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The Decline of Denali's Wolves: Federal Options in the Face of Non-Cooperative Wildlife Federalism

Catherine Danley*

I. INTRODUCTION: A FEDERAL RESPONSE TO ALASKA'S WAR ON WOLVES

Near the entrance of Denali National Park and along the park's lone, winding road lived the beloved East Fork pack of Denali wolves.¹ This pack was the most visible wolf pack in Denali;² it delighted "researchers and tourists alike" and provided invaluable research to park biologists.³ Scientists began studying this pack in 1939.⁴ With over seventy years of continuous study—including research by the famed biologists Adolph Murie and Gordon Haber—the East Fork pack was "one of the longest-observed large mammal families, . . . rivaled only by Jane Goodall's chimpanzees."⁵

Now, however, the entire pack may be dead.⁶ Over the last fifteen years, the pack's population has fluctuated dramatically in response to losses from hunting and trapping outside the park⁷—all legal under Alaska state law. "[I]n April 2012, one of the two trappers who target Denali wolves" shot his horse, laid the carcass near the border, and surrounded it with trapper's snares, a technique that is the "land-based

*Catherine Danley is a judicial law clerk at the Idaho Supreme Court. She graduated from the University of Utah S.J. Quinney College of Law in May 2018 with a certificate in Environmental and Natural Resource Law.

1. GORDON HABER & MARYBETH HOLLEMAN, *AMONG WOLVES: GORDON HABER'S INSIGHTS INTO ALASKA'S MOST MISUNDERSTOOD ANIMAL* 255-57 (2013). The East Fork Pack may also be referred to as the Toklat Pack or Toklat Family Group. The NPS refers to them as the East Fork pack. *Id.* at 255 n.34.

2. *See id.* at 255-56.

3. Elise Schmelzer, *Storied Alaska Wolf Pack Beloved for Decades Has Vanished, Thanks to Hunting*, WASH. POST (Aug. 9, 2016), <https://www.washingtonpost.com/news/morning-mix/wp/2016/08/09/storied-alaska-wolf-pack-beloved-for-decades-has-vanished-thanks-to-hunting/>.

4. *Id.*

5. *Id.*; HABER & HOLLEMAN, *supra* note 1, at 150.

6. *Id.*

7. *See* HABER & HOLLEMAN, *supra* note 1, at 149-57, 255-56; Schmelzer, *supra* note 3.

equivalent of high-seas drift-net fishing.”⁸ Two wolves died in those snares, including the radio-collared female breeder from the East Fork pack.⁹ Her death likely resulted in the death of her pups for the year as well.¹⁰

*Figure A: Adolph Murie's Original Drawings of the East Fork Wolves, 1944*¹¹



8. HABER & HOLLEMAN, *supra* note 1, at 194.

9. *Id.* at 256.

10. *Id.*

11. Schmelzer, *supra* note 3.

In 2016, researchers in Denali National Park discovered the pack's last radio-collared male.¹² The wolf had been shot near a hunting camp, in an area that previously served as a no-wolf-kill buffer zone along Denali's borders.¹³ A mother wolf and two pups remain unaccounted for, but there have been no sightings since 2016.¹⁴ Officials noted that the den remains empty and said, "it's unlikely that the mother and her pups will survive without the support and protection of a pack."¹⁵

Ultimately, "[t]he East Fork pack's decline was fast and drastic."¹⁶ The pack declined from a large population of seventeen wolves in 2014 to just three—a mother and two pups, all missing and presumed dead—by 2016.¹⁷ While the causes of death varied, approximately 75% of the East Fork pack deaths from 2015 to 2016 resulted from human trapping and hunting outside the borders of Denali National Park's federal protections.¹⁸

The loss of the East Fork pack is likely just "the most recent fatality of a controversial Alaska policy that allows hunters to kill wolves and other large predators in the state's national wildlife refuges."¹⁹ While the State of Alaska maintained a protective buffer zone from 2000 to 2010 along Denali's northeastern park boundaries, in 2010 the Alaska Board of Game ("ABOG") "decided to eliminate closed areas and allow hunting and trapping wolves in all areas bordering the park."²⁰ In response, the National Park Service (NPS) began a study of wolf movements and sightings, as well as wolf survival, along the Denali Park Road.²¹ So far, the studies indicate a massive decline in wolf sightings over the last seven years, dropping from about 45% to 1% (see Figure

12. *Id.*

13. Dan Bross, *Denali Wolf Killed in "No Wolf Kill Buffer Zone,"* ALASKA PUB. MEDIA (May 18, 2016), <https://www.alaskapublic.org/2016/05/18/denali-wolf-killed-in-no-wolf-kill-buffer-zone/>; Schmelzer, *supra* note 3.

14. Schmelzer, *supra* note 3.

15. *Id.*

16. *Id.*

17. *Id.*

18. *Id.*

19. *Id.*; see also HABER & HOLLEMAN, *supra* note 1, at 255–56.

20. NAT'L PARK SERV., DENALI NATIONAL PARK AND PRESERVE: DENALI'S WOLF VIEWING PROJECT, <https://www.nps.gov/articles/denali-crp-wolf-viewing.htm> (last updated Mar. 29, 2016).

21. *Id.*

B).²² Wolf density has also declined to “the lowest density estimate since monitoring began in 1986” (see Figure C).²³

In the past few years, the State of Alaska “has implemented the largest de facto predator control Alaska's wolves have ever endured, and Denali's wolf population has plummeted.”²⁴ In fact, “[i]n the winter of 2008–2009 alone, about half of the twenty Denali study groups were known or likely to have been hit by trappers or hunters.”²⁵ By 2009, three active traplines along Denali's park borders resulted in the majority of Denali wolf deaths.²⁶ In addition, hunting and trapping eliminated both the Savage Pack and the Headquarters Pack.²⁷

Since 2001, the NPS has petitioned the ABOG—the department that implements lethal wolf control throughout the state²⁸—to stop hunting practices that upset a natural predator-prey balance.²⁹ Instead of honoring the petition, the ABOG approved a variety of “controversial hunting methods, including targeting bears and wolves from planes and shooting wolves and their pups in their dens.”³⁰ Richard Steiner, a wolf advocate and retired professor from the University of Alaska, reported: “We are aware of no other instance in which a state has so extensively compromised the ecological integrity of a federal conservation area . . . The State of Alaska is foolishly, almost vindictively, squelching a generation of invaluable scientific inquiry into predator-prey dynamics.”³¹

22. *Id.*; NAT'L PARK SERV., DENALI NATIONAL PARK AND PRESERVE: WOLF SIGHTING INDEX, <https://www.nps.gov/dena/learn/nature/wolf-sighting-index.htm> (last updated October 3, 2019) [hereinafter WOLF SIGHTING INDEX].

23. NAT'L PARK SERV., DENALI NATIONAL PARK AND PRESERVE: WOLF MONITORING IN DENALI (Mar. 17, 2016), <https://www.nps.gov/articles/denali-crp-wolf-monitoring.htm> [hereinafter DENALI WOLF MONITORING].

24. HABER & HOLLEMAN, *supra* note 1, at 255.

25. *Id.* at 194.

26. *Id.*

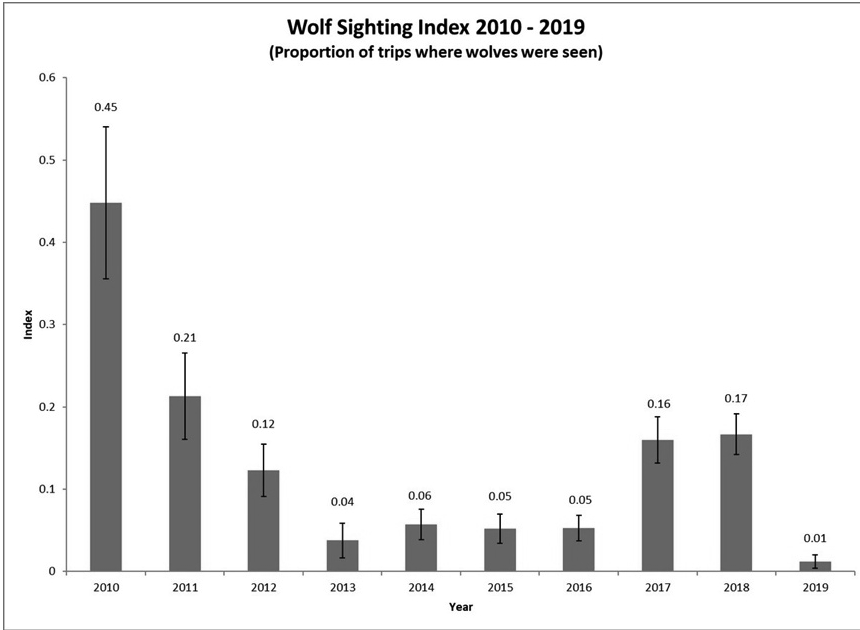
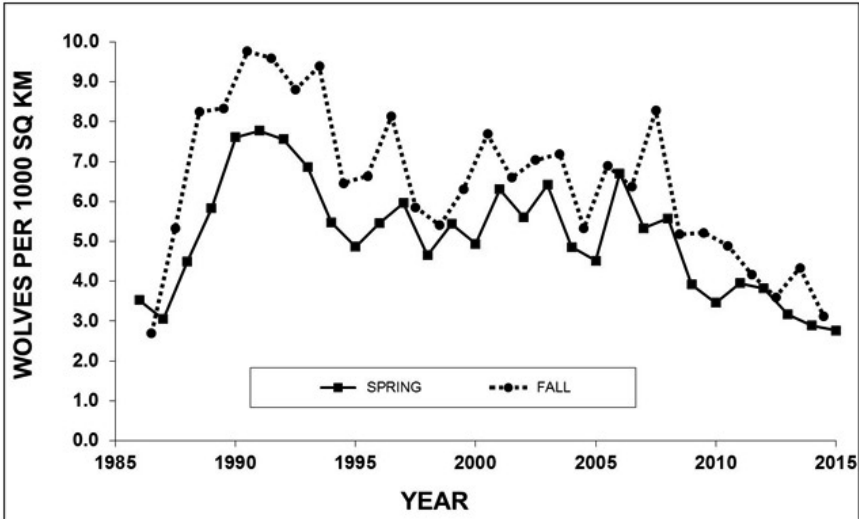
27. Schmelzer, *supra* note 3.

28. Edward A. Fitzgerald, *The Alaskan Wolf War: The Public Trust Doctrine Missing in Action*, 15 ANIMAL L. 193, 194 (2009).

29. BRENDA PETERSON, WOLF NATION, 47 (2017).

30. Schmelzer, *supra* note 3.

31. Corbin Hiar, *NPS Abandons Study After Alaska Shoots Research Animals*, E&E NEWS PM (Aug. 8, 2016), https://www.peer.org/assets/clips/E&E-NPS_Abandons_study.pdf.

Figure B: Denali National Park Wolf Sighting Index, 2010 to 2019³²Figure C: Wolf Density in Denali National Park and Preserve, 1986 to 2015³³32. WOLF SIGHTING INDEX, *supra* note 22.33. DENALI WOLF MONITORING, *supra* note 23.

In 2015, as a last-ditch attempt to slow the deaths of wolves and other predators important to Denali National Park, the NPS promulgated a new rule to halt predator-control-based hunting in Alaska's national preserves.³⁴ The U.S. Fish and Wildlife Service ("USFWS") followed suit in 2016 with its own rule for National Wildlife Refuges as a means of preserving natural and biological diversity.³⁵ The response in Alaska was outrage. Politicians and officials called the regulations illegal federal overreach and a transition from "cooperation to subservience."³⁶ Subsequently, Alaska and the Safari Club filed suit against the Secretary of Interior in May 2017, with multiple environmental organizations joining the suit as intervenor-defendants on the NPS's side immediately thereafter.³⁷

The escalation of Alaska's wolf controversy is a rare display of federal agencies challenging a state's interests in the wildlife within its borders.³⁸ At the heart of this controversy are conflicting goals in wildlife management: Alaska wants to allow killing of predators to benefit hunters, including both sport and subsistence hunters, while the National Park Service—which oversees about 48 million acres of national parks and preserve land in Alaska—seeks to preserve and stabilize wildlife populations in their natural ecosystems.³⁹ These incompatible approaches may come to a head if President Trump's administration does

34. Alaska; Hunting and Trapping in Nat'l Preserves, 80 Fed. Reg. 205, 64325–44 (Oct. 23, 2015) (to be codified at 36 C.F.R. pt. 13).

