

Shrinking Pastures: The Impact of Range Policy on the Economic Viability of the Sheep Industry in the American West, 1860-1920

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KEYWORDS: sheep industry, American West, public land policies, overgrazing.

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This article examines the growth and decline of the sheep industry in the American West between 1860 and 1920, particularly the effects of legislative actions concerning access to public lands. It looks at how woolgrowers handled relationships with other land users, how the industry responded to regulatory frameworks, and how these dynamics affected the structure and sustainability of the wool trade. The study, based primarily on government records, follows the industry to its peak in the late 19th century and gradual decline due to numerous environmental and economic factors. It sheds light on the difficulties of overgrazing, land rivalry, and regulatory interventions that affected the growth of sheep farming, giving insight into its workings.

Pastos menguantes: el impacto de la política de pastos en la viabilidad económica de la industria ovina en el Oeste americano, 1860-1920

PALABRAS CLAVE: industria ovina, Oeste norteamericano, políticas de tierras públicas, sobrepastoreo.

CÓDIGOS JEL: D0, Q13, Q15, Q51.

Este artículo examina el crecimiento y declive de la industria ovina en el Oeste americano entre 1860 y 1920, incidiendo especialmente en los efectos de las leyes sobre el acceso a las tierras de dominio público. Se examina cómo los productores de lana gestionaron sus relaciones con otros usuarios de la tierra, cómo respondió el sector a los marcos normativos y cómo afectaron estas dinámicas a la estructura y sostenibilidad del negocio. El estudio, que recurre principalmente a fuentes gubernamentales, hace hincapié en cómo la industria alcanzó su punto álgido a finales del siglo XIX y luego fue decayendo gradualmente como consecuencia de numerosos factores ambientales y económicos. Arroja luz sobre las dificultades del pastoreo excesivo, la rivalidad por la tierra y las intervenciones gubernamentales que afectaron al crecimiento de la industria ovina, dando una idea de sus entresijos.

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1. INTRODUCTION

In 1898, prominent Nebraska sheep dealer Edward Oswald reported that the range sheep industry in the American West was already at the end of its days. “The knell of the big sheep range is even now sounding”—he said. Oswald owned a ranch in southern Idaho, as well as two large commercial feedlots in Wood River, Nebraska, and Galesburg, Illinois, where he fed about 20,000 head of sheep. The later activity consisted of buying sheep in the interior markets of the West and shipping them by rail directly to his feed yards with the intention of reselling them for slaughter after a short feeding period. He also had an extensive sheep breeding business. Oswald frequently traveled across the western states and Canada to arrange purchases and shipping of live sheep and to oversee his operations. He knew the sheep industry well.

In 1898, after one of his business trips to Wyoming, Oswald told a reporter that by 1904 the sheep industry in the West would collapse as a result of overstocking and the consequent overgrazing. Then, sheep population would decline as more sheep and other ruminants would persist in competition for the limited remaining forage. Consequently, according to Oswald, sheep numbers would be expected to continue their decrease in view of the general unprofitability of sheep ranching, and greater emphasis would be placed upon improving product quality. Eventually, in his own words, the range sheep industry would be but “a haunting memory” (Anonymous, 1898). Oswald and other contemporaries linked the decline of the western sheep industry to overstocking and resultant overgrazing, which reduced herd sizes, increased production costs, and necessitated significant industry adjustments, including flock reduction and enhanced care.

During the period between the 1870s and the 1910s, the West became the most important region in the United States in the production of wool. Initially major sheep producing states were New Mexico, Arizona, and California. By the late 1870s, the center of the sheep industry moved to the Mountain region where land was abundant and cheap. This created a fragile ranching economy characterized by increasing livestock numbers, uncontrolled and intensive grazing for extended periods of time, and frenzied competition over public grazing resources. By the late 1880s, the range sheep industry of the West had grown to be a major sector in American agriculture. The 1890s saw an upturn, and by 1900 the western sheep industry reached peak production. The new millennium, after a relatively short-lived period of growth, ushered in a period of decline as the industry struggled against increasing threats on many fronts.

This article examines the expansion and subsequent contraction of the range sheep industry in the West from 1860 to 1920, exploring how legislative constraints on access

to public domain lands impacted the industry. This article utilizes government documents to delve into the impact of regulatory frameworks on the capacity of woolgrowers to utilize public rangelands in the West¹. It further elucidates how these wool producers established institutional arrangements to manage their interactions with other users of public lands and to address challenges as perceived within their operational context in the West².

2. SHEEP GRAZING AND THE TRAGEDY OF THE COMMONS IN THE AMERICAN WEST

During the late 19th century, the sheep industry in the West was primarily nomadic, especially in its initial stages. Most sheep operations lacked a permanent base, leading to continuous grazing across various seasonal ranges throughout the year. Costs associated to land were minimal. The sparse forage resources per acre or square mile required sheep to roam extensive areas to find adequate feed. As the sheep population increased and competition for grazing land grew, early migrations in search of feed, initially minimal, became more substantial (Fig. 1). The scarcity of quality forage and the need for water prompted many sheep operators to establish feed bases for at least partial winter feeding. This adjustment led to a reduction in migration and diminished the reliance on distant winter ranges, fostering more semi-nomadic operations. Although the physical distances between these seasonal ranges stayed the same, the frequency of nomadic groups moving in search of forage significantly decreased.

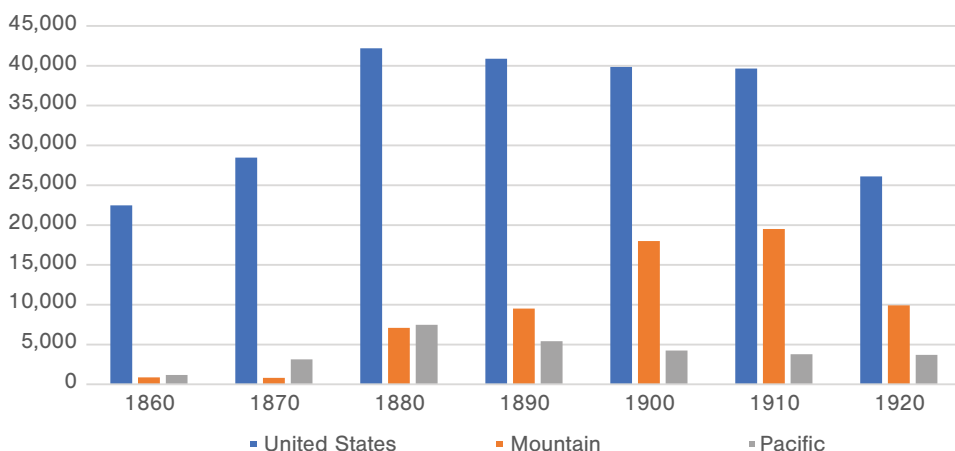
Range forage was shaped by the seasons, with growing conditions, available forage types, water access, and snowfall dictating where and when sheep could graze. This led to the establishment of three main grazing classifications: summer, spring-fall, and winter. These classifications overlapped based on the prevailing environmental conditions. For instance, mountain ranges were only usable in summer due to heavy snow during other seasons, while desert areas were primarily grazed in winter once the

1. Rangeland refers to uncultivated land well-suited for grazing and browsing animals. It pertains to areas where the primary vegetation consists mainly of grasses, grass-like plants, forbs, or shrubs. Varieties of rangelands encompass tall grass and short grass prairies, arid grasslands and shrublands, woodlands, savannas, chaparrals, steppes, and tundras (USEPA, 2024).

