



FIG. 4.1. Stephen Nelson Leek, *Elk Herd Eating Hay in Snow on the Leek Ranch, Jackson Hole, WY*, no date, published in *Zoological Society Bulletin* in May 1914. Photographic print, original version glass plate negative, 16.5 × 21.6 cm. S. N. Leek Papers, University of Wyoming, American Heritage Center.

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four Animal Photography and the “Elk Problem” in Modern Wyoming

In the May 1914 issue of the New York Zoological Society’s bulletin two photographs document the fluctuating population of the Jackson Hole elk herd and offer a glimpse of the larger conflicts between man and animal brought on by the arrival of Euro-American settlers in this Wyoming valley. The first image resembles the aftermath of a battle: a group of dead elk are strewn across a landscape. In the foreground their bodies are emaciated, intertwined, and distorted, seeming to have been there for a long time, perhaps since the last snowfall, which is melting on the hill in the background. In contrast, the second photograph depicts a large herd of live, healthy elk feasting on hay in a winter field (fig. 4.1). These elk are even more numerous than the first picture, receding far into the background space and blending into the landscape. The first photograph was taken five years earlier than the second, in 1909; viewed chronologically, the pictorial narrative of dead-to-alive is explained by accompanying captions. The first reads, “Five years ago, when elk were starving. Photographed in Jackson Hole, Wyoming by S. N. Leek before Congress took hold to save the elk.” The second: “Elk herd today in Jackson Hole. They have been fed all winter by the Government and will seek their grazing ground in the hills as soon as the snow goes off. There are 887 elk in this picture and behind the camera are many more. Photographed by S. N. Leek. February 1914.”¹ As a visual record of animal history, this diptych represents the elk as both a vulnerable and a protected species, animals who increasingly lost their self-sufficiency and ended up reliant on the interventions and control of Euro-American settlers who had caused the crisis in the elk’s livelihood in the first place.

This chapter discusses the intersections among animal photography, hunting, and conservation in Jackson Hole, Wyoming, and the issues surrounding the “elk problem”—that is, the mass starvation and death of thousands of elk

due to Euro-American settlement between 1889 and the establishment of the National Elk Refuge in 1912. Publicizing the demise of the elk while also popularizing the area as a wildlife tourist destination, homesteader Stephen Nelson Leek (1858–1943) became the leading advocate for the preservation of the elk. The national circulation of Leek's photographs gave pictorial access to wildlife of the American West in an otherwise remote part of the country; even in 1910 Jackson Hole was 120 miles from the nearest railway station in Idaho and accessible in the winter only by snowshoe through Teton Pass. Just as images were used to help establish and promote the first national parks in the nineteenth century, photographs of animals in the wild were published to sway public and congressional opinion about their protection. This chapter reveals how the simultaneous arrival of cameras in the region and the increasing issues facing elk resulted less in an environmental crisis than an opportunity to colonize the animals through federally funded feeding programs and force them into restricted territories. Wildlife preservation served not only to advocate for the well-being of animals and their habitat but also to gain control over animals for economic and political purposes.

“Visual imagery,” writes Alan C. Braddock, “far from being transparent or of negligible importance, played a central role in mediating environmental attitudes and politics in late-nineteenth-century America.”²² In the tradition of promoting the American West through photography and painting, animals and the landscape were represented as independent from humanity—as unspoiled and idealized. When Euro-American settlers were depicted, they were portrayed as being at the mercy of nature. Painters like Charles M. Russell perpetuated the romanticization of the West through images of its ostensible dangers: predatory animals, extreme landscapes, severe weather, and Indigenous people. The camera diverges from other mediums, however, in that it was believed to be “a recorder of facts,” a machine of “great scientific value, for it cannot lie.”²³ Understood as an objective representation of the world, photography was capable of persuading viewers to support environmental conservation. Most famously, Carleton Watkins's photographs of Yosemite Valley represented the landscape as pristine and void of humanity—settler or Indigenous—and these images were used in 1864 when Congress passed and President Lincoln signed the first legislation to preserve land for the common good. Similarly, William Henry Jackson's photographs and Thomas Moran's paintings of the Yellowstone region during the Hayden Expedition, a federal

survey in 1871, were used in the official report to lobby Congress to establish Yellowstone National Park in 1872. In fact, Congress purchased Moran's painting *The Grand Canyon of the Yellowstone* (1872), which was then widely popularized by chromolithograph reproductions—circulating conservationist ideals about the American wilderness as pristine and hiding the realities of violence, death, and destruction inflicted on Indigenous peoples, animals, and the environment.

Leek's photography diverged from traditional portrayals of nature by maintaining the copresence and codependence of white settlers and animals, and documenting the ongoing struggle to gain control of environmental problems, including pictures of dead and dying animals in the landscape. Beginning his photographic career in keeping with the emerging genre of "camera hunting" at the time, Leek's practice combined a hunter's visualization of elk while also documenting their existence, peril, and survival in relationship with white settlers. His pictures recorded what it was like to be an elk in Wyoming at the turn of the century, as animals confronted multiple obstacles, including spatial and ecological changes as well as encounters with poachers, hunters, and photographers on the landscape. By publicizing the demise of the elk to help them, while also popularizing Jackson Hole as a hunting destination, Leek's photographs reveal that Euro-American settlers wanted to protect elk both as wildlife of intrinsic value and as a natural resource to be exploited by people.

THE BEGINNING OF THE ELK PROBLEM

The history of Euro-American settlement in Jackson Hole is in keeping with the "story of frontier migration" William Cronon describes as "a long tale of people moving to frontier areas, seizing abundance, encountering scarcity, and remaking the land and themselves in the process."⁴ Fifty miles south of Yellowstone National Park, Jackson Hole (originally called Jackson's Hole) is a large valley situated between the Teton and Gros Ventre mountain ranges in Wyoming. Teton County is home to a diversity of plants and a rich variety of wildlife, with over fifty species of mammals who inhabit the region part or most of the year. Surrounded by rugged mountains, the basin was inhabited by prehistoric people as early as 6500 to 7400 BCE, eventually belonging to the Eastern Shoshone nation, who occupied the valley during the summer months for ceremonial and hunting purposes.⁵ With an average elevation of

6,800 feet (2,100 meters), its geographic remoteness, rough terrain, and climate led to the relatively late arrival of homesteaders at the end of the nineteenth century, when the rest of the western frontier had already reached the Pacific. The arrival of white settlers in Jackson Hole, beginning in 1884, altered the landscape, causing ecological changes that disrupted wildlife populations, migration patterns, habitats, and resources.

