9, 92-3. Ms. Dassow began her long employment with the magazine during WWII and became assistant editor, rewriting manuscripts to give a balance between good grammar and colloquial expression. *The Alaska Sportsman* evolved into *Alaska* in 1969 under the management of the Alaska Northwest Publishing Company, which had bought the magazine in 1958. The de emphasis on hunting and fishing reflected the changing tastes of the increasingly non-Alaskan readership.

³⁴ "Main Trails and Bypaths," *The Alaska Sportsman* 1:1 (January 1935): 4; "The Alaska Sportsmen's Association," *The Alaska Sportsman* 1:1 (January 1935): 20.

A "major objective" of the Sportsmen's Association was to find "ways and means for wolf extermination." The first issue of The Alaska Sportsman contained an article on wolves that established a model for many more to follow: wolves were on the increase, they threatened game and killed for sport, and the successful wolf hunter needed bravery, skill and luck. The caption to a hunter posing with a dead wolf read, "The wolve's fangs account for countless thousands of harmless denizens of the woods each year. A dead wolf is a good wolf." Besides providing adventurous reading, wolves figured prominently as a problem for the territory to solve as had been done in the states. The February 1935 issue urged higher bounties on "those gangsters of the wilds," in order to provide sufficient incentive for trappers to pursue wolves. The cover of the following issue showed a snarling coyote caught in a trap, and the editorial averred that an increased bounty—from fifteen to twenty-five dollars—was a matter of "vital interest and importance" to Alaskans. Another article in the March issue detailed how to collect bounty on wolves. First-person wolf hunting articles became a staple in the magazine. In "I Stalk Villains of Wildlife," the author went after "carnivorous menaces . . . I chalk up mentally the twenty bucks his head will bring, as I send him a leaden missile that mushrooms when it rips into the vital spot, and send the snarling creature to the ground. . . . all I did to that fellow was to put a lead 'period' at the end of his murderous career." By 1939 The Alaska Sportsman had a circulation of thirty thousand and provided a consistent platform for information and sentiment to help Alaskans eliminate the wolf as a competitor.³⁵

³⁵ From *The Alaska Sportsman*: F. W. Gabler, "The Wolf Pack," 1:1 (January 1935):16, 17; "Main Trails and Bypaths," 1:2 (February 1935): 4; "The Alaska Sportsmen's Association," 1:2

Changes in the fur industry during the 1930s cast an economic pall over rural Alaska and contributed sentiment against any possible competitor for furbearers. Fur shipments in 1929 from Alaska provided \$4.5 million in revenue, yet this fell by more than half with the onset of the Depression and only slowly recovered at the decade's end. From 1929 to 1930 red and white fox revenues fell from \$1,777,081 to \$263,696; by 1932, a trapper received only \$17.18 for a white fox pelt which three years earlier fetched \$60.25 (average values). In a two-year period revenues from beaver declined from \$850,512 to \$9,520, the decline enhanced by a closed season in 1930 to allow beaver stocks to replenish. The total value of mink slipped from \$500,000 to \$200,000 in one year, and other furbearers declined to pre-WWI values. While financial inducements for wolves and coyotes included both bounty collection (raised in 1935 from \$15 to \$20) and sale of furs, the average price for wolf pelts decreased from \$41.55 to \$8, and coyotes dropped from \$20.50 to \$4.11. Little wonder, then, that strong arguments existed for increased bounties on predators through years of financial hardship for trappers. While wolves did not prey heavily on furbearing animals, except for beaver, the omnivorous coyote did, and popular sources linked the decline in fur to the rise in predators. Wolves and coyotes represented threats to the economic sustenance of numerous Alaskans, who were struggling to raise cash in an industry severely damaged by the Depression.³⁶

(February 1935): 15; "Main Trails and Bypaths," 1:3 (March 1935): 5; C. R. Snow, "The Trap Line," (March 1935): 20; R. W. Irwin, "I Stalk Villains of Wildlife," 9:3 (March 1943): 14, 16.

³⁶ Statistics on furs from the Exec. Officer's Annual Report to AGC, 1938, RL.

The repeated charges of McKinley Park serving as a sanctuary for wolves had little basis in policy, although this seemed to go unrecognized by opponents of its wolves. The Park Service did not participate in the previously-described cooperative predator control program of 1927-31, but park rangers did kill coyotes and wolves. From the earliest reports of its spread into interior Alaska, the Park Service regarded the coyote as an unwelcome intruder. In 1932 George Wright called them a "difficult and insidious problem," and in order to protect McKinley's native carnivores urged that "every step should be taken against this encroachment as an exotic and an alien." Joseph Dixon concurred in a letter to Horace Albright, who wrote Harry Liek to "Please instruct your rangers to destroy all coyotes found preying on game animals." For reasons unknown, though not for lack of coyotes, rangers killed only four of them between 1930-34. They had better success with wolves, killing twenty-three in the same period before being instructed by Director Cammerer to cease control in 1935.

Cammerer's order to protect the wolves followed similar instructions to the rangers of Yellowstone to quit killing coyotes, and resulted from the evolving Park Service philosophy toward hands-off management practices, preferring instead to trust natural processes. The evidence available to Cammerer for McKinley Park seemed to justify his order. Harry Liek's 1934 Annual Report to the director did not mention wolves or depredations, and said the previous winter had inflicted minimal damage to animal populations. Liek made the first

³⁷ Wright, et. al., *Fauna of the National Parks*, 47-8. Recent research indicates that these fears may have been justified, as some coyote experts think that man's persecution of the coyote in this century has resulted in animals "larger, smarter, more adaptable, faster, and more cunning;" see Gier, "Ecology and Behavior of the Coyote," 261.

³⁸ Dixon to Albright, 27 October 1932; Albright to Liek, 14 November 1932; Liek to Cammerer, 18 January 1935, RG 79, Entry 7, Box 1415, File 715, Box 1415, NA.

ever aerial animal census in 1934 with game warden Sam White, who pioneered the use of aircraft in wildlife work. They estimated a sheep population of three thousand, and did not recognize that number as evidence of a crisis. Liek also submitted reports to the Alaska Game Commission. His comments for the early months of 1936 seemed to justify the cessation of wolf control: "I found no evidence where the wolves are increasing within the Park boundary." Liek had taken a 248 mile park survey in February and saw no wolves or signs of wolves, and he notified the game commission of Cammerer's order to halt their killing within the park.³⁹

As far as Alaskans were concerned, the Park Service's protective stance toward wolves contradicted the evidence all around them. Of the recommendations concerning predators received and printed by the game commission in 1936, Harry Liek's letter stood in a minority of one, as from around the Territory—Hoonah, Stony River, Noatak, Chulitna, McCarthy—observers reported increasing wolf numbers and depredation of game. Governor John Troy requested federal assistance from Interior Secretary Ickes to halt wolf killing of reindeer herds which were "imperiling Native food supplies." Congress approved Troy's request in May with an appropriation for a predator hunter, and later in the summer the newspaper announced that Harlan Gubser was enroute from Idaho to Kotzebue to "wage war on predatory brutes," four years after his first employment with the cooperative predator program. 40

³⁹ Superintendent's "Annual Report," 1934, 1935, RG 79, Entry 7, Box 1405, NA; Liek to Alaska Game Commission, n.d., in AGC *Annual Report*, 1936, RL; see also Dave Hall, "Sam O. White: The First Flying Game Warden," *Alaska* 52:5 (May 1986): 14-17, 59-62.

⁴⁰ Daily News-Miner, "Troy Asks Help From Ickes In Fight on Wolves," 11 February 1936; "Alaska Items Are Carried In Interior Bill," 13 May 1936; "Expert to Wage War On Predatory Brutes," 5 August 1936.

Newspaper headlines in the spring of 1936 painted a gloomy picture: "Wolves Increasing Here Say Mushers;" "Wolves Kill 500 Reindeer Near Barrow;" "Reindeer Are Devastated By Wolf Bands;" "Wolves Run In Big Packs Along Kobuk." "The territory even advertised in stateside papers for people to come to Alaska to hunt wolves. "The well-known sheep of McKinley Park received attention from Fairbanksans, who began to notice and comment that McKinley's sheep were less numerous. A visitor to the park in 1936 saw three sheep supposedly killed by wolves and "was surprised that the government protects wolves from hunters." The game commission considered declining sheep numbers to be "almost entirely to depredations of coyotes and wolves," a conclusion supported by the Biological Survey. "3

Local sentiment against predators received organized support in the spring of 1936 with the formation of the Tanana Valley Sportsmen's Association. Twenty men created the association on April 3, their discussion focused on the introduction of new species of game and fish—elk, pheasant, Scandinavian grouse, rainbow and lake trout—to interior environments. Seventy people attended the following week's meeting, and the increased numbers of wolves and coyotes came up for discussion. Sam White, the pilot wildlife agent, introduced a new concept in predator control which had far-reaching effects: "he

⁴¹Daily News-Miner, "Wolves Increasing Here Say Mushers," 27 February 1936; "Wolves Kill 500 Reindeer Near Barrow," 26 March 1936; "Reindeer Are Devastated By Wolf Bands," 31 March 1936; "Wolves Run In Big Packs Along Kobuk," 2 April 1936.

⁴² John Mykytya to Governor Troy, 29 June 1936, in response to an ad in Minnesota's *Free Press Prairie Farmer*; RG 101, Box 474, Folder 1, ASA.

⁴³ Daily News-Miner, "New Plans Outlined By Tanana Sportsmen At Spirited Meeting," 16 May 36; AGC Annual Report, June 1936; AGC Annual Report, October 1936; Annual Report of the Chief of the Bureau of Biological Survey, 1936.

had conceived the idea of fighting wolves by shooting at them from airplanes with automatic shotguns."⁴⁴ An editorial in the *Fairbanks Daily News-Miner* lauded the aerial hunting concept and urged Uncle Sam's assistance: "If Alaska is to preserve her game and fur animals she—with aid of the federal government—must wake up and carry relentless warfare into the ranks of the enemy—not tomorrow but today—not at some convenient season but in this hour of emergency." The Park Service's new wolf policy made bold headlines in the newspaper: "Sportsmen Take Aggressive Steps on Wolves and Coyotes; Protest Made Against Protection of Outlaw Animals in McK. Park." The sportsmen's association opposed "the Park rule that nothing may be killed there," for its members were convinced that wolves and coyotes were responsible for the decreased game numbers within the park, as well as spreading into surrounding areas.⁴⁵

From its inception, National Park Service leaders understood the need for public relations with local residents. Steven Mather and Horace Albright encouraged park superintendents and rangers to become involved with nearby communities and help spread the national park philosophy. Harry Liek, upon arrival at McKinley Park in 1929, had to replace an authentic sourdough, Harry Karstens, as superintendent of a park few Alaskans visited. In 1931, Liek

⁴⁴ Daily News-Miner, "Sportsmen Organize With Aim to Bring In New Species," 4 April 1936; "Large And Enthusiastic Gathering Is Held By Fairbanks Sportsmen," 11 April 1936. I have found brief references to a prior group, the Tanana and Yukon Valley Game Protective and Propagation Association, but little else.

⁴⁵ Daily News-Miner, "Alaska's Warfare on Outlaw Animals," 16 April 1936; "Sportsmen Take Aggressive Steps on Wolves and Coyotes; Protest Made Against Protection of Outlaw Animals in McK. Park," 9 May 1936; "Wolves Near Reindeer On Kuskokwim," 30 July 36.

⁴⁶ Foresta, *America's National Parks*, 26; Swain, "The National Park Service and the New Deal," 317.

admitted to Albright that he had made little progress in swaying public opinion toward the park. To get some attention for himself and his park, he and ranger Grant Pearson joined Minneapolis lawyer Alfred Lindley and ski instructor Erling Strom and made the second ascent of Mount McKinley. The stunt worked, and Liek found himself accepted by Alaskans and active in many capacities outside the park.⁴⁷

Public relations suffered over the wolf issue. Recording public contacts was a standard part of the superintendent's monthly reports, and Liek cultivated local leaders in both Fairbanks and Anchorage. A trip to Fairbanks in March 1936, for example, provided Liek opportunity to talk with the mayor, the governor of the Yukon Territory, the postmaster, the newspaper editor, the district judge, and the presidents of the Chamber of Commerce and First National Bank. Park Service representation became a fixture at the Fairbanks Winter Carnival and Anchorage Fur Rendezvous, where they judged dog races, cooking contests, and beauty pageants. Park rangers also showed wildlife films and gave lectures to groups at the schools, hospitals, chambers of commerce, and Alaska Railroad employees. Although Alaskans disagreed with the protection of wolves in the park, they understood that policies came from Washington, D.C., not from their neighbors at the park. Recognition of the fragility of public relations resulted in the burying of eleven pictures of wolf-killed animals in McKinley Park by officials in Washington: "it would seem advisable to take

⁴⁷ Brown, *History of Denali*, 176, 191, 193. Other members were Alfred Lindley, Erling Strom, and ranger Grant Pearson, who became acting superintendent during part of WWII, and superintendent in 1949.

every precaution against their being broadcast indiscriminately, or placed in the hands of persons who might use them as propaganda against the wolf."48

Wolves were also perceived to threaten a new resource quickly gaining importance in the Fairbanks economy: the tourist dollar. Mount McKinley National Park dominated the venue for tourists venturing inland from Alaska's coast, and local residents held justifiable pride toward their backyard park. Each summertime steamer from Seattle and train from Seward received newspaper coverage indicating the number of tourists aboard. Visitors to the park in 1936 increased by sixty-four percent over the preceding year, to the delight of the hoteliers and merchants of Fairbanks. Tourists wanted to see game, since they often could not see the cloud-hidden mountain, and if wolves killed off the famed sheep and caribou, tourists might go elsewhere. Two important officials visited in 1936: Ernest Gruening, then with the Office of the Territories, Interior Department, gave the keynote speech at the commencement ceremony at the University of Alaska and toured the park, where he was "thrilled" by the wildlife display. Assistant Parks Director Arthur Demaray arrived in June, and after his visit announced "In no other park have I seen so many fine specimens of wild animal life." Demaray delighted his audience by announcing the Congressional passage of an appropriations bill providing \$100,000 for extending the park road to Wonder Lake, to increase tourist accessibility. 49 Alaskans took a dim view at

⁴⁸ See Superintendent's "Monthly Reports," 1936-38, DENA; Lawrence Merriam and E. Lowell Sumner, Jr., to Victor Cahalane, 17 March 1937, RG 79, Entry 7, File 719, Box 1415, NA.

⁴⁹ Daily News-Miner, "Tourist Gain By M'Kinley Is 64 Per Cent," 1 October 1936; "Director Thrilled By Sight," 20 May 1936; "Park Chief Impressed By McKinley," 2 July 1936; "\$100,000 Is Granted To M'Kinley Park," 23 June 36. For an explication of the park road history and significance, see Gail Evans, "From Myth to Reality: Travel Experiences and Landscape Perceptions in the Shadow of Mount McKinley, Alaska, 1876-1938" (M.A. Thesis, University of California at Santa Barbara, 1987).

any factor which threatened to diminish the visitor's experience, and visitors expected to see caribou and sheep in McKinley Park.

During his June visit, Demaray had encountered first-hand the depth of public opinion against the protective wolf policy as he met with local and state leaders. The information from the park changed too, as Harry Liek's July 1936 report offered a different view on wolves than he had expressed the previous February. Wolves were becoming a "menace to the sheep . . . more numerous and . . . so bold they will come right into a camp in broad daylight." A later report in 1936 also laid the blame for sheep decline to the "steady increase the past two years" in wolf numbers, and Liek recommended continued control efforts.

Back in Washington, D.C., Demaray reversed the tenuous wolf protection policy in August and gave permission to "kill a moderate number." The Park Service realized it had critics on both sides of the issue: killing wolves would "probably answer local critics who believe the wolf population should be reduced," yet to allay potential criticism from animal biologists, it would be done under the guise of research by saving wolf stomachs and contents for dietary analysis. He cautioned Liek to "pay great attention to details as the value of the results and freedom from criticism of conservation organizations will depend largely upon you and your staff." Ever conscious of this, Harold Bryant made a marginal notation on the copy circulated among the staff: "Hope you go slow on this! Mammalogists will protest mightily at any control." The headline in the Daily News-Miner read "Rangers Now Allowed Kill Park Wolves." 50

⁵⁰ Superintendent's "Monthly Report," July 1936; Superintendent's "Annual Report," 1936, RG 79, Entry 7, Box 1405 and 1406, NA, resp.; Demaray to Liek, 22 August 1936, RG 79, Entry 7, File 719, Box 1415, NA; *Daily News-Miner*, 30 November 1936, "Rangers Now Allowed Kill Park Wolves."

CHAPTER 6

ADOLPH MURIE AND PREDATOR RESEARCH

McKinley Park rangers shot wolves occasionally after the protective stance was lifted—fourteen in 1936-38, and rangers were assigned specifically to springtime predator control—but this did little do satisfy Park Service critics. Park administrators, lacking well-researched information on the park's wildlife, realized they had an insufficient body of data to justify their management decisions. Daniel Beard, of the Park Service's Wildlife Division, made this quite clear: "The arguments that the Service have presented to date are not backed by enough evidence to counterbalance the statements made by Camp Fire Club members." Joseph Dixon chastised Park Service officials for down-playing the park's wolf numbers, saying that outside organizations would never trust the service "unless the Park Service shows more willingness to be governed by facts." Dixon urged further wolf study, since facts would be the only defense against the "sentiment and prejudice amongst the Alaskans." Harry Liek pointed out that "neither I nor anyone can present a comprehensive picture of the wildlife situation here." Suggestions for a scientific study had been made in 1937, but no funding had been made available, nor an available expert found.¹

While the Park Service had clearly committed itself to animal protection that included predators, this isolated them from the mainstream of public

¹ Superintendent's "Monthly Report," July 1938, DENA; Beard to Director, 21 May 1938, RG 79, Entry 7, File 719, Box 1415, NA; Dixon to Director, 10 June 1938; Dixon to Bryant, 28 June 1938; Dixon to Director, 16 December 1938; all File 5986, Box 2, DENA; Liek to Director, 24 June 1938, RG 79, Entry 7, File 719, Box 1415, NA.

opinion and other government agencies. Nevertheless, the evolution in attitude toward predators that started with the American Society of Mammalogists in the late 1920s continued to spread through the 1930s, providing the Park Service with allies to help it justify its policies. Harold Bryant continued his efforts to rehabilitate predators and found a receptive audience in the Audubon Societies, where he contributed articles and gave a speech on the value of predators at their annual convention in 1936.2 The research on bird predation by a Wisconsin biologist received coverage in *Bird-Lore* as well. Paul Errington studied bobwhite quail for five years and concluded that quality of habitat, rather than predation, curbed quail numbers, and that predator control failed to raise the prey population, invoking the modern concept that nature worked in balance until man disturbed it.3 Lee Dice, from the University of Michigan, wrote to conservation organizations urging them to support the Park Service in resisting pressures to kill McKinley Park's wolves, and the American Society of Mammalogists responded with a resolution supportive of the Park Service and further study, and specifically condemning the Alaska Territorial Legislature's 1939 memorial to force wolf control on parks.⁴

Another important voice arose in the 1930s in defense of wild fauna, one whose conversion of attitudes toward predators has become one of environmentalism's most repeated tales. Aldo Leopold, a former Forest Service

² "Predators Necessary to Wild Life," *Bird-Lore* 38:6 (November-December 1936): 448-50; also in the same issue see Leonard Wing, "Predation is Not What it Seems," 401-405.

³ Paul Errington, "Feathered Vs. Human Predators," *Bird-Lore* 37:2 (March-April 1935): 122; Dunlap, *Saving Wildlife*, 73.

⁴ Dice to C.N. Edge, of the Emergency Conservation Committee, 15 March 1939, RG 79, Entry 7, File 715, Box 1415, NA; W.B. Davis to Governor of Alaska, 29 April 1939, RG 101, Box 474, ASA.

ranger and later a professor at the University of Wisconsin, became the father of game management during his life; after his death in 1948, his writings joined those of Thoreau and Muir in providing a philosophical foundation for the environmental movement.⁵ As a young ranger, Leopold wholeheartedly helped coordinate New Mexico's ranchers and state game wardens with rangers and Biological Survey agents against predators. Leopold was "young and full of trigger-itch," providing little evidence of his forthcoming change.⁶ By 1925, after the disaster on the Kaibab Plateau, and the questioning of predator control by the American Society of Mammalogists, Leopold began a reexamination of his views. With predators severely diminished in the southwest, he recognized their possible significance in an ecological system, although still favoring predator control even in national parks. His ecological views coalesced in Game Management (1933), the first book of its kind to appear in the United States and an enduring work still in print. Leopold saw with new clarity the failures of the sportsman's "short-time viewpoint," the "age-old insistence of the human mind to fix on some visible scapegoat the responsibility for invisible phenomena which they cannot or do not wish to understand."8 While this represented a step

⁵ A comprehensive biography is Curt Meine, *Aldo Leopold: His Life and Work* (Madison: University of Wisconsin Press, 1988). A more tightly-focused work is Susan Flader, *Thinking Like a Mountain: Aldo Leopold and the Evolution of an Ecological Attitude Toward Deer, Wolves, and Forests* (Lincoln: University of Nebraska Press, 1974). The best known work of Leopold's is the posthumously published *A Sand County Almanac* (New York: Oxford Univ. Press, 1949; reprint New York: Ballantine Books, 1966 (page numbers are from reprint edition).

⁶ Leopold, "Thinking Like a Mountain," in A Sand County Almanac, 138; Meine, Aldo Leopold, 154-55; Flader, Thinking Like a Mountain, 60-1.

⁷ Meine, Aldo Leopold, 241; Flader, Thinking Like a Mountain, 94; Wright, Wildlife Research, 63.

forward in attitudes toward predators, Leopold still wrote from the utilitarian rather than the aesthetic or moral stance, regarding naturalists who wished no predator control to be biologically misguided and willfully oblivious to economic concerns.⁹

Leopold shaped his attitudes toward predators by the emerging theories of ecology, and he proved capable of applying them to the policy issues faced by wildlife and land managers. An additional impetus to his evolution in thought arose from a less tangible concept, that uniquely American idea of wilderness. As early as 1921 he recognized the potential value of undisturbed Forest Service lands for a particular type of recreation, that of the extended trip "through a big stretch of wild country" away from the "hordes of motorists." His proposal bore fruit in the 1924 designation of the Gila Wilderness in New Mexico, the precursor to a much larger system of Forest Service wilderness areas, and in 1934 Leopold joined eight others in creating the Wilderness Society. ¹⁰

Two trips in the mid-1930s to quite different destinations confirmed his predilection toward wild areas. A lengthy visit to Germany and its intensively-managed forests brought a mixture of feelings: admiration for German conservation of game species despite its dense human population, and pity for Germany's "bearless, wolfless, eagleless, catless woods," which, to Leopold's

⁸ Aldo Leopold, *Game Management* (New York: Charles Scribner's Sons, 1933), 246, 212. On Errington's influence, see Meine, *Aldo Leopold*, 274-76, 288. *Game Management* is still assigned in classes at the University of Alaska Fairbanks.

⁹ Leopold, Game Management, 230; Meine, Aldo Leopold, 287.

¹⁰ Aldo Leopold, "The Wilderness and its Place in Forest Recreational Policy," *Journal of Forestry* 19:7 (November 1921): 720.

mind, was a trade which yielded "very little indeed." ¹¹ The following year he journeyed to the mountains of northern Mexico, and experienced a land affected by neither twentieth century development nor by resource management, where forests were healthy yet deer were abundant, and predators roamed free of "rifle, trap, and poison." Wilderness lacked true wildness in the absence of all its native fauna, and from this time Leopold urged management schemes that included predators as essential components of healthy lands. ¹² Leopold maintained contact with members of the Park Service's Wildlife Division through work on national conservation and game advisory boards, and through the annual meetings of the North American Wildlife Conference. When the wolfsheep controversy moved to the floors on Congress in 1946, Leopold became involved on behalf of the Park Service.

A 1920 graduate of the University of Wisconsin, Sigurd Olson, experienced a similar change in attitude toward the wolf. Born and raised in northern Wisconsin, Olson began his writing career with articles in newspapers and magazines about the canoe country near Lake Superior. A biology instructor and administrator at Ely Junior College in Ely, Minnesota, Olson maintained a guiding business during the summers, traversing the historic water routes of the French voyageurs. Wolves still roamed the forests and lakes, and Olson's contact with the area's trappers yielded material for two articles in *Sports Afield* magazine. "The Poison Trail" (1930) described with approval this "phase of the

¹¹ Aldo Leopold, "Naturshutz in Germany," *Bird-Lore* 38:2 (March-April 1936): 102; see Meine, *Aldo Leopold*, 358-60, and Flader, *Thinking Like a Mountain*, 139-44 for further details on this trip. Roderick Nash discusses the context from which the Wilderness Society arose in *Wilderness and the American Mind*, 207-8.

¹² Aldo Leopold, "Song of the Gavilan," in *A Sand County Almanac*, 159; Meine, *Aldo Leopold*, 368-9; Flader, *Thinking Like a Mountain*, 151-55.

warfare between the predatory animal control and the hosts of grey marauders," while the fictional "Papette" (1932) described the bloody life of the wolf pack in the style of Jack London's stories.¹³

When Olson started graduate studies at the University of Illinois, he chose wolves as his thesis topic. Through the 1930s he changed from a hunting and fishing writer to an outspoken advocate for preservation issues, influenced by Leopold and early membership in the Wilderness Society. His academic research, supervised by ecologist Victor Shelford, formed the earliest comprehensive study of the north woods, and Olson's previous attitude toward the wolf changed into one of admiration and respect. Like Leopold, Olson came to appreciate the wolf for both its ecologic role and its symbolic place in wilderness. Olson's master's thesis appeared in the April 1938 Scientific Monthly. "A Study in Predatory Relationship with Particular Reference to the Wolf" utilized the lore and knowledge of Olson's trapper and game warden friends to build a case for preserving wolf populations, despite the desire of his informants to see the wolves exterminated. Olson concluded that wolves took far fewer game animals than popularly supposed, and that they were a "distinct asset to big game types." The Park Service noticed Olson's work: Harold Bryant wrote a congratulatory letter to Olson and requested five copies, pointing out that "the facts recorded in your article would tend to support our claims that at Mount McKinley evidence is lacking to show that wolves are doing an unusual amount of damage." Olson's

¹³ Both articles are reprinted in Mike Link, ed., *The Collected Works of Sigurd F. Olson: The Early Writings:* 1921-1934 (Stillwater, Minnesota: Voyageur Press, 1988), 121-33, 171-86.

work paved the way for Adolph Murie's more rigorous wolf study, and Olson became a staunch advocate for the Park Service in the McKinley controversy. 14

The founders of the Wilderness Society included Olaus Murie, whose thoughts on predation also went through an evolution in the 1930s. Following graduation from Oregon's Pacific University in 1912, he traveled to Canada's northern regions as a collector and naturalist for the Carnegie Museum. After service in World War I, Olaus obtained a position with the Biological Survey and came to Alaska in the early 1920s for caribou and waterfowl research. Olaus and Adolph attended the University of Michigan together, and then Olaus rejoined the Biological Survey. He conducted a major coyote study near his home in Jackson Hole, Wyoming, in 1927-32. This study concluded, to the displeasure of his organizational superiors, that coyotes had little effect on elk numbers. Murie's personal correspondence with Otto Geist at the University of Alaska reflected his growing positive thinking toward predators.

"I do not become irate at the Alaskans who think otherwise. I believe they are sincere and I have much respect for their viewpoints. Most of us felt the same way not so long ago. But some of us have been studying these problems intensively in the last few years and we have had our eyes opened. We find that we can have game and moderate numbers of predatory birds and mammals in the same area.

