

‘Sweet Public Lands’: The open-range sheep industry of Nevada and its legal dimension in the late nineteenth century*

by Iker Saitua

Abstract

The present article traces the late nineteenth-century development of the open-range sheep industry in the state of Nevada. In particular, it explores how free access to the public-domain lands combined with favourable environmental conditions fostered the expansion of sheep grazing to the detriment of cattle ranching during the late nineteenth century. With the expansion of the livestock industry on the public-domain lands, the United States Federal Government, as the owner of such vast lands, pursued a *laissez-faire* policy toward grazing rather than imposing range rules. This article demonstrates how its inaction strongly benefited the growth of the sheep industry.

In March 1896, J. W. Freeman, a Nevada sheep operator, wrote to the *American Wool and Cotton Reporter* that Nevada was a good country for sheep grazing: ‘Nevada’s soils are like her feeds, various brush, foliage, bunch grass, white and black sage are all found in the immediate vicinities. She has miles of such domain, and there are today over one-half million sheep roving over her “hills and dales”’. Freeman described in detail how the open ranges of Nevada made the range sheep industry viable:

The mountain ranges produce bunch grass and sunflowers and are well watered. Upon these the sheep are run during the spring, summer and autumn. Upon her vast deserts a very rich feed known as ‘white sage’, grows to a height of one or two feet. This feed is utilized when the ‘snow is on the ground’. There being no water on the deserts the feed grows undisturbed during the summer; the stock owners are not obliged to put up hay as the ‘bush’, sand grass and white sage produce such a variety of feed that ‘Mary’s little lambs’ would leave hay stacks and roam at will. The herders laugh and grow fat when the beautiful snow falls and they fall down out of the mountains on to these deserts where there is such abundance of feed that one herder can easily take care of five thousand head.¹

* I thank the editor of the *Review* and the anonymous reviewers for their constructive comments. This article has been made possible thanks to the financial support provided by the Basque Government through its post-doctoral fellowship programme.

¹ As reprinted in *Reno Weekly Gazette and Stockman*, 12 Mar. 1896.

As Freeman explained, the economic success of those sheep enterprises depended largely upon the free use of public-domain lands.

In the late nineteenth and early twentieth centuries, Nevada became one of the major sheep-producing states in the North American West, largely due to the presence of a very high proportion of public-domain range lands. Federally owned rangelands in Nevada encompassed all grazing lands not under private ownership, which meant that well over 90 per cent of the range was free and open, but owned by the Federal government. The range may be described as one single common whose forage resources were under pressure from overgrazing by uncontrolled private interests. In other words, the lands of faraway Nevada were examples of marginal lands open for development and exploitation. The scarcity of water sources determined much of the socio-economic activity of Nevada. Because of its arid ecosystem, Nevada has been unsuited to most kinds of crop agriculture and consequently, the state's population remained low and sparse in the nineteenth century. During the early mining boom, its population was concentrated in small urban mining developments. By the end of the nineteenth century mining had fallen into depression in Nevada. Thereafter, livestock farming surpassed a declining mining industry in the state. Throughout these years, it was the possession and control of water which determined the use of the Nevada's rangelands.²

Mining was the first modern extractive sector to be developed by the Euro-American population in Nevada. The continued presence of newcomers who tried to prosper in the so-called Silver State in the extraction of minerals aided the development of the livestock industry. In other words, miners and early settlers needed feeding. After the American Civil War (1861–65), Nevada's rangelands supported thousands of cattle and to a lesser degree sheep. By the late 1880s, the sheep industry had become a fast growing sector. For many with capital to invest in the American West, sheep grazing was a profitable business offering an opportunity for good profits from low investment. In other words, the sheep industry appeared to be a low-risk business. By the late 1880s, the state of Nevada was regarded as 'the best sheep country' in the United States.³ Free access to the public-domain lands made sheep farming profitable in the state. In the 1890s, as the mining camps declined, the sheep population increased considerably in Nevada, producing competition for the forage on the range between cattle producers and sheep raisers at a time of environmental change. Cattle owners and local authorities became increasingly frustrated over the Federal government inaction concerning the management of the public-domain lands in Nevada. In 1905 the free and open range situation changed when the US Forest Service began establishing a range control programme in the newly created National Forests that Congress had authorized in Nevada. But these National Forests only ever comprised a small portion of the state's surface.⁴

² Effie M. Mack, *Nevada: a history of the State from the earliest times through the Civil War* (1936), pp. 19–38; Elmer O. Wooton, 'The public domain of Nevada and factors affecting its use', *United States Department of Agriculture Tech. Bulletin* 301 (Apr. 1932), pp. 37–8.

³ *Reno Weekly Gazette and Stockman*, 18 Apr. 1889.

⁴ Russell R. Elliott, *History of Nevada* (1973),

pp. 115–22; Marion Clawson, 'Range lands of north-eastern Nevada: their proper and profitable use (a progress report)', (Bureau of Agricultural Economics, USDA, 1938), p. 6; Richard H. Lane, 'The cultural ecology of sheep nomadism: northeastern Nevada, 1870–1972' (unpublished PhD thesis, Yale University, 1974), pp. 142–3, 171.

This article aims to contribute to the existing American agricultural historiography with an emphasis on public land policy.⁵ It analyses the historical development of the open-range sheep industry in Nevada before the Federal government instituted land-management on portions of the public domain at the turn of the century. It examines the origins of the open-range sheep industry in a period of largely unrestricted capitalist competition in the American West during the late nineteenth century. It also explores how transhumant sheep-raising faced continual competition from other range resource-user groups – primarily from cattle ranching – and from local government desires to regulate the public domain. It focuses on the relationship among land, law, and polity. More particularly, it analyses Federal laws and regulations applicable to public-domain lands, as well as state-level measures to address grazing problems in Nevada which affected the sheep industry. The constitutional aspect is central to our understanding of the development and expansion of range sheep production during the late nineteenth and early twentieth centuries in the state of Nevada.

I

The economic evolution of the Nevada Territory and its early years as a state was largely determined by the development of the Far West's mining economy. As the demand for animal products increased, the sheep industry became a highly profitable business. The first domestic sheep to enter Nevada were introduced in 1841 by the Workman and Rowland party, who drove the flock of 150 sheep from New Mexico to California passing through the southern portion of the present boundaries of Nevada. The Workman-Rowland migration was followed by larger sheep drives from New Mexico to California in the early 1850s.⁶

With the Gold Rush in California (which started in 1849), the new state created a market for sheep. Generally, the point of departure for the sheep flocks into California became New Mexico, where investors could find sheep at low prices. In the long livestock drives thousands of head of sheep moved from northwestern New Mexico to the mining camps in California. Nevada became part of the trail on the way to California. In 1852 one of the major, commercial sheep drives to California, was undertaken by Richens Lacy Wootton, also known as 'Uncle Dick', who trailed 9000 sheep from Taos in New Mexico to Sacramento with the help of 14 hired shepherders, seven guards, eight goats, and sheep dogs to control the flocks. A year later, Christopher 'Kit' Carson, along with his partner Lucien B. Maxwell, bought 13,000 head of sheep in Santa Fe and trailed them to Sacramento. Both parties stimulated later sheep drives and established the route for the trailing of these animals to the Pacific Coast. One source calculated that between 1852 and 1860 more than half a million sheep traversed Nevada in their way to California.⁷

⁵ On the evolution of American agricultural historiography, see R. Douglas Hurt, 'Reflections on American agricultural history', *AgHR* 52 (2004), pp. 1–19.