35. Non-Subsistence Take of Wildlife, and Public Participation and Closure Procedures, on Nat'l Wildlife Refuges in Alaska, 81 Fed. Reg. 151, 52247–73 (Aug. 5, 2016) (to be codified at 50 C.F.R. pts. 32 and 36).

36. Colin Dwyer, *Congress Rolls Back Obama-Era Rule on Hunting Bears and Wolves in Alaska*, NPR (Mar. 22, 2017), <https://www.npr.org/sections/thewoway/2017/03/22/521089304/congress-rolls-back-obama-era-rule-on-hunting-bears-and-wolves-in-alaska>.

37. See *Alaska v. Zinke*, 2017 U.S. Dist. LEXIS 69151 (D. Alaska May 3, 2017).

38. See Martin Nie et al., *Fish and Wildlife Management on Federal Lands: Debunking State Supremacy*, 47 ENVTL. L. 797, 802 (2017).

39. Kevin Gullufsen, *State and Interior Disagree Over Bear Hunting on Parks and Preserves*, JUNEAU EMPIRE (Jan. 5, 2018), <http://juneauempire.com/state/news/local/2018-01-05/state-and-interior-disagree-over-bear-hunting-parks-and-preserves>.

not moot the issue by repealing the NPS regulation.⁴⁰ Notably, Congress has already passed a bill repealing federal hunting prohibitions in national wildlife refuges.⁴¹

Nevertheless, a larger question remains for both Alaska and the federal agencies: as scientific research increasingly documents exactly how state wildlife management can adversely impact wildlife populations that federal land managers want to protect,⁴² will federal regulations increasingly operate outside the borders of federal public land units to protect the wildlife within? Moreover, as wolves are delisted from the protections of the federal Endangered Species Act⁴³ in the contiguous United States (the wolf was never listed for protection in Alaska),⁴⁴ can states work cooperatively with the federal government to protect both natural biodiversity and state hunting needs?⁴⁵ As the battle between hunter and wolf, state and nation continues, answering these questions regarding sovereignty over wildlife also poses crucial questions of federalism and preemption for both the judiciary and the legislature.

These recent events in Alaska have come to a head at the same time congressional leaders strive to delist the gray wolf as an endangered species in the Great Lakes region and Wyoming,⁴⁶ and as the U.S. and

40. See Darryl Fears, *Interior to Review Rules Against Killing Bear Cubs and Wolf Pups with Their Mothers*, WASH. POST (July 21, 2017), <https://www.washingtonpost.com/news/animalia/wp/2017/07/21/interior-orders-review-of-rules-that-prohibit-killing-bear-cubs-and-wolf-pups-with-their-mothers/>; Gullufsen, *supra* note 39.

41. Fears, *supra* note 40.

42. See Bridget L. Borg et al., *Implications of Harvest on the Boundaries of Protected Areas for Large Carnivore Viewing Opportunities*, PLOS ONE 1, 2 (Apr. 28, 2016), <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0153808>; Joshua H. Schmidt, John W. Burch, & Margaret C. MacCluskie, *Effects of Control on the Dynamics of an Adjacent Protected Wolf Population in Interior Alaska*, 198 WILDLIFE MONOGRAPHS 1, 26 (June 26, 2017), <https://wildlife.onlinelibrary.wiley.com/doi/full/10.1002/wmon.1026>; WOLF SIGHTING INDEX, *supra* note 22.

43. 16 U.S.C. §§ 1531–1540 (2017).

44. ALASKA DEP'T OF FISH & GAME, WOLF HUNTING IN ALASKA, <http://www.adfg.alaska.gov/index.cfm?adfg=wolfhunting.main> (last visited Sept. 15, 2019) [hereinafter WOLF HUNTING IN ALASKA].

45. See Joanna Klein, *Protected Wolves in Alaska Face Peril from Beyond Their Preserve*, N.Y. TIMES (July 14, 2017), <https://www.nytimes.com/2017/07/14/science/wolves-alaska-yukon-charley-preserve.html>; Jim Robbins, *For Wolves, a Recovery May Not Be the Blessing It Seems*, N.Y. TIMES (Feb. 6, 2007), <http://www.nytimes.com/2007/02/06/science/06wolf.html>.

46. Center for Biological Diversity, *New Congress Introduces Bill to Strip Protections from Endangered Wolves in Great Lakes, Wyoming* (Jan. 11, 2017), https://www.biologicaldiversity.org/news/press_releases/2017/wolf-01-11-2017.php; Chuck Quirnbach, *Congress*

New Mexico grapple with Mexican wolf recovery efforts.⁴⁷ Senators are also pushing for the U.S. Fish and Wildlife Service to “end the Red Wolf recovery program and declare the Red Wolf extinct.”⁴⁸ These wolf-related controversies also come at a time when western states are vying to “‘reclaim’ public land from the federal government” because the states are “best equipped to pursue the full economic potential of lands within their borders.”⁴⁹ Like in the 1970s Sagebrush Rebellion, this modern states’ rights push is the counter-movement to growing conservation and environmentalism, whose proponents seek public land management policies that promote climate change mitigation and preservation for future generations.⁵⁰ These movements indicate the “political fissures in public lands federalism” and underscore “important differences with legal and practical implications between the land use regimes for state and federal lands.”⁵¹ Wolf management, particularly around the Greater Yellowstone area, has been, and continues to be, a volatile and contentious example of the clash between these contradictory goals for the public lands.⁵²

Since the 1995 and 1996 reintroduction of wolves to Yellowstone National Park,⁵³ the legal scholarship and policy focus of American

Renews Efforts to Remove Gray Wolf Protections, WISCONSIN PUBLIC RADIO (July 12, 2017 at 5:05 PM), <https://www.wpr.org/congress-renews-efforts-remove-gray-wolf-protections>.

47. Susan Montoya Bryan, *US, States Agree to Collaborate on Mexican Wolf Recovery*, AP NEWS, <https://www.apnews.com/2fb213c9d33d4a8dba2f98674cfcadd5> (last visited Sept. 9, 2019).

48. DEP’T OF THE INTERIOR, EXPLANATORY STATEMENT FOR THE DEPARTMENT OF THE INTERIOR, ENVIRONMENT, AND RELATED AGENCIES APPROPRIATIONS BILL, 17 (2018), <https://www.appropriations.senate.gov/imo/media/doc/FY2018-INT-CHAIRMEN-MARK-EXPLANATORY-STM.PDF>.

49. Uma Outka, *State Lands in Modern Public Land Law*, 36 STAN. ENVTL. L.J. 147, 148–49 (2017).

50. *Id.* at 148–49, 160.

51. *Id.* at 166.

52. See Simon Worrall, *The ‘Most Famous Wolf in the World’ Lived Hard—and Died Tragically*, NAT’L GEOGRAPHIC (Nov. 11, 2017), <https://news.nationalgeographic.com/2017/11/american-wolf-nate-blakeslee-yellowstone-hunting/>; Simon Worrall, *Why We’re So Divided Over Saving Wolves*, NAT’L GEOGRAPHIC (June 11, 2017), <https://news.nationalgeographic.com/2017/06/wolf-nation-brenda-peterson-wolves/>.

53. Rob Dubuc, *The Northern Rocky Mountain Wolf Delisting: What Would Leopold Think?*, 32 ENVIRONS ENVTL. L. & POL’Y J. 215, 218 (2009); Lara D. Guercio & Timothy P. Duane, *Grizzly Bears, Gray Wolves, and Federalism, Oh My! The Role of the Endangered Species Act in De Facto Ecosystem-Based Management in the Greater Glacier Region of Northwest Montana*, 24 J. ENVTL. L. & LITIG. 285, 315 (2009).

wolves has been through the lens of the Endangered Species Act.⁵⁴ However, because wolves were never listed under the Endangered Species Act in Alaska,⁵⁵ the wolf conservation issues between the NPS and ABOG provide a unique examination of the federal tools available in wildlife management with non-cooperative federalism. In addition, the USFWS has been delisting the gray wolf in the contiguous United States, which allows states to regulate wolf-hunting practices including in areas of the Greater Yellowstone Ecosystem.⁵⁶ As wolf populations progress toward a life without the Endangered Species Act's protections, states and the federal government must grapple with the future of wolves outside, and even within, national parks. In following Alaska's wolf controversy, we gain a greater understanding of the possible futures for wolf management on public lands, the wildlife federalism conflicts that contradictory predator management goals can create, and the possibilities for federal preemption of state wildlife law within—and beyond—the borders of public lands.

This Article is the first to examine wildlife federalism in the context of Alaska, free of the Endangered Species Act's domineering role. Part II examines Alaska's history of wolf-control practices and the establishment of federal public lands within the state. Part III discusses the role of wolves within ecosystems, and the effects predator control can have on populations within federally protected areas. Part IV analyzes the federal legal tools available for managing wildlife. Part V discusses the importance of cooperative federalism at a landscape scale, the rising conflicts caused by non-cooperative federalism, and how the federal government can assert its constitutional authority to regulate wildlife on state and private lands to protect federal lands and resources. Part VI concludes that in the face of non-cooperative federalism, the Constitution grants broad authority to the federal government to manage wildlife on, and even beyond, public lands.

54. See, e.g., Edward A. Fitzgerald, *Red Wolf Coalition v. North Carolina Wildlife Resources Commission: Better Red Than Dead*, 23 ANIMAL L. 273 (2017); Robert C. Moore, *The Pack is Back: The Political, Social, and Ecological Effects of the Reintroduction of the Gray Wolf to Yellowstone National Park and Central Idaho*, 12 T.M. COOLEY L. REV. 647 (1995).

55. WOLF HUNTING IN ALASKA, *supra* note 44.

56. HABER & HOLLEMAN, *supra* note 1, at 229.

II. HISTORICAL PERSPECTIVES

A. *Wolves in North America, Including Alaska*

Wolves “have long inhabited an important and complex place in America's physical, ecological, and psychological landscape.”⁵⁷ Indeed, the wolf provokes unparalleled loathing and admiration from the public.⁵⁸ Historically, the colonies of pre-revolutionary America offered wolf bounties as early as 1630, with the Massachusetts Bay Colony, for example, paying a penny per wolf.⁵⁹ While wolves once roamed from the Mexican Plateau all the way to the northern Canadian islands, widespread hunting and extermination practices resulted in a reduction within the contiguous United States to only scattered packs along the Canadian border by the 1990s.⁶⁰

Nevertheless, just as they did in colonial times, wolves continue to represent wildness and wilderness.⁶¹ The desire to conserve wolves paralleled a changing view of wilderness itself—namely, that “[w]ildness became something to be cherished and preserved.”⁶² Modern conservation efforts led to the wolf's reintroduction to Yellowstone⁶³—and to legal protection through the Endangered Species Act⁶⁴—so that wolves could successfully return to historic habitats in the contiguous United States. Today, “about 1,900 wolves in more than 300 packs live in the Northern Rockies and Pacific Northwest.”⁶⁵

57. Guercio & Duane, *supra* note 53, at 287.

58. Henry Lininger & Tom Lininger, *Unlocking the “Virtual Cage” of Wildlife Surveillance*, 27 DUKE ENVTL. L. POL'Y F. 207, 212 (2017).

59. Dale D. Goble, *Of Wolves and Welfare Ranching*, 16 HARV. ENVTL. L. REV. 101, 103–04 (1992).

60. *See id.*; Guercio & Duane, *supra* note 53, at 314–15.

61. *See* Goble, *supra* note 59, at 103–05.

62. *See id.* at 105; STEPHEN R. KELLERT, KINSHIP TO MASTERY: BIOPHILIA IN HUMAN EVOLUTION AND DEVELOPMENT 94 (1997) (“It is discouraging to realize how rarely today we experience routine, convenient, and spontaneous access to healthy and stimulating natural settings. A distinguishing feature of modern, especially urban, existence is the diminishing role of wild nature as an integral aspect of our everyday lives.”).

63. NAT'L PARK SERV., YELLOWSTONE NATIONAL PARK: WOLF RESTORATION, <https://www.nps.gov/yell/learn/nature/wolf-restoration.htm> (last updated May 6, 2019).

64. 16 U.S.C. § 1531 (2017).