There is always so much hysteria, as in the case of the starving Eskimo. And so much political propaganda. . . . I realize the whole

¹⁴ Mike Link, ed., *The Collected Works of Sigurd F. Olson: The College Years:* 1935-1944 (Stillwater, Minnesota: Voyageur Press, 1990), 21-4, 82-103; Bryant to Olson, 3 June 1938, RG 79, Entry 7, File 719, Box 1415, NA. Olson became the most important wilderness advocate in the Great Lakes region; his son, Sigurd Jr., became a game biologist for the Fish and Wildlife Service in Alaska in the 1950s.

¹⁵ Biographical information from Olaus Murie, *Journeys to the Far North* (Palo Alto: American West Publishing, 1973): 246-9; Worster, *Nature's Economy*, 279; Dunlap, "Wildlife and the National Parks," 195-6. James M. Glover is working on a biography.

country is against the animal. Traders will be cussing them. Probably the Eskimo will resent the killing by wolves. I find it necessary to be diplomatic in such cases and quietly gather what data I can. The problem of sincere conservationists is to find places where animals such as the wolf can exist in moderate numbers and prevent their complete extermination. 16

The Park Service assigned Adolph Murie to a coyote study in Yellowstone in 1937. While Olaus finished with a master's degree at Michigan, Adolph continued to a Ph.D. under Lee Dice. His dissertation concerned the moose of Isle Royale, a sight that would become famous for wolf research after their natural introduction on the island during an exceptionally cold winter in the 1940s. He also conducted a study of foxes in Michigan and helped establish research methods of determining a carnivore's diet by examining droppings. To Joining the Park Service's Wildlife Division as a predator/prey specialist, Adolph Murie traveled to Glacier, Yellowstone, Rocky Mountain, and the proposed Olympic national park. He concluded that problems of too many ungulates in park lands resulted from the absence of predators. Faunal issues held far more importance to Murie than making the parks accessible to visitors. His field notes include an exchange with the superintendent of Yellowstone over the drainage of an area around Old Faithful lodge to reduce tourist complaints of mosquitoes, to which Murie suggested that "the mosquitoes might be a selective agency." 18

¹⁶ O. Murie to Geist, 18 March 1935; 17 September 1936, Geist Collection, Box 16, RL. The reference to the starving Eskimo pertains to the common newspaper allegations that wolves were to blame for the demise of the reindeer herds and hence the Native's food supply.

¹⁷ Durward L. Allen, Wolves of Minong: Their Vital Role in a Wild Community (Boston: Houghton Mifflin Co., 1979), 31; review of Following Fox Trails, by Adolph Murie, in Journal of Mammalogy 18:1 (February 1937): 107.

¹⁸ A. Murie Collection, Box "Field Notes on a Variety of Species, 7/6/35 - 9/17/35;" Folder "Notes on a Management Plan for Grand Canyon National Park;" Box #11, Folder "Olympic Notes 1936," RL. The mosquitoes of interior Alaska are legendary. Murie spent

Arno Cammerer halted coyote killing in Yellowstone in 1934 following pressure from the American Society of Mammalogists, yet this policy proved difficult to sustain. Area ranchers as well as Park Service people strongly disagreed with coyote protection, and Murie was called upon to assess the situation.¹⁹ He commenced a two-year study in May 1937, and established methods that he would later use in Alaska. In order to determine if the existing wildlife populations were aberrational or normal, Murie combed through a wide variety of historical references seeking clues, including the journals of Lewis and Clark, records from the Rocky Mountain fur trade, diaries of early explorers, reports by government surveyors, and the early park records.²⁰ Field studies included year-round observations of coyotes and other animals, as well as studies of range conditions and feeding patterns of the ungulates. Murie examined five thousand coyote droppings to determine prey preferences and examined prey carcasses, paying particular attention to the fat content of winterkilled animals as an indication of their overall health. His field notes clearly indicate that Murie felt the coyote to be beneficial to prey species, as well as detailing what he called the "symbiosis" between coyotes and game animals, concluded from watching coyotes lingering near calmly-feeding bison, alert for any rodents made available as the bison cleared snow away from underlying

countless hours afield, patiently observing, during his many years in McKinley Park, before modern chemical deterrents appeared. Through his books, notes, and diaries, I have found only one mention of mosquitoes, when on 16 June 1941 he recorded they were "mildly bothersome," likely indicating his willingness to accept nature as it is, combined with a Norwegian stoicism.

¹⁹ See Chase, Playing God in Yellowstone, 126-8.

²⁰ Murie's historical notes are found in the A. Murie Collection, Box 11, "Historical Notes on Western U.S.," RL; these formed the basis of "Comparison of the primitive and present wildlife status" in his monograph, *Ecology of the Coyote in the Yellowstone*, Fauna Series No. 4 (Washington, D.C.: GPO, National Park Service, 1940).

grasses.²¹ Murie proved the great variety in the coyote diet, especially their dependence on rodents, and blamed inadequate winter range and overpopulation of ungulates for their poor condition, rather than coyote predation. He discounted the "reservoir" effect of coyote protection in the national park, and recommended that coyote killing remain in abeyance. He remained consistent with an evolving Park Service preference for natural controls on all animals and regarded the coyote as "a desirable member of the assembly of animals."²²

Adolph wrote to family friend Otto Geist in Fairbanks that his coyote report had "gone to the printers after some objections on the part of those whose philosophy it did not agree with." Murie's critics wore Park Service uniforms. Yellowstone Superintendent Edmund Rogers favored coyote control and thought Murie had a "soft job" while on his coyote study. The park's Chief of Operations urged Cammerer to delay publishing Murie's study, since it would provoke "unfavorable comments" about the Park Service. Horace Albright, still interested in service affairs, wanted "open war" on the coyotes, regardless of Murie's conclusions. Supporting coyotes guaranteed the wrath of western stockmen. Despite the opposition, the Park Service remained committed to the ideal of the natural balance and Murie's monograph was published in 1940.²³

²¹ Ecology of the Coyote, Chapter 4; A. Murie Collection, Box 11, "Coyote Notes 1937-38,"
RL. Modern ecologists would likely refer to this relationship as simply opportunistic behavior by the coyote.

²² A. Murie, Ecology of the Coyote, 146-8.

²³ A. Murie to Geist, 16 October 1939, Geist Collection, Box 15, RL; "Coyote Notes," 18 March 1938, A. Murie Collection, Box 11, RL; Chase, *Playing God in Yellowstone*, 126-8.

The manuscript had been completed by Murie in three short weeks, his wife Louise hastily typing drafts back at the Murie home in Jackson Hole, for Adolph had received an assignment in McKinley Park. In response to the public pressure, Arno Cammerer wrote a friendly missive to William Greeley on January 31, 1939, in which he outlined his scheme for a research project. Cammerer mentioned Adolph Murie as being a good candidate to conduct the research, but budget problems seemed insoluble, and a year's study would cost \$4500. Given their "deep interest" and many members of "means and intelligence," Cammerer wondered if the Camp Fire Club would be willing to fund the project on McKinley's sheep. Greeley, who had been a forest ranger under Gifford Pinchot and later Chief Forester for presidents Harding and Coolidge, responded tersely to this suggestion. He noted that "uninformed and unintelligent views of certain organizations" held too much sway in the Park Service, that the wolves quite clearly presented a menace to the sheep, that wolf control need not be postponed for lack of wolf study, and that no, "the raising of a fund for investigation is not within the province of this Committee."24

A meeting of Park Service officials in California the following month resulted in the decision to proceed with a wolf-sheep study. Joseph Dixon, Harold Bryant, Aubrey Houston, and Harry Liek concluded that the Park Service needed to "solve its own wildlife problems and thus avoid pressure for control measures by other agencies" by sending an experienced scientist for a six-month research project. Dixon, with six previous Alaskan trips, prior research in McKinley Park, and an academic background of sufficient length and distinction

²⁴ "Notes Concerning Yellowstone Coyote M.S.," A. Murie Collection, RL; Cammerer to Greeley, 31 January 1939; Greeley to Cammerer, 8 February 1939, RG 79, Entry 7, File 715, Box 1414, NA.

to provide widespread credibility, was the obvious choice. Director Arno Cammerer found the money and approved the idea and Dixon's participation, as did the Camp Fire Club. Yet Joseph Dixon was fifty-five years old, and his doctor recommended only a short trip and that he "avoid extremes of cold weather and exertion." Dixon's credentials notwithstanding, prudence won out and attention shifted to Adolph Murie.²⁵

Murie had suggested his participation in a McKinley wolf study in 1936, while working at Isle Royale. He recognized the widespread interest such a study would accrue, important for Park Service management as well as conservation and science. After several happy years up north as a young man, Murie was under "the Alaska spell," according to Louise, and wanted to return following his studies in Michigan. Harold Bryant attempted to get Murie to Alaska at that time, but the need for a predator study in Yellowstone prevailed. His work there, while it had its detractors, brought him a measure of prominence, enough that in 1938 the Director of the Audubon Societies, Richard Pough, recommended Murie to handle the "general hysteria about wolves" in Alaska. Experienced in predator research, eager for Alaska, and available, in March Murie packed his field gear and proceeded on orders from Director Cammerer to Seattle to catch a government ferry transporting a CCC contingent

²⁵ Dixon to Carl Russell, 24 February 1939, RG 79, Entry 7, File 719, Box 1415, NA. Dixon was professor of vertebrate biology at UC-Berkeley; Ranger Houston had just been transferred from McKinley to Death Valley.

²⁶ A. Murie to Victor Cahalane, NPS Wildlife Division, 17 August 1936, RG 79, Entry 7, File 719, Box 1415, NA; Louise Murie to Otto Geist, 29 September 1936, Geist Collection, RL.

to Seward. A train ride would take him to McKinley Park for a seven-month study of its wolves.²⁷

Adolph Murie arrived at the park in the midst of a transition in superintendents. Harry Liek's tenure as superintendent of McKinley Park came to a close in May 1939 following reports of gambling, drinking, and a lack of discipline among the supervisory staff of the park.²⁸ Liek was transferred to Wind Cave National Park in South Dakota and replaced by Sequoia National Park's naturalist, Frank Been, a graduate of the Park Service's Yosemite Field School. A thin, disciplined man, Been arrived in June 1939, and fit in poorly with the informality of the ranger staff.²⁹ The self-styled "Cheechako Superintendent" immediately justified his sobriquet by wrecking the park sedan attempting to cross a partially flooded bridge. Further embarrassment followed in Been's first Alaskan winter as he attempted to learn dog mushing. Out for a practice run in December, his lead dog came unhitched and sprinted ahead of the team, only to encounter a wolf in the trail. Been couldn't stop the sled and the rest of the dogs barreled into the fight. Unsheathing his rifle, Been shot at the wolf and hit his dog Bill instead. The wolf fled, Been fired again and missed, and finally put a

²⁷ Pough to Cahalane, 11 March 1938; Bryant to Pough, 21 March 1938; Carl Russell to Cammerer, 7 March 1939; Cammerer to Murie, 8 March 1939; RG 79, Entry 7, File 719, Box 1415, NA.

²⁸ Grant Ross to Frank Kittredge, NPS Regional Director, 4 August 1938; Kittredge to Demaray, 6 August 1938; RG 79, Entry 7, File 207, Box 1405, NA.

²⁹ Grant Pearson, *My Life of High Adventure* (Englewood Cliffs, New Jersey: Prentice-Hall, 1962), 186-9. Pearson started as a ranger under Harry Karstens and replaced Frank Been as superintendent in 1949. Pearson had a popularity among the men never attained by Been.

third round into the wounded dog. Ranger Harold Herning tracked and killed the wolf the following day.³⁰

The change in superintendents likely proved beneficial to Adolph Murie's research. While Liek had come from the traditional ranger ranks, Been came from the new "posy-sniffing" branch of park rangers, and brought with him a naturalist's appreciation for research. Murie had arrived in April; Been quickly became convinced of the possible scope and value of Murie's work, and recommended funding for a lengthy study. Been recognized that Murie's research could have value on several levels. Within the park staff, "the old school of rangers has not realized or comprehended the significance of animal observations and recordings." In the broader scope, Been realized the importance of the wolf issue to Alaskans, and understood that "Territorial ramifications" existed. Conclusions that would be used to make policies could not be obtained by only a few months of study, but needed longer time because Been felt that Alaskans would not accept the study's findings unless it appeared thorough. While Murie's coyote study in Yellowstone had not been well-received by others, he nevertheless received the assignment in Alaska, indicating that his expertise was valued by top Park Service staff. Part of his mission was to blunt public criticism of service policy. Been provided a tantalizing clue indicating that an element of subjectivity came with Murie to McKinley Park: with Murie only commencing his study, Been wrote that "Dr. Adolph Murie . . . states that

³⁰ Superintendent's "Monthly Reports," June, November, December 1939, RG 79, Entry 7, Box 1406, NA; Been to Board of Survey [?] 8 December 1939, RG 79 Entry 7, File 715, Box 1414, NA.

indications point to a favorable report to support the National Park Service policy of protecting all species of native animals."31

Murie originally received a seven-month assignment, but arguments on behalf of an extension began before this was completed. The arguments for continued research recognized the basic scientific value of Murie's work, yet also derived from public opinion imperatives: the need to improve relations with the residents of Alaska, allay public apprehension over 'protected' wolves, supply facts to answer critics of service policy, and maintain professional integrity. Frank Been's recommendations were echoed by a Biological Survey agent, L.J. Palmer, who visited the park in 1939 and met with Murie and Been. Palmer worked on a variety of Alaskan issues, including deer studies in southeastern Alaska, moose on the Kenai Peninsula, and lichen on the reindeer ranges, and also surveyed the Dall sheep in the eastern part of the Alaska Range and hoped to correlate Murie's findings with his sheep research.³²

Administrative changes in Washington, D.C. helped in getting an extension of the wolf study: in July 1939 the Biological Survey had been transferred from the Department of Agriculture to Interior, alongside the Park Service, and then in December the Park Service's Wildlife Division joined the Biological Survey, led by Victor Cahalane. Like Murie, Cahalane had studied at Michigan under Lee Dice, and had served with the Park Service since 1934. Besides this shared background, the men held memberships in the same

³¹ Superintendent's "Monthly Reports", June, October, December 1939, RG 79, Entry 7, Box 1406, NA. Been's comment about the ranger staff not appreciating animal recordings is consistent with Grant Pearson's lukewarm description of Been.

³² "Reports to Fish and Wildlife Service 1937-42," L.J. Palmer Collection, RL; Russell to Director 27 March 1940, RG 79, Entry 7, File 719, Box 1415, NA.

organizations, such as the Society of Mammalogists and the Wilderness Society, and Cahalane became a staunch supporter of Murie's research and McKinley Park's wolves. The Director of the Park Service, Arno Cammerer, and the Chief of the Biological Survey, Ira Gabrielson, had earlier agreed on principles of park wildlife management. These affirmed that "every species shall be left to carry on its struggle for existence unaided," including predators, which would not be killed unless a prey species was in threat of extermination. Been worked hard to convince his superiors to find \$1100 for further study by Murie, helped by the joint management principles which stated that investigation would precede any "interference with biotic relationships." Determining whether or not McKinley's Dall sheep faced extirpation formed the crux of Murie's study, for their status would form the basis of a wolf policy. With controversy at hand, and objective principles to sustain, the money appeared. In April 1940 Been wrote, "The pleasantest event of the month was the return of Field Biologist Adolph Murie." He spent the next fifteen months in the park.

No one had previously had an opportunity to study wolves in their natural environment, yet Murie did not have luxury of a purely basic research project. He understood that his first mission was to "determine the need for wolf control" and that "public opinion and various current attitudes must first be

³³ Biographical information on Cahalane from Jaques Cattell Press, ed., *American Men and Women of Science*, 12th ed. (New York: R.R. Bowker Co., 1971), 841.

³⁴ Gabrielson and Cahalane both visited the park in the summer of 1940; Press Release, Dept. of Interior, 27 December 1939; Cammerer and Gabrielson to Ickes, 24 November 1939 RG 101, Box 470, ASA; Been to Director, 10 January 1940; Superintendent's "Monthly Report," April 1940, Box 1406, NA.

considered."³⁵ Writing an ecological treatise on the wolf followed from this specific research mission. Murie ascribed to the national park ideal of letting nature dictate the balance between species, writing that "The less control or interference in a given park the more successful we feel that park has been."³⁶

Murie's field research started with a fundamental question: what do wolves eat? From this came a torrent of questions. How do wolves raise their young? What are their hunting tactics? What do they kill, and how much of their food is carrion? What are the causes of prey mortality? How many sheep and caribou calves live through the first year? What are the populations of the different species, and how do they interact with wolves? Using research techniques learned in the Yellowstone coyote study, he began by collecting the stories of old-timers and the scattered written records to sketch historic patterns of animal population fluctuations. He carried Charles Sheldon's book into the field, comparing observations of thirty-two years earlier with his own.³⁷ The Park Service had several years of wolf stomach content data from wolves killed in the park, but this information was scant and unsystematic. Murie derived his knowledge from the basic tools of a field biologist: a pair of strong legs—he estimated he walked 1,700 miles the first summer, collecting skulls from sheep carcasses for analysis; a naturalist's sensitivity to the nuances of his

³⁵ "Annual Report" by A. Murie to Gabrielson, 3 July 1940; "Quarterly Report" by Murie to Cahalane, 6 October 1940, reprints from the Denver Technical Center, National Park Service (hereafter DTC).

 $^{^{36}}$ No date, yet probably between 1940-42, "Wildlife in McKinley National Park," A. Murie Collection, RL;

³⁷ A. Murie, *Wolves of Mount McKinley*, 1. The historical compilations have proven their worth to many subsequent researchers of the larger species in McKinley Park; "Field Notes on Wolves, 1939," A. Murie Collection, RL.

environment—Murie observed the species of plant foraged by a large flock of snow buntings and realized they were the same plant favored as winter food by the sheep; patience—he spent 195 hours in seven weeks watching a wolf family at their den site, once for 33 hours straight.³⁸

Murie sought information on relationships between animals, not the mere descriptions that had dominated previous generations of research, and no facts lacked significance. He watched magpies following wolves, waiting for them to make a kill. He speculated on the trees killed by porcupines, the porcupines killed by wolves, and the wolves killed by porcupines. He classified the percentages of various plants comprising the diet of sheep, the percentage of sheep comprising the diet of wolves, the ages of wolf-killed sheep, and the variety of diseases borne by the dead sheep. Hunting tactics of wolves, migration patterns of sheep and caribou, predation on sheep by coyotes, wolverines, and golden eagles, the influence of the park road, the competition for carrion between wolves and bears—all of Murie's research was original and meticulous.

The discovery of a wolf den in the East Fork River valley in May 1940 afforded Murie a chance to learn about wolf behavior and juvenile development. With adult wolves howling their protest nearby, Murie wriggled into the den and examined the pups, placing one in his knapsack "for closer acquaintance." This pup, named Wags, grew up under the care of the Murie family, since wife Louise and five-year old daughter Gail spent 1940-41 in the park. Louise collected botanical specimens and Gail often accompanied her father on his drives and hikes through the park. The East Fork cabin, where they summered, attracted bears; Louise once chased one away with a stove poker, causing

³⁸ A. Murie, Wolves of Mount McKinley, 3, 95, 24.

Adolph to comment that "when Gail plays outside she must be alert and ready to flee." Gail stayed out of harm's way and kept Wags full of condensed milk, and the pup grew up friendly and domestic.³⁹

Wags lived at park headquarters following Murie's departure in 1941, where her future became uncertain. Kept on a exercise wire leash, she broke it twice yet caused no harm to the sled dogs. She was confined to a kennel after slightly wounding a caretaker, and the park staff wondered just what they were to do with her. Murie recommended against releasing her back to the wild, and suggested two options: transport her to a zoo, or shoot her. The Park Service solicited the National Zoological Park in Washington, D.C. for accommodation. The zoo agreed, yet they could not find a freight company willing to take the task. After finally arranging transportation, the zoo changed its mind. Wags had only one more value to scientist Murie; the park staff shot her and sent Murie her measurements: 5' 3" long, 2' 7" high, 65 pounds. 40

Murie finished his McKinley work in August 1941, convinced that he had accumulated enough data "for solving immediate administrative problems." The Murie family traveled back to Jackson Hole, where laboratory work and manuscript preparation occupied Adolph's time. After keeping "everlastingly at it," he completed the monograph in late 1942.⁴¹

³⁹ A. Murie to Geist, 2 July 1940, Geist Collection, Box 15, RL; A. Murie, Wolves of Mount McKinley, 45-50. Gail appears in two photos, pp. 24 and 50.

⁴⁰ A. Murie, *Wolves of Mount McKinley*, 48-9; G.A. Moskey to William Mann, 6 April 1943, File 5968, Box 2, DENA; A. Murie to Cahalane, 8 March 1943, RG 79, Entry 7, File 715, Box 1414, NA.

⁴¹ "Annual Report" by A. Murie to Gabrielson, 1941; "Quarterly Report," September 1941, reprints from DTC.

As Murie stated in the foreword of his book, his study occurred to determine if wolf control was necessary to ensure the presence of game species, especially the sheep. He examined other predators—coyotes, lynx, bears, wolverines, and golden eagles—and dismissed them as significant sheep predators. This left the wolf, and Murie analyzed wolf-killed sheep for shared factors which may have increased their availability to the wolves. He also sought other causes of sheep mortality. He concluded that environmental conditions such as snowpack and diseases caused susceptible sheep to weaken and die. He collected over eight hundred skulls of dead sheep to determine their ages, sex, and health, finding that wolves preyed primarily on the old, the young, and the sick. This led to the overall conclusion that wolf predation likely provided a benefit to the species by exerting a positive selective effect. Furthermore, Murie regarded the high sheep population of the 1920s as aberrational, and felt during the 1930s an equilibrium existed between the two species—the balance of nature. Management tactics, then, should tend toward promoting this stability by careful watching and intervention only when absolutely necessary, which corresponded to the Park Service's philosophy. As an objective scientist, though, Murie also stated what Park Service critics sought: "wolves are the chief factor limiting the sheep population."42

While Murie roamed the hills of McKinley Park, watching and recording, efforts continued to improve the Park Service's public image. "Each time the Superintendent leaves the park," wrote Frank Been to his boss, "he runs into criticism of the predator policy at McKinley." Been continued efforts to positively

⁴² A. Murie, Wolves of Mount McKinley, 126-8, 141, 230-1.

influence local attitudes toward their national park asset, and his superiors regarded local relations "effectively improved" by Been. 43 Been started assigning rangers to accompany park bus tours and provide nightly flora and fauna lectures in the park hotel. Appearances before chambers of commerce and civic organizations became part of Been's annual cycle of activities, and Mrs. Been contributed by speaking at women's groups and schools. These public wildlife lectures included pictures of wolves, providing an opportunity to explain park philosophy concerning predators and curb the prevalent erroneous information about the park. Radio was another publicity tool used by Been, and he arranged for two broadcasts from the park by Fairbanks station KFAR. In all of these, Been encouraged Alaskans to visit their park and adopt it as their own. In addition to public lectures, films, and slide shows, Been took less visible public relations steps. While visiting Anchorage, Been saw 'Alaskan wildlife' postcards for sale in Hewitt's Photo Shop, which showed chained bears and caged Dall sheep. He invited Mr. Hewitt to lunch and explained the Park Service role in providing tourists with access to real wildlife. A twenty-three year resident of Alaska, Hewitt had never visited the park. He later received a personal tour by Been and agreed to delete the postcards from his photo shop.⁴⁴

Been also attended the 1940 annual meeting of the Alaska Game

Commission, a meeting he regarded as worth "years of experience." This gave

Been a chance to combat the "almost complete lack of appreciation for Park

 $^{^{43}}$ Been to Director, 10 January 1940; Charles Russell to Director, 27 March 1940; RG 79, Entry 7, File 719, Box 1415, NA.

⁴⁴ See Superintendent's "Monthly Reports" in 1940-41 for specifics of public appearances; *Jessen's Weekly* [Fairbanks], "McKinley Park Is For Alaskans, Says Superintendent Been," 20 February 1942; "McKinley Park A New World," 3 April 1942; Been to Director, 5 March 1940, RG 79, Entry 7, File 715, Box 1414, NA.

Service purposes." Been's presentation on park wildlife policies was wellreceived by the group: one commissioner, a forty-year resident, commented that he had "just found out what the National Park Service is." While the commissioners did not change their attitudes toward predators, Been felt the contact had been important for diminishing direct criticism of park policies by this influential group. In this and other meetings with the public, Been made a point to inform people that wolves were being shot by park rangers when possible, in hopes that this knowledge would modify the "critical attitude toward these predators being completely protected."45 For the game commission, Been submitted summary information for the previous decade on wolves killed in the park both not only to demonstrate that wolves had not enjoyed complete protection, but also for a visual statement. The game commission published in their annual report a map of Alaska indicating the location of wolves taken for bounty the previous year. Been offered the park wolf kill data so that "the map of wolves killed will not show the park as a blank. Unfavorable comment may thereby be reduced." The next map published by the game commission showed six wolves taken for bounty within the park.⁴⁶

Adolph Murie, too, contributed to the public relations campaign while he conducted his research. Rangers and other park staff accompanied Murie in his forays through the park, whether on foot or out for an evening drive, and Been

⁴⁵ Superintendent's "Annual Report," 1940; Been to Director, 29 February 1940, RG 79, Entry 7, Box 1405, 1406, NA; Director to Been, 4 April 1940, RG 79, Entry 7, File 715, Box 1414, NA; Been to Director, 13 February 1940, RG 79, Entry 7, File 719, Box 1415, NA.

⁴⁶ Been to Dufresne, 13 March 1940; Been to Director, 6 March 1940, RG 79, Entry 7, File 719, Box 1415, NA; Department of the Interior, *Annual Report of the Alaska Game Commission*, 1940, RG 101, Box 470, ASA. The 1939 restructuring of the Biological Survey into the Fish and Wildlife Service involved its transfer to Interior from Agriculture.

commented favorably that Murie was "stimulating and beneficial to park personnel who have gained an improved sense of responsibility for the animals." Rangers readily blamed game kills on wolves, and Murie took these opportunities to broaden their understanding of ecological complexity. Murie also had opportunities for contact with area trappers and miners, and recorded in his diary numerous instances of discussing wolf attitudes and practices with them. He did this with an air of understatement and obliqueness, listening to others respectfully and offering his beliefs as alternatives; years before, he had recorded in his diary thoughts on the efficacy of "more indirect methods" rather than "crusading" on wildlife issues.⁴⁷ Prominent visitors to the park during these years often traveled the park road accompanied at their request by Murie, who explained his research and park policies. When in Fairbanks, he attended a meeting of the Tanana Valley Sportsman's Association and made a presentation on wolves and game. Writing in retrospect, Murie admitted that his research emphasis on describing the wolf's home life resulted from a desire "to change wolf-hatred to a more generous attitude, not only in the public but among Service employees. Here esthetics are involved, a 'reverence for life,' and the fundamentals of the park philosophy."48

Criticism of the Park Service's policies in McKinley Park came to national prominence in the September 1941 *Field and Stream* magazine. In "Wolves Look Better Dead," Russell Annabel wondered "why there has never been a campaign

⁴⁷ Superintendent's "Annual Report," 1940, 1941, RG 79, Entry 7, Box 1405, NA; "Diary and Field Notes, 1939;" "Personal Diary 1940-41;" "Olympic Notes," 27 January 1936, A. Murie Collection, Box 11, RL.

⁴⁸ "Field Notes on Wolves," 7 February 1941, A. Murie Collection; Murie to Geist, 2 April 1940, Geist Collection, Box 15; Murie to Regional Director, 7 March 1963, A. Murie Collection, Box "Correspondence," RL.

to exterminate the wolves in Mt. McKinley National Park." He scoffed at the need to study the park's ecology and blamed officials in Washington, D.C. for holding the park staff in check, citing a "conscientious" unnamed ranger who criticized the "fantastic government policy" that prevented a war on the wolves. Annabel lived in Alaska, making his living guiding and writing for sporting publications, especially *Field and Stream*. Frank Been, responding to the article, invited Annabel to visit the park and informed the director that Annabel "has been described by those who know him as 'a blow-hard."

