Check for updates

Article

Nature and Space

'Canadian wolves are wildlife terrorists': Interrogating the social construction of the New West's 'super-wolf'

EPE: Nature and Space
1–34
© The Author(s) 2026
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/25148486261502273
journals.sagepub.com/home/ene
Sage

Jeff Vance Martin[1], Tandeep Sidhu[2], Kristina Beggen[3], and Stephanie Rutherford[4]

Abstract

The return of gray wolves (*Canis lupus*) to the Northern Rocky Mountain (NRM) region of the United States since the 1990s is often hailed as a conservation success story. However, this success has not been without controversy, including the pervasive idea that the 'wrong' wolf was reintroduced from Canada. The claim that so-called 'Canadian super-wolves' are a non-native and hyper-violent subspecies is then utilized to justify violence against and lethal control of wolf populations and to stymie conservation efforts. Within the field of taxonomy, delineating between subspecies is complicated and fraught, especially in the case of canids' messy genetic lineages. Yet opposition today is frequently couched in terms of biological non/belonging through an appeal to nativeness. Using a political ecological analysis, this paper interrogates the 'Canadian super-wolf' discourse as biologically misleading but also a reflection of broader political-economic anxieties and regional transformations. While assertions of wolf impacts on livestock production and elk populations in the NRM do not hold up to empirical scrutiny, an eye toward scale and geographical context helps explain the durability of such claims. We argue that understanding the narrative of 'Canadian super-wolves' necessitates engagement with the particular context to which wolves have returned – the 'New West,' in its cultural and political-economic dimensions – and the ways in which they are enrolled in broader social struggles. Wolves have been made into a monstrous, invading threat – shorthand and scapegoat for anxieties surrounding land use, rural livelihoods, and identity – one subject to a nativist reaction with roots in settler colonialism and ideas of wilderness. We conclude that the wolf question is fundamentally social and ideological, and that understanding its dynamics as inextricably material and meaningful highlights the value of critical and transdisciplinary attention to human-wildlife conflict and conservation. *Content Warning: Contains an image of a dead wolf held by a hunter (Figure 4).*

[1]USDA Forest Service Pacific Southwest Research Station, Arcata, CA, USA
[2]Department of Sociology and Criminology, University of Manitoba, Winnipeg, Canada
[3]Department of Sociology and Environmental Studies Program, University of Oregon, Eugene, OR, USA
[4]School of the Environment, Trent University, Peterborough, Canada

Corresponding author:
Jeff Vance Martin, USDA Forest Service Pacific Southwest Research Station, 1700 Bayview Street, Arcata, CA, USA.
Email: j.vance.martin@gmail.com; Jeffrey.Martin4@usda.gov

Keywords
American West, animal geographies, human-wildlife conflict, nativism, taxonomy

Introduction

The return of gray wolves (*Canis lupus*; hereafter *C.l.*) to the U.S. Northern Rocky Mountain (NRM) region presents an emblematic instance of human-wildlife conflict and a politically contested challenge for contemporary wildlife management. Anti-wolf sentiment in the American West has largely been framed around the impacts of predation on livestock and wild game species, yet is also linked with anxieties surrounding regional transformations and perceived threats to livelihood (Martin, 2021b; Richardson, 2022; Urbigkit, 2008). Pro-wolf voices have frequently challenged these concerns, pointing to the relatively minor impacts of wolf return at the sectoral level, the steady increase in regional elk populations, as well as wolves' ecotourism benefits and ecological value in landscape scale restoration (Beggen and York, 2025; Kareiva et al., 2022; Ripple et al., 2025). However, polarization and antagonism continue – some 30 years since wolves' return to the region and seemingly disproportionate to their material impacts – highlighting the ongoing need for social science attention to the thorny 'human dimensions' of wolf management (Baruch-Mordo et al., 2009; Bruskotter and Shelby, 2010; Young et al., 2015).

There is a pernicious belief in the NRM that wolves captured and released from Canada[1] are a distinct subspecies, larger and more aggressive than their historical predecessors in the region. The descendants of reintroduced wolves have been referred to as the 'Canadian super-wolf,' 'weapons of mass destruction,' and 'wildlife terrorists' (Fawn, 2011; Hatch, 2016; Polley, 2025; Ring, 2008; Urbigkit, 2008), suggesting that they are a non-native and/or invasive species, and invoking a xenophobic dimension to anti-wolf opposition. As one former U.S. Fish and Wildlife Service (USFWS) wolf recovery coordinator observed, 'anybody that calls 'em 'Canadian wolves' are anti-wolf.' Here we interrogate the social construction of the 'Canadian super-wolf,' analyzing a prominent regional discourse that has thus far remained under-examined in the academic literature.

A growing body of research has engaged the human dimensions of wildlife conflict and coexistence (Clark et al., 2005; Frank et al., 2019; Woodroffe et al., 2005), challenging the premise that management decisions are solely influenced by natural science and ecological factors (Anderson, 2021; Artelle et al., 2018; Eichler and Baumeister, 2018). More recently, scholars have also explored the *political* dimensions of such questions, through insights from political ecology (Fletcher et al., 2023; Margulies and Karanth, 2018; Martin, 2024), and intersecting with work from critical animal geographies and engagements with settler colonialism, raising questions of where species belong and who decides (Beggen and York, 2025; Emel, 1995; Philo and Wilbert, 2000; Sidhu et al., 2026). Wolves present a rich example of polarizing wildlife conflict given their historical and symbolic associations (Lopez, 1978; Marvin, 2012; Wilson, 1997): one of 'surplus antagonism,' in which opposition appears to far exceed adverse economic impacts (Martin, 2020; 2024; Ortner, 2006), and a parallel process in which advocates often overplay the benefits of wolf recovery (Mech, 2012; Middleton, 2014). Furthermore, as wolves are enrolled in national level 'culture wars,' debates surrounding their management are difficult to separate from broader regional divides and political discourse (Martin, 2021a; Swette et al., 2023; Wuerthner, 2020).

Through a lens informed by political ecology, science and technology studies, and the environmental humanities, we explore here the discursive figure of the 'Canadian super-wolf' in order to investigate broader dynamics of wildlife enrollment in political struggles. We argue that the wolf question is best understood as a *social* phenomenon, serving alternatively as a metaphor for immigration and a proxy for regional socio-economic anxieties. 'Canadian super-wolf' discourse draws

our attention to the articulation of conservation with settler colonial legacies (Gillespie and Narayanan, 2020) and the persistence of nativeness arguments within conservation itself (Robbins and Moore, 2013; van Eeden et al., 2025). Although usually dismissed by wolf proponents (as in the quote above), the question of non/belonging highlights taxonomic ambiguity and the unavoidable politics of science. Opponents, who elsewhere express distrust of science, ironically invoke subspecies taxonomy to contest wolves' legitimacy in place, thereby turning an arguably native animal into a monstrous foreign invader and even a 'terrorist.' Such moves 'biologize' geopolitical borders, even as science itself increasingly dissolves the boundaries being policed. Yet these discursive moves are predicated on the durable appeal to nature within conservation as a presumed neutral justification of policy, which hinders the ability of conservationists to effectively contest anti-wolf opposition.

This case study of the so-called 'terrorist' 'Canadian super-wolf' adds to a growing literature concerning the intersection of animality, race, and settler colonialism (Beggen and York, 2025; Gillespie and Narayanan, 2020; Kim, 2015). In what follows, we lay out the history of wolf return and subsequent conflict in relation to the unsettled science and popular understandings of taxonomy, the regional history of settler colonialism, and related debates over nativeness and non/belonging. We then turn to a critical engagement with wolf conflict in the region – informed by our author team's respective experience working on these questions across Canada and the U.S. – exploring how the framing of wolves as non-native or invasive articulates with racialized discourse, contemporary economic fears, and other socio-political anxieties related to wolf return. We conclude by examining the implications of this analysis for future research regarding the socio-political dimensions of wildlife management, with the aim of informing effective conservation practice amid the polarization of our times.

Background

Restoration and return

Wolves were once among the most widely distributed species in North America, but were extirpated across much of their former range over the 19th and early 20th centuries (Fogleman, 1989; Mech and Boitani, 2010; Smith and Bangs, 2009). In colonial America, removal of wolves was linked to European socio-cultural fears stemming from their mythologized representation as menacing, dangerous, and evil, as well as the perceived threat they posed to livestock and game species (Donalson, 2006; Emel, 1995; Fogleman, 1989; Jones, 2010; Pluskowski, 2006; Wise, 2016). Rutherford (2022) demonstrates how sensationalist accounts framed wolves as an existential threat to the burgeoning expansion of economic activities on the colonial 'frontier.' Like other predatory species, wolves were viewed as an impediment to colonialism and incompatible with settler land uses such as ranching and homesteading – solidifying their construction as villainous interlopers and impediments to nation building, and making them a target for destruction (Beggen and York, 2025; Coleman, 2008; Smalley, 2017; Wise, 2016).

State-sponsored bounty programs saw wolves shot and trapped by both state agents and the public across much of North America (Beggen and York, 2025; Smith and Bangs, 2009; Wise, 2016). Poison followed, with strychnine-laced carcasses used to great effect during the nineteenth century, alongside the slaughter of bison across the Great Plains and prairies (Emel, 1995; Jones, 2010; Wise, 2016). In the U.S., the work of 'wolfers' was eventually professionalized through the establishment of the Bureau of Biological Survey, a precursor of the USFWS – a likely factor in the successful extirpation of wolves in the U.S. vis-à-vis Canada, which never moved beyond the bounty system (Rutherford, 2022). While it is unclear how many wolves were killed during the colonization of the West, estimates suggest several hundreds of thousands (Leonard et al., 2005); by the

1930s, wolves had been extirpated from nearly all their historic range in the U.S., barring remnant populations in Alaska and the Great Lakes region (Bangs and Fritts, 1996; Lopez, 1978; Smith and Bangs, 2009).

Public attitudes toward wolves began to shift over the century, however, alongside settler nostalgia for 'untamed wilderness' and in favor of conservation (Mech, 1970; Rutherford, 2022; Van Horn, 2012). Increasing scientific interest and understanding of wolf behavior and ecology dispelled some long-held assumptions about wolves and their ecological un/importance. The elk population in the NRM region had grown to an ecologically unsustainable level following wolf removal and policy limiting intrusive management (Leopold et al., 1963; Wagner et al., 2006; Weaver, 1978). Additionally, the ESA (87 Statute 884, Public Law 93-205, December 27, 1973) established a legal mandate to protect and restore endangered species, with wolves among the first to be added to the legislation in 1974. While wolves had also begun the process of naturally recolonizing the NRM by the early 1980s, they had failed to establish a permanent population in the region (Bangs and Fritts, 1996; Fritts et al., 1997; Smith and Bangs, 2009). Although the National Park Service (NPS) and managers with the USFWS faced several early roadblocks, following decades of planning and political negotiations wolves were finally reintroduced from Canada in the mid-1990s. Thirty-one wolves were captured in British Columbia and Alberta and released in Yellowstone National Park and central Idaho in 1995 and 1996 (Bangs and Fritts, 1996; Fischer, 1995; Fritts et al., 2001; Smith and Bangs, 2009).

As wolves expanded in numbers and range over the subsequent years, pressure mounted for ESA delisting and for management to be handed over to the states. Yet as wolves have returned to landscapes from which they have been absent for decades, so too has socio-political conflict in shared landscapes (Clark et al., 2005; Nie, 2002; 2003; Wilson, 1997). An emblematic instance of human-wildlife conflict (Frank et al., 2019; Woodroffe et al., 2005), wolf issues are largely framed around the threat of predation on livestock and wild game species, yet also bound up with broader regional anxieties that appear to extend far beyond the animal itself. Thus while wolf recovery has been often hailed as a conservation success story, even attaining a mythic status in the public imagination (Mech, 2012), attitudes remain uneven, with significant and persistent anti-wolf animosity – 'wolf wars' (Fischer, 1995) – across the NRM (Figure 1).

On the more extreme end, conspiracy theories abound surrounding reintroduction, including often hyperbolic discussions of the effects of wolf return on rural livelihoods and safety, and arguments for wolf removal (legally or illegally; Figure 2). Such articulations are commonplace across the range of geographies to which wolves are returning, either through reintroduction or in-migration. In Norway and France, for instance, rumors around clandestine government and environmentalist reintroduction of wolves are widespread among those who suffer their depredations (Skogen et al., 2008). In Greece, Theodorakea and von Essen (2016) note that, in addition to being secretly released, these wolves are thought to be genetically impure hybrids. Komi (2025) illustrates how hunters and advocacy organizations have amplified the rumor that wolves in Finland are wolf-dog hybrids of Russian origins while wolves in Norway have Latvian roots. These authors, along with many others working in the European context, see these narratives as a form of popular cultural resistance whereby feelings of marginalization – around lost economic opportunities, changing lifestyles, and intrusion by outside state forces – are displaced onto bodies of wolves (Skogen et al., 2008; Skogen and Krange, 2003; von Essen, 2015; compare Martin et al., 2025 on similar dynamics across cases in the American West).