65. Greg Moore, *Wolves are Here to Stay, Expert Says*, IDAHO MOUNTAIN EXPRESS (Oct. 4, 2017), http://www.mtexpress.com/news/environment/wolves-are-here-to-stay-expert-says/article_1930784c-a883-11e7-bbdc-f3f4cdef7fe2.html.

Like in the lower forty-eight states, Alaska has a long history of wolf control practices, including early indigenous practices to “keep [predators] down” to ensure plentiful prey populations for subsistence hunting.⁶⁶ Tribes traditionally hunted bears, eagles, sea otters, and wolves because the people “depended on the fish and wildlife of the region for food, clothing, and other materials.”⁶⁷ These methods were especially important in the Arctic, where life “was harsh, and starvation was not uncommon.”⁶⁸

Following European settlement in Alaska came the fur trade and Klondike gold rush, which resulted in widespread trapping and poisoning of wolves.⁶⁹ Mining activities, and corresponding timber harvests, spread quickly throughout Alaska.⁷⁰ Many prospectors burned entire forests to clear the land, and trappers hunted extensively to provide both furs and game meat to developing markets.⁷¹ Consequently, this “intense human pressure on wildlife and the alteration of habitats” reduced moose, caribou, mountain sheep, bear, and wolf populations “to historically low levels.”⁷²

By the twentieth century, the federal and territorial governments began implementing aggressive wolf control policies, which resulted in extensive wolf killings across the landscape.⁷³ Portraying the wolf “as an evil predator of game, a competitor for food, and a valuable fur-bearer,” Alaska established its first territorial bounty in 1915, paying ten dollars per wolf.⁷⁴ Aggressive wolf control continued to evolve in the rest of territorial Alaska, and included “[p]oisons, bounties, aerial shooting, and year-round trapping . . . to maximize the number of wolves killed.”⁷⁵

66. NAT'L RESEARCH COUNCIL, WOLVES, BEARS, AND THEIR PREY IN ALASKA: BIOLOGICAL AND SOCIAL CHALLENGES IN WILDLIFE MANAGEMENT 27 (1997).

67. *Id.* at 27–28.

68. *Id.* at 27.

69. *Id.* at 28.

70. *Id.*

71. *Id.*

72. *Id.*

73. Fitzgerald, *supra* note 28, at 205.

74. *Id.*

75. *Id.*

B. Public Lands Battles in Alaska

Also in the early twentieth century, naturalist Charles Sheldon wrote to Alaska's legislature regarding the creation of a park around Mount McKinley,⁷⁶ the tallest mountain in North America.⁷⁷ Sheldon promoted making McKinley a national park to protect the diverse wildlife of the region—"including grizzly bears, moose, caribou, and the distinctive Dall sheep"—from trophy hunters that were decimating wildlife populations.⁷⁸ In 1917, Congress enacted legislation that reserved 2,200 square miles of Alaskan wilderness as Mount McKinley National Park (later renamed Denali National Park).⁷⁹ Later, in 1939, Park Service biologist Adolph Murie began "the first in-depth study ever undertaken of wolves."⁸⁰ Murie's wolf research proved crucial for understanding this nearly-eradicated species, and was the foundation for the protection of wolves in Denali National Park.⁸¹

Congress passed the Alaska Statehood Act in 1959.⁸² The subsequent discovery of vast oil deposits in Alaska began a "fight over what to do with the federal lands" that "quickly become a national battle."⁸³ As Congress debated setting aside federal lands in Alaska, industries allied themselves against the Alaska Coalition, "a collection of fifty environmental groups that ultimately . . . was the largest grassroots conservation effort in U.S. history."⁸⁴ Finally, after the Senate stalled legislation to protect public lands in Alaska,⁸⁵ President Jimmy Carter

76. TIMOTHY RAWSON, CHANGING TRACKS: PREDATORS AND POLITICS IN MT. MCKINLEY NATIONAL PARK 28 (2001).

77. Tim Stelloh, *McKinley Out, Denali In: The Highest Peak in North America Renamed*, NBC NEWS (Aug. 30, 2015, 6:30 PM), <https://www.nbcnews.com/news/us-news/mckinley-out-denali-highest-peak-north-america-renamed-n418541>.

78. *Denali National Park*, PBS, <http://www.pbs.org/nationalparks/parks/denali/> (last visited Sept. 13, 2019); see RAWSON, *supra* note 76, at 28–29.

79. *Denali National Park*, *supra* note 78; RAWSON, *supra* note 76, at 29–32.

80. *Denali National Park*, *supra* note 78.

81. *See id.*

82. *See* PBS, "Episode Six: 1946–1980, *The Morning of Creation*", in *The National Parks: America's Best Idea*, <http://www.pbs.org/nationalparks/history/ep6/5/> (last visited Sept. 13, 2019) [hereinafter *America's Best Idea*].

83. *Id.*

84. *Id.*

85. *Id.*

designated seventeen national monuments covering 56 million acres in Alaska on December 1, 1978.⁸⁶

In Alaska, “all hell broke loose.”⁸⁷ Protests mounted, with many marchers toting handmade signs attacking both President Carter and Interior Secretary Cecil Andrus.⁸⁸ One protestor even burned Carter in effigy, “drawing cheers from the crowd.”⁸⁹ In Seward, Alaska, the city council passed two resolutions “condemning the creation of a national monument” near their small fishing town.⁹⁰ Meanwhile, sportsmen’s groups planned the “Great Denali-McKinley Trespass,”—a goal to violate twenty-seven national monument regulations within only two days.⁹¹ The trespass included between 1,000 and 3,000 participants.⁹²

Back in Washington, D.C., legislators continued to debate Alaska’s public lands for another year and a half.⁹³ With mounting pressure from the Alaska Coalition, Congress compromised and assembled the Alaska National Interest Lands Conservation Act (ANILCA), which President Carter signed into law on December 2, 1980.⁹⁴ The Act protected more than 100 million acres of public lands in Alaska, doubled the size of the national park and wildlife refuge system, and designated thirty-five new areas of wilderness.⁹⁵ It even tripled the size of Denali National Park and granted additional protections for the wilderness and wildlife therein.⁹⁶

86. *Id.*

87. *Id.*

88. Dermot Cole, *Thirty-five Years Ago, Carter Drew Wrath of Many Alaskans*, ANCHORAGE DAILY NEWS (July 7, 2016), <https://www.adn.com/commentary/article/thirty-five-years-ago-carter-drew-wrath-many-alaskans/2013/12/01/>.

89. *Id.*

90. PBS, *Kenai Fjords National Park*, <http://www.pbs.org/nationalparks/parks/kenai-fjords/> (last visited Sept. 13, 2019).

91. Cole, *supra* note 88.

92. *Id.*

93. *America’s Best Idea*, *supra* note 82, at part 6.

94. *Id.*; 16 U.S.C. §§ 3101–3233.

95. *The Implementation of the Alaska National Interest Lands Conservation Act of 1980, Including Perspectives on the Act’s Impacts in Alaska and Suggestions for Improvements to the Act: Hearing Before the Comm. on Energy and Natural Resources*, 114th Cong. 1 (2015) (written testimony of Joan Frankevich, Program Manager, Alaska Regional Office, National Parks Conservation Association) [hereinafter *Frankevich Testimony*].

96. *America’s Best Idea*, *supra* note 82, at part 6.

C. Wolf Management by the State of Alaska

After Congress passed the Alaska Statehood Act in 1959, Alaska received administrative authority over its fish and wildlife resources.⁹⁷ The state's wolf management policies derive from the ABOG, which consists of seven board members, each appointed by the governor and confirmed by the state legislature.⁹⁸ As such, the Board of Game "reflects the policies of the governor and state legislature, and these policies reflect traditional wildlife management."⁹⁹ Once the Board establishes a wolf control policy, the Alaska Department of Fish and Game ("ADFG") implements it.¹⁰⁰ Critics stress that the ABOG serves primarily hunting and trapping interests, leaving nongame species to suffer "neglect, ignorance, and misplaced priorities."¹⁰¹ Following ANILCA, the state began authorizing wolf control in specific regions of Alaska to artificially inflate ungulate populations (hooved prey, like caribou and moose).¹⁰²

By 1992, the ABOG approved an aggressive wolf control policy, despite national and international public opposition.¹⁰³ The plan laid out measures to kill between 300 and 400 wolves the first year, and then between 100 and 300 wolves annually in the following years.¹⁰⁴ Such methods, the ABOG explained, should reduce wolf populations by about 80%, which would greatly increase moose and caribou for sport hunting.¹⁰⁵ Public outcry spread throughout the United States and Europe, including widespread boycotts against Alaska tourism. The boycotts cost Alaska between \$100 and \$150 million in tourism revenue, which was a substantial loss compared to that year's \$67 million in hunting revenue.¹⁰⁶

Following "a futile wolf summit in January 1993," the ABOG withdrew its infamous 1992 plan.¹⁰⁷ A few members, however, complained

97. NAT'L RESEARCH COUNCIL, *supra* note 66, at 30.

98. Fitzgerald, *supra* note 28, at 201.

99. *Id.*

100. *Id.* at 194.

101. *Id.* at 202.

102. *See id.* at 210-11.

103. *Id.* at 213.

104. *Id.*

105. *Id.*

106. *Id.* at 213-14.

107. *Id.* at 214.

that national environmentalists were “holding Alaska as an ‘economic hostage’ and threatened to open the entire state to wolf control in the future.”¹⁰⁸ Instead, in 1993 the Board opened wolf control measures to any Alaskan resident with a trapper’s license, eliminated bag limits, and readopted land-and-shoot policies (tracking wolves by plane, landing the aircraft, and then shooting the wolf).¹⁰⁹ In addition, the 1993 plan extended the hunting season into April, which allowed hunters to pursue more wolves over longer days and in “deep snow ideal for tracking.”¹¹⁰ As a result, hunters killed over 1,500 wolves that season, reaching a twenty-year record high.¹¹¹ In response, the USFWS banned aerial shooting of wolves in the National Wildlife Refuges (about 20% of Alaska), while the NPS halted wolf killing in the national parks (about 33% of Alaska).¹¹²

After his 1994 inauguration, Governor Tony Knowles eliminated the wolf control program and called for research studies of the long-term effectiveness of such programs.¹¹³ The National Academy of Science determined that the “shortcomings in the design of past predator control programs make it impossible to determine whether wolf or bear reduction programs are effective in the long term.”¹¹⁴ Under Governor Knowles, the Alaska Department of Fish and Game implemented nonlethal control methods, including sterilization and relocation programs.¹¹⁵ In 2002, the Department of Fish and Game’s Director of Wildlife Conservation concluded, “The department will never again conduct widespread and continuous wolf control to increase ungulate populations.”¹¹⁶ He also added that future wolf control would need to be done “in small areas to help restore moose or caribou populations” and should have “citizen participation in a planning process, guided by reliable scientific information.”¹¹⁷

108. *Id.*

109. *Id.*

110. *Id.*

111. *Id.*

112. *Id.* at 214–15.

113. *Id.* at 217–18.

114. *Id.* at 218.

115. *Id.*

116. Wayne L. Regelin, *Wolf Management in Alaska with an Historic Perspective: Presentation to the Alaska Board of Game*, ALASKA DEP’T OF FISH & GAME (Mar. 2002), <http://www.adfg.alaska.gov/index.cfm?adfg=intensivemanagement.historicwolf>.

117. *Id.*

Nonetheless, following Governor Knowles came Governors Murkowski (2002–2006) and Palin (2006–2008), both of whom supported lethal wolf control to enhance game populations and hunting opportunities.¹¹⁸ In 2003 and 2004, the ABOG implemented an aggressive wolf control program that expanded wolf control areas to 60,000 acres across five areas of the state.¹¹⁹ Private pilots then had legal clearance to shoot wolves from airplanes and helicopters.¹²⁰ One district even permitted increasing the bag limit from ten wolves per year to ten wolves per day.¹²¹ In addition, the ABOG unsuccessfully attempted to reinstate a wolf bounty—offering private pilots \$150 per left leg of a wolf.¹²² Within the last decade, Alaska has permitted a wide range of hunting practices, including gassing wolf dens to kill pups, taking wolves through the denning season, allowing private pilots to shoot wolves from fixed-wing aircraft, and permitting ADFG staff to shoot wolves from helicopters.¹²³

Concerned over both wolf control and hunting regulations, wolf researcher Gordon Haber began advocating for a no-wolf-kill buffer zone on bordering state lands as early as 1972.¹²⁴ The ABOG denied his requests until 2000 when it established a partial buffer zone along Denali's border.¹²⁵ Unconvinced that the buffer provided adequate protection, Haber continued to petition the ABOG, and asked the NPS to work more assertively to protect wolves outside park boundaries.¹²⁶ Following Haber's death in 2009, the NPS requested an expansion of the buffer zone in 2010.¹²⁷ The ABOG “responded by eliminating it completely, making wolves vulnerable to trapping and

118. See Fitzgerald, *supra* note 28, at 219–23.

119. *Id.* at 220.

