

Historical Livestock Grazing Data for Counties of the Northern Blue Mountains

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Much of the material provided below was taken from Oliver et al. (1994). Although not enclosed in quotes, some of the Oliver et al 1994 material was used verbatim.

Early Grazing History. Livestock were brought to eastern Oregon and Washington in the 1840s via the Oregon Trail, and cattle herds were well distributed by the 1880s. At that time, many parts of eastern Oregon and Washington were covered with lush grass. Evidence of extensive range use was observed as early as the 1870s.

Shepherders would make an annual migration with their flocks, following the snow from low elevations in the spring to high elevations in the summer, and back to low elevations in the autumn. Sheep grazing created enmity between the cattle ranchers and shepherders because the shepherders were often itinerant and because conventional wisdom held that sheep destroyed the range and riparian zones (Irwin et al. 1994).

The Forest Reserve Act of 1891 resulted in the first Federal regulations on livestock grazing in 1895. New regulations banned sheep grazing on Forest Reserves in the West, except in Oregon and Washington (Coville 1898). As a result, many western shepherders brought their herds to the Northwest. As early as 1898, the National Academy of Sciences, in their *Report of the Commission Upon a Forest Policy for the Forested Lands of the United States*, judged that such unregulated grazing led to widespread destruction of forage resources (Irwin et al. 1994).

Livestock grazing on the national forests was sanctioned after creation of the USDA Forest Service by the Transfer Act of 1905. From 1903 to 1914, sheep and cattle ranchers supported range regulations, including fencing to protect range from overuse. Grazing fees and other regulations were established in 1906. Little enforcement was possible, however, and livestock routinely trespassed on mountain summer ranges. Political pressure by powerful stockmen kept grazing fees on National Forests low, severely reducing fee income that could then be used for range management, and low fees also subsidizing grazing.

Grazing was a primary issue of management (Bright and Powell 2008). In 1907, 80 percent of the receipts from eastern Oregon National Forests and 40 percent from eastern Washington National Forests were from grazing; most of the rest was from timber sales (USDA Forest Service 1908).

Figure 1 shows the number of domestic grazing animals, summarized for three categories of livestock, for nine counties in the Blue Mountains of northeastern Oregon and southeastern Washington (Asotin, Columbia and Garfield in Washington; Grant, Morrow, Umatilla, Union, Wallowa and Wheeler in Oregon) (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Note that data portrayed in figure 1, which is from U.S. Census reports for agriculture, does not necessarily indicate actual numbers of livestock being grazed *on national forest lands* in these counties. [Note that figures 4-13 provide the same grazing data included in figure 1, but they do so for individual counties.]

The number of livestock grazed on National Forests increased slightly after World War I, reflecting a policy change to increased food production. This new policy led to abusive grazing practices because the Forest Service allowed stocking “to the most optimistically accepted carrying capacity.”

Figure 2 provides grazing data for the Umatilla National Forest for the first 34 years of its existence (1906-1939) (USDA Soil Conservation Service 1941). Figures 1 and 2 clearly show that livestock grazing numbers were high in the early 1900s but then dropped quickly to lower levels.

Post-1930s Grazing History. During the period from 1930 to 1960, several factors combined to dramatically change grazing practices on national forests. The Dust Bowl and overgrazing made everyone more concerned with regulating grazing, and the Taylor Grazing Act of 1934 gave authority to the USDA Bureau of Land Management to regulate grazing on public rangelands.

This law resulted in establishing districts, which coordinated with Forest Service grazing allotments; it also continued to keep grazing fees low. Later, the Granger-Thye Act of 1950 recognized grazing as an official use of National Forests and put the Forest Service in charge of range management.

Sheep herding was more difficult because of range wars, a declining price of wool, fences that restricted herd movements, government subsidies to kill sheep and thereby reduce overproduction, and policies by the King of Spain that increased the costs of using Basque shepherds. In addition, a report to Congress in 1935 showed that forage depletion had occurred on most mountain summer ranges in the West (United States Senate 1936).

To stabilize Midwest soils in the 1930s, Asian plants (grasses mostly, but also a few shrubs like caragana) were introduced to rangelands. These grasses were soon introduced to eastern Oregon and Washington as well. Mule deer and elk populations increased as a result of protection and conservative hunting. Hunting for bull elk was authorized in Oregon in 1933, and females became legal game animals in 1939 after 30 years of protection.

The total number of sheep declined dramatically during the late 1920s (figs. 1-2) in northeastern Oregon and southeastern Washington, but the number of sheep in Blue Mountain counties returned to high levels in the early 1930s.

The number of cattle in eastern Oregon and Washington increased slowly but steadily from about 1940 onward (figs. 1-2). Horses declined in all areas after 1920, primarily as a result of increased use of automobiles and mechanical equipment like tractors and combines.

When considering overall vegetation conditions for the lower Columbia Basin, it is clear that livestock grazing was an important cause of vegetation change. But it was certainly not the only one. Figure 3 shows the magnitude of wheat raising in Walla Walla County, Washington – it compares wheat production acreage with cattle and sheep numbers for the county. Much of the wheat producing area was previously used for grazing pastures, especially during early spring and late fall when livestock were not utilizing mountain pasturage.

Influence of Native Ungulates. Livestock grazing in the first half of the 1900s was certainly important, but it was not the only factor contributing to evolving range conditions. In many areas, the impact of native ungulates (deer, elk, etc.) was more pervasive and, unlike domestic animals, continues at high levels today (Case and Kauffman 1997, Humphrey 1943, Parks et al. 1998, Riggs et al. 2000).

Elk were indigenous to the Columbia Basin (McCorquodale 1985) but were not common before 1850. Market and subsistence hunting by European settlers nearly exterminated elk by 1900 (Bailey 1936, Oregonian 1914). Elk were reestablished in the northern Blue Mountains by importing animals from Yellowstone National Park and from other areas (Bright and Powell 2008, Cliff 1939, Mason 2004, Tucker 1940).