Taxonomy, nativeness, and (non)belonging

A frequent element of such discussions is the idea of the 'Canadian super-wolf,' the argument that reintroduced animals and their descendants represent a fundamentally distinct subspecies from

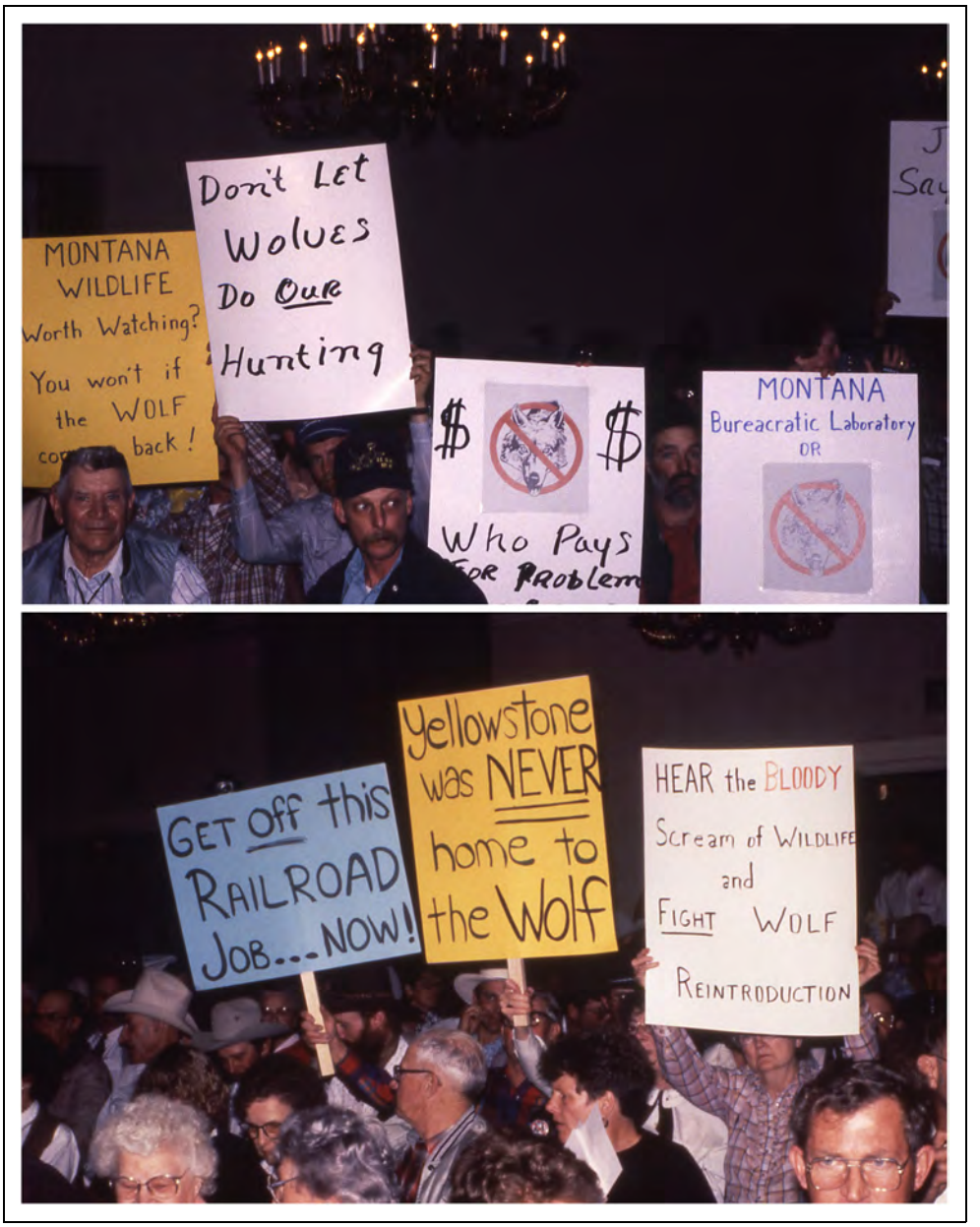


Figure 1. Montana anti-wolf protests, 1991–1996. Images from Yellowstone National Park's Photo Collection (public domain). Signs read: (A) 'MONTANA / WILDLIFE / Worth Watching? / You won't if / the WOLF / co[mes] back!'; 'Don't LEt / Wolves / Do OuR / Hunting'; '$ $ / Who Pays / [F]or Problem / [cut off]'; 'MONTANA / Bureaucratic Laboratory / OR / [cut off]'; (B) 'GET Off this / RAILROAD / Job…NOW!'; 'Yellowstone / was NEVER / home to / the Wolf'; 'HEAR the BLOODY / Scream of WILDLIFE / and / FIGHT WOLF / REINTRODUCTION.'.

those that previously populated the NRM region. This narrative frames wolves as 'invaders' and even 'terrorists,' and has proliferated in populist discourse in the region and across social media (Hatch, 2016; Polley, 2025; Sidhu et al., 2026; Urbigkit, 2008), even being used as a political



Figure 2. Anti-wolf bumper stickers (originally from gunshirts.com (above), and smokeapackaday.com (below), reproduced under Fair Use). Text reads: (A) 'SHOOT. SHOVEL. SHUT UP'; (B) 'SUPPORT YOUR / LOCAL RANCHER'; (C) 'SAVE OUR ELK / SHOOT A WOLF'; and (D) 'SMOKE A PACK A DAY / IDAHO.' 'Shoot, shovel, and shut up,' also known as the '3-S' treatment, refers to the illegal and clandestine lethal removal of animals, often framed in terms of the defense of community, livelihood, and/or property (compare Griffin et al., 2019; Jacoby, 2003; Thompson, 2013 [1975]). Wolf poaching was more frequently discussed in the NRM prior to federal delisting and the expansion of public hunting and lethal control by state management agencies.

tool to halt more recent reintroduction efforts in Colorado (Gruver, 2025; Hatch, 2016; Polley, 2025). While frequently dismissed out of hand by scientists and conservationists, as seen in the quote in the introduction, the question of wolf non/belonging in the NRM presents a complex political ecological question bound up with the ambiguities of taxonomy and the history of settler colonialism.

Taxonomy is a messy business. While understood colloquially as both authoritative and settled, taxonomy is an evolving field of science, one that constructs, renders legible, and calcifies species divides, operating as a form of 'ontological governance' of life (and indeed nonlife) (Povinelli, 2016). While the species concept itself is 'deeply ambiguous,' with debates among morphological, phylogenetic, and ecological strands (Agapow et al., 2004: 162; see also Wilkins and Doak, 2009), taxonomy is powerful precisely because the political orientations of classification are obscured. Taxonomy, then, is more than a straightforward biological classification; instead, it can operate as a form of politics by other means (Bowker and Starr, 2000; Latour, 1993). The delineation of subspecies is even trickier, with the development and recognition of such categorizations characterized by historical contingency and subjectivity (Cronin et al., 2015). Nonetheless, the way that taxonomy is deployed as a form of truth can authorize all sorts of conservation or annihilation discourses and interventions, especially if species are seen as invasive, hybrid, or outside their historically identified range – all the while appearing fundamentally apolitical (Mitchell, 2016; Probyn-Rapsey, 2016; van Eeden et al., 2025).[2]

Nowhere is the slipperiness of taxonomy clearer than in what wolf biologist L. David Mech (2011) has termed '*Canis lupus soupus*.' The science of wolf taxonomy remains distinctly unsettled (Chambers et al., 2012; Cronin et al., 2015; Rutledge et al., 2010; Way and Lynn, 2016; Weckworth et al., 2015), with complex and messy genetic lineages that include gray, red, arctic, Mexican, coastal, and brush wolves (actually coyotes, *Canis latrans*). The mass killing of wolves in both the U.S. and Canada led to even more genetic mixing, as wolves turned to coyotes as potential mates. As a result, we have seen the emergence of 'coywolves' or eastern coyotes (*Canis latrans var.*), a hybrid of primarily wolf and coyote, with some dog genes in the mix (Flores, 2016; Rutherford, 2018).

This genetic complexity is further complicated by scientific debates over the number of wolf subspecies. Hall's (1981) morphological research found 24 distinct wolf subspecies in North America, a number that has steadily been revised downward, yet which still holds cultural and political currency. Nowak (1995) revised the figure to five, and laid the foundation for delineating geographic boundaries for each subspecies. Most pertinent to the narrative of the 'Canadian super-wolf' are *C.l. occidentalis* (Northwestern), which inhabited south central Alberta into the Northwest Territories and the Yukon, *C.l. irremotus* (NRM), which also inhabited south-central Alberta while expanding across Montana, Idaho, and Wyoming, and *C.l. nubilus* (Plains), which inhabited southern Saskatchewan, northeastern Montana, and the American Great Plains. Relevant, too, is the often-debated eco-geographical 'Bergmann's rule,' which suggests that larger animals within a species are found in colder (and thus higher-latitude) environments – indicating a broad trend toward greater size in wolves from more northern climes (Ashton et al., 2000; McNab, 1971; Meiri and Dayan, 2003; on wolves specifically, see Geist, 1987 and Meiri et al., 2007).

The debate in the literature now also encapsulates the issue of subspecies and geographic distributions. *C.l. irremotus* was collapsed by Nowak (1995) into *C.l. nubilus*, while all wolves in south-central Alberta were reclassified as *C.l. occidentalis*. Wolves who lived in the northern reaches of Montana and across Western Canada were classified as *occidentalis*, while wolves who lived in the United States were classified as *nubilus*. While Nowak's delineation of subspecies is generally accepted, issues pertaining to geographic boundaries and the interspecies variation is the subject of greater debate (Chambers et al., 2012; Cronin et al., 2015; Gonzalez-Bernal et al., 2022; Weckworth et al., 2015). A growing body of scholarship argues that defining species' geographic boundaries are fraught with numerous challenges, limiting the accuracy of any such efforts. This is especially the case with highly mobile and adaptable wolves, which complicate the assertion of geographical (much less geopolitical) boundedness as the marker of subspecies categorization; indeed, there are intergrading zones in which multiple subspecies of wolves can and do live (Chambers et al., 2012; González-Bernal et al., 2022). More recent literature also suggests that *occidentalis'* range includes western Canada and the northwestern United States (González-Bernal et al., 2022). Perhaps most important to this argument is that there is no evidence to suggest that *occidentalis* did not previously inhabit the northwestern United States prior to reintroduction and that *nubilus* did not live in central Alberta, as some writers have claimed (Urbigkit, 2008). Rather than rooted in scientific evidence around subspecies range, the discourse of the 'Canadian super-wolf' draws instead on more flexible (and socio-political) ideas of (non)nativeness and (non)belonging.

The notion that (sub)species belong to particular places rather than others has proved culturally enduring. This should perhaps be unsurprising given the ways in which a historically and culturally contingent 'native-introduced dichotomy' underwrites the policy and practice of much of the North American model of conservation (van Eeden et al., 2025: 2), with 'the distinction… a core guideline principle' in conservation biology (Davis et al., 2011: 153). This categorization is rooted in the notion that historical range and an absence of human intervention in species movement defines which species belong where. As van Eeden, et al. point out, however, biotic nativeness often imputes value, particularly in Western conservation, with nativeness conceived of as an unalloyed

good. Wildlife labeled through an imprecise and ill-defined lexicon as invasive, alien, exotic, introduced, or otherwise out of place (Chew and Hamilton, 2011; Hall, 2003) are often singled out for removal from the 'natural' landscape, obscuring broader political and economic factors associated with these public policy decisions. Yet as Davis, et al. point out, 'nativeness is not a sign of evolutionary fitness or of a species having positive effects' (2011: 153). Indeed, the assumption that introduced species have an automatically deleterious effect on ecosystems is belied by evidence that points to their frequent positive impacts, especially around ecosystem services (Davis et al., 2011; Mascaro et al., 2012; Sax et al., 2022).

The relevance of the non/native socio-cultural construction further loses coherence if we consider species movement alongside the ecological changes wrought by the Anthropocene (Hill and Hadly, 2018; Warren, 2023). Political ecologists have long asserted that nature separate from culture is a fiction, noting there have, since our species' arrival, never been 'pure' natures untouched by humans (Castree and Braun, 2003; Harvey, 1996; Smith, 2010 [1984]; Williams, 1980). Efforts to establish ecological baselines are thus murky at best, even as they serve as the basis of much ecological restoration. Such efforts are further complicated by the acceleration of ecosystem change: climate change, ocean acidification, urbanization, habitat fragmentation, and mega-fires, among other earth-reshaping processes, have remade much of the earth into 'hybrid' or 'novel' ecosystems (Hobbs et al., 2006, 2009, 2014; Marris, 2011; Schläppy and Hobbs, 2019), comprised of species combinations with no historical referent. These conditions amplify the inseparability of nature and culture, giving further credence to calls to rethink the non/native divide in conservation management (Davis et al., 2011; Karieva et al., 2017; van Eeden et al., 2025).

Despite this, much of the popular resistance to wolves introduced to the NRM region is expressed in terms of the nonnativeness of *C.l. occidentalis* – a framing that works, arguably, because such concepts remain in ongoing use within ecology. The so-called 'Canadian wolf' is popularly described as a larger, stronger, more aggressive, and importantly *foreign* subspecies, one that does not belong in the United States (Figure 3). Such narratives emerged initially with the reintroduction of wolves to Idaho and Yellowstone National Park in 1995 and 1996 on the basis of their actual relocation from Canada. These wolves were selected for reintroduction to the NRM because of their similar ecology – they came from the northern Canadian stretch of the same mountain range, and had similar prey sources to ungulate species in the recolonization zone (Fritts et al., 2001).

Diane Boyd, a wildlife biologist who has researched gray wolves since the 1970s, succinctly summarizes the tenor of this concern: 'Cries went out that these reintroduced super-wolves weighed 175 pounds and had eight canine teeth – and they were very dangerous because the most aggressive wolves had been selected for reintroduction, so they would survive no matter what' (2024: 171). Such framing is exemplified by the rhetoric of the late Ron Gillett, former director of the Idaho Anti-Wolf Coalition, who sported the vanity license plate 'NOWOLFS.' Gillett frequently referred to wolves and their environmentalist supporters using extreme and passionate language: reintroduced wolves were 'animals of mass destruction,' 'wildlife terrorists,' 'vicious, binge killers,' and 'land piranhas'; Gillett was also quoted as saying that 'If the devil had an animal, it would be the Canadian wolf' (Fawn, 2011; Ring, 2008).

While wolves' subspecies differentiation – and the implied monstrousness of those currently inhabiting the region – has been contested by conservation scientists and wildlife organizations since the Yellowstone reintroduction, such rhetoric has taken a firm hold among anti-wolf advocates. Across the region, those who would contest the 'imposition' of wolves frequently fall back on the 'Canadian super-wolf' narrative. On social media, particularly on Facebook and Reddit, one encounters references to 'Canadian transplants' and 'killing machines,' with wolf recovery programs characterized as 'Wolf Terrorist Ambush Projects.' Such posts are often accompanied by pictures of enormous dead wolves that act as purported evidence of the 'Canadian wolf' as a distinct subspecies, as well as a form of spectacle (Figure 4). Joe Rogan, the popular American



Figure 3. Poster displayed in the front window of Hailey, Idaho's Les Schwab store in 2009, some 14 years after the release of wolves in the state (Maughan, 2009). Text reads: 'Canadian Wolf Alert / Greenhorn Subdivision / March 12th 2009 / Citizens for proper management of Canadian Wolves. / Special Guest Speakers on Management. / A Public Forum … Bring Wolf Stories. / We Must Stand Together And Manage Wolves. / Where: Community Campus, Hailey Idaho / When: Saturday April 4th / Time: 6:00–10:00 PM / Sponsored By: Deer Hunters of Idaho / Are You Involved?'.

podcaster who boasted 14.5 million followers in 2024 (Carman, 2024), has even entered the debate, inviting Boyd on his podcast to talk, in part, about the fact that they 'introduced a different sized wolf' to Yellowstone (Boyd handily demystifies such a notion based on dispersal patterns, which show wolves moving between fluidly between the Yellowstone to Yukon corridor since the 1980s) (JRE, 2024: ep. 2213).