⁶ Elliott, *History of Nevada*, p. 115; Clel Georgetta, 'Sheep in Nevada', *Nevada Historical Society Q.* 2, (1965), p. 18.

⁷ Edward N. Wentworth, *America's sheep trails: history, personalities* (1948), pp. 165–9; Byrd W. Sawyer, *Nevada nomads: a story of the sheep industry* (1971), pp. 1–13; Clel Georgetta, *Golden fleece in Nevada* (1972), pp. 6–26.

In the 1850s, livestock agriculture had its beginnings in the western portion of the Great Basin. Mormon migrants from Utah began to settle in the Carson Valley area and developed rural communities. Historians have concluded that Mormon migrants must have brought small flocks of sheep with them. Stockmen from California also began wintering their cattle in western rangelands of Nevada, primarily in the Truckee Meadows, as forerunners of the eastward movement of the California ranch frontier. By the second half of the 1850s, three prominent livestock ranching operations had been started in Nevada: by Fred Dangberg in the Carson Valley, Hock Mason in the area of today's Lyon County, and the Smith Brothers in the valley to which they gave their family name. At the same time, the decline of placer mining (from river alluvium) in California prompted prospectors and capitalists to explore for precious metals in the interior of the Far West. New lodes were found immediately across the Sierra. In 1859, the discovery of the Comstock Lode created a prosperous local economy and, of course, strengthened the small livestock industry east of the Sierra in what was then Utah Territory. Stock farmers initially prospered alongside the mining bonanzas of the Comstock, but they continued after the closure of the Comstock mines.⁸

The relation between mining discoveries and the development of a livestock economy, however, does not completely explain the trajectory of the livestock industry in Nevada which continued as a profitable sector during the twenty years of Nevada's mining depression from 1880 to 1900. The success of early stockmen proved the potential of selected Nevada ranges for grazing. In 1890, Hubert H. Bancroft optimistically wrote: 'Nevada is a better agricultural country than at first glance one might expect to find'.⁹ In the years immediately following the Civil War, cattle herds from Texas began appearing in Elko County. In the early 1870s, important cattle grazing operations were established by several prominent ranchers from California and elsewhere such as John W. Long's in the Clover Valley and the Altube Brothers in Independence Valley.¹⁰

After Nevada secured statehood in 1864, the future for the stock industry on its open rangelands seemed promising. Expansion of livestock production on the Pacific Coast brought falling stock market prices in California. Large sheep flocks now grazed eastward into the Great Basin to serve the satellite markets created around the new Nevada mining districts. In the spring of 1869, the Central Pacific Railroad completed its route across Nevada. The railroad opened new markets for livestock raised on Nevada ranges. New mineral discoveries increased the railroad traffic, as did livestock production. Along the railroad's route, property values rose significantly and stock agriculture in adjoining counties expanded. In the summer of 1872, the *Humboldt Register* reported that an increasing number of 'sheepmen' was acquiring titles to lands in Humboldt County, Nevada.¹¹ Because sheep products were more valued in Chicago and other far away markets on the East Coast, the development and improvement of transportation and favourable market conditions made Nevada a perfect state to raise meat on

⁸ Elliott, *History of Nevada*, pp. 116–18; Mack, *Nevada*, pp. 200–8, 437–55; James W. Hulse, *The silver state: Nevada's heritage reinterpreted* (1991), pp. 74–9, 133–5.

⁹ Hubert H. Bancroft, *History of Nevada, Colorado, and Wyoming, 1540–1888* (*The works of Hubert Howe Bancroft*, 25, 1890), p. 243.

¹⁰ Elliott, *History of Nevada*, pp. 118–21; Sam P. Davis, *The history of Nevada* (2 vols, 1913), I, pp. 640–5; Edna B. Patterson, Louise A. Ulph and Victor Goodwin, *Nevada's northeast frontier* (1969), pp. 211–13.

¹¹ From the *Humboldt Register* as noted in *Territorial Enterprise*, 6 Aug. 1872.

the hoof. Free forage from Federal lands, of course, lowered production costs. All contributed to the ultimate objective of securing the largest margin of profit.¹²

In 1875, the *Territorial Enterprise* of Virginia City reported that Nevada did not need any more miners:

In the Atlantic States they appear not to understand that the rich silver mines of the Comstock are few in number ... The Comstock does not cover the whole State, nor does the bonanza extend through the whole Comstock. We now have miners enough and more than enough to work all of our mines, both paying and prospective. Let this be understood abroad, and let moneyless men give the Comstock a wide berth.

The *Enterprise* advised those wanting to go West to enter the region's emerging sheep-ranching industry: 'Better cross the Sierras and seek employment on the sheep ranches of Southern California, than to stop here to starve while walking over the millions that lie buried deep in the rocky bosom of the big bonanza'.¹³

From 1864 to 1878, fluctuations in the Comstock mining boom laid bare the uncertain basis of the state's economy. When the Comstock failed after 1877, the structural weakness of the mining economy became evident. As an alternative to failing mining investments many capitalists invested in stock ranching.¹⁴ In 1876, a Nevada sheep operator said: 'Sheep are better than a government bond; you can tear off a coupon every six months half as big as the bond, and the bond is left as big as it was'.¹⁵ Within 20 years of the Comstock's failure, stock-raising operations had assumed a major role in Nevada's economy with sheep starting to rival cattle as the preferred livestock. In 1881, a correspondent for the *New York Times* in a travel article, 'Through Nevada's Desert', noticed: 'The people of Nevada, now that the mining future is so dubious, can see nothing ahead but agriculture, and, as it has been demonstrated that the soil is good, the great problem is water'.¹⁶ Later, in 1885, the *Central Nevadan* noted: 'There is no country in the world where sheep thrive so well, are so free from disease and attain such perfection as in Nevada'.¹⁷

II

In Nevada, the arid conditions determined economic development, specially for crop agriculture, as well as for grazing and ultimately the failure of the state to attract a population base. Despite the small, sparse settlements around mining, and ranching towns along the railways, most of the public domain of Nevada remained unclaimed. The unsettled land situation in Nevada challenged a Federal land policy that encouraged the alienation and privatization of the public-domain lands.¹⁸

¹² James A. Young and B. Abbott Sparks, *Cattle in the cold desert* (1985), pp. 48–55; Byrd W. Sawyer, *Nevada nomads*, pp. 15, 17; Henry Stewart, *The shepherd's manual: a practical treatise on the sheep. Designed especially for American shepherds* (1876), p. 33.

¹³ An article from the *Territorial Enterprise* as reprinted in the *New York Times*, 21 Mar. 1875.

¹⁴ Elliott, *History of Nevada*, pp. 171–3.

¹⁵ *Emmetsburg Palo Alto Pilot*, 23 Mar. 1876.

¹⁶ *New York Times*, 20 Mar. 1881.

¹⁷ As reprinted in *Nevada State Journal*, 18 Aug. 1885.

¹⁸ Romanzo Adams, 'Public Range Lands – a new policy needed', *American J. of Sociology* 22 (1916), pp. 325–31.