Elk population levels for the Blue Mountains recovered quickly, as illustrated by these grazing statistics for the Whitman National Forest in northeastern Oregon: 26,300 cattle and 152,300 sheep were grazed there in 1921; by 1941 those numbers had dropped to 10,584 cattle and 64,472 sheep; during that same period, elk were believed to have increased from 360 to 13,000 animals (Pickford and Reid 1943).

Following agitation for a number of years by residents of Walla Walla, Washington, the Mill Creek watershed (source of Walla Walla's municipal water supply) was closed to domestic livestock grazing in 1925. Livestock predators had been rather consistently trapped or hunted in Mill Creek, with the result that deer and elk increased unchecked (Humphrey 1943).

By 1940, grazing pressure in Mill Creek, all of which was ostensibly related to wild ungulates, had increased to an extent where much of the watershed was overgrazed. The overgrazing disturbed soil by trampling and erosion, causing substantial pollution of Walla Walla's water supply in the summer of 1940 and at other times (Humphrey 1943).

LITERATURE CITED

Bailey, V. 1936. The mammals and life zones of Oregon. Washington, DC: USDA Bureau of Biological Survey. 416 p. [Bailey 1936](#)

Bright, G.A.; Powell, D.C., editor. 2008. An extensive reconnaissance of the Wenaha National Forest in 1913. Tech. Pub. F14-SO-06-08. Pendleton, OR: USDA Forest Service, Pacific Northwest Region, Umatilla National Forest. 65 p.

Bureau of the Census. 1895. Report on the statistics of agriculture in the United States at the eleventh census: 1890. Washington, DC: U.S. Department of the Interior, Census Office.

- Bureau of the Census. 1902.** Twelfth census of the United States, taken in the year 1900; agriculture; part I: farms, live stock, and animal products. Volume V. Washington, DC: U.S. Department of the Interior, Census Office.
- Bureau of the Census. 1913.** Thirteenth census of the United States, taken in the year 1910; volume VII; agriculture, 1909 and 1910. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1922.** Fourteenth census of the United States taken in the year 1920; volume VI, part 3, agriculture. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1927.** United States census of agriculture; the western states. Part III. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1932.** Fifteenth census of the United States; agriculture; the western states. Volume I, Part 32. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1942.** Sixteenth census of the United States; agriculture; first and second series states reports; statistics for counties. Volume I, Part 6. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1946.** United States census of agriculture; Washington and Oregon; statistics for counties. Volume I, Part 32. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1952.** 1950 United States census of agriculture; Washington and Oregon; counties and state economic areas. Volume 1, Part 32. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1956.** United States census of agriculture: 1954; counties and state economic areas; Washington and Oregon. Volume 1, Part 32. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1961.** U.S. census of agriculture: 1959; counties; Washington and Oregon. Volume 1, Part 46 and Part 47. Washington, DC: U.S. Department of Commerce, Bureau of the Census.
- Bureau of the Census. 1967.** 1964 United States census of agriculture. Volume 1, Part 46 and Part 47. Washington, DC: U.S. Department of Commerce, Bureau of the Census. 11 p.
- Bureau of the Census. 1972.** 1969 census of agriculture. Volume 1, Part 46 and Part 47. Washington, DC: U.S. Department of Commerce, Bureau of the Census. 26 p.
- Bureau of the Census. 1977.** 1974 census of agriculture. Volume 1, Part 37 and Part 47. Washington, DC: U.S. Department of Commerce, Bureau of the Census. 11 p.
- Bureau of the Census. 1981.** 1978 census of agriculture. Volume 1, Part 37 and Part 47. Washington, DC: U.S. Department of Commerce, Bureau of the Census. 10 p.
- Case, R.L.; Kauffman, J.B. 1997.** Wild ungulate influences on the recovery of willows, black cottonwood and thin-leaf alder following cessation of cattle grazing in northeastern Oregon. Northwest Science. 71(2): 115-126.

- Cliff, E.P. 1939.** Relationship between elk and mule deer in the Blue Mountains of Oregon. Transactions of the North American Wildlife Conference. 4: 560-569.
- Coville, F.V. 1898.** Forest growth and sheep grazing in the Cascade Mountains of Oregon. Washington, DC: USDA Division of Forestry. 54 p. [Coville 1898](#)
- Humphrey, R.R. 1943.** A history of range use and its relation to soil and water losses on the Walla Walla River watershed, Washington and Oregon. Northwest Science. 17: 82-87.
- Irwin, L.L.; Cook, J.G.; Riggs, R.A.; Skovlin, J.M. 1994.** Effects of long-term grazing by big game and livestock in the Blue Mountains forest ecosystems. Gen. Tech. Rep. PNW-GTR-325. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. 49 p. <https://www.fs.usda.gov/treearch/pubs/6330>
- Mason, D. 2004 (October 29).** Legendary herd. La Grande, OR: La Grande Observer. [Mason 2004](#)
- McCorquodale, S.M. 1985.** Archaeological evidence of elk in the Columbia basin. Northwest Science. 59(3): 192-197.
- Oliver, C.D.; Irwin, L.L.; Knapp, W.H. 1994.** Eastside forest management practices: historical overview, extent of their application, and their effects on sustainability of ecosystems. Gen. Tech. Rep. PNW-GTR-324. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. 73 p. <http://www.fs.usda.gov/research/treearch/6294>
- Oregonian. 1914 (April 26).** Perpetuating Oregon's wild animal kingdom. Portland, OR: Oregonian newspaper.
- Parks, C.G.; Bednar, L.; Tiedemann, A.R. 1998.** Browsing ungulates – an important consideration in dieback and mortality of Pacific yew (*Taxus brevifolia*) in a northeastern Oregon stand. Northwest Science. 72(3): 190-197.
- Pickford, G.D.; Reid, E.H. 1943.** Competition of elk and domestic livestock for summer range forage. Journal of Wildlife Management. 7(3): 328-332.
- Riggs, R.A.; Tiedemann, A.R.; Cook, J.C., et al. 2000.** Modification of mixed-conifer forests by ruminant herbivores in the Blue Mountains ecological province. Res. Pap. PNW-RP-527. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. 77 p. <http://www.fs.usda.gov/research/treearch/2941>
- Tucker, G.J. 1940.** History of the northern Blue Mountains. Unpublished Report. [Pendleton, OR: USDA Forest Service, Pacific Northwest Region, Umatilla National Forest.] 170 p.
- United States Senate. 1936.** The western range: A great but neglected natural resource. Document No. 199. Washington, DC: U.S. Government Printing Office. 620 p. [US Senate 1936](#)
- USDA Forest Service. 1908.** Forest Service atlas: extracts from the statistical volume of the Forest atlas for the Fiscal Year 1907. Washington, DC: USDA Forest Service, Office of Geography. 30 p.
- USDA Soil Conservation Service. 1941.** Survey report: run-off and waterflow retardation and soil erosion prevention for flood control purposes; appendix B: watershed classification, soil, erosion, cover, infiltration survey; land use treatment plans. Spokane, WA: USDA Soil Conservation Service, Region 9. 122 p.