In 2020, citizens in Colorado voted – by a razor-thin margin of 50.9% – to reintroduce wolves, which had been extirpated from the state in the 1940s (Boyd, 2022). Although public surveys indicated broad support for wolves, the reintroduction strategy was always polarized (Ditmer et al., 2022; Niemiec et al., 2020). Anti-wolf advocacy groups, such as Smart Wolf Policy CO and Colorado Wolf Tracker, have leaned on 'Canadian wolf' rhetoric, and the issue has become a political hot button



Figure 4. Image of a deceased wolf held by a hunter, frequently reproduced on social media and in articles on the danger of bigger, meaner, and hungrier 'Canadian wolves' (e.g., in Foley, 2012). Its exact provenance is unknown; according to Long (2011), this same wolf was 'allegedly shot in Utah, [as well as] Idaho, Montana, Wyoming, Alaska, Alberta, British Columbia, and 'near Manitoba.".

nationally, with the U.S. president telling Colorado Parks and Wildlife in 2025 that reintroduced wolves must come from the NRM region rather than Canada (Gruver, 2025). While this is likely a strategy to end wolf translocation altogether (most NRM states have indicated they do not want to participate in the project), the objection to 'Canadian' wolves specifically is notable in a time of both heightened xenophobia and attacks on science (Gallagher, 2025; Jones et al., 2025; Nagel, 2025).

Across these examples, we can see how the mobilization of biotic non/nativeness does political work. While gray wolves are in a general sense 'native' to the NRM, they are frequently framed as out of place, both temporally anachronistic (the West has moved on from its 'wild' past) and geographically incongruous (they belong to a different habitat and, indeed, a different country). This discursive move allows the wolf to be repositioned from *native* (as well as threatened or endangered) to *invasive*, framed as a monstrous other within the contemporary cultural politics in the region. That science is deployed to buttress such claims is particularly telling. Even as the divisions between wolf (and other animal) subspecies are increasingly rendered scientifically uncertain, the *currency* of scientific objectivity and authority is marshalled in anti-wolf politics. Reification of subspecies classifications is particularly notable as it is leveraged by political actors who have simultaneously exhibited distrust around the scientific justifications for reintroduction in the first place, in what Komi has called a 'paradoxical legitimation strategy,' one grounded in our 'post-truth era' (2025: 7). As with wolves in Finland (Komi, 2025) or red wolves in the U.S. (Brewitt and Giles, 2022), the power of science is weaponized in politicized debates about predators to make claims about genetic identity and historical range. This is true of the narrative of the 'Canadian super-wolf,' where scientific debates around taxonomy are mobilized to make a 'native' species into an ecological invader.

Methodological approach

The analysis herein is based on the collective research of the author team, representing decades of combined experience with wolf conflict and coexistence efforts in the U.S. and Canada, largely from the social sciences and humanities as well as applied work with natural resource management agencies. This has included ethnographic and archival research and participant observation with a range of interested parties, including residents, hunters and outfitters, ranchers, environmentalists, and government agency employees (Anderson et al., 2023, 2026; Martin, 2021a, 2021b; Martin et al., 2021, 2025; Merz et al., 2025; Smith et al., 2025; Wilkinson et al., 2020) and complementary reflections on related themes (Beggen, 2019; Beggen and York, 2025; Martin, 2024; Martin et al., 2019; Rutherford, 2016, 2018, 2022; Rutherford et al., 2023, 2024; Sidhu et al., 2026; van Eeden et al., 2025).

We approach this case study of 'Canadian super-wolf' discourse in the U.S. NRM region from a critical geographical and political ecological perspective, one which highlights the value of qualitative methods (Drury et al., 2011; Sayre, 2004) and a 'critical-normative' engagement (Helmcke, 2022; see also Robbins, 2012). As Castree (2005) explains, case studies scrutinize phenomena *in context* and *conjuncturally*, with an emphasis on the specific ways in which local articulations alter the operation of processes across space and time – although never fully separable from processes occurring at different scales (see also Robbins et al., 2009 on the impossibility of demarcating a coherent boundary to the 'New West'). Per Helmcke (2022), case studies within political ecology particularly trace socio-environmental interrelations across scales, allowing us to effectively explore complexity, contingency, and 'dissonant knowledges' (e.g., contrary or incompatible frameworks or ways of knowing). Such an approach is less concerned with direct comparison and statistical generalizability than with the insights to be gained through deep examination of the particular, through which we may identify 'key forces' that play across scales and frames of analysis (see Hart for further work on this 'relational comparison' approach (2004, 2006, 2016); see also Burawoy's 'extended case method' (1998)). We thus assert that there remain broader lessons to be drawn from the specific (though extensive) geography of the NRM via attention to patterns and processes via transdisciplinary analyses.

Here we deploy a critical discourse analysis (CDA), an approach that interrogates how language and cultural artifacts construct, reproduce, and legitimize social structures and relations of power (Mullet, 2018). CDA allows for transdisciplinary engagement with the semiotics of cultural products (e.g., social media posts, visual imagery) as the embodiment of social practices of language which, in turn, shape ways of knowing (McClanahan and Wall, 2026; Mullet, 2018; Rutherford, 2020). CDA further allows us to explore the construction and interpretation of social reality through practices of categorization, storytelling, and representation (Brugger et al., 2020; Robbins, 2012; Said, 2014 [1978]; van Eeden et al., 2025).

The selection of thematic categories, narratives, and imagery we draw together here stems from prior research (e.g., Martin, 2020; Rutherford, 2022) as well as ongoing projects (e.g., Beggen and York, 2025; Sidhu et al., 2026) related to wolf representation and management. Quotes and broader characterization of the discourse is informed by conversations, interviews, and extensive media analysis conducted over many years, as well as a review of popular press accounts of the 'Canadian super-wolf' narrative (e.g., Hatch, 2016; Polley, 2025).[3] The core thematic elements of our CDA are informed by substantive bodies of literature that interrogate the relationship between wolves and livestock producers (Howery and DeLiberto, 2004; Ramler et al., 2014; Steele et al., 2013), wolves and ungulate populations (Niemeyer, 2007; Rotella et al., 2020; Trump et al., 2022; Wright et al., 2006), and the settler colonial dimensions of wolf culling (Beggen and York, 2025; Coleman, 2008; Gilbert et al., 2022; Rutherford, 2022; Sidhu et al., 2026). We engage with photographs and other forms of visual imagery throughout and employ

them to illustrate and situate these themes. The centrality of images and folklore employing wolf iconography (see Fogleman, 1989; McClanahan and Wall, 2026; Rutherford, 2020) position these cultural artifacts within the centuries-long persecution of wolves across North America and demonstrate the pervasive regional presence of the 'Canadian super wolf' discourse, thus far underexplored in the academic literature.

Discussion

Predation mis/perceptions

Discourse surrounding the supposed lethality and aggression of the 'Canadian super-wolf' centers on the effects of wolf predation on domestic livestock and wild ungulates, yet represents a 'surplus antagonism' (Ortner, 2006) disproportionate to those impacts. As we shall argue below, the durable conflict surrounding wolves in the NRM region – and emphasis on the supposed monstrosity of such – can be understood, at least in part, through a political ecology-informed attentiveness to regional context, in particular the political-economic pressures and history of transformation that situates residents' risk perception.

For the past several decades, much of the opposition and management interventions in the region around wolves have focused on threats to livestock, particularly cattle (*Bos taurus*) and, in certain contexts, sheep (*Ovis aries*). Predation on livestock is frequently described by wolf proponents as negligible when compared with other sources of loss (e.g., disease, harsh winters, other predators) (USDA, 2015, 2017). Such arguments, however, focus on the *region* or *sector* level, while impacts are experienced at the level of the *individual operator*. Livestock producers operate at relatively thin margins (Sayre et al., 2012), making even small stochastic instances of predation potentially devastating. While larger operations may be able to absorb the added losses represented by returning predator populations through economies of scale, from the situated perspective of smaller producers (Haraway, 1988; Robbins, 2006), a single wolf attack can be catastrophic – to say nothing of the affective impacts of livestock loss (cf. Epstein and Haggerty, 2022). Ranchers also point to indirect effects on livestock, including stress and behavioral changes[4] that can reduce weight gain and reproductive success, as well as long-term losses to operation breeding potential (Howery and DeLiberto, 2004; Ramler et al., 2014; Steele et al., 2013). Others have written on the inadequacy of dominant compensation models, which underrepresent producer losses and may at best pay current market rate for confirmed instances of predation (Dickman et al., 2011; Macon, 2020).

Over time, some ranchers in the NRM have begun to 'get along' with predators, as one Idaho field technician put it, particularly given the growing availability of nonlethal tools and techniques for deterring predation (Carlisle et al., 2023; Jacobs et al., 2025; Martin et al., 2021, 2025; Smith et al., 2025). Thus some producers may concede that wolves *are* indeed a native species, or at the very least are 'here to stay,' emphasizing instead the federal imposition of – and hence responsibility for – the added costs represented by rebounding carnivore populations (Martin, 2024; McInturff et al., 2021). More recently, according to one former Idaho Department of Fish and Game (IDFG) researcher, the 'real fire' of anti-wolf animosity comes 'from sportsmen and women, people who wanna hunt deer and elk' – a notable contrast to the historical confluence of interest between hunters and conservationists (Heffelfinger et al., 2013).

We have seen a rise in narratives framing wolves as a competitive threat to wild ungulate availability, with wolves viewed as a source of downward pressure on elk populations and competition with human hunters (Eisenberg et al., 2014; Farrell, 2015; Wright et al., 2006).[5] The basis of this argument is that wolf predation reduces human hunter opportunities through a reduction in overall numbers via reduced calf survival (Farrell, 2015; Niemeyer, 2007; Trump et al., 2022), as well as fear-induced migrations that make elk spatially inaccessible (Niemeyer, 2007; Richardson, 2022).

As with much of the research on wolves, however, effects on elk populations lack clear scientific consensus (Niemeyer, 2007; Rotella et al., 2020; Wright et al., 2006).

Across the region, elk populations appear to have in fact increased since the return of wolves, with several states reporting record or near-record populations in recent years (MFWP, 2026; WGFD, 2024). In 1999 (four years after the first reintroduction) there were 108,000 elk reported in Idaho, but this number had ballooned to 120,000 in 2025 (IDFG, 1999, 2025); that same year, Montana reported over 150,000 elk (MFWP, 2026). This growing population is in turn a source of concern for wildlife management and agricultural operations (Proffitt et al., 2026; Richardson, 2022). As one IDFG conservation officer put it, 'we have a buttload of elk… In certain areas…way too many.' Where elk compete for forage with livestock or depredate on crops, they too create added costs and provoke social opposition (Martin et al., 2025: 23, 53).

The increase in elk numbers is associated with better hunter success rates (WGFD, 2024), with elk harvests in some areas 'higher than… when wolves were introduced,' as one IDFG supervisor explained. However, this 'misses a big piece of the story,' they continued, including dynamics of localized decreases. In northeastern Idaho, on the border with Montana, the Lolo zone is often discussed as an area with declining elk numbers (Niemeyer, 2007). Managers frequently attribute the cause to wolves (Gilman, 2006; Groen, 2010; Niemeyer, 2007); however, such characterization oversimplifies and obscures important historical context. Large scale wildfires in the early twentieth century had created ideal foraging conditions and allowed for the growth in the local elk population, believed to have peaked sometime between the 1950s and 1980s (Groen, 2010; IDFG, 1999). However, the regrowth of forests (in part connected with the removal of low-intensity burning from the landscape), predation by other species (including black bears, *Ursus americanus*, particularly on calves), and severe winter conditions have all also contributed to elk decline (IDFG, 1999; Rotella et al., 2020). Attributing localized declines to returning wolves thus ignores a complex range of socio-environmental factors that influence population dynamics.

As wolf management in the NRM has been given over to the states following federal ESA delisting, there has been a pattern of increased lethal control of 'problem wolves' (those who prey too readily on livestock) and public trophy hunting as a means to keep populations 'under control' – and thus, purportedly, to support livestock producers and ungulate populations.[6] However, the efficacy of such programs is empirically contested (Bradley et al., 2015; DeCesare et al., 2018; Lorand et al., 2022; Rotella et al., 2020; Treves, 2009; Wielgus and Peebles, 2014).[7]

Although the return of wolves to the landscapes of the NRM region certainly represents an added source of predation pressure, its effects – and the effects of predator removal on ungulate populations – remain unclear, with notable variation across ecological zones (Clark and Hebblewhite, 2021; Eisenberg et al., 2014; Niemeyer, 2007; Rotella et al., 2020). In Alberta, Trump et al. (2022) found elk populations remained consistent despite hunting pressures from grizzlies (*Ursus arctos horribilis)*, cougars (*Puma concolor*), wolves, and humans. Similarly, Wright et al. (2006) found that while human hunters select female elk with the greatest reproductive value, wolves selected those with low reproductive value, with differential long-term effects on population. Given the seeming irony of localized concerns over elk numbers amid state and regional expansion, some wildlife managers have attributed anti-wolf attitudes instead to shifts in hunting culture and practices. As one former Forest Service district ranger put it, '…they said, 'Oh, the wolves are killing all the elk, there's no elk around'… Well, you get… your lazy ass off your ATV [All-Terrain Vehicle] and you can find elk!'

Examples like the diminished Lolo herd are amplified by anti-wolf advocates as 'proof' of the adverse effects of wolf reintroduction, arguing that 'Canadian super-wolves' must be controlled in the interest of 'our' elk (Figure 2). This too-simple story deploys statistics disconnected from historical trends or broader context, obscuring socio-ecological complexity and geographical variation

to legitimize predator removal (cf. Marris, 2017). There are certainly particular places – including traditionally popular backcountry hunting sites like the Lolo – where wolf predation likely has affected elk numbers, in conjunction with myriad other factors. In other places, as one IDFG manager put it, 'elk are going gangbusters!' (quoted in Martin et al., 2025: 23), with wildlife managers left to navigate the contradictory aims of appeasing ungulate hunters, agriculturalists, and conservationists (Martin, 2021a). Understanding risk perception as situated (Haraway, 1988; Robbins, 2006) helps us to better account for the animosity wolves evoke as a question of historical memory and political-economic ties to place – affected, in turn, by the changing land use patterns and pressures of the New West.

Political-economic anxieties

As explored above, wolf impacts are complicated by scale and geography and frequently misrepresented by both pro- and anti-wolf voices. While the latter are often tied to economic interests, conflict appears more complicated than a question of simple numerical losses, either of livestock or wild ungulates. Making sense of this 'surplus antagonism' (Martin 2020; 2024; Ortner 2006) and the often-invoked narrative of monstrous 'Canadian super-wolves' necessitates engagement with the particular context to which wolves have returned, and the ways in which they are enrolled in broader socio-political struggles. Specifically, *C.l.* recovery takes place against the backdrop of the so-called 'New West,' with perceived impacts and anxieties situated in relation to the political-economic pressures and demographic transformations of the region.

The New West has been described in terms of socio-ecological transformations that have taken place in the region beginning in the last quarter of the twentieth century. These include the reduced centrality of agriculture and traditional extractive industries (mining, logging, grazing), alongside growth in amenity migration, recreation, and conservation (Baden and Snow, 1997; Riebsame and Robb, 1997; Robbins et al., 2009; Winkler et al., 2007) – following Neumann (2002), a transition from 'landscapes of production' to 'landscapes of consumption' (see also Fletcher et al., 2023).[8] Such changes are contrasted with a semi-mythologized conception of the 'Old West,' and in relation to a longer history of 'range war'-type struggles over public lands and the identity of place – dynamics which continue to structure environmental politics in the region (Martin 2024; Martin et al. 2019).