One of those was Lee Swisher, a trapper and occasional park employee, who derided the article in a letter of support to Been. Swisher concluded his letter by saying, "Well, from the way it looks now we will have all we can do to take care of our little yellow brothers across the sea." 49 It was December 8, 1941; the national imagination and effort would be devoted to a far more significant issue than McKinley's wolves. Alaska entered the modern era in an avalanche of defense spending and McKinley Park became a playground for soldiers. Adolph Murie's research gathered shelf dust, unavailable and unneeded.

⁴⁹ Russell Annabel, "Wolves Look Better Dead," Field and Stream 46:5 (September 1941): 70, 36; Been to Director, 17 September 1941, RG 79, Entry 7, Box 1414, File 715, NA; Swisher to Been, 8 December 1941, RG 79, Entry 7 Box 1407, File 208-06, NA.

CHAPTER 7

THE WAR YEARS

Increased government spending during the Roosevelt administration helped the Park Service expand during the 1930s. The federal government had recognized the need to place greater emphasis on wildlife conservation and used New Deal moneys to purchase lands to improve the game and fish populations and provide employment. The Civilian Conservation Corps (CCC) provided thousands of men to work on conservation projects, improving animal habitat, roads and visitor facilities on federal lands. The national parks hosted 118 CCC camps, enrollees building many of the park's enduring symbols, such as Glacier Park's Going-to-the-Sun road. The Park Service had the benefit of an advocate at the top, Interior Secretary Harold Ickes, who served from 1933 to 1945. Ickes expanded parks to include historic sites and national seashores, and protected the wilderness values and usage patterns in the large western parks. Publicity campaigns during the 1930s helped increase park visitation from 3.5 million in 1933 to 16.7 million in 1940. That year the service received a yearly appropriation of thirty-five million dollars.

¹ Foresta, America's National Parks, 44; for a comprehensive work, see John C. Paige, The Civilian Conservation Corps and the National Park Service, 1933-1942: An Administrative History (Washington, D.C.: GPO, National Park Service, 1985).

² See Cart, "'New Deal' for Wildlife;" Mackintosh, "Harold L. Ickes and the National Park Service."

³ Swain, "The National Park Service and the New Deal," 318.

This growth came to an abrupt halt in 1941. Wartime priorities caused funding to plummet to five million dollars in 1943. Construction halted, maintenance budgets diminished, and the permanent staff declined by over fifty percent. Visitation decreased markedly with gas rationing and the general war mobilization of the population, from twenty-one million in 1941 to six million in 1942. In order to make office space for military administrators, park headquarters moved from Washington, D.C. to Chicago, where it remained until 1947. Park Service officials faced years of defensive action to protect the parks from timber, grazing, and mining interests who sought to open the protected lands under the guise of national emergency.⁴

A new Park Service director assumed duties in August 1940. Newton Drury, a respected conservationist with the Save-the-Redwoods League and college classmate of Horace Albright, faced the difficult task of preserving the parks against outside interests. While he disliked the world of Washington politics, his preservation philosophies and the support of Ickes kept the parks intact. Military interests wanted park resources, such as the Sitka spruce of Olympic National Park for airplane construction. Drury deflected these desires by cooperating with the War Department in opening parks to military recreation and training while trying to keep the military's activities consistent with essential park values. Drury believed in a caretaker, rather than promoter, role for the Park Service, a philosophy that fit in well with his science advisors and advocates of McKinley's wolves.⁵

⁴ Conrad Wirth, *Parks*, *Politics*, and *People* (Norman, Okla.: University of Oklahoma Press, 1980), 20.

⁵ Olsen, Administrative History, 16; Wirth, Parks, Politics, and People, 20; Brown, History of Denali, 204; Ise, National Park Service, 449-453; Foresta, America's National Parks, 48.

At McKinley Park, Frank Been assumed the leadership of a park experiencing its best years ever. A contingent of 211 CCC personnel worked in McKinley Park in 1938, building dog kennels, laying telephone and sewer lines, finishing a ranger station at Wonder Lake, and constructing a park hotel. Secretary Ickes had funded the hotel project through a \$350,000 Works Progress Administration appropriation, and while on an Alaskan inspection tour in 1938 he visited the park to inspect its progress. Although he didn't care for the hotel's design, the two hundred-guest facility opened in June 1939, completing a host of improvements to bring the park out of the cabins and snowshoes era.6

Superintendent Been departed for active military duty in January 1943 as a captain in the Army's Special Services Division. He reluctantly left the park in the hands of Chief Ranger Grant Pearson, who had started on the ranger staff in 1926. At his request, Pearson had transferred to Yosemite in 1939, just prior to Been's arrival at McKinley, to gain experience in the variety of park problems unseen in Alaska: large numbers of tourists, illegal livestock grazing, campground management. After his return to Alaska in 1942, Pearson and Been suffered strained relations; according to Pearson, Been felt him incapable of the superintendent's responsibility. Nevertheless, Pearson ably oversaw the transition of McKinley Park from a tourist facility to Alaska's premier site for military rest and recreation. Six to eight thousand men per month visited the park during 1943, enjoying the scenery, ice skating, hiking, ski hill, and films, including footage from Pearson's 1932 climb (with Liek) and Murie's wildlife movies. Hosting soldiers kept the reduced park staff close to headquarters, with

⁶ Daily News-Miner, "CCC Activities Central Alaska," "McKinley Park CCC Completes Extensive Work for Season 1938," 3 November 1938; Brown, History of Denali, 210-12.

minimal attention paid to the wildlife in the park; Pearson quit making monthly wildlife reports for lack of ranger information and an office stenographer.⁷

The war brought a new era to the territory. Alaska's population in 1939 stood at 72, 524, slightly over half non-Native, with only five hundred servicemen. Alaska became a theater of war with the Japanese invasion of the Aleutian chain in June 1942, and by 1943 the territory hosted 152,000 military personnel.⁸ Airfields sprang up, Native villagers still living in log cabins suddenly found themselves surrounded by construction activities, and the Alaska Highway brought a welcome transportation option. Anchorage, site of Fort Richardson, began its rise to dominance, and the whole human geography of Alaska changed in several years.

Material shortages caused by the war manufacturing effort affected the taking of game by Alaskans. New arms and ammunition for sporting purposes became unavailable in many locales, as manufacturers devoted their full production to military hardware. While manufacturers developed a colorful and patriotic series of advertisements in sporting magazines to keep their name in the public eye, their products were allocated by the Munitions Assignment Board in Washington, D.C., with civilian usage holding lowest priority. Alaska's distance from production centers disadvantaged the territory in civilian allocation. A spokesman for the Assignment Board admitted that little large caliber ammunition was shipped to Alaska, adding "I don't know what they shoot with it up there—grizzly or polar bears, or something of that sort." Alaskans needed

⁷ Pearson, *My Life*, 189; Brown, *History of Denali*, 203-05; Superintendent's "Monthly Reports," January-March 1943, DENA; Pearson to Regional Director, 17 November 1943, File 5968, Box 2, DENA.

⁸ Rogers and Cooley, *Alaska's Population and Economy*, Tables P-3 and P-4.

to shoot food rather than bears, and by 1943 the lack of ammunition among Native villages became "acute," with only six calibers available in small supplies. Alaska's ammunition needs became a priority even over the other western states (where it was "needed to keep down predatory animals") and in the following spring seventeen million rounds arrived by steamer from Seattle.⁹

The number of wolf trapping permits declined through war years, as men left the villages for active duty or construction work rather than running trap lines. The number of wolves submitted for bounty fell from an average of 625 in 1936-40 to an annual average of 122 over the next three years. Metal shortages forced the Oneida Company to curb trap production, although the Newhouse No. 114, developed specifically for Alaskan wolves with the addition of interlocking teeth on the trap's jaws, remained available. The Victor trap company, an Oneida subsidiary, offered a free pamphlet on the care and repair of traps, noting that "Metal's scarce . . . manpower's scarce . . . so new traps will be scarce, too!" By 1943 the Alaska Game Commission reported increasing wolf numbers and "much damage" inflicted on game and fur populations. While the game commission could dispatch only eight wildlife agents in all of Alaska to deal with increased numbers of hunters, the U.S. Fish and Wildlife Service put nine predator control agents in the field in 1943, indicative of the importance placed on predator control at this time. 10

⁹ Louis W. Lipscomb, "Procurement of Ammunition for Other Than Military Purposes," in *Transactions of the Eighth North American Wildlife Conference* (Washington, D.C.: Wildlife Management Institute, 1943), 77; *Jessen's Weekly*, "Food Supplies of Natives are Being Replenished," 4 June 43; "Carload of Small Arms Ammunition Coming to Alaska," 17 March 1944.

¹⁰ Gerstell, *The Steel Trap*, 209; advertisements for the Victor pamphlet appeared regularly in *The Alaska Sportsman*; AGC *Annual Reports*, 1940-44.

The war forced changes in the food habits of Alaskans. A national concern arose over the millions of uniformed young men unavailable to pursue accustomed hunting patterns, threatening a surplus of game animals that might damage forage and food crops. Game managers urged continued vigilance in predator control because "every pound of meat saved for human consumption" had significance. 11 Game had always been important for daily food in Alaska, with an estimated harvest of 2.5 million pounds of big game animals and game birds (dressed weights) in 1942.¹² Domestic meat shipments to Alaska from Seattle became subject to quotas and were reduced by thirty-five percent from 1941 levels, although prices remained under government control. As the 1943 hunting season approached, Fairbanks grocers and restaurant owners announced "meatless Wednesdays," to reduce imported meat consumption. Despite the desire for their presence, the caribou did not appear on the customary fall migration route along the Steese Highway northwest of Fairbanks, and in McKinley Park the wolves were reportedly "getting thin from lack of food." The snowshoe hare populations reached their cyclic high in 1943; in the absence of larger game, hunters were encouraged to harvest hares for winter meat. The university's extension service published a series of newspaper articles on wild food preservation and urged people to take to the hills and forests to harvest

¹¹ The entire *Transactions of the Eighth North American Wildlife Conference* (Washington, D.C.: Wildlife Management Institute, 1943) is interesting for a look at fish and game concerns during wartime. From this are Elliot S. Barker, "Management for Maximum Production," 122-31; Albert M. Day, "Wartime Uses of Wildlife Products," 45-54; Frederic C. Walcott, "Harvesting Game in Wartime," 19-20.

¹² Exec. Officer's Report to the AGC, 1943, 2, 6, RL.

berries and mushrooms to augment rationed commercial foods such dried fruits.¹³

Fairbanks hunters harvested only sixteen caribou in the first week of the 1944 season, with moose scarce as well, despite having a record number of hunters in the field. 14 Military personnel caused the increase in hunters, since in 1943 Congress had passed a bill allowing soldiers resident hunting licenses after one year in the territory. This followed a well-publicized court case involving the leader of the Alaska Defense Command, Brigadier General Simon Bolivar Buckner. The Alaska Game Commission denied his original request for a resident license, yet Buckner won his case on behalf of the military, and followed this with a detailed General Order to all military personnel to comport themselves with the highest standards of sportsmanship. 15 The game commission's reluctance to offer resident licenses to soldiers followed the general reluctance of Alaskans to allow transient residents the privileges of Alaskan life. Emory Tobin in The Alaskan Sportsman regarded soldiers with automatic rifles to be a "real threat to the game resources of Alaska," and urged "no relaxation of present regulations." The Alaska Game Commission worried about providing "orientation in the rudiments of good sportsmanship" to newcomers. The game commission received support from Ira Gabrielson, Director of the Fish and

¹³ Jessen's Weekly, "Wednesday Named Meatless Day in Fairbanks," 24 September 1943; "Sheldon Finds Diminishing Wildlife at McKinley," 20 August 1943; "Rabbits Plentiful and Recommended for Meat Supply," 27 August 1943; Daily News-Miner, "Control Put On Meat For Alaska," 6 August 1943; "Prunes and Raisins Are Rationed," 2 September 1943; "Hunting At End After Light Kill," 1 October 1943.

¹⁴ Jessen's Weekly, "Game Eluding Local Sportsman," 8 September 1944; "Hunting Season Opens, 1353 Licenses Issued Locally, Interest High," 1 September 1944.

¹⁵ Sherwood, *Big Game in Alaska*, 139-40. This case forms the backbone of Sherwood's book.

Wildlife Service, who regarded Alaska's game as threatened by the "invasion" of new hunters who would be hunting less for food than recreation. Nevertheless, the number of resident hunting licenses issued in Alaska rose by twenty-five percent in 1943, and Fairbanks sportsmen uneasily shared the meager crop of game with soldiers from nearby Ladd Field. *The Alaska Sportsman* called it "the passing of an era in the progress of The Last Frontier." 17

Military hunters received the brunt of local blame for poaching and unsportsmanlike conduct, although firm evidence of verifiable incidents is scarce. *The Alaska Sportsman* occasionally printed reports of killings by soldiers, such as whales or moose used for target practice by aerial gunners. The Alaska Game Commission felt overwhelmed by the inability to monitor the numerous violations by soldiers, and warden Sam White resigned in protest over wanton killings by military personnel. A Yukon Territory official said that Americans "fished and killed and left their victims to rot." After the war, an American officer admitted "considerable truth" to reports of shooting safaris by soldiers in the Fairbanks area. 19

¹⁶ "Main Trails and Bypaths," *The Alaska Sportsman*, 7:7 (July 1941): 5; AGC *Annual Report*, 1944; *Jessen's Weekly*, "Alaska Invasion Threatens Game, Says Gabrielson," 20 August 1943; Sherwood, *Big Game in Alaska*, 3.

¹⁷ Exec. Officer's *Report to the AGC*, 1943, 16, RL; "Main Trails and Bypaths," *The Alaska Sportsman* 8:6 (June 1942): 5. The "invasion" was shortlived; resident hunting/hunting and trapping licenses issued rose to 11,000 in 1943 and topped out at approx. 14,000 before declining in 1947 to 5,000; see Exec. Officer's *Report to the AGC*, 1946, 1948, RL.

¹⁸ Butler, Ralph E., "The Blue Cow," *The Alaska Sportsman* 11:4 (April 1945): 8; "Main Trails and Bypaths," *The Alaska Sportsman* 14:8 (August 1948): 4; Exec. Officer's *Report to the AGC*, 1942, 1, RL; Hall, "Sam O. White," 61.

¹⁹ M.P. George Black, quoted in McCandless, *Yukon Wildlife*, 74; Lieutenant Colonel J.P. Williams to Governor Gruening, 4 October 1946, RG 101, Box 470, ASA.

Resentment against military hunters flared in 1943 when General Buckner announced that McKinley Park would be opened for hunting to soldiers on furlough. Acting Superintendent Grant Pearson went directly to local newspapers to ensure negative publicity against this threat to park animals. The Daily News-Miner reported the hunting arrangement without editorial comment, but Jessen's Weekly described "indignation and dismay . . . the wave of resentment . . . astonishment . . . the strongest disapproval." An editorial the following week condemned the proposal, not for the possible reduction in game numbers, but for the utter lack of sportsmanship involved with shooting animals unaccustomed to the threat of men with guns: "killing one of them would be no more difficulty than shooting one of Bentley's or Creamer's prize dairy cows." Even patriotic appeal failed to convince Alaskans that soldiers should be allowed to reap a bounty denied others. Buckner's announcement proved wishful thinking and came to naught, due to Newton Drury's effective work in Washington, D.C.²²

Although many worried about the impact of military sport hunters, other saw opportunities for wolf control by soldiers. Personnel traveling the Alaska Highway had standing orders to fire at will on wolves. A correspondent to the Alaska Game Commission in 1939 suggested enlisting military planes with machine guns in the campaign against wolves, since trapping, shooting, and poisoning had proven insufficient to diminish wolf numbers. Most importantly,

²⁰ Buckner to Post Commanders, 2 September 1943, File 5968, Box 2, DENA.

²¹ Pearson to Drury, 12 January 1944, RG 79, Entry 7, Box 1407, File 208-06, NA; *Daily News-Miner*, "Hunting in McKinley Arranged," 28 September 1943; *Jessen's Weekly*, "Hunting In Park Arouses Public Condemnation," 1 October 1943; "No Hunting in National Park," 8 October 1943.

²² Brown, History of Denali, 204; Olsen, Administrative History, 16.

soldiers could be used to protect Alaska's "Indian Service Contribution to the War," the reindeer herds. A 1942 Interior Department appropriations bill had contained \$91,000 for the operations of the Reindeer Service while providing \$40,000 for predator control on reindeer ranges, yet reindeer herd numbers continued their decline. Villagers reported rabies in wolf populations, and the newspaper intoned severely that "When mad wolves attack man and dog teams, the situation demands public attention." The famed Arctic explorer Vilhjalmur Stefansson recommended aerial wolf control by soldiers to help the reindeer and improve the men's marksmanship. *The Alaska Sportsman* reported thirty thousand dead reindeer killed by wolves in one year—an estimated three million pounds of meat—and in 1943 military personnel flew by helicopter and airplane to shoot wolves in the reindeer areas.²³

Public opinion toward wolves took a negative turn during the war for symbolic reasons as well. Increased antipathy could only be expected when the enemy in Europe identified so closely with the wolf. The Third Reich used wolf lore as an analogue of the relationship of the subservient citizenry to the will of the pack leader, Adolf Hitler, who named his East Prussian underground headquarters *Wolfsschanze*, Wolf's Lair.²⁴ The malevolence of the Nazi threat reached across the Atlantic to America's shores in the wolf-pack flotillas of the U-boats, which came close to strangling Britain's supply lines. Admiral Karl Dönitz

²³ "From Ketchikan to Barrow," *The Alaska Sportsman* 9:4 May 1943): 18; Exec. Officer's Report to the AGC, 1939, 90; Jessen's Weekly, "Crazy Fox Attacks Dogs In Nome; Wolves A Menace," 8 May 1942; Stern, "Ethnohistory and Cultural Ecology," 190; "From Ketchikan to Barrow," *The Alaska Sportsman* 9:8 (August 1943): 21; "From Ketchikan to Barrow," *The Alaska Sportsman* 9:12 (December 1943): 23.

²⁴ Erik Zimen, *The Wolf,*" 4, 307; William L. Shirer, *The Rise and Fall of the Third Reich* (New York: Simon and Schuster, 1960), 849, 1048-54.

master-minded the *Rudeltaktik* (pack attacks) and exhorted his submariners with "U-boats are the wolves of the ocean. Attack! Rend! Destroy! Sink!"²⁵ The wolfpack as a malevolent force against good came right to the doorstep of America in early 1942, as U-boats torpedoed ships within sight of the Atlantic seaboard. On the Pacific front, readers of *The Alaska Sportsman* could order a "Japanese Hunting License . . . authorizes the payment of bounty for any Japanese shot." A Fish and Wildlife Service scientist took the simile to heart in discussing the McKinley wolf situation: "Suppose we had let the wolves (Germans and Japanese) just continue their depredations on the sheep (the rest of mankind)." William Beach, in a letter to a fellow Camp Fire Club member, also made the connection clearly:

"Unfortunately in this great country of ours there are many people who will cry for leniency when Germany and Japan have been defeated. Certainly in the animal life a wolf is of a similar standard, a killer and destroyer of all that is beautiful inn [sic] the mammals of North America. It would appear to me that if the wolf has a place in the animal kingdom then certainly Hitler, Hirohito, Mussolini and their ilk should be protected, for eventually there would be a balance reached, and by the same line of reasoning we should refrain form the prosecution of murderers, robbers, etc." 26

These wartime circumstances resulted in a crescendo of negative publicity toward the wolf as the war came to an end. A joint memorial of the Territorial Legislature in February 1945, signed by Governor Gruening, and entered into the

²⁵ Karl Dönitz, *Memoirs: Ten Years and Twenty Days*, trans. R. H. Stevens (Cleveland: World Publishing Company, 1959), 19; Terry Hughes and John Costello, *The Battle of the Atlantic* (New York: Dial Press, 1977), 30, 316; *Anchorage Daily Times*, "Germans Say U-Boats Prey Off U.S. Coast," 27 January 1942.

²⁶ Dorr Green to FWS Chief of Predator and Rodent Control, 25 April 1945, RG 79, Entry 7, File 715, Box 1414, NA; Beach to McLean, 5 June 1944, File 5968, Box 1, DENA.

Congressional Record, summarized Alaskan feelings: wolves were responsible for the decrease in reindeer from 641,000 to 90,000 in the past decade, the territory made every effort to kill predators, and the blame lay with the National Park Service, which "is breeding these destructive creatures in great refuges." The memorial sought federal funding for aerial hunters and a removal of wolf hunting restrictions in parks. Acting Superintendent Grant Pearson, sympathetic to Alaskan complaints, admitted having difficulty defending the Park Service against the charges of this memorial. Few efforts to control wolves had been made since Murie's departure in 1941, and the Park Service provided a convenient scapegoat for Alaskan frustration.²⁷

A spate of articles on wolves appeared in *Jessen's Weekly* during 1945, more than in any other year. Wolves were blamed for eliminating reindeer on the Alaska Peninsula, and the superintendent of the Alaska Reindeer Service stated that across the territory one million reindeer had been killed by wolves in the past twelve years. One Native group near Bethel reportedly killed their entire reindeer herd in hopes that lack of prey would cause the local wolves to depart the area. The Reindeer Service offered airplane hunters free twelve-gauge ammunition and dressed deer carcasses for wolves killed. Three of the six registered airplane wolf hunters suffered crashes that year, making any financial incentives beyond the bounty quite welcome, if not necessary. Miners north of Fairbanks reported a pack of ninety-nine wolves, and wolves were blamed for taking the whole caribou calf crop that year east of Fairbanks. Up north, Brooks Range residents reported that "Big, white wolves have now come out of the

²⁷ Alaska Legislature, *Senate Joint Memorial No. 5*, 17th Session, 1945; Pearson to Regional Director Tomlinson, 26 February 1945; Tomlinson to Director, 9 March 1945, RG 79, Entry 7, File 715, Box 1414, NA.

Arctic in search of food."²⁸ That such obvious exaggerations found space in the newspaper reflects the increasingly pessimistic view held toward the future of Alaska's game as the sourdough era in Alaska's history came to an end.

The year 1944 marked the publication of the most important works on the wolf since Seton's stories in the 1890s. Former wolf hunter Stanley Young's *The Wolves of North America* placed the animal in historical context and, without undue sentimentality, regarded the wolf with a certain respect and desire to see it remain part of North America's fauna. Aldo Leopold penned his short, eloquent confessional essay "Thinking Like a Mountain," arguably the most-quoted piece on the wolf ever written. And finally, after two years of effort by Park Service staff to bring it to print during wartime shortages of paper and manpower, Murie's *The Wolves of Mount McKinley* came out as No. 5 of the fauna series, a continuation of the tradition and philosophy started by George Wright and Joseph Dixon.²⁹ Complete with Adolph's photos and illustrations by Olaus Murie, this provided the first detailed look at wolf ecology.

Recognition of its influence is still evident. When Durward Allen began his wolf studies on Isle Royale in 1958, Murie's work provided "the most definitive piece of research we could draw upon." David Mech, perhaps the world's most highly respected wolf expert, dedicated his 1970 book *The Wolf* to

²⁸ Jessen's Weekly, "Dillingham Wild Life Agent Here After Juneau Meet," 23 February 1945; "Reindeer Service Head Finds Fairbanks Center of Alaska's Aviation," 2 March 1945; "Eskimos Beat Wolves By Killing Own Reindeer," 30 March 1945; "102 Wolves Killed In Bering Unit During Past Year," 23 February 1945; "Livengood Wolves Drive Caribou Into The Village," 30 March 1945; "Caribou Calf Crop Nil On Salcha Cr. Because Of Wolves," 2 November 1945; "Arctic Wolves Drive Moose Out Of Wild Lake," 23 November 1945; AGC Annual Report, 1946, 8.

²⁹ Cahalane to Director, 25 January 1943, RG 79, Entry 7, File 715, Box 1414, NA.

Adolph Murie. Erich Klinghammer dedicated a 1975 wolf behavior symposium to Murie, whose book "broke the spell of Little Red Riding Hood."³⁰ With recent increasing popular interest in wolves, the University of Washington Press reprinted Murie's work in 1985, with a third printing in 1992.

The monograph received acclaim in its time as well. Director Drury took time to read it and thought Murie's research would finally quiet the critics of Park Service policy. Harold Anthony at the American Museum of Natural History reviewed the work for Natural History magazine and called it "a splendid piece of natural history reporting," "one of the best statements of its kind that this reviewer has seen." Both Adolph and Olaus kept letters of response they had received, and upon request Adolph sent excerpts to Victor Cahalane at Park Service headquarters. These provide insight as to the rigor of Adolph's research and the effectiveness of his writing. Praise came from scientific peers at universities and other federal agencies for Murie's science: "your paper on the wolf is very, very good;" "it is the best thing of its kind ever put out;" "one of the very finest jobs anyone has done in . . . mammalian ecology." Leaders of conservation organizations such as the National Parks Association and Izaak Walton League sent their praise; Richard Pough of the Audubon Society said "an extraordinarily interesting report . . . The wolf himself emerges as a remarkably intelligent and likable animal Don't miss it!" The book reached a broader audience as well, a combination of the subject matter, the price of only forty cents, and Adolph's writing style. A Chicago banker wrote that "It turned out to

³⁰ Allen, *The Wolves of Minong*, 92; Klinghammer, introduction to *The Behavior and Ecology of Wolves*; Mike Link, collecting and editing the varied and prolific writings of Sigurd Olson, writes that Olson's 1938 master's thesis was the "seedbed from which other wolf research could grow;" see *Collected Works*, 1935-1944, 82-6. Perhaps, but Olson's wolf work is rarely recognized by his successors.

be far more than a factual report. I found it as engaging as a top-notch novel." A Wisconsin chemist commented that "I think your paper is the smoothest bit of writing I have seen for years." Back in Alaska, a Fairbanks trapper said that "it's written so any guy can understand it," and ranger John Rumohr of McKinley Park told Adolph that "It is said that the ease with which a book is read is the best proof of its worth. Yours have it. My congratulations."³¹

Over the objection of a friend, who feared it might put him in a bad humor, William Beach took *The Wolves of Mount McKinley* with him on a trout fishing trip to Canada in May 1944. The Park Service had waited anxiously for publication of Murie's research to vindicate its policies; Park Service critics like Beach, with the evidence now in hand, went through the book with the scrutiny of prosecutors. Upon his return from Canada, Beach penned a three-page response to the book and sent copies to Marshall McLean, chair of the Conservation Committee of the Camp Fire Club, Newton Drury at the Park Service, and Governor Gruening. Beach accused Murie and the Park Service of complicity at the outset—"it is quite evident that it was his intention to justify the Park Department in its stand that the wolf should be conserved"—questioned Murie's research methods, cast the park as a drain on Alaska's treasury by perpetuating wolves available for bounty, and requested that the Camp Fire Club "exert every effort to have the wolf destroyed to protect our grand game herds." ³²

³¹ Drury to A. Murie, 21 October 1944; A. Murie to Cahalane, 20 June 1945, RG 79, Entry 7, File 715, Box 1414, NA; Richard Pough, review of *The Wolves of Mount McKinley*, by Adolph Murie, in *Audubon* 47:1 (January-February 1945): 58; Harold Anthony, review of *The Wolves of Mount McKinley*, by Adolph Murie, in *Natural History* 54:1 (January 1945): 46.

³² W.S. Ladd to Drury, 18 May 1944; Beach to McLean 5 June 1944; McLean to Drury 21 June 1944, RG 79, Entry 7, File 715, Box 1414, NA; Beach to Gruening, 22 June 1944, RG 101, Box 470, ASA.