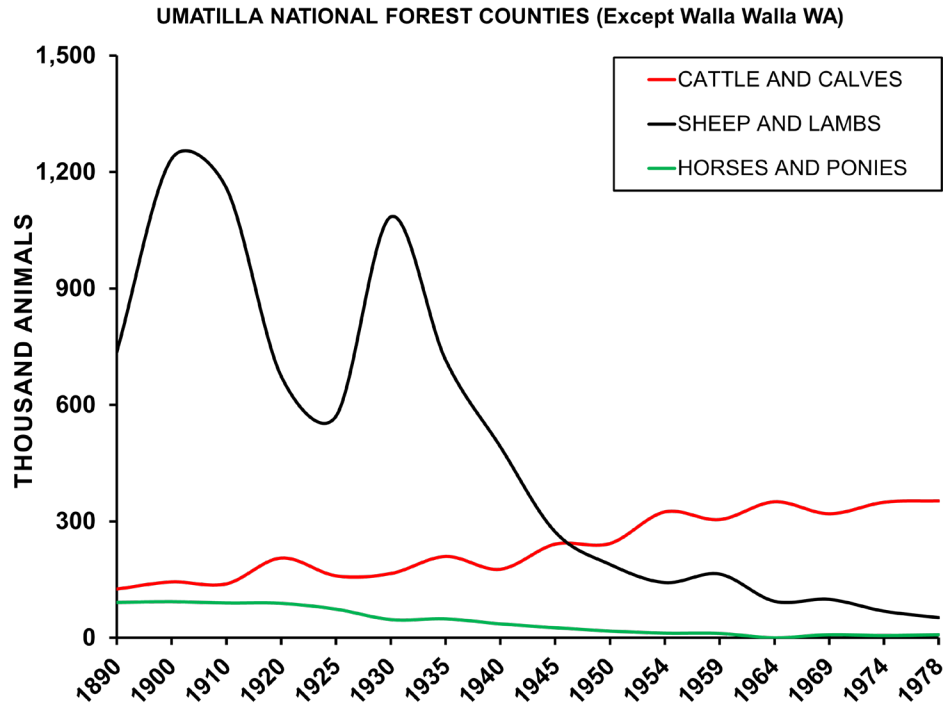


Figure 1—Number of domestic grazing animals for Asotin, Columbia, and Garfield counties in Washington; and Grant, Morrow, Umatilla, Union, Wallowa, and Wheeler counties in Oregon. Data from agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Walla Walla County was not included because it contains only 2,433 acres of National Forest System land.

Table 1: Domestic grazing animal data (thousand animals) used for figure 1.

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	125.096	735.831	90.979
1900	143.649	1233.395	92.994
1910	138.579	1158.651	89.247
1920	205.389	674.257	88.38
1925	159.388	570.613	73.585
1930	165.161	1084.206	46.79
1935	209.363	716.468	48.604
1940	176.432	492.398	35.73
1945	241.117	273.09	25.847
1950	242.633	189.284	17.348
1954	324.318	142.303	11.804
1959	304.404	164.331	11.194
1964	350.424	94.382	
1969	319.476	99.118	7.97
1974	349.065	68.821	5.589
1978	352.518	52.05	8.115

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

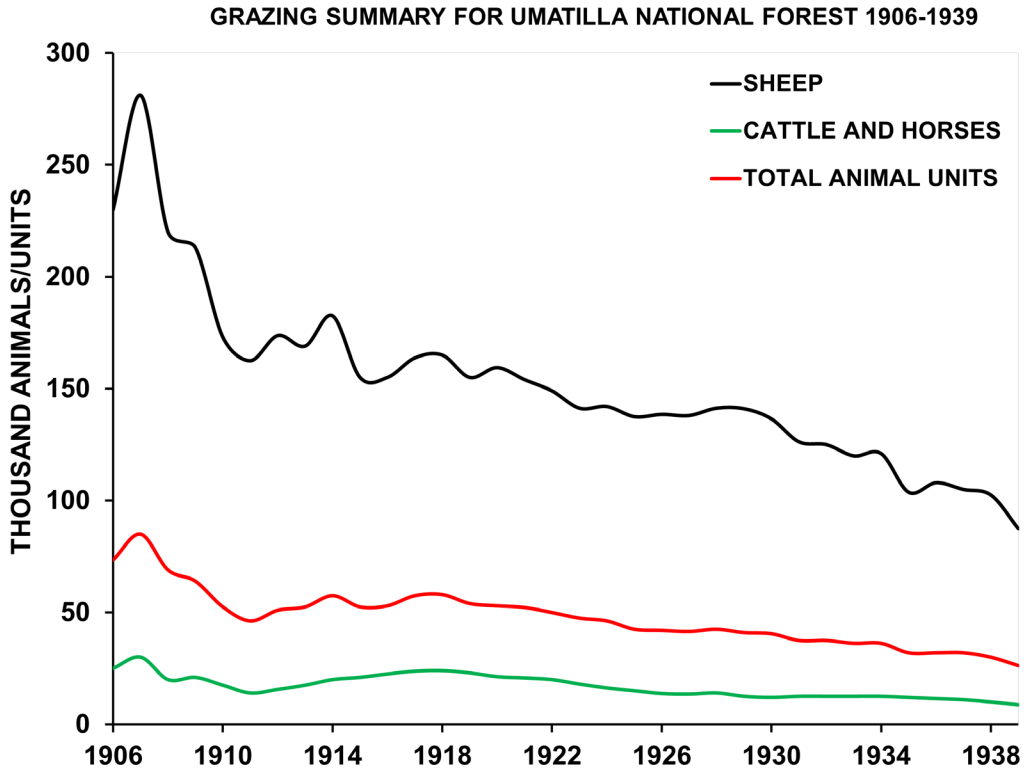


Figure 2—Grazing summary for the Umatilla National Forest, 1906-1939. Data derived from USDA Soil Conservation Service (1941).