Significantly impacted were the herds of elk who migrated in the thousands from the Teton Mountains and the Yellowstone region to their winter ranges in the Red Desert and Green River Basin areas of southern Wyoming. The Rocky Mountain elk (*Cervus canadensis nelsoni*), a subspecies of elk found in the Rocky Mountains and the ranges of western North America, is one of the largest mammals in North America. These ungulates are also called wapiti, from the Shawnee and Cree word *waapiti*, meaning “white rump.” Elk are social animals who herd together while traveling, and their seasonal migrations take place from higher altitudes in the summer, when their large matriarchal herds are dominated by one or more mature cows, to lower altitudes during the winter months. Today elk spend the spring, summer, and early autumn in the meadows of the Yellowstone and Grand Teton National Parks, before they subdivide into discrete herds, including the southern or Jackson herd, to winter outside the parks.⁶

Prior to Euro-American settlement, there is evidence that the southern herd used Jackson Hole only as a resting ground along their journey, but by the late 1880s the herd began shortening the migration route so that Jackson Hole became their winter destination, and this pattern has continued since that time.⁷ However, Jackson Hole was not ideal, as ranching, farming, and development soon began to encroach on elk feeding grounds. Descending into the valley, elk faced numerous changes along their historic migration route: extensive irrigation, the replacement of sage-brush flats and meadows on which they foraged with fields of grain and hay, and newly built barbed-wire fences and roads. There was also new competition from domestic livestock who ranged the land that had previously supported elk and other animals. The changes brought to the landscape by animal agriculture demonstrate that white settlers were not individual immigrants but, as Alfred Crosby shows, were “part of a grunting, lowing, neighing, crowing, chirping, snarling, buzzing, self-replicating and world-altering avalanche.”⁸ Faced with these changes, elk were confined to Jackson Hole and the surrounding area in the winter and during

particularly harsh winters were at the mercy of severe cold and heavy snow accumulation. Some years thousands of elk died of starvation, succumbing to what was known as the elk famine or “elk problem.”

Some researchers argue that the loss of traditional forage due to farming and the introduction of hay, even when it was insufficient, created a reliance on the new food supplied by people.⁹ While modest in size, the increasing cattle population in the valley coincided with the emergence of the elk problem. According to the Wyoming Stock Growers Association, ranches in Jackson Hole steadily increased; in 1901, there were 29 ranchers and 1,540 cattle, and by 1910 there were 61 ranchers and 10,919 cattle (although these numbers are considered low because this does not account for cattle raised by nonmembers).¹⁰ Unlike the Great Plains, the size of ranches was limited in Jackson Hole because of the short grazing season, and herd size was determined by the amount of land needed to cultivate hay in the winter.¹¹ It is in the periphery of ranches, or on them, that many elk died of starvation.

Another contribution to the elk problem was the situation in the Jackson herd’s summer ranges. When Yellowstone National Park was set aside as a “pleasuring-ground for the benefit and enjoyment of people,” little was initially done to protect its wildlife.¹² Poaching was so rampant in the park that an estimated four thousand elk were hunted every year from the 1870s until the US Army took over in 1886. According to historian Paul Schullery, around the time Yellowstone was established, hunting had caused an “ecological holocaust.”¹³ It was not until 1894, when the Yellowstone Game Protection Act was passed, that the situation changed. But these conservation efforts were counterproductive: by the late 1890s elk numbers increased so greatly that they exceeded the park’s capacity to feed them, and by the 1920s and 1930s heavy grazing and browsing by elk was killing plants, shrubs, and trees, and causing soil erosion.¹⁴

In the hierarchy of wildlife, elk were considered “the most valuable livestock in Wyoming” and “the stateliest deer in the world,” and requiring protection from predatory animals.¹⁵ In contrast, bounties were placed on such animals as mountain lions, wolves, coyotes, wolverines, bobcats, and bears because they were viewed as threats to game and livestock, species of economic and cultural value. At least seven thousand elk were slaughtered between 1875 and 1877 for “their hides, or perhaps their carcasses, which were stripped and poisoned for bear, wolf, or wolverine bait.”¹⁶ Bounties were encouraged and paid for by

private landowners, rancher associations, the territory and state, and eventually by the federal government, demonstrating how wildlife would become intensely human managed. Perhaps the most vilified species in Wyoming was the gray wolf, which was increasingly perceived as an economic threat to both ranching and game animals. Between 1895 and 1927 over 36,000 wolves were killed by bounty hunters and government trappers, contributing to their near extinction from Wyoming by 1930.¹⁷

In what was once regarded as a landscape of “endless abundance,” the elk problem revealed how the frontier was, as Cronon describes, a landscape of “scarcity, so fragile in the face of human destructiveness that only careful management could ensure survival.”¹⁸ Outside Wyoming, elk had already succumbed to the irreversible impacts of Euro-American settlement. In the eastern United States and southern Canada the eastern elk (*Cervus canadensis canadensis*) was declared an extinct subspecies in 1880, around the same time the Merriam’s elk (*Cervus canadensis merriami*) was made extinct in the southwestern United States due to overhunting and cattle grazing.¹⁹ At stake was not just the future of the elk as a species but the livelihood of the new community, which relied on the growing recreational tourism economy, which entailed guided fishing, trophy hunting, and later, wildlife photography. There was the economic value of elk as a material good, in the form of live animals, meat, hides, antlers, and eyeteeth, all significant exports from the state. Therefore, saving the elk from human impact would also ensure there would be enough animals of value. At the same time, many farmers considered (and still consider) elk to be pests since they can damage crops and fences, eat livestock feed, and possibly spread disease. With little support or infrastructure from the territory and state to deal with these issues, residents of Jackson Hole found ways to preserve wildlife on their own terms.