2. The geographical focus of the present study is the West or the western states, in US Census Bureau terminology, including both the Mountain and Pacific divisions (except Alaska and Hawaii). The Mountain division includes the states of Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada. The Pacific division includes the states of Washington, Oregon, and California (BC, 1931: 7).

snow had melted. Limited water availability in spring and fall restricted grazing during those seasons. As a result, sheep migration patterns were directly determined by these classifications, with sheep moving between areas to access the best grazing conditions throughout the year.

FIGURE 1
Sheep inventory in the US and the American West (Mountain and Pacific Divisions), 1860-1920 (in thousands)



Note: sheep inventory excludes lambs.

Source: author's own elaboration based on Voorhies and Schneider (1929).

In the late 19th century, sheep operators strived for an ideal balance in their seasonal ranges to sustain their flocks throughout the year. Sheep were routinely moved from low winter ranges to foothill spring ranges, and ultimately to high summer ranges, following the emergence of new forage as the seasons progressed. However, achieving this ideal was fraught with challenges due to unpredictable climatic conditions which could delay forage growth and disrupt the balance of the ranges. Consequently, ranges well-suited one year could become unbalanced the next, often forcing sheep to be grazed in areas either over or under their capacity. To mitigate these discrepancies, ranchers sometimes moved their flocks to more remotely located ranges or adjusted the grazing times to earlier or later in the season than typically suitable, practices that, while sometimes necessary, frequently led to overuse of the land and significant economic difficulties. As a result, the desired equilibrium of seasonal ranges was more an aspiration than a reality, often compromised by the immediate needs of livestock management.

In the late 19th century, the size of sheep operations was heavily influenced by the characteristics of the land. Smaller operations, typically found in regions conducive to irrigated or dry farming, often managed herds ranging from 100 to 500 sheep, with these endeavors frequently serving as supplementary to other forms of agriculture. Conversely, in the vast, arid expanses of desert and semi-desert regions, larger operations were more prevalent because livestock production was the principal agricultural activity. The sparse forage in these areas and the broad dispersal of seasonal ranges often required these operations to maintain substantially larger flocks, generally from 2,000 to 5,000 sheep or more, to ensure economic viability. Operations in areas with a mix of dry-land and irrigated farms, such as the mountain valleys of central Utah, eastern and central Idaho, and southwestern Colorado, typically managed mid-sized herds ranging from 500 to 1,500 sheep (Connor, 1921).

The relationship between the size of the operation and the distance over which sheep were migrated for seasonal grazing significantly impacted operational risks and management strategies. Larger operations, needing to cover vast distances due to the sparse distribution of forage, faced increased risks like predation and adverse weather conditions. Nevertheless, they also possessed greater resources to confront these challenges. Smaller and medium-sized operations typically faced shorter migration routes, often utilizing nearby farm fields and pastures, allowing for more effective risk management due to closer proximity to home bases and better accessibility to their flocks. As a result, the economic stability and viability of sheep operations were closely tied to their ability to adapt to the geographical and environmental challenges posed by their respective ranges (Hochmuth *et al.*, 1942).

The viability of ranch operations in the late 19th and early 20th centuries heavily relied on access to extensive, freely available public rangelands. From the confederation period onward, the central government and eventually the Federal Government asserted ownership of the lands of the West in their surface and even mineral rights. The 1785 Land Ordinance from the Confederation Congress further confirmed possession when it devised a grid system for the survey of the public domain north of the Ohio River, or in the Old Northwest Territory. The system subsequently followed the advance of United States possessions across the continent into the 19th century. The grid system allowed a rectangular parceling of the land. The land system provided a method of identifying ownership in the numbering of ranges, townships, sections, and acres in either the sale or the granting of lands from the Federal Government, first from the Treasury Department, later from the General Land Office created in 1812 that found its way into the new Department of Interior in 1849 (Gates & Swenson, 1968: 317-18; Linklater, 2002: 73).

As the US embraced western expansion in the first half of the 19th century, its system of land survey, sale, and land grants followed. The settlement at the end of the Mexican-American War in the Treaty of Guadalupe-Hidalgo (1848) gave the US the Mexican Cession, or most of the American Southwest including the lands of the future territory and state of Nevada. As various territories in the West transitioned into statehood, their enabling acts often included specific requirements to formally join the Union. These acts typically mandated that new states relinquish any claims to unappropriated public-domain lands within their boundaries, ensuring these lands remained under the exclusive control of the US government. Furthermore, the states agreed not to levy taxes on lands or properties owned or subsequently purchased by the federal government. Such stipulations were common and highlighted the federal government's dominant sovereignty, especially during periods of national crisis such as the Civil War. This framework was designed to assert federal authority and manage the integration of new states into the Union, maintaining control over extensive federal lands and preventing any state-level taxation that could conflict with national interests.

This control over land was not just bureaucratic but had tangible impacts on industries like ranching. Most of the public-domain lands in the West were utilized for grazing. These federally-owned lands made up over 85% of the grazing lands in the West, providing critical seasonal forage for sheep herds. Managed under the open range system until the 1880s, public-domain lands allowed ranchers to graze livestock without the costs of ownership or leasing, significantly reducing the financial burden of land acquisition. This open access was pivotal for the expansion of the sheep industry, enabling ranchers to maintain large herds with minimal direct land costs. However, this dependence required adaptability to the varying natural conditions and forage availability across expansive territories. This broad historical and regulatory context underscores how federal land policies directly influenced the economic activities and environmental management across the expanding frontier.

Before the federal government assumed regulatory responsibilities for its real estate in the 1890s, customary grazing practices governed by traditional norms allowed livestock, especially cattle and sheep, to roam freely on open ranges. These practices included seasonal movements dictated by forage availability, informal water rights prioritizing early users, and community enforcement of disputes. Land use was managed based on respect for established patterns, with newcomers expected to adapt to these norms, including adherence to routes for stock driveways and an understanding of the land's carrying capacities to prevent overgrazing. However, as settlements expanded, conflicts over resource use also increased.

In most years, the natural forage on these lands sufficed to support the herds year-round, eliminating the need for additional winter feed. However, a long-term perspective was often lacking, leading to widespread mismanagement. This mismanagement was primarily driven by individuals acting as free-riders, who pursued short-term gains without regard for the long-term sustainability and profitability of the grazing lands, thereby exacerbating environmental degradation. This scenario has been recognized as a classic example of the “tragedy of the commons,” a concept described by Hardin (1968). Hardin theorized that individuals, acting independently according to their own self-interest, behave contrary to the common good by depleting a shared resource. In the context of the West, the shared resources were the expansive public rangelands used for grazing. Without sufficient regulatory oversight or well-defined property rights, each rancher increased their livestock numbers to maximize personal gains, leading to overuse and degradation of the land, which threatened the long-term viability of the entire grazing system. This evolving conflictive scenario initially spurred local initiatives and institutions, particularly from established cattle ranchers, aimed at governing grazing lands and controlling range access to mitigate conflicts with nomadic sheep graziers, setting the stage for subsequent federal intervention (Anderson & Hill, 2004: 4; Libecap, 1981).