Since roughly the 1970s, the NRM region has experienced rapid growth and urbanization, with burgeoning sprawl and exurban development alongside the decline of small towns. This rural gentrification (Bryson and Wyckoff, 2010; Ghose, 2004; Hines, 2010, 2012; Walker and Fortmann, 2003) has created a place 'where homes are a fortune and good jobs are few' (Vanderbilt, 2017); or, as one resident said of Sun Valley, Idaho put it, 'You either have three jobs or three houses – nothing in between.' Alongside these patterns are institutional and regulatory changes around the access and use of public lands, with knock-on effects on the viability of livestock operations (Brick and Cawley, 1996; Sheridan, 2001; 2007; Swette and Lambin, 2021). Indeed, it is frequently argued that the declining economic primacy of livestock production, alongside national-level value shifts vis-à-vis predators and conservation associated with growing education and urbanization, set the stage for wolf reintroduction in the region – with wolves revalorized from an economic cost (to producers) to an economic benefit (for ecotourism).[9] And it is in this context of regional 'growing pains' (Vanderbilt, 2017) that predator impacts are experienced and perceived, with wolf return layered atop political, economic, and socio-cultural anxieties.

A political ecology-informed engagement with the wolf question emphasizes environmental in/justice – the unevenly experienced costs and benefits of conservation – highlighting patterns of political-economic transformation and/as uneven development (McInturff et al., 2021; Schroeder et al., 2006; Smith, 2010 [1984]). These, in turn, are connected to deep-rooted regional struggles



Figure 5. Bumper stickers available from zazzle.com and etsy.com (Martin, 2020). Text reads: (A) 'Keep Idaho beautiful… / … go back to California.'; (B) 'CALIFORNIANS… THE NEWEST INVASIVE SPECIES'. Rural Idahoans often describe feeling under siege, with 'Californians' – shorthand for relatively wealthier newcomers taking advantage of lower cost of living in the state – driving up real estate prices. Note in particular the human-animal slippage in the invocation of 'invasive species,' also used in discussions of 'Canadian' wolves.

over public lands governance (Hays, 1959; Rowley, 1985; Sayre, 2017), as well as questions of identity and belonging, historical memory, and sense of place (Figure 5). Reading the wolf question through insights from people and parks scholarship (Adams and Hutton, 2007; Neumann, 2002 [1998]; West et al., 2006) and work on moral economy/ecology (Griffin et al., 2019; Jacoby, 2003; Scott, 1976; Thompson, 2013 [1975]) helps us better understand the seemingly outsized rural reactions to wolf return (compare Cronon, 1996; Fortmann, 1990; McCarthy, 2002).

As noted above, for livestock producers wolf impacts cannot be easily isolated from the broader political-economic context in which rancher decision-making and risk assessment takes place, which includes diverse land use pressures, market competition, fluctuating commodity prices, labor uncertainties, and marginal returns (Martin, 2020, 2024). In such a context, producers often express fears that wolves will be the 'final blow' or the 'straw that breaks the camel's back,' pushing them out of business and off the land (compare Sheridan, 2007; Volski et al., 2026). These fears are compounded by the psychological and non-material costs of living with wildlife (Gieser and von Essen, 2021; Thondhlana et al., 2020), which further complicate any simple numerical assessment of wolf impacts on livelihood.[10]

On the hunting side, perceptions of reduced opportunities and resultant antagonism towards wolves can also be read as a byproduct of changing land use patterns. Historically, landowners provided hunters with access to private lands to manage elk herds and limit their disruption on agricultural and livestock production. This tradition of public access to private lands was premised on mutual obligation and the conceptualization of wildlife as a public right, accessible regardless of social class (Eliason, 2016; Haggerty and Travis, 2006; Middleton et al., 2022). As rural economies have shifted toward amenity-based activities and land ownership, large tracts have been converted to leisure, recreation, or investment, upending traditional social norms and land access relationships (Epstein 2020; Gosnell et al. 2006; see also Epanchin-Niell et al., 2022; Fletcher et al.,

2023; Ribot and Peluso, 2003). Some amenity owners create quasi-refuges by curtailing public access, while others have used the abundance of game species on their lands to commercialize hunting (Eliason, 2016; Middleton et al., 2022; Proffitt et al., 2026).

These shifts in land use amplify class divisions and regional economic anxieties, as access to elk herds becomes increasingly predicated on one's capacity to afford hunting opportunities on private lands. Elk hunting is not only an economically important activity in the NRM, but also an important cultural and even subsistence practice across many rural communities (Burcham et al., 1999; Epstein and Haggerty, 2022; Metcalf et al., 2017). The broader political anxieties stemming from amenity ownership are thus perceived as a threat to a cultural tradition and hunting as a social institution based on shared norms and values, and to broader survival amid economic volatility and marginality. In exploring the growing commercialization of wildlife, Eliason (2016) found that hunters believed it morally wrong to curtail access to private lands; others reported being unable to purchase these expensive hunts, which some viewed as a violation of longstanding tradition and threatening access for future generations (compare Fortmann, 1990 on usufruct rights claims in the West).

A growing body of literature demonstrates that elk, like other ungulates, employ behavioral modifications in response to the threat of being hunted (Eisenberg et al., 2014; Proffitt et al., 2013; Ranglack et al., 2017). One of these adaptations, most pronounced during rifle seasons, is that elk move to private lands and other hard-to-access areas (Burcham et al., 1999; Proffitt et al., 2026; Sergeyev et al., 2022; Smith et al., 2022). At the same time, there is at least anecdotal evidence that wolves affect the behavior and distribution of elk – indeed, this sort of 'trophic cascade' effect was promoted as one of the motivators for wolf reintroduction or 'rewilding' (Fortin et al., 2005; Ripple and Beschta, 2004, 2005, 2012; Soule and Noss, 1998) – although Eisenberg et al. (2014) note that elk responses to increased predation risk is not uniform and varies across other contextual features (see also Mech, 2012).

Hunters often have multi-generational ties to *particular* landscapes; for them, the question is not how elk numbers have changed at the level of the state or region, but rather in *their* hunting areas vis-à-vis historical memory. For outfitters – those who make their living guiding and providing related logistics and other services for hunters –concerns also include capital investments *in place*. As elk distribution shifts, they face devaluation through loss of revenue (as one IDFG manager put it, 'They don't sell the tags that they used to, they don't bring in that economy of non-resident hunters that they used to'), and may be further affected by the shifting private land access relationships described above – all without any form of compensation for these losses (Martin et al., 2025: 55). Thus, while there is documented and substantive growth in the overall elk population in the NRM, there remains a perception among the hunting public that wolves have reduced elk numbers and/or made them inaccessible (Richardson, 2022; see also Philo and Wilbert, 2000 on the tensions between animal mobility and the fixity of private property and jurisdictional boundaries). These perceived impacts thus play into a popular narrative that frames the return of 'Canadian wolves' as a monstrous and existential threat to ungulate populations and livelihoods (Niemeyer, 2007; Farrell, 2015).

The monstrous other

Cross-disciplinary engagement helps clarify the ways in which wildlife as *symbols* – as discursive entities, distinct yet never fully disconnected from the material creatures – are enrolled within political struggles (compare Callon, 1984; Latour, 2005; Li, 2014). Wolves have long been associated with wilderness (Donalson, 2006; Marvin, 2012; Pluskowski, 2006; Van Horn, 2012), places 'where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain' per the U.S. Wilderness Act of 1964 (Pub.L. 88–577). For the first several hundred years of occupation, taming or conquering the North American wilderness was a key

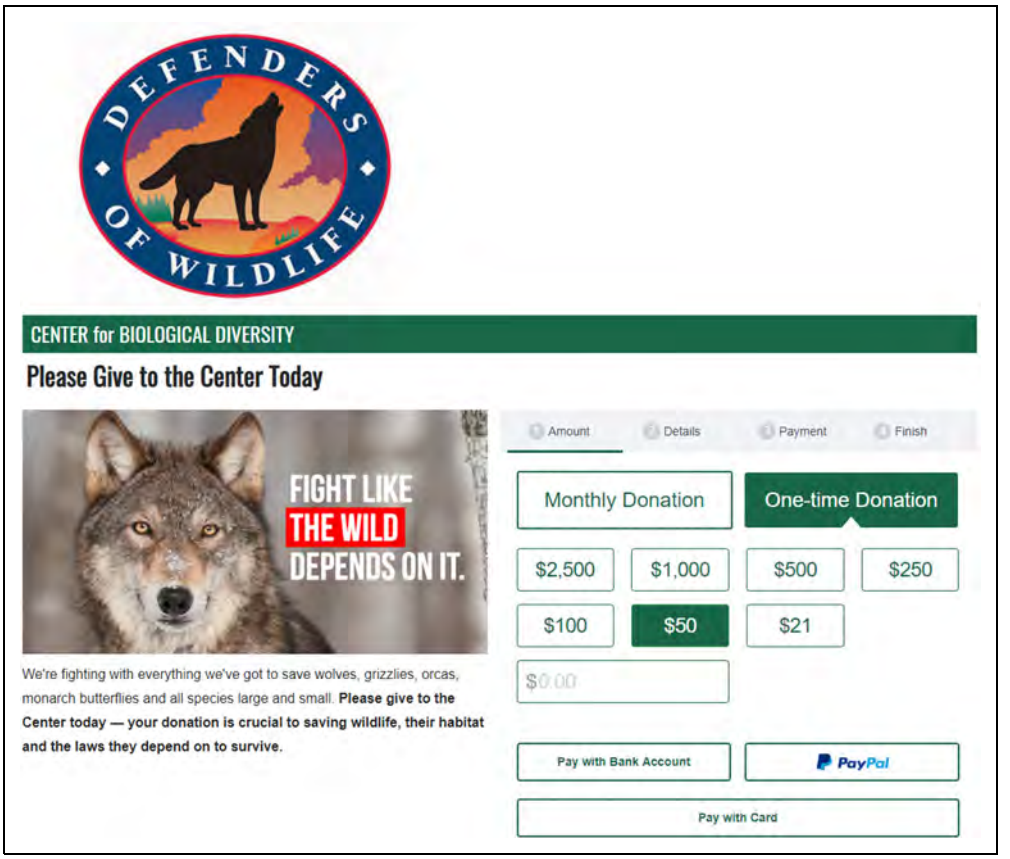


Figure 6. (A) Defenders of Wildlife (defenders.org) uses a wolf silhouette as their organization's logo, thereby linking the animal to their conservation activities. (B) Center for Biological Diversity (biologicaldiversity.org) and other environmental nonprofits will frequently use wolves and other charismatic megafauna in their mailings to solicit donations. Text reads: 'Please Give to the Center Today / FIGHT LIKE THE WILD DEPENDS ON IT. / We're fighting with everything we've got to save wolves, grizzlies, orcas, monarch butterflies and all species large and small. Please give to the Center today – your donation is crucial to saving wildlife, their habitat and the laws they depend on to survive.'.

policy and societal goal, part of 'improving' the landscape for settler economic ends. Visions of unruly wild wolves haunted settler imaginaries, and associations with violence, greed, and waste – rooted in centuries of European land use change – compelled them to eliminate the animals for both their material impacts and figurative associations.[11]

As wilderness was revalorized over the twentieth century, so too were wolves – yet such perceptions were not universal, with the animals still vilified in many rural communities where private and public land use was geared towards ranching (Smith and Bangs, 2009; Figure 1). In the mid-1990s, some praised Canada for preserving the species and allowing for the reintroduction; one headline even claimed, 'Canadian Wolves Help Save US Wilderness' (Boswell, 2003, A7, cited in Rutherford, 2022: 110). Since then, wolves have often been deployed by environmental organizations as charismatic megafauna (Lorimer, 2015), whose popular appeal is used to garner public attention and funds (Figure 6), and whose habitat needs can be mobilized toward stricter enforcement or new environmental regulation (e.g., on the in/appropriate use of public lands; see Brugger et al., 2020; Wuerthner and Matteson, 2002). This popular appeal has, at times, relied on ecological



Figure 7. Anti-wolf imagery often draws on the idea of a foreign threat, including Orientalist associations with terrorism and villainized regimes du jour (Said, 2014 [1978]). Text reads: (A) 'THE / WOLF / is the / SADDAM HUSSEIN / of the / ANIMAL WORLD / we don't want / SaddAM / in / Montana !!!' (Nabeki, 2012). Alongside the construction of the other is the self-affirmation of in-group identity (Anderson, 2006 [1983]; Said, 2014 [1978]). In a recent Facebook post (B), wolves' endangered status is rejected, invoking instead an implied common identification ('We') counterposed to and threatened by the wolf (Archibald, 2026). Text reads: 'WOVES ARE NOT / ENDANGERED. / WE ARE. / DELIST THE WOLF'.

narratives that overstate wolves' own needs and environmental effects, such as the claim that 'wolves change rivers' (Marris, 2017; Monbiot, 2014; see also Mech, 2012; Middleton, 2014).

Although the Wilderness Act in fact permits historical land uses like livestock grazing, the *ideology* of wilderness (Cronon, 1995; Neumann, 2002) produces a logical incompatibility: the very presence of wolves on a landscape makes other uses of space inappropriate.[12] When environmental non-governmental organizations (ENGOs) use wildlife species like *C.l.* in their campaigns and litigation, the animals are experienced by ranchers and rural residents as a *vanguard of dispossession*: invasive, transgressive, and in alliance with those who would see them displaced – and thus a target for violent reaction (Martin, 2020: 57, 80). While many species have historically taken on such a political role – including the northern spotted owl in the Pacific Northwest (Satterfield, 2007; Watson and Muraoka, 1992) – wolves' spatio-historic associations with wilderness and rewilding, cultural-symbolic resonance, and their wide-ranging qualities result in a particularly fraught combination.

New West transformations and regulatory changes undergird the further enrollment of wolves by right-wing populists into broader 'culture wars,' with anti-wolf opposition and even violence

framed as a *defense* of rural livelihoods and identity (Figure 2). In this way, a Polanyian reaction against political-economic transformations is channeled into a moral ecology-inflected anti-environmentalism (Griffin et al., 2019; Jacoby, 2003; Polanyi, 2001 [1944]), drawing on European cultural tropes of the wolf as villain and monster (Chaney, 2026; Donalson, 2006; Emel, 1995; Houston et al., 2010; Pluskowski, 2006; Skogen and Krange, 2003; Wise, 2016). Wolves and their urbanite, environmentalist supporters are thus framed as invading, non-belonging *others* that threaten the 'true' or appropriate residents of place, reaffirming a sense of coherent in-group political identity (compare Said, 2014 [1978]; Anderson, 2006 [1983]; Figure 7).