S. N. LEEK, “FATHER OF THE ELK”

Sportsmen conceptualized elk as animals to be hunted (by camera or rifle) in a manner of fair chase and to be protected from the inappropriate deaths they increasingly faced in the forms of “poaching” and starvation. But how do we find the animal experience within these human sources? Bearing witness to the spatial and ecological changes, as well as the multiple ways human power structures and ideologies affected the lives of the local wildlife, the photo-

graphs allow us to piece together what it was like to be an elk in Wyoming at the turn of the century. The archive of Leek's photographs, which spans over fifty years (1890–1943), contains thousands of photographs of wildlife in the Jackson Hole region, with a particular focus on elk—both dead and alive—exhibiting a visual narrative of the animals as a revered species.²⁰ Pictured in situ, many elk gaze directly at Leek's camera, as if engaging for a brief moment with their human observer. Seen through Leek's eyes and lens, elk were noble, primordial, even ideal creatures that stood in for the landscape itself. Widely published between 1890 and 1920, Leek's pictures and writing appeared in sporting magazines, newspapers, and scientific books, as well as federal and state publications. In the beginning, he sold and published photographs as a way to promote himself as a hunting guide for sportsmen from the East. In the late 1890s until the 1910s, sporting magazines such as *Recreation* frequently printed letters Leek wrote with updates on big game hunting in Wyoming, illustrating their pages with photographs he mailed in. At the same time, Leek began documenting the aftermath of poaching, the starving and dying elk on his ranch, and the efforts to save them through supplemental feeding, distributing the photos and urgent letters to sporting journals to call attention to these issues.

“HUNT WILD ANIMALS WITH A CAMERA”

With the rapid development of the American conservation movement in the nineteenth century, growing concern for protecting land extended to an effort to preserve wildlife, especially with the anthropogenic near extinction of bison by the 1880s and the extinction of the passenger pigeon by 1901. Recreational hunters in particular wanted to protect individual big game species that were facing issues of habitat destruction and overhunting, organizing their efforts through private sportsmen's clubs and the sporting press to pressure local and national governments to create hunting regulations.²¹ Their goal was not only to save game animals from extinction but to ensure sport hunting in the future. Coinciding with these issues were the technological advancements made in photography, which had the potential to support wildlife conservation efforts.

It was not until the late nineteenth century, which brought faster film and compact cameras, that photographing animals in their natural habitats became possible. Prior to these developments even the slightest movement of subject

or camera caused blurring of the image, which explains why some of the first photographs of animals in their natural habitat were actually of taxidermy. The first photographs of living animals in the wild were taken in the 1890s by hunters who turned to photography as a new technology to accompany or replace their weapons. Classified as “camera hunting,” this early form of animal photography emerged when hunters employed methods similar to those used to shoot animals with a firearm.²² When Leek received a camera from Eastman around 1891, he adapted hunting skills analogous to those that would produce successful photographs of animals in the wild. They include a working knowledge of animals and their habitat, the use of specific tools, precision in aiming at “prey,” and familiarity with shooting technology, whether weapon or camera. Furthermore, photographing animals in the wild was believed to be equal to, if not more difficult than, hunting itself since the technological and logistical limits of early photography made it extremely challenging. Early articles on camera hunting, including those by Leek, describe in detail how to produce a successful shot. Consider, for instance, the quick shutter speed and adequate sunlight needed to capture the unpredictable movement of animals in the wild while navigating wind, sun direction, and other on-site variables. Camera hunting required the use of other living animals, too, such as horses or mules, to bear the burden of packing in and out the excess weight of fragile glass-plate negatives, equipment, and chemicals, as well as kills, whether it be meat for camp or trophy heads.

Increasingly, camera hunting was elevated over hunting as a way to preserve wildlife—a position advocated, though not practiced, by Theodore Roosevelt, who observed, “More and more, as it becomes necessary to preserve the game, let us hope that the camera will largely supplant the rifle.”²³ Stricter hunting restrictions across the United States coincided with the rise of new photographic technologies that made it easier and more affordable to become an amateur camera hunter. As a result, this new hobby was marketed in popular publications such as *Recreation*, *Forest and Stream*, and *Outdoor Life* to sportsmen who were looking for alternative ways to hunt when the season was over, with advertisements for camera equipment and photographic paper appearing alongside ads for ammunition and hunting lodges. Kodak explicitly suggested that the camera could replace the gun, using slogans such as “There are no game laws for those who hunt with a Kodak” or advising “There are no game laws—and no accidents—for those who hunt with a Kodak” and “The

rod or the gun may be left out, but no nature lover omits a Kodak from his camp outfit.”²⁴

With a similar sentiment, in 1917 two of Leek’s photographs of elk herds in the landscape were included in the brochure *The National Parks Portfolio* alongside an article that suggested, “Hunt wild animals with a camera.”²⁵ Since hunting was restricted within park boundaries, encouraging visitors to take up photography contributed to the wider ethos at stake, akin to the conservationist motto “Take only pictures, leave only footprints.”²⁶ The implication here is that hunting with a camera was less intrusive than hunting with a gun; yet, as Matthew Brower argues, “This rhetoric positions nature photography as maintaining a separation between humans and nature” and “assures us that photography keeps us at an appropriate distance from nature.”²⁷ Closer examination of these images and their narratives, however, reveals how intrusive the practice could be. Although claiming to portray animals ostensibly free of human influence, these modes of photography were often artificial and required intrusive hunting tactics. As Brower demonstrates in *Developing Animals*, the widespread use of trip wires and bait and the practice of “jacklighting” (a hunting technique, now illegal, that uses fire or light to attract and stun animals) confirm that camera hunting was by no means a passive activity.²⁸ Some photographers used dogs to tree or chase animals in order to take their photographs, only to kill them afterward.²⁹ A Wyoming game law introduced in 1906 illustrates how animal photography was equated with hunting, requiring photographers to obtain a permit from the state game warden as well as employ a special assistant warden to supervise the expedition at the salary of \$3 per day.³⁰ From written accounts, however, it appears Leek was less intrusive in his tactics of photographing living animals, wearing white clothes and painting his camera white to blend with the snow and later feeding hay to elk on his ranch as a convenient way to lure the animals closer to the camera.