120. *Wolf ‘Control’ in Alaska*, N.Y. TIMES (Mar. 14, 2004), <http://www.nytimes.com/2004/03/14/opinion/wolf-control-in-alaska.html/>.

121. *Id.*

122. DEFENDERS OF WILDLIFE, ALASKA'S PREDATOR CONTROL PROGRAMS: MANAGING FOR ABUNDANCE OR ABUNDANT MISMANAGEMENT?, 8–9 (2011), https://defenders.org/sites/default/files/publications/alaskas_predator_control_programs.pdf.

123. HABER & HOLLEMAN, *supra* note 1, at 260; Schmidt, Burch, & MacCluskie, *supra* note 42, at 9.

124. HABER & HOLLEMAN, *supra* note 1, at 191.

125. *Id.*

126. *Id.*

127. *Id.*

hunting all around the park boundary.”¹²⁸ Despite additional NPS proposals for a buffer zone and widespread local support for wolf protection, the ABOG continues to shoot down buffer zone bids.¹²⁹

In addition, subsequent wildlife reports indicate that Alaska has experienced an over-harvest of wolves and that the state wildlife managers “failed to provide adequate justification for their controversial programs.”¹³⁰ Denali National Park’s wolf populations even reached a historic low in 2015, with only fifty-one wolves scattered among thirteen packs.¹³¹ Many of those wolves were killed in the previous buffer zone after it ceased to exist in 2010.¹³² Yukon-Charley Rivers National Preserve also lost many wolves to adjacent state predator control, especially as wolves followed winter caribou migrations outside Preserve boundaries.¹³³

D. Non-Cooperative Federalism and the National Park Service’s 2015 Regulations

States and the federal government can certainly work together in wildlife management. For example, in Biscayne National Park, Florida and the NPS share governance over fisheries management.¹³⁴ This dual authority “has expanded the role and influence of the Park beyond its borders, producing an overall positive outcome for stakeholders and the marine environment.”¹³⁵ However, that has not been the case in Alaska.

Because Alaska manages sport hunting statewide, including on U.S. public lands, “conflicts have arisen between the state’s hunting regulations, which express the state’s wildlife laws and goals, and the

128. Tom Clynes, *How Can 6 Million Acres at Denali Still Not Be Enough?*, NAT’L GEOGRAPHIC (Feb. 2016), <https://www.nationalgeographic.com/magazine/2016/02/denali-national-park-alaska/>.

129. HABER & HOLLEMAN, *supra* note 1, at 190–92; Zaz Hollander, *Alaska Game Board Shoots Down Bid for Denali Wolf Buffer*, ANCHORAGE DAILY NEWS (Feb. 24, 2017), <https://www.adn.com/alaska-news/2017/02/24/alaska-game-board-shoots-down-bid-for-wolf-buffer-next-to-denali-national-park/>.

130. Peterson, *supra* note 29, at 46.

131. *Id.* at 46–47.

132. *Id.* at 46; HABER & HOLLEMAN, *supra* note 1, at 191.

133. HABER & HOLLEMAN, *supra* note 1, at 149–50; Klein, *supra* note 45.

134. Ryan B. Stoa, *Cooperative Federalism in Biscayne National Park*, 56 NAT. RESOURCES. J. 81, 83–84 (2016).

135. *Id.* at 84.

wildlife management goals expressed by several federal statutes.”¹³⁶ The State of Alaska's goal is “to maximize a sustained yield of desirable prey,” which leads to the ABOG’s lethal predator control policies.¹³⁷ In contrast, the NPS must maintain “natural and healthy” wildlife populations and ecosystems. Thus the “state and federal goals are mutually exclusive.”¹³⁸

To deal with this conflict and protect natural predator populations within the national preserves, the NPS and USFWS began regulating state hunting on federal public lands.¹³⁹ In 2015, the NPS issued new regulations to restrict Alaskan sport hunting within national park areas to better protect predator species.¹⁴⁰ The regulations came about after decades of failed back-and-forth annual negotiations between the ADFG and the USFWS on hunting regulations within national wildlife refuges and parks.¹⁴¹ These negotiations often resulted from Alaska’s “unwilling[ness] to accommodate the different management directives for NPS areas,” and lead to the NPS objecting to over fifty state proposals for liberalized predator harvest on public lands.¹⁴²

By 2013, the ADFG rejected the federal rules altogether and told “its state wildlife agency to write its own.”¹⁴³ In response, in 2015 the NPS instituted its current rules barring killing of wolves in denning season, hunting bear cubs or sows with cubs, and “[u]sing the aid of a pit, fire, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical, or a conventional steel trap with an inside jaw spread over nine inches.”¹⁴⁴ The USFWS implemented a similar rule for the National Wildlife Refuges in Alaska in 2016.¹⁴⁵

136. See Nie, *supra* note 38, at 878.

137. See *id.* at 878–79.

138. *Id.* at 879.

139. Alaska; Hunting and Trapping in National Preserves, 80 Fed. Reg. 64,325 (Nov. 23, 2015) (to be codified at 36 C.F.R. 13); Non-Subsistence take of Wildlife and Public Participation and Closure Procedures, on National Wildlife Refuges in Alaska, 81 Fed. Reg. 52247 (effective Sept. 6, 2016) (to be codified at 50 C.F.R. pt. 32 & 50 C.F.R. pt. 36).

140. See 36 C.F.R. § 13.42 (2019).

141. Fears, *supra* note 40.

142. Alaska; Hunting and Trapping in National Preserves, 80 Fed. Reg. at 64, 326.

143. Fears, *supra* note 40.

144. 36 C.F.R. § 13.42 (2019) (specifically bars taking wolves “from May 1 through August 9,” which is the approximate denning season for a wolf pack); HABER & HOLLEMAN, *supra* note 1, at 14–15.

145. See *generally* Non-Subsistence Take of Wildlife, 81 Fed. Reg. at 52247–52273.

Alaska immediately objected to the new regulations, with officials alleging statutory overreach and violations of the public trust doctrine.¹⁴⁶ In 2017, Alaska filed suit against the Secretary and Department of Interior, alleging unlawful preemption of state authority to manage wildlife, illegal restrictions on subsistence hunting rights, and unlawful closures of federal lands.¹⁴⁷ However, Congress has already repealed the USFWS regulations, while the NPS regulation remains under review.¹⁴⁸

III. WOLF ECOLOGY AND THE IMPACTS OF LETHAL CONTROL ON PROTECTED POPULATIONS

Alaska is massive.¹⁴⁹ It is about “one-fifth the size of the lower 48 states and occupies 1,477,270 [square kilometers].”¹⁵⁰ Ecosystems within Alaska range from coastal temperate rainforests and fjords to interior boreal forests, high mountain ranges, and Arctic tundra.¹⁵¹ Incredibly, these landscapes and “natural habitats have not been substantially altered.”¹⁵² In fact, many “Alaskan ecosystems are still much the same as they were when Europeans first arrived in North America.”¹⁵³ Within this dynamic landscape, wolves have carved out a home in virtually every habitat possible, with their range encompassing about 85% of the state.¹⁵⁴

146. Doug Vincent-Lang, *Alaska Must Reject Feds' Claim to Control Hunting in Preserves and Refuges*, ANCHORAGE DAILY NEWS (Jan. 10, 2016), <https://www.adn.com/commentary/article/feds-out-line/2016/01/10/>.

147. *Zinke*, 2017 U.S. Dist. LEXIS 69151.

148. Chris D'Angelo, *Congress Votes to Kill Protections For Wolves, Bears on Alaska Refuges*, HUFFINGTON POST (Mar. 23, 2017, 12:23 AM), https://www.huffingtonpost.com/entry/senate-approves-alaska-predator-hunting-wildlife-refuges-us_us_58d1c633e4b0b22b0d17ffb7; Fears, *supra* note 40; Adam Wernick, *Congress Repeals a Regulation Limiting Hunting in Alaska's Wildlife Refuges*, PUBLIC RADIO INTERNATIONAL (May 15, 2017), <https://www.pri.org/stories/2017-05-15/congress-repeals-regulation-limiting-hunting-alaskas-wildlife-refuges>.

149. See NAT'L RESEARCH COUNCIL, *supra* note 66, at 37–41.

150. *Id.* at 37.

151. *Id.* at 37–41.

152. *Id.* at 41.

153. *Id.*

154. *Id.* at 44.

Today, Alaska “is home to the largest remaining populations of gray wolves in the United States.”¹⁵⁵ Wolf density, however, corresponds strongly with ungulate biomass,¹⁵⁶ making food availability “the dominant natural factor that limits wolf abundance.”¹⁵⁷ As such, wolf populations vary by region and locality; statewide populations can appear stable while local wolf populations are decreasing or eliminated completely in wolf control areas.¹⁵⁸

Generally, wolves live in social units called families or packs, with each pack consisting of a breeding pair (the alpha male and female), their offspring, and other non-breeding adults.¹⁵⁹ The breeding female gives birth in the spring, usually in dens used by multiple generations of the pack.¹⁶⁰ These dens are an elaborate “network of burrows and chambers excavated at least ten to twenty feet into the ground” and can spread out over “an area of up to fifty acres.”¹⁶¹ Wolf packs also occupy a specific territory, which varies in size according to prey availability and migration.¹⁶²

While wolves generally dwell in packs, adults sometimes disperse great distances on their own to find a mate or to join another pack.¹⁶³ Dispersal is risky because packs often exhibit territorial behavior and kill intruders.¹⁶⁴ However, a dispersing wolf can replace a breeder within an existing pack, form a new pack with a new mate, or even gain acceptance as a non-breeding adult within an existing pack.¹⁶⁵ Wolf dispersal thus helps to “mitigate localized losses of packs in relatively

155. DEFENDERS OF WILDLIFE, *supra* note 122, at 2.

156. NAT'L RESEARCH COUNCIL, *supra* note 66, at 24.

157. *Id.* at 44.

158. DEFENDERS OF WILDLIFE, *supra* note 122, at 2.

159. NAT'L PARK SERV., *Wolf Ecology Basics*, <https://www.nps.gov/articles/life-of-a-wolf.htm> (last updated Oct. 31, 2017).

160. HABER & HOLLEMAN, *supra* note 1, at 51–52 (“Virtually all of the homesites are very old” with some dating back “at least a century or two.”).

161. *Id.* at 51.

162. NAT'L PARK SERV., *supra* note 159.

163. John Burch, *Wolf 258*, NAT'L PARK SERV., <https://www.nps.gov/yuch/learn/nature/wolf-258.htm> (last updated July 21, 2017).

164. *Id.*

165. *Id.*

continuous populations,”¹⁶⁶ and the high risk can reap great biological rewards.¹⁶⁷

“[T]he breeding pair defines the pack and represents the most reproductively valuable population component.”¹⁶⁸ Generally speaking, breeders have “low natural mortality and dispersal rates,” and the loss of breeders can cause “pack dissolution or decreased productivity.”¹⁶⁹ In addition, studies indicate that harvesting wolves, especially breeders, “has lingering effects on the size, number, stability, and persistence of family-group social units (packs); on reproductive, hunting, and territorial behavior; on the role of learning and related traditions in wolf packs; on within-group and between-group patterns of genetic variation; and on overall mortality.”¹⁷⁰

Today, trappers and hunters harvest about 1,200 wolves annually in Alaska.¹⁷¹ However, it is highly likely that additional wolves are killed, through both illegal means and unreported legal kills.¹⁷² The primary purpose of lethal wolf control in Alaska—and for many hunting regulations—is to inflate game species populations, like moose and caribou.¹⁷³ However, the “[e]cological carrying capacities of Alaskan environments for ungulates are low because arctic, alpine, and subalpine soils are typically poor in nutrients.”¹⁷⁴ Undoubtedly, wolf and predator control inflate ungulate populations; with fewer predators more prey survive, especially calves.¹⁷⁵ Nevertheless, examining these immediate results alone limits the “success” of wolf control to immediate hunting prospects and fails to consider the long-term health of the herd.¹⁷⁶ Studies increasingly show that aggressive wolf control pol-

166. Schmidt, Burch, & MacCluskie, *supra* note 42, at 23.

167. *Id.*

168. *Id.*

169. *Id.*

170. HABER & HOLLEMAN, *supra* note 1, at 230–31; NAT’L RESEARCH COUNCIL, *supra* note 66, at 51; *see also* Schmidt, Burch, & MacCluskie, *supra* note 42, at 23.