The presence of transient herders, legally entitled to graze on the many unregulated and unclaimed ranges just like the pioneering large-scale ranchers, heightened conflicts. Particularly, landless sheepherders, often scapegoated, found themselves at the center of intense disputes over access to public ranges, involving various agricultural stakeholders. These conflicts, frequently escalated into what are known as “range wars,” where cattle operators’ coercive power often turned violent. These bloody confrontations typically centered around struggles for control of land resources, pitting homesteading farmers against open-range livestock herders, large ranchers against smaller ones, and cattlemen against sheep graziers. Similarly, in the West—much like Spain’s Mesta where sheep routes often conflicted with agricultural lands—sheep grazing interfered with arable farming (Klein, 1920). This was particularly evident as homesteaders moved into regions traditionally used by ranchers for grazing. From an institutional perspective, as noted by Terry Anderson and Peter Hill, such violent encounters often occurred when options for redistributing property rights were limited and legal rules failed to enforce equitable distribution, thereby making rent extraction and conflict a negative-sum game (Anderson & Hill, 2004: 4, 23–4).

This era underscored a significant conflict over land, leading to notable environmental degradation. Historian Pfeffer noted that in the battle for land use, “the chief sufferer, and the one destined to exact the greatest measure of revenge, was the range itself”

(1951: 26). Winters revealed such fragile ranching economy. This period was marked by some devastating winters that significantly disrupted range management and dramatically influenced the trajectory of the sheep industry. Each harsh winter presented unique challenges and transformations to the grazing landscapes, profoundly affecting the lives of those dependent on them. The historical narrative frequently posits a direct causal link among overstocking, severe winter losses, and the eventual collapse of the industry. While it is challenging to determine actual stocking levels during this time, researchers contend that the aftermath of these harsh winters provides clear evidence of overstocking (Fite, 1977).

Historically, both cattle and sheep roamed the open ranges throughout the year, relying solely on natural forage even during the harsh winter months. This practice, however, was severely challenged by the prolonged winters and droughts of the late 1880s, which led to significant livestock losses. There is a consensus among historians that these severe winters were a pivotal factor in the demise of the open range system, marking a turning point towards more controlled practices. The winter of 1886-87, known as the “Great Die-Up,” was particularly harsh, marked by severe blizzards and extreme cold, and is often cited as a critical turning point for the ranching industry. While this winter is traditionally viewed as the beginning of the decline for the open-range cattle industry, research by economic historians McFerrin and Wills (2013) challenges this narrative, suggesting that the impacts were not as severe as once thought. According to their findings, the cattle industry continued to expand until 1895, and neither cattle prices nor banking statistics from the period show significant disruptions that would indicate a catastrophic die-off. This suggests that the perceived massive die-off may have been overstated, with financial instability and shifts in land use policies in the 1890s playing a more substantial role in the industry’s transformation.

Nevertheless, perceptions of catastrophic losses during that winter influenced many ranchers’ decisions, leading some to prematurely exit the industry and marking a pivotal moment in its history. The cattle industry faced significant losses, which had a profound impact on the sheep sector as well. Among those affected was Isaac S. Schultz, who operated the Custer Creek Ranch near Miles City, Montana. By the winter’s end, Schultz had lost a substantial portion of his flock and was forced to sell the remainder and seek new employment. In a poignant letter dated February 23, 1887, to his brother Alfred, Schultz detailed the extent of the devastation: “There are over half the sheep in the territory gone, cattle likewise. Some lost bands of sheep. Here are a few neighbors of ours: H. J. Socke 5000 sheep loss 4000, Banckette 2900 loss 2000, Dr. Bjfall 2600 loss 2400, J Huevenen 220 loss 2000 etc. So you see most of the sheep here are gone”. In response to these challenging conditions, the remaining sheep ranchers sought

strategies to mitigate future risks. Some relocated to milder climates in the Southwest, while others invested in hay cultivation and winter-feeding practices to better sustain their flocks through the cold months. These adaptations not only helped the sheep industry persist but also paved the way for its evolution into a more stable industry in some places (Schneck, 2013: 31).

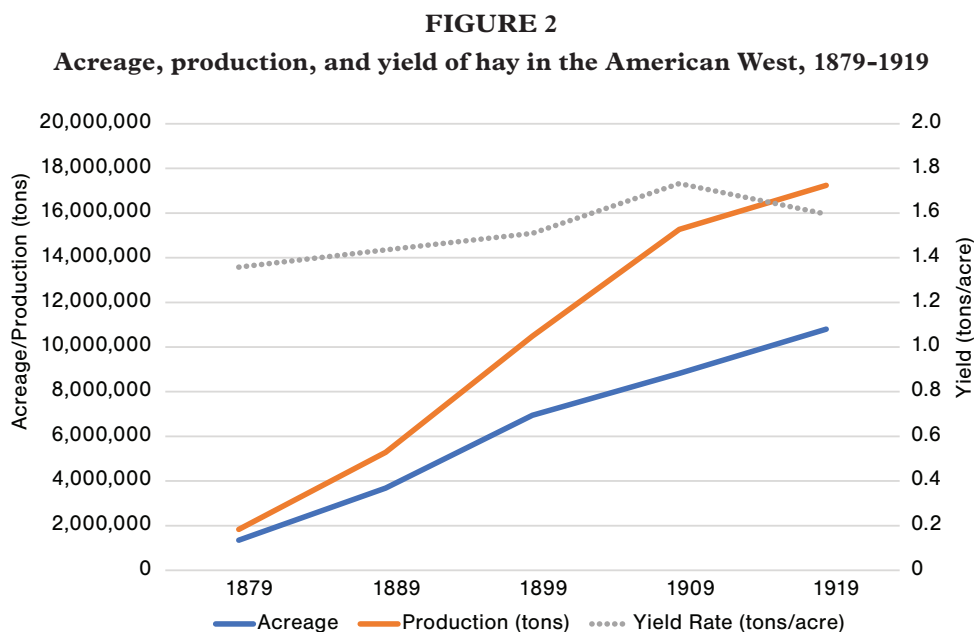
The winter of 1889-90, famously known as the “White Winter,” brought catastrophic conditions to cattle ranchers throughout the Great Basin. It was an exceptionally harsh season, with ranches reporting losses of up to 95% of their cattle. One prominent case was the Sparks-Tinnen outfit in Elko County, Nevada, which faced financial ruin; their cattle branding plummeted from 38,000 calves in the 1885 roundup to just 68 calves in 1890. Despite these overwhelming losses, Sparks was able to buy out his partner and establish a new partnership with Jasper Harrell. This disastrous winter precipitated a major shift in ranching practices, from year-long grazing to an increased reliance on harvested hay for winter feeding. The sharp decrease in cattle numbers opened a gap in the livestock market, quickly filled by the sheep industry, which adapted well to the harsh conditions. Many cattle ranchers, recognizing the sheep’s lower maintenance needs and their efficiency in using winter range, either switched entirely to sheep ranching or diversified their operations to include both cattle and sheep. This strategic change enabled the sheep to flourish, utilizing winter forage and relying on snow for water (Stewart, 1936; Young & Sparks, 2002: 134).