By picturing human-animal encounters, photographs of animals by way of “camera hunting” lacked “the separation of human and animal that is central to wildlife photography.”³¹ For some, hunting with a camera was never a matter of replacing the rifle. In fact, obtaining a picture before and after a kill was common, as seen throughout Leek’s archive, including *The Elk of Jackson’s Hole, Wyoming, Their History, Home and Habits*.³² The photographs in this self-published book show a progression of human-animal encounters from the hunter/photographer’s perspective. As the title clearly implies, the reader

is given a history of the elk, but only from a hunter's perspective. We see, first, a close-up picture of a large bull who faces the camera, followed by an image of an unnamed hunter aiming at a herd of elk in the distance, then the same hunter posed with his "prize head," and the book concludes with several pictures of large herds of elk in the landscape. Leek's pictorial narrative promotes his marksmanship as a camera hunter and at the same time demonstrates how pictures provide proof of the abundance of game animals in the region. One could, in fact, "prove it—with a Kodak."

"INDIAN HUNTING RIGHTS"

As "the father of the elk," Leek's authority on elk was a white settler's vision of a sustainable relationship between humans and animals, one which, through his direct participation in racially targeted conflict, perpetuated an intolerance of Indigenous hunting. This included the belief that Indigenous tribes were intruders in the valley and contributors to the population decline of game animals, even though these forms of subsistence hunting had been sustainable for thousands of years. The arrival of Euro-American settlers in the mid-nineteenth century encroached on Indigenous territory, created competition for resources, and caused damage to the habitat, altering the behavior of the game on which their livelihood depended. Often ignoring game laws themselves, as Karl Jacoby observes, the residents of Jackson Hole viewed subsistence hunting by settlers "as a natural right" and "rarely opposed poaching done for necessities such as meat, hides, or tallow."³³ In contrast, much like elsewhere in the country, off-reservation hunting by Native Americans was considered poaching and a threat to the livelihood of game animals and white hunting guides. People of Jackson Hole were specifically intolerant of the annual hunting practices of the Shoshone and Bannock because they did not have to follow the same game laws as non-Indigenous peoples since they were guaranteed by the 1868 Treaty of Fort Bridger "the right to hunt on the unoccupied lands of the United States so long as game may be found thereon."³⁴

Conflicts regarding hunting rights increased throughout Wyoming, Montana, and Idaho in the 1890s, culminating in the Bannock Uprising, or Bannock War of 1895, which began when twenty-seven armed white men from Jackson Hole confronted a Bannock family who had traveled from Fort Hall Reservation to hunt elk, a traditional food source, to the south of Yellow-

stone.³⁵ Among the mob was Leek, who participated in arresting the families for “wantonly killing game,” a confrontation that became violent when Bannocks attempting to escape were shot at, resulting in one death and several injuries.³⁶ The unprovoked violence led to a national public outcry, a federal inquiry, and eventually the US Supreme Court case *Ward v. Racehorse*, which declared that the Treaty of Fort Bridger was superseded by Wyoming law and required Indigenous persons to follow state hunting regulations off reservation.³⁷ Increasingly, access to a dwindling population of game animals was a privilege of the white settlers who had caused the animal population to be in a crisis in the first place. The Bannock Uprising reveals how the anthropogenic environmental change that came with colonization had not only put new pressure on elk populations but it also exposed the political inequalities between white settlers and Indigenous peoples.

In the months following the conflict, *Forest and Stream* published several articles on the matter. While most of these shared the belief of Jackson Hole residents that Indigenous hunting practices were equal to that of poachers and market hunters, on several occasions the editor condemned the conflict as murder, pointing out that hunting parties from the East were equally, if not more, detrimental to elk populations but had not met the same reaction.³⁸ Updating readers on the appeal taken to the Supreme Court, the article “Indian Hunting Rights” featured three of Leek’s photographs, the first time he was published in *Forest and Stream*. Leek had submitted these pictures as a direct response to the recent conflict, writing, “Find inclosed [*sic*] some photos, taken by myself last winter, of elk on their winter range in Jackson’s Hole. . . . Can not the sportsmen of the East with their influence help us, the people of Jackson’s Hole, to save these noble animals from all being slaughtered?”³⁹ His position on the issue of Indigenous hunters perceived as “poachers” was not unusual for the time; in fact, Leek was explicit in letters to various publications on the matter, blaming a decline in the elk population on the presence of Indigenous peoples on the land and boasting in 1896 how “one bunch of Indians have been arrested and fined . . . [and] now languish in jail,” perhaps the victims of the Bannock Uprising.⁴⁰

The inclusion of his pictures is odd given the condemnation of the conflict by the journal and Leek’s direct participation in it. Nonetheless, when published alongside the text, these animal photographs came to represent power and control over hunting rights and reveal how the relationship between

humans and animals was understood from a settler-colonial viewpoint. Like most of Leek's early work, the photographs published in *Field and Stream* are taken from a distance, groups of silhouettes on the snowy landscape that create the illusion that we, the viewers, are looking at them through the barrel of a gun. From the lens of a white settler, Leek's camera-hunting images were reframed in the context of the conflict with Indigenous peoples, but at the same time, they reached the same sports community the photographs were initially intended for.

In the context of a sports publication, where hunting was pursued as a form of leisure, subsistence hunting lacked the same cultural capital as sports hunting. Between the nineteenth and twentieth centuries there was a signal change in how hunting was practiced and understood in the United States and how it represented a cultural identity. In the wake of the Civil War, when subsistence hunting declined, sport hunting grew in popularity among middle- and upper-class men. By the latter half of the nineteenth century the utilitarian function of the hunt was replaced by its value as a sport, serving pleasure rather than subsistence. This emphasis continued to define hunting during the twentieth century. As sociologist Jan Dizard observes, this shift furnished the grounds for the critique of hunting until recent times, as most critics of hunting accept its value as a utilitarian activity but not as recreation.⁴¹ With a desire to connect with the tradition of elite British hunters, the ideal of the white sportsman appealed to the increasingly urban and educated middle- and upper-class American, or as Thorstein Veblen put it in 1899, the "predatory leisure class."⁴² Sports hunting as a continuous tradition redolent of upper-class sensibility was reflected in the practices and values embraced by sportsmen who believed they had a moral way of thinking about hunting and nature, a code of conduct that was socially constructed and willingly followed. At the turn of the twentieth century outdoor recreational magazines such as *Field and Stream* were produced for the sport hunter, publishing articles on hunting practices and stories that often underlined sportsmanlike practices of hunting within limits and in the proper season. Read through these different modes of address to audience and purpose, it is impossible to read Leek's photographs as simply representations of animals in a landscape. Leek's images were ideologically inflected attempts to define Indigenous hunting practices, long sustainable, as forms of poaching and to pronounce them illegal.