On 31 October 1864, Nevada became the thirty-sixth state in the Union. Its statehood Enabling Act by Congress asserted ownership of the public domain by the United States and required the state to forever disclaim any right and title to the unappropriated Federal lands. By this Act, Congress granted 12,800 acres to Nevada for public buildings and education. From the late nineteenth century on, the history of Nevada's Federal lands has been a matter of local versus Federal authority, particularly in access and use of resources. Any consideration of the practical operation of important land laws of the United States in relation to the range industry and its need for water is a complicated undertaking.¹⁹

In March 1861 Congress established the Territory of Nevada. The following year it passed the Homestead Act, which offered squatters the opportunity to claim 160 acres of unappropriated public domain. It was assumed that the homesteader living on the land would make improvements in terms of both structures and land cultivation.²⁰ The homestead law with its later amendments operated with variable degrees of success in the West. It was most effective in the humid lands of the Upper Mississippi Valleys and moderately so in portions of the Intermountain and Pacific Regions, but in Nevada it was largely unsuited to the type of large-scale stock agriculture grazing that occurred on the state's marginal lands. The failure of Federal land policy in the state was legendary. Between 1864 and 1904 far fewer homestead entries were made in Nevada than in any other western public-domain state. Other generous land acts aimed to promote settlement in the arid West: The Timber Culture Act, the Timber and Stone Act, the Desert Land Act of 1877, and the Carey Act of 1894. Some required the development of water supplies and irrigation. All failed to bring about the desired settlement. The result was the continued ownership of much of the West and almost all of Nevada by the Federal government. What land was acquired from the government resulted in the monopolization of water sources by large livestock operations who thereby controlled the rangelands.²¹

In 1880 Congress responded with a two-million-acre land grant in Nevada by which the state's citizens were able to select lands for purchase. Under the original school land grants to states dating from 1841, and earlier, sections 16 and 36 in every surveyed township were granted to the state for the support of common schools. This system could not work in Nevada. First, Nevada was mostly unsurveyed. Secondly such a system of allocation would, in many cases, award worthless lands far from water sources. The 1880 grant provided for the disposition of 'selected lands' to be made under regulations prescribed by the Nevada Legislature. The 1881 state legislative session initiated the school land-selling process of randomly chosen acreage

¹⁹ Davis, *History of Nevada*, pp. 266–7; Elliott, *History of Nevada*, pp. 84–5; *Biennial report of the surveyor-general and State land register of the State of Nevada, 1909–1910* (1911), pp. 28–30; Eleanor Bushnell, *The Nevada constitution: origin and growth* (1965), pp. 117–18; Michael J. Brodhead, 'Accepting the verdict: national supremacy as expressed in State constitutions, 1861–1912', *Nevada Historical Society Q.* 13 (1970), pp. 9–10; Michael J. Brodhead and James W. Hulse, 'Paul W. Gates, Western land policy and the equal footing doctrine', *Nevada Historical Society Q.* 29 (1986), pp. 234–6, 239.

²⁰ On the Homestead Act, see Paul W. Gates and Robert W. Swenson, *History of public land law development* (1968).

²¹ Henry N. Smith, *Virgin land: the American West as symbol and myth* (1950), pp. 195–6; Eric Foner, *Free soil, free labor, free men: the ideology of the Republican Party before the Civil War* (1970), pp. 31–8, 175; Gates and Swenson, *History of public land*, pp. 393–414, 638–54; Young and Sparks, *Cattle*, pp. 89–98; Mack, *Nevada*, pp. 415, 420; *Biennial report ... 1909–1910*, pp. 9–21; Donald J. Pisani, *To reclaim a divided West: water, law, and public policy, 1848–1902* (1992), pp. 186–8.

in no less than 40-acre parcels. The lands selected for purchase were generally those with nearby water sources and were secured by cattle interests. The school land sales, along with the assertion of prior rights under a registration law, allowed some ranchers to secure riparian rights through the ownership of lands around water sources. The legislature set a price of \$1.25 acre for the land, requiring only 25¢ an acre down payment and extending the terms of payments to as much as 50 years. These generous credit terms caused a rapid purchase of school lands and, of course, a monopolization of water sources.²²

Nevada's large stock firms, such as those owned by John Sparks, W. N. M. McGill or the Dangberg family, became major purchasers of state selected school lands. Those large operations, as range scientist James A. Young observed, 'deposited funds in Carson City to be drawn upon to meet the numerous annual credit payments for state school grant lands.'²³ These companies had a number of contracts for further land purchases. There was a close cooperation between the State Land Office and the large livestock operations. The monopolization of land ownership served a two-fold purpose for the large firms: they owned the best lands along the streams for hay and winter-feed production and at the same time they excluded small operators and itinerants from access to water. By allowing the possession and control of water sources, the school land disposition system facilitated the rangeland monopolization. At a lower level, small grazing operations and livestock farms struggled to survive in Nevada. Their business needed to secure the prized hay pasture, irrigated lands, some good rangeland, and access to water on their home ranch of no more than 320 acres, as well as the use of the public domain. Small operators could only survive in the ranching business by producing hay and watering in the private lands for the winter season and grazing on the Federal lands. For many this was beyond their limited resources.²⁴

For the most part, public rangelands and mining districts remained without Federal regulation. Congress had no intention of imposing control or closing the open rangelands to settlement. It did insist by the late 1880s that the public range should not be fenced by stock operators or graziers. In the absence of central government regulation and its uncertainty about western public rangelands and mineral lodes, state authorities began taking decisions. After the coming of homesteaders and sheep owners to Nevada, cattle producers made increased use of the rangelands. In 1873, the Nevada legislature passed a branding law in an attempt to establish order on the ranges. With lack of enforcement, however, the state's capacity

²² Mack, *Nevada*, pp. 420–2; *Appendix to the Journals of Senate and Assembly of the tenth session of the legislature of the State of Nevada* (1881), p. 10; *Report of the surveyor general and State land register of the State of Nevada, for the years 1881 and 1882* (1883), pp. 21–2; Joseph Nimmo, Jr., 'Report in regard to the range and ranch cattle business of the United States', *United States Treasury Department, Bureau of Statistics* (1885), pp. 430–44; Adams, 'Public range', pp. 324–51; Bancroft, *History of Nevada*, pp. 315–17; Young and Sparks, *Cattle*, pp. 94–8; John M. Townley, 'Management of Nevada's State lands, 1864–1900', *J. of the West* 17 (1978), pp. 63–73; Young and Sparks, *Cattle*, p. 99; Clawson,

'Range lands', pp. 102–7; William D. Rowley, *Reclaiming the arid West: the career of Francis G. Newlands* (1996), pp. 51–2; Donald J. Pisani, *Water and American Government: The Reclamation Bureau, national water policy, and the West, 1902–1935* (2002), pp. 89–90. See also Robert G. Dunbar, *Forging new rights in Western waters* (1984).

²³ Young and Sparks, *Cattle*, p. 98.