171. WOLF HUNTING IN ALASKA, *supra* note 44.

172. HABER & HOLLEMAN, *supra* note 1, at 211.

173. Fitzgerald, *supra* note 28, at 218–19; *see id.* at 213.

174. NAT’L RESEARCH COUNCIL, *supra* note 66, at 42.

175. *Id.* at 44.

176. *Compare* Gullufsen, *supra* note 39 (“The 40-mile caribou herd, which the program aims to bolster, has grown from about 13,000 in 1990 to over 50,000 at last count.”), *with* NAT’L RESEARCH COUNCIL, *supra* note 66, at 121 (“[P]olitical pressures have created conditions that

icies, and larger ungulate populations, are biologically and environmentally damaging as prey species quickly eradicate food sources. Consequently, the evidence suggests that lethal predator control drives herds to “unsustainable historical highs” and unattainable carrying capacities.¹⁷⁷

There also may be larger ecosystem impacts, as the restoration of wolves to Yellowstone National Park has demonstrated in reverse. The return of wolves to Yellowstone National Park showed how quickly and dynamically wolves can affect local ecosystems.¹⁷⁸ Essentially, by reintroducing wolves, the Park regained a vital predator that kept elk populations, and competing predators, in check.¹⁷⁹ With elk declines, streamside vegetation returned, which brought back beaver.¹⁸⁰ Beavers then transformed the rivers and streams in Yellowstone, benefiting fish populations and other species.¹⁸¹ In addition, as wolves reduced the overabundant coyote population, rodents rebounded along with their predators: birds of prey, foxes, and badgers.¹⁸² Likewise, wolf kills provided an important food source to bears in low-food years.¹⁸³ In short, the “renaissance of all these species was a direct result of restoring the top predator.”¹⁸⁴ Known as “trophic cascades,” these ecological benefits are restoring America’s first National Park to its natural majesty.¹⁸⁵

With expanding state hunting regulations in both Alaska and the contiguous U.S., “hunting or trapping outside [national parks] has sparked widespread controversy and prompted concern regarding the impact of these losses on population and pack dynamics.”¹⁸⁶ A sixteen-

have favored attempts to achieve quick, short-term results from predator control experiments by altering more than one factor simultaneously. In addition, budgetary constraints have led to the use of indirect measures of success, which are less expensive in the short-term but which are not good indicators of population trends.”), and DEFENDERS OF WILDLIFE, *supra* note 122, at 2 (“[C]ritical data, such as accurate population estimates, are often lacking and that results of predator control programs are not sufficiently monitored.”).

177. DEFENDERS OF WILDLIFE, *supra* note 122, at 11–12.

178. Worrall, *supra* note 52.

179. *Id.*

180. *Id.*

181. *Id.*

182. *Id.*

183. NAT’L PARK SERV., *supra* note 63.

184. Worrall, *supra* note 52.

185. William J. Ripple & Robert L. Beschta, *Trophic Cascades in Yellowstone: The First 15 Years After Wolf Reintroduction*, 145 BIOLOGICAL CONSERVATION 205 (Jan. 2012).

186. Borg, et al., *supra* note 42, at 2.

year study of both Denali National Park and Yellowstone National Park determined that wolf harvesting adjacent to park areas reduced wolf sightings within the park, even when there were only minimal impacts on protected populations.¹⁸⁷ Thus, “[h]uman-caused mortality of large carnivores adjacent to protected areas can lead to population declines within the protected region.”¹⁸⁸

Furthermore, in 2017, wildlife biologists in Alaska completed a twenty-two-year study (1993–2014) of protected wolf populations in the Yukon-Charley Rivers National Preserve.¹⁸⁹ The study ultimately determined that adjacent predator control harvests affected the protected wolf populations within the Preserve.¹⁹⁰ More specifically, predator harvesting directly shifted Yukon-Charley “from being a population source before lethal control to a population sink during lethal control.”¹⁹¹ As wolf densities decreased, adjacent pack natality rates increased, “but not enough to immediately offset those killed during predator control efforts.”¹⁹² The Preserve’s wolf population depended largely on “immigrants from other areas.”¹⁹³

Over the course of the study, two separate wolf control programs (lethal and non-lethal) took place on state lands surrounding the National Preserve, with the goal of increasing the Fortymile caribou herd.¹⁹⁴ Lethal control eliminated over seventy-five monitored wolves from the Preserve study, and human-caused mortality in the entire region “usually exceeded” the proposed 29% sustainability threshold.¹⁹⁵ The research also indicated that young or dispersing wolves are the most vulnerable to traditional trapping and hunting methods, while lethal control has a much greater impact on breeders. Thus, lethal control methods can have a “much greater impact on population dynamics.”¹⁹⁶

187. *Id.* at 11.

188. *Id.*

189. Schmidt, Burch, & MacCluskie, *supra* note 42, at 1.

190. *Id.* at 25–26.

191. *Id.* at 26.

192. Klein, *supra* note 45; *see also* Schmidt, Burch, & MacCluskie, *supra* note 42, at 25.

193. Schmidt, Burch, & MacCluskie, *supra* note 42, at 21.

194. *Id.* at 7.

195. *Id.* at 18.

196. *Id.* at 26.

Ultimately, “[e]very single wolf pack went outside the bounds of the preserve,” said Dr. John Burch, a wildlife biologist for the National Park Service’s study.¹⁹⁷ Once the wolves were outside the Preserve’s borders, hunters shot many of the Yukon-Charley wolves.¹⁹⁸ Consequently, the biologists recommended “simple prohibitions” on harvest and control to achieve “a normally functioning wolf population.”¹⁹⁹ The study also recommended that managers of protected public lands consider the findings carefully: The “passive management approach often employed by managers in response to external threats may be insufficient to prevent a shift in ecosystem dynamics when management regimes differ in adjacent areas, particularly in the case of wolf control.”²⁰⁰ Such direct and vital consequences require consideration, collaboration, and mitigation, potentially at a regional level.²⁰¹

Alaska’s expansive wolf culling does not just affect the overall wolf population count. The ecological consequences also include the psychological effects on pack dynamics, with the greatest impacts following the deaths of breeders and older generations of the wolf pack.²⁰² The consequence of removing these adults—which function as the teachers and leaders of the pack—is to create a “younger, dysfunctional, and smaller family” unit that lacks the hunting skills and traditional behaviors passed down through wolf generations.²⁰³ Thus, even where wolf numbers “rebound” from public hunting and agency killings, the pack losses diminish overall interspecies contacts and broader ecosystem interactions.²⁰⁴ These adverse impacts are especially concerning because most Alaskan public lands are bordered by state wolf control areas, including Denali National Park, Gates of the Arctic National Park, Wrangell St. Elias National Park, Lake Clark National Park, Katmai National Park, and the Yukon-Charley Rivers National Preserve (see Figure D).²⁰⁵

197. Klein, *supra* note 45.

198. *Id.*

199. Schmidt, Burch, & MacCluskie, *supra* note 42, at 21.

200. *Id.* at 26.

201. *See id.* at 26–27.

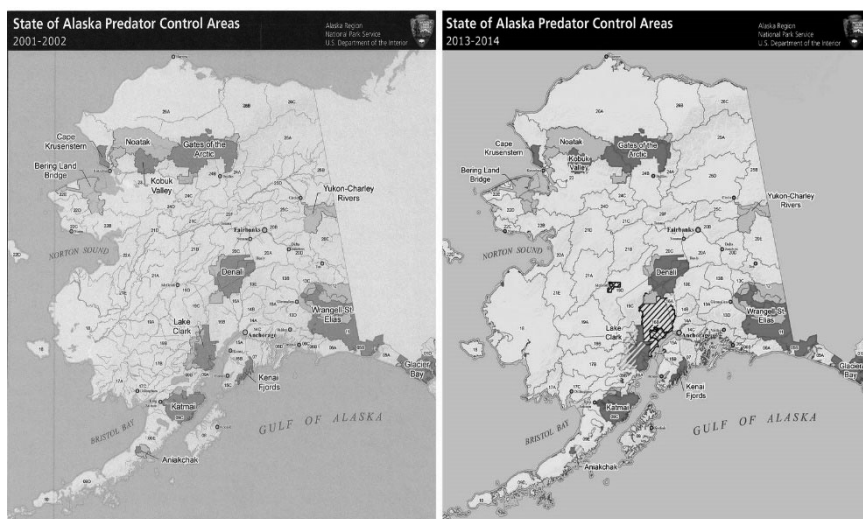
202. *Id.* at 23.

203. HABER & HOLLEMAN, *supra* note 1, at 230–31; Peterson, *supra* note 29, at 106–07.

204. HABER & HOLLEMAN, *supra* note 1, at 230–33.

205. *Glossary of Unbearable Terms*, NAT’L PARKS CONSERVATION ASS’N., (Sept. 1, 2017) <https://www.npca.org/resources/3218-glossary-of-unbearable-terms>.

Figure D: Alaska's Wolf Control Areas & National Park Units, 2001–2002 and 2013–2014²⁰⁶



IV. LEGAL REGIMES GOVERNING WOLVES IN ALASKA

Federal and state authorities in Alaska thus have contradictory goals for wolf and other predator populations across the state: The State of Alaska promotes hunting and other lethal controls in order to promote population growth for big game and subsistence prey animals such as moose and elk, while the federal government seeks healthy wolf populations within its National Parks and National Wildlife Refuges. In the ensuing non-cooperative federalism, science strongly indicates that the state's policies are dominant: State predator control measures outside federal lands are detrimentally impacting wolf populations within federal preserves.

The issue, then, is how the federal government can respond when it cannot reach for the Endangered Species Act. The U.S. Constitution provides the necessary framework “for federal-state relations and power-sharing arrangements, as well as individual obligations and limitations on authority for each level of government.”²⁰⁷ The key provisions relating to the federalism question over wildlife management on

206. *Id.*

207. Nie et al., *supra* note 38, at 819.

Alaska's public lands include: (a) state and federal wildlife regulations; (b) the Tenth Amendment; (c) the Property Clause; (d) the Commerce Clause; and (e) the Supremacy Clause.²⁰⁸

A. Competing Federal and State Regulations in Alaskan Wildlife Management

At the state level, the politically appointed ABOG determines wildlife management policies, including predator control programs.²⁰⁹ Then the ADFG implements them.²¹⁰ Over most of its history, the ABOG has developed game populations for hunters and trappers, including subsistence users, at the expense of eliminating predator populations across Alaska.²¹¹ In addition, Article VIII of the Alaska Constitution protects wildlife through the public trust doctrine.²¹² In theory, these legal principles extend to wolves; in practice, the doctrine protects the hunters instead of the hunted.²¹³

In contrast, the NPS manages the National Parks in Alaska, as elsewhere, "under an overarching mandate that interacts with governing regulations specific to individual parks."²¹⁴ The National Park Service Organic Act requires the Secretary of the Interior "to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave

208. *Id.*

209. Fitzgerald, *supra* note 28, at 201.

210. *Id.* at 194.

211. *Id.* at 194, 218–19.

212. ALASKA CONST. art. VIII, § 1 ("It is the policy of the State to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest."); ALASKA CONST. art. VIII, § 2 ("The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people."); ALASKA CONST. art. VIII, § 3 ("Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use."); ALASKA CONST. art. VIII, § 4 ("Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses."); ALASKA CONST. art. VIII, § 17 ("[T]he use or disposal of natural resources shall apply equally to all persons similarly situated with reference to the subject matter and purpose to be served by the law or regulation.")

213. *See* Fitzgerald, *supra* note 28, at 198–200.