Table 2: Domestic grazing animal data used for figure 2.

Year	Sheep	Cattle & Horses	Total Animal Units
1906	230000	25000	73500
1907	281000	30000	85000
1908	220000	20000	69000
1909	213000	21000	64000
1910	173000	17500	52500
1911	162500	14000	46250
1912	173750	15600	51000
1913	169000	17500	52500
1914	182500	20000	57500
1915	155000	21000	52500
1916	155000	22500	53000
1917	163750	23750	57500
1918	165000	24000	58000
1919	155000	23000	54000
1920	159400	21300	53000
1921	154000	20750	52250
1922	149000	20000	50000
1923	141250	18000	47500

Year	Sheep	Cattle & Horses	Total Animal Units
1924	142000	16250	46250
1925	137500	15000	42500
1926	138500	13750	42000
1927	138000	13500	41500
1928	141250	14000	42500
1929	141000	12500	41000
1930	136500	12000	40500
1931	126250	12500	37500
1932	125000	12500	37500
1933	120000	12500	36250
1934	121000	12500	36250
1935	103750	12000	32000
1936	108000	11500	32000
1937	105000	11000	32000
1938	102500	10000	30000
1939	87500	8750	26250

Source: USDA Soil Conservation Service (1941).

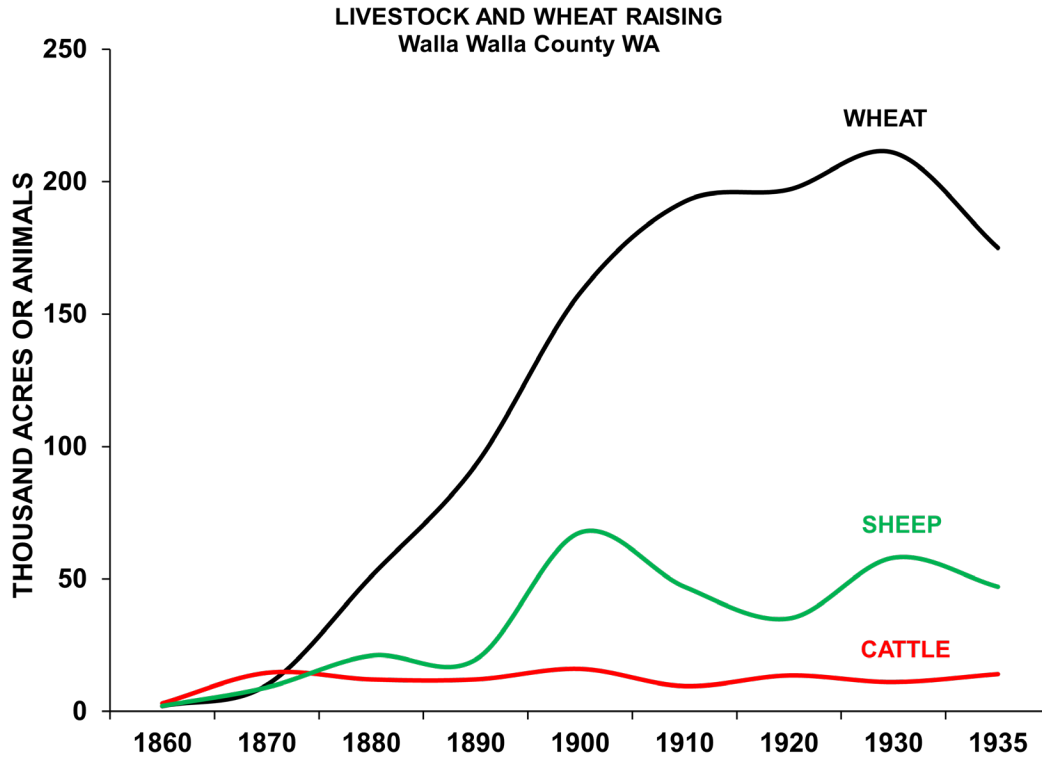


Figure 3—Historical trends for dryland wheat, cattle, and sheep production, Walla Walla County, Washington (data from USDA Soil Conservation Service 1941). Large numbers of sheep and cattle were driven into eastern Oregon and Washington during the summer and fall of 1861 but the winter of 1861-1862, one of the most severe ever recorded for the Pacific Northwest, almost wiped out this fledgling livestock industry. In the fall of 1863, a farmer sowed 50 acres of wheat near Weston, Oregon, and harvested an average of 35 bushels per acre in the summer of 1864. Wheat farming grew quickly – by the late 1860s and early 1870s, Walla Walla, Wasco, and Umatilla counties became known as “one of the world’s great granaries” (Humphrey 1943).

Table 3: Wheat, cattle, and sheep data used for figure 3.

Year	Wheat	Cattle	Sheep
1860	2000	3000	2000
1870	10000	14500	9000
1880	51000	12000	21000
1890	93000	12000	19500
1900	158000	16000	67500
1910	192500	9500	47000
1920	197000	13500	35000
1930	211000	11000	58000
1935	175000	14000	47000

Source: USDA Soil Conservation Service 1941.