²⁴ *Ibid.*, pp. 96–8; Clawson, 'Range lands', pp. 4–6; *Statutes of the State of Nevada passed at the fourteenth session of the legislature, 1889* (1889), p. 129; Townley, 'Management', pp. 63–73; Adams, 'Public range', pp. 324–51.

to control the range problems was limited. When Nevada began to enforce some range law, livestock operators often ignored it.²⁵

Squatters settled on different corners of Nevada's public domain, but without any assurance that in the future they could acquire their properties. Typically, they declared their intent to file a pre-emptive claim under one of the land laws, although most of them did not proceed with their claim because they could not raise the standardized \$1.25 per acre for the land their animals grazed. Initially, the land could not be taxed by the state because it was still public domain belonging to the Federal government. But in 1865, the legislature of Nevada enacted a property tax law, which permitted counties to assess what they considered 'possessory property' on the public-domain lands or land subject to claims which a squatter had not 'proved up'. The assessment occurred after improvement to the property had taken place, when houses, outbuildings and barns had been erected and the land grazed.²⁶

Toward the end of the 1880s, after a rapid growth in the numbers of livestock and especially sheep, lack of regulation and grazing controls exposed continuing quarrels over range resources. In general terms, the ownership of land in Nevada was divided between three categories. First, the greater part of Nevada was public domain, with a huge percentage of marginal lands remaining unclaimed; second, over half of the privately owned property belonged to the railroads and big ranch outfits; and third, virtually the rest of the privately owned lands were situated around or close to water sources along streams adjacent to productive grasslands. The result was most of the private property in Nevada was held as large ranches monopolizing surface waters. These ranches exploited the Nevada's 'sweet' public lands, to paraphrase the title of a novel from Robert Laxalt, as a free resource.²⁷ In June 1880, the *New York Times* reported that 'In the sage-brush lands, alfalfa, the cereals, and all vegetables flourish in profusion where water can be obtained, and Nevada is becoming an important stock-raising State'.²⁸ Because of a huge depression in the mining industry, many investors in the extraction of metals moved their capital into the livestock business. These years witnessed a rise in the number and weights of sheep slaughtered in Nevada.²⁹

For the fiscal year ending on 30 June 1885, Christopher C. Powning, US Surveyor General of Nevada, prepared a report on the state's extractive economic activities utilizing public lands. The sheep industry was, Powning wrote, 'in a prosperous condition'. There were:

500,000 sheep on the ranges. Mutton sheep are valued at \$2 per head, and lambs at \$1.50. The average annual increase is 80 per cent. The wool clip averages 6 pounds, and good Nevada

²⁵ Clawson, 'Range lands', pp. 13-4, 16-7; *Statutes of the State of Nevada passed at the sixth session of the legislature, 1873*, pp. 99-101; Halina M. Stewart, 'The Nevada State detectives', *Nevada Historical Society Q.* 49 (2006), pp. 25-8. See also Velma Stevens Truett, *On the hoof in Nevada* (1950).

²⁶ Young and Sparks, *Cattle*, pp. 97-8; *Statutes of the State of Nevada, passed at the first session of the legislature, 1864-5* (1865), pp. 343-44; Romanzo Adams, *Taxation in Nevada: a history* (1918), pp. 100-10.

²⁷ In 1957 Robert Laxalt published his biographical

novel, *Sweet Promised Land*. In what was to become a classic book of the western literature, Laxalt told the story of his father, Dominique, a Basque immigrant, a sheepherder in the Nevada desert.

²⁸ *New York Times*, 4 June 1880.

²⁹ Wootton, 'The public domain', pp. 37-49; Adams, 'Public range', pp. 331-5, 341-6; Elliott, *History of Nevada*, pp. 171-4; Patterson *et al*, *Nevada's northeast*, pp. 269-79; Stephen Powers, *The American merino: for wool and for mutton* (1907), p. 276.

wool brings 16 cents per pound. There are no dry seasons here for sheep, and each year will witness a marked increase in this important, permanent and profitable industry.³⁰

While economic winds favoured sheep grazing, it lacked, however, support from the state authorities. On range issues, the Nevada state government and cattle interests came together to the detriment of the sheep industry. Nevada's legislature actively sponsored legislation to undermine sheep grazing because of its migratory, itinerant, and foreign character. The state sought legal ways to limit competition for the range and assert the cattle industry's economic position. In February 1889, the Nevada legislature passed a stock trespass law and in 1893 a further statute declaring it unlawful 'to herd or graze any live stock upon the lands of another without having first obtained the consent of the owner or owners of the land so to do'. The state tried to close access from the public lands to water streams, springs, or holes which were surrounded by privately owned lands. The new trespass law made stockmen responsible for double the damages caused by their stock trespassing onto private property.³¹

Use of the public-domain lands in the intermountain states of Nevada and Utah were absolutely vital to the operations of big stock outfits. The grazing of the Federal lands significantly reduced sheep production costs. The open-range system of livestock grazing offers a picturesque feature of the Western agricultural history of this period. Basically, the labour contracted to graze livestock by the companies – either the shearers or their counterparts in the cattle industry who rode horses, the cowboys – wandered at will over the Federal lands looking for pastures to graze that remained in the public domain.³² For many years, livestock operators grazed stock freely on these lands. By the end of the century, every stockman knew that the days of free and open range might be numbered. Although many livestock owners made fortunes and prospered under the conditions of open-range grazing, uncontrolled stock numbers on the range depleted the resources. Competition for forage brought conflict and damage to the ranges. Early on, sheep grazing faced opposition in the state, specially from the powerful cattle interests. After 1890, however, various developments offered opportunities for sheep on Nevada ranges.³³

III

As in the Great Plains, the early cattle industry in the Great Basin developed with open-range grazing. Low operating expenses with cheap labour, free forage, and the open range made for large profits. In the late 1880s, severe droughts and cold winters occurred. The winter of 1889–90 was the disastrous 'White Winter' on the Nevada ranges. The losses during this winter

³⁰ *Report of the U.S. surveyor general of Nevada for the fiscal year ending June 30th, 1885* (1885).

³¹ Rowley, *Reclaiming the arid West*, pp. 50–2; *Statutes of the State of Nevada, passed at the sixteenth session of the legislature, 1893* (1893), pp. 30–1.

³² New interpretations of ranch labour include David Igler, *Industrial cowboys: Miller & Lux and the transformation of the Far West, 1850–1920* (2001); Jacqueline M. Moore, *Cow boys and cattle men: class and*

masculinities on the Texas frontier, 1865–1900 (2010).

³³ William Rowley, 'From open range to closed range on the public lands', in William G. Robbins and James C. Foster (eds), *Land in the American West: private claims and the common good* (2000), pp. 96–8; Louise E. Peffer, *The closing of the public domain: disposal and reservation policies, 1900–1950* (1951), p. 26; Young and Sparks, *Cattle*, pp. 89–100.

surpassed all previous winters and wreaked havoc on northern Nevada ranges. Locally in the Great Basin, the 'White Winter' forced a transformation of open-range grazing practices to include the cultivation of hay crops for winter feed. In many cases this meant smaller home ranch operations, the irrigation of lands and even the planting of alfalfa. All of this was a far cry from itinerant 'transhumance' grazing operations and large outfits that simply let cattle run freely on the open range during cold and dangerous winters.³⁴

After the 'White Winter', stock operators abandoned the classic open-range system. They placed greater emphasis upon the raising of hay for winter feeding. The process required greater capital investment, reducing profit margins. Stock operators of all kinds suffered great losses. Many were forced to quit their businesses. Bankruptcies were frequent. Others reduced their operations, and some transferred into sheep grazing. Generally, numbers of stock, both sheep and cattle, on the rangelands fell dramatically. In March 1890, C. S. Reynolds, a sheep broker from Nebraska, analysed the crisis in the business:

This Winter has been an unfortunate one to wool growers on the Pacific slope, as the heavy storms have killed many sheep. I have found severe losses in Oregon, Nevada, Utah and Northern California. As the wool growing industry is too extensive to be confined to any one district the sheep owners who pulled their flocks through will get no increase over last year's prices. Some Pacific slope sheep raisers will be driven out of the business by their heavy losses this Winter ... In Utah, Oregon and Nevada the loss is universal. Montana will show a fair increase. In eastern Oregon and Nevada the loss of sheep is 65 per cent. One reason for the heavy loss in Nevada is that no hay was raised during the last two years. When this year's storms began all communication from the outside was shut off, and no hay was obtainable. The meagre supply of hay was given to the cattle, and the sheep had to rustle or starve. Nearly every year I buy several hundred sheep at or near Austin, Nevada. This year there is not enough wool there to line an overcoat. All in all, it will be a pretty hard year for sheep growers.³⁵

Still, the stock survival rate during this harsh winter was greater among sheep than cattle. In the spring of 1891, a Nevada sheepman, Patrick L. Flanagan, sheared 8000 sheep whose fleeces weighed 60,000 pounds. In the same year, John Taylor, another prominent state rancher, loaded over 70,000 pounds of wool, worth 20c. a pound, into railroad cars at Winnemucca.³⁶

In Nevada, the 'White Winter' added to the already hard economic times. The mines were in a terribly depressed condition. In August 1891, on a visit to San Francisco, Nevada Governor Roswell K. Colcord said the state's mines were not attractive for further investment. Most mine locations were either exhausted or oversupplied with labour. He warned people in California to stay put and not to go to Nevada.³⁷ During the decade of 1890, a general mining depression, disastrous winters for livestock, and a general national depression after 1893 reduced the

³⁴ Walter Prescott Webb, *The Great Plains* (1981), pp. 226–30; Edna Patterson, 'Early cattle in Elko County', *Nevada Historical Society Q.* 8 (1965), pp. 6–12; James A. Young, 'Hay making: the mechanical revolution on the western range', *Western Historical Q.* 14

(1983), pp. 311–13.

³⁵ *Daily Nevada State Journal*, 14 Mar. 1890.

³⁶ Young and Sparks, *Cattle*, p. 135; *Daily Tribune*, 10 Apr. 1891.

³⁷ *New York Times*, 31 Aug. 1891.

population of Nevada from 47,355 in 1890 to 42,335 by 1900.³⁸ Nonetheless, the state continued to attract ambitious speculators and some intrepid settlers. On 24 December 1891, the *Reno Evening Gazette* pointed out that 'Nevada is becoming noted for other things besides her mineral wealth'.³⁹

The winter of 1889–90 significantly reduced cattle numbers on the Nevada ranges to the benefit of sheep graziers. James Young explained how: 'The net immediate effect of the White Winter was freedom for the range sheep industry to expand without competition from previously established cattle ranches'. Availability of range resources was altered by overgrazing, inappropriate agricultural practices, as well as droughts and severe winters. In the spring of 1890, the depletion of the perennial grasses over the preceding years of overgrazing coupled with drought led to their replacement by shrubs and annual grasses. Bitterbush, a desirable browser, was accompanied by the spread of the toxic big sagebrush and the expansion of the pinyon/juniper trees into the grasslands. The range's resources underwent a severe alteration in the decade of the 1890s that favoured sheep because of their ability to survive on a range supporting a variety of browse.⁴⁰

Consequently, the new economic situation after the 'White Winter' opened up a promising period for the sheep industry of Nevada. The advance of the sheep industry frustrated the cattle community in Nevada. After the 'White Winter', the Nevada ranges became a major producer of sheep. Sheep breeders stocked Nevada ranges with tens of thousands of animals. Dispersed over wide range areas, market centers grew up with packinghouses in Denver (Colorado) or Omaha (Nebraska) that connected the West with the main national markets.⁴¹ Although less than the cattle, the sheep industry took at least a year to produce marketable lambs and wool. The lengthy production systems made it difficult to adjust the supply to market demand. Both national and international markets influenced local prices.⁴² On 27 September 1893, the Salt Lake City *Daily Tribune* reported about some 'heavy sheep shipments from Nevada' that ran directly to the main markets in San Francisco and to the midwestern and eastern cities of Chicago and New York.⁴³ In the years 1890–99, according to the agricultural census of 1900, the total sheep population in Nevada had increased from 273,469 to 568,251 head, more than the total number of neat cattle (see Table 1).⁴⁴

Meanwhile, the Nevada state legislature continued discussing the competition for range sources. While the state assembly proposed several strategies to exclude sheep from state ranges, little was accomplished. In February 1895, John H. Weiland from Elko filed a bill in the Nevada legislature to limit itinerant sheep operations and specially prevent out of state companies (largely from Utah, California, or Idaho) from using Nevada's open ranges by

³⁸ *Twelfth Census of the United States, taken in the year 1900* (1902), p. 632.

³⁹ *Reno Evening Gazette*, 24 Dec. 1891.

⁴⁰ Young and Sparks, *Cattle*, p. 135.

⁴¹ For a discussion of how the city acted as a nucleus and prod for the countryside's often distant development in terms of agricultural crops or stock enterprises, see William Cronon, *Nature's metropolis: Chicago and the Great West* (1991).

⁴² Young and Sparks, *Cattle*, pp. 1356; Lane, 'Cultural ecology', pp. 56–9; Richard White, *It's your misfortune and none of my own: a history of the American West* (1991), pp. 222–7; Powers, *American merino*, pp. 209–51.

⁴³ *Daily Tribune*, 27 Sept. 1893.

⁴⁴ U.S. Census Office, *Census reports. Vol. V, twelfth census of the United States, taken in the year 1900, agriculture. Pt. I, farms, live stock, and animal products* (1902), pp. 704, 708.

TABLE 1. Total number of sheep and neat cattle in the state of Nevada, 1860–1900.

<i>Nevada</i>	1860	1870	1880	1890	1900
Total number of sheep	376	11,018	280,695	273,469	568,251
Total number of neat cattle	5,471	31,516	216,823	210,900	304,131

Source: U.S. Census Office, Twelfth census of the United States, taken in the year 1900, agriculture. Pt. I, farms, live stock, and animal products (1902), Vol. V, pp. 704, 708.

requiring licenses for sheep grazing. Grazing licenses (which could be as much as \$250 on a large flock) would be issued on a preference basis according to the total of number of sheep grazed. County sheriffs would be the sheep license collectors and in charge of inquiries and detailed examinations. It would be a misdemeanor for any person to graze sheep without the proper license. The legislature, however, was deeply divided and the sheep license bill was lost on a vote of eighteen to nine. Nevertheless, the session established a special committee consisting of three members from the Assembly and two from the Senate to formulate a measure that would satisfy both cattle and sheep interests. The members of the committee consisted of two cattlemen and two sheepmen, as well as one disinterested party. Patrick L. Flanagan, a sheep grazer and Republican representative from Washoe County, said: ‘This is a question of very great importance, and as we fully realize the necessity of a bill protecting both cattle and sheep interests’⁴⁵

On 21 February 1895, the *Nevada State Journal* declared that by attempting to pass the sheep license act, the state legislature was ‘at the quickest speed possible [trying] to kill the sheep industry in Nevada’. The article remarked that the sheep industry should be considered one of the main economic sectors in Nevada. It argued that the economic development in Nevada was largely based on livestock ranching, either sheep or cattle. Given the arid climate and poor lands for crop agriculture, it explained how sheep ranching naturally grew and prospered in Nevada. The *State Journal* contended that the development of the sheep industry held the key to the state’s future:

There are many persons engaged in it, and considerable of the revenue for the support of State and county governments is derived from it. It utilizes pasturage in Nevada which other wise would be wasted. It gives employment to a good many persons, who, if the business is crippled by unfriendly legislation, would have to leave the State.⁴⁶