The conclusions Murie reached provided evidence for advocates on either side of the wolf issue, and one of the ironies of the Camp Fire Club's post-war efforts is their repeated citations of Murie's study to justify their views. The Park Service also cited the study, of course, with both sides taking individual sentences out of the book to support their contentions. Murie wrote to validate the Park Service's philosophy that no native fauna should be exterminated, and shaped his conclusions around the idea that park wildlife management should differ from management in other parts of Alaska.³³ The Camp Fire Club disagreed as to the purpose of the park, holding that it existed to support large game herds, not as an example of a natural world untouched by human interference.

As the war came to a close, questions arose within the Park Service as to the policy on McKinley's wolves. Shortly after he assumed the superintendency of the park in 1943, Grant Pearson had requested clarification from Washington, D.C., on wolf policy and was told to terminate any control efforts. Subsequent lack of shooting and thousands of friendly soldiers offering sandwiches led to numerous contacts between wolves and people. One wolf approached to fifteen feet of a soldier intent on photographing the animal; he was saved—according to the published account—by a companion "brandishing his ski pole in his hand like a bayoneted rifle." Such incidents prompted Victor Cahalane to recommend that rangers fire over the heads of the wolves to "work up a less fraternal spirit in the wolves." Pearson regarded wolves with disfavor and was not pleased that

³³ A. Murie to Cahalane, 29 March 1943, RG 79, Entry 7, File 715, Box 1414, NA.

³⁴ Pearson to Director, 9 March 1943; Tolson to Regional Director 10 May 1943; Drury to Regional Director, 10 December 1943, RG 79, Entry 7, File 715, Box 1414, NA; "From Ketchikan to

his rangers had to hang up their guns. As an Alaskan trying to maintain his reputation among long-time acquaintances, he made it known that this wolf policy had come from Washington, D.C. Pearson passed upward an inquiry letter from the Camp Fire Club, having "neither the data nor the inclination to answer this letter, and feeling that the entire matter is packed with dynamite, I am passing the buck to you." (Director Drury wrote the response.) Emery Tobin of *The Alaska Sportsman* requested information on park wolf policy, and Pearson again sent the letter to headquarters and told Tobin "I feel this is a subject which should be handled by the Director." Despite his unwillingness to support wolf protection, Pearson remained loyal to the organization. He sent his regional director a report of a conversation held with Governor Gruening and Edwin Arnold from the Division of Territories, Interior Department, in November 1945, which indicates the awkward position in which Pearson found himself.

Governor: Grant, what is your opinion in regard to the wolf situation in the Park? Are they doing any noticeable damage to the Park's wildlife?

Superintendent: We send in our Wildlife Reports to the Director's Office with copies to the Regional Director, and a qualified Biologist makes the decisions and recommendations. I am not qualified along those lines to answer your question.

Governor: That is not answering my question. What is your personal opinion and what would you recommend? This is off the record.

Superintendent: Limited control by Park personnel.

Barrow," The Alaska Sportsman 10:8 (August 1944): 21; Cahalane to Tomlinson, 20 August 1943, File 5968, Box 2, DENA.

³⁵ Adolph Murie's diaries reveal many occasions when Pearson expressed his dislike of wolves and wolf protection. Pearson to Regional Director, 20 March 1945; Drury to McLean, 31 March 1945; Pearson to Tobin, 22 June 1945 RG 79, Entry 7, File 715, Box 1414, National Archives.

Governor: I would recommend they be exterminated. Do you ever see any wolves around Headquarters?

Superintendent: Occasionally.

Governor: What do you do about it?

Superintendent: We do not molest them.

Governor: I have positive proof that a twelve year old boy was killed by wolves at Dillingham. You have a little girl, and if any more wolves come around Headquarters, kill them and I'll back you up.

Mr. Arnold: I'll also back you up.

Superintendent: No comment.³⁶

Governor Gruening expressed not merely a personal opinion, but that of the Alaska Development Board, a lobbying organization comprised of the territory's most influential politicians and businessmen. Besides accusing the Interior Department of neglect in failing to develop more fully Alaska's national parks, Chairman of the Board Gruening had recently written a letter directly to Secretary Ickes recommending the extermination of wolves in Alaska's national parks and monuments. While sympathizing with a Park Service philosophy of faunal preservation, the board considered it "too costly and destructive." 37

Park Service sensitivity to Alaskan opinion appeared prominently in correspondence in the mid-1940s. Regional Director Tomlinson recommended a harvest of three to five wolves annually, since Alaskans were so adamant against

 $^{^{36}}$ Pearson to Regional Director, 5 November 1945, RG 79, Entry 7, File 715, Box 1414, NA.

³⁷ Daily News-Miner, "Alaska Development Board Reports on Actions Taken During Session At Juneau," 26 September 1945; Gruening to Ickes, 14 September 1945, RG 79, Entry 7, File 715, Box 1414, NA.

the animal and the wolves seemed plentiful. Reindeer biologist L.J. Palmer of the Indian Service wrote on the subject to Victor Cahalane.

The control of wolves in McKinley Park would have a good psychological effect on the people, which would probably be of more importance than physical eradication of the predator. The people are now definitely antagonistic to the Park policy of protecting the wolf and are in virtual mutiny against it. It is not favorable to Park administration.38

Acting Superintendent Pearson, caught in the middle and protesting continued protection of the wolves to his regional director, regarded Alaskan opinion as the most important factor in the situation. Tired of the "barrage of criticism, ridicule, and sarcasm from the Alaska people," Pearson did not criticize the policies his superiors had ordered, but tried to explain why Alaskans viewed wolves as direct, and thus unwanted, competitors for food. He ended the letter with either a good prediction or evidence that he was aware of broader action being contemplated against the Park Service: "Nothing short of extreme measures will regain the good will and confidence of Alaskans. Timorous action at this time is certain to bring repercussions the echos [sic] of which may reach as far as the halls of Congress." Feeling preyed upon by encircling critics and recognizing the symbolic value of Park Service actions, Drury penned a note to biologist Cahalane: "Hadn't something better be thrown to the wolves?" 39

 $^{^{38}}$ Tomlinson to Director, 21 October 1943, Palmer to Cahalane, 3 May 1945, RG 79, Entry 7, File 715, Box 1414, NA.

³⁹ Pearson to Regional Director, 11 April 1945, File 5968, Box 2, DENA; marginal note on Drury to Cahalane, 13 March 1945, RG 79, Entry 7, File 715, Box 1415, NA.

CHAPTER 8

THE LEGISLATIVE THREAT

William Beach returned to McKinley Park in August 1945. He arrived on the sixteenth, accompanied by his wife and Andy Simons, a hunting guide and Alaska Game Commission member; they drove to Wonder Lake and back and departed on the seventeenth. With this wealth of evidence Beach testified on park wildlife policy in Fairbanks the next week to a visiting congressional committee for the Office of Territories, as well as to Alaskan newspapers. Beach blamed the wolves for the disappearance of game and the Park Service for relying too heavily on the advice of men like Adolph Murie and too little on men like Andy Simons. Beach urged the Alaskan Congressional Committee to force the Interior Department to "correct the evil they have allowed to exist." Notwithstanding the moral stance of Beach, the Camp Fire Club had for some time been receiving disturbing reports on the sheep population of McKinley Park and encouraged the Park Service to send Adolph Murie back for an inspection.

Murie had recommended follow-up studies in 1941 and Victor Cahalane recommended Murie's return as early as January 1944, but the Park Service could not spare the money on their lean war budget. The Fish and Wildlife Service had Murie on their payroll conducting rodent studies in the southwest, and Parks Director Drury requested Murie's detachment for a McKinley sheep check. To

¹ Superintendent's "Monthly Report," September 1945, RG 79, DENA; Jessen's Weekly, "Easterner Wrought Up Over Wolves In McKinley Park," 24 August 1945; Anchorage Daily Times, "Says McKinley Is Breeding Spot For Alaska's Wolves," 25 August 1945; Beach to Alaskan Congressional Committee, 18 October 1945, RG 79, Entry 7, File 715, Box 1414, NA.

soften up Ira Gabrielson and Harold Ickes on his request for Murie's time, Drury went back to the Park Service's old organizational friends, the American Society of Mammalogists. In April 1945 Drury invited the society to analyze his predator policy. On May 12 the mammalogists passed a resolution of full support for Park Service personnel and policies, approving predator control only when "justified by scientific investigation." The previous day Drury had met with Joseph Dixon and Grant Pearson to discuss the wolf-sheep situation, and they agreed that game reports appeared alarming and that Murie must visit the park as soon as possible. Ickes and Gabrielson received copies of the mammalogist's resolution on May 17, and by the end of June Murie had funding for a one-month study in McKinley Park. Acting Parks Director Hillory Tolson, while expressing his thanks to the president of the Society of Mammalogists, made a further request indicative of the mounting pressure on the Park Service, asking if:

members of the Society who are in a favorable position could be urged to use any opportunity to publicize, through writings, photographs, or lectures, the facts regarding the place of predators in wild areas. Information of this type is badly needed, especially in sportsmen's magazines, newspapers, and popular periodicals.₂

Adolph Murie returned to the park shortly after the war's end in August and stayed until September nineteenth, his time afield spent revisiting the peaks and valleys he had come to know so well. He anticipated a delicate mission, in which "the policy on the wolf must be handled in such a way so as not to arouse too much anti-wolf emotion." What he found left little room for Park Service

² Cahalane to Drury, 4 January 1944; Drury to McLean, 31 March 1945; Drury to E.R. Hall, April 1945; Hall to Ickes, 17 May 1945; Tomlinson to Drury, 11 May 1945; Tolson to Hall, 17 July 1945, all RG 79, Entry 7, File 715, Box 1414, NA.

maneuvering and seemed to vindicate its critics. The sheep population had declined to about five hundred animals since 1941; Murie actually counted only 244 and extrapolated the rest. He guessed that the wolf population had also declined, but had too little time in the field to tell. Caribou numbers seemed adequate, judging from reports. Murie admitted that large gaps existed in his knowledge and understanding of wolf-sheep ecology, and that the continued existence of the park's sheep could be in jeopardy. He recommended as a "precautionary measure" that ten to fifteen wolves be shot from the sheep ranges, with control continued until the sheep population began to increase. No other alternative existed in the face of the "psychological intrusion" of Park Service skeptics, and Murie knew the best argument in favor of keeping the wolf in the park was the presence of a healthy and numerous Dall sheep population.³

Park Service staff sent copies of Murie's report to the Fish and Wildlife Service, Governor Gruening, the Camp Fire Club, and scientific groups. Aldo Leopold received a copy, and he recommended following Murie's plan: "There are not many people from whom I would accept without question a recommendation for wolf control, but in his case I do accept it." The Park Service prepared a news release outlining service policy and quoting Murie's report; Director Drury explicitly ordered the release to go to the Alaskan news media and the nation's conservation magazines. Grant Pearson received approval on December 6 to begin wolf hunting.4

³ A. Murie to Tolson, 25 May 1945, RG 79, Entry 7, File 715, Box 1414, NA; A. Murie, "A Review of the Mountain Sheep Situation in Mount McKinley National Park, Alaska, 1945," 9 October 1945, manuscript in A. Murie Collection, Box 7, RL.

⁴ Drury to staff, 25 October 1945; Leopold to Drury, 6 November 1945, Drury to Ickes, 31 October 1945, RG 79, Entry 7, File 715, Box 1414, NA; Superintendent's "Monthly Report," December 1945, DENA. Pearson later took credit for the control plan, writing that "We finally

Drury issued a public summary of the situation that sought to justify Park Service actions and had written confidently to Harold Ickes that killing fifteen wolves in McKinley Park would quiet the critics of the wildlife policy.⁵ On the contrary: during the war years, the balance of nature tilted freely in McKinley Park, unobserved and unmanaged; the scientist himself had underestimated the volatility of the animal populations, casting the desired protection of all native fauna into question.

The Camp Fire Club, unsatisfied with the Park Service's response to the reduced sheep population, began another public pressure tactic in 1945. Since the club disagreed with the Park Service on the reason for the park's existence—what exactly did a "game refuge" mean?— they went back to the source for help. Charles Sheldon was dead, as were James Wickersham, George Bird Grinnell, and Steven Mather, who had all testified on behalf of the park's creation in 1916. Still alive, though, was Belmore Browne, who had led the Camp Fire Club's efforts for the park from 1912-17 and subsequently added artistic success to his impressive Alaskan credentials. From his adopted home in Banff, Alberta, Browne had become a well-known landscape and wildlife painter and a specialist in painting backgrounds for museum exhibits, notably for the Alaskan species in the North American Hall of the Museum of Natural History. During the Second World War, Browne served as a consultant for the Air Force Arctic Training School, spending 1942 in Alaska doing cold-weather testing of machines

prevailed on the Park Service to suspend the hard-and-fast rule that nature is its own best regulator;" Pearson, My Life, 102-3.

⁵ Drury to Ickes, 31 October 1945, RG 79, Entry 7, File 715, Box 1414, NA; Drury statement, "The Wolf Problem in Mount McKinley National Park," 4 January 1946, Stef. Mss., 190 - 8:88, Dartmouth College Library, hereafter DCL.

and gear and teaching survival to airmen. Belmore Browne, thought the Conservation Committee of the Camp Fire Club, could serve as an impressive advocate for McKinley Park's sheep. Marshall McLean wrote Browne on March 6, 1945, requesting his observations on the wolf and sheep, and sent for review a copy of *The Wolves of Mount McKinley* and a letter from the Park Service explaining its wolf policy.⁶

Browne's negative feelings toward the wolf were consistent with his time. In his early writings he described wolves as "gaunt murderers" coursing after caribou. Browne was convinced that no wolves existed in the McKinley area prior to the park's creation, and that only after game became protected in the park did the wolves move in for the plentiful prey. Through the summer of 1945 Browne worked on a response to Murie's book in his spare time at the training school, angrily finishing it after Murie's 1945 report became public. The loss of sheep confirmed to Browne the error of Park Service ways. "Murie's report paints in blood and bone what the custodians have done with it [McKinley Park]."

The Analysis by Belmore Browne for the Committee on Conservation of the Report of Dr. Adolph Murie's "The Wolves of Mt. McKinley" provided the Camp Fire Club a summary document of their arguments against the Park Service by a man of "unswerving integrity." It resembled a religious tract more than a factual rebuttal. Browne wrote from a populist stance, casting himself alongside "practical . . . serious . . . Northern . . . outdoor men" supported by "scores of

⁶ Bates, Mountain Man, 183; McLean to Browne, 6 March 1945, Stef. Mss., 190 - 8:67, DCL.

⁷ Browne, "In the Caribou Country," originally in *Outing* (June 1910), reprinted in Bates, *Mountain Man*; Browne to McLean, 14 and 19 October 1945, Stef. Mss., 190 - 8:67, DCL.

experienced wildlife experts" in a situation that "called for the realistic appraisal of a practical stockman." Opposed to these men of pragmatism and reason were administrators from the "Department of Parks," desk-bound men "misled" by the theories of biologists, particularly the "scientists laboratory tinged theories" of Adolph Murie.⁸ Despite evidence of declining sheep numbers during the 1930s, according to Browne, the Park Service had done nothing until assigning Murie to study the situation, and then let four years pass before admitting the sheep were threatened. Browne called this the "most costly and unnecessary catastrophe in the history of American Governmental game control," a curious statement that ignored the histories of elk in Yellowstone and deer on the Kaibab Plateau.⁹

Browne outlined two central arguments used by the Camp Fire Club, the first discrediting the balance of nature concept. He disparaged the Park Service management philosophy that had existed since the early 1930s, of preserving the parks as laboratories for observing natural interactions between the native fauna, calling it a "fallacious doctrine." Browne called Murie's book "An Eulogy to the Wolf," and he accused Murie of commencing his study determined "to prove the wolf a useful citizen on all fronts." As evidence, Browne noted that Murie had stated five times in his book that wolf predation checked game increases, but compared these to the sixty-plus statements by Murie indicating that predation had a negligible or positive effect on the sheep. Browne accused Murie of "a lack of knowledge of the sheep's habits" and of excessive use of qualifying adverbs—

⁸ Belmore Browne, Analysis by Belmore Browne for the Committee on Conservation of the Report of Dr. Adolph Murie's "The Wolves of Mt. McKinley" (New York: Camp Fire Club, 1946), 6, 13, 10, 11; Browne to McLean, 19 October 1945, Stef. Mss., 190 - 8:67, DCL.

⁹ Browne, Analysis, 9.

probably, likely, appears—in his conclusive statements. Browne caustically hoped that visitors disappointed by the lack of game in the park would "become enthusiastic over their memories of biotic units and natural interrelationships." ¹⁰

While Browne argued as a first-hand expert on sheep, Marshall McLean, a New York attorney since 1898, edited the work and helped craft the second argument: park managers were guilty of ignoring their mission as written in the 1917 enabling legislation that created the park. Section 6 of the McKinley Park bill stated that it was established as a game refuge, and no game could be killed except to "protect or prevent the extermination of other animals or birds." The club felt the presence of predators contradicted the purpose of Section 6. Sheep numbers had clearly declined through the 1930s, and with only five hundred sheep left in the park they were obviously on the verge of extermination. What further evidence was needed to declare the Park Service derelict in its mission? Furthermore, although the Park Service had at various times protected the wolf as part of the native fauna, it had never been classified as a game animal, thereby excluding it from the list of protected animals in McKinley Park, according to the Camp Fire Club. They thought of the park as a place for tourists to see game, as well as to create an overflow of game into surrounding areas for hunters. In all of these, the Park Service had failed. Browne's treatise concluded that the Park Service should take "the necessary steps at once to remove every wolf possible from the Park area."11

¹⁰ Ibid., 31, 11, 21.

¹¹ Ibid., 7, 24, 11, 31. McLean held Camp Fire Club membership for thirty-six years, and further served conservation by advisory board work with migratory bird groups and for preservation of the Adirondacks; see obituary, *New York Times*, 7 April 1952.

Marshall McLean told Browne he had done a "splendid job." William Beach liked it so much he agreed to pay the cost of printing Browne's work as a Camp Fire Club pamphlet. McLean also told Browne, in November 1945, that Browne would be "Exhibit A" later in Washington, D.C., as the club planned to escalate the wolf-sheep controversy by introducing legislation in Congress to force the Park Service to rectify its mistakes in the management of Mount McKinley National Park. 12

Park Service Director Newton Drury received word of the Camp Fire Club's intent just before Christmas 1945. The letter from Marshall McLean discussed the service's "astonishing failure" and requested Drury's cooperation with the legislative amendment. McLean included a copy of the bill that had been introduced in the House of Representatives the previous week by Rep. Homer Angell of Oregon. H.R. 5004, To provide for the protection of the Dall sheep, caribou, and other wildlife native to the Mount McKinley National Park area, and for other purposes, amended Section 6 of the 1917 McKinley Park Act by adding a specific clause concerning wolves:

Sec. 6. The said park is established as a game refuge, and no person shall kill any game in said park except under order from the Secretary of the Interior for the protection of persons or to protect or prevent the extermination of other animals or birds. The Secretary of the Interior shall take immediate steps to provide for the rigid control of wolves and other predatory animals in Mount McKinley National Park to the end that said refuge be made safe, and so maintained, for the Dall sheep, caribou, and other wildlife native to the area.₁₃

¹² McLean to Browne, 8 November 1945; 14 June 1946, Stef. Mss., 190 - 8:67, DCL.

¹³ Congress, House, Committee on Public Lands, *To Provide for the Protection of the Dall Sheep, Caribou, and Other Wildlife Native to the Mount McKinley National Park Area, and for Other Purposes*. 79th Cong., 2nd sess., 1946, H. R. 5004.

The bill was modified prior to the hearing by the addition of two words: "... and other wildlife, *except predators*, native to the area " and relabeled H.R. 5401. It was referred to the Committee on Public Lands, and McLean hoped for a March hearing, depending on Belmore Browne's availability.¹⁴

Drury lost little time in responding. He requested the opinion of the Park Service's chief counsel, who thought that H.R. 5004 could not supersede the National Park Service Act, which allowed for the protection of all animals in parks. Drury sent this to McLean on December 29, defending his policy as one based on the best available scientific information. 15 Anticipating the need for public testimony, Drury also created a mailing list of possible allies and sent a copy of Murie's 1945 report and Drury's public summary statement on the wolf situation to seventy-nine people. The list included scientists—Lee Dice, Charles Adams, Victor Shelford, Tracey Storer, Harold Anthony—as well as conservationists, such as Aldo Leopold of the Wilderness Society, Rosalie Edge of the Emergency Conservation Committee, Kenneth Reid of the Izaak Walton League, and Devereux Butcher of the National Parks Association. Alaska's Governor Gruening received the information, as did all members of the Camp Fire Club's Conservation Committee. Favorable responses came back; Harold Anthony at the Museum of Natural History specifically commended Drury's tactics and pledged his support. Drury asked Olaus Murie for suggestions on

¹⁴ McLean to Drury, 22 December 1945, RG 79, Entry 7, File 715, Box 1414, NA; McLean to Browne, 28 January 1946, copy of H.R. 5004 attached, Stef. Mss., 190 - 8:67, DCL.

¹⁵ Jackson Price to Drury, 29 December 1945; Drury to McLean, 29 December 1945, RG 79, Entry 7, File 715, Box 1414, NA.

how to deal with the Camp Fire Club, and they agreed that Olaus would narrate Adolph's "Wildlife at Denali" film during the hearings. 16

The Congressional Committee on Public Lands held two brief hearings that spring, and the Park Service barely had a chance to provide testimony, much less enough time get Adolph or Olaus to Washington, D.C. The first hearing on April 3, 1946, belonged to Marshall McLean, who had impressive witnesses and a friendly audience of western representatives: White of Idaho, Savage of Washington, Lemke of North Dakota, LeCompte of Iowa, Barrett of Wyoming, D'Ewart of Montana, Norblad of Oregon, Rockwell of Colorado, and Bartlett of Alaska. McLean began his testimony by filing as evidence a wolf photograph from The Alaska Sportsman, the beast "180 pounds of solid bone and muscle." Belmore Browne presented a synopsis of experiences and perspective as one of the founders of the park. When asked what the Park Service had done about the sheep situation, Browne replied, "They have done nothing," and recommended hiring expert trappers using a new type of poison cartridge to kill off the wolves. Following Browne came a recent recruit to the Camp Fire Club's effort, Bradford Washburn, Director of the New England Museum of Natural History. Known as a pioneer in mountaineering, aerial photography, and photogrammetric mapping, Washburn had visited Alaska sixteen times since 1930 and had recently spent time on Mount McKinley leading equipment testing expeditions for the army. He told the committee that if he wanted to photograph game, the last place he would visit would be McKinley Park, because the wolves had eliminated the game. Dr. James Clark followed, affiliated with the American Museum of

¹⁶ Drury to mailing list, 11 January 1946; Russell to Drury 13 March 1946; Anthony to Drury, 16 January 1946; Drury to O. Murie, 5 January 1946; O. Murie to Drury, 21 January 1946; Drury to O. Murie, 4 February 1944; all RG 79, Entry 7, File 715, Box 1414, NA.

Natural History. An avid world-wide big game hunter, Clark's testimony was based on a one-week trip to McKinley Park in 1935. He strongly disagreed with Park Service management of "holding these wolves as they are to observe the balance of nature and the biology of nature, because they are permitting the wolves to breed as you would foxes in your chicken yard." McLean's final witness harkened back to the park's founding: Stephen Capps of the Geological Survey, who had written the 1917 *National Geographic* article which helped convince Congress to create McKinley Park. He too had not visited the park since 1935, and admitted he had never seen a wolf kill a sheep, but guessed that "the average of one sheep or caribou a day per wolf is probably not an exaggeration." Marshall McLean concluded by submitting letters of support for H.R. 5401, including ones from Horace Albright, and Jack O'Connor and Andy Simons of the Alaska Game Commission.¹⁷

Acting Chairman White admitted the hearing had been arranged on short notice, and that he would have liked the presence of witnesses from the National Park Service. The only Park Service advocate to speak was Devereux Butcher, in attendance as the executive secretary of the National Parks Association. Butcher questioned the singular role of the wolf in declining sheep numbers and sought to introduce human hunting pressures into the analysis. White rebuffed these comments, since hunting was not legal within the park, and the hearing ended with the committee members well convinced of the Camp Fire Club's arguments

¹⁷ All of these, as well as the following statements from May 22, are taken from Congress, House, Committee on Public Lands, Protection of Dall Sheep, Caribou, Etc., Native to Mount McKinley National Park: Hearing before the Committee on Public Lands, 79th Cong., 2nd sess., 23 July 1946.

and in favor, according to Alaskan Delegate Bartlett, of even more stringent wolf control. 18

The Committee on Public Lands met again on May 22, 1946, with the Camp Fire Club introducing the only witness, Brigadier General Dale B. Gaffney of the U.S. Army. Gaffney had been assigned to Alaska in 1940 and specialized in cold weather flying. His observations were based on what he and other military men had seen of game conditions from the air, particularly with caribou and reindeer. Newton Drury attended the hearing and defended the Park Service, noting that the reindeer situation invoked by Gaffney hardly pertained to the park's Dall sheep. Drury also filed documents supporting his case, starting with the recommendation of recently-appointed Interior Secretary Julius Krug that H.R. 5401 not be enacted. Other letters of support came from scientists and nature organizations. Since the Park Service had not had a chance to present testimony, the committee tabled the legislation until the following congress, giving a reprieve to the Park Service.

At stake for the Park Service, and for the Interior Department, was the tradition of the Park Service handling its own affairs without Congressional intervention on specific issues. In the first half of the century, agencies had typically operated without detailed oversight by legislators, and the Park Service had successfully cultivated trusting supporters in Congress. Few challenges came from Capitol Hill since legislators lacked expertise when dealing with issues

¹⁸ Bartlett to Harry Cowan, 26 April 1946, Bartlett Collection, Box 1: Interior—NPS, Folder 1, RL.

¹⁹ Marshall McLean had written directly to the War Department requesting leave for Gaffney's presence; letter of 19 March 1946, Stef. Mss., 190 - 8:67, DCL; *Anchorage Daily Times*, "Dale Gaffney Promoted to Full Colonel," 26 January 1942.

within an agency's purview.²⁰ Reactions to H.R. 5401 from members of the Committee on Public Lands certainly gave little optimism for letting congressmen decide a matter of wildlife management: Representative Savage wondered if wolves would turn to human prey once they had cleaned out Alaska's game; Barrett asserted the wolves were killing the sheep for enjoyment; White claimed there were still plenty of wolves in central Iowa; Rockwell flatly stated that he was in favor of complete wolf extermination. Bartlett scoffed at the thought of exterminating McKinley's wolves: "I suspect the whole United States army could be turned loose in the Park with instructions to kill wolves and at the end of the year there would be some left." Drury considered this case to have "dangerous implications . . . If Congress should pass an act changing the basic policies with respect to a specific national park, this tendency would undoubtedly spread and any special interest group would take advantage of it."²¹

At the hearing Drury had stated his appreciation of the Camp Fire Club's interest in Park Service affairs, yet to Victor Cahalane he wrote "Tell him [McLean] you will follow <u>truth</u> wherever it leads. This should be our watchword, together with <u>tolerance</u>, even of asininity." Since the early 1930s, the Park Service had formulated wildlife management policies based on science, yet their opponents in the wolf-sheep controversy disagreed more on emotion than on facts. Park officials noted that throughout the hearings, Adolph Murie's study

²⁰ Foresta, *America's National Parks*, 74-5. Foresta notes the recent changes in this accompanying increased congressional staff sizes, since staffers could take the time to familiarize themselves with the intricacies of issues.