Wolves have long been used as a proxy for the immigrant, colonial, and racial/ized across European and North American contexts (Arnds, 2021; McClanahan and Wall, 2026; Sidhu et al., 2026; see also note 11). The 'Canadian super-wolf' should not be read, then, so much as a novel discourse than a contemporary repackaging of both the 'big bad wolf' and the subaltern Other. Sidhu et al. (2026) engage with the premise that framing wolves as invaders in the NRM has fostered the use of militaristic models of management, which draw on both the discourses of war (i.e., terrorism), and the technologies of warfare to quell this supposed threat. The depiction of wolf-as-terrorist is perhaps best illustrated by the comments from infamous anti-wolf advocate Ron Gillett, who once stated, 'there are three kinds of terrorists: There are foreign terrorists like [Osama] bin Laden, there are domestic terrorists like Defenders of Wildlife… and the wildlife terrorist is the Canadian wolf' (60 Minutes Australia, 2019, 1:03–1:18). This vilification, as suggested by Arnds (2021) as well as Kim (2015), racializes more-than-humans even as it reciprocally vilifies human racial and colonial Others, further framing the destruction of the wolf as both a defensive and civilizing project (Beggen and York, 2025; McClanahan and Wall, 2026; Sidhu et al., 2026).

The lens of *monstrousness* is also useful for conceptualizing the work done by 'Canadian super-wolves' discourse. Per Nirta and Pavoni, the animal is made to represent an 'embodied transgression' and 'forced engagement,' an untameable harbinger, challenge, and embodiment of the fragility of the normal – that for which we are not prepared, a warning and demonstration of the limits of human mastery over nature (2022: xvi, xxx; see also Clark, 2010). The affective responses provoked by these figures – horror, anger, and disgust – is 'symptomatic of the fundamental precariousness of normality' (Nirta and Pavoni, 2022: xvi; see also Asma, 2009; Cohen, 1996; Mittman and Dendle, 2012; cf. Smith, 2011). Such a read may in turn be linked with critical animal geography scholarship on the transgression of humans' spatial and conceptual boundings (Gillespie and Collard, 2015; Philo and Wilbert, 2000; see also Anderson et al., 2023; Margulies and Karanth, 2018). However, an eye toward monstrousness further highlights the ways in which the discursive and political enrollment of wolves (re)produces them as scapegoats and stand-ins for broader processes of uncertainty and precarity too difficult or politically inconvenient to name (e.g., capitalism; see Martin, 2024).

The notion of 'Canadian' wolves positions these animals as transgressive border-crossers and non-belonging entities from a foreign land. Ire and suspicion towards returning wolf populations have often manifested in conspiracy theories about clandestine reintroduction efforts of foreign wolves. As noted above, European farmers have often suspected newly established wolf packs of being secretly introduced (Skogen et al., 2008). In France, farmers contended these wolves were of Russian origin, counter to the more likely theory of natural dispersion from Italy. The conspiracy of an invading 'Canadian super-wolf' is thus a regional manifestation, perhaps, of a broader trend. Of course, the border between the U.S. and Canada is a settler colonial construction that seeks to restrict movement of 'undesired' immigrants, both human and non-human. Nativist xenophobia operates – in tandem with settler colonialism and white supremacy – to dictate who and what belongs within the nation's boundaries (Dunbar-Ortiz, 2014; Goldstein, 2019; Moreton-Robinson, 2015; Sidhu et al., 2026; Taylor, 2016). Immigrants and Indigenous peoples have often been intentionally associated with violence, predation, and animality in order to manufacture a threat toward and reinforce white

settler identity (Goldstein, 2019; Massey, 2016; Moreton-Robinson, 2015; Whyte, 2018). Popular narratives of the Canadian 'far north' – as a dangerous wilderness replete with fearsome wildlife shaped by harsh landscapes – situate 'Canadian' wolves as a subspecies that does not belong in tamer southern latitudes (Davidson, 2005). These are wolves that are larger (per Bergmann's rule; Geist, 1987; McNab, 1971) and more resilient (after all, they were never extirpated, like those in the U.S.). Sidhu et al. (2026) suggest that wolves invoke an instability in the settler psyche, as they are the descendants of those that could not be killed and symbolically challenge settler dominion over the natural world.

With 'Canadian super-wolves,' then, we see the dialectical play between human and non-human: the native carnivore is painted as foreign invader, within a settler colonial mindset that poses violence as an appropriate 'civilizing practice' against the existential threat of the invading wild. Crucially however, this appeal to non/nativeness (nature) by wolf opponents is predicated on a conservation that does the same (Robbins and Moore, 2013; van Eeden et al., 2025; Williams, 1980), lending it both scientific and cultural legitimacy. Such narratives produce and displace socio-cultural anxieties onto this monstrous other, in turn obscuring contemporary complexity (e.g., ecological baselines; or shifting political-economic relations of land access) as well as a history of settler colonial expulsions and erasures (Martin et al., 2019).

Conclusion

Wolves are hard to pin down, as much as proponents of the 'Canadian super-wolf' discourse may wish otherwise. Mobility is a hallmark of the species, and movement across the human-imposed settler colonial border between Canada and the U.S. continues to be a common dispersal practice. Attempting to fix canids – spatially, temporally, and/or taxonomically – appears, then, to be a futile endeavor, as wolves have long adapted geographically, genetically, and behaviorally to human persecution and environmentally diverse conditions. Wolves care little for socio-political boundaries and perhaps less about the valorization of where and how they belong. The wolves found in the NRM region are neither 'Canadian' nor 'super,' but rather part of a continuous population of animals across western North America, in search of conditions in which they can survive and persist. As Mech has noted: 'We have altered the concept of wolf habitat… That habitat is where wolves have prey and food and where people let them live' (quoted in Binder, 2000).

Although taxonomical distinctions between wolf subspecies continue to collapse as scientific research advances, the idea of particular animals tied to appropriate geographies continues to carry ideological heft, and is weaponized in a kind of multispecies nativism that renders wolves irrevocably out of place. Such weaponization further serves to biologize the border between the U.S. and Canada at a time when tensions between the two nations are increasingly elevated – thereby linking this instance of environmental governance to the broader socio-political questions of our time.

The purported invasion of the 'Canadian super-wolf' has become an ideological battleground, with canid bodies serving as the terrain upon which socio-political tensions are made manifest. This articulation draws on longer histories of wolf vilification while responding to contemporary political, economic, and socio-cultural reconfigurations of the region. This nativist discourse, we argue, is not by accident; it operates as a heuristic for that which does not belong within a particular imagining (white, settler colonial, rural, extractive) of what the NRM has been and should be. In other words, we suggest that the 'Canadian super-wolf' operates as a capacious cipher for a range of regional anxieties. Through this, the wolf – an animal native to the region – is remade: not only out of place, but invasive, monstrous, and foreign, a harbinger of the total transformation from Old to New West, with all the attendant and imagined losses it implies. As 'Canadian super-wolves' are enrolled in struggles over land use and regional futures – often through their symbolic association with wilderness – they become a meaningful shorthand for the slow death and precarious futurity of rural livelihoods and identity.

What might this story of the 'Canadian super-wolf' offer in this time of intense polarization, where wildlife management operates as a form of politics by other means? Questions of (non)nativeness and (non)belonging provide ideological scaffolding and fodder for debates about wolf reintroduction and migration, with opponents (perhaps cynically) using the authority of science as a cudgel against conservation. At the same time, this discourse points to the limits of conservation and coexistence strategies that rely on an appeal to nativeness as a supposedly neutral justification for policy; such moves may, in fact, undermine the ability of conservationists to effectively argue against anti-wolf opposition. Instead of grounding wildlife's value (or disvalue) in the 'native-introduced dichotomy' (van Eeden et al., 2025), we suggest that wildlife managers and wolf advocates might be better served by shifting the discursive terrain. Rather than look to ever more natural science-based evidence to justify particular policy directions and management interventions, we might instead move away from ecological baselines (Marris, 2011; Robbins and Moore, 2013) toward a responsible *conviviality*, in which wolves live where we let them and belong because they are there (Buscher and Fletcher, 2019, 2020; Komi and Nygren, 2023; Massarella et al., 2021).

We have argued that the wolf question is a social phenomenon, one that is simultaneously and inextricably material and meaningful: wolves produce real ecological and economic effects, but those effects acquire significance through and in dialogue with narratives of invasion, government overreach, rural dispossession, and contested belonging. This highlights the necessity of critical and transdisciplinary engagements – especially from the social sciences and environmental humanities – that can better identify the drivers of conflict, and the ways in which particular conservation interventions might, in fact, intensify political grievance, provoke social protest, and induce violence against vulnerable species. By acknowledging the expressly and unavoidably political nature of these challenges, wildlife managers and advocates can better attend not only to the ecological realities of wolves, but also the economic and social realities of those who bear the costs of their return.

Highlights

- The 'Canadian super-wolf' is a prominent discourse of anti-wolf sentiment in the Northern Rocky Mountains (NRM) region of the U.S.
- Objections to wolf reintroduction assert they are not native to the NRM and are detrimental to native wildlife and ranching.
- Using a political ecology approach, we investigate the way in which wolves are made to serve as a political proxy.
- 'Canadian super-wolf' discourse is thus tied to political-economic anxieties associated with 'New West' regional transformations.
- Wolves are made into a monstrous stand-in and scapegoat, bound up with nativist tropes and political polarization in the region.

ORCID iDs

Jeff Vance Martin https://orcid.org/0000-0001-5575-2873
Tandeep Sidhu https://orcid.org/0009-0001-3252-4672
Kristina Beggen https://orcid.org/0009-0007-3090-8465
Stephanie Rutherford https://orcid.org/0000-0002-0322-3424

Ethical approval and informed consent

All human subjects research informing this manuscript was carried out with participants' written and/or verbal informed consent, adhering to ethical standards for social science research as outlined in CITI Program

training, including measures taken to protect the anonymity of interviewees. JVM research while at the University of California, Berkeley, was conducted under Committee for Protection of Human Subjects (CPHS) Protocol Number 2016-02-8374.

Author contributions

JVM: Conceptualization, Project administration, Writing - original draft (lead), Writing - review & editing.
TS: Conceptualization, Writing - original draft, Writing - review & editing.
KB: Writing - original draft, Writing - review & editing.
SR: Writing - original draft, Writing - review & editing.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Declaration of conflicting interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The findings and conclusions in this publication are those of the authors and should not be construed to represent any official USDA or U.S. Government determination or policy.

Data availability

Full data sets cannot be shared publicly because of ethical restrictions: data contains potentially identifying information, with sharing representing a breach of compliance with human subjects' ethics approval. Fellow researchers may contact the corresponding author of data inquiries.

Notes

1. Supported by protections under the Endangered Species Act (ESA), wolves captured from Canada were reintroduced to Yellowstone National Park and central Idaho in 1995 and 1996 (Bangs and Fritts, 1996; Fritts et al., 1997; Smith and Bangs, 2009). More recently, voters in Colorado approved a 2020 ballot measure that facilitated reintroduction of wolves to the state (Ditmer et al., 2022); while reintroduced wolves were initially captured from Oregon, a series of political tensions in the recovery effort necessitated the reintroduction of wolves captured from Canada (Gruver, 2025).
2. Such debates over nativeness (and thus non/belonging and in/appropriate management) also take place over other megafauna species in the region, as explored by Taylor et al. (2026) on the moose (*Alces alces*) in Colorado.
3. Whether the images and narratives herein are truly 'believed' by those who circulate them – or instead serve merely to rhetorically communicate a sense of belonging and political affiliation – presents an interesting question beyond the scope of this analysis, although we speculate that the answer is likely a mix of both.
4. Some of these changes are the very sorts of behaviors highlighted by ecologists in discussions of wolves' trophic cascade effects on wild ungulates (e.g., Ripple and Beschta, 2004).
5. Interestingly, most nonlethal tools and techniques aim to increase the energetic costs associated with preying on livestock, thereby shifting predators to more 'appropriate' wild prey like elk (Stone et al., 2017; Wilkinson et al., 2020).
6. Wolves in Montana and Idaho have been continuously hunted since 2011 (IDFG, 2023; Richardson, 2022).
7. Clark and Hebblewhite (2021) found evidence of publication bias, in which counter examples (e.g., reduced ungulate numbers following predator removal) were underreported.
8. Such a clear binary is of course problematic, as the economies of the 'New West' do, in fact, include production. Hines (2012) emphasizes the distinction as one between landscapes of production/consumption of

commodities/natural resources and "experiences," respectively, pointing toward the amenity- and recreation-focus of the new political-economic regime.

9. Our focus here is limited to the national/regional context; however, such pressures are inseparable from political-economic dynamics occurring at other levels, as well, including the rise of feedlot production and international competition with cattle markets in Latin America and lamb production in Australia and New Zealand (see Martin, 2024: 13; compare Robbins et al., 2009: 372).
10. For further engagement with the pressures of regional political-economic change on livestock producers, in particular, see Martin (2024), and Smith et al. (2025).
11. Wolves, like other predators, often practice 'surplus killing' and 'partial prey consumption,' killing more animals than can be eaten at once and leaving carcasses for later consumption (Muhly and Musiani, 2009). This has evolutionary and ecological benefits, but humans have associated the behavior with wastefulness (Rutherford, 2022). Settlers also drew unfavorable comparisons between wolves and Indigenous peoples; various accounts describe Native peoples as wolf-like, violent predators (Eichler and Baumeister, 2018; Kim, 2015).
12. Despite wolves being known habitat generalists (Mech and Boitani, 2010). Notably, arguments over spatial incompatibility are made by both pro- and anti-predator voices (compare Foley, 2012; Wuerthner, 2017) even as wolf-livestock coexistence is demonstrated as both feasible and desirable for many (Fascione et al., 2004; Frank et al., 2019; Miller et al., 2016; Stone et al., 2017).

References

60 Minutes Australia (2019) The fight to save Yellowstone wolves [Online Video]. Available at: https://www.youtube.com/watch?v=l59-szc_UbA (accessed 10 September 2026).

Adams WM and Hutton J (2007) People, parks and poverty: Political ecology and biodiversity conservation. *Conservation and Society* 5(2): 147–183.

Agapow P-M, Bininda-Emonds ORP, Crandall KA, et al. (2004) The impact of species concept on biodiversity studies. *The Quarterly Review of Biology* 79(2): 161–179.

Anderson B (2006) [1983] *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso.

Anderson RM (2021) Killing for the common good? The (bio)politics of wolf management in Washington state. *Elementa: Science of the Anthropocene* 9(1): 00179.

Anderson RM, Charnley S, Epstein K, et al. (2023) The socioecology of fear: A critical geographical consideration of human-wolf-livestock conflict. *Canadian Geographies / Les géographies canadiennes* 67(1): 17–34.

Anderson RM, Charnley S, Martin JV, et al. (2026) Large, rugged and remote: The challenge of wolf–livestock coexistence on federal lands in the American West. *People and Nature* 8(7): 2065–2077.