3. STRATEGIC RESPONSES IN SHEEP RANCHING

These shocks led ranchers to pursue strategies for greater stability and resilience. Throughout the late 1880s and 1890s, they increasingly adopted hay cultivation and land acquisition, not just as means of survival, but as adaptive responses to the environmental and economic challenges they faced. This shift is highlighted by the significant rise in hay production during the late 1880s, as ranchers adapted to the demanding conditions of their environment. As depicted in Figure 2, hay production in the West surged during this period, becoming a crucial resource for winter feeding of livestock, including sheep.

The acreage devoted to irrigated hay fields expanded considerably, and production more than doubled, enhancing ranch stability and ensuring the survival of livestock that were previously at risk during severe winters. The ability to produce and store ample hay allowed ranchers to sustain their herds through winter, minimizing losses from starvation or inadequate nutrition. This expansion not only supported the maintenance

of larger herds but also improved overall sheep health, leading to more consistent meat and wool production year-round. Hay cultivation thus emerged as a critical resilience measure, buffering the agricultural sector against the vulnerabilities posed by harsh climates.



Source: author's own based on the US agricultural census data (BC, 1922: 809).

The strategic shift toward extensive hay cultivation introduced financial stability to ranch operations, helping to buffer against the uncertainties of seasonal changes. With a dependable feed source, ranchers could more effectively plan and manage herd sizes, ensuring a steady market supply. However, this increase in hay production required additional land, equipment, and labor, significantly raising operational expenses. Despite the risks posed by potential adverse weather and volatile market prices, the benefits of a secure feed supply generally outweighed these costs, proving crucial for maintaining healthy livestock and viable operations.

Yet, by 1885, the expansion of homesteading and crop agriculture had claimed desirable grazing lands, pushing both cattle and sheep to less favorable areas. This shift contributed to a decline in sheep numbers in some subregions, primarily due to the conversion of productive grazing lands into agricultural use and overstocking that reduced carrying capacities. The influx of farmers and livestock into these regions increased

pressure on public rangelands, leading to overgrazing, vegetation deterioration, and in some cases, ecosystem collapse. These developments highlight the complex interplay between land use changes and agricultural sustainability, emphasizing how shifts in resource allocation decreased livestock productivity (Mollin, 1938: 33).

Another strategy was secure land access by purchasing or leasing. With the increasing congestion of the range, many early operators were forced out of business, while others had to significantly reduce their herds and flocks. Cattle graziers were particularly affected due to the difficulties of herding their stock and the limited availability of nutritious grazing areas caused by overgrazing. Consequently, they experienced the initial impact of this pressure. To sustain their operations, the remaining stockmen had to secure control over a substantial portion of their range, either through purchasing land or entering into leasing agreements (Blinken, 1948; Osgood, 1929: 193-201).

Except for Texas, which retained all its public-domain lands upon joining the Union in 1845 and later sold or leased them to farmers and stock operators, the initial significant areas to come under the control of stockmen were a few Spanish land grants in New Mexico and California. Most of these grants were later acquired by large cattle companies. These grants, spanning several hundred thousand acres, were originally awarded by the Spanish and Mexican governments as concessions for colonization or in recognition of other services provided prior to the United States acquiring the territory (Gates & Swenson, 1968: 82-3).

Moreover, ranchers residing in areas with railroad land grants quickly acted by leasing and purchasing these parcels. These grants, covering extensive areas, were originally awarded to select transcontinental railways. They encompassed every other section of land for a specified distance on both sides of the railroad right-of-way, with additional extensions to replace previously alienated portions. Prominent among these grants was a 50-mile-wide strip granted to the Northern Pacific Railway in the states of Montana, Idaho, and Washington. There was also a 20-mile-wide strip on each side of the Union Pacific and Central Pacific railways in Wyoming, Utah, Nevada, California, and Oregon. Moreover, a 60-mile-wide strip on each side of the Atlantic & Pacific Railway was granted in the western parts of New Mexico and Arizona (Ellis, 1946: 30-45; Gates & Swenson, 1968: 373-77).

In 1895, the Northern Pacific Railway took the initiative to lease their railroad lands in the state of Washington. Despite primarily selling land for lumbering and agricultural purposes, they recognized that a significant portion of their land was suitable for

stock grazing. During that time, all stock had unrestricted access to these lands. In an attempt to regulate grazing, the railroad implemented leases. Initially, livestock operators refused to lease the lands, resulting in a court order for the arrest of 30 prominent sheep operators on charges of trespassing. However, these individuals eventually began leasing the railway lands they had previously used free of charge, and by 1898, 237 leases were issued.

Although full control was not guaranteed and cattle and horses continued to roam freely, the legal situation improved significantly. The positive results of this method of regulating sheep grazing led sheep operators to willingly pay a grazing fee of 2 cents per acre. Later, due to a growing demand for the land for wheat cultivation, there was intense competition for its purchase. By 1904, only 34 out of the original 300 leases were still active, and a significant portion of the remaining leased land was sold under leasehold terms. Subsequently, other railroad companies followed suit, adopting a similar approach and by the early 20th century virtually all railroad agricultural lands were sold (USTC, 1921: 151).

In the early 20th century, the Northern Pacific Railway was crucial to the growth of the West not just by providing transportation but also by leasing property. The railway company was a major lessor and seller of land, possessing large land tracks that it leased and sold to ranchers (CPLS, 1929: 10-1). During the early 20th century, the large Castle Mountain Livestock Company, located near White Sulphur Springs, Montana, engaged in leasing and purchasing land from the Northern Pacific Railway Company's Land Department. This strategic acquisition and leasing of land allowed the company to expand its operations and solidify its presence in the region, leveraging the railway's vast land holdings to enhance its cattle and sheep ranching ventures (see bottom of form in Fig. 3).

Marginal ranges were leased to stockmen for a nominal fee, typically with arrangements that ensured their eventual purchase. In certain cases, the buyers of these lands paid higher prices than the actual grazing value. Owning such lands gave them some control over both the alternate government sections and portions of the public range. The "checkerboard" ownership arrangement granted some control over the public range, but it did not confer the title holder full control of the surrounding or adjoining public-domain lands. In legal terms, public-domain lands within these areas must remain accessible to all users. Then, livestock operators who owned railroad lands were not permitted to fence them off, making them susceptible to trespassers (Gates & Swenson, 1968: 381-86).

FIGURE 3

**Receipt for land acquisition issued to Castle Mountain Livestock Company from
Northern Pacific Railway Company, 1946**

Receipt N° 213337 ✓ **ORIGINAL** Form L. D. 21 25Bk RP

Remittance No. 216234 **NORTHERN PACIFIC RAILWAY COMPANY**

St. Paul, Minn., March 14 1946

Received from Castle Mountain Livestock Co.

ck for Thirty Two Hundred and 74/100 Dollars,

which, when collected, will be applied in payment on Contract No. 20131 ✓

North Division, as follows:

Principal \$ 3200.00

Interest to _____

Taxes for year _____

Entered on Cash Book and Record:

L. E. Johnson Bookkeeper.

Entries checked no

TOTAL \$ 3200.00 ✓

[Signature] FOR Treasurer.