TUSKING

In the late 1890s while elk were already facing colonial environmental crises, another threat they faced was a new form of illegal market hunting, called tuskling, for the purpose of collecting their upper canine eyeteeth. During the winter months elk are vulnerable creatures. In large numbers they are highly visible against the white snow, and, unable to camouflage, they become easy targets. Just as hunters had killed buffalo for their tongue or hide, leaving the rest of the carcass where it fell, “tuskers”—transient men and opportunistic locals—hunted adult elk solely for their two “ivories.” Tusking became such a problem that in 1904 Leek began documenting the aftermath of illegal market hunting in the valley, providing authentication on the issue for Wyoming’s *Game Warden’s Report* as well as articles in newspapers and magazines. Using Leek’s photos, the *Los Angeles Times* described a common scenario in 1906: elk laboring through the snow with their young and suddenly sensing humans in the snow, the loud sounds of gunfire, and a mad scramble to escape.⁴³ Sometimes tuskers wore skis or snowshoes to chase the animals into deep snow, which held them in place while they were killed at close range.

Between 1890 and 1910 tusking was driven by the popularity of elk teeth as part of the official badge of membership (ironically) in the Benevolent and Protective Order of Elks, a fraternal organization founded in 1868 in New York. Mounted on watch fobs, cuff links, pins, and rings, elk teeth were in such high demand that imitation teeth were produced and sold as the cost of ivory increased. Initially it was not elk hunting that supplied the demand but rather the purchase of Indigenous garments from which teeth were removed to resell.⁴⁴ When demand for ivories increased among members of the Elks, in addition to collecting from animals they hunted, residents of Jackson Hole began to carry pliers with them in the winter in order to remove the tusks from dead elk they came across in the valley.⁴⁵ Tusk collecting from hunting was not detrimental until outsiders, primarily transient white men who traveled through the area, took notice of the lucrative opportunity and began illicitly killing elk for the sole purpose of collecting their teeth. Tuskers developed ways to avoid getting caught, including smuggling the easily hidden teeth and fastening hooves to the soles of their feet to hide their tracks in the winter and avoid game wardens.⁴⁶

Already photographing issues surrounding the elk problem, Leek began documenting the work of the illegal hunters: otherwise healthy bulls found rotting in the landscape, their meat, hides, and antlers left for waste. In contrast to his other pictures of dead elk, these have bloated bodies, and their faces are often out of the camera's viewpoint, as if to give them some dignity in their death. Following Leek's lead, in 1907 Al Austen, a forest ranger and amateur photographer with the first telephoto lens in the valley, captured a crew of tuskers known as the Binkley gang in the process of killing elk and extracting tusks in Yellowstone, images of which were used as evidence in their trial.⁴⁷ A decade earlier, L. A. (Laton Alton) Huffman had documented the illegal hunting of buffalo in Montana, photographs reproduced as illustrations in William Temple Hornaday's report, *The Extermination of the American Bison*, produced for the Smithsonian Institution in 1889.⁴⁸ Visually, both Huffman and Leek's pictures are reminiscent of Timothy O'Sullivan's (1840–1882) documentation of the aftermath of the American Civil War, the camera bearing witness to anonymous bodies of soldiers strewn across the landscape.⁴⁹ Leek's photographs offer a different visualization of the animal experience—or the aftermath of it, at least. While Huffman's photographs depict an active engagement with the slain animals by including men skinning buffalo and horses in the background, Leek's pictures are quiet, as the animals blend into the ground and antlers resemble the tree branches above.

The disparity between hunting *with* a camera and documenting forms of hunting *on* camera indicates how human-animal relations were conceptualized by white settlers at the beginning of the twentieth century. Increasingly, photographs were taken during hunting trips to equally celebrate and authenticate successful kills. For those who followed the sportsmanship code of fair chase, often these pictures contained visual markers showing that hunting parties had behaved honorably, including displays of the legal limit of animals per hunter arranged side by side as a testament to an adherence to game laws.⁵⁰ Others created elaborate displays of their excessive and illegal kills. George O. Shields, editor of *Recreation*, took on the role of activist for wildlife conservation by publishing these photographs as a way to name and shame people he called "game hogs." The circulation of Leek's photographs of elk who had died from illegal hunting fit within this genre of what were considered inappropriate animal deaths as a way to not only raise concern for the animals but shame members of the Order of the Elks, many of whom were part of the social

circles of those who supported environmental conservation. Due in part to Leek's advocacy, there was a national call to stop illegal hunting, including by President Theodore Roosevelt, who addressed the issue in his 1902 State of the Union Address, stating that "butchering off such a stately and beautiful creature as the elk for its antlers or tusks" was "against our national good."⁵¹ Again, elk were made vulnerable by the arrival of Euro-Americans. From a self-sufficient population, the elk became reliant upon a small group of white settlers and the charity and advocacy of the wealthy from the East to protect them from the predators of the market.

THE ELK FAMINE UP CLOSE

The progression of the multiple crises facing the elk are spatially reflected in Leek's photographic archive from the 1890s until the formation of the National Elk Refuge in 1912. Over time, his photographs provide a clearer picture of the animal experience. That is to say, the combination of the elk problem with the development of photographic technologies influenced how Leek photographed animals. When Leek began documenting numerous elk dying of starvation in Jackson Hole, the resulting images provided a visual record of how animals experienced a loss of autonomy—too weak to care about a man with a camera—as they succumbed to the consequences of the colonial project. In these scenes we get a closer look at the animal experience, with the camera recording human-animal interactions in which both parties were trying to deal with a crisis: the elk with starvation and severe winter weather, and the ranchers with preventing elk from stealing their livestock's hay but also attempting to keep the elk from dying.