214. Outka, *supra* note 49, at 170.

them unimpaired for the enjoyment of future generations.”²¹⁵ The NPS manages a variety of national parks, monuments, preserves, historic sites, and seashores, with each designated with specific protective mandates.²¹⁶ In contrast, the USFWS manages over 500 wildlife refuges under a comprehensive organic act,²¹⁷ which prioritizes the lands’ purpose for fish, wildlife, and plant conservation.²¹⁸

Management policies further require the NPS to “minimiz[e] human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them.”²¹⁹ In addition, the NPS is supposed to “work with other land managers to encourage the conservation of the populations and habitats of these species outside parks whenever possible.”²²⁰ Those other land managers include states, other federal agencies, tribal governments, and foreign nations.²²¹

Most other national parks and federal public lands in Alaska were created first by presidential proclamation and then ratified through the Alaska National Interest Lands Conservation Act (ANILCA) in 1980.²²² ANILCA allows for some uses of federal lands that are typically barred in the rest of the United States. For instance, § 811 provides for subsistence use in wilderness areas,²²³ while § 1313 permits sport hunting in National Preserves.²²⁴ ANILCA also created a new parklands category in Alaska called Preserves, which permit sport hunting and commercial trapping activities.²²⁵

215. 54 U.S.C. § 100101(a) (2017).

216. Outka, *supra* note 49, at 170.

217. National Wildlife Refuge System Administration Act of 1966, 16 U.S.C. § 668dd (2017).

218. 16 U.S.C. § 668dd(a)(2) (2017); *see also* Nie et al., *supra* note 38, at 854; Outka, *supra* note 49, at 170–71.

219. NAT’L PARK SERV., MANAGEMENT POLICIES 2006, § 4.4.1 (2006), https://www.nps.gov/policy/MP_2006.pdf.

220. *Id.* at § 4.4.1.1.

221. *Id.*

222. 16 U.S.C. §§ 3101–3233 (2017).

223. 16 U.S.C. § 3121 (2017).

224. 16 U.S.C. § 3201 (2017) (“A National Preserve in Alaska shall be administered and managed as a unit of the National Park System in the same manner as a national park except as otherwise provided in this Act and except that the taking of fish and wildlife for sport purposes and subsistence uses, and trapping shall be allowed in a national preserve under applicable State and Federal law and regulation.”).

225. *Id.*

However, ANILCA § 1313 also stipulates that the Secretary of the Interior “may designate zones where and periods when no hunting, fishing, trapping, or entry may be permitted for reasons of public safety, administration, floral and faunal protection, or public use and enjoyment.”²²⁶ Furthermore, following ANILCA’s 1980 enactment, ADFG and NPS signed a Master Memorandum with the state agreeing to “manage fish and resident wildlife populations in their natural species diversity” on NPS lands, “recognizing that nonconsumptive use and appreciation by the visiting public is a primary consideration.”²²⁷

Therefore, “Alaska presents a unique situation within the federal public lands system” because federal land managers default to state hunting regulations²²⁸ and must comply with ANILCA,²²⁹ “which creates new land categories and statutory exceptions that do not exist elsewhere, as well as an overarching system of subsistence management.”²³⁰ In addition to preserving subsistence uses, ANILCA established multiple conservation units across Alaska²³¹ with the goals to preserve wildlife species, wilderness values, recreational opportunities, and unaltered ecosystems.²³²

The 2015 regulations specifically prohibit predator control practices on national park lands, including taking bear sows with cubs,

226. *Id.*; see also 16 U.S.C. § 3126(b) (2017) (“[T]he Secretary, after consultation with the State and adequate notice and public hearing, may temporarily close any public lands (including those within any conservation system unit), or any portion thereof, to subsistence uses of a particular fish or wildlife population only if necessary for reasons of public safety, administration, or to assure the continued viability of such population.”).

227. Tony Knowles, Opinion, *Alaska’s National Parks: Policy of Economics and Common Sense, or a State and Federal Political Agenda?*, JUNEAU EMPIRE (Sept. 6, 2017, 7:07 AM), <http://juneauempire.com/opinion/2017-09-06/alaska-s-national-parks-policy-economics-and-common-sense-or-state-and-federal>.

228. Nie et al., *supra* note 38, at 876.

229. 16 U.S.C. §§ 3101–3233 (2017).

230. Nie et al., *supra* note 38, at 876; see also *Sturgeon v. Frost*, 136 S. Ct. 1061, 1071 (2016) (“Looking at ANILCA both as a whole and with respect to Section 103(c), the Act contemplates the possibility that all the land within the boundaries of conservation system units in Alaska may be treated differently from federally managed preservation areas across the country, and that ‘non-public’ lands within the boundaries of those units may be treated differently from ‘public’ lands within the unit.”).

231. *Frankevich Testimony*, *supra* note 95.

232. 16 U.S.C. § 3101(a)–(b) (2017).

hunting with bear bait, or taking wolves and coyotes during the denning season.²³³ Though Alaska alleges that the NPS has imposed a prohibition on sport and subsistence hunting, the regulations bar only predator control practices by state officials and private hunters on national preserves.²³⁴

According to the NPS, state wolf-harvest practices were based “on a desire to reduce predator populations, and often far in excess of any previous authorizations.”²³⁵ In addition, the NPS found a conflict between lethal state predator controls and national park management policies, that “prohibit the manipulation of wildlife populations.”²³⁶ Thus, the NPS sought to prohibit “the purposeful decrease of predator populations to achieve (or attempt) an increase of ungulate populations to benefit hunters.”²³⁷

B. Tenth Amendment

The Tenth Amendment provides that “[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”²³⁸ While in its early history the Supreme Court held the Tenth Amendment to be “a strong and limiting power of the Constitution,” views shifted significantly by the twentieth century.²³⁹ In *United States v. Darby*, the Court held that the Tenth “[A]mendment states but a truism that all is retained which has not been surrendered.”²⁴⁰ As such, it is simply a declaration “to allay fears that the new national government might seek to exercise powers not granted, and that the states might not be able to exercise fully their reserved powers.”²⁴¹ Since *Darby*, “it

233. 36 C.F.R. § 13.42 (2019); *see also* Alaska; Hunting and Trapping in National Preserves, 80 Fed. Reg. 64325 (Oct. 23, 2015).

234. Alaska; Hunting and Trapping in National Preserves, 80 Fed. Reg. 64325, 64328, 64332 (Oct. 23, 2015).

235. *Id.* at 64332.

236. *Id.*

237. *Id.*

238. U.S. CONST. amend. X.

239. Nie et al., *supra* note 38, at 829.

240. *United States v. Darby*, 312 U.S. 100, 124 (1941).

241. *Id.*

has become exceedingly uncommon for the Supreme Court to invalidate federal laws under the Tenth Amendment.”²⁴²

Federal courts have also been reluctant to invoke the Tenth Amendment in wildlife management cases.²⁴³ For example, in *Gibbs v. Babbitt*, the U.S. Court of Appeals for the Fourth Circuit upheld a USFWS regulation prohibiting the taking of red wolves on private lands in North Carolina.²⁴⁴ The court held that the wolf takings substantially affected interstate commerce and that the regulation was part of a comprehensive endangered species protection program.²⁴⁵ Similarly, the U.S. Court of Appeals for the Tenth Circuit barred Wyoming from compelling the USFWS to vaccinate elk on a national wildlife refuge because Congress has “complete power” in regulating wildlife on public lands.²⁴⁶ In fact, the court found it “painfully apparent that the Tenth Amendment does not reserve to the State of Wyoming the right to manage wildlife, or more specifically vaccinate elk, on the [National Elk Refuge], regardless of the circumstances.”²⁴⁷ Both *Gibbs* and *Wyoming v. United States* thus rejected outright arguments of exclusive state sovereignty over wildlife, especially where an enumerated federal power was being used.²⁴⁸

Ultimately, legal “questions about the powers of federal and state governments over natural resources are part of a larger rethinking of federalism.”²⁴⁹ From the decades following Roosevelt’s New Deal Program, the judiciary has “generally favored an expansion of federal authority to overcome indifferent, incapable, or resistant state and local authority.”²⁵⁰ Thus, even though “states undoubtedly have well-established historical responsibility over the wildlife within their borders . . . that responsibility is not exclusive, nor dominant, nor constitutionally derived.”²⁵¹

242. Nie et al., *supra* note 38, at 829.

243. *Id.* at 831–33.

244. *Gibbs v. Babbitt*, 214 F.3d 483, 486–87 (4th Cir. 2000).

245. *Id.*

246. *Wyoming v. United States*, 279 F.3d 1214, 1227, (10th Cir. 2002) (quoting *Kleppe v. New Mexico*, 426 U.S. 529, 540–41 (1976)).

247. *Id.*

248. *Id.* at 1226–27; *Gibbs*, 214 F.3d at 499.

249. Donald N. Zillman, *Natural Resource Federalism*, 35 ROCKY MT. MIN. L. INST. 1, § 1.01 (1989).

250. *Id.*

251. Nie et al., *supra* note 38, at 838.

Instead, the Constitution grants the United States federal authority to manage land, natural resources, and articles of commerce, “even in the face of objections from the states.”²⁵² While the Tenth Amendment still prohibits the U.S. from “forcing state governments to carry out federal regulatory schemes, it cannot prevent the federal government from implementing those schemes itself.”²⁵³ At this point, “if the Commerce or Property Clauses are successfully invoked by the federal government as the authority to regulate wildlife, then by definition, inconsistent state law is preempted notwithstanding the Tenth Amendment.”²⁵⁴

C. The Property Clause

Article IV, Section 3, of the U.S. Constitution grants Congress power “to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States.”²⁵⁵ Essentially, this clause vests power “to the United States of control over its property,”²⁵⁶ as well as over federal resources.²⁵⁷ A variety of federal agencies manage “almost 30 percent of the United States land surface,”²⁵⁸ with 222 million acres of public lands in Alaska alone.²⁵⁹ That acreage amounts to about 60% of Alaska and “includes national parks, wildlife refuges, national forests, military reservations and the North Slope National Petroleum Reserve.”²⁶⁰ In fact, about two-thirds of national park lands are in Alaska.²⁶¹

In *Kleppe v. New Mexico*,²⁶² the Supreme Court considered New Mexico’s practice of allowing individuals to capture wild burros from public lands for sale at private auction, when the federal government

252. *Id.*

253. *Id.*

254. *Id.* at 836.

255. U.S. CONST. art. IV, § 3, cl. 2.

256. *Kansas v. Colorado*, 206 U.S. 46, 89 (1907).

257. *See Kleppe v. New Mexico*, 426 U.S. 529, 530 (1976).

258. Outka, *supra* note 49, at 166.

259. *Land Ownership in Alaska*, ALASKA DEP’T OF NAT. RES. (Mar. 2000), http://dnr.alaska.gov/mlw/factsht/land_fs/land_own.pdf.

260. *Id.*

261. CAROL HARDY VINCENT ET AL., CONG. RESEARCH SERV., R42346, FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA (2017).

262. *Kleppe*, 426 U.S. at 529.

had protected these animals under the Wild Free-Roaming Horses and Burros Act.²⁶³ In enacting that statute, Congress “deemed the regulated animals ‘an integral part of the natural system of the public lands’ of the United States”²⁶⁴ and accordingly recognized Congress’s “power to determine what are ‘needful’ rules ‘respecting’ the public land.”²⁶⁵ As such, the Court held that Congress could protect wildlife on public lands despite a state’s broad trustee and police powers over wildlife.²⁶⁶ In short, the U.S. Supreme Court expanded the Property Clause’s powers beyond traditional public land borders to include protecting federal lands and resources from external threats, including state actions.²⁶⁷

However, *Kleppe* is a rare case. “[F]ew cases touch upon the Property Clause power to regulate ‘integral’ wildlife outside of the boundaries of the federal lands, perhaps because federal agencies and their employees tend to be reluctant to exercise their power aggressively.”²⁶⁸ However, the Supreme Court has continuously held that state law cannot contravene federal law,²⁶⁹ even where states express legitimate “concerns for conservation and protection of wild animals underlying the 19th-century legal fiction of state ownership.”²⁷⁰ Federal courts have also recognized that federal regulations, as enacted by administrative agencies, can preempt state wildlife management laws and policies.²⁷¹

263. 16 U.S.C. §§ 1331–1340 (2017).

264. *Kleppe*, 426 U.S. at 535.

265. *Id.* at 539.

266. *Id.* at 545–46.