On 11 March 1895, the Sheep Law Committee proposed in the Senate a substitute act for Assembly Bill N. 90. It read as follows:

An act supplemental to an Act entitled ‘An Act to provide revenue for the support of the government of the State of Nevada, and to repeal certain Acts relating thereto’, approved March 23, 1891, and to all Acts amendatory thereof, and to provide for a license upon the

⁴⁵ *The journal of the assembly of the seventeenth session of the legislature of the State of Nevada, 1895* (1895), pp. 103–4, 180; *Reno Weekly Gazette and Stockman*,

21 Mar. 1895.

⁴⁶ *Nevada State Journal*, 21 Feb. 1895.

business of owning, raising, grazing, herding or pasturing sheep in the several counties of the State of Nevada and to declare a violation thereof a misdemeanor, and to provide punishment thereof.⁴⁷

The state substitute bill was then approved by the majority and approved by the Governor of Nevada, John E. Jones.⁴⁸

The *Reno Weekly Gazette and Stockman* spoke for many Nevada ranchers and landowners when it urged a solution to bring order to the rangelands, regardless of the competition between the sheep and cattle interests. It was in the interest of all graziers, be they either sheep or cattle people, to suppress the 'roving bands of stock'.

Decent stockmen in Nevada have been at, the mercy of roving bands of stock that were owned by aliens and run where they pleased, taking the best of everybody's feed without paying rent, taxes or anything else ... This would simply have had the effect to kill the business, and the State and counties would have lost an important industry. Nevada has so few lines that can be made productive that every one who gave the matter any intelligent consideration felt that it would be very bad to kill off the sheep industry.⁴⁹

The majority of resident stock operators (sheep and cattle people) who owned land, either large or small, saw transient sheep grazing on the public domain as a threat to established range practices and therefore a threat to law and order. Part of the law was a reaction against recent European immigration and the out-of-state companies who employed herders to bring sheep into Nevada. Assemblyman Patrick Flanagan, backed the Sheep License Act because it undermined the position of the non-resident stock growers – especially Basque and Portuguese immigrant herders and the Mormon sheepmen of Utah – who contributed nothing in the way of tax revenue to the state.⁵⁰ The anti-Basque sentiment was explicit in the Flanagan's statements. According to Flanagan, nine-tenths of the state's wool-growers community strongly supported the bill.⁵¹

In 1897, the legislature revised the law to compel all the sheep owners to pay a license to the counties in which they operated, unless they owned one acre of land for every two head of sheep on the range. Although the new law was approved and celebrated by many established stock operators, its application was problematic. The itinerant graziers who moved sheep

⁴⁷ *The journal of the assembly of the seventeenth session of the legislature of the State of Nevada, 1895*, p. 188.

⁴⁸ *Ibid.*, pp. 207–8.

⁴⁹ *Reno Weekly Gazette and Stockman*, 21 Mar. 1895.

⁵⁰ Typically, non-English-speaking immigrants (including Portuguese, Mexicans, and Basques) and other marginalized groups occupied the lower-ranking occupations in the sheep industry. For more discussion on these immigrant experiences, see Arnold Peg, 'Wyoming's Hispanic sheepherders', *Ann. of Wyoming* 69 (1997), pp. 29–42; Donald Warrin, 'An immigrant path to social mobility: Portuguese Atlantic islanders in the California sheep industry', *California Hist.* 76 (1997–8), pp. 94–107; J. Kent Hicks and Eileen Johnson, 'Pastores

presence on the southern high plains of Texas', *Historical Arch.* 34 (2000), pp. 46–60; Iker Saitua, 'Becoming herders: Basque immigration, labor, and settlement in Nevada, 1880–1910', *Montana The Magazine of Western History* 66 (2016), pp. 58–70. For more general works on those immigrant communities who were engaged in raising sheep in the West, see William A. Douglass and Jon Bilbao, *Amerikanuak: Basques in the New World* (1975); Alexander Campbell McGregor, *Counting sheep: from open range to agribusiness on the Columbia Plateau* (1982); Ferenc Morton Szasz, *Scots in the North American West, 1790–1917* (2000).

⁵¹ *Nevada State Journal*, 5 May 1895.

from one grazing land to another were difficult to follow as they moved across county lines. The sheep growers had to pay for a license unless they owned one acre for each two sheep they owned. This requirement could be evaded by leasing parcels of land since there was no distinction in law between leasing or owning land. Since the railroads were the largest land owners, their land agents saw the new regulation as another way to make money. Sheep raisers began to lease railroad land because it was much cheaper than the amount they had to pay under the new state sheep tax laws. Consequently, the railroad companies leased a great deal of poor and worthless lands to sheep operators.⁵²

On 26 January 1897, a taxpayer from Golconda wrote a letter to the editor of the Salt Lake City *Daily Tribune* complaining about these irregular activities:

... [T]he result is that except to help the railroad company lease worthless land the law is a blank failure. The only parties satisfied with it are the railroad companies and the tramp sheep-owners. The sheep-owner rents a few townships (that is the odd sections) of alkali land at, say, \$10 per township – which likely he never sees at all. Certainly he never occupies – and with his lease in his pocket claims the right to range over the whole State. The question may be settled to the satisfaction of the courts, the railroad company and the tramp sheepmen, but scarcely to the satisfaction of the taxpayers and legitimate stock-raisers.⁵³

Clearly, this Nevadan described a fraud which undermined the law. The law did not satisfy those from the livestock community who wished for a restriction on the outsiders who were creating chaos on the Nevada ranges. Despite amendments to the legislation made in 1897, this state of affairs persisted until the 1930s.

IV

Exploitation and degradation of the natural resources raised concerns among forestry and water experts as well as those Progressives who sought to champion the cause of an emerging Conservation Movement that emphasized the ‘wise use’ of resources based upon a utilitarian doctrine that stressed use for the greatest number, for the greatest good, for the longest period of time. In the 1890s Congress initiated a partial reorganization of the public domain. In response to calls to conserve the nation’s forest resources, Congress gave the President the authority to proclaim forest reserves on the public domain, mostly in the Far and Mountain West. Establishment of forest reserves was a first step to conserve and protect conservation of water and timber resources. With the passage of the Land Revision Act of 1891, Congress prohibited land entries or private land claims under the land laws of the United States on the designated or proclaimed forest reserve lands. The immediate effects of the Land Revision Act were to close resource use development on these lands.⁵⁴ The historian William Rowley has contended: ‘The move toward regulated grazing in the forest reserves became part of an

⁵² *The journal of the assembly of the eighteenth session of the legislature of the State of Nevada, 1897* (1897), pp. 182–3, 198, 219; *The journal of the Senate of the eighteenth session of the legislature of the State of Nevada, 1897* (1897), p. 203.

⁵³ *Daily Tribune*, 28 Jan. 1897.