Homesteaders had only been in the valley for a few years when the first elk famine occurred in the winter of 1889–90, resulting in the death of an estimated twenty thousand elk out of a herd of fifty thousand. In 1900 Leek wrote to *Recreation* asking for advice on the issue, describing how elk "attacked the settlers' haystacks, already too small to meet the needs of the domestic animals." To which editor George O. Shields suggested they continue to feed the elk hay and grow "soft wood trees, such as willows and aspens, on which such animals browse," and which had been replaced by farm fields in the first place.⁵² The elk famine did not seem to be an issue until almost two decades later, when three harsh winters between 1908 and 1911 caused thousands of

elk to die. The mass die-off was aggravated by several factors: the population of elk had significantly increased partly due to conservation efforts, there had been several years of mild winters, their natural predators had been eradicated, and much of the winter range had been settled with farms, ranches, homes, and roads as the population of Jackson Hole increased.

In 1909 the snow depth in the valley reached three feet and was frozen on the surface, making it impossible for the winter grazing of an estimated twenty thousand elk. Too famished to fear humans, elk charged pastures and stables, with some reports of animals breaking through barn windows, and one individual eating the bristles of a broom. The community tried multiple solutions to prevent elk from raiding their feed supply, including creating new enclosure designs, installing barbed-wire fencing, deploying guard dogs, and firing guns to scare or kill elk. Some ranchmen pitched tents or made camp near their haystacks, spending the night during the most severe months of winter to protect their cattle's food supply.⁵³ Leek recalled the struggle between ranchers and the starving elk in *Colliers Weekly*: "These are trying times for the settler, who must sleep by his haystack during the cold winter night to save the scanty supply for his stock, and who may be awakened during the night to find elk standing over him feeding. When they are starving hardly any kind of fence will stop them; they roam at will over all the ranches, devouring everything in sight that can be eaten, even to willow brush one-half inch in diameter."⁵⁴

In Yellowstone, elk were also wreaking havoc, repeatedly breaking down fences as they stole hay meant for antelope, deer, and mountain sheep.⁵⁵ In negotiating these interactions with the elk, citizens of Jackson Hole were faced with not only the need to ensure the winter survival of their livestock but general concern for the well-being and survival of animals dying at their doorsteps, animals who provided income in the summer from tourists.

There is a sense of urgency and hopelessness in the photographs of the elk famine, both from the animals and the photographer. Leek described such a feeling: "I took a photograph from my barn last evening, showing fifty elk, part of them within the corral, and at the time there were fifteen hundred head of elk within my field, all starving. I could feed a hundred or so, but did I commence I should soon have a thousand to feed, and I haven't the hay. . . . I feel almost like quitting and letting them all die, and have the worry over."⁵⁶

Photographs from these winters record scenes of elk carcasses strewn across



FIG. 4.2. Stephen Nelson Leek, *Two Young Elk at Haystack Surrounded by Carcasses on the Leek Ranch, Jackson Hole, WY*, no date. Photographic print, original version glass plate negative, 16.5 × 21.6 cm. S. N. Leek Papers, American Heritage Center, University of Wyoming.

fields and bodies piled around hay corrals. *Two Young Elk at Haystack Surrounded by Carcasses on the Leek Ranch, Jackson Hole, WY* encapsulates the desperation facing the animals, with hay visible but unreachable (fig. 4.2). There is also a series of pictures in which an unidentified man stands beside a group of elk, posing in contemplation of the animals suffering around him, some of which are looking up at him. In another, a yearling is photographed caught on a fence, its legs slumped over on either side, too weak to move.

Written accounts found in local newspapers and sporting magazines also provide a glimpse of the animal experience. One rancher described a desperate scenario: “These noble animals have eaten bark off the trees, devoured almost all available food, such as brush and twigs, and have been breaking into farmers’ haystacks by tearing down fences and causing other depredations in search for food.”⁵⁷ Another account recalled, “Elk have been known to mount upon

the fallen bodies of their companions and thus climb to the top of a thatched roof shed where they would voraciously devour the rotten hay or straw used as a roof covering.⁵⁸ During a single season Leek claimed he could “walk a half mile on the bodies of dead elk,” and a ranchman “counted the bodies of sixteen hundred dead elk in the spring of 1909.”⁵⁹ In the spring of 1910 it took “a team ten days . . . to haul away the dead elk on a 400-acre ranch in Jackson’s Hole.”⁶⁰ The stench of rotting bodies in the spring was enough to make several families temporarily relocate, and the waters of the rivers and streams became unsafe to drink.⁶¹

Some of Leek’s photographs overtly illustrate the issues facing the elk and the ranchers. For example, several photographs are theatrically composed. In the foreground are dozens of bodies of elk who have died of starvation, some of which look like they have been dead longer than others. These animals are all situated beside a fenced and abundant haystack, the food source that would have saved them. In *Two Young Elk at Haystack* there are only two survivors in the scene, one looking toward and the other away from the viewer (or photographer), as if contemplating their present and future (fig. 4.2). Did Leek drag these carcasses and arrange them next to the haystack to emphasize the dire situation? He would not be the first to do so for the sake of pictorial narrative. Civil War photographer Alexander Gardner, for example, moved and posed corpses, and changed the weapon of a soldier to create more dramatic narratives in such photographs as *Sharpshooter’s Last Sleep* (1863).⁶² Even if Leek’s pictures were orchestrated, they authenticated written accounts of the situation by visualizing the human and animal experience for outsiders to see.

Hoping to witness the elk problem firsthand in an effort to prove whether “such conditions had been overdrawn,” Dillon Wallace, a writer for *Outing* magazine, visited Jackson Hole during the winter of 1911. With Leek providing the photography, Wallace produced a two-part article on the issues facing the elk and the settlers of the region. Using Leek as his guide, Wallace’s report explains that the animal suffering was caused by environmental damage by white settlers. On the visibility of the death toll in the landscape, he wrote:

I read the sickening story of the tragedy of the elk, written in bold characters on every field, on every hill and mountainside. . . . [A]ll along the trail from the Hoback to the Gros Ventre were scattered bones and tufts of hair of animals that had starved. Bark-stripped willows and quaking aspens and twigs

... gnawed down by famished animals in vain attempt to find sustenance in dead sticks told the story of misery and suffering. On the fields wherever I walked ... were the bones of innumerable elk that had perished within two years.⁶³

Paired with Wallace's account, Leek's pictures portray the dire reality for the elk, eliciting empathy from the reader, especially the images documenting the dying among the dead—scenes of carnage that again resemble images of the corpse-strewn battlefields of the Civil War almost half a century earlier.