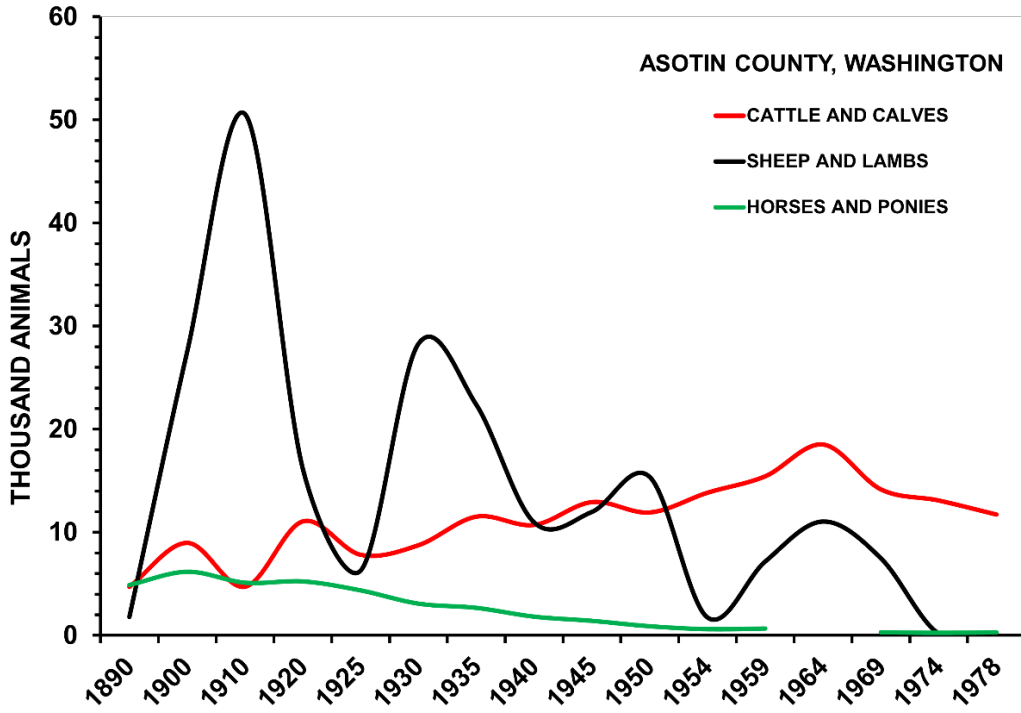


Figure 4—Number of domestic grazing animals for Asotin County, Washington. Note that no 1964 census data was available for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 4: Cattle, sheep, and horse data used for figure 4 (Asotin County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	4705	1785	4888
1900	8971	27520	6164
1910	4718	50548	5106
1920	11056	16156	5232
1925	7817	6269	4363
1930	8742	28263	3082
1935	11518	22384	2675
1940	10709	10955	1825
1945	12930	11962	1422
1950	11924	15369	896
1954	13839	1733	615
1959	15432	7155	677
1964	18517	11036	-
1969	14165	7476	310
1974	13087	167	260
1978	11721	242	299

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

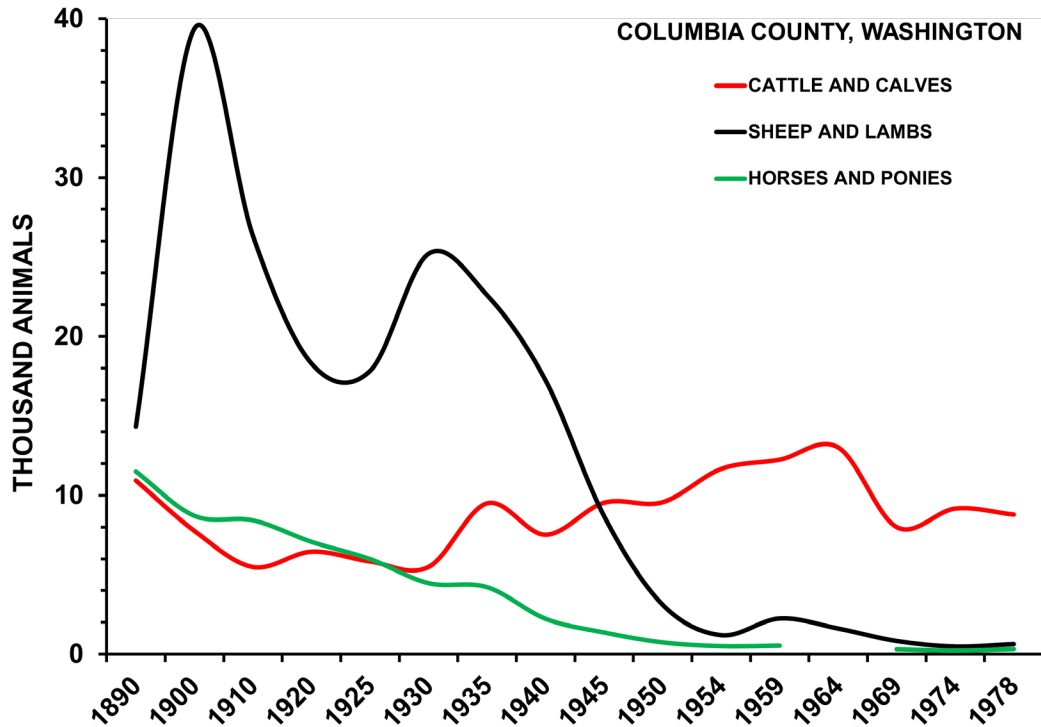


Figure 5—Number of domestic grazing animals for Columbia County, Washington. Note that no 1964 census data was available for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 5: Cattle, sheep, and horse data used for figure 5 (Columbia County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	10926	14325	11490
1900	7754	39383	8700
1910	5478	26341	8421
1920	6446	18302	7065
1925	5830	17826	5981
1930	5484	25209	4464
1935	9491	22608	4211
1940	7514	17241	2221
1945	9530	8695	1358
1950	9559	3118	732
1954	11655	1199	496
1959	12237	2251	526
1964	13012	1616	-
1969	7994	830	303
1974	9159	483	218
1978	8782	633	316