⁵⁴ Char Miller, *Gifford Pinchot and the making of modern environmentalism* (2001), pp. 138–9; William D. Rowley, *US Forest Service grazing and rangelands: a history* (1985), pp. 4–5, 54.

effort to achieve stability and permanency in an industry that had experienced destructive competition and resultant devastation of range forage'.⁵⁵

During the 1890s, several Administrations set aside millions of acres of Federal lands as forest reserves to prevent their monopolization and destructive logging practices. The reserved lands also included grazing lands and their forage resources. The celebrated Conservation Movement took pride in the creation of forest reserves. Before long, however, far western members of Congress demanded some answers on how the resources of these lands were to be utilized. Some accused the Federal government of banning resource use entirely on the reserves and plotting to turn them into preserves or parks. In 1897, Congress passed the Forest Organic or Forest Use Act. The Act permitted resource use in the reserves, but only under the regulation and supervision of the Department of Interior from where the original forest reserves were administered. In 1898 and 1899 the Department of Interior and its General Land Office moved to regulate and limit the numbers of stock grazing on the newly established forest reserves.⁵⁶ In March 1898, Nevada's *Reno Weekly Gazette and Stockman* informed its grazing community that the Federal government had reopened the forest reserve in California 'to her starving herds'.⁵⁷ While California witnessed the enforcement of the first conservation laws, in Nevada sheep operators did not have to worry about the closing of the public-domain lands yet.

By contrast with California, no forest reserves were created in Nevada at this time. In this state, the commencement of government management of renewable natural resources on public-domain lands significantly altered the economics of sheep production. The establishment of national parks and forest reserves in California closed access by sheep graziers to parts of the Sierra. It is well known that in 1891 Captain Abram E. Wood, commander of the Forth Cavalry and first acting superintendent in charge of the troops assigned to protect the Yosemite National Park, drove out bands of sheep. Woolgrowers accused the forest reserves and later the National Forests of permitting cattle to graze and excluding sheep. Typically, local groups, specially sheep and wool interests, rallied against grazing use regulations in the new forest reserves. While forest reserves were proclaimed in California during the 1890s, no lands in Nevada were reserved for National Forests until after 1905. Until then the free and open range existed even in the valuable high mountain pastures. In many respects it became a free for all as graziers competed for resources, sometimes violently so. In the 1890s, the continued free and open range in Nevada drew in sheepmen from California who no longer had access to the extensive forest reserves in that state. In 1894, John Muir described the invasion of Nevada in his *The mountains of California*: 'Immense numbers of starving sheep and cattle have been driven through them [the Sierra] into Nevada, trampling the wild gardens and meadows almost out of existence'.⁵⁸ The situation intensified the competition for forage and water resources on the Nevada ranges.⁵⁹

⁵⁵ Rowley, *US Forest Service*, p. 5.

⁵⁶ Harold K. Steen, *The US Forest Service: a history* (1976), pp. 56–61; Rowley, *US Forest Service*, pp. 22–31.

⁵⁷ *Reno Weekly Gazette and Stockman*, 31 Mar. 1898.

⁵⁸ John Muir, *The mountains of California* (1907), p. 96.

⁵⁹ Harvey Meyerson, *Nature's army: when soldiers fought for Yosemite* (2001), pp. 95–103; 'Conquering the West: the Federal lands question', *National Wool Grower* 55 (1965), pp. 87–9; Rowley, *US Forest Service*, pp. 28–38; Clawson, 'Range lands', pp. 4–6.

Unregulated livestock grazing on common land invited crises and conflicts. In the still abundant free open ranges of Nevada, law enforcement was weak or absent. Confrontations occurred between landowning stock operators and nomadic sheep graziers over water rights, trespass, and the destruction of forage resources on the common rangelands. Samuel Hays has described how by 'resorting to force and violence, sheepherders and cowboys "solved" their disputes over grazing lands by slaughtering rival livestock and murdering rival stockmen'.⁶⁰ In the growing anarchy on the Nevada ranges, it was contracted sheepherders who often bore the brunt of the resulting range conflicts. Sheepherders, either Basques or other European immigrants, or Mexicans, were easy targets for their opponents or enemies. In November 1895, two Basque sheepherders were killed at a sheep camp northwest of Pyramid Lake near Winnemucca Valley, in Nevada, by two ranch hands working for the cattle operation of J. M. Flannigan.⁶¹ Hostility to European immigrants and Mexicans was a feature of the conflicts that marked the Nevada range struggles from the 1890s to the 1930s.

By the early twentieth century, livestock agriculture in Nevada was a major economic activity. In 1900, the Nevada Surveyor General, Edward D. Kelley, in his Biennial Report, declared that it was 'one of the most prominent as well as most profitable in the State'.⁶² In addition, the international markets gave an impetus to the western sheep industry. From 1896 to 1901, US exports (largely to the British markets) increased from 323,576 head of sheep, worth \$1,948,841, to 432,419, worth \$2,514,766. In 1902, the Bureau of Animal Industry of the United States Department of Agriculture reported that most of the animals had entered the export trade to Great Britain. 'It is believed that the time has come when an effort should be made to introduce our fine breeding animals to the stockmen of other countries'. In 1900, the total number of sheep reported on Nevada ranches was 887,039, worth \$2,344,865.⁶³

Despite these positive trends, sheep grazing represented a continuing threat to those who traditionally operated on the public-domain lands of Nevada. While the Department of Interior tried to ignore grazing issues on its public domain other than the prevention of any unlicensed fencing of lands, the Nevada range users faced issues of overgrazing and the destruction of water sources. Year after year, Nevada policymakers tried to address the grazing problems on the state's ranges. While state powers over Federal lands were limited, the Nevada legislature took some measures to resolve the matters at hand. Nevada still offered good opportunities for open-range stock grazing because of the free range and rising prices. The

⁶⁰ Samuel P. Hays, *Conservation and the gospel of efficiency: The Progressive Conservation Movement, 1890-1920* (1959), p. 50.

⁶¹ Richard H. Lane, 'Trouble in the sweet promised land: Basques in early 20th century northeastern Nevada', in William A. Douglass, Richard W. Etulain and William H. Jacobsen, Jr. (eds), *Anglo-American contributions to Basque studies: essays in honor of Jon Bilbao* (1977), pp. 33-41; *Nevada State Journal*, 16 Nov. 1895.

⁶² *Biennial Report of the Surveyor-General and State Land Register, State of Nevada, for 1899-1900* (1901), p. 7; *Biennial Report ...*, 1903-1904 (1905), p. 9.

⁶³ D. E. Salmon, 'Eighteenth Annual Report of the Bureau of Animal Industry for the Year 1901', *Bureau of Animal Industry, USDA* (1902), pp. 615, 12, 640. Richard White has assessed that the economic potential in the American West was firmly intermingled with the worldwide markets: 'The West possessed an extractive economy that depended on outside markets, outside capital, and, most often, skills and technologies imported from the outside. Westerners had learned to look anxiously to eastern and European markets and investors. Outsiders controlled their economic fate'. White, 'It's your misfortune and none of my own', p. 267.

increasing arrival, however, of new stock enterprises meant more competition for ranges which were becoming depleted. Although the most productive lands were occupied and controlled by specific livestock and railroad companies, the remaining marginal rangelands still presented opportunities for the expansion of grazing enterprises.⁶⁴

The lack of forest in this arid state made it difficult for Nevada to qualify for forest reserve designations. On 10 August 1904, Gifford Pinchot, chief of the Division of Forestry, U.S. Department of Agriculture, and on behalf of the Public Land Commission, sent a letter to John Sparks, Nevada Governor, asking about lands under state ownership and their relation to the open-range public domain.⁶⁵ From Carson City, Edward Kelley, State Land Register, replied. Some of the questions and answers referred to were as follows:

Pinchot: What class of lands are most in demand?

Kelley: Agricultural and grazing lands are in greatest demand.