Leek's distressing photographs were mailed to local and national newspapers and magazines, as well as official government publications in an effort to gain state and federal support for their conservation. For example, several of the same photographs that appeared in Wallace's articles in *Outing* also appeared in the *Chicago Daily Tribune* (1911), the state game warden's official reports (1911–13), and the US Department of Agriculture's special bulletin on the conditions of the elk in Wyoming (1911). In all of these formats, Leek's photographs served as authenticators that sought to evoke emotional responses from the viewer. Encountering images of dead animals was not unusual in the nineteenth or early twentieth century, when the hunting adventure genre grew in popularity. At the same time, when viewers saw Leek's documentation of suffering and dead elk in Wyoming, the near extinction of bison was fresh in the minds of the nation. In response, editors and readers responded in several publications with advice on how to solve the problem, including the suggestion that surplus elk be relocated to states that could "adopt them," as a way to rebuild populations (something that did occur in Yellowstone between the 1910s and the 1960s). Others proposed expanding the boundaries of Yellowstone, since the elk were already "wards of the United States" who were "housed and fed" with federal protection in the summer, only to be "turned out" in the winter.⁶⁴

FEEDING THE ELK: DOCILE SUBJECTS

Another solution was to feed the elk the hay that they were desperately trying to eat, yet this went against the belief that "when wapiti get a taste of good hay, they seem to lose all idea of going back to the foothills to find feed for themselves."⁶⁵ In fact, there had been discussion of an amendment to the Wyoming

game law in 1903 to make it a misdemeanor for “anyone to let his haystack go unprotected, because when the winter is very severe a taste of hay is almost sure to be followed by the starvation of some of the elk.”⁶⁶ Yet rationing a portion of hay for the elk every winter at the rancher’s own cost seemed the only solution, documented by Leek on his own ranch. In his pictures of elk on the ranch, hundreds of elk are in a feeding frenzy and the closely cropped scenes emphasize the size of herds and their ravenous hunger, reminding viewers of the chaos that had taken place and would again without continuation of the feeding program. In a letter to the governor in 1909 Leek wrote, “Enclosed herewith find pictures of elk eating hay in the Jackson Hole country, showing how quickly they accustom themselves to the new conditions. Think of wild animals becoming so tame in two short months that they will allow people to drive among them on the feedyard all the same as domestic cattle. Feeding them seems to be a complete success.”⁶⁷ As a result, the Wyoming legislature appropriated \$5,000 in 1909 to purchase hay the following year. In 1911 Congress appropriated \$20,000 “to be made available immediately for feeding and protecting the elk in Jackson Hole,” and the year after allocated \$45,000 and guaranteed the creation of an elk refuge by merging 1,000 acres of public land with 1,760 acres of purchased land, which would be expanded in the following decades. This parcel of protected land formed the Elk Refuge in 1912, renamed the National Elk Refuge in 1940.

Taming the elk was considered beneficial to both settlers and animals: finally the elk had a place to source food during the winter, and settlers gained control of the persistent elk famine that had wreaked havoc on their ranches. To residents of Jackson Hole who had dealt with years of elk famine and the issues surrounding it, having a feeding program and allocated land for the elk away from their own properties was the best of both worlds. Elk became semi-domesticated pets that settlers and the government had responsibility for, but also control over. The strict management of elk was withheld from Indigenous locals, so the elk could no longer contribute to Indigenous self-sufficiency either. This is not to equate the local Indigenous people with the elk, but there is a parallel of control. Like the Bannock and Shoshone, elk were forced onto restricted territories and made reliant on government-supplied food. In finding a solution to the elk problem, the animals were colonized, so that the issue became not so much an environmental crisis but an opportunity for white settlers who had learned to prefer a controlled relationship with wild animals.

In the years after the feeding program began, Leek documented the size of herds in the feedlot as a way to show the health of the herd as a result of human intervention. These photographs also provided naturalists with a better understanding of the population demographics of the elk, including William T. Hornaday, who included a photograph by Leek in his book *Our Vanishing Wildlife: Its Extermination and Preservation*.⁶⁸ While congratulating the people of Jackson Hole on preserving the elk, Hornaday noticed that as a result of hunting, poaching, and famine, there was “an alarming absence of mature bulls, indicating that now most of the breeding is done by immature males,” concluding that there was a “deterioration of the species” as a result of years of hunting, poaching, and famine.⁶⁹ An absence of older bulls causes a lack of social order among herds, which may lead to increased fighting among young bulls and an extended rutting season. Additionally, as part of the adaptive genetic selection process, cows given the choice tend to choose mature bulls with larger racks, and without their presence conception rates are reduced and delayed. As a result, if calves are born later in the spring, their feeding season is not long enough to gain sufficient weight for the winter, perpetuating the cycle of winter famine.⁷⁰

In contrast to Leek’s images of suffering animals, after the feeding program began, elk were portrayed as welcome visitors in the feedlot, often including the photographer himself and his family surrounded by the animals, who were sometimes shown eating from their hands. In several of these seemingly harmonious scenes of human and animal, the photographer appears with his camera, documenting how close his subjects were. In a self-portrait, Leek is completely surrounded by elk, a large grin on his face, and there is a blur in the foreground of the image: an elk ear perhaps as an animal gets too close to the camera. In another picture, Leek’s son Holiday is shown setting up a tripod and camera while swarmed by curious elk, many of which are looking directly at the “father of the elk,” who is taking the photograph (fig. 4.3). Of Leek’s elk photographs Gregg Mitman writes, “This domestication of elk on screen paralleled the narrative conventions of nature writers like Ernest Thompson Seton and wildlife displays in the national parks. In each case, wildlife was made familiar.”⁷¹ The seeming domestication of wild elk contributed to the public’s desire to save these animals; by including humans in these pictures to make them appear less wild and more docile, elk appear as “familiar, semi-domesticated pets.”⁷²



FIG. 4.3. Stephen Nelson Leek, *Holly [Holiday] Leek Photographing Elk on the Leek Ranch, Jackson Hole, WY*, no date. Photographic print, original version glass plate negative, 16.5 × 21.6 cm. S. N. Leek Papers, American Heritage Center, University of Wyoming.