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

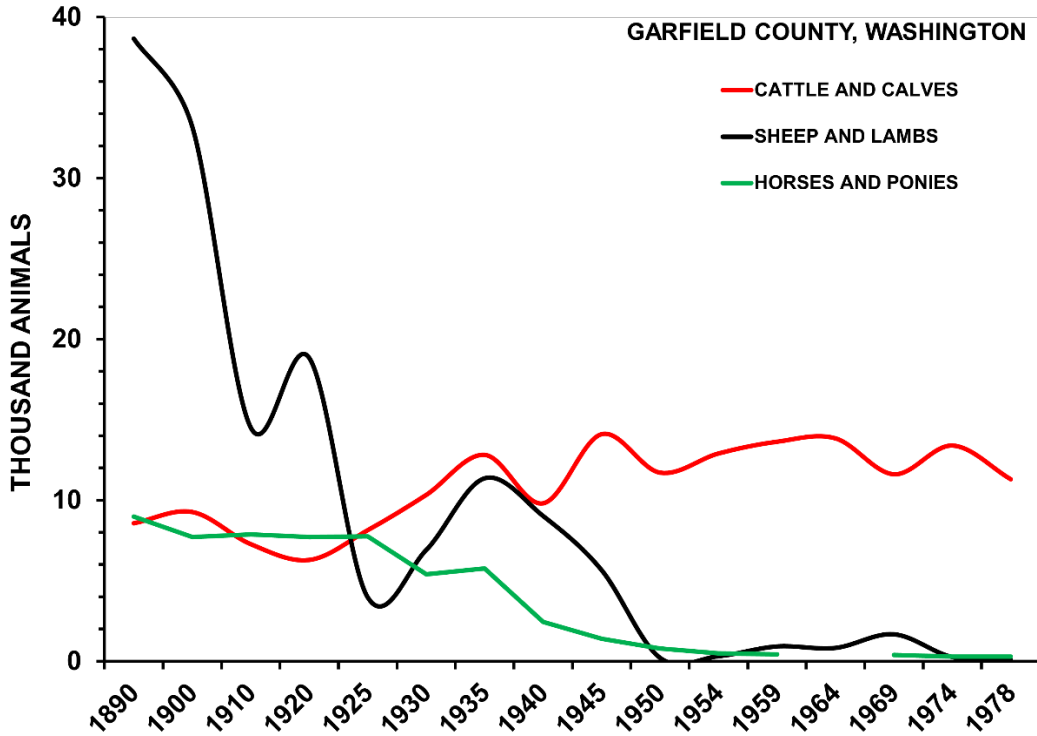


Figure 6— Number of domestic grazing animals for Garfield County, Washington. Note that no 1964 census data was available for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 6: Cattle, sheep, and horse data used for figure 6 (Garfield County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	8570	38671	8985
1900	9269	33203	7718
1910	7274	14516	7866
1920	6291	18838	7714
1925	8137	3973	7747
1930	10324	6891	5390
1935	12815	11354	5764
1940	9806	9018	2437
1945	14098	5660	1397
1950	11711	207	782
1954	12901	303	492
1959	13629	912	415
1964	13842	818	-
1969	11611	1666	378
1974	13393	251	278
1978	11302	89	276

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

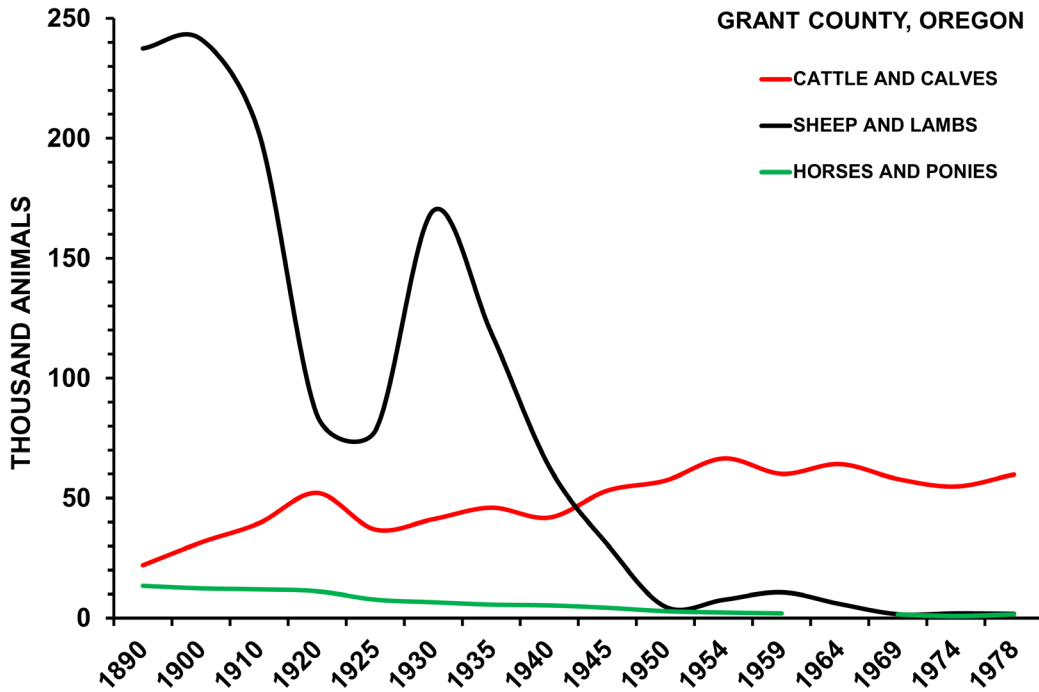


Figure 7—Number of domestic grazing animals for Grant County, Oregon. Note that no 1964 census data was available for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 7: Cattle, sheep, and horse data used for figure 7 (Grant County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	21967	237346	13447
1900	31507	241290	12387
1910	39552	202073	11973
1920	52167	84580	11198
1925	36924	78035	7701
1930	41218	169761	6612
1935	46048	118870	5622
1940	41878	62924	5281
1945	53128	30662	4285
1950	57352	4715	2825
1954	66585	7636	2265
1959	60115	10799	1907
1964	64218	5895	
1969	57976	1600	1463
1974	54848	1949	842
1978	59862	1769	1500