Archibald D (2026) Ranchers are feeding the Canadian wolves…it is an experiment and it's not working it's ANIMAL CRUELTY. … a felony…. In: *Facebook*. Available at: https://www.facebook.com/photo?fbid=1225681092854232&set=a.492414486180900 (accessed 18 March 2026).

Arnds P (2021) *Wolves at the Door: Migration, Dehumanization, Rewilding the World*. Bloomsbury Academic.

Artelle KA, Reynolds JD, Treves A, et al. (2018) Hallmarks of science missing from North American wildlife management. *Science Advances* 4(3): eaao0167.

Ashton KG, Tracy MC and de Queiroz A (2000) Is Bergmann's rule valid for mammals? *The American Naturalist* 156(4): 390–415.

Asma ST (2009) *On Monsters: An Unnatural History of Our Worst Fears*. Oxford University Press.

Baden J and Snow D (1997) *The Next West: Public Lands, Community, and Economy in the American West*. Island Press.

Bangs EE and Fritts SH (1996) Reintroducing the gray wolf to central Idaho and Yellowstone National Park. *Wildlife Society Bulletin* 24(3): 402–413.

Baruch-Mordo S, Breck SW, Wilson KR, et al. (2009) A tool box half full: How social science can help solve human–wildlife conflict. *Human Dimensions of Wildlife* 14(3): 219–223.

Beggen K (2019) *Chasing tails: Stories for refining relationships between wolves and humans*. MA thesis. Oregon State University, Corvallis, Oregon. Available at: https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/44558k90p (accessed 4 September 2026).

Beggen K and York R (2025) Colonizing *Canis lupus*: Wolf management as a settler colonial project. *Rural Sociology* 90(3): e70009.

Binder D (2000) Wolves: From brink of extinction to the edge of the city. *New York Times*, 14 March. Available at: http://www.nytimes.com/2000/03/14/science/wolves-from-brink-of-extinction-to-the-edge-of-the-city.html (accessed 20 November 2013).

Boswell R (2003) Canadian wolves help save US wilderness. *The Vancouver Sun*, 30 October, A7.

Bowker GC and Starr SL (2000) *Sorting Things Out: Classification and Its Consequences*. The MIT Press.

Boyd D (2022) *A Review of Lessons Learned to Inform Colorado Wolf Reintroduction & Management*. National Wildlife Federation. Available at: https://www.nwf.org/-/media/PDFs/Rocky-Mountain/NWF_Boyd_Wolf_Report_Web-compressed_FINAL.ashx?la=en&hash=B0EB93BEE478F8706AC4BC9B75085C4A24AEBE9B (accessed 23 February 2026).

Boyd DK (2024) *A Woman Among Wolves: My Journey Through 40 Years of Wolf Recovery*. Greystone Books.

Bradley EH, Robinson HS, Bangs EE, et al. (2015) Effects of wolf removal on livestock depredation recurrence and wolf recovery in Montana, Idaho, and Wyoming. *The Journal of Wildlife Management* 79(8): 1337–1346.

Brewitt P and Giles L (2022) Red wolf science and identity storylines in an online discursive community. *Environmental Science & Policy* 133(July): 54–62.

Brick PD and Cawley RM (1996) *A Wolf in the Garden: The Land Rights Movement and the New Environmental Debate*. Rowman & Littlefield.

Brugger J, McClaran MP and Sprinkle JE (2020) 'Storytelling' natural resource conflict on U.S. public lands. *Ethnos* 85(1): 54–78.

Bruskotter JT and Shelby LB (2010) Human dimensions of large carnivore conservation and management: Introduction to the special issue. *Human Dimensions of Wildlife* 15(5): 311–314.

Bryson J and Wyckoff W (2010) Rural gentrification and nature in the old and new wests. *Journal of Cultural Geography* 27(1): 53–75.

Burawoy M (1998) The extended case method. *Sociological Theory* 16: 4–33

Burcham M, Edge WD and Marcum CL (1999) Elk use of private land refuges. *Wildlife Society Bulletin (1973-2006)* 27(3): 833–839.

Büscher B and Fletcher R (2019) Towards convivial conservation. *Conservation and Society* 17(3): 283–296.

Büscher B and Fletcher R (2020) *The Conservation Revolution: Radical Ideas for Saving Nature Beyond the Anthropocene*. Verso.

Callon M (1984) Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St Brieuc Bay. *The Sociological Review* 32(1): 196–233.

Carlisle KM, Ellis HE, Jaebker LM, et al. (2023) Producers' perceptions of large carnivores and nonlethal methods to protect livestock from depredation: Findings from a multistate federal initiative. *Human Dimensions of Wildlife* 28(4): 392–395.

Carman A (2024) Spotify reveals Joe Rogan's podcast numbers. Available at: https://www.bloomberg.com/news/newsletters/2024-03-21/spotify-reveals-podcast-numbers-for-joe-rogan-alex-cooper-travis-kelce.

Castree N (2005) The epistemology of particulars: Human geography, case studies and 'context'. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 36(5): 541–544.

Castree N and Braun B (2003) *Social Nature: Theory, Practice, and Politics*. Blackwell.

Chambers SM, Fain SR, Fazio B, et al. (2012) An account of the taxonomy of North American wolves from morphological and genetic analyses. *North American Fauna* 77(1): 1–67.

Chaney R (2026) Pack politics: How political identity can twist perception of wolves. In: *Mountain Journal*. Available at: https://mountainjournal.org/pack-politics-how-political-identity-can-twist-perception-of-wolves/ (accessed 4 February 2026).

Chew MK and Hamilton AL (2011) The rise and fall of biotic nativeness: A historical perspective. In: *Fifty Years of Invasion Ecology: The Legacy of Charles Elton*. Blackwell Publishing Ltd., 35–47.

Clark N (2010) *Inhuman Nature: Sociable Life on a Dynamic Planet*. Sage.

Clark SG (under TW), Rutherford MB and , Casey D (eds) (2005) *Coexisting with Large Carnivores: Lessons from Greater Yellowstone*. Island Press.

Clark TJ and Hebblewhite M (2021) Predator control may not increase ungulate populations in the future: A formal meta-analysis. *Journal of Applied Ecology* 58(4): 812–824.

Cohen JJ (1996) *Monster Theory: Reading Culture*. University of Minnesota Press.

Coleman JT (2008) *Vicious: Wolves and Men in America*. Yale University Press.

Cronin MA, Cánovas A, Bannasch DL, et al. (2015) Wolf subspecies: Reply to Weckworth et al. and Fredrickson et al. *Journal of Heredity* 106(4): 417–419.

Cronon W (1995) The trouble with wilderness; or, getting back to the wrong nature. In: Cronon W (ed.) *Uncommon Ground: Rethinking the Human Place in Nature*. W.W. Norton & Co., pp.69–90. Available at: http://www.williamcronon.net/writing/Trouble_with_Wilderness_Main.html.

Cronon W (ed.) (1996) 'Are you an environmentalist or do you work for a living?': Work and nature. In: *Uncommon Ground: Rethinking the Human Place in Nature*. 1st ed. W. W. Norton & Company, 171–185.

Davidson P (2005) *The Idea of North*. Reaktion Books.

Davis MA, Chew MK, Hobbs RJ, et al. (2011) Don't judge species on their origins. *Nature* 474(7350): 153–154.

DeCesare NJ, Wilson SM, Bradley EH, et al. (2018) Wolf-Livestock conflict and the effects of wolf management. *The Journal of Wildlife Management* 82(4): 711–722.

Dickman AJ, Macdonald EA and Macdonald DW (2011) A review of financial instruments to pay for predator conservation and encourage human–carnivore coexistence. *Proceedings of the National Academy of Sciences* 108(34): 13937–13944.

Ditmer MA, Niemiec RM, Wittemyer G, et al. (2022) Socio-ecological drivers of public conservation voting: Restoring gray wolves to Colorado, USA. *Ecological Applications* 32(3): e2532.

Donalson MD (2006) *The History of the Wolf in Western Civilization: From Antiquity to the Middle Ages*. Edwin Mellen Press.

Drury R, Homewood K and Randall S (2011) Less is more: The potential of qualitative approaches in conservation research. *Animal Conservation* 14(1): 18–24.

Dunbar-Ortiz R (2014) *An Indigenous People's History of the United States*. Beacon Press.

Eichler L and Baumeister D (2018) Hunting for justice. *Environment and Society* 9(1): 75–90.

Eisenberg C, Hibbs DE, Ripple WJ, et al. (2014) Context dependence of elk (*Cervus elaphus*) vigilance and wolf (*Canis lupus*) predation risk. *Canadian Journal of Zoology* 92(8): 727–736.

Eliason SL (2016) Access to public resources on private property: Resident hunter perceptions of the commercialization of wildlife in Montana. *Journal of Outdoor Recreation and Tourism* 16: 37–43.

Emel J (1995) Are you man enough, big and bad enough? Ecofeminism and wolf eradication in the USA. *Environment and Planning D: Society and Space* 13(6): 707–734.

Epanchin-Niell RS, Jackson-Smith DB, Wilson RS, et al. (2022) Private land conservation decision-making: An integrative social science model. *Journal of Environmental Management* 302: 113961.

Epstein K and Haggerty JH (2022) Managing wild emotions: Wildlife managers as intermediaries at the conflictual boundaries of access relations. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 132: 103–112.

Epstein KE (2020) *High net worth ownership regimes in critical conservation areas: Implications for resource governance*. PhD dissertation. Montana State University, Bozeman, Montana. Available at: https://scholarworks.montana.edu/xmlui/handle/1/16039.

Farrell J (2015) *The Battle for Yellowstone: Morality and the Sacred Roots of Environmental Conflict*. Princeton University Press.

Fascione N, Delach A and Smith ME (eds) (2004) *People and Predators: From Conflict to Coexistence*. Island Press.

Fawn D (dir) (2011) *The Phantom Wolves of Sun Valley*. Documentary. Available at: http://fawnfilms.com/phantom-wolves/.

Fischer H (1995) *Wolf Wars: The Remarkable Inside Story of the Restoration of Wolves to Yellowstone*. Falcon Press.

Fletcher R, Massarella K, Ferraz KMPMB, et al. (2023) The production-protection nexus: How political-economic processes influence prospects for transformative change in human-wildlife interactions. *Global Environmental Change* 82: 102723.

Flores D (2016) *Coyote America: A Natural and Supernatural History*. Basic Books.

Fogleman VM (1989) American attitudes towards wolves: A history of misperception. *Environmental Review* 13(1): 63–94.

Foley J (2012) Information concerning the Canadian gray wolf. Available at: https://www.klamathbasincrisis.org/wolves/letters/greywolvesbyFoley011012.htm (accessed 11 March 2026).

Fortin D, Beyer HL, Boyce MS, et al. (2005) Wolves influence elk movements: Behavior shapes a trophic cascade in Yellowstone National Park. *Ecology* 86(5): 1320–1330.

Fortmann L (1990) Locality and custom: Non-aboriginal claims to customary usufructuary rights as a source of rural protest. *Journal of Rural Studies* 6(2): 195–208.

Frank B, Glikman JA and Marchini S (eds) (2019) *Human-Wildlife Interactions: Turning Conflict into Coexistence*. Cambridge University Press.

Fritts SH, Bangs EE, Fontaine JA, et al. (1997) Planning and implementing a reintroduction of wolves to Yellowstone National Park and Central Idaho. *Restoration Ecology* 5(1): 7–27.

Fritts SH, Mack CM, Smith DW, et al. (2001) Outcomes of hard and soft releases of reintroduced wolves in central Idaho and the greater Yellowstone are. In: *Large Mammal Restoration: Ecological and Sociological Challenges in the 21St Century*. Island Press, 125–148.

Gallagher CA (2025) 'They're eating the dogs. The people that came in, they're eating the cats': Xenophobia and group threat as a path to the White House. *Ethnic and Racial Studies* 48(15): 2986–2999.

Geist V (1987) Bergmann's rule is invalid. *Canadian Journal of Zoology* 65(4): 1035–1038.

Ghose R (2004) Big sky or big sprawl? Rural gentrification and the changing cultural landscape of Missoula, Montana. *Urban Geography* 25(6): 528–549.

Gieser T and von Essen E (2021) Wolves, ecologies of fear, and the affective challenges of coexistence. *Society & Space*, 6 September. Online. Available at: https://www.societyandspace.org/articles/wolves-ecologies-of-fear (accessed 9 September 2021).

Gilbert JH, David P, Price MW, et al. (2022) Ojibwe perspectives toward proper wolf stewardship and Wisconsin's February 2021 wolf hunting season. *Frontiers in Ecology and Evolution* 10: 782840.

Gillespie K and Collard R-C (eds) (2015) *Critical Animal Geographies: Politics, Intersections and Hierarchies in a Multispecies World*. Routledge.

Gillespie K and Narayanan Y (2020) Animal nationalisms: Multispecies cultural politics, race, and the (un)making of the settler nation-state. *Journal of Intercultural Studies* 41(1): 1–7.

Gilman S (2006) Mass wolf kill rests on shaky science. Available at: https://www.hcn.org/issues/issue-320/mass-wolf-kill-rests-on-shaky-science/ (accessed 18 February 2026).

Goldstein A (2019) Entangled dispossessions: Race and colonialism in the historical present. In: Molina N, HoSang DM and Gutiérrez RA (eds) *Relational Formations of Race: Theory, Method, and Practice*. University of California Press, 60–79.

González-Bernal A, Rojas-Soto O and Martínez-Meyer E (2022) Climatic comparison of the gray wolf (Canis lupus) subspecies in North America using niche-based distribution models and its implications for conservation programs. *Journal of Mammalogy* 103(6): 1305–1314.

Gosnell H, Haggerty JH and Travis WR (2006) Ranchland ownership change in the greater Yellowstone ecosystem, 1990–2001: Implications for conservation. *Society & Natural Resources* 19(8): 743–758.

Griffin C, Jones R and Robertson IJM (eds) (2019) *Moral Ecologies: Histories of Conservation, Dispossession and Resistance*. Palgrave Macmillan. Available at: https://www.palgrave.com/gp/book/9783030061111 (accessed 6 May 2019).

Groen C (2010) Op-Ed: Lolo zone in perspective | Idaho fish and game. Available at: https://idfg.idaho.gov/press/op-ed-lolo-zone-perspective (accessed 18 February 2026).

Gruver M (2025) Trump administration tells Colorado wolves must come from U.S. Rockies states, not Canada. Available at: https://coloradosun.com/2025/10/25/colorado-wolf-reintroduction-trump-administration-directive/ (accessed 17 February 2026).

Haggerty JH and Travis WR (2006) Out of administrative control: Absentee owners, resident elk and the shifting nature of wildlife management in southwestern Montana. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 37(5): 816–830.

Hall ER (1981) *The mammals of North America. 1. 2. ed*. Wiley.

Hall M (2003) Editorial: The native, naturalized and exotic—plants and animals in human history. *Landscape Research* 28(1): 5–9.

Haraway D (1988) Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies* 14(3): 575–599.