Pinchot: What protection is given to the State lands against fire and trespass?

Kelley: No protection except the general law against setting out fires, and a special law, which concerns individuals only, against trespass.

Pinchot: Is the State taking any steps to use and perpetuate the State timber lands, and if not, is special legislation required before such action can be taken?

Kelley: None of the reverted lands now owned by the State are timber lands.⁶⁶

The responses reflected how in the early twentieth century, Nevada's public lands largely remained unregulated and unprotected. Only after 1905 with the transfer of forest reserves from the Department of Interior to the Department of Agriculture were National Forests created in Nevada under the management of the United States Forest Service.⁶⁷

It was the administration of Theodore Roosevelt (1901–09) which invigorated the Conservation Movement. Gifford Pinchot, a friend and advisor to Roosevelt, persuaded the President to move the forest reserves to the Department of Agriculture under a new National Forest System. In February 1905, the Department of the Interior's administrative functions and responsibilities were transferred to a newly established agency, the United States Forest Service, within the Department of Agriculture. Pinchot was appointed Chief Forester for the new agency.

In 1902, the Department of Interior had issued the *Forest Reserve Manual* which stated that the Secretary of the Interior possessed the authority to restrict any livestock grazing activity with the aim of protecting the forest reserves. It had started to issue permits.⁶⁸ The new Forest Service continued to implement the permit system that the General Land Office had begun. It issued a *Use Book* that defined resource-use regulations under a permit for an allotment. It set out rules on grazing seasons, set numbers of stock, and issued grazing permits based upon

⁶⁴ Lane, 'Cultural ecology', pp. 63–74; Clawson, 'Range lands', pp. 8–16.

⁶⁵ In 1903, President Theodore Roosevelt appointed a Public Land Commission composed by Gifford Pinchot, Frederick H. Newell, and William A. Richards in an attempt to determine the problems affecting the public-domain lands. *Report of the public lands commission, with appendix*, 58th Cong., third Sess., Doc.

no. 189 (1905), pp. 3–11.

⁶⁶ Edward D. Kelley to Gifford Pinchot, 31 Aug. 1904; Gifford Pinchot to John Sparks, Aug. 10, 1904, *Biennial Report of the Surveyor-General and State Land Register, 1903–1904* (1904), pp. 15–16.

⁶⁷ Lane, 'Cultural ecology', p. 142.

⁶⁸ Miller, *Gifford Pinchot*, pp. 162–4; Rowley, *U.S. Forest Service*, pp. 46–59.

property ownership and traditional use criteria. Three classes of grazing permits were available: first, Class A to those owners of ranch properties within or adjacent to the National Forests who customarily grazed stock on lands now within the National Forests; second, Class B for those who possessed property near the National Forests and traditionally grazed stock in these high mountain pastures; and third, Class C to itinerant graziers who did not own property or a home ranch. The various permits were issued on the basis of this preference criteria. The permits were considered to be grazing privileges and not permanent concessions by the Forest Service. The preference system favoured the first two classes. Few Class C permits were issued to itinerant graziers. Also, as William Rowley has explained, the Forest Service based its preference system on the concept of 'commensurate property ownership'. The principle of commensurability required graziers to own enough private land to support winter feeding of stock when they were removed from the National Forests at the end of the grazing season. The Forest Service considered these policies to be the means to defend established landowning ranchers and small homesteads against the intrusion of itinerant sheep graziers.⁶⁹

With the arrival of the Forest Service grazing regulations, order finally started to take hold in the high mountain pastures of Nevada's mountain ranges. While the US Forest Service had taken control of some parts of the grazing on the public lands, a vast open range still remained outside Forest Service management. Nevada's ranges remained unregulated and a persisting problem. Range conflicts continued and helped prompt a national debate over the future of the still unregulated and free and open-range grazing on the public domain. During the first three decades of the century, this situation increasingly pushed the Nevada legislature to become involved in range issues. Local experiments in range matters preceded Federal involvement. Finally, after much hesitation, Congress extended a grazing control programme to the remaining non-privatized public-domain lands with the Taylor Grazing Act of 1934 followed by various implementation phases until the creation of the Bureau of Land Management (BLM) in 1946.⁷⁰

V

In the last two decades of the nineteenth century, Nevada witnessed a sheep boom similar to that experienced in other western public-land states. Demand for meat and wool in the United States and abroad spurred the expansion of the Nevada's sheep industry. In comparison with cattle ranching, the open-range sheep industry had higher short term returns on

⁶⁹ William D. Rowley, 'Privilege vs. Right: livestock grazing in US government forests', in Harold K. Steen (ed.), *History of sustained-yield forestry: a symposium* (1984), pp. 61–7; Rowley, *US Forest Service*, pp. 58–62.

⁷⁰ Clawson, 'Range lands', p. 6; Lane, 'Cultural ecology', pp. 98–111, 121–31; Ivan Sack, 'History of Toiyabe National Forest' (unpublished ms, 1965, held by Special Collections, University of Nevada Library, Reno); Iker Saitua, 'Sagebrush laborers: Basque immigrants in Nevada's sheep industry, international

dimensions, and the making of an agricultural workforce, 1880–1954', (unpublished PhD thesis, University of Nevada-Reno, 2016), pp. 178–86. After management by the Bureau of Land Management began, the public range for grazing livestock would be governed exclusively through a permit system without exception. For a comprehensive history of the BLM, see: James R. Skillen, *The nation's largest landlord: The Bureau of Land Management in the American West* (2008).

investment. The economic success of those sheep outfits depended largely upon the free use of public-domain lands, secure winter feed, water resources, and employment of low wage but dependable agricultural labour. After the 'White Winter' of 1889-90, the economic profitability of sheep grazing in the Great Basin encouraged old stock owners and newcomers to enter this industry. After this devastating weather event, the sheep population increased considerably in Nevada. But the increasing presence of sheepherders in the public rangelands drew derision from a cowboy culture in the West.

It was the Federal government's laissez-faire policy towards grazing on the public domain which allowed the free-range stock industry to grow at impressive rates but the unstable conditions this created made for a destructive competition for the range resources. Possession of water sources and water rights created the opportunity for exclusive range use by preventing the stock of competitors from having access to water sources: the control and ownership of water became an instrument to monopolize public rangelands. Exclusive use of rangelands facilitated by water ownership did not confer ownership or rights to the forage on the lands in question. Problems on the Nevada ranges called for some authority to order the growing tensions between itinerant graziers and landowning stock operators, both cattle and sheep owners. Private and even state legislative efforts were not successful in bringing order to range affairs, specially after sheep entered the competition for Nevada range resources in greater numbers from the early 1890s.

By the turn of the century, the state of Nevada still offered the ideal setting to produce sheep at the lowest cost possible because of the abundant ungranted public domain and its grazing lands. The lack of any regulation of grazing on these lands in terms of numbers and season of graze coupled with the cheap labour needed to oversee great flocks of sheep presented tremendous opportunities for profit. It was not until after 1905 that Forest Reserves (or subsequently) National Forests were established which brought the first government range regulations. With the coming of Federal land management to portions of the public domain in Nevada (mountain pastures), the Forest Service tried to exclude or at the least limit large itinerant sheepherding from the lands it administered. The grazing lands beyond the Forest Service's National Forests, however, were anything but ordered. Chaotic conditions on the open range continued for many years. It was only with the Taylor Grazing Act in 1934 that Congress began to resolve the problems posed by the public-domain lands outside the National Forests.