²¹ Protection of Dall Sheep, Caribou, Etc.; Drury to Daniel Beard, 21 November 1946, RG 79, Entry 7, File 715, Box 1414, NA; Bartlett to Harry Cowan, 26 April 1946, Bartlett Collection, Box 1: Interior Dept.— NPS, Folder 1, RL.

had received virtually no mention, despite this being the most factual document available on the situation. ²² Olaus Murie attempted to reason with Browne following a verbal "free-for-all" during a meeting in Washington, D.C. Adolph, said Olaus, had recommended wolf control, and the Park Service proceeded to hunt wolves: "What more does the Campfire Club want?" He urged Browne to let go of the single-minded attack on park wolves and focus the Camp Fire Club on more pressing conservation issues. In the manner which made Olaus such an effective advocate in the political arena, he invited Browne to Jackson Hole "after the smoke clears . . . to talk about dog mushing and mountain climbing." Newton Drury, in a thoughtful letter to a retired colleague, reflected on the hazards of dealing with strong sentiment:

I feel that I am on excellent personal terms with Mr. McLean, Senator Wolcott, and many others and have tried not to maneuver them into a position from which they could not with dignity withdraw. I am afraid, however, that Beach, Browne, and others have forced themselves into such a position and perhaps we have been partly responsible for their plight. Pride of opinion, as you know, is the unforgivable sin and causes more sorrow in the world than perhaps any other motive. As a man gets along in years he yearns more and more to be considered an 'expert.' He wants to be listened to. That, I am sure, is the fix of our friend Mr. Belmore Browne.23

The Park Service decision in January 1946 to kill fifteen wolves received favorable publicity back in Alaska. The *Daily News-Miner* credited the new wolf

²² Drury to Cahalane, 4 May 1946; Tomlinson to Pearson, 29 May 1946, RG 79, Entry 7, File 715, Box 1414, NA.

²³ O. Murie to Browne, 22 April 1946, Stef. Mss., 190 - 8:67, DCL; Drury to Daniel Beard, 21 November 1946, RG 79, Entry 7, File 715, Box 1414, NA.

control directive to the "widespread demand from residents of the Territory," and Delegate Bartlett assured constituents of his support for minimizing the park's wolves. The April hearings by the Committee on Public Lands received favorable publicity in the *Daily News-Miner*. *The Alaska Sportsman* reported erroneously that rangers had been newly-given permission to carry rifles in the park for the new wolf hunt, as rangers had shooting at wolves for years. As before, either the Park Service's history of killing wolves had not been effectively communicated to the press, or reporters ignored the actual ranger practices in favor of reportage that discredited the federal officials. ²⁴

The Park Service received an unanticipated result in its 1946 wolf hunt. Rangers covered 125 miles of sheep range in December 1945 and saw only one wolf. In February, they hired an experienced hunter and trapper, John Colvin, who received permission to use snares in addition to shooting to achieve the desired quota of wolves. He spent the next two months afield in search of the forty or so wolves presumed to live in the park. To everyone's surprise, he found no wolves, and was released in April. Newton Drury delightedly informed Marshall McLean of this development, assuring him that wolf control would resume if needed. With Grant Pearson absent on a trip to the states, Acting Superintendent Peterson released the news to local papers. Drury prepared a press release in May, but it did not appear in Alaskan papers, withheld by the returned Grant Pearson. Always sensitive to local opinion, Pearson reasoned to

²⁴ Daily News-Miner, "Washington News-Letter," 18 February 1946; The Alaska Sportsman, "From Ketchikan to Barrow" 12:4 (April 1946): 24; Daily News-Miner, "McKinley Park Wolf Question Up At Hearing," 4 April 1946; "Washington News-Letter," 5 April 1946.

²⁵ Sumner to Regional Director, 22 April 1946, RG 79, Entry 7, File 715, Box 1414, NA; Superintendent's "Monthly Reports," February, March, April, 1946, DENA; Jessen's Weekly, "McKinley Park Rangers Can't Find Any Wolves," 29 March 1946.

his superiors that the Park Service would be embarrassed if wolves again appeared with the spring caribou migration, forcing a recantation of the supposed lack of the predators. Nevertheless, Drury sent his press release to his mailing list of allies, receiving back several comments such as that of Richard Westwood, President of the American Nature Association: "I am delighted to hear that the search for wolves revealed little evidence of these animals and no necessity of any killing of them."²⁶ It appeared that the Park Service had again appeared both sides of the wolf-sheep argument, first by ordering wolves killed, then by announcing to the anti-killing people the failure of its action.

The wolves did return to the park in the summer, as did William Beach. With the wolf quota still in effect, rangers killed five wolves, yet Beach again made headlines, "wrought up over the destruction of game." An editorial in the Daily News-Miner cited Beach as one of an "increasing body of competent authority" questioning the wisdom of Park Service management. For the first time, park rangers had been pursuing wolves with a specific goal, rather than taking the opportunistic shot, yet the Daily News-Miner ignored this. The editorial again dredged up the old argument of the wolf-breeding ground, allowing wolves to spread across Alaska, "cutting down and wiping out the animals which have become traditionally identified with our land." With the Camp Fire Club's legislation upcoming in the 1947 Congress, the Daily News-Miner urged "every Alaskan to demand passage of this bill." Beach also appeared on the airwaves, gaining an interview on radio station KFAR on August 17. Beach derided Park Service management based on the balance of nature and proposed

²⁶ Drury to McLean, 6 May 1946, Stef. Mss., 190 - 8:67, DCL; Pearson to Regional Director, 16 May 1946; Westwood to Drury, 8 May 1946, RG 79, Entry 7, File 715, Box 1414, NA.

legislation as the solution. When asked what listeners could do about the park wolf situation, Beach responded, "They can try to force the Department of the Interior to adopt some method of killing wolves and force the Park to kill them."²⁷

Adolph Murie arrived at McKinley Park the same day William Beach spoke on the radio. He stayed until September 23, attempting to census the sheep and wolf populations and determine the survival of that year's crop of lambs. He still estimated a population of only five hundred sheep, but considered their age class distribution healthier than seven years earlier, and posited that an "equilibrium with the current environment has been reached." Any such balance was tenuous: Murie estimated a wolf population of no more than fifteen and found much less predation on sheep than in his earlier visits, but noted that a single pack entering the park could shift the predator/prey balance overnight. While overnighting at the Sanctuary River ranger cabin, Murie reflected on his dual mission as a biologist and a Park Service advocate. "This is not the critical time for the wolves. That time is coming, when wolves become scarce. Now is the time to build up a generous attitude toward the wolf and the park service." Murie refuted Beach's comments by his own appearance on KFAR, a report "worded to favor the park administration." Upon his departure, Jessen's Weekly reported that Murie's study confirmed national park policies, "that if undisturbed nature will preserve a balance." Even though wolf predation on sheep was negligible in the fall of 1946, the potential instability between the

²⁷ Jessen's Weekly, "Grant Pearson, McKinley Park Head, In Town," 23 August 1946; "N.Y. Sportsman Here For Game," 16 August 1946; Daily News-Miner, "Wolves, Sheep, and Cold Cash," 17 August 1946; Pearson to Regional Director, 6 September 1946, RG 79, Entry 7, File 715, Box 1414, NA. This latter is a transcript of the radio interview sent to top Park Service administrators.

animal populations coupled with the desire to build positive public attitudes toward the Park Service caused Murie to recommend continued wolf control.²⁸

Subsequent Park Service correspondence confirms that wolf control in 1947-48 had less to do with the biological needs of the sheep than with the psychological needs of the public. Victor Cahalane predicted that Murie's statement about a wolf-sheep equilibrium would be "greeted with derision by Beach, Browne, and the rest of the Camp Fire-eaters." Cahalane felt the wolf controls should continue because the chances of taking wolves were slight and continued control would help keep the critics quiet. He also recommended withholding from McLean animal reports from McKinley park, since "he has chosen to disregard everything that emanates from the N.P.S. and to use it, if possible, to the disadvantage of the Service."29 Newton Drury stated that "Our ideal objective is the removal of artificial management," yet agreed that prudent wolf removal was justified, and tried to convey that message to the Camp Fire Club through the higher offices of Interior Department officials. Adolph Murie justified wolf killing because it would "benefit the wolf most," since "if the public opposition continues, resentment against the wolf and the Service would increase." He advocated a flexible control policy based on the sheep population; with little danger of exterminating the wolf due to its wide-ranging habits, such a plan would minimize "unfavorable public reaction to our conservation efforts

²⁸ A. Murie, "1946 Alaska Trip," field journal, 15 August, 12 September 1946, A. Murie Collection, Box 12, RL; A. Murie, "Wolf-Mountain Sheep Relationships in Mount McKinley National Park, Alaska - 1946," File 5986, Box 3, DENA; Superintendent's "Monthly Report," September 1946, DENA; Jessen's Weekly, "Wolves Have Gone, Lambs Are Arriving At McKinley Park," 4 October 1946.

²⁹ Cahalane to Tolson, 8 January 1947, RG 79, Entry 7, File 715, Box 1414, NA; Cahalane to Tolson, 23 April 1948, RG 79, Entry 7, File 715, Box 1415, NA.

without sacrificing anything." To this end, four wolves killed in March 1948 were displayed at park headquarters for public viewing and photography. Superintendent Been wrote that "The observation by people from widely scattered parts of Alaska, including the many who saw the wolves last month will broadcast... that wolves are being controlled in the Park." Been reported these wolf kills in the newspaper as well. As of June 1948, nine wolves of the original 1945 quota of fifteen had been killed and wolves were scarce in the park; nevertheless, Acting Director Tolson recommended the control effort continue through the summer tourist season, to convey the Park Service's stance to more people. 30

Park Service biologist Lowell Sumner, in an appraisal of the wolf-sheep situation, outlined the primary problem facing park administrators:

I recognize, as do Superintendent Been and Dr. Murie, that we cannot allow nature to take its course at the time because the general public has not yet been educated to a full appreciation of the biological values of our national parks, and the way they function.31

This long-term view defined the task of the National Park Service in this issue: effect immediate policies in reaction to current demands, while preserving what the park held unique.

³⁰ Drury to Regional Director, 26 February 1948; Drury to Regional Director, 9 January 1948; Tolson to Doerr and Cahalane, 30 June 1948, RG 79, Entry 7, File 715, Box 1415, NA; A. Murie to Been, 29 January 1948, File 5968, Box 1, DENA; *Jessen's Weekly*, "Park Superintendent Looks For Big Tourist Season in '48," 12 March 1948; Superintendent's "Monthly Report," March 1948, DENA.

³¹ Sumner to Regional Director, 6 February 1948, RG 79, Entry 7, File 715, Box 1415, NA.

In maneuvering for public support, the Camp Fire Club had a potential ally in their partner in McKinley Park's creation, the Boone and Crockett Club. Membership of the two groups overlapped considerably, and Belmore Browne and Marshall McLean belonged to both. In harkening back to the park's roots, Browne and McLean recruited the son of Charles Sheldon to support their cause at the 1945 Boone and Crockett annual meeting. William Sheldon had training in wildlife biology, but had just returned from military service and knew few of the details of the McKinley situation. With William's support, and in honor of his father, the club passed Sheldon's motion favoring the legislation.³²

In the following year, however, Sheldon read Murie's book, learned more of the situation, and changed his mind. At the 1946 Boone and Crockett annual meeting McLean and Browne attempted to pass another resolution against the Park Service, and Sheldon led the successful opposition against "the old diehards who are making the trouble." To allow for further discussion of the issue, the club president commissioned a committee to assess the situation, led by Richard Mellon and Dr. Harold Anthony of the Museum of Natural History. The committee met in the museum's Sportsmen's Library on January 23, 1947, with McLean and Browne presenting their views, and with Park Service representation by its Chief Naturalist, Carl Russell. The former repeated their legal argument over the definition of McKinley Park as a game refuge, and attempted to discredit Adolph Murie's research. McLean thought that legislation was necessary "in order that the wolf problem may be met effectively in spite of

³² Trefethen, Crusade for Wildlife, 301.

biologists," and Browne asserted that "Dr. Murie is responsible for the National Park Service lethargy." ³³

Carl Russell reported that "McLean's hands shook and Browne leaned over to steady his paper so that the shaking would be less noticeable. They struck me as being two old-timers very upset by the possibility that their 'baby' may be neglected. I feel sorry for them—not sore at them." Russell put forth a spirited defense of Murie and park policy, noting that the situation held such importance that Murie was to take up permanent residence in the park to monitor the situation. Upon their wolf committee's recommendation, the Boone and Crockett Club officially expected the Park Service to ensure a viable sheep population, but thenceforth remained neutral on further legislative efforts against the Park Service.³⁴

Bradford Washburn, after being "heartily in favor" of the 1946 legislation, continued to be a burr in the side of the Park Service. He spent the summer of 1947 on Mount McKinley filming an ascent for RKO Productions in a project named "Operation White Tower." Upon his return, Washburn submitted statements deploring game conditions to the Park Service and the Camp Fire Club. In a letter to Newton Drury, Washburn accused Adolph Murie of editing research findings to conform to Park Service policy, and ridiculed the opinions of other naturalists. Drury responded coldly. "We desire to follow truth, wherever it leads, in wildlife and all other matters. We cannot, and I believe should not,

³³ Sheldon to Cahalane, 17 March 1947; Sheldon to Anthony, 17 March 1947, File 5968, Box 3, DENA; Harold Anthony, "Minutes of the Wolf Committee Meeting of the Boone and Crockett Club," 23 January 1947, RG 79, Entry 7, File 715, Box 1414, NA.

³⁴ Russell to Drury, 23 January 1947, RG 79, Entry 19, Box 13, File "Mt. McKinley National Park," NA; Russell to Drury, 27 January 1947; Anthony to Russell, 28 January 1947, RG 79, Entry 7, File 715, Box 1414, NA.

exterminate the wolf. But short of that I do not believe there is much to argue about." Although a scientist himself, in this instance Washburn preferred public opinion: "I still value the convictions of the vast majority of the local people in the McKinley Park area more highly that those of the biologists . . . the list of those in opposition to his [Murie's] views seems to me to be a rather distinguished one."35 Washburn had stated to Drury that this was the only park service policy with which he disagreed, yet he pushed for a road extension from Wonder Lake across the tundra to McGonagall Pass, the traditional route to the base of Mount McKinley, "to extend the road right over to the mountain so that he [the tourist] can actually touch the peak." Washburn also tried to get permission for the Navy to build a cosmic ray research station on Mount McKinley. Neither of these were approved; Belmore Browne opposed the road idea, preferring that the park retain as much wilderness character as possible. Adolph Murie privately cut Washburn down to size: "actually he is pulling all possible strings to get the projects approved so that he can get lecture material. . . We all feel that Washburn, with his commercialization of the Mountain, has already desecrated it enough, enough for one little man."36

While the wolf-sheep conflict simmered in Washington, D.C., the battle for public opinion received coverage in national magazines. Members of the Wilderness Society, with Olaus Murie as president, gained acquaintance with

³⁵ Washburn to Bartlett, 7 March 1946, Stef. Mss., 190 - 8:67, DCL; Washburn to Drury, 14 November 1947; Washburn to McLean, 14 November 1947; Drury to Washburn, 24 December 1947; Washburn to Drury, 2 January 1948, RG 79, Entry 7, File 715, Box 1415, NA.

³⁶ Washburn to Interior Sec. Krug, 2 September 1947, Bartlett Collection, Box 1: Interior—NPS, Folder 1, RL; Browne to Grant Pearson, 8 December 1949, Stef. Mss., 190 - 8:69, DCL; A. Murie to Otto Geist, 28 October 1948, Geist Collection, Box 15, RL. Notwithstanding these issues, Washburn holds great significance in the history of Alaska mountaineering, high latitude and high altitude science, and mountain mapping.

Adolph's research, as *The Living Wilderness* printed long excerpts from *The Wolves* of *Mount McKinley*. A broader audience was reached in January 1946, when *Field* and *Stream* printed a direct attack on the National Park Service in an article titled "Shall We Protect the Killers?" The author, C. Blackburn Miller, did not claim Camp Fire Club affiliation in the article, yet served on the Conservation Committee alongside William Beach and Marshall McLean. Calling the wolf a "malignant, malicious beast," Miller blamed the Park Service's adherence to balance of nature ideals as pushing the Dall sheep to the brink of extermination, and urged sportsmen to rise up in protest.³⁷

The Park Service took up the gauntlet. Newton Drury responded with a letter to the editor of *Field and Stream*, in which he defended the legal basis for their wildlife policy, supported Murie's research, and took pains to note that on the basis of science, rather than hearsay, park rangers were currently in the process of culling wolves from the park. Drury also requested space in *Field and Stream* for a longer rebuttal, which appeared in June. In "Should We Cry Wolf?," Chief Biologist Victor Cahalane defended the wolf as "part of the warp and woof of the pattern of our American wildlife heritage." Appealing to the "well-informed wildlife enthusiasts" rather than the "itinerant wildlife zealots," he derided the "overcrowded pasture of spiritless sheep" that would result in the absence of their natural predator, and assured readers that the Park Service would maintain both species. Another article by Cahalane appeared simultaneously in *The Living Wilderness*. "Shall We Save the Larger Carnivores?"

³⁷ Adolph Murie, "The Wolves of Mount McKinley," *The Living Wilderness* 10:12 (February 1945): 9-25; C. Blackburn Miller, "Shall We Protect the Killers?" *Field and Stream* 50:9 (January 1946): 96-7. Miller's name appears on a Camp Fire Club membership list in 1939, taken from RG 79, Entry 7, File 719, Box 1415, NA.

addressed the different readership by urging support for the Park Service against H.R. 5401, since the Park Service stance kept in mind the desires of the non-hunting public: "Perpetuation of the unique values of this area seems to depend on aggressive action by naturalists and sustained interest and support by the nature-loving public." Olaus Murie provided the editorial comment for that issue of the magazine, wondering if Congress would be swayed by a "group of New York people" who would cause McKinley Park to "degenerate into a game refuge." 38

The sportsmen's magazines remained unconvinced. The next month's issue of *Field and Stream* contained an article by an Alaskan trapper, "Arch Villains of the Wilderness," while *Outdoor Life* printed "The Timber Wolf: Scourge of Game and Stock." Although wolves had not preyed on stateside stock in decades, the article declared "the only good wolf is a dead wolf. . . Here is an animal for which nobody has a kind word, nor does he deserve one." Alaskan Russell Annabel painted a gloomy picture in the February 1947 *Field and Stream* in "Wolf Trouble in Alaska." Ignoring that wolves had actually received full protection in McKinley Park only for brief periods, Annabel blamed the "curious official stubbornness" of the Park Service for causing the disappearance of all game in a two hundred mile stretch of the Alaska Range. This article appeared as a chapter in Annabel's 1948 book, *Hunting and Fishing in Alaska*, and his charges received coverage in *The Alaska Sportsman* of June 1948. Frank Dufresne, the former head of the Alaska Game Commission, put his considerable credibility

³⁸ Newton Drury, letter to the editor, *Field and Stream* 50:12 (April 1946): 7-8; Victor H. Cahalane, "Should We Cry Wolf?" *Field and Stream* 51:2 (June 1946): 103, 107, 37, 104; Victor H. Cahalane, "Shall We Save the Larger Carnivores?" *The Living Wilderness* 17:11 (June 1946): 22; Olaus Murie, editorial, *The Living Wilderness* 17:11 (June 1946): 1.

into an anti-wolf article in *Outdoor Life*, declaring "In man's scheme of things, at least, the wolf has no place." At the least, the wolf held a place as man's enemy, as outlined in another *Outdoor Life* article, "America's Longest War: The Battle With Wolves." Echoing Annabel's broad territorial stroke, *Outdoor Life* also published "Sportsmen: We Must Not Let Alaska's Game Die Out." This article covered wolf predation predictably, but fairly considered the effects of Alaska's increased population of newcomers and the use of airplanes in hunting on the game situation. While the pre-war wolf controversy had been essentially confined to local coverage in Alaska and in the clubrooms of New York City and Washington, D.C., this magazine coverage assured it national prominence.³⁹

Additional publicity to the wolf-sheep controversy arose from another self-appointed savior of the hoofed animals of the north, a retired evergreen tree grower from Seattle named I.P. Callison.⁴⁰ An avid hunter, Callison had traveled throughout the western Canadian provinces and visited Alaska in 1945 in search of big game. He became convinced that the gamut of northern game species was rapidly becoming extinct through a combination of advancing civilization and increasing wolf predation. Although he sincerely believed in the validity of his

³⁹ Chick Ferguson, "Arch Villains of the Wilderness," Field and Stream 51:3 (July 1946): 38, 97-9; P.A. Parsons, "The Timber Wolf: Scourge of Game and Stock," Outdoor Life 98:1 (July 1946): 40; Russell Annabel, "Wolf Trouble in Alaska," Field and Stream 51:10 (February 1947): 74; Annabel, Hunting and Fishing in Alaska, 145-57; "From Ketchikan to Barrow," The Alaska Sportsman 14:6 (June 1948): 30; Frank Dufresne, "Ghosts That Kill Game," Outdoor Life 101:4 (April 1948): 37; Fred R. Zepp, "America's Longest War: The Battle with the Wolves," Outdoor Life 48:5 (May 1948): 41, 118; Ben East, "Sportsmen: We Must Not Let Alaska's Game Die Out," Outdoor Life 101:5 (May 1948): 24-5, 116-8.

⁴⁰ I have not found biographic information on Callison, and cannot explain the coincidence of his crusade and his namesake, Israel Putnam. A major general in the Continental Army, Putnam gained pre-Revolutionary War renown and a place in American wolf history by crawling into a wolf den near his farm in Connecticut and killing the beast who had decimated his livestock the previous night; see Young, Wolf in North American History, 69-72.

research, which involved talking to wardens, guides, and local residents (and later sending a survey to four hundred guides and trappers), Callison arrived at some curious conclusions. To explain the supposed increase in predator numbers, he posited a migration of animals northwest, packs of wolves and coyotes driven before the plow and road from the Canadian prairies, who then found the reindeer herds of Alaska and multiplied greatly. The increase in wolves was boosted by the breeding grounds provided by the "balance-of-nature hopheads" of the American and Canadian park services. At seventy-five years of age, Callison began printing his opinions on the north's game following his Alaskan trip, and gained publication in magazines such as *Game Trails* and *Alaska Life*.41

Callison had spent July 1945 in McKinley Park, ostensibly on a photographic mission, and claimed a sheep population of only one hundred twenty. He came to the attention of Park Service headquarters after his magazine articles appeared. Victor Cahalane, to his colleagues, dismissed Callison as one of the "amateur doctors of wildlife ills." While Callison may have been an amateur, he was an amateur on a crusade. In July 1948 he privately published a ninety-page pamphlet titled *Wolf Predation in the North Country* and mailed it to his guide and trapper contacts, Alaskan politicians, and the Camp Fire Club. The Park Service requested a copy, and Callison charged them one dollar. They paid.⁴²

⁴¹ I.P. Callison, "Wolves and Coyotes, The Major Menace to North American Big Game," Alaska Life 9:6 (June 1946): 10.

⁴² Superintendent's "Monthly Report," July 1945, DENA; Cahalane to Drury, 29 March 1946, RG 79, Entry 7, File 715, Box 1414, NA; Callison to Gruening, 2 August 1948, RG 101, Box 471, ASA; Cahalane to U.S. Grant, 26 August 1948, File 5968, Box 2, DENA; I.P. Callison, Wolf Predation in the North Country (Seattle: By the author, Lloyd Building, 1948); Tomlinson to Callison, 13 August 1948, File 5968, File 5968, Box 2, DENA.

While Belmore Browne's analysis of Murie's book had been long on rhetoric, short on evidence, and verging on the slanderous, Callison's pamphlet took the wolf-sheep controversy to previously unplumbed depths. Wolves received every vile adjective known, and were responsible for all evil in the north, including the killing of a million reindeer. While Callison's informants were all men of vast experience and unshakable integrity, federal officials were "super-fanatics" who "live in a cloistered vacuum the four walls of which are fashioned out of false theories based on wholly false premises." From this had come a "strange and unrealistic philosophy" which led to a sickness, the "balance-of-nature virus." Although scientists had provided the balance of nature theory, Callison considered its adherents to be involved in a religious deviance to an unproven creed. Conservationists who had given testimony in support of the Park Service at the Congressional hearing were "the high priests of the strange cult." In debunking the balance of nature concept, Callison used the same argument that had been used by the Biological Survey in the 1920s: as soon as white men appeared in North America, any preexisting balance disappeared, and Callison rightly pointed out the inroads of civilization and population against the north's game populations.⁴³

Adolph Murie, a "poor benighted conservationist," had undertaken a research project unnecessarily, since the evidence against the wolf was obvious to all who lived in Alaska. Nevertheless, he had received a "glorious vacation at the taxpayer's expense," in order to justify the philosophies of park service biologists, chiefly the "childish twaddle" of Victor Cahalane. Murie's research

⁴³ Callison, Wolf Predation, 22, 40, 82, 37, 11, 83, 38.

report was "a piece of pro-wolf propaganda from start to finish." That notwithstanding, Callison quoted Murie frequently and selectively to prove his point, that wolves ate sheep. Callison claimed that Park Service employees disagreeing with the theories of top administrators had been "tightly muzzled," and that Murie's research conclusions had been dictated from Washington, D.C. by people whose minds were "utterly impervious to the principles of practical game management." Callison summarized the McKinley Park situation as "the most colossal example of wanton waste in wildlife management ever recorded. The Park was turned over to the Park Service teeming with wild game, a biological spectacle without a rival in all the world. In thirty short years it has made of the Park a howling wilderness."44

Victor Cahalane understatedly considered Wolf Predation in the North Country to be "highly dramatic but unfortunately highly imaginative." In response to predation inquiries the Park Service supplied copies of The Wolves of Mount McKinley and subsequent reports by Murie, no doubt assuming that objective readers could compare the two authors and draw reasonable conclusions as to their respective veracity. A Canadian biologist quoted extensively by Callison, C.H.D. Clarke, informed Callison that he objected to Callison's extreme subjectivity, sweeping generalizations, and personal attacks on Adolph Murie. Even Marshall McLean was "bothered about Callison's 'book'—all agree it is very good in spots—but so tied down with extraneous matter—as to lose all point as a weapon of attack."

⁴⁴ Ibid., 46, 42, 81, 51, 39, 49, 62.

⁴⁵ Cahalane to U.S. Grant, 26 August 1948, File 5986, Box 2, DENA; Clarke to Callison, 14 March 1949, File 5986, Box 1, DENA; McLean to Browne, 23 October 1947, Stef. Mss., 190 - 8:68, DCL.

Olaus Murie objected enough to write a four page letter to Callison. He admitted he did not have time refute every item, but warned Callison that "I shall want to dispute some of your data as occasion may arise, and particularly your presentation of the matter." One occasion came in late 1948, as Jessen's Weekly published a column about Callison's work. The newspaper printed Olaus's lengthy reply to the editor, in which he pointed out some of Callison's fallacious arguments and criticized the "highly denunciatory character of the publication." In his typically conciliatory manner, Murie ended his letter with a rational plea for cooperation. "We say we are a democracy. It might be remembered that all of us like to have the privilege of enjoying our country, each in his own way, and sportsmanship includes tolerance for the other fellow's kind of enjoyment." Callison had the last word in Jessen's Weekly and displayed little appreciation for Murie's appeal. He defended his opinion of the Park Service and attacked Olaus for then being in New Zealand on an international assignment for the Fish and Wildlife Service to help with an elk study. "It appeals to the writer that such assignments not only place an unnecessary burden on the taxpayers but indicate a woeful lack of understanding of the fitness of things."46

Wolf Predation in the North Country, with its combination of fervor and scurrilousness, stands as a singular example of the hostility extant in the late 1940s toward wolves and the National Park Service. In all likelihood, the informants who had sent reports of wolf depredations to Callison found his book

⁴⁶ O. Murie to Callison, 17 November 1948, Stef. Mss., 190 - 8:68, DCL; Jessen's Weekly, "New Book Out On Wolf Predation In North Country," 24 September 1948; O. Murie, letter to editor, 17 December 1948; Callison, letter to editor, 25 March 1949. Comments by both Olaus Murie and Callison indicate further correspondence in 1948, but I have not been able to obtain these. Jessen's' Weekly had previously indicated a positive regard for Olaus with a complementary editorial on the Wilderness Society, 30 April 1948.

consistent with their own beliefs. There was no widespread support for protection of wolves, national park or not. The Park Service still faced a formidable public relations challenge.