Hart G (2004) Geography and development: Critical ethnographies. *Progress in Human Geography* 28(1): 91–100.

Hart G (2006) Denaturalizing dispossession: Critical ethnography in the age of resurgent imperialism. *Antipode* 38(5): 977–1004.

Hart G (2016) Relational comparison revisited: Marxist postcolonial geographies in practice. *Progress in Human Geography* 42(3): 371–394.

Harvey D (1996) *Justice, Nature, and the Geography of Difference*. Blackwell Publishers.

Hatch SF/ BC (2016) Debunking the Canadian super-wolf. Available at: https://www.jhnewsandguide.com/opinion/columnists/signal_fires/debunking-the-canadian-super-wolf/article_0c77b040-fca5-5051-976a-bab4db274a82.html (accessed 17 February 2026).

Hays SP (1959) *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920*. Harvard University Press.

Heffelfinger JR, Geist V and Wishart W (2013) The role of hunting in North American wildlife conservation. *International Journal of Environmental Studies* 70(3): 399–413.

Helmcke C (2022) Ten recommendations for political ecology case research. *Journal of Political Ecology* 29(1): 266–277.

Hill AP and Hadly EA (2018) Rethinking 'native' in the anthropocene. *Frontiers in Earth Science* 6: 1–4.

Hines JD (2010) Rural gentrification as permanent tourism: The creation of the 'new' west archipelago as post-industrial cultural space. *Environment and Planning D: Society and Space* 28(3): 509–525.

Hines JD (2012) The post-industrial regime of production/consumption and the rural gentrification of the new west archipelago. *Antipode* 44(1): 74–97.

Hobbs RJ, Arico S, Aronson J, et al. (2006) Novel ecosystems: Theoretical and management aspects of the new ecological world order. *Global Ecology and Biogeography* 15(1): 1–7.

Hobbs RJ, Higgs E, Hall CM, et al. (2014) Managing the whole landscape: Historical, hybrid, and novel ecosystems. *Frontiers in Ecology and the Environment* 12(10): 557–564.

Hobbs RJ, Higgs E and Harris JA (2009) Novel ecosystems: Implications for conservation and restoration. *Trends in Ecology & Evolution* 24(11): 599–605.

Houston MJ, Bruskotter JT and Fan D (2010) Attitudes toward wolves in the United States and Canada: A content analysis of the print news media, 1999–2008. *Human Dimensions of Wildlife* 15(5): 389–403.

Howery LD and DeLiberto TJ (2004) Indirect effects of carnivores on livestock foraging behavior and production. *Sheep & Goat Research Journal* 19(8): 53–57.

Idaho Department of Fish and Game (1999) *Status & Objectives of Idaho's Elk Resources*. Available at: https://idfg.idaho.gov/old-web/docs/wildlife/planWildElk.pdf.

Idaho Department of Fish and Game (2023) *Idaho Gray Wolf Management Plan, 2023–2028*. May. Idaho Department of Fish and Game. Available at: https://idfg.idaho.gov/sites/default/files/idaho-gray-wolf-management-plan-2023-2028.pdf (accessed 1 November 2023).

Idaho Department of Fish and Game (2025) Elk hunting | Idaho Fish and Game. Available at: https://idfg.idaho.gov/hunt/elk (accessed 18 February 2026).

Jacobs B, Kareiva P and Schachtschneider C (2025) The expanding use and effectiveness of nonlethal methods for mitigating wolf-cattle conflict. *Rangelands* 47(4): 223–230.

Jacoby K (2003) *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation*. University of California Press.

Jones K (2010) From big bad wolf to ecological hero: Canis Lupus and the culture(s) of nature in the American–Canadian west. *American Review of Canadian Studies* 40(3): 338–350.

Jones N, Witze A, Tollefson J, et al. (2025) What Trump 2.0 means for science: The likely winners and losers. *Nature* 637(8046): 532–535.

JRE (2024) The Joe Rogan Experience. Episode 2213. Available at: https://open.spotify.com/episode/1qrLWCeJRhZfWP4zLMyUYB.

Kareiva P, Attwood SK, Bean K, et al. (2022) A new era of wolf management demands better data and a more inclusive process. *Conservation Science and Practice* 4(11): e12821.

Karieva P, Marvier M and Silliman B (2017) *Effective Conservation Science: Data Not Dogma*. Oxford University Press.

Kim CJ (2015) *Dangerous Crossings: Race, Species, and Nature in a Multicultural Age*. Cambridge University Press.

Komi S (2025) 'The real truth about wolves': Political ecology of wildlife conservation in the post-truth era. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 160(March): 104238.

Komi S and Nygren A (2023) Bad wolves? Political ecology of responsibility and more-than-human perspectives in human–wildlife interactions. *Society & Natural Resources* 36(10): 1238–1256.

Latour B (1993) *We Have Never Been Modern*. Harvard University Press.

Latour B (2005) *Reassembling the Social: An Introduction to Actor-Network Theory*. Oxford University Press.

Leonard JA, Vilà C and Wayne RK (2005) FAST TRACK: Legacy lost: Genetic variability and population size of extirpated US grey wolves (*Canis lupus*). *Molecular Ecology* 14(1): 9–17.

Leopold AS, Cain SA, Cottam CM, et al. (1963) *Wildlife Management in the National Parks. The Leopold Report*. Secretary of the Interior.

Li TM (2014) What is land? Assembling a resource for global investment. *Transactions of the Institute of British Geographers* 39(4): 589–602.

Long B (2011) Dead wolf sprouts wings. *High Country News*, 10 November. Available at: https://www.hcn.org/blogs/range/dead-wolf-sprouts-wings/.

Lopez B (1978) *Of Wolves and Men*. Simon and Schuster.

Lorand C, Robert A, Gastineau A, et al. (2022) Effectiveness of interventions for managing human-large carnivore conflicts worldwide: Scare them off, don't remove them. *Science of The Total Environment* 838: 156195.

Lorimer J (2015) *Wildlife in the Anthropocene: Conservation After Nature*. University of Minnesota Press.

Macon D (2020) Paying for the presence of predators: An evolving approach to compensating ranchers. *Rangelands* 42(2): 43–52.

Margulies JD and Karanth KK (2018) The production of human-wildlife conflict: A political animal geography of encounter. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 95: 153–164.

Marris E (2011) *Rambunctious Garden: Saving Nature in a Post-Wild World*. Bloomsbury.

Marris E (2017) A good story: Media nbias in trophic cascade research in Yellowstone National Park. In: Kareiva P, Marvier M and Silliman B (eds) *Effective Conservation Science*. Oxford University Press, 80–84.

Martin JV (2020) *In the shadow of the wolf: Wildlife conflict and land use politics in the new west*. PhD dissertation. University of California, Berkeley, Berkeley, California. Available at: https://escholarship.org/uc/item/6zk5g54g (accessed 22 May 2021).

Martin JV (2021a) Between Scylla and Charybdis: Environmental governance and illegibility in the American west. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 123: 194–204.

Martin JV (2021b) Peace in the valley? Qualitative insights on collaborative coexistence from the wood river wolf project. *Conservation Science and Practice* 3(3): e197.

Martin JV (2024) Conservation and conviviality in the American west. *Elementa: Science of the Anthropocene* 12(1): 00073.

Martin JV, Anderson RM, Epstein K, et al. (2025) *Managing Wolf-Livestock Conflict on National Forests in the Western U.S*. PNW-GTR-1029, General Technical Report. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Available at: https://doi.org/10.2737/pnw-gtr-1029.

Martin JV, Epstein K, Anderson RM, et al. (2021) Coexistence praxis: The role of resource managers in wolf-livestock interactions on federal lands. *Frontiers in Conservation Science* 2(707068): 1–16.

Martin JV, Epstein K, Bergmann N, et al. (2019) Revisiting and revitalizing political ecology in the American west. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 107: 227–230.

Marvin G (2012) *Wolf*. Reaktion Books.

Mascaro J, Hughes RF and Schnitzer SA (2012) Novel forests maintain ecosystem processes after the decline of native tree species. *Ecological Monographs* 82(2): 221–228.

Massarella K, Nygren A, Fletcher R, et al. (2021) Transformation beyond conservation: How critical social science can contribute to a radical new agenda in biodiversity conservation. *Current Opinion in Environmental Sustainability* 49(April): 79–87.

Massey DS (2016) The Mexico-U.S. border in the American imagination. *Proceedings of the American Philosophical Society* 160(2): 160–177.

Maughan R (2009) Big anti-wolf meeting tonight in Hailey, ID. In: *The Wildlife News*. Available at: http://www.thewildlifenews.com/2009/04/04/big-antiwolf-meeting-tonight-in-hailey-id/ (accessed 18 June 2020).

McCarthy J (2002) First world political ecology: Lessons from the wise use movement. *Environment and Planning A* 34(7): 1281–1302.

McClanahan B and Wall T (2026) Savage natures: Police and the wolf. *Theoretical Criminology* 0(0). DOI: 10.1177/13624806251401581.

McInturff A, Cannon CEB, Alagona PS, et al. (2021) Meeting at the crossroads: An environmental justice framework for large carnivore reintroductions and recoveries. *Elementa: Science of the Anthropocene* 9(1): 00172.

McNab BK (1971) On the ecological significance of Bergmann's rule. *Ecology* 52(5): 845–854.

Mech LD (1970) *The Wolf: The Ecology and Behavior of an Endangered Species*. American Museum of Natural History.

Mech LD (2011) The scientific classification of wolves: Canis lupus soupus. *International Wolf* 21(1): 4–7.

Mech LD (2012) Is science in danger of sanctifying the wolf? *Biological Conservation* 150(1): 143–149.

Mech LD and Boitani L (eds) (2010) *Wolves: Behavior, Ecology, and Conservation*. University of Chicago Press.

Meiri S and Dayan T (2003) On the validity of Bergmann's rule. *Journal of Biogeography* 30(3): 331–351.

Meiri S, Yom-Tov Y and Geffen E (2007) What determines conformity to Bergmann's rule? *Global Ecology and Biogeography* 16(6): 788–794.

Merz LM, Clemm Von Hohenberg B, Bergmann NT, et al. (2025) Elusive effects of legalized wolf hunting on human-wolf interactions. *Science Advances* 11(34): eadu8945.

Metcalf AL, Metcalf EC, Khumalo K, et al. (2017) Public wildlife management on private lands: Reciprocity, population status, and stakeholders' normative beliefs. *Human Dimensions of Wildlife* 22(6): 564–582.

Middleton A (2014) Is the wolf a real American hero? Available at: https://www.nytimes.com/2014/03/10/opinion/is-the-wolf-a-real-american-hero.html.

Middleton A, Stoellinger T, Bennett DE, et al. (2022) The role of private lands in conserving Yellowstone's wildlife in the twenty-first century. *Wyoming Law Review* 22(2): 237–301.

Miller JRB, Stoner KJ, Stoner MR, et al. (2016) Effectiveness of contemporary techniques for reducing livestock depredations by large carnivores. *Wildlife Society Bulletin* 40(4): 806–815.

Mitchell A (2016) Beyond biodiversity and species: Problematizing extinction. *Theory, Culture & Society* 33(5): 23–42.

Mittman AS and Dendle PJ (eds) (2012) *The Ashgate Research Companion to Monsters and the Monstrous*. Ashgate Publishing, Ltd.

Monbiot G (2014) How wolves change rivers. Documentary. Sustainable Man, TED. 5m. Available at: https://www.youtube.com/watch?v=ysa5OBhXz-Q.

Montana Fish, Wildlife, & Parks (2026) Elk population and distribution | Montana FWP. Available at: https://fwp.mt.gov/conservation/wildlife-management/elk/population-and-distribution (accessed 18 February 2026).

Moreton-Robinson A (2015) *The White Possessive*. University of Minnesota Press.

Muhly TB and Musiani M (2009) Livestock depredation by wolves and the ranching economy in the Northwestern US. *Ecological Economics* 68(8): 2439–2450.

Mullet DR (2018) A general critical discourse analysis framework for educational research. *Journal of Advanced Academics* 29(2): 116–142.

Nabeki (2012) Anti-wolf sign. B. Weide Photo. In: *Howling For Justice*. Available at: https://howlingforjustice.wordpress.com/2012/10/13/will-you/anti-wolf-sign-b-weide-photo/ (accessed 18 March 2026).

Nagel C (2025) Immigration policy in the second Trump administration: Restriction, removal, and the limits of MAGA nativism. *The Geographical Journal* 191(4): e70015.

Neumann RP (2002) *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa*. California Studies in Critical Human Geography. University of California Press. Available at: http://www.ucpress.edu/book.php?isbn=9780520234680 (accessed 5 December 2015).

Nie MA (2002) Wolf recovery and management as value-based political conflict. *Ethics, Place & Environment* 5(1): 65–71.

Nie MA (2003) *Beyond Wolves: The Politics of Wolf Recovery and Management*. University of Minnesota Press.

Niemeyer C (2007) The good, the bad and the ugly, depending on your perspective. In: *Transactions of the North American Wildlife and Natural Resources Conference*, 2007, pp. 287–296. Available at: https://wildlifemanagement.institute/sites/default/files/2016-09/10-The_Good_Bad.pdf.

Niemiec R, Berl REW, Gonzalez M, et al. (2020) Public perspectives and media reporting of wolf reintroduction in Colorado. *PeerJ* 8: e9074.

Nirta C and Pavoni A (eds) (2022) *Monstrous Ontologies: Politics Ethics Materiality*. Vernon Press.

Nowak RM (1995) Another Look at wolf taxonomy. In: *Ecology and Conservation of Wolves in a Changing World*. Canadian Circumpolar Institute, 375–398.

Ortner SB (2006) *Anthropology and Social Theory*. Duke University Press.

Philo C and Wilbert C (eds) (2000) *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations*. Critical geographies. Routledge.

Pluskowski A (2006) *Wolves and the Wilderness in the Middle Ages*. Boydell Press.

Polanyi K (2001) [1994] *The Great Transformation: The Political and Economic Origins of Our Time*. 2nd Beacon Paperback ed Beacon Press.

Polley BA (2025) Myth-Busting and the great gray wolf. Available at: https://mountainjournal.org/myth-busting-and-the-great-gray-wolf/ (accessed 17 February 2026).

Povinelli EA (2016) *Geontologies: A Requiem to Late Liberalism*. Duke University Press.

Probyn-Rapsey F (2016) Five propositions on ferals. *Feral Feminisms* 6(Fall): 18–21.

Proffitt KM, Bealer NP, Jourdonnais CS, et al. (2026) Refuges alter elk distribution: A case study of public and private land management strategies. *Wildlife Biology* 2026(1): e01509.

Proffitt KM, Gude JA, Hamlin KL, et al. (2013) Effects of hunter access and habitat security on elk habitat selection in landscapes with a public and private land matrix. *The Journal of Wildlife Management* 77(3): 514–524.