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

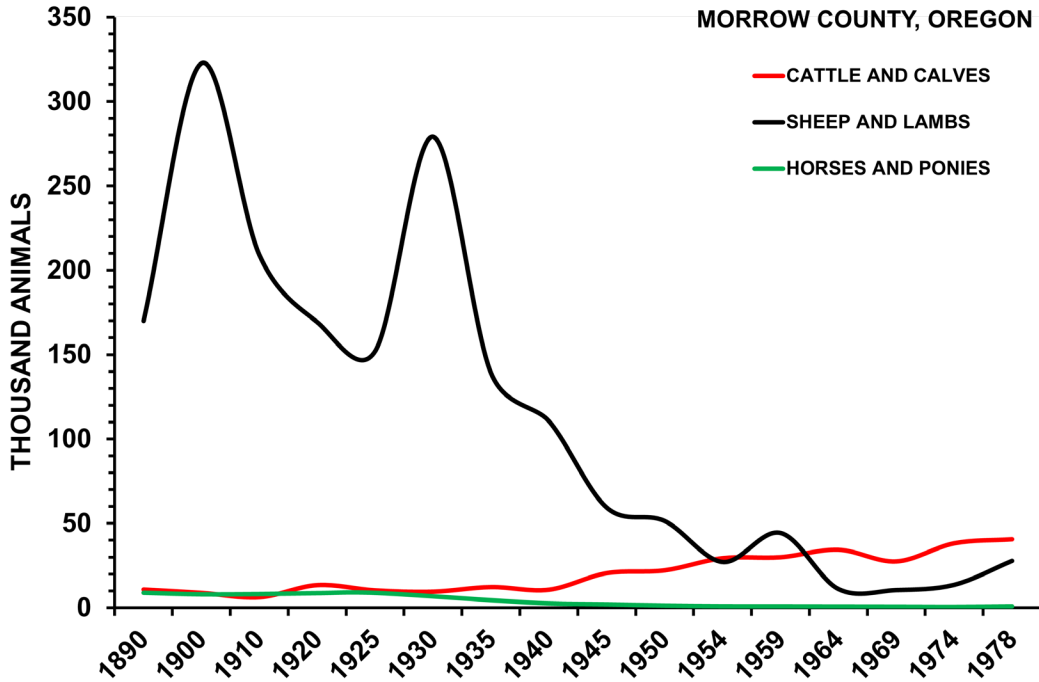


Figure 8—Number of domestic grazing animals for Morrow County, Oregon. Note that no 1964 census data was available for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 8: Cattle, sheep, and horse data used for figure 8 (Morrow County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	10746	169971	8881
1900	8746	322650	7949
1910	6161	209057	8109
1920	13388	169214	8644
1925	10233	152054	8802
1930	9460	279056	7860
1935	12213	139121	4495
1940	10632	110624	2586
1945	20516	59295	1997
1950	22195	51397	1307
1954	29389	27098	899
1959	29953	44325	837
1964	34412	11077	
1969	27473	10420	659
1974	38258	13539	519
1978	40653	27766	875

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

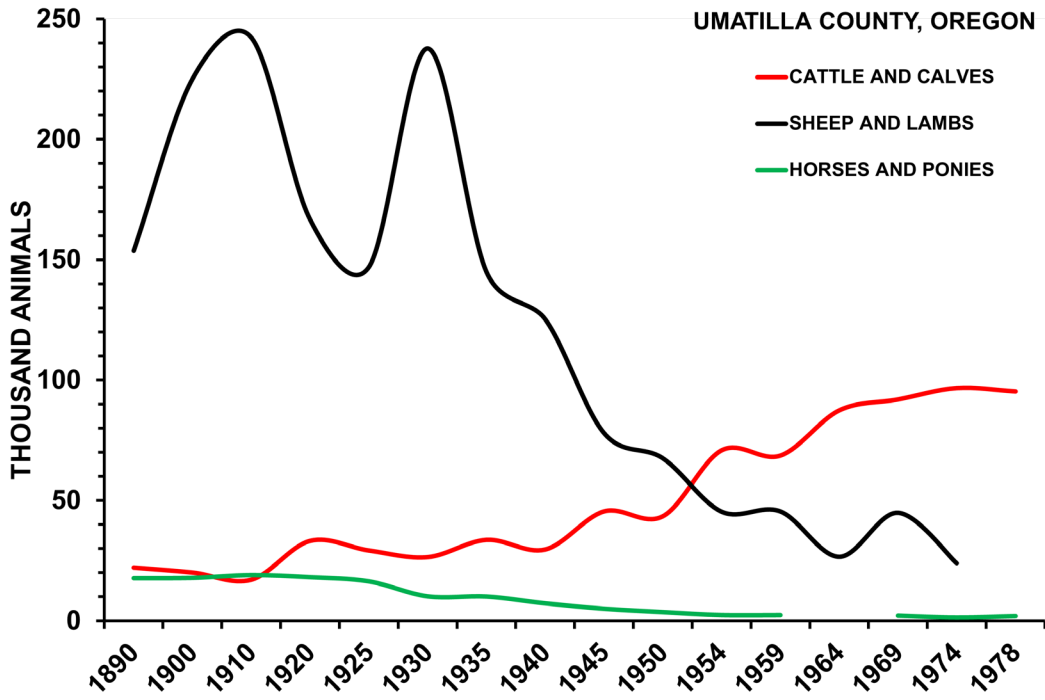


Figure 9—Number of domestic grazing animals for Umatilla County, Oregon. Note that no 1964 census data was available for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 9: Cattle, sheep, and horse data used for figure 9 (Umatilla County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	22100	153719	17768
1900	20059	225128	17895
1910	17059	242280	19054
1920	33217	166649	18181
1925	29212	146935	16431
1930	26459	237727	10170
1935	33648	144946	10092
1940	29621	125275	7261
1945	45438	77995	4987
1950	43395	67543	3586
1954	70795	45329	2365
1959	68606	45442	2349
1964	87371	26614	-
1969	91921	44881	2129
1974	96634	23915	1347
1978	95244	-	1940

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census. Sheep and lambs data was not available for the 1978 census.