The legislative reprise in the spring of 1947 became a victory for the Park Service. The bill requiring the immediate reduction of wolves in McKinley Park was again introduced into both houses of Congress and referred to committees.⁴⁷ This time the Park Service prepared its defenses adequately. Adolph Murie had published an update on the situation in the December 1946 The Living Wilderness, and the Park Service ordered five hundred copies of the article for distribution to their mailing list "at a strategic time." In anticipation of hearings, potential witnesses submitted their testimony to Park Service headquarters for review by Cahalane and the chief counsel's office. Cahalane distributed lists of congressmen to favorable lobbyists, and urged them to also write directly to the Camp Fire Club outlining their opposition to the legislative tactic.⁴⁸ The American Society of Mammalogists passed not only a resolution opposing legislation, but a statement directing the Park Service to "pay special attention to the problem of preserving the wolf in Mount McKinley National Park," since the park represented virtually the only sanctuary on the continent for the wolf. Frank Been, returned to the superintendent's job from military duty, provided the latest

⁴⁷ Congress, House, To Provide for the Protection of the Dall Sheep, Caribou, and Other Wildlife Native to the Mount McKinley National Park Area, and for other purposes, 80th Cong., 1st sess., 1947, H.R. 2863; Senate, [same title], 80th Cong., 1st sess., 1947, S. 891; copies from File 5968, Box 3, DENA.

⁴⁸ Adolph Murie, "Another Look at McKinley Park Sheep," *The Living Wilderness* 11:19 (December 1946): 14-16; Cammerer to Regional Director, 31 January 1947; Cahalane to Fred Packard of National Parks Assoc., 13 May 1947, File 5968, Box 3, DENA; Cahalane to Donald Hoffmeister of Soc. of Mammalogists, 17 September 1947, RG 79, Entry 7, File 715, Box 1415, NA.

word on conditions in the park: "Fortunately, we can now report that wolves are decreasing and sheep are increasing. The reversal of the situation of the past few years may cool the ardor for enforced control." Interior Secretary Krug registered his opposition to the legislation, concluding it "might well lead to an unhealthy balance of species, with which situation we have had considerable experience on other Federal lands." Lacking the support of powerful sportsmen's groups such as the Boone and Crockett Club and the Izaak Walton League, opposed by virtually every conservation organization and by the country's leading wildlife biologists, and unwanted by the Interior Secretary, the Camp Fire Club's bill died quietly. It never gained another hearing.

⁴⁹ Hoffmeister to Drury, 16 September 1947, RG 79, Entry 7, File 715, Box 1415, NA; Been to Drury, RG 79, Entry 7, Box 1405, NA; Krug to Sen. White, Rep. Welch, 22 April 1947, File 5986, Box 3, DENA; Robert Beatty of Izaak Walton League to McLean, 17 November 1947, RG 79, Entry 7, File 715, Box 1415, NA.

CHAPTER 9

THE FINAL CAMPAIGN

Despite the support given to Adolph Murie's research by the scientific community and the efforts by the Park Service to generate favorable publicity for their cause, they still faced criticism from Alaskans, the sportsmen's media, and the Camp Fire Club. The club arranged an audience with Assistant Interior Secretary C. Girard Davidson in February 1948 to continue their pressure on the Park Service. The meeting included Director Newton Drury, who felt the club members came "with blood in their eyes." The litany of Park Service transgressions was familiar to Drury, but the club members emphasized an old and unpopular management tool: the use of poison to kill wolves, rather than relying on rifles and snares. Drury adamantly opposed this suggestion; as news of this development spread among Park Service officials, Lowell Sumner commented "it marks a new low in their comprehension of the facts of life as regards conservation and biology." Secretary Davidson promised his support in finding solutions to the problem, without agreeing to the validity of the Camp Fire Club's accusations.¹

Even with the threat of legislation seemingly past and indications of an increasing sheep population, this continued pressure forced Park Service officials to seek another way to mollify their critics and validate their management of

¹ Drury to S. T.. Dana, 19 February 1948; Drury to Davidson, 25 February 1948, RG 79, Entry 7, File 715, Box 1415, NA; Camp Fire Club memo of meeting, 19 February 1948, Stef. Mss., 190 - 8:77, DCL; Sumner marginal note on Drury to McLean, 17 March 1948, File 5986, Box 2, DENA.

McKinley Park. Inviting a bipartisan team to evaluate conditions in the park had been suggested in 1946, when they had requested nominations for a group from Horace Albright. Opposed to wolf protection, Albright approved the idea yet felt the group should include men "who have not been too closely tied to the protection of predators." He proposed Harold Anthony, among others, and correspondence began between Anthony and the Park Service to arrange a trip to Alaska.²

Harold Anthony held the respect of both scientists and sportsmen. A college acquaintance of Olaus Murie, Anthony had been on the staff at the Museum of Natural History since 1912, rising from curator of mammals to the director. His studies had carried him to distant continents, where he displayed the vigor needed by field biologists of the day, such as covering four thousand miles in Sudan on a six-month collecting expedition in 1926. His 1928 Field Book of North American Mammals became a standard text across the country. Combining these credentials with the social rank and prestige of membership in the Boone and Crockett Club ensured that his judgment of Murie's recommendations and park management would be taken seriously. Anthony added another member to his investigation, Ralph Friedman of New York. A businessman, not a scientist, Friedman had hunted extensively and provided museum specimens for Anthony. He made his inclusion easier by defraying the travel expenses of the trip for both of them. Their arrival in McKinley Park was set for mid-August.³

² Albright to Tolson, 14 May 1946, RG 79, Entry 7, File 715, Box 1414, NA; Drury to Anthony, 5 May 1947, File 5968, Box 3, DENA.

³ Dunlap, Saving America's Wildlife, 60; "Comment and News," Journal of Mammalogy 8:3 (August 1927): 267; Harold Anthony, Field Book of North American Mammals (New York: G.P. Putnam's Sons, 1928).

Marshall McLean got wind of the Park Service plan and proposed "with due modesty" that the Camp Fire Club be allowed to send a representative. Newton Drury graciously agreed to "receive any scientist" the club cared to send, and proposed they coordinate with Anthony's plans. McLean proceeded to nominate not a scientist, but Belmore Browne, causing some consternation at Park Service headquarters. Lowell Sumner wrote a skeptical memorandum, disparaging Browne's "meager understanding of wildlife," and making two important suggestions: that Browne and the study team agree on their findings before Browne's departure from the park, thereby inhibiting a possibly divergent public statement by the Camp Fire Club, and that Adolph Murie accompany Browne at all times, to make sure Browne saw all of the sheep present in the park. Drury solicited Anthony's reaction to Browne's presence; Anthony considered Browne to be a friendly acquaintance and foresaw no personal difficulties, yet in view of Browne's history with the wolf controversy, held "grave doubts that anything short of a miracle will make an impression upon him."4

Browne arrived at McKinley Park prepared to repel any possible miracles. He had flown from Calgary via the Alaska Highway air route and inquired of game and wolf conditions during stops. In Fort St. John he met a mining engineer who spoke bitterly about the dwindling game herds, blaming their demise on biologists and their "equilibrium theories." In Whitehorse, Browne spoke with two men who had conducted a wolf poisoning campaign the previous winter, neither of them "believers in the balance of nature theory." He heard tales of the

⁴ McLean to Drury, 26 March 1948; Drury to McLean, 5 April 1948; McLean to Drury, 14 June 1948; Sumner to Regional Director, 29 June 1948; Drury to Anthony, 22 June 1948; Anthony to Drury, 28 June 1948, RG 79, Entry 7, File 715, Box 1415, NA.

Kluane area having been cleaned of caribou and of Indians starving due to lack of game animals. A taxi driver in Fairbanks told Browne of the previous season's caribou slaughter by hunters along the Steese Highway, blaming army men.⁵ On the train ride from Fairbanks to McKinley Park, Browne noted the "moose country of the best type," and scanned with his binoculars "where moose would have been visible at long distances; no moose or caribou were seen. . . . An extremely fine moose head on a cabin was a mute reminder of the glory of past days." As the train pulled up the grade from Healy into the foothills of the Alaska Range, Browne remembered his earlier days in the area, before the railroad or park existed, as he returned after an absence of thirty-six years.

I was struck with the magnificence of these Alaskan grasslands. In my long life as a sheep hunter I have never seen high grass grown mountains that can compare with the N. slopes of the Alaskan Range. I will state without hesitation, that if the white sheep was really protected by good laws and efficient warden service that the number of sheep this range could sustain would be practically limitless. The largest grass lands of the Canadian Rockies pale to insignificance by comparison. Having often seen sheep from the car windows of the C. P. R. in both open + [unclear] country, I used binoculars continuously from Healy to the Park Station without seeing an animal of any kind.6

Harold Anthony and Ralph Friedman had arrived the previous day and drove to Camp Eielson with Adolph Murie, seeing eighty-two sheep. Upon learning of Browne's arrival, they drove back to headquarters on the

⁵ The *Daily News-Miner* called the scene "one of the most degrading examples of human debauchery . . . a shameful spectacle dominated by the lowest instincts of man, the gory lust to kill, that has no place in civilization." From "Caribou Extermination," 30 October 1947.

⁶ These are taken from the diary Browne kept of this trip, 17-19 August 1948, Stef. Mss., 190 - 8:70, DCL.

evening of the nineteenth.⁷ That evening the men met with Superintendent Been to get acquainted and make plans for their investigation. Browne confessed to some discomfiture "for me in particular, as I, more than any one in the gathering, had been the severest critic of both Murie and the Park administration." But a gentlemanly spirit prevailed, and Murie impressed Browne by his lack of hostility and overall knowledge, which "convinced me that he knew the McK. Park game situation better than any of us and that he would be a straight shooter during our investigation." Browne perceived Anthony as being "open-minded," although favoring the continued presence of wolves; Friedman was an "amateur... frankly afraid of wolf control." Been struck the veteran Browne as "an energetic Park administrator rather than an experienced outdoorsman." The men agreed to drive to Camp Eielson the following day and use it as a base for exploration.⁸

August twentieth, like most of the month, dawned cold and cloudy, yet the party had reasonable visibility as they drove the park road. Frank Been considered the day a triumph for Murie. Only thirteen sheep were visible with the unaided eye, yet Murie's familiarity with the sheep's haunts enabled the group to see a total of one hundred ten with their binoculars and spotting scopes. Been felt this "illustrates the shallow basis for adverse comment from inexperienced observers," who would have seen only the thirteen sheep. This fell short of the miracle Anthony had hoped for with

⁷ From Adolph Murie's personal diary, "Notes General, 8/14/48 - 12/17/48," A. Murie Collection, Box "Personal Diary," RL. The following account draws from both men's diaries, as well as Frank Been's Superintendent's "Monthly Report," August 1948, DENA.

⁸ Browne diary, likely written in retrospect on 27 August 1948.

Browne, though. Browne wrote that "Only 110 sheep counted under good visibility in a journey of 66 miles." He compared it to seeing one thousand sheep on a day's foot journey back in 1912, and thought the park should be supporting a sheep population of ten thousand, based on "a cursory glance of the summer grass slopes." Browne lamented for "the great sheep herds that inhabited this area before the wolves began their slaughter," and was shocked at the absence of caribou.9

That evening, as rain fell hard, caribou dominated the conversation. Murie had heard that the main herd was north of the park, while Browne insisted their absence in the park was due to the wolves having driven them away from ancestral calving grounds. Browne continued his argument until midnight and into the tent he and Murie shared. Murie wrote, "He cites endless episodes with game. A single episode proves what he wants to conclude. Browne talks incessantly, poor conversationalist; hard to get an exchange of thoughts on a subject." ¹⁰

The noise of the rain on the tents continued into the wee hours, but finally stopped. When the men arose to a silent morning, they were surprised to open their tent flaps and discover that the rain had been replaced by snow. Browne spent the day painting, while the others played bridge. The following day, August 23, the skies cleared and the party enjoyed the view of Mt. McKinley before driving back to headquarters. They were likely pleased to be active again,

⁹ Superintendent's "Monthly Report," August 1948, DENA; Browne diary, 21 August 1948.

 $^{^{10}}$ Browne diary, apparently 22 or 23 August 1948; A. Murie diary, 21 August 1948.

for Murie remarked that the superintendent had been a "constant master of ceremonies even during lunch time." ¹¹

In order to check the conditions of the winter sheep pastures in the Outer Range, the party climbed a spur of Sable Mountain the next day. Murie had picked a gentle route up grassy slopes after evaluating the physical ability of the group, but his goal was too ambitious: Friedman quit early because of a bum knee, Browne dropped his pack and stayed at a low elevation, and Anthony turned back shortly afterward. Browne interpreted the landscape differently, writing that "The mountain was smooth, eroded and with no protecting cliffs to offer sanctuary from wolf attacks. . . . Today there is no sheep population. Cause, predation by wolves." 12

For the next two days, the men took walks in various places near park headquarters and the Savage River. They had been scheduled to take a flight over the park, but mechanical problems grounded their plane. According to Murie, Browne spent his days painting rather than investigating game conditions. Browne did not mention painting in his journal, but did take time to reflect on the effects of civilization upon the north, allowing that man held responsibility for much of the game decrease. Only Browne, of this group, had seen Alaska before the railroad and the towns it produced. He sadly concluded that "The vast wilderness areas of Alaska no longer exist. We are at the threshold of a new era throughout the North." 13

¹¹ A. Murie diary, 22-23 August 1948. The "master of ceremonies" from a different journal, written several days later: Folder "Notes on Alaskan vegetation, 1940-1965," Box "Field notes on a variety of species," A. Murie Collection, RL

¹² A. Murie diary, 24 August 1948; Browne diary, 24 August 1948.

¹³ A. Murie diary, 25-26 August 1948; Browne diary, 24 or 25 August, 1948.

Murie had accomplished his task, which was to show the party the animals of the park as much as possible, and convince Browne of his objectivity as a scientist. Frank Been took center stage on the final day of the investigation, introducing with a flourish a joint statement he wished all to sign. "It was pretty awful," according to Adolph. Debate over the message and wording occupied the afternoon, Been regarding the statement as "his baby," while Anthony insisted he couldn't sign anything before filing a report with the Boone and Crockett Club. The three investigators were due to board the 7:15 PM train to Fairbanks; Been brought a typewritten draft to the park depot, and the men reluctantly signed, after making still more changes and convincing Been that it was not for public distribution. Murie thought that he and Been should not have signed at all; Anthony and Friedman considered the whole performance "quite sad." Frank Been, though, was pleased at the "uniformity of thought on a policy" and with the "wholesome tenor of friendliness and respect" that had overlain the ten days. 14

The one-page statement of understanding represented compromise from both sides of the issue. Browne agreed that predator control legislation was a dangerous precedent and should no longer be supported, yet he convinced the others to insert a recommendation that telescopic sights should be purchased for the park ranger's rifles, to improve their effectiveness in further wolf control. The statement did not place blame on Park Service mismanagement for reduced sheep numbers, but did agree that wolf killing should continue until the sheep population reached 2,500, under the direction of the Secretary of the Interior.

¹⁴ A. Murie diary, 26-7 August 1948; Been to Regional Director, 31 August 1948, RG 79, Entry 7, File 715, Box 1414, NA.

While discussing environmental factors affecting sheep, the statement also recognized the impact of public opinion: "An enlightened public is also essential in order that there will not exist unfair pressures born of ignorance." ¹⁵

Each of the three guests to the park submitted lengthy reports to Park Service headquarters, providing individual perspectives. Drury found Ralph Friedman's to be an "unusually keen analysis." Although a newcomer to Alaska, Friedman placed the McKinley Park situation in the larger context of the territory, blaming the overall decrease of Alaska's game on humans, rather than wolves. He accepted the concept of a natural balance existing between the predators and prey of the park in the absence of direct hunting pressures, but suggested adding twenty-five game wardens to the eight men then responsible for game law enforcement in the whole of Alaska. Nevertheless, Friedman agreed with the recommendation to kill more of McKinley's wolves, given the low sheep population, the plentiful numbers of wolves outside the park, and because "the Park Service has been given very bad publicity amongst the 'wolfconscious' resident Alaskans and it is very desirable from a public relations standpoint that this program we have suggested be instituted." He also recommended that the Park Service widely publicize this renewed control effort.16

Frank Been wrote that both Belmore Browne and Harold Anthony had "modified their original positions because of their observations here." Lowell

 $^{^{15}}$ "Memorandum on meeting held August 26, 1948, to discuss wolf-sheep relationships," RG 79, Entry 7, File 715, Box 1415, NA.

¹⁶ Drury to Asst. Interior Sec. Warne, 6 January 1949, RG 79, Entry 7, File 715, Box 1415, NA; Ralph Friedman, "Memorandum for the Interior Department on the Problems of Predation in the Mount McKinley National Park, and Related Wild Life Management Problems in Alaska," copy from D-161, File: Denali, DTC.

Sumner felt the joint investigation had succeeded because Browne's report demonstrated a "noticeable improvement in the attitude of our critics." Adolph Murie, having had those nights of discussion in the tent, felt less positive: "B. Browne's wolf report was at the office today. Bad as I expected.... Arguing with Browne is like taking on the Queen of Hearts." While Browne had become convinced of Murie's integrity and agreed not to promote further legislation, his report to the Camp Fire Club ended with an unmodified flourish: "The loss in blood and treasure caused within the boundaries of Mr. McKinley Park by unchecked wolf slaughter transcends anything of a like nature in National Park history." 17

Browne's frame of reference for the health of the park's animal populations continued to be his previous visit in 1912, as if the park could be frozen in time and impervious to the changes in relations between animals and humans since then. He scoffed at the Park Service record in controlling wolves, declaring it should have been easy to kill fifteen wolves in the first year of that effort, had competent men been assigned the task. Grant Pearson, for example, was "an excellent man," yet had been kept busy on construction projects rather than wolf hunting. If providing rangers for the task were impossible, Browne suggested that one or two aerial hunts could quickly reduce the wolf population and achieve the desired result. Murie escaped Browne's criticism, since he "knows that the wolf is responsible and has so stated in two reports for the Parks

¹⁷ Been to Regional Director, 31 August 1948, File 5968, Box 2, DENA; Sumner to Regional Director, 19 January 1949, File 5968, Box 1, DENA; A. Murie diary, 3 January 1949, A. Murie Collection, Box "Field Notes on Wolves," RL; Browne, "Report to the Committee of Conservation of Forests and Wild Life of the Campfire Club of America—Subject: Alaskan Game Conditions; Predation and Control of Predators in Mr. McKinley Park, Alaska, August, 1948," 13, RG 79, Entry 7, File 715, Box 1415, NA.

Service." At fault, then, were the highest officials in the Park Service, who continued to deny the importance of wolf predation. In a section titled "Can Government Administered Wolf-Control Succeed?," Browne concluded it would not until "the heads of our great wild-life departments have been convinced of the costliness of their errors." Browne wrote his report to validate the almost twenty-year effort by the Camp Fire Club to force park officials to protect the sheep in preference to the wolf. As evidence of their victory, Browne pointed to the joint memorandum signed by the five men of the investigative team, which implied admission by the Park Service of previous errors in management, backed by the credibility of Murie and Anthony. Although he had conceded the legislative front, McLean informed the Interior Secretary's office that further legislation would be proposed if necessary. 18

Browne's report came out shortly after his return from Alaska; taking a cue from I.P. Callison, perhaps, Browne had his fourteen-page report copyrighted. Harold Anthony purposely didn't read Browne's report until Anthony had completed his, and while he anticipated a negative commentary by Browne, he thought that Browne "would have made things darker if he had not been up there and had those long talks with Adolf [sic]." Anthony's report was certainly the one most anticipated by Park Service officials. Anthony had bitterly opposed the predator control programs of the Biological Survey in the 1930s, and had supported the Park Service's stance on McKinley's wolves. He expressed to Newton Drury his displeasure at "being maneuvered into signing that joint statement at Park Headquarters," yet Anthony favored vigorous wolf killing in

 $^{^{18}}$ Browne, "Report," 7, 14-15; McLean to Davidson, 22 November 1948, File 5968, Box 3, DENA.

the park, to the surprise of many. He confessed that "I went North with the expectation that what I learned would confirm my belief that the wolf-sheep problem was adjusting itself satisfactorily and that all that was needed was the passage of time." He became convinced of the need to shoot wolves because of the low sheep population, but also because of the significance of public opinion: "I fear for the <u>future</u> of the wolf in the Park unless some concession in the way of active control is made <u>now</u>." 19

Harold Anthony's report confirmed the continued role of public opinion in shaping the wolf policy in McKinley Park. While the sheep population was low, its recovery seemed probable; Anthony's primary concern was with preserving a wolf population in the park, against the desires of most people, and the only way to do that was to build up the sheep population immediately and staunch the torrent of criticism toward park service policy:

The announced policy of several years ago, to remove fifteen wolves from the Park has not been implemented in a fashion to impress the Park critics that the Park Service really wants to control the wolves. Partly because of this I believe that the Service should now lean over backward to convince the public that active control is the standing order of the day.

In my opinion, the situation with regard to the wolves in Mount McKinley National Park is a critical one, first with respect to the uncertain future of the Dall Sheep if it must accept any wolf predation at all, and second with regard to the loss of public confidence in the National Park Service as the administrator of the federal wilderness areas. . . . It is not a theory but a fact that an aggressive segment of the public is inveighing against the Service, the time is too short to attempt to win this fraction over, and the conservationists who oppose this force by generalizations do not gain many converts. This is the time to

¹⁹ Anthony to Drury, 29 September, 9 December 1948, RG 79, Entry 7, File 715, Box 1415, NA; Albert Day, USF&WS, to Asst. Interior Sec. Warne, 24 January 1949, File 5968, Box 1, DENA.

be realistic and it seems to me that inaugurating rigid wolf control in McKinley Park, as I have suggested, is no great concession to expediency either.₂₀

With the reports of the investigative team on his desk, Newton Drury accepted their recommendations and removed any limits to the number of wolves taken and the duration of this effort. Park Service biologists Lowell Sumner and Victor Cahalane warned of the wolf becoming extirpated as a result of this loss of the park land as sanctuary, but Drury had little choice, since Adolph Murie, the avowed expert on McKinley Park wildlife, supported further wolf killing. At the park, Frank Been reported no recent signs of predation, but "rifle bolts are being dried of oil in the hope of cutting more off the quota this winter." Murie began setting snares for wolves around the park's garbage dump, and wrote that ranger John Rumohr "had ordered ammunition and . . . plans to send the boys out in the park to shoot wolves. He says that the Director wants all wolves killed."²¹

The decision to aggressively hunt an unlimited number of wolves for an indefinite time seemed like sweet vindication of the Camp Fire Club's long effort. Assistant Interior Secretary Davidson informed McLean of the decision to lift the numerical limit on killed wolves and his instructions to pursue them "with all possible vigor." McLean expressed his gratification at this to Newton Drury: "I trust you will feel that we were always motivated by a very honest belief in our

²⁰ Harold E. Anthony, "Report on the Status of the Wolf in Mt. McKinley National Park in 1948," copy from D-159, File: Denali, DTC.

²¹ Drury to Regional Director, 14 January 1949; Sumner to Regional Director, 19 January 1949; Been to Regional Director, 4 November 1948, File 5986, Box 2, DENA; Tomlinson to Drury, 31 January 1949, RG 79, Entry 7, File 715, Box 1415, NA; A. Murie diary, 16 January 1949, A. Murie Collection, Box "Field Notes on Wolves," RL.

case, and an equally honest desire to give constructive help to the wild life of the Park." To Belmore Browne, McLean wrote "This makes it a clear cut victory—congratulations—I hope the sheep will bless you."²²

With the new wolf control policy in McKinley Park came a change in superintendents. Frank Been had not been particularly missed at McKinley during his four years of military duty, as Acting Superintendent Grant Pearson capably ran the park and added to his personal popularity by a heroic exploit involving a mission to a crashed Army plane high in the Alaska Range, for which Pearson received the Medal of Freedom.²³ In April 1946 Pearson received word that Been would be leaving the Army and would resume his post as McKinley's superintendent. Pearson expressed his dismay to Alaskan Delegate Bob Bartlett. "I can't and will not work under Been. It looks to me Bob like the Park Service has a lemon and id [sic] trying to keep him in Alaska." Bartlett had already suggested to the Park Service that Pearson be appointed full superintendent, and in response to this development Bartlett again solicited assistance for Pearson. Newton Drury, however, had a legal obligation to reinstate Been as a discharged veteran. Been returned to McKinley Park in January 1947, and in June Grant Pearson took an arranged transfer to Glacier Bay National Monument.²⁴

²² Davidson to McLean, 31 December 1948, Stef. Mss., 190 - 8:68, DCL; McLean to Davidson, 5 January 1949; McLean to Drury, 5 January 1949, RG 79, Entry 7, File 715, Box 1415, NA; marginal note from McLean to Browne on copy of Davidson's letter.

²³ Browne, History of Denali, 205-6; Pearson, My Life, 190-99.

²⁴ Pearson to Bartlett, 9 April 1946; Bartlett to Tomlinson, 14 February 1946; Drury to Bartlett, 13 March 1946, Bartlett Collection, Interior—NPS, Box 1, Folder 1, RL; Superintendent's "Monthly Report," June 1947, DENA.

Frank Been had a rocky time during the next two years. Eight of the ten rangers quit or requested transfers, and reports of discontent and fiscal improprieties filtered upwards to Been's superiors. Unhappy with Been's limited leadership abilities and effect on morale, officials made plans for his transfer to Crater Lake National Park. Somewhat ironically, Been protested this to Delegate Bartlett, telling him that "The National Park Service is transferring to the States its best trained and experienced man on Alaskan affairs." Bartlett assured Been that he had immediately contacted the highest Park Service officials about this, but Been's fate had been decided; "I regret for your sake that the change will be made." Newton Drury officially informed Been shortly after Christmas 1948, calling the transfer—to assistant superintendent of a very small park—an "advancement in the Service." Been left Alaska a bitter man, convinced that Pearson had brought him down behind the scenes, and lasted only a short while in Oregon before abruptly leaving the Park Service. Grant Pearson returned triumphantly to McKinley Park and the wolf campaign. 25

Adolph Murie, toward the end of 1949, wrote in his diary that "The request for control is not synonymous with the need for control." As had happened in 1946, the announced measures against the wolf pleased Park Service critics, yet produced few dead wolves. Murie and the rangers focused their efforts on wolves that frequented the park hotel's garbage dump, setting snares and traps and taking one female in November 1948. Virtually no wolf sign

²⁵ Pearson, *My Life*, 212; Tolson to Rep. Gearhart, 13 August 1948, RG 79, Entry 19, Box 18, File "Personnel - N.P.S.," Records of Newton B. Drury, 1940-51, NA; Been to Bartlett, 1 June 1948; Bartlett to Been, 10 June 1948, Bartlett Collection, Interior: NPS, Box 1, Folder 1, RL; Drury to Tomlinson, 23 December 1948; Drury to Been 28 December 1948, RG 79, Entry 19, Box 13, File "Mt. McKinley National Park," Records of Newton B. Drury, 1940-51, NA; A. Murie diary, 13 October 1948, A. Murie Collection, Box "Personal Diary," Folder "Notes General 8/14/48-12/17/48", RL.

appeared in the park before the spring of 1949, and that summer only occasional shots rang out. In terms of reducing predators to help the sheep, wolf control was a failure. Month after month, the superintendent reported no wolves killed. A wolf snared in December pleased Pearson, who asked Murie about saving the pelt and skull for a museum exhibit. "I said well in a few years they would probably be the only ones left in the park." With the wide-ranging habits of wolves, who sought game where they could find it, events outside McKinley Park helped minimize the wolves within its boundaries. As wolves moved to the caribou wintering grounds to the north, they were met by lines of poison bait spread by the U.S. Fish and Wildlife Service, which organized a widespread effort to protect caribou and reindeer populations by killing wolves. 26

Caribou and reindeer numbers had continued to decline after WW II, causing hardship and concern among interior Alaskans accustomed to their bounty. Food shipments to Alaska remained limited in 1946; basic grocery prices had increased twenty-four percent since 1942, and in Fairbanks bakers quit making cakes and pastries, reserving available flour for bread. The University of Alaska struggled to feed increased numbers of students, many of them veterans. President Charles Bunnell reported in December 1946 that the university had only milk, potatoes, and vegetables, and was waiting a food order that had been placed in July. The hunting season that fall had again been dismal for caribou,

²⁶ A. Murie diary, 30 December 1949, 5 December 1949, A. Murie Collection, Box "Field Notes on Wolves," RL; A. Murie, "Bimonthly Reports on the Wolf, 1949", DENA.

and when a herd appeared near the Steese Highway many hunters exceeded their bag limit of two.²⁷

While the decreased caribou numbers likely resulted from a combination of increased human population, the spread of roads, and availability of aircraft for access into areas not customarily hunted, these were all signs of the progressive development desired by the territory. Wolves provided an easy scapegoat to explain diminished game numbers. The head of the Alaska Native Service, responsible for the reindeer herds, stated in the newspaper "the decimation of wild game in Alaska cannot possible have been caused by the increase in take by man, but in large measure is due to the increase in number of wolves now roving the Territory." Hunters in the Fairbanks district had poor success in 1947, taking few caribou, only twelve moose, and five sheep. Despite the presence of bounty incentives, wolf populations showed no reduction; the situation was deemed critical enough to lead to a predator control appropriation request to Congress in 1948.²⁸

The Fish and Wildlife Service had long employed one predator hunter who worked primarily in the reindeer regions in cooperation with the Native groups. The Alaska Game Commission, in response to the outcry for increased wolf control, supplemented his efforts in 1947 with two agents and an airplane to dispense poison baits for wolves. The poison had been developed several years

²⁷ Jessen's Weekly, "Food Dealers Present Local Price Handicaps In Reply To Hilscher," 3 January 1947; "University Struggles," 6 December 1946; "Few Caribou Taken By Game Hunters; Moose Season Opens," 30 August 1946; "Caribou Migration Leads To Slaughter By Highway Hunters," 27 September 1946.