Assistant Treasurer.

ATTACH THIS RECEIPT TO CONTRACT.

Source: land, box 2, folder 8, Series 3, Livestock and Land, 1887-1967, Castle Mountain Cattle and Sheep Company Records, Montana State University Library, Merrill G. Burlingame Special Collections, Bozeman, Montana.

Of course, many cattle operators sought to consolidate their holdings as much as possible. They achieved this by leasing the school sections (lands granted to states to provide revenue for public school system) and, whenever feasible, by acquiring all the patented lands within these areas that were obtained through homesteading, preemption, or other congressional acts. Additionally, they utilized railroad scrip, which represented land granted to railroads by the government in exchange for land taken from them to establish National Forests or Indian reservations. The livestock operators also influenced their respective states to select lieu lands (lands provided as a substitute for school sections located within National Forests or Indian reservations) within their range and leased such lands.

Through these means, a significant number of stock operators managed to gain control over all or most of the range they utilized, enabling them to fence and protect it effectively. Apart from certain railroad, school, and Indian lands in southern Wyoming, northern Utah and Nevada, and northern Arizona and New Mexico, stock operators faced significant challenges in gaining control over large areas. However, some ranchers managed to gain virtual control over the range they used by purchasing patented lands

along waterways, utilizing railroad scrip, leasing state lands near watering places, or securing strategic points for water development (Anonymous, 1902; Rowley, 2016; Walker, 2006: 113, 117-20).

In the more fertile areas, such as the plateau region spanning eastern Montana, Wyoming, Colorado, and northeastern New Mexico, extensive homesteading took place. In these areas, most of the flat and fertile parts of the range were claimed through homesteading. Those homesteaders who settled in the more favorable locations successfully cultivated grain crops, while many expanded their operations by acquiring additional land and adopting a mixed farming approach that combined livestock and grain production. The size of one typical dry-land farm encompassed an average of more than 1,300 acres, with livestock accounting for 40% or more of the total income generated. The less favorable homestead locations were generally acquired by stock operators, generally large companies (Hunter, 1919).

At the turn of the century, a significant number of those settled areas were temporarily leased to livestock operators. In most western states also, ranchers successfully leased substantial tracts of land within Indian reservations. In Washington and Oregon, for example, stock operators secured extensive leases on summer grazing lands from lumber companies. Besides leasing land, incorporated ranches or family enterprises increasingly purchased large tracts of grazing land. Through various means, extensive portions of the range came under private ownership (McNeilly, 1899).

In certain areas, particularly where the range supported year-round grazing, this shift towards private ownership, especially in smaller parcels, resulted in a significant reduction of sheep, particularly in parts of the Pacific Northwest and the prairie regions east of the Rocky Mountains. These areas were well-suited for cattle raising and were predominantly held in relatively small units by cattle ranchers. In these regions, sheep numbers tended to decrease, and generally only large companies were capable of managing both cattle and sheep. This was mainly due to the fact that cattle could be raised in various unit sizes, making them adaptable to owned, leased, or public-domain lands. If sheep was not confined to smaller areas, sheep required herding or extensive protection (Oliphant, 1948: 10-25; Shaw, 1942: 160-65).

Yet in regions characterized by semidesert areas where grazing was limited to the winter months when water or snow was available, sheep were abundant. This was particularly true in semidesert areas with shrubs and weedy annuals as prevalent vegetation, which sheep thrive on in detriment to cattle. Moreover, these areas were better suited for sheep as they could be easily herded and moved between ranges. They could sus-

tain themselves in winter without frequent water access, often relying on eating snow to quench their thirst. In summer, they grazed toward and in the mountains. However, in regions where lowland areas were narrower and much of the land was brought under irrigation, sheep once again faced strong competition with cattle. This was especially true in parts of the Pacific Northwest, where the available open range between winter feeding grounds and the mountains was insufficient to meet the needs of both livestock types (Griffiths, 1902, 1903; Hislop & Howell, 1917).

Despite the efforts of livestock operators to exert control over the range and stabilize their business, there were still many areas that remained uncontrolled. These areas were suffering from severe overstocking and, as a result, were gradually deteriorating. The livestock operators who depended upon these ranges were aware of this predicament but lacked the means to provide desired protection. The itinerant sheep herds continued their seasonal migration to the basin and rangelands, with some staying during winter, relying on white sage or winter fat for sustenance. Local ranch owners, along with the small business communities that relied on the prosperity of these ranges, expressed their dissatisfaction to state government representatives in Washington, DC. In response, some local governments and counties introduced sheep head taxes, which proved challenging to collect due to the constant movement of herds controlled by herders and their vigilant sheep dogs. The resentment against transient sheep operators persisted, sometimes resulting in altercations with the sheepherders or unfortunate incidents involving their dogs. The issue of what to do with the still available rangelands troubled state and local officials, as well as Congress (Lane, 1974: 100-50).

4. REGULATIONS GOVERNING SHEEP GRAZING ON NATIONAL FORESTS

The establishment of National Reserves (later renamed National Forests) also contributed to the overall transformation of the range sheep industry. The enactment of the Land Revision Act by Congress in 1891 marked a significant shift away from the distributive resource policies of the 19th century concerning the public domain. One of the key provisions of the 1891 Act was the establishment of forest reserves on the public domain. Congress bestowed upon the President the authority to establish forest reserves through presidential proclamation. In 1891, President Benjamin Harrison established the Yellowstone Park Timber Land Reserve in Wyoming, encompassing 1,239,040 acres, making it the first-ever forest reserve in the United States (Jacoby, 2014: 166).

During the 1890s, presidents Harrison, Grover Cleveland, and William McKinley played instrumental roles in designating vast expanses of public land in the western states as forest reserves that encompassed millions of acres. Originally created to preserve timber and safeguard watersheds, these forests were initially restricted from stock grazing, particularly sheep (Miller, 2001: 155; Wiebe, 1967: 36). In 1897, Congress passed the Forest Organic Act or Forest Use Act. The Act stood as the primary source of authority governing forest administration for more than half a century. The principle of resource utilization was embraced, and the Department of the Interior was entrusted with the authority to manage and safeguard them to guarantee optimal water flow conditions and ensure an uninterrupted timber supply. The Act did not explicitly mention grazing as a legitimate use. Instead, the Secretary of the Interior was given general instructions to regulate “occupancy and use, with the aim of preserving the forest and preventing its destruction”. These words granted the Secretary of the Interior the authority to allow grazing if deemed compatible with the safe utilization of resources, specifically the protection of water and timber. This was the stated purpose of the forest reservations as outlined in the legislation (Rowley, 1985: 31).

At the same time, following deliberations on whether to permit sheep grazing under a general grazing program, the Secretary of the Interior decided to issue permits in the national reserves based on a “preference” system for livestock of all types. In a circular dated January 1902, the following preference order was established:

1. Stock of residents within the reserve.
2. Stock of persons who own permanent stock ranches within the reserve, but who reside outside of the reserve.
3. Stock of persons living in the immediate vicinity of the reserve, called neighboring stock.
4. Stock of outsiders who have some equitable claim.