267. *Id.* at 539 (holding that “[T]he power granted by the Property Clause is broad enough to reach beyond territorial limits,” and “[P]ower over the public land thus entrusted to Congress is without limitations.”); *see also* *Camfield v. United States*, 167 U.S. 518, 525 (1897) (recognizing that Congress could regulate private lands adjacent to public lands).

268. *See* Nie et al., *supra* note 38, at 825.

269. *Kleppe*, 426 U.S. at 531 (“While the states have broad trustee and police powers over wild animals within their jurisdiction and, as to its inhabitants may regulate the killing and sale of wildlife, nevertheless, those powers exist only insofar as their exercise is not incompatible with, or restrained by, the rights conveyed to the federal government by the Federal Constitution.”); *see also* *Hughes v. Oklahoma*, 441 U.S. 322, 336 (1979); *Hunt v. United States*, 278 U.S. 96, 99–100 (1928).

270. *Hughes*, 441 U.S. at 336.

271. *See* *United States v. Grimaud*, 220 U.S. 506, 517 (1911); *Wyoming v. United States*, 279 F.3d 1214, 1227 (10th Cir. 2002).

The federal courts have continued to recognize a federal agency's ability to regulate activities on non-federal land pursuant to the Property Clause.²⁷² In other words, "Congress may regulate conduct off federal land that interferes with the designated purpose of that land."²⁷³ For example, the federal government can regulate the use of motorboats on state waterways within and adjacent to federal wilderness areas.²⁷⁴

D. Commerce Clause

The Commerce Clause gives Congress the power to "regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes."²⁷⁵ The Supreme Court has interpreted "commerce" to include management of a variety of natural resources, including wildlife.²⁷⁶ In the 1930s, facing New Deal legislation, the Court interpreted the Commerce Clause power very broadly, and those interpretations included the Court's increasing recognition of limitations on a state's control over wildlife, especially concerning impacts on interstate commerce.²⁷⁷ For example, in *Gibbs*, the USFWS could regulate endangered red wolf takings because of the substantial effects on interstate commerce.²⁷⁸

E. Supremacy Clause

Under Article VI of the Constitution, federal laws—including the Constitution itself, statutes, and treaties—"shall be the supreme Law of the Land."²⁷⁹ The doctrine of federal preemption—the express or

272. *State of Minn. by Alexander v. Block*, 660 F.2d 1240, 1249–53 (8th Cir. 1981) (upholding federal restrictions on motorboats and snowmobiles upon state lands within the Boundary Waters Canoe Area Wilderness); *United States v. Lindsey*, 595 F.2d 5, 6 (9th Cir. 1979) ("It is well established that [the Property] clause grants to the United States power to regulate conduct on non-federal land when reasonably necessary to protect adjacent federal property or navigable waters.").

273. *State of Minn. by Alexander*, 660 F.2d at 1249–50.

274. *Id.*

275. U.S. CONST. art. I, § 8, cl. 3.

276. *See Hughes*, 441 U.S. at 335–36.

277. *See* Nie et al., *supra* note 38, at 833–36.

278. *Gibbs*, 214 F.3d at 486–87.

279. U.S. CONST. art. VI, cl. 2.

implied overriding of state law by federal law—derives from the Supremacy Clause.²⁸⁰ Essentially, preemption occurs where Congress “occup[ies] a given field,” or where state law “conflicts with federal law, that is, when it is impossible to comply with both state and federal law, or where the state law stands as an obstacle to the accomplishment of the full purposes and objectives of Congress.”²⁸¹

Both the Commerce and Property Clauses work closely with the Supremacy Clause in courts’ federalism analyses, especially where public lands and wildlife are concerned. For example, In *Alaska v. Andrus*, the State of Alaska sued the Secretary of Interior for halting a wolf hunt on federally controlled lands.²⁸² Alaska alleged that the wolf hunt was necessary to protect the Western Arctic caribou herd, which provided essential subsistence hunting to local Native populations.²⁸³ The State also questioned the Secretary’s authority to halt the state’s wolf kill program.²⁸⁴ However, the U.S. District Court for the District of Alaska found that Alaska’s Statehood Act could not circumvent the Supremacy Clause of the Constitution, despite the Act’s provision giving the State control of wildlife.²⁸⁵ Under the Property Clause, Congress retained authority to control wildlife management on the federal lands.²⁸⁶ As such, the Supremacy Clause meant that federal wildlife management decisions on federal lands preempted contradictory state law.²⁸⁷

280. *California Coastal Comm’n v. Granite Rock Co.*, 480 U.S. 572, 581 (1987).

281. *Id.*

282. *Alaska v. Andrus*, 429 F. Supp. 958, 960–61 (D. Alaska 1977) *aff’d*, 591 F.2d 537 (9th Cir. 1979).

283. *Id.*

284. *Id.*

285. *Id.* at 962; 591 F.2d at 538 (holding that NEPA conformance was not required by the Secretary of Interior, but that the court would not indulge in constitutional interpretation where the NEPA analysis sufficiently solved the question before it).

286. *Andrus*, 429 F. Supp. at 962 (citing *Kleppe v. New Mexico*, 426 U.S. 529, 535-41 (1976)).

287. *Id.*

V. WILDLIFE MANAGEMENT AND THE RISE OF NON-COOPERATIVE FEDERALISM

In the larger discussion of wildlife federalism, especially when the Endangered Species Act does not apply, states and the federal government should cooperate on a larger ecosystem and landscape scale. Scientific research is showing how state wildlife management can adversely affect adjacent federally protected lands.²⁸⁸ More importantly, state practices can dramatically impact these intricate ecosystems because they spread well beyond traditional federal-state borders. For instance, while Yellowstone National Park occupies about 2.2 million acres,²⁸⁹ the Greater Yellowstone Ecosystem spreads across 22.6 million acres throughout Wyoming, Idaho, and Montana.²⁹⁰

Yellowstone's sprawling ecosystem is home to massive mule deer and pronghorn migrations with "overland routes that rival in distance the movement of wildebeests on the Serengeti Plain and caribou in the Arctic."²⁹¹ Such large-scale migration patterns play essential ecological and cultural roles for wildlife as they show the survival instincts passed on to each new generation.²⁹² They also demonstrate that a landscape-based perspective is crucial because "looking primarily at pieces of these [ecosystems] instead of the whole" can lead to overharvesting of wolf populations and delayed species recovery.²⁹³ Thus, studying the greater ecosystem—at a landscape scale—helps federal, state, and tribal stakeholders understand how species interact, and know exactly what impacts local wildlife populations.²⁹⁴

In Alaska, state predator control and hunting regulations have not only impacted control-area populations, but also drastically reduced

288. Borg et al., *supra* note 42, at 11; Schmidt, Burch, & MacCluskie, *supra* note 42, at 18.

289. Yellowstone National Park occupies 2,221,766 acres or 3472 square miles. NAT'L PARK SERV., PARK FACTS (2019) <https://www.nps.gov/yell/planyourvisit/parkfacts.htm>.

290. Todd Wilkinson, *Great Migrations: Keeping Yellowstone's Lifeblood Flowing*, NAT'L GEOGRAPHIC (May 2016), <https://www.nationalgeographic.com/magazine/2016/05/yellowstone-national-parks-animal-migration/>.

291. *Id.*

292. *See id.*; HABER & HOLLEMAN, *supra* note 1, at 230–31; Peterson, *supra* note 29, at 106–07.

293. HABER & HOLLEMAN, *supra* note 1, at 6.

294. *See* Wilkinson, *supra* note 290 (explaining that drought conditions and bear predation reduced local elk populations even though locals blamed the decrease on wolves).

wolf numbers within Denali National Park and the Yukon-Charley Rivers National Preserve.²⁹⁵ In 2016, the NPS ceased its twenty-two-year-long study and other wolf research programs in Yukon-Charley Rivers National Preserve because too many of the Preserve's wolves were killed.²⁹⁶ Encouraged by state wildlife regulators, hunters would shoot wolves that traveled beyond the Preserve's protective borders.²⁹⁷ In addition, the state predator control program ultimately impacted nine wolf packs in the entire park and eliminated three packs altogether, including the twenty-four-member Seventymile Pack.²⁹⁸ Yukon-Charley Superintendent Greg Dudgeon stated, "The loss of collared wolves has reduced our ability to locate packs, observe dens and conduct spring and fall population estimates."²⁹⁹

These non-cooperative federalism tactics may pose a risk to wildlife populations in the contiguous United States as well, especially to wolves. Several states adopted conservative wolf management plans early in the delisting process to accommodate federal conservation goals.³⁰⁰ Nonetheless, recent years have revealed an increased willingness by states to lethally control wolf populations, especially as the conservation goals conflict with ranching uses on public lands.³⁰¹ Even more concerning is the rise in hunting practices that decimate wolf populations.

One such practice is the use of "Judas wolves" where "states' hunters collar a 'Judas wolf' that leads them back to its pack; the collared wolf then watches the hunters kill its entire pack but is spared so the hunters can slaughter the next pack that it joins."³⁰² Some private hunt-

295. See generally Borg et al., *supra* note 42; Schmidt, Burch, & MacCluskie, *supra* note 42.

296. Hiar, *supra* note 33; see also Sean Cockerham, *Collared Wolves Killed During Aerial Predator Control*, ANCHORAGE DAILY NEWS (Sept. 27, 2016), <https://www.adn.com/alaska-news/article/collared-wolves-killed-during-aerial-predator-control/2010/03/19/>.

297. Hiar, *supra* note 33.

298. *Id.*

299. *Id.*

300. Robert B. Keiter, *Breaking Faith with Nature: The Bush Administration and Public Land Policy*, 27 J. LAND RESOURCES & ENVTL. L. 195, 235-36 (2007) ("[T]he wolf population continues to proliferate and to disperse into new territory that extends into eastern Oregon, northern Colorado, and northern Utah. These states have responded by adopting their own wolf management plans, hoping to avoid federal oversight by giving the wolf some room to roam.").

301. Peterson, *supra* note 29, at 189-94.

302. Lininger & Lininger, *supra* note 58, at 213-14.

ers can even use government radio collars to track wolves by intercepting the collar's signal, monitoring the government's telemetry, or gaining access to the government's frequencies.³⁰³ These methods are especially concerning because of the large numbers of collared wolves within both Denali National Park and Yellowstone National Park.³⁰⁴ However, even solo kills by licensed hunters on state lands can adversely affect park packs. For example, when private hunters legally killed Yellowstone's stalwart '06, an alpha female, in 2012 outside park borders, her pack immediately fragmented.³⁰⁵ As a result, wolf conservationists and park officials continue to express concerns over adjacent state-based wolf management as the USFWS delists gray wolves.³⁰⁶ Many also call for expanded park boundaries and buffer zones to ensure species protection.³⁰⁷

The preemption doctrine suggests that wildlife regulatory authority on federal lands belongs to the federal administrative agencies and Congress.³⁰⁸ While each national park and preserve operates under a different statute,³⁰⁹ the NPS still manages each "to provide for the enjoyment of the scenery, natural and historic objects, and wildlife . . . as will leave them unimpaired for the enjoyment of future generations."³¹⁰ Moreover, the NPS must minimize the human impacts on wildlife populations and ecosystems,³¹¹ which creates an inherent conflict with any state engaging in wildlife management that creates unbalanced predator-prey relationships.³¹² Where the state's wildlife policies dominate and ultimately usurp federal policies, federal agencies can assert their constitutional authority to protect public lands and wildlife. While such state regulations may not run into conflict with

303. *Id.* at 225–27; Peterson, *supra* note 29, at 93; *see also* Clynes, *supra* note 128 (reporting that while looking for wolves in Denali, the pilot said, "I'm just going to make one pass . . . Some of the guys in these houses here, if they see me circling, they'll come out and try to find what I'm looking at and shoot it.").

304. Lininger & Lininger, *supra* note 58, at 216.

305. Peterson, *supra* note 29, at 95.

306. *See* Peterson, *supra* note 29, at 93–94; Robbins, *supra* note 45.

307. Peterson, *supra* note 29, at 93–94.

308. *See* *United States v. Grimaud*, 220 U.S. 506, 517 (1911); *Wyoming v. United States*, 279 F.3d 1214, 1227 (10th Cir. 2002).

309. Outka, *supra* note 49, at 170.

310. 54 U.S.C. § 100101(a) (2017).