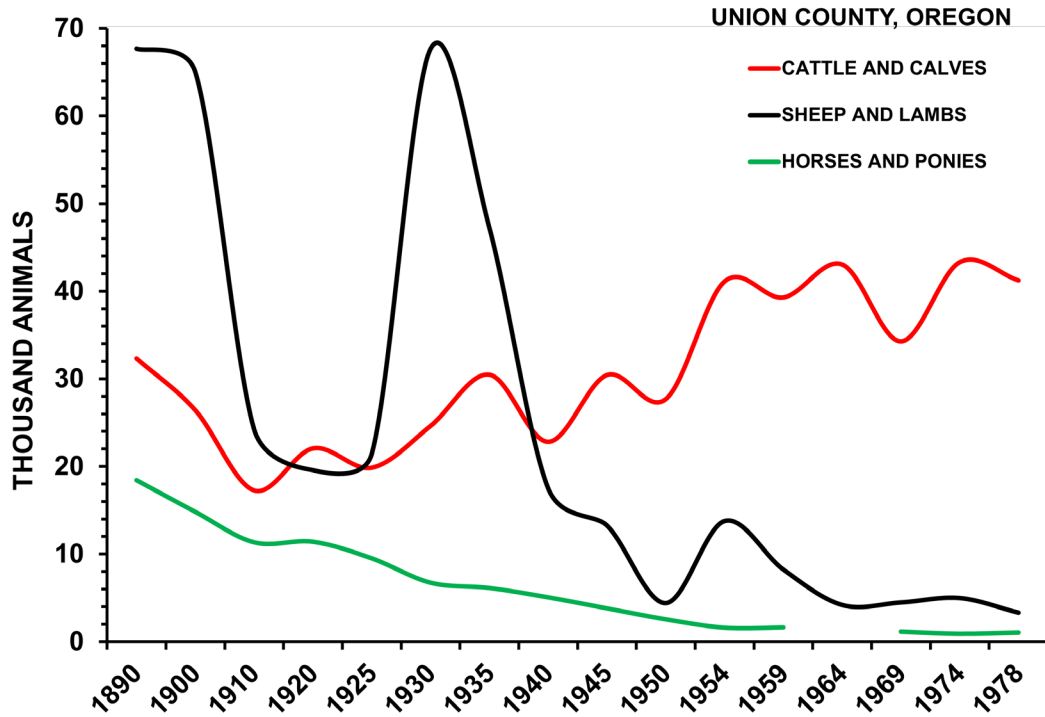


Figure 10—Number of domestic grazing animals for Union County, Oregon. Note that no 1964 census data was available for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 10: Cattle, sheep, and horse data used for figure 10 (Union County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	32333	67688	18444
1900	26418	65020	14825
1910	17269	24229	11348
1920	22067	19580	11415
1925	19862	21422	9516
1930	24621	67653	6733
1935	30475	47286	6131
1940	22815	17515	5059
1945	30434	13277	3799
1950	27671	4404	2549
1954	41097	13770	1594
1959	39275	8240	1628
1964	43042	4195	-
1969	34268	4481	1149
1974	43300	4985	905
1978	41224	3315	1044

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

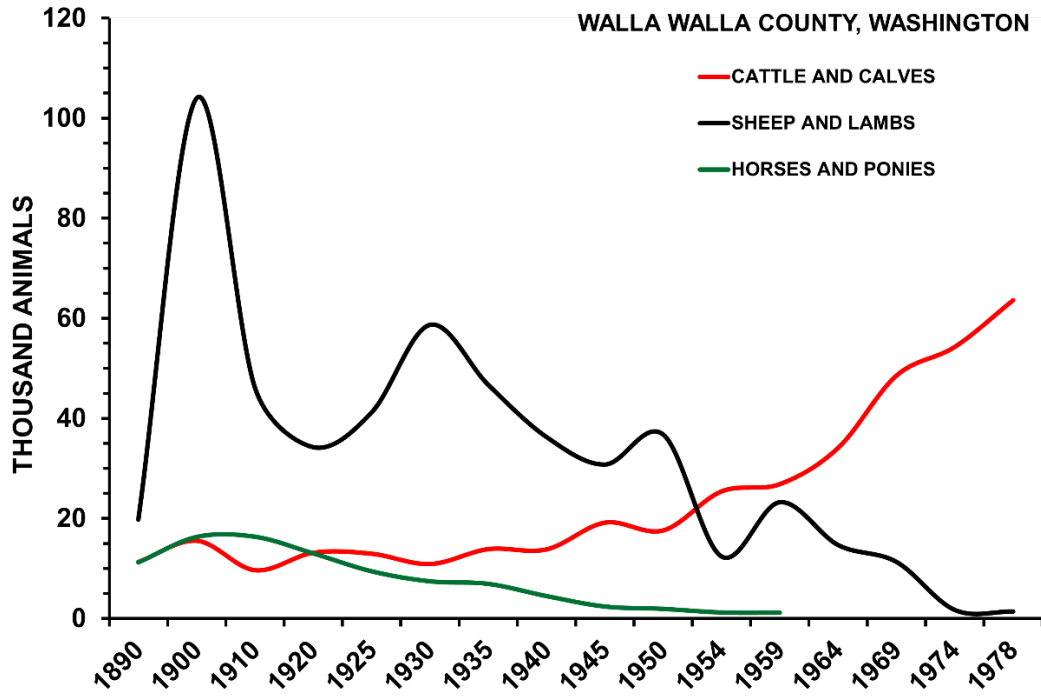


Figure 11—Number of domestic grazing animals for Walla Walla County, Washington. Note that no census data was available for 1964 and 1974 for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 11: Cattle, sheep, and horse data used for figure 11 (Walla Walla County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	11277	19796	11229
1900	15509	104000	16311
1910	9626	46118	16355
1920	13130	34259	13025
1925	12927	41205	9448
1930	10862	58701	7439
1935	13850	46723	6937
1940	13800	36284	4492
1945	19140	30795	2409
1950	17581	36786	1933
1954	25380	12420	1222
1959	26829	23263	1185
1964	34079	14702	-
1969	48523	11341	1230
1974	54257	1729	-
1978	63578	1415	1019

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 and 1974 agricultural censuses.