Ramler JP, Hebblewhite M, Kellenberg D, et al. (2014) Crying wolf? A spatial analysis of wolf location and depredations on calf weight. *American Journal of Agricultural Economics* 96(3): 631–656.

Ranglack DH, Proffitt KM, Canfield JE, et al. (2017) Security areas for elk during archery and rifle hunting seasons. *The Journal of Wildlife Management* 81(5): 778–791.

Ribot JC and Peluso NL (2003) A theory of access. *Rural Sociology* 68(2): 153–181.

Richardson JE (2022) 'They need to be managed:' Hunters' and ranchers' narratives of increased tolerance of wolves after a decade of wolf hunting. *Society & Natural Resources* 35(6): 611–627.

Riebsame WE and Robb JJ (eds) (1997) *Atlas of the New West: Portrait of a Changing Region*. 1st ed. W W Norton & Co Inc.

Ring R (2008) The gospel according to Ron Gillett. *High Country News*, 12 May. Available at: https://www.hcn.org/issues/370/17691 (accessed 22 August 2019).

Ripple WJ and Beschta RL (2004) Wolves and the ecology of fear: Can predation risk structure ecosystems? *BioScience* 54(8): 755–766.

Ripple WJ and Beschta RL (2005) Linking wolves and plants: Aldo Leopold on trophic cascades. *BioScience* 55(7): 613–621.

Ripple WJ and Beschta RL (2012) Trophic cascades in Yellowstone: The first 15 years after wolf reintroduction. *Biological Conservation* 145(1): 205–213.

Ripple WJ, Beschta RL, Wolf C, et al. (2025) The strength of the Yellowstone trophic cascade after wolf reintroduction. *Global Ecology and Conservation* 58: e03428.

Robbins P (2006) The politics of barstool biology: Environmental knowledge and power in greater northern Yellowstone. *Geoforum* 37(2): 185–199.

Robbins P (2012) *Political Ecology: A Critical Introduction*. 2nd ed. Wiley-Blackwell.

Robbins P, Meehan K, Gosnell H, et al. (2009) Writing the New West: A critical review. *Rural Sociology* 74(3): 356–382.

Robbins P and Moore SA (2013) Ecological anxiety disorder: Diagnosing the politics of the anthropocene. *Cultural Geographies* 20(1): 3–19.

Rotella J, Garrott R, Proffitt K, et al. (2020) *Evaluating Carnivore Harvest as a Tool for Increasing Elk Calf Survival and Recruitment*. Montana Fish, Wildlife & Parks and Montana State University. Available at: https://wolfwatcher.org/wp-content/uploads/2021/08/MT-elk-wolf-study.pdf.

Rowley WD (1985) *U.S. Forest Service Grazing and Rangelands: A History*. Texas A&M University Press.

Rutherford S (2016) A resounding success? Howling as a source of environmental history. In: *Methodological Challenges in Nature-Culture and Environmental History Research.* Routledge, 63–74.

Rutherford S (2018) The anthropocene's animal? Coywolves as feral cotravelers. *Environment and Planning E* 1(1–2): 206–223.

Rutherford S (2020) Wolfish white nationalism: Lycanthropic longing on the alt-right. *The Journal of Intercultural Studies* 41(1): 60–76.

Rutherford S (2022) *Villain, Vermin, Icon, Kin*. McGill-Queen's University Press.

Rutherford S, Fraser-Celin V-L, Hager HA, et al. (2024) The social landscape of wolves in Canada: Preliminary findings. *Human Dimensions of Wildlife* 30(2): 240–247.

Rutherford S, Shea V and Pearson C (2023) Affect, animals and annihilation: campaigns against canids in post-war Canada. *Emotions: History, Culture, Society* 7(2): 322–347.

Rutledge LY, Garroway CJ, Loveless KM, et al. (2010) Genetic differentiation of eastern wolves in algonquin park despite bridging gene flow between coyotes and grey wolves. *Heredity* 105: 520–531.

Said EW (2014) [1978] *Orientalism*. Knopf Doubleday.

Satterfield T (2007) *Anatomy of a Conflict: Identity, Knowledge, and Emotion in Old-Growth Forests*. UBC Press.

Sax DF, Schlaepfer MA and Olden JD (2022) Valuing the contributions of non-native species to people and nature. *Trends in Ecology and Evolution* 37(12): 1058–1066.

Sayre NF (2004) Viewpoint: The need for qualitative research to understand ranch management. *Journal of Range Management* 57(6): 668–674.

Sayre NF (2017) *The Politics of Scale: A History of Rangeland Science*. University of Chicago Press.

Sayre NF, Carlisle L, Huntsinger L, et al. (2012) The role of rangelands in diversified farming systems: Innovations, obstacles, and opportunities in the USA. *Ecology and Society* 17(4): 43.

Schläppy M-L and Hobbs RJ (2019) A triage framework for managing novel, hybrid, and designed marine ecosystems. *Global Change Biology* 25(10): 3215–3223.

Schroeder RA, St Martin K and Albert KE (2006) Political ecology in North America: Discovering the third world within? *Geoforum; Journal of Physical, Human, and Regional Geosciences* 37(2): 163–168.

Scott JC (1976) *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. Yale University Press.

Sergeyev M, McMillan BR, Hall LK, et al. (2022) Reducing the refuge effect: Using private-land hunting to mitigate issues with hunter access. *The Journal of Wildlife Management* 86(1): e22148.

Sheridan TE (2001) Cows, condos, and the contested commons: The political ecology of ranching on the Arizona-Sonora borderlands. *Human Organization* 60(2): 141–152.

Sheridan TE (2007) Embattled ranchers, endangered species, and urban sprawl: The political ecology of the new American west. *Annual Review of Anthropology* 36(1): 121–138.

Sidhu T, Duguay M, Graham A, et al. (2026) Ghosts on the 'frontier': Interrogating the possessive logic of wolf killing. *Sociology Compass* 20(7): 1–19.

Skogen K and Krange O (2003) A wolf at the gate: The anti-carnivore alliance and the symbolic construction of community. *Sociologia Ruralis* 43(3): 309–325.

Skogen K, Maus I and Krange O (2008) Cry wolf!: Narratives of wolf recovery in France and Norway. *Rural Sociology* 73(1): 105–133.

Smalley AL (2017) *Wild by Nature: North American Animals Confront Colonization*. John Hopkins University Press.

Smith AP, Martin JV, Kwait T, et al. (2025) Cowboying for coexistence? Range riding in the New West. *Frontiers in Conservation Science* 6(1648815): 1–16.

Smith DW and Bangs EE (2009) Reintroduction of wolves to Yellowstone National Park: History, values and ecosystem restoration. In: Hayward MW and Somers MJ (eds) *Reintroduction of Top-Order Predators*. 1st ed. Wiley, pp. 92–125. Available at: https://onlinelibrary.wiley.com/doi/10.1002/9781444312034.ch5 (accessed 17 February 2026).

Smith JB, Spitz DB, Brown CL, et al. (2022) Behavioral responses of male elk to hunting risk. *The Journal of Wildlife Management* 86(3): e22174.

Smith JM (2011) *Monsters of the Gévaudan: The Making of a Beast*. Harvard University Press.

Smith N (2010) *Uneven Development: Nature, Capital, and the Production of Space*. 3rd ed. University of Georgia Press.

Soulé M and Noss R (1998) Rewilding and biodiversity: Complementary goals for continental conservation. *Wild Earth*, Fall. Available at: https://rewilding.org/wp-content/uploads/2012/04/RewildingBiod.pdf.

Steele JR, Rashford BS, Foulke TK, et al. (2013) Wolf (Canis lupus) predation impacts on livestock production: Direct effects, indirect effects, and implications for compensation ratios. *Rangeland Ecology & Management* 66(5): 539–544.

Stone SA, Breck SW, Timberlake J, et al. (2017) Adaptive use of nonlethal strategies for minimizing wolf–sheep conflict in Idaho. *Journal of Mammalogy* 98(1): 33–44.

Swette B, Huntsinger L and Lambin EF (2023) Collaboration in a polarized context: Lessons from public forest governance in the American West. *Ecology and Society* 28(1): 29.

Swette B and Lambin EF (2021) Institutional changes drive land use transitions on rangelands: The case of grazing on public lands in the American West. *Global Environmental Change* 66: 102220.

Taylor D (2016) *The Rise of the American Conservation Movement*. Duke University Press.

Taylor WTT, Wendt JAF, Dombrosky J, et al. (2026) Understanding ancient moose populations in the southern Rocky Mountains. *Journal of Biogeography* 53(6): e70279.

Theodorakea IT and von Essen E (2016) Who let the wolves out? Narratives, rumors and social representations of the wolf in Greece. *Environmental Sociology* 2(1): 29–40.

Thompson EP (2013) *Whigs and Hunters: The Origin of the Black Act*. Breviary Stuff Publications.
Thondhlana G, Redpath SM, Vedeld PO, et al. (2020) Non-material costs of wildlife conservation to local people and their implications for conservation interventions. *Biological Conservation* 246: 108578.
Treves A (2009) Hunting for large carnivore conservation. *Journal of Applied Ecology* 46(6): 1350–1356.
Trump T, Knopff K, Morehouse A, et al. (2022) Sustainable elk harvests in Alberta with increasing predator populations. *PLOS ONE* 17(10): e0269407.
Urbigkit C (2008) *Yellowstone Wolves: A Chronicle of the Animal, the People, and the Politics*. McDonald & Woodward Publishing Company.
USDA (2015) *Sheep and Lamb Predator and Nonpredator Death Loss in the United States, 2015*. September. USDA–APHIS–VS–CEAH–NAHMS. Available at: https://www.aphis.usda.gov/sites/default/files/sheepdeathloss2015.pdf (accessed 17 March 2026).
USDA (2017) *Death Loss in U.S. Cattle and Calves Due to Predator and Nonpredator Causes, 2015*. December. USDA–APHIS–VS–CEAH–NAHMS. Available at: https://www.aphis.usda.gov/sites/default/files/cattle_calves_deathloss_2015.pdf (accessed 17 March 2026).
Vanderbilt T (2017) Did Airbnb kill the mountain town? *Outside*, 11 July. Available at: https://www.outsideonline.com/2198726/did-airbnb-kill-mountain-town (accessed 20 May 2019).
van Eeden LM, Martin JV, Fisk J, et al. (2025) Species nativeness as a cultural paradigm in conservation. *Biological Conservation* 311: 111415.
Van Horn G (2012) The making of a wilderness icon: Green fire, charismatic species, and the changing status of wolves in the United States. In: *Animals and the Human Imagination*. Columbia University Press, 203.
Volski L, McInturff A and Beaudreau AH (2026) Community perspectives on the role of power and place-based knowledge at the frontline of gray wolf (Canis lupus) return. *Elementa: Science of the Anthropocene* 14(1): 00097.
von Essen E (2015) Whose discourse is it anyway? Understanding resistance through the rise of 'barstool biology' in nature conservation. *Environmental Communication* 11(4): 470–489.
Wagner FH, Hamilton WL and Keigley RB (2006) *Yellowstone's Destabilized Ecosystem: Elk Effects, Science, and Policy Conflict*. 1st ed. Oxford University Press. Available at: https://academic.oup.com/book/10711 (accessed 17 February 2026).
Walker P and Fortmann L (2003) Whose landscape? A political ecology of the 'exurban' sierra. *Cultural Geographies* 10(4): 469–491.
Warren CR (2023) Beyond 'Native V. Alien': Critiques of the native/alien paradigm in the Anthropocene, and their implications. *Ethics, Policy & Environment* 26(2): 287–317.
Watson RB and Muraoka DD (1992) The northern spotted owl controversy. *Society & Natural Resources* 5(1): 85–90.
Way JG and Lynn WS (2016) Northeastern coyote/coywolf taxonomy and admixture: A meta-analysis. *Canid Biology & Conservation* 19(1): 1–7.
Weaver JL (1978) *The Wolves of Yellowstone*. Dept. of the Interior, National Park Service : for sale by the Supt. of Docs., U.S. Govt. Print. Available at: http://archive.org/details/wolvesofyellowst243weav (accessed 17 February 2026).
Weckworth BV, Dawson NG, Talbot SL, et al. (2015) Genetic distinctiveness of Alexander Awerchipelago wolves (Canis lupus ligoni). *Journal of Heredity* 106(4): 412–414.
West P, Igoe J and Brockington D (2006) Parks and peoples: The social impact of protected areas. *Annual Review of Anthropology* 35(1): 251–277.
Whyte K (2018) Settler colonialism, ecology, and environmental injustice. *Environment and Society* 9(1): 125–144.
Wielgus RB and Peebles KA (2014) Effects of wolf mortality on livestock depredations. *PLoS ONE* 9(12): e113505.
Wilkins J and Doak D (2009) *Species: A History of the Idea*. University of California Press.
Wilkinson CE, Mcinturff A, Miller JRB, et al. (2020) An ecological framework for contextualizing carnivore–livestock conflict. *Conservation Biology* 34(4): 854–867.

Williams R (1980) Ideas of nature. In: *Problems in Materialism and Culture*. Verso, 67–85.

Wilson MA (1997) The wolf in Yellowstone: Science, symbol, or politics? Deconstructing the conflict between environmentalism and wise use. *Society & Natural Resources* 10(5): 453–468.

Winkler R, Field DR, Luloff AE, et al. (2007) Social landscapes of the inter-mountain west: A comparison of 'old west' and 'new west' communities. *Rural Sociology* 72(3): 478–501.

Wise MD (2016) *Producing Predators: Wolves, Work, and Conquest in the Northern Rockies*. University of Nebraska Press.

Woodroffe R, Thirgood S and Rabinowitz A (2005) *People and Wildlife: Conflict or Coexistence?* Cambridge University Press.

Wright GJ, Peterson RO, Smith DW, et al. (2006) Selection of northern Yellowstone elk by gray wolves and hunters. *Journal of Wildlife Management* 70(4): 1070–1078.

Wuerthner G (2017) Coexistence between wolves and livestock is a delusion. *High Country News*, 19 October. Available at: https://www.hcn.org/articles/opinion-coexistence-between-wolves-and-livestock-is-a-delusion (accessed 10 August 2019).

Wuerthner G (2020) The war on wolves is part of the culture war. *CounterPunch.org*, 11 February. Available at: https://www.counterpunch.org/2020/02/11/the-war-on-wolves-is-part-of-the-culture-war/ (accessed 25 June 2020).

Wuerthner G and Matteson MY (2002) *Welfare Ranching: The Subsidized Destruction of the American West*. Island Press.

Wyoming Game & Fish Department (2024) New elk harvest record set by Wyoming hunters | Wyoming Game & Fish Department. Available at: https://wgfd.wyo.gov/news-events/new-elk-harvest-record-set-wyoming-hunters (accessed 18 February 2026).

Young JK, Ma Z, Laudati A, et al. (2015) Human-Carnivore interactions: Lessons learned from communities in the American West. *Human Dimensions of Wildlife* 20(4): 349–366.