In 1905, after forest lands were transferred to the Department of Agriculture, the US Forest Service, soon renamed from the Bureau of Forestry, continued the existing preference system in its grazing program. The Forest Service introduced clear instructions that graziers must adhere to after acquiring a grazing permit, as outlined in the *1905 Use Book*. The revised regulations encompassed guidelines concerning the grazing season, limitations on the number of permissible livestock, and incentives to ensure the equitable distribution of stock across the allotments. The *Use Book* affirmed the Forest

Service's authority and detailed grazing regulations, focusing on protecting grazing lands, promoting the livestock industry's long-term welfare, and shielding settlers from unfair competition in range use (Pinchot, 1972: 256; Rowley, 1985: 46-7, 59; USC, 1902-03; USDA, 1905: 20-1).

To protect the interests of established stock operators with historical grazing practices on lands now designated as national forests, the Forest Service introduced a three-tier permit preference system. The system included class A permits for ranchers with property in or near the forests, class B for those grazing occasionally without adjacent property, and class C for itinerant grazers who do not own land related to their livestock. The Forest Service favored class A and B permit holders, generally denying permits to itinerant grazers and often fully utilizing the designated range, emphasizing the need for "commensurate property ownership" to qualify for grazing privileges in national forests. This principle meant that permittees must have enough private land to support their livestock when the forest was inaccessible, with protective stock limits set between 25 to 300 cattle or horses and 500 to 2,000 sheep or goats, varying by forest and resource demand (Rowley, 1984, 1985: 54, 58-9, 61-2; Saitua, 2019: 148).

This practice aimed to preserve the mountain ranges and protect nearby small cattle owners from the adverse impacts of encroachment by wandering sheepherders. The procedure and practice were widely embraced by local ranch owners in the vicinity of the newly established national forests. Abundant evidence exists in the form of numerous petitions advocating for the establishment of national forests (*e.g.* in Nevada and Colorado), as these served to prevent itinerant stock from occupying productive mountain pastures that were highly coveted by cattle ranchers. Roosevelt aimed to protect small ranchers and irrigator farmers from absentee corporate herds by prioritizing small owners and de-emphasizing those with transient stock, who contributed less to land development (Gulliford, 2018; Hays, 1999: 63; Rowley, 1985: 61-2; Saitua, 2019: 148-60).

Initially, there was a strong resistance to allowing sheep to graze in certain areas because they were believed to cause significant range damage. This bias was partly due to the sheep's habit of grazing the vegetation very close to the ground, making it difficult for plants to regrow. This prejudice, though somewhat diminished, was also rooted in the historical nomadic tendencies of the sheep industry. Some ranchers, especially those running large sheep operations, recognized the merit in protecting smaller operators but felt that the protective measures were excessively stringent, ultimately harming the livestock industry. They expressed frustration over having to reduce their livestock numbers to make room for settlers who, due to the small scale of their operations, often

struggled to maintain a viable business. These settlers typically abandoned their efforts after a few years, only to be replaced by others who faced the same unsuccessful cycle.

In accommodating these settlers, there were instances where it was necessary to reduce the stock numbers of prior users. Sheep graziers required relatively larger units to maintain viability. If they reduced significantly their flock size to make room for others, the operating costs per head increased. When sheep were displaced to make room for cattle, it was often to accommodate settlers who typically did not have the capacity to raise sheep but required range for their horses, milk cows, and additional livestock. The areas allocated for sheep grazing within the national forests were usually the rougher and higher lands, which offered suitable forage for sheep but were not as advantageous for cattle. Each sheep band was assigned specific boundaries.

FIGURE 4

Grazing permits issued on the national forests of the American West, 1906-20

	Cattle, Horses, and Swine	Sheep and Goats
1906	13,545	2,500
1907	17,421	3,809
1908	19,260	4,282
1909	21,437	5,072
1910	19,920	4,987
1911	19,756	5,099
1912	20,487	5,307
1913	21,349	5,428
1914	22,924	5,160
1915	24,731	4,920
1916	26,914	5,241
1917	29,749	5,471
1918	31,080	6,485
1919	30,585	6,585
1920	29,496	6,146

Note: grazing use of national forest ranges in the West was primarily by cattle and sheep, and to a lesser extent by hogs and goats.

Source: author's own elaboration with data from annual reports of the Secretary of Agriculture (1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921).

Woolgrowers particularly felt their interests affected, and their dissatisfaction often reached the Department of Agriculture. Among other issues, woolgrowers and their associations expressed significant dissatisfaction with the perceived favoritism towards cattle graziers (Fig. 4). The number of permits issued for cattle, horses, and swine generally increased from 1906 to 1918, peaking at 31,080 in 1918, before declining sli-

ghtly in the following two years. Similarly, the number of permits for sheep and goats increased over the years, reaching a peak in 1919 with 6,585 permits before a slight drop in 1920. Throughout the years, permits for cattle, horses, and swine outnumber those for sheep and goats.

At the 1909 convention of the National Woolgrowers' Association, Ezra S. Gosney, prominent woolgrower of Flagstaff, Arizona, delivered a speech criticizing the Forest Service for promoting out of "favoritism, prejudice, and corruption" in the management of the national reserves (Anonymous, 1909). Despite all criticism, the Forest Service demonstrated its effectiveness in regulating affairs to such a degree that ranchers and stock organizations readily embraced the efficiency and regulations it implemented within the limited ranges under its control in the western states. Still in many areas range affairs outside Forest Service lands on the public domain stood in a confused state.

Public grazing lands outside the Forest Service's national forests were not well regulated. In states like Nevada and Colorado, where national forests comprised a small fraction of the public domain, one avenue to bring more order on public grazing lands beyond the Forest Service's national forests and exclude sheep-itinerant operations was to expand the national forest lands. Established cattle operators sent petitions and requests to the Forest Service for the enlargement of the national forests for the purpose of range control. Yet the Forest Service generally denied those petitions based on the premise that the timber found within the suggested reserves was insufficient to justify conservation efforts. Additionally, it was argued that this timber did not adequately contribute to safeguarding a watershed with a viable supply of flowing surface water. In those cases, the Forest Service considered that Congress should pass a comprehensive law to facilitate the responsible management and utilization of the unreserved public-domain lands, primarily valuable for grazing purposes (Gulliford, 2018; Saitua, 2019: 148-60).