²⁸ Jessen's Weekly, "J. Sidney Rood Takes Up Cudgel To Further Muskoxen Experiments,"
3 January 1947; "Game is Scarce, Hunters Report," 12 September 1947; "Outdoor Alaska," 5
March 1948.

earlier by a Fish and Wildlife Service agent in southeastern Alaska and used there with success, the baits supposedly not attracting animals other than wolves and coyotes.²⁹

The localized poisoning effort continued through 1948. A *Jessen's Weekly* editorial urged vigorous action "if our babies of today are to be able to see caribou, mountain sheep, moose and bear anywhere outside of a zoo or a museum." A member of the Tanana Valley Sportsmen's Association blamed wolves entirely for the decrease in caribou, and recommended matching federal funds for bounty moneys and the elimination of all wolves from McKinley Park. The paper did, however, report that rangers estimated only fifteen wolves in the park.³⁰

Congress granted the requested appropriation of \$104,000 in the fall of 1948, creating Alaska's first large-scale federal predator operation, involving trappers, hunters, and pilots, as well as poison. After Christmas, six planes covered areas from Petersburg to Bristol Bay to the Arctic slope, dispensing strychnine hidden in seal blubber baits and taking aerial shots as available. Ground agents placed cyanide cartridges—the "Humane Coyote Getter"—during the summer months. A pilot dropped poison at the headwaters of all rivers flowing north from the Alaska Range, including those crossed by the boundary of McKinley Park. The Alaska Game Commission reported

²⁹ Jessen's Weekly, "Game Commission Plans To Destroy Wolves With Poison," 7 March 1947; "Experiments Start in Poisoning Wolves and Also Coyotes," 3 July 1947; "From Ketchikan to Barrow," *The Alaska Sportsman* 13:6 (June 1947): 24; "From Ketchikan to Barrow," *The Alaska Sportsman* 12:4 (April 1946): 26.

³⁰ Jessen's Weekly, "Later Than We Think," 23 January 1948; "Reed Urges Wolf Elimination Plus Caribou Protection," 13 February 1948; "McKinley Park Tourist Season Officially Opens," 21 May 1948.

"outstanding progress" in the mission, considering predator control to be as important in managing game herds as enforcement of hunting regulations. In areas of concentrated control efforts, the combination of tactics demonstrated that wolves could be effectively eliminated; in the Nelchina Basin area southeast of the park, for example, over two hundred wolves were killed by the end of 1951.³¹

Alaskans welcomed the wolf hunting by federal agents. Virtually every sportsmen's group supported the effort, as did the Territorial Legislature and Governor Gruening. In a letter to Clarence Rhode, Alaskan director of the Fish and Wildlife Service, Gruening wrote "the matter of predation is so serious that no aspect of it should be left without action. . . . the wolf works 365 days in the year." The governor, in this instance, wrote specifically about protection of the reindeer herds, which had continued their decline, and which presented undeniable humanitarian and economic incentives for killing wolves. Urgent appeals went to Gruening in early 1950, citing the need for immediate dispatch of predator hunters to prevent reindeer slaughter. 32 Yet the situation along the western coast could not be wholly blamed upon wolves, even by federal hunters. Clarence Rhode himself witnessed hundreds of killed and crippled caribou on the Kobuk River, shot with the rifles and ammunition issued to reservists of the

^{31 &}quot;Federal Hunters Control Predatory Animals in Alaska," press release from USF&WS, 5 October 1948, RG 126, Entry 1, File 9-1-33, Box 304, NA; Jessens's Weekly, "Wildlife Service Predator Control Supervisor Here," 12 November 1948; "Wolf Poisoning Program Under Way," 31 December 1948; "Winter Wolf Control Program Ends April 1," 15 April 1948; AGC Annual Reports, 1 July 1948 - 30 June 1950, 3; Bob L. Burkholder, "Movements and Behavior of a Wolf Pack in Alaska," Journal of Wildlife Management 23:1 (January 1959): 1.

³² AGC *Annual Report*, 1 July 1950 - 30 June 1951, 22; Gruening to Rhode, 11 March 1950, RG 101, Box 470, ASA. This same Box 470 contains whole series of telegrams to Gruening from various people in NW Alaska about the wolf-reindeer situation.

army's Territorial Guard, which consisted of Alaska Natives. Predator Agent Patrick, stationed at Kotzebue, reported further inexplicable game killing by Natives: "it looks to be something that I never witnessed before on such a wholesale slaughter. . . . If I had a movie camera, I could have taken pictures of the damndest thing you ever heard of."33 In discussing the question of declining caribou herds across Alaska, Rhode did not hesitate to assign blame to white hunters as well, in conjunction with better rifles and aircraft access, rather than solely blaming wolf predation, a view shared by many biologists.³⁴ While questions concerning the adherence to territorial game laws by Alaskans or the ultimate effects of larger numbers of sport hunters contained considerable political volatility, hunting wolves was a cause questioned by hardly anyone. Harold Anthony recognized this, in acknowledging the challenge faced by the Park Service in holding onto its wolf population: "The recently announced program for an active campaign against the predators of Alaska is what the community wants, and there will be no mercy shown to wolves anywhere if Alaskans have their way."35

Predator control by the Fish and Wildlife Service remained linked to management of specific game herds, rather than being a wolf extermination program for the territory, and effects remained localized. In their best years,

³³ Rhode to Gruening, 10 May 1949, RG 101, Box 471, ASA; Kelly to Rhode, 2 March 1950, RG 101, Box 470, ASA; *Jessen's Weekly*, "Caribou Herds Found Depleted," 20 May 1949; "From Ketchikan to Barrow," *The Alaska Sportsman* 15:10 (September 1949): 22.

³⁴ See A. W. F. Banfield, "The Present Status of North American Caribou," in *Transactions* of the 14th Annual North American Wildlife Conference (Washington, D.C.: Wildlife Management Institute, 1949): 477-89; see Leopold and Darling, Wildlife in Alaska, for various speculations on the cause of Alaska's game demise.

³⁵ Anthony, "Report on the Status of the Wolf in Mt. McKinley National Park in 1948," copy from D-159, File: Denali, DTC.

federal agents took barely half the annual take of bounty hunters. The annual average from 1949-57 of slightly over two hundred wolves hardly put a dent in Alaska's total population (Figure 4, following page). When hunters concentrated their efforts, though, the results could be spectacular. In a two-month mission in the spring of 1952, dubbed "Operation Umiat," predator agents flying north of the Brooks Range destroyed 259 wolves. Pilots and gunners covered twenty-five thousand square miles, firing Winchester repeating shotguns with speciallyloaded twelve-gauge shells carrying forty-one pieces of #4 shot rather than the standard twenty-eight. Afterwards, the area covered by the Western Arctic caribou herd was "practically devoid of wolves." In the Nelchina basin, the caribou herd increased from an estimated four thousand in 1948 to near thirteen thousand by 1954, allowing the continuation of a sport hunting season on this caribou herd, the closest to Anchorage. Alaskans, for the most part, heartily approved these results, especially when the federal government paid the price. To achieve even more wolf kills, the Territorial Legislature approved an appropriation of twenty-five thousand dollars in 1953 for cooperative efforts between the Fish and Wildlife Service and the Alaska Game Commission. Similar predator control projects continued through the 1950s, and were assumed by the state of Alaska after 1959. Federal and state control of wolves attracted little criticism until the 1960s, and most of that originated from other states; one of the gunners, Ray Tremblay, wrote that "Preservationists were a relatively small, elite group and any opposition from that quarter had little effect."36

³⁶ AGC, Annual Report, 1 July 1951-30 June 1952, 15; AGC Annual Report, 1 July 1953-30 June 1954, 15; Tremblay, Alaska Game Warden, 99, 101. Jay Hammond, one of the gunners, was elected Alaska's governor in 1974 and 1978.

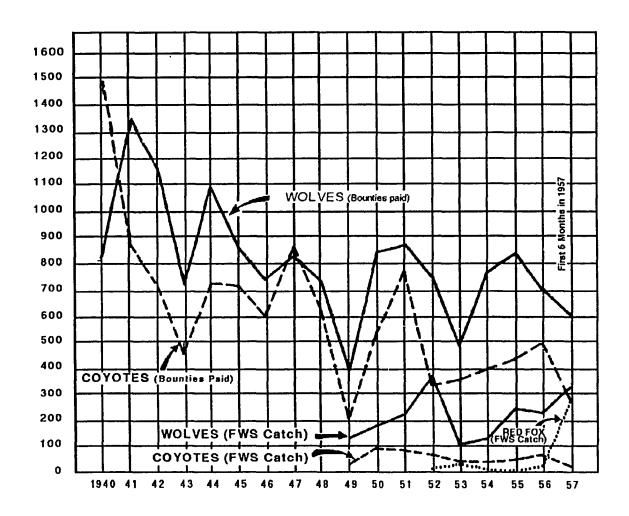


Figure 4. Recorded predators taken in Alaska, 1940-1957. Source: AGC *Annual Report*, 1957, 32.

Sheer economics dictated the dominance of the sportsmen's views: the National Park Service estimated that revenues to Alaska from sport hunting and fishing topped twelve million dollars in 1951-53, while wildlife tourism returned only one and one-half million dollars. Alaskans tended to agree with and support the verdict of the Alaska Game Commission: "Thus wolves can destroy caribou and wolf control restore them."³⁷

Wolf control activities in McKinley Park under the 1949 directive, as in 1946, failed to meet the expectations of those who favored the effort. Murie patrolled the north boundary of the park for evidence of poison baits, but never found dead wolves attributable to them, although he suspected that many were being killed outside the park. As had been the case for several years, wolves were scarce in the park, yet Park Service officials agreed that control efforts were desirable "for the benefit of relations between the Service and critical organizations on the outside." Most of the eleven wolves taken in the park between 1949-52 frequented the garbage dump near the park hotel during winter months and found snares waiting for them. Murie wondered if the availability of garbage near settlements helped maintain wolf populations through the lean winter months. Grant Pearson kept up the pressure to destroy wolves, since as superintendent he was accountable to his superiors in Washington, D.C., and he continued to scoff at suggestions of the park being a place to exhibit the balance of nature, according to Murie's diary. Pearson, with his considerable appeal among Alaskans, seems to be the subject of this excerpt from Murie:

³⁷ Department of the Interior, *A Recreation Program for Alaska*, vol. 2 (Washington, D.C.: GPO, 1955): 29; AGC *Annual Report*, 1 July 1952-30 Jule 1953, 16.

In McKinley Park, where one of our most interesting animals is still present but against whom there is a strong prejudice, it is especially important to have a personnel which is in sympathy with the wolf and the objectives of the Park Service. . . . Personnel for McKinley must be selected with care not with the idea of drawing a cult but having broad enough intellectual flexibility that he can see the values of different patterns of land use.

Flexible or not, Pearson could report only occasional wolves taken through these years.³⁸

Although they thought their battle won, the Camp Fire Club maintained pressure on the Park Service to see that wolves remained in check. Marshall McLean was disturbed that "the campaign against the predators does not show more heavy results." Newton Drury continued to supply McLean with the wildlife reports coming from the park, particularly as the sheep population continued to increase annually. While this confirmed to McLean his cause, he continued to caution Drury to "see that the predator situation is kept under a real control." Drury resigned in the spring of 1951, and McLean graciously offered a letter of regret at the news, although even then he couldn't avoid the subject of wolves; in a postscript, he asked "Before pulling up your stakes will you be good enough to see that we get a full report on the sheep predator situation and Mt. McKinley." Even the increased sheep population did not bode well to McLean, and once again he used Adolph Murie's research to buttress his concern. In a January 1952 letter to Ronald Lee, Assistant Parks Director, McLean concluded that because of more sheep "there will undoubtedly be a build up in the number

³⁸ A. Murie diary, 19 March 1949, A. Murie Collection, Box "Field Notes on Wolves," RL; Herbert Maier to Drury, 28 December 1949, File 5968, Box 1, DENA; Francis J. Singer, *Status and History of Caribou and Wolves in Denali National Park*, Anchorage: National Park Service, 1985), 50; A. Murie diary, 30 December 1949; 9 July 1951; 26 August [no year given, but between '48-'50], A. Murie Collection, Box "Field Notes on Wolves," RL.

of wolves. . . . Dr. Murie found that one group, while under his observation, I think in a two year period, increased form 7 to 23." McLean died three months later, knowing the Park Service still sought to kill McKinley's wolves and protect the sheep for which he had fought.³⁹

Several factors coalesced to bring an end to wolf control in the park. The increased predator control activities outside the park, particularly the distribution of poison baits along the wintering grounds of the park's caribou, and thus some of its wolves, kept wolf populations down. Adolph Murie noted the changed dynamic in 1950, concerned that the Park Service not eliminate the last wolves in the area.

There are two important considerations regarding the future of the wolf in McKinley. First food supply, second public opinion. We must provide a food supply if we are to have wolves. If we succeed in providing an ample food supply, toleration for a small wolf population to take the surplus will no doubt follow. . . . I would hold the wolves down now to permit the sheep to increase rapidly, so that when wolves in the future become scarce in surrounding areas as they are controlled more closely by outside agencies, we will have sufficient food to maintain some wolves within the park. 40

Fortunately for the Park Service, the Dall sheep continued to increase, relieving the pressure to shoot wolves. While Murie and other biologists attributed this more to a natural cycle little understood, Grant Pearson publicly regarded this as a result of wolf control in the park. Murie made an aerial census

³⁹ McLean to Demaray, 5 August 1949; McLean to Drury, 7 December 1950, 9 February 1951; McLean to Lee, 21 January 1952, File 5968, Box 1, DENA; obituary, *New York Times*, 7 April 1952.

⁴⁰ A. Murie to Ben Thompson, 22 February 1950, Box 12, Folder "Wolf 1950," A. Murie Collection.

of sheep in September 1951 and estimated a population of 1200, at least a doubling of population since the low recorded in 1945. The following spring, Park Service biologist Lowell Sumner repeated the aerial survey. While persistent snow conditions prevented an accurate sheep count, he reported a healthy lamb crop and a virtual absence of wolf sign. By 1953 Murie estimated no fewer than 1500 sheep and increased numbers of caribou migrating into the park for spring calving. As for wolves, Murie rarely saw them, and concluded that "zealous control operations" outside the park had reduced the need for rangers to control them within the park. In the same report, Murie wrote that "it will require sentiment to save this and many other carnivorous species. A wholesome, sympathetic point of view is needed." A vehicle for sympathy came from an unexpected source.⁴¹

One of Hollywood's biggest names had visited Alaska and Mount McKinley National Park in 1947; from that trip Walt Disney became interested in producing wildlife films for educational purposes. *Seal Island*, which appeared in 1948, became Disney's first short wildlife film and led to the successful True-Life Adventure series. Longer animal documentaries, *The Living Desert* and *The Vanishing Prairie*, were released in 1953 and 1954, to popular success if not acclaim from biologists. In 1952 Disney commissioned a husband and wife team of film-makers, Herb and Lois Crisler, to make films in a variety of Alaskan locations showing the natural denizens of the north.⁴²

⁴¹ "From Ketchikan to Barrow," *The Alaska Sportsman* 17:4 (April 1951): 30; A. Murie, "Summary Report on the 1951 D≥ll Sheep Count in Mount McKinley National Park;" Lowell Sumner, "The 1952 Mount McKinley Sheep Survey;" A. Murie, "Field Studies in Mount McKinley National Park - 1953," File 5968, Box 1, DENA.

⁴² Bob Thomas, Walt Disney: An American Original (New York: Simon and Schuster, 1976), 206-08; Richard Schickel, The Disney Version: The Life, Times, Art and Commerce of Walt Disney (New

The Crislers had already produced nature footage for Disney on elk and bighorn sheep. For their Alaska film, they wanted to show the home life of a wolf family, and queried the Park Service for permission to film a wolf den in McKinley Park. To help comply with this, Lowell Sumner recommended a temporary suspension of wolf control in the park, arguing that since Disney wanted to portray the wolf "in the most sympathetic manner possible," such a film would be the best possible means of gaining public support for the ultimate Park Service desire to protect McKinley Park's wolves. Superintendent Grant Pearson disagreed. He wished to continue wolf control, fearing adverse publicity from Alaskans and predicted "another public relations problem such as existed in 1942-48." Conrad Wirth, the new Park Service Director, agreed that if a wolf den were found, it should be unmolested for use by the Crislers for two reasons: the information that could be gained from a film, and the sheep no longer seemed threatened.⁴³

The Crislers obtained their wolf footage as well as new friends, who provided further evidence of changing times for wolves. Ginny Hill Wood, husband "Woody" Wood, and Celia Hunter had homesteaded land just beyond the park boundary near Kantishna for a rustic wilderness lodge, Camp Denali, which opened for business in 1952. The Park Service welcomed their presence, and the Crislers used the camp in between filming trips in the park. The owners of Camp Denali sought to attract the type of tourist who cared little for luxuries, but wished close access to wilderness and wildlife. The possibility of seeing

York: Simon and Schuster, 1968), 285-92; "From Ketchikan to Barrow," The Alaska Sportsman 18:6 (June 1952): 36.

⁴³ Lowell Sumner, "The 1952 Mount McKinley Sheep Survey;" Pearson to Regional Director, 14 January 1953; Wirth to Regional Director, 24 February 1953, File 5968, Box 1, DENA.

wolves became part of the early sales pitch for customers, demonstrating to the Park Service that wolves had an increasing value in helping attract tourists.⁴⁴

With a reduced wolf population, a rebounding sheep population, imminent film publicity for the park's wolves, and the recognition by appreciative tourists that Mount McKinley was the only park still containing wolves, the temporary ban on wolf killing became permanent. While occasional poaching of park wolves continued, no longer would park rangers set snares and unsling rifles against the park's wolves.

Unlike previous attempts to provide protection for wolves, little public outcry ensued. Bounty on wolves had risen to fifty dollars in 1950, keeping their pursuit somewhat lucrative, and the Fish and Wildlife Service control efforts provided evidence that finally the federal government had come to its senses in providing help for Alaska's game herds. The Camp Fire Club did not again mobilize against the Park Service. Opposition by Alaskans to wolf protection had little subsequent effect on park policy.

Thus came to an end the purposeful killing of wolves by park personnel in Mount McKinley National Park. From 1930 to 1953, at least seventy-six wolves had been taken, a number far smaller than had been anticipated by advocates of control efforts. Twenty years had passed since Horace Albright wrote a wildlife policy of protection for all native species within national parks and Arno Cammerer had halted predator control efforts. The situation in Alaska, in which the Park Service felt compelled to continue killing wolves, was unique among national parks, and resulted in large part from the vigorous public opinion

⁴⁴ Ginny Hill Wood, "Wilderness Camp," *The Alaska Sportsman* 19:11 (November 1953): 20-4; Celia Hunter, pers. comm., 14 July 1994.

against protection of wolves by a federal agency. Lowell Sumner, writing in 1949, identified a potential role of the park for wolves:

The time may come quite soon when wolves will be exterminated in much of Alaska, not because they are doing damage to livestock but through scare publicity based on ignorance and ancient tradition and designed to secure increased appropriations for pest control organizations. . . . When that time comes Mount McKinley National Park will have to be a sanctuary for wolves just as the other parks now are sanctuaries for buffalo, bighorn, grizzlies, wolverines and trumpeter swans in the States. 45

Sanctuary had become reality, though the wolves could hardly be expected to know that. They went on doing what wolves do, eating and breeding and raising their pups, roaming the wilderness fastness north of the Alaska Range under the soft twilight of summer nights and the brilliant aurora displays of winter. McKinley Park would gain renown for being one of the few places in the world where researchers could study wolf ecology in a setting very nearly approaching Joseph Grinnell's ideal of an undisturbed natural laboratory. The Park Service managed to keep both wolves and sheep in McKinley Park by adhering to its principles while demonstrating flexibility in the face of widespread criticism. Wolves have not been exterminated in Alaska, though in 1949 Sumner had little reason to doubt that their fate in Alaska would be different from the wolf history of the western states. Although wolves can be found across Alaska, Mount McKinley National Park provides visitors the best opportunity to see what they can see nowhere else in the public lands of the United States: a treeless landscape in which wolves, rather than humans, are the dominant predator.

 $^{^{45}}$ Sumner to Regional Director, 19 January 1949, File 5968, Box 1, DENA.

CHAPTER 10

SUMMARY AND CONCLUSIONS

Russell Rutter and Douglas Pimlott, in *The World of the Wolf* (1968), wrote that "the wolf was one of the last natural resources to be included in the great modern movement toward conservation." Conservation arose in the twentieth century from a perceived need to utilize natural resources efficiently—the nation's forests, watersheds, and soils. Human use of wildlife required attention to efficiency as well, as ever-increasing numbers of hunters sought ever-decreasing populations of game animals. Killing North America's wolves fit with tradition as well as a utilitarian view toward resources. Conservation slowly developed an alternate branch after World War II, environmentalism, which placed an emphasis on preservation of resources rather than in their efficient use. With increasing urbanization and rising educational levels of Americans, wild animals gained value for esthetic reasons in beyond their being food sources or trophies.²

While preserving wolves for esthetic reasons eventually became the center of wolf advocacy, attempts for their initial inclusion into the cause of conservation arose from evolving attitudes among scientists toward predation.

¹ Russell Rutter and Douglas Pimlott, *The World of the Wolf* (Philadelphia: J.B. Lippincott, 1968), 12.

² Samuel Hays offers a sound analysis of conservation's change in *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987), and Mighetto follows the changing appreciation of animals in *Wild Animals and American Environmental Ethics*.

The idea that predators kept prey populations healthy by exerting a positive selective effect certainly preceded the current century, yet the damage done to western livestock by predators guaranteed their role as enemies of man and blunted the moderating attitudes of early wildlife scientists such as Joseph Grinnell. The wolf was virtually gone from the contiguous states by the time others began to reassess the traditional views. Adolph and Olaus Murie, through their coyote studies, concluded by the 1930s that old myths about canid predators did not match their field observations. Sigurd Olson's 1938 wolf study promoted wolves as a healthy force for deer. Aldo Leopold converted from a wolf hunter to wolf advocate during these years, after seeing the effects of deer overpopulation on vegetation in western ranges and Wisconsin. Yet the attitudes of these scientists gained significance and posterity because all four men dispersed their scientifically-grounded thoughts on wolves through popular writings, rather than keeping them buried in obscure government reports or scientific journals.

The hints of popular change toward wolves appeared in scattered examples after WW II. The editor of the Kentucky *Louisville Times*, Tom Wallace, considered McKinley Park's wolves far more interesting than the sheep, and wondered if the Park Service should instead ask "Are there enough sheep and other animals to keep the wolves from starving?" Wallace also belittled the difference between the carnivory of wolves and "our steaks-and-chops-consuming grandmothers." Paul Errington, who studied Midwestern predator-

³ Wallace to Drury, 14 January 1946, RG 79, Entry 7, File 715, Box 1414, NA. Wallace was a staunch supporter of the Park Service through the wolf-sheep controversy. A. Murie's diaries contain excerpts from some of Wallace's editorials in favor of wildlife preservation; see, for example 17 March 1941, A. Murie Collection, Box "Field Notes on Wolves," RL.

prey relations, published a 1947 article for both sportsmen and scientists. He wrote not as a professor but as one who deeply loved hunting and questioned motives as he discussed predator control as a question of values, rather than of management technique.⁴ Numerous visitors to McKinley Park after the war requested copies of Adolph Murie's The Wolves of Mount McKinley, enough that Superintendent Been ordered them by the boxful for immediate sale rather than requiring visitors to request copies from Washington, D.C. after their trip. The Fish and Wildlife Service received harsh publicity for its Alaskan wolf poisoning campaigns in the 1950s, criticism which in previous decades was confined to the biologic societies. Even in Alaska, the effort seemed excessive to some. In 1955 Jessen's Weekly published a front page story (with photos) by a Dr. L. L. Hufman, in which he charged that "The public is being duped by propaganda material that pictures the wolf as a savage beast." Olaus Murie commented in 1957 on the time-lag between scientific findings and public policy, yet he saw the changes expressed by his readership, people "who have the scientific facts and the sensitivity to what nature has to offer us ... 'wolf' symbolizes all those original natural values so important for us, but which, through careless planning, are slipping away from us."5

The release of the Disney True-Life Adventure White Wilderness in 1958, which brought to the public the Alaskan wolf footage of Herb and Lois Crisler, accelerated public attention to wolves as interesting animals. Adolph Murie's

⁴ Paul L. Errington, "A Question of Values," *Journal of Wildlife Management* 11:3 (July 1947): 267-72.

⁵ Tolson to Regional Director, 14 September 1948,; Yeager to Been, 23 September 1948, File 5968, Box 2, DENA; *Jessen's Weekly,* "Poisoned Caribou Carcass Set By F & WS For Wolves 'Gets' Fox, No Predators," 7 July 1955; O. Murie, "Wolf," *Audubon* 59:5 (September-October 1957): 218.

wildlife films had long been a staple for visitors at the McKinley Park hotel, but a Disney production meant nation-wide distribution at thousands of Saturday matinees. The film showed endearing pups, but also showed wolves hunting caribou and feeding at carcasses. Nevertheless, the Disney version of the big bad wolf established a new standard: the *New York Times* reviewer wrote "Surprisingly, the most domestic family portrait is that of the wolf (not, we learn, the legendary professional killer)." The Disney films changed American perceptions of animals in much the same way as the development of coffee-table photography books from the Sierra Club enhanced appreciation for the untrammeled American landscape. White Wilderness brought Alaska's wildlife to viewers in a new light, in which the animals were charming, cuddly, and romantic rather than threatening, replacing Jack London's North with an image tamed for juvenile mass consumption.