311. NAT'L PARK SERV., *supra* note 219, at § 4.4.1.

312. Nie et al., *supra* note 38, at 878–79.

the NPS in other areas of the country, Alaska and the American West hold such vast tracts of public lands that overlapping wildlife management is bound to raise wildlife federalism issues.

Outside of the endangered species context, Alaska's war on wolves manifests the core wildlife federalism conflicts rife in public lands management, especially where 60% of the lands within the state remain subject to federal control.³¹³ After all, "[e]cosystem processes do not respect jurisdictional or ownership boundaries."³¹⁴ The traditional approach to lands management was an individual, parcel-by-parcel approach to maximize economic output.³¹⁵ However, as development confined protected ecosystems to smaller areas, policy shifted to an ecosystem-based approach, which emphasized comprehensive and landscape-scale public lands management, especially for wide-ranging species.³¹⁶ That landscape-scale approach needs to be the basis for wildlife federalism to reduce the inherent conflicts in opposing state and federal wildlife policies.

Another method that may help accomplish landscape-scale wildlife management is the restoration, and potential expansion, of a buffer zone around Denali National Park to extend wildlife protections into state lands. From 1972 until his death in 2009, prominent wolf researcher Gordon Haber advocated for a buffer zone to prevent Denali wolf pack losses and adverse environmental impacts, like the 2016 loss of the East Fork pack.³¹⁷ While Denali National Park and Preserve encompasses a massive 6 million acres,³¹⁸ the government boundaries "do

313. Sam Friedman, *Alaska Sues Interior Department Over Hunting Rules*, DAILY NEWS-MINER (Jan. 13, 2017), http://www.newsminer.com/news/alaska_news/alaska-sues-interior-department-over-hunting-rules/article_7ade579c-da09-11e6-84f4-53e4c52f4779.html (Alaska Attorney General Jahna Lindemuth reported: "Alaskans depend on wildlife for food. These federal regulations are not about predator control or protecting the state's wildlife numbers . . . These regulations are about the federal government trying to control Alaskans' way of life and how Alaskans conduct their business."); Fears, *supra* note 40 ("The federal government has bent over backwards to work with the state and found that [sic] had a responsibility to preempt their rules. Now Trump wants the Parks Service to review those regulations. The American public deserves to know what's going on in Alaska with our national conservation areas.").

314. Guercio & Duane, *supra* note 53, at 289.

315. *Id.*

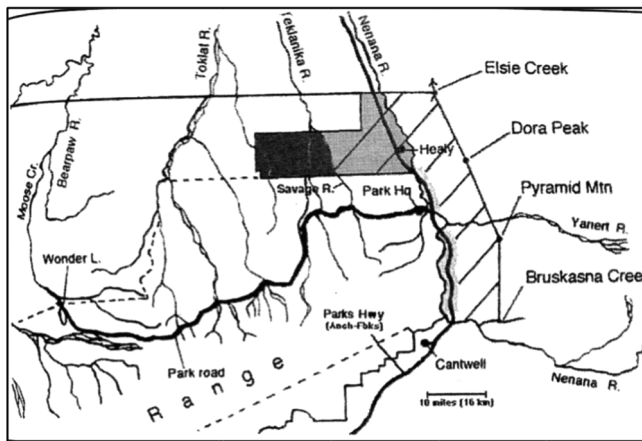
316. *Id.* at 289, 292–93.

317. See HABER & HOLLEMAN, *supra* note 1, at 191–92, 255–56.

318. NAT'L PARK SERV., PARK STATISTICS (2019) <https://www.nps.gov/dena/learn/management/statistics.htm>.

not align with the world-class wildlife system's most important ecological boundaries, especially in the northeastern area, where Denali's most important wildlife wintering area is left largely unprotected."³¹⁹ The "Wolf Townships" area that juts into the northeastern section of Denali National Park remains "[t]he most glaring omission from true ecological boundaries" because it "is an essential and regular part of the wolves' natural ecosystem territory" (see Figure E).³²⁰ Despite ANILCA's mandate for the protection of "natural behavior, patterns, and processes for all park wildlife" in Denali, the wolves remain targets of trappers and hunters in these areas.³²¹

*Figure E: Gordon Haber's Proposed Buffer Zone*³²²



The dark gray area shows the 2004 to 2010 buffer zone, and the light gray expansion shows the additional buffer area necessary to protect wolves.

Likewise, the NPS and ABOG could collaborate to manage sensitive areas to ensure the protection of federal wildlife resources, especially where migratory and wide-range species consistently move back-

319. HABER & HOLLEMAN, *supra* note 1, at 192.

320. *Id.*; see also DENALI WOLF MONITORING, *supra* note 23 (showing a map of wolf pack home ranges in 2015, with many pack territories expanding beyond park boundaries).

321. HABER & HOLLEMAN, *supra* note 1, at 192-94.

322. *Id.* at 195.

and-forth across park boundaries. Finding the right balance is especially important as the number of hunters decline, and park visitations rise. A recent U.S. Fish and Wildlife Service report “found 2.2 million fewer hunters in America now than in 2011,” while “national parks have seen a 13% increase in visitors over the past two years, and welcomed a record-setting 331 million people in 2016.”³²³ Hunting remains a vital interest in Alaska, as well as other Western states, because it generates state revenue and provides a crucial food source to subsistence users.³²⁴ However, wildlife viewing and tourism also play a huge economic role, with the “fishing and visitor industries generat[ing] a sustainable economic impact of almost \$12 billion annually.”³²⁵ Denali National Park alone brings more than 600,000 visitors a year to Alaska.³²⁶

This is not to say that any one use or user should dominate another, or that federal interests outweigh state interests. The goal of wildlife federalism is cooperation between federal and state authorities to protect the vital interests both have in the local wildlife. Ultimately, cooperative wildlife federalism could help ensure balanced hunting interests, increased wildlife viewing and tourism revenue, ecological integrity, and a variety of other stakeholder interests. In contrast, non-cooperative federalism risks damaging the wildlife populations and important corresponding state and federal interests.

Nevertheless, when cooperation is not possible—as demonstrated in Alaska—then the federal government can actively assert more of its constitutional authority to regulate wildlife, even on state and private

323. *Secretarial Order on Hunting is a Solution in Search of a Problem*, NAT'L PARKS CONSERVATION ASS'N (Sept. 15, 2017), <https://www.npca.org/articles/1643-secretarial-order-on-hunting-is-a-solution-in-search-of-a-problem>.

324. Mike Leahy et al., *Hunters and Anglers: Fueling Our Nation's Economy and Paying for Conservation*, NAT'L WILDLIFE FED'N, <https://www.nwf.org/~media/PDFs/Water/WOTUS%20Econ%20fact%20sheet%203252014.pdf> (last visited Oct. 21, 2019); *Subsistence Hunting in Alaska*, ALASKA DEP'T FISH AND GAME: SUBSISTENCE, <http://www.adfg.alaska.gov/index.cfm?adfg=subsistence.hunting> (last visited Oct. 21, 2019); Riley Woodford, *The Economic Importance of Alaska's Wildlife: Wildlife Generates Billions for Alaska*, ALASKA FISH & WILDLIFE NEWS (June 2014), http://www.adfg.alaska.gov/index.cfm?adfg=wildlifenews.view_article&articles_id=664.

325. Tony Knowles, *Let's Protect Alaska's Other Permanent Fund—Our Fish and Wildlife*, ANCHORAGE DAILY NEWS (Aug. 12, 2017), <https://www.adn.com/opinions/2017/08/12/lets-protect-alaskas-other-permanent-fund-our-fish-and-wildlife/>.

326. *Id.*

land, to protect populations on federal public lands. Continuing to prioritize one user group (i.e. consumptive over non-consumptive) runs the risk of damaging both predator and prey populations, and reducing the natural integrity of protected public lands, as demonstrated by recent scientific studies.³²⁷ Thus without state cooperation, the federal agencies can more actively assert their constitutional authority to fulfill their statutory obligations.³²⁸

VI. CONCLUSION:

IN THE FACE OF NON-COOPERATIVE FEDERALISM, AGENCIES CAN ASSERT CONSTITUTIONAL AUTHORITY FOR WILDLIFE MANAGEMENT

Alaska demonstrates that the wolf's fate is closely tied to federal-state relations, "especially out West, where admiration for Washington and its edicts tends to run thin."³²⁹ As public lands and protective federal statutes come under attack—including the Endangered Species Act and the Migratory Bird Treaty Act³³⁰—it is increasingly important to understand what constitutional provisions are available to manage wildlife on public lands. Likewise, as conservation groups question the future of predators removed from the Endangered Species List,³³¹ they

327. See Borg et al., *supra* note 42, at 11; Schmidt, Burch, & MacCluskie, *supra* note 42, at 1.

328. See, e.g., 54 U.S.C. § 100101(a) (2017).

329. Clyde Haberman, *For Gray Wolves, a Success Story Not Without Detractors*, N.Y. TIMES (Nov. 2, 2014), <https://www.nytimes.com/2014/11/03/us/for-gray-wolves-a-success-story-not-without-detractors.html>.

330. Amanda Peacher, *Trump Administration Considers Rule That Would Weaken Endangered Species Protections*, BOISE STATE PUBLIC RADIO (Apr. 5, 2018), <http://boisestatepublicradio.org/post/trump-administration-considers-rule-would-weaken-endangered-species-protections#stream/0>; Lynn Scarlett, *Analysis: Reinterpretation of Migratory Bird Treaty Act Runs Counter to Spirit of the Law*, CORNELL LAB OF ORNITHOLOGY (Mar. 29, 2018), <https://www.allaboutbirds.org/analysis-reinterpretation-of-migratory-bird-treaty-act-runs-counter-to-spirit-of-the-law/>; *The Looting of America's Public Lands*, N.Y. TIMES (Dec. 9, 2017), <https://www.nytimes.com/2017/12/09/opinion/sunday/looting-americas-public-lands.html>.

331. See *Groups Challenge Decision to Remove Yellowstone Grizzly Protections*, NAT'L PARKS CONSERVATION ASS'N (Aug. 30, 2017), <https://www.npca.org/articles/1621-groups-challenge-decision-to-remove-yellowstone-grizzly-protections> ("[T]he Yellowstone population needs continued protection, not a new threat of state-sponsored trophy hunting.").

will seek a broader range of legal tools to protect wildlife from over-harvest. Wolves cause particular concern as they spread through the contiguous United States and lose the protections of the stalwart Endangered Species Act.³³²

Undoubtedly, Alaska has vast interests in ensuring subsistence hunting for state residents and indigenous tribes, as well as maintaining revenue from wildlife viewing and hunting.³³³ However, the federal government also maintains vital interests in its lands and resources in Alaska, many of which inspired the conservation movements to protect wilderness areas across the nation.³³⁴ The Constitution allows broad federal authority to trump the state's actions where incompatible state and federal policies adversely impact national resources, including wolves. As stated in *Kleppe*, “the power granted by the Property Clause is broad enough to reach beyond territorial limits,” and the “power over the public land thus entrusted to Congress is without limitations.”³³⁵

As such, the federal government, including federal agencies, has constitutional authority to regulate wildlife, especially when state law and actions affect the biological and ecological integrity of federal public lands intended—at least in part—to protect wildlife populations. Such assertions of authority over wildlife will, of course, be intrusive to states—like Alaska—where state wildlife policies diametrically oppose federal policies. Nevertheless, a more comprehensive examination of non-cooperative wildlife federalism is likely to reveal a continuum of relationships between state and federal wildlife policies, allowing for more nuanced and less intrusive federal regulations in other situations. Equally important is the understanding that the Endangered Species Act,³³⁶ the Migratory Bird Treaty Act,³³⁷ and other similarly protective statutes are not the only vehicles available to federal agencies to protect the ecological integrity of federal public lands with wildlife preservation purposes. Ultimately, it is the Constitution that provides such expansive and comprehensive protective authority for federal wildlife management.

332. See HABER & HOLLEMAN, *supra* note 1, at 227–33; Peterson, *supra* note 29, at 189–94; Haberman, *supra* note 329.

333. ALASKA DEP'T FISH AND GAME, *supra* note 324; Woodford, *supra* note 324.

334. Clynes, *supra* note 128.

335. *Kleppe v. New Mexico*, 426 U.S. 529, 538–39 (1976).

336. 16 U.S.C. §§ 1531–1544 (2017).

337. 16 U.S.C. §§ 703–712 (2017).