5. THE EFFECTS OF THE STOCK-RAISING HOMESTEAD ACT OF 1916 AND POSTWAR CRISIS

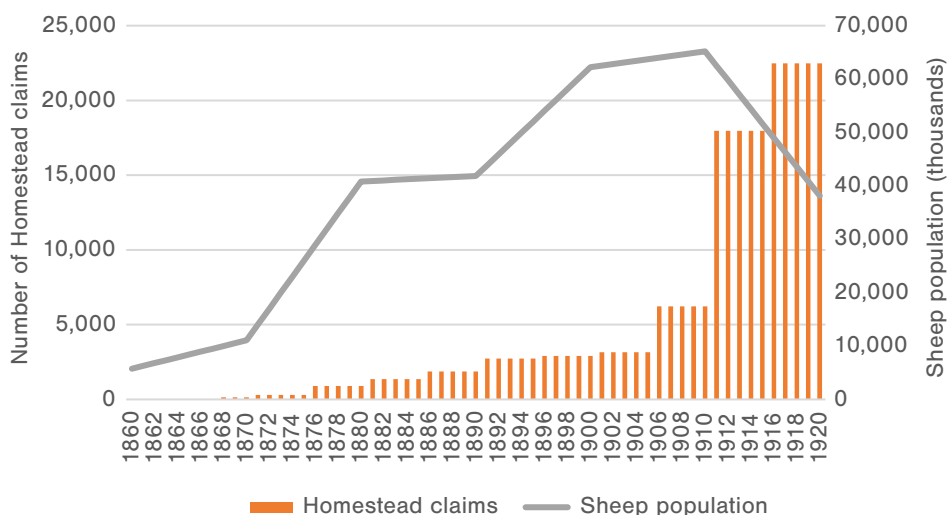
In the early 20th century, a renewed homesteading movement significantly influenced sheep ranching. By then, State and local officials, along with Congress, were troubled by the unresolved matter of the open rangelands. Congress endeavored to address the issue of unclaimed western public-domain lands by modifying the 1862 Homestead Act. Important revisions to the original Homestead Act came into force in the acts of

1904, 1906, 1909, 1912, and 1916. Particularly, the latter two acts prompted the most significant surge in homestead claims since the original Homestead Act.

The so-called Kinkaid Act of 1904 was exclusively applicable to the western and central Nebraska, with a particular focus on the Sand Hills region. This law facilitated the establishment of 640-acre homesteads within the specified zones, excluding land reserved for irrigation purposes. In 1906, the Forest Homestead Act enabled individuals to claim homesteads on lands primarily valued for agricultural use located within national forests. And in 1909 the Enlarged Homestead Act tackled the issue of land size by permitting claims of up to 320 acres, designed to promote non-irrigated farming. Even though dry farming was pursued in many portions of the interior West (*e.g.* Wyoming), most farmers had to supplement their efforts by depending on livestock, primarily sheep, for their sustenance. The passage of this act marked a triumph for those advocating for homesteading, as they managed to prevail over the stockmen's push for even larger 640-acre parcels that were more suitable for grazing. Three years later, in 1912, a new Homestead Act reduced the residence period requirement on homesteads from five to three years (Gates & Swenson, 1968: 495-507).

FIGURE 5

Homestead claims and sheep population trends in the American West, 1860-1920



Source: author's own elaboration with data from BLM (1962) and Voorhies and Schneider (1929).

In certain areas, the influx of settlers, the proximity of flocks, and the limited availability of grazing resources contributed to a decline in sheep flocks. Because of the crowded

conditions on the range, sheep graziers had to reduce both the total number of sheep and the size of their herds. Sheep bands consisting of 2,500 to 3,000 or more were reduced to around 2,500 or even less, frequently dropping below 1,500. At the regional level, sheep numbers had started to decline sharply, and never recovered (BC, 1931: 592). By then, more than half of the country's sheep population was still concentrated in the West, with Wyoming and Montana leading all states in the country. In Montana, for example, sheep population declined from a peak of 8,932,000 in 1903 to 2,791,000 in early 1920 (BC, 1914: 332, 396-97; BC, 1922: 644; BSC, 1904: 7).

The real breakthrough in ranching came with the passage of the 1916 Stock-Raising Homestead Act. Some representatives, prompted by rancher associations, proposed leasing unclaimed lands, while others suggested amending the Homestead Act to enable the establishment of more ranches on these lands. In 1916, the Stock Homestead Act enabled ranchers to claim ownership of homesteads up to 640 acres on lands suitable for grazing, and with the sole purpose of livestock grazing. Under this act, settlers possessed surface rights to the land, while the federal Government retained rights to underground minerals. Still a 640-acre plot remained inadequate for supporting a viable ranching operation. Assuming that a homestead parcel of 640 acres could accommodate from 16 to 20 cattle, this carrying capacity was significantly higher than the average for such areas. A homesteader would require a minimum of four sections of land (2,560 acres) to generate enough income for a successful enterprise. In many cases, however, homesteaders would need as much as 10 or more sections to meet the requirements (Saitua, 2021: 14).

The passage of the 1916 act started a rush of land-seekers to the West. By October 1916, only three months after the passage of the act, more than 45,000 applications were made and approved (Anonymous, 1919). Eventually more than 70 million acres of public-domain lands were privatized through this Act, of which, 15 million acres were in New Mexico alone. In some areas, the influx of new homesteaders pushed Native-American sheep graziers out business. In western New Mexico, continuing with the same example, the Ramah Navajo sheep graziers, most of whom depended on public-domain lands for their livelihood, were displaced by the arrival of new homesteaders. According to some estimates, there were about 10,000 head of Navajo sheep that were affected and pushed from their customary lands south of Ramah (Anonymous, 1917a).

While a portion of the settlers did manage to successfully establish their homesteads, enduring the challenging conditions and adapting to their new environment, a significant majority encountered severe hardships. These hardships often culminated in failure, a pattern underscored by the research of Libecap and Hansen (2002). They reveal that misinformed optimism about the climatic conditions of the Great Plains led many to adopt agricultural practices ill-suited to the region's reality. This misinformation, deeply embedded in the settlers' strategies, contributed to widespread economic and personal failures, highlighting a critical area of concern in historical land management and settlement policies. In the course of this process, many small and medium-sized firms ceased to be competitive and disappeared. Certain operators, lured by the prospect of vast acreage, were not well-acquainted with the local conditions. Consequently, they faced challenges in establishing stable homes due to unfavorable locations, difficulty adapting to the conditions, or a lack of capital to develop their acquired lands. The 1916 Act enabled existing homesteaders to extend their property rights under its provisions. Moreover, it assisted those who, upon receiving official homestead grants, had the chance to purchase additional adjacent lands. Many ranchers acquired different parcels of land under the different homestead laws. In areas where substantial tracts of land were claimed under this act, large companies took advantage and acquired a significant portion of the available land.

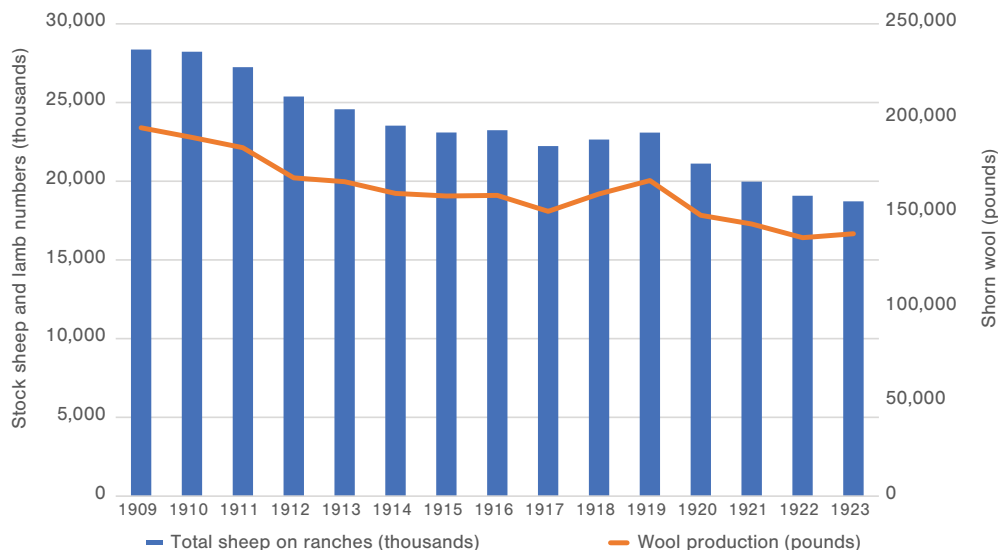
In certain locations, this situation led to some operators to strategically claim homesteads in locations that allowed them to charge sheep operators for passage to their summer grazing areas. In southern Idaho, for example, state law prohibited sheep from grazing within a 2-mile radius of populated areas, making it difficult to move sheep between winter and summer ranges. As a means of overcoming such adversities, some woolgrowers formed local associations that purchased or leased cooperatively enough land along the trails connecting winter and summer ranges. By having the sheep rested on controlled areas at night and herding them during daylight, herders could manage the trail. Still range sheep trespass cases occasionally occurred, and their owners faced substantial expenses related to trespassing charges against them.