The following year brought a new book on the wolf. *Arctic Wild*, by Lois Crisler, documented the months spent filming *White Wilderness*. ⁹ Readers learned

⁶ Howard Thompson, review of *White Wilderness*, *New York Times*, 13 August 1958. Other photographers contributed to the film, but the Crislers supplied the wolf and caribou footage, shot during months of rugged living in McKinley Park as well as the Brooks Range. There they raised wolf pups and followed their hunts, thus obtaining closeups and spectacular footage of wolves and caribou at full speed on the tundra. The traveled viewer will easily identify the pasted scenes shot in the Canadian Rockies, likely with animals confined in a wooded area.

⁷ Hays, Beauty, Health, and Permanence, 37.

⁸ Turner, *Reckoning with the Beast*, 58. He notes that any radical change in social attitudes requires refinement before becoming popularly acceptable, and the Disney film played an important role in providing the transition from the wolf as killer to the wolf as modern-day totem. *White Wilderness* was the fifth True-Life Adventure, and received wide distribution due to the success of the previous documentaries. See also James B. Trefethen, *An American Crusade for Wildlife* (New York: Winchester Press, 1975), 281-82 for more on Disney's impact on animal attitudes, and Cartmiller, *A View Toward a Death in the Morning*, for a chapter specifically on the influence of the film *Bambi*.

⁹ Lois Crisler, *Arctic Wild* (London: Secker and Warburg, 1959).

how to raise wolf pups, how to howl and communicate with wolves, how to hunt and play with and, ultimately, love wolves. Predation by wolves was only positive to the caribou, as the crippled and sick were killed; the Crislers claimed a wolf could not kill a healthy caribou. Emotions abounded; these were not the clinical observations of Adolph Murie. At the end of the book one of their wolves fell to a bounty-hunter's poison, a tragic event far different than the triumphant wolf killings on the pages of *The Alaska Sportsman*. Crisler tells the story with sympathy and awe for nature, and the photos of their life with wolves caused a sensation. The book was a hit, and was soon translated into other languages. Farley Mowat's 1963 novel, *Never Cry Wolf*, has received substantial recognition for its influence in changing attitudes toward wolves (well before the 1981 movie of the same name), but *White Wilderness* and *Arctic Wild* provided a significant and earlier boost in rehabilitating the wolf, the most important vehicles for change since Murie's *The Wolves of Mount McKinley*. Since the 1960s, American perceptions of the wolf have continued a trend from negative to positive.

With this chronology in mind, the history of the wolf-sheep controversy in Mount McKinley National Park emphasizes how far ahead of these societal changes was the desire of the Park Service to include predators in their protection of all animals native to parks. The American Society of Mammalogists became the first organization to advocate on the behalf of predators, and Park Service personnel such as Harold Bryant, Adolph Murie, and Victor Cahalane took support from their professional organization into the federal agency. The wildlife policy recommendations of George Wright, Joseph Dixon, and Ben Thompson, recorded in the 1930s in their *Fauna Series* Nos. 1, 2, and 3, sound

remarkably familiar to the modern reader, as their emphasis on preservation, the balance of nature undisturbed by humans, and inclusion of predators became the current model for park management.

The Park Service's distance from the mainstream of public opinion can be judged by the degree of criticism they received. Virtually no one outside of the biologists' associations and early animal rights groups agreed with this stance. Within the federal government, the Biological Survey was receiving substantial appropriations to control predators, and after it became part of the Interior Department in 1939 (and renamed the Fish and Wildlife Service), that department had two agencies at odds over predators. Writing in 1945, a Fish and Wildlife Service predator control specialist remarked:

the Park Service finds itself in the inescapable and often uncomfortable position of a protagonist for the advanced ideas of a very small percentage of the population—a crusader, if you please, for the ultimate in a scientifically impregnable wilderness philosophy. Whether or not this is a proper function of a government agency is a question open to debate \ldots_{10}

Another Fish and Wildlife Service officer, also reflecting on the situation in McKinley Park, wrote "Non-cooperative predator species of wild animals need controlling, just as irresponsible, selfish, and vicious individuals and races in mankind require control and punishment." The Park Service did not follow the trend of public opinion on this issue, but established a new precedent. The Park Service became the first American federal agency to offer protection to the wolf,

 $^{^{10}}$ Clifford Presnall to Chief of Wildlife Research, F & WS, 21 April 1945, RG 79, Entry 7, File 715, Box 1414, NA.

¹¹ Dorr Green to Chief of Wildlife Research, F & WS, 25 April 1945, RG 79, Entry 7, File 715, Box 1414, NA.

and perhaps the first in the world. However, to laud the Park Service for halting predator control in the early 1930s, as some authors have, ignores the subsequent twenty-years of killing wolves in McKinley Park, the control forced by public disagreement with a Park Service philosophy.¹²

The Park Service attempted to answer public criticism by invoking the objectivity of science. Harold Bryant took his stand against Horace Albright in 1932 as a scientist and naturalist. The subsequent director, Arno Cammerer, halted predator control in the parks in 1934, and immediately faced protests over this decision, particularly in regards to Yellowstone and Mount McKinley parks. Lacking the research evidence to support the contention that coyotes and wolves were not harming the game populations of these parks, Cammerer assigned Adolph Murie to investigate the relationships between predator and prey. The results of these studies became the response to critics of the Park Service.

The Park Service walked a fine line during these years, as they received criticism from game advocates for being overprotective of predators and from the biologists' associations for not doing enough to protect predators. Murie's research provided justifications to both sides as the Park Service tried to find a middle ground. To the anti-wolf factions, research indicated that other factors contributed to sheep mortality. When Murie recommended wolf control in 1945, he was convinced the sheep population needed respite from depredation; this allowed the Park Service to base its changed policy on science, rather than sentiment, thereby legitimizing wolf control to advocates of the wolves. Further legitimacy for wolf control came from the inclusion of Harold Anthony in the

¹² For example, see Mighetto, *Wild Animals*, 98-9. It seems she took the 1931 date from Albright's animal policy statement, yet predator control continued until 1934 and a new Park Service director.

1948 investigation, for the Park Service could then demonstrate its adherence to the recommendations of an esteemed scientist rather than publicly admitting that wolf killing was done to appease the Camp Fire Club and Alaskans.

Throughout the years of wolf control, though, the Park Service regarded this as a temporary measure, pending the increased sheep population. Victor Cahalane summarized this attitude in a presentation at the North American Wildlife Conference in 1947: "national park faunas are not managed to provide maximum numbers nor to furnish stable exhibits for the public. Instead, the objective is to maintain the natural ebb and flow of animal life." Several consecutive years of increased sheep numbers in McKinley Park encouraged the cessation of wolf control.

Examining the criticism received by the Park Service reveals how little the anti-wolf faction considered the scientific aspects of the situation. The written attacks by Belmore Browne and i.P. Callison used a minimum of evidence obtained by field research, preferring instead to trust the opinions of guides and trappers. These were the sources of the articles in the national sportsmen's magazines, whose editors no doubt liked the sensational aspects of the issue and whose readership gained a thrill by learning about a place where men engaged a four-legged foe renowned in history, yet gone from most of the rest of the country. Although the McKinley Park rangers refrained from active wolf control only four of the years between 1930-53, the commonly-held label—the park as a protected breeding ground for wolves—was never successfully refuted, continuing as a virtual stereotype of the Park Service in Alaska. By preserving

¹³ Victor Cahalane, "Wildlife and the National Park Land-Use Concept," in *Transactions of the 12th North American Wildlife Conference* (Washington, D.C.: Wildlife Management Institute, 1947): 434.

parks as natural laboratories for the sake of ecosystem studies, the Park Service introduced a concept of land use that did not make intuitive sense to people who perceived themselves as still wresting a living from the raw frontier. Visitors to the parks could gain exposure to this new concept, but obviously the Park Service could not educate the entire populace. Habits and traditions die hard, regardless of research data.

The wolf-sheep controversy was a battle of public opinion, rather than a clash of opposing scientific information. The Park Service couldn't just hide behind its science, since the Camp Fire Club took the situation to Congress, where the club could deploy its opinions to a group that had possible power over the Park Service. This forced the top Park Service administrators to begin their own public relations campaign, using mailing lists, personal letters from Director Drury, dissemination of their research finding, and magazine articles. Also important was the support of sympathetic organizations, well-established groups such as the American Society of Mammalogists and relatively new groups like the Wilderness Society, with Olaus Murie's crucial advocacy. These allies could criticize as well, and opposed wolf hunting by rangers. The Park Service was fortunate that wolves were scarce during the two times that Director Drury ordered organized wolf killings, at the end of 1945 and 1948, because he could then demonstrate to the pro-wolf groups that the killings helped appease anti-wolf critics, yet also cost very little in dead wolves.

Ronald Foresta offers an analysis of strategies by which an agency can gain public support, outlining two methods: portraying a favorable image by convincing the public that the agency supports popular values, and demonstrating tangible benefits to the public of the agency's presence or

actions. 14 The Park Service had a difficult time with the former, since wolf protection held little popular appeal until after the wolf-sheep controversy ended. The administrators of McKinley Park, though, certainly addressed the latter method. Positive public contact was expected of the superintendent, and this topic formed a section in his monthly reports to the director. By the mid-1930s, the importance of McKinley Park to the Alaskan tourist economy was plain to see. Vigorous efforts were made to bring Alaskans to the park, to show them what the park was about and why it mattered. Alaskan merchants supposed that a herd of sheep was of far greater interest to the tourist than a wolf, but visitation to the park after the war increased steadily regardless of game animal populations. Belmore Browne may have been disappointed to only see one hundred sheep in a day, but most visitors expressed delight at seeing such numbers.

By no means did the Park Service present a unified front on the wolf-sheep controversy, however. Substantial disagreement persisted within the organization over the place of predators in parks. Had Horace Albright remained director past 1933, predator protection would have likely been delayed beyond Cammerer's 1934 instructions to halt control efforts. Adolph Murie's Yellowstone coyote study met with strong disagreement and minimal cooperation from the park's superintendent, while in contrast Murie's McKinley study had the support of Superintendent Been. Murie often commented in his diary on the difficulties of promoting positive attitudes toward an ideal that included wolves, be it with road crewmen and hotel workers or rangers. In a report written well after the wolf-sheep controversy, Murie warned against the Park Service taking too much

¹⁴ Foresta, America's National Parks, 25.

credit for the success in maintaining the wolf, since it had survived in spite of a recent anti-wolf superintendent at McKinley Park.¹⁵ This could have been none other than Grant Pearson, who until his resignation in 1956 seemingly never became convinced of the desirability of wolves in the park.

The Park Service adhered to its ideal because key administrators in Washington, D.C. believed in keeping predators in parks. Harold Bryant, as Assistant Director in the 1930s, convinced directors Arno Cammerer and Arthur Demaray of the ecological and philosophic value of predator inclusion. Bryant's role as lead wolf advocate was then taken by Victor Cahalane, who became Chief of the Wildlife Division in 1939, and served as Chief Biologist from 1944-55. (Cahalane went on to become director of the advocacy group Defenders of Wildlife, which vigorously opposed wolf control in Alaska after statehood). The wolf issue complemented Director Drury's preservationist leanings, who exercised control over reluctant superintendents such as Harry Liek and Grant Pearson. The Park Service directors ultimately gained support from the Interior Secretary: Harold Ickes during the 1930s and early 1940s, then Julius Krug, who fought against the Congressional threat. Finally, Oscar Chapman in the 1950s sustained the ideal until wolf control in McKinley Park ceased to be an issue. Their support may have had less to do with preservationist leanings toward the wolf than with desiring to avoid any rifts that could be exploited by Congress, but on this issue the Interior secretaries did not undermine the Park Service directors.

¹⁵ Murie recorded that at least one ranger didn't report all the wolves he killed because of the resultant paperwork; from an undated page, A. Murie Collection, Box "Field Notes on a Variety of Species," Folder "Denali Mammals 1947-53." Superintendent comment from A. Murie, "Some Policies and Problems Related to McKinley Park Wildlife," n.d., unpublished report, Pamphlet 591, DENA. This was probably written between 1961-65.

In many respects, the wolf-sheep controversy came down to a generational difference, between men of the first part of the century who felt that national parks should be refuges only for game species, and later-born men who held a different concept. This can be seen within the Park Service, between the old guard of Horace Albright, Harry Liek, and Grant Pearson, and the generation represented by Adolph Murie, Victor Cahalane, and Lowell Sumner. Recent research indicates that value changes toward the environment are associated with generational changes, and the wolf-sheep controversy fits into this pattern. ¹⁶

Nowhere can this difference be more clearly seen than in the crusaders of the Camp Fire Club. William Beach, Marshall McLean, William Greeley, and Belmore Browne helped create McKinley Park and felt a sense of ownership toward it. These men took a very personal interest in the campaign, doggedly confronting a succession of Park Service administrators, equating the temporary decline of the Dall sheep to the slaughter of the buffalo herds and unrestricted felling of the nation's forests. The lack of support for the Camp Fire Club by similar national organizations, such as the Izaak Walton League and the Boone and Crockett Club, indicated that the fervor of the Camp Fire Club leaders was more personal than persuasive. They were old men fighting an old battle, who thought they had achieved success in 1948. They died shortly afterwards, though: McLean in 1952, Browne in 1954, Beach and Greeley in 1955. Although

¹⁶ Hays, Beauty, Health, and Permanence, 33.

¹⁷ McLean, "Memorandum filed on behalf of the Camp Fire Club of America through its Committee on Conservation in the above matter," 28 November 1947, RG 79, Entry 7, File 715, Box 1415, NA.

sincerely motivated, their concept of conservation remained fixed in a simplistic 1920s fashion.

Quite obviously, Adolph Murie played the most important individual role in this controversy. Over the years he maintained the respect of people on both sides of the issue, through a combination of scientific integrity, forthrightness, and a willingness to face political realities. Murie could be as pragmatic and utilitarian toward animals as anyone in the Alaska Game Commission, and no trace of remorse enters his writings when discussing the killing of wolves. No one understood the ambiguities of the wolf-sheep conflict better than Murie, and casting him as the stalwart defender of the wolf in a two-dimensional play cannot be supported by the historical record. At the same time, he was convinced of the evolutionary role of predators in keeping prey healthy and fervently wanted to maintain wild areas so animals could continue their natural existence.

In the political arena, brother Olaus overshadowed Adolph. It was Olaus, after all, who wrote letters to Belmore Browne, I.P. Callison, and Marshall McLean on the wolf-sheep issue; Adolph confined emotions to his diary and public comments to official reports. His magazine articles stayed noncontroversial, animal observations from a master naturalist lacking in political content. Olaus maintained a very public advocacy as director of the Wilderness Society, while Adolph remained quietly working within the Park Service bureaucracy.

¹⁸ These include, for example, Adolph Murie, "The Mysterious Mouse," *Audubon* 50:4 (July-August 1948): 202-10, or "Grizzly Mothers in the Alaska Range," *Living Wilderness* 17:4 (Autumn 1952): 15-21. An exception to this is the previously-cited "Another Look at McKinley Park Sheep," *Living Wilderness* 11:19 (December 1946): 14-16.

Nevertheless, McKinley Park became Adolph Murie's legacy, as he is considered "the single most influential person in shaping the geography and wildlife-wilderness policies of the modern park."19 Murie gained a permanent assignment at Crater Lake National Park in 1958 while continuing to spend his summers until 1970 at McKinley Park. He maintained a firm stance against infrastructure development in the park, considering the park's value to be commensurate with its wildness. He resisted roads, campgrounds, airplane flights, even research involving the radio tagging of bears with visible collars.²⁰ The boundaries of Mount McKinley National Park had been drawn in 1917 with little knowledge of the year-round needs of the park's animals, especially the wide-ranging caribou and wolves. Expanding the park lands to the north became Murie's primary goal, but one he would not live to see. He died in 1974; McKinley Park tripled in size in the 1980 Alaska National Interest Lands Conservation Act and was renamed Denali National Park and Preserve, with a true ecosystem focus of its boundaries and management. Adolph Murie's name still lives, in the "Plains of Murie" beneath the road at Polychrome Pass, and in his books, which have been reprinted by popular demand and continue to please readers.²¹

¹⁹ Brown, History of Denali, 161.

²⁰ See Adolph Murie, "Some Policies and Problems Related to McKinley Park Wildlife," unpublished report, n.d., but later than 1961, Pamphlet 591, DENA.

²¹ See Brown, History of Denali, 220-21, 240-41 for a synopsis of expansion proposals and ANILCA. Reprints of Adolph Murie's books include The Wolves of Mount McKinley (Seattle, University of Washington Press, 1985; original publisher Washington, D.C.: GPO, National Park Service, 1944); A Naturalist in Alaska (Tucson: University of Arizona Press, 1990; original publisher New York: Devin-Adair Company, 1961); Mammals of Denali (Anchorage: Alaska Natural History Association, 1983), originally Mammals of Mount McKinley National Park (Anchorage: Mount McKinley Natural History Association, 1962); The Grizzlies of Mount McKinley (Seattle: University of Washington Press, 1985, original publisher Washington, D.C.: GPO, National Park Service,

While the involvement of the Camp Fire Club, the reporting by the sportsmen's magazines, and the opposition by groups favorable to the wolf placed the controversy on a national level, this issue did not engage a large portion of the American people. Public involvement was confined for the most part within particular organizational channels, with occasional publicity on the situation in national magazines. In Alaska, however, virtually everyone coexisted with wolves, if unwillingly, and issues pertaining to game and predation held great significance to the entire territory.

Alaska is a poor place for farming or ranching, and the primary food product of the land is—and was—the wild meat. Usage of game meat by Alaskans varies, from people living subsistence lifestyles in rural Alaska to those in urban Anchorage or Fairbanks, but at mid-century the game harvest was an important part of daily diet for many residents, and provided sport as well. The wolf was viewed as a direct competitor for food and as a source of cash revenue for pelt and bounty. For the National Park Service to protect wolves based on an intangible ecological ideal was an alien concept, and ensured the antipathy of Alaskans.

The wolf-sheep controversy caught the Park Service between its desire to promote positive relations with local residents and its national mandate to preserve all forms of native park life. Alaskan criticism of McKinley Park's management was consistent, vociferous, and spanned the social gamut, from poor trapper to the territory's governor and congressional delegate. It was

^{1981).} The latter was completed posthumously by son Jan Murie, who also became a wildlife biologist.

unjustified on factual grounds, which put critics in good company, as wildlife managers in this country have consistently encountered opposition led by local sportsmen groups to scientific ideals of game management.²² Time and again the Park Service pointed out that the several dozen wolves of McKinley Park could not possibly contribute in a significant way to the wolf populations that continued to exist in interior Alaska despite decades of trapping pressure and bounty incentives. The demise of Alaska's reindeer and distant caribou herds had nothing to do with McKinley Park, but it kept Alaskans howling for more wolf carcasses and affronted by distant administrators who seemed to prefer wolves to usable meat. Adolph Murie, as objective and skilled a scientist as could be found, assembled considerable evidence showing that weather conditions and disease played major roles in determining sheep numbers, yet Alaskans judged the wolf the sole culprit. The role of Alaskan opinion in the wolf-sheep controversy is plain: decisions by the Park Service to control McKinley's wolves were surficially based on science, yet the record shows a willingness to eliminate a few wolves very publicly in order to reduce criticism of park policies.

Opposition to the Park Service was part of the larger tension between residents of the territory and the federal government. The conventional wisdom of the time held that Alaska had not been allowed to develop fully because of the neglect of the federal government. Governor Gruening spoke of Alaska as being in a legislative strait-jacket.²³ Alaskans felt sorely the lack of local control over

²² See Allen, *Our Wildlife Legacy*, 140-45, 295-303 for other mid-century examples of the role of public opinion in game controversies.

²³ Ernest Gruening, "The Political Ecology of Alaska," in *Proceedings of the 2nd Annual Alaskan Science Conference*, 1951, 13. For more on the federal neglect theme, see Gruening, *The State of Alaska* (New York: Random House, 1954); *The Battle for Alaska Statehood* (College, Alaska: Univ. of Alaska Press, 1967); Herbert H. Hilscher, *Alaska Now* (Boston: Little, Brown, and Co., 1948). A recent interpretation of Alaska's relationship to the federal government can be found in Gerald A.

resources, resenting the distant landlords in Washington, D.C., and the political appointees that held power over Alaska. Power was particularly vested in the Secretary of the Interior, who administered numerous agencies of critical importance to Alaskans: the Office of the Territories, the Office of Indian Affairs, the General Land Office (now Bureau of Land Management), the Fish and Wildlife Service, the Geological Survey, the Alaska Road Commission and the Alaska Railroad, and the National Park Service. The Park Service's wolf philosophy was held as another example of ill-advised federal control over an essential Alaskan issue. The notoriety of the wolf-sheep issue went clear to a Juneau attorney's testimony to Congress on Alaskan statehood. He claimed that statehood would have allowed Alaskans to effectively confront the Park Service and eliminate the sanctuary received by wolves.²⁴

Statehood, quite obviously, has not increased Alaska's abilities to manage its animals without external influences. Although the protection of wolves in national parks is no longer a significant source of conflict, public opinion plays a larger role in Alaska's wolf politics than ever before, as evidenced by Alaska's most recent wolf controversy. A 1992 wolf control plan, created with substantial public involvement by Alaskans, resulted in a national furor. In order to increase the number of moose and caribou for human harvest, the state Board of Game approved the reduction by half of wolf populations in three small areas near Fairbanks, about three hundred wolves in all. Animal rights groups, both in and out of Alaska, immediately protested, bringing enough pressure to cause the

McBeath and Thomas A. Morehouse, *Alaska Politics and Government* (Lincoln: Univ. of Nebraska Press, 1994), Chapter 4 "Alaska and the Federal Union."

²⁴ Congress, House, Committee on Public Lands, *Hearings on Statehood for Alaska*, 80th Cong., 1st sess., 16-24 April 1947, 280.

state to revise its plans in the face of withering hostility from the public and threats of tourist boycotts.

For many Alaskans, and for the state wildlife experts, this was simply a matter of management: fewer wolves meant more game. Like the Dall sheep in McKinley Park, three consecutive winters of deep snow had caused substantial moose and caribou calf mortality; reduced wolf populations would help prey populations rebuild. Subsistence hunters and sportsmen alike wanted continued harvests of game, rather than being told that wolves had a greater right to prey than did humans.

Opponents of the wolf control plan based their arguments less on biology and more on philosophy. As an extreme example, Renee Askins, of the Wolf Fund, a group based in Moose, Wyoming, equated the wolf control plan to the Holocaust, claiming "little difference in causation."²⁵ More moderate critics simply pointed out that nonconsumptive users of wildlife needed their views represented in management plans, rather than biasing plans toward hunting harvests. Unlike the wolf-sheep controversy, national opposition to Alaska's plans was widespread and indicative of the modern ability to disseminate information and the coordination of public comment by interested groups. As with most wildlife management conflicts, attempts to create and validate plans by use of science foundered under the sentiment generated by a public more interested in discussing values than mortality ratios and carrying capacities.

²⁵ Renee Askins, speech, Alaska Wolf Summit, 16 January 1993, Fairbanks, Alaska. This three-day event, bringing together biologists, state officials, representatives from interested groups, and the public, was a result of the intense controversy raised by the control proposal, and represented a recognition by the state government to the power and threat of opposing groups.

While Alaskan resentment toward outside influence in the wolf-sheep controversy was directed toward the federal government, the 1992 conflict provoked a similar backlash against nongovernmental external influence. A group calling itself the Alaska Wildlife Conservation Association published newspaper advertisements screaming "It's not about wolves, it is about . . . Outsiders dictating Alaska's future; Loss of state's rights; Extortion; Freedom and choice." The Alaskan Independence Party, under whose banner the current governor had been elected, warned that

OUTSIDE MANIPULATORS are turning Alaska into a park for tourists. Government Bureaucrats and Big Business Power Brokers, and 'environmental' groups are reducing our land to the level of a simplistic National Geographics video showing cute little wolf pups froliking [sic] in the snow.

The furor did not cause the Department of Fish and Game to abolish their plan, but merely change the means of wolf reduction, from aerial hunting to snaring and trapping. Fewer wolves live now in the three management areas. Anyone holding a trapping license is still eligible to take an unlimited number of wolves in Alaska, except in the national parks; Alaska's wolves are by no means endangered. This most recent wolf controversy stands on a continuum of increasing public involvement with the animal's future in Alaska, which began with the wolf-sheep controversy in Mount McKinley National Park. Further public involvement in the future of Alaska's wolves is guaranteed.

Within two generations, the preservation of wolves has become important to a significant number of Americans. Their previous image as fearsome beasts has been replaced by the more noble one visible in current artworks, films, books, and wall calendars. The reasons for this are beyond the scope of this

study, but involve large elements of nostalgia and romanticism.²⁶ Wolves may well represent what people find lacking in their lives: stable family structures, a cooperative and well-defined social hierarchy, and an unambiguous life in surroundings of ecological integrity and natural beauty. While the image has changed, the symbolic power of the wolf remains.

At the bottom of all this is the relationship of civilizing humans to the untamed wilderness.²⁷ Wolves have always symbolized undominated nature, at least for Euro-Americans, and have always aroused passion in humans, be it vengeful or protective. In previous centuries wolves stood as an affront to our ability to overcome natural forces that threatened economic activity, while now, for many Americans, wolves represent a freedom and wildness of desirable character. While the wolf-sheep controversy in McKinley Park was the first conflict between a traditional and a modern attitude toward the wolf, the emotions surrounding the wolf retain their power to divide us. The proposed reestablishment of wolves in Glacier, Yellowstone, and North Cascades national parks will ensure the continuation of wolf management arguments. An increased variety of information media and increased speed of information flow will help keep subsequent wolf conflicts in the national purview, rather than allowing them to remain local.

²⁶ Two northern scholars have contributed an interesting analysis of the social clash between traditional and contemporary attitudes in the north: Matthew Berman and Michael Pretes, "Modern, Postmodern, and Northern: A New Approach to the Political Economy of Northern Regions," paper presented at Western Regional Science Meeting, Tucson, Arizona February 1994.

²⁷ Starting points for this issue are Nash, Wilderness and the American Mind, Huth, Nature and the Americans, and Leo Marx, The Machine in the Garden: Technology and the Pastoral Ideal in America (New York: Oxford University Press, 1964).

Alaska Governor Walter Hickel, speaking at the Alaska Wolf Summit in January 1993, said that "you can't just let nature run wild." The wolves of McKinley Park roam as evidence of the convictions of men determined to allow nature to do just that in the national parks. The wolves play a role increasingly difficult to find, serving as a link to the mysterious and unpredictable possibilities inherent in the encounter between the wild and the civilized.

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DTC Denver Technical Center, National Park Service

ASA Alaska State Archives

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ASHL Alaska State Historical Library, Juneau

DCL Dartmouth College Library

Belmore Browne Collection, part of the Vilhjalmur Stefansson Collection

RL Rasmuson Library, University of Alaska Fairbanks, Alaska and Polar

Regions Department

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Lee R. Dice Collection

Otto Geist Collection
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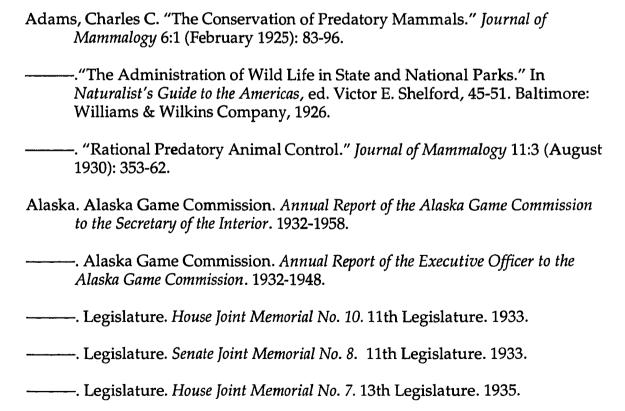
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