NEW PROBLEMS FACING ELK AND HUMANS

Throughout his career, Leek's work portrayed game animals as subjects of the camera and the hunter, as well as documenting the ecological crises of the elk by bearing witness to winter starvation and poaching. These were animals understood in relation to specific standards "appropriate" to human-animal relations: as subject to hunting by the white sportsman who respected fair chase, as a ward to protect from those who did not follow game laws and requiring intervention from human-caused habitat destruction. But through the anthropocentrism of these sources, the animal experience of the colonial

environmental transformation can be pieced together. Leek's documentary photography differed from other wildlife photographers of the time in that he did not seek to erase the presence of humans or the effects of modernity encroaching upon Wyoming. Instead, his photographs and their wide distribution reveal the issues involved in the elk problem, and how supplementally feeding the elk as a solution began a practice that has continued for over a century—which hardly seems like a solution at all.

Since its establishment, the intensely managed Jackson Hole herd of thousands have learned how to navigate highways, roads, and subdivisions as they make their way to the safety of the National Elk Refuge. The sustainable relationship based on practices of subsistence hunting that once existed between Indigenous peoples and animals throughout the region has been replaced with a highly controlled relationship in which elk are artificially fed in the winter and the population managed through licensed hunting. The reliance Euro-American settlers once had on the elk as a local attraction over a century ago has continued in recent years, as evidenced by the iconic elk antler arches that decorate the town square, the establishment of the Museum of Wildlife Art (1987), and annual sleigh rides in the refuge during which tourists can take close-up photographs of elk just as Leek did a century ago. The original circulation of Leek's elk images has expanded to include an engagement in wildlife trade as an important way to keep the refuge running: partial funding of the refuge by annually auctioning naturally shed antlers collected by Boy Scouts.

The success of the institutional feeding program once vaunted by Leek and naturalists has now created problems for natural resource managers in Wyoming. Feeding wildlife for over a century has decreased their migration routes and resulted in overcrowding, increasing the risk of disease, including brucellosis, which has been present in bison and elk of the greater Yellowstone area since 1917, and chronic wasting disease, which was detected in the Jackson elk herd in 2020.⁷³ What was once a nationally celebrated solution to the elk problem became a problematic practice, and while a new solution has yet to be agreed upon, a structured program for reducing supplemental feeding began in the 2021–22 season.⁷⁴ Moreover, elk are still a threat to the livelihood of ranchers: elk continue to compete with livestock for forage, destroy fences, and steal from haystacks. Elk also attract wolves (who have returned), increasing the chance that they will prey upon cattle, while their close contact increases the likelihood of transmitting disease to cattle.⁷⁵ Evidently, anthropogenic

environmental change has continued to impact the elk herds in western Wyoming and the National Elk Refuge, and the initial solution to the “elk problem” is not a permanent solution. At the same time, the concentration of elk in one area has continued to benefit the tourist economy by attracting visitors to the region as well as bringing in revenue from hunters and state game agencies who purchase licenses and conduct guided hunts. Just like a century ago, the Jackson Hole elk herd is central to the feedback loop of tourism, hunting, and conservation that is vital to the local cultural identity and economy.

NOTES

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8. Alfred W. Crosby, *Ecological Imperialism* (Cambridge: Cambridge University Press, 2015), 194.
9. Cromley, “Historic Elk Migrations around Jackson Hole, Wyoming.”
10. John Daugherty, *A Place Called Jackson Hole: The Historic Resource Study and Grand Teton National Park* (Moose, WY: Grand Teton National Park, 1999), 150.

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16. P. W. Norris, *Annual Report of the Superintendent of the Yellowstone National Park to the Secretary of the Interior for the Year 1880* (Washington, DC: Government Printing Office, 1881), 39.
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24. George Eastman Kodak Company advertisements, ca. 1905–7.
25. Robert Sterling Yard, *The National Parks Portfolio* (Washington, DC: Government Printing Office, 1917), 35.
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31. Matthew Brower, “George Shiras and the Circulation of Wildlife Photography,” *History of Photography* 32, no. 2 (2008): 170.
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33. Karl Jacoby, *Crimes against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley: University of California Press, 2001), 139.
34. *Fort Bridger Treaty Council of 1868*, Article IV.
35. John Clayton, “Who Gets to Hunt Wyoming’s Elk? Tribal Hunting Rights, U.S. Law and the Bannock ‘War’ of 1895,” *Wyoming State Historical Society*, 2020.
36. US Bureau of Indian Affairs, *Annual Report of the Commissioner of Indian Affairs, 1895* (Washington, DC: Government Printing Office, 1895), 63–68.
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“does not give them the right to exercise this privilege within the limits of that state in violation of its laws.” *Ward v. Race Horse*, 163 U.S. 504 (Supreme Court of the United States, 1896), 504.

38. “The Silly Season War,” *Forest and Stream* 45, no. 5 (August 3, 1895): 89.

39. “Indian Hunting Rights,” *Forest and Stream* 46, no. 23 (June 6, 1896): 449–51; S. N. Leek, letter to the editor, *Forest and Stream* 46, no. 23 (June 6, 1896): 455.

40. S. N. Leek, letter to the editor, *Recreation* 5, no. 6 (1896): xvii.

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56. Wallace, "Saddle and Camp in the Rockies," 195.
57. W. A. Bartlett, "Forest and Stream," *Forest and Stream* 72 (1909): 458.
58. "The Elk Problem," *Forest and Stream* 77 (1911): 437.
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62. William A. Frassanito, *Gettysburg: A Journey in Time* (New York: Charles Scribner's Sons, 1975), 186–92.
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66. Irland, "The Wyoming Game Stronghold," 262.
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