The establishment of livestock driveways became then indispensable for transporting sheep to shipping points and, between winter and summer grazing areas. Under the 1916 Act, according to some estimates, approximately 9,000,000 acres were designated for this purpose. Moreover, similar driveways were established within national forests to prevent conflicts between livestock being driven to their owners' designated areas and the lands of other permit holders. But sometimes conflict seemed inevitable. Certain stock trails were inherently narrow and unable to provide sufficient forage to sustain all the livestock that needed to travel along them (CA, 1933: 68).

Large firms managed to create their own stock drives by purchasing ranches strategically placed at intervals along their routes. They acquired land in small 40-acre plots and in elongated shapes that extended along stream banks or around springs, waterholes, and other water sources. Some commentators lauded this flexible approach to land sale and distribution as a way to circumvent the limitations imposed by the checkerboard system of strictly rectangular land purchases. However, others viewed this practice as a threat to the principles of American land law, criticizing it for promoting range concentration –what contemporaries termed “monopolization”– through the privatization of water rights by large cattle operations (Adams, 1916; Anonymous, 1893: 397; Saitua, 2023: 65-6; Young & Sparks, 2002: 94-8).

The Homestead Act of 1916 had a profound impact on sheep ranching in the West, as evidenced by Figure 5, which displays a marked decline in both the stock of sheep and lambs and the production of shorn wool from 1909 to 1948. This Act led to the appropriation of vast stretches of traditional grazing lands for homesteading, significantly reducing the areas available for sheep grazing. As homesteaders took over these lands, previously used by ranchers for seasonal migration of livestock, many sheep ranchers were deprived of essential grazing territory. This forced them to either reduce herd sizes dramatically or exit the industry. The transformation of grazing lands into homesteads not only displaced many ranchers but also led to the consolidation of the remaining parcels under well-financed stock companies like John Etchart’s in Montana, stabilizing some segments of the livestock industry despite the overall downturn. This graph underscores the long-term effects of legislative changes on agricultural productivity and the stability of the sheep industry in the West (USTC, 1921: 15-6).

Western woolgrowers’ associations tried to cope with such curtailments of grazing lands. One radical proposal to cope with this problem was to move millions of sheep from the West to the Midwest or even to the South rangelands. On September 13, 1917, at the closing session of the Great Lakes Wool convention, the Upper Peninsula Development Bureau of Michigan, Wisconsin Advancement Association, and Minneapolis Civic and Commercial Association, in conjunction with the National Sheep and Wool Bureau, offered 3 million acres of grassland free of charge in upper Minnesota, Wisconsin, and Michigan to prospective sheep raisers. In December of that year a committee of western woolgrowers traveled to New Orleans, Louisiana, to look into the possibility of moving western sheep to the south (Anonymous, 1917b, 1917c). This solution never worked. With the advance of the 1910s, the western sheep industry recognized a new and dangerous era approaching.

FIGURE 6**Total stock sheep and lambs and production of shorn wool in the American West, 1909-23**

Source: author's own elaboration with data from Bureau of Agricultural Economics (BAE, 1949: 8).

The First World War (1914-1918) gave the range sheep industry in the West a new impetus. The sector surged in response to increased demand for foodstuffs and fibers, notably lamb, mutton, and wool, which were vital for the war effort. Sheep's short production cycles made them ideal for meeting the urgent wartime demand, especially for wool used in military uniforms, which was harvested during biannual shearings. This period of prosperity extended into the early war years, with the wool manufacturing business booming until 1917, when the US government stepped in to regulate the industry to prevent speculation. Sheep grazing in national forests reached record numbers, with over 8.45 million mature sheep in 1918. However, after the war, despite initial stability, wool prices plummeted by spring 1920, leading to a decline in the sheep industry. The industry faced further challenges in the 1920s due to a drop in European demand, overproduction, and financial restrictions, marking the start of a prolonged downturn that continues to affect the industry (Barlett, 1938: 115; Jardine, 1910; Hislop & Howell, 1917; USTC, 1921: 56-8, 76-85, 89-90; Wentworth, 1948: 391-2, 416).

6. CONCLUSIONS

The abundance of free grazing pasture in the West's unclaimed public domains after the Civil War created an ideal environment for the growing sheep business. These were opportunities that entrepreneurs took advantage of, and sheep populations grew significantly; by 1880, there were almost 14 million of them. But this quick growth also resulted in overgrazing, which reduced the amount of feed that was available and led to more problems down the road. Due to low investment costs and effective utilization of public resources, the sector was initially profitable, which helped large-scale operations flourish. However, this also planted the seeds for future instability as a result of economic and environmental constraints.

The impact of the homesteading movement and the major cattle organizations acquisition of prime grazing grounds created additional complications for the sheep sector. Overgrazing and land degradation were made worse when sheep and cattle were forced into less desirable regions as homesteaders converted productive sites for cultivation. Not only did the settlement patterns cause resource depletion, but they also heightened rivalry and strife among various livestock owners due to a string of droughts and economic changes. Regulatory measures were necessary to counteract the negative effects of the unregulated expansion into what was essentially a common property resource.

Last but not least, in response to the problems of overstocking and environmental damage, the sector changed toward private ownership and managed grazing techniques. These actions not only limited the larger economic and environmental dynamics reshaping the West, but also attempted to stabilize the industry and safeguard the interests of different stakeholders. The industry's regional diversification in response to these challenges is exemplified by the increasing numbers of sheep in semi-desert regions, where they were better suited than cattle, compared to their fall in more fertile places. The story of the range sheep industry's growth throughout this time provides evidence of the interaction of financial opportunities, environmental limitations, and the changing regulatory environment, laying the groundwork for the industry's future trajectory in the face of these shifting.

The establishment of national forests and the introduction of regulated grazing practices were intended to mitigate the environmental degradation caused by overgrazing and to foster a more sustainable industry. While these measures had some positive effects, they also introduced new complexities and constraints. The Stock-Raising Homestead Act of 1916, in particular, had profound and unintended consequences for

the industry. It catalyzed a shift toward monoculture practices and compelled ranchers to diversify their agricultural activities. This diversification, while a strategic response to the evolving economic and regulatory landscape, marked a departure from traditional sheep ranching and contributed to the industry's long-term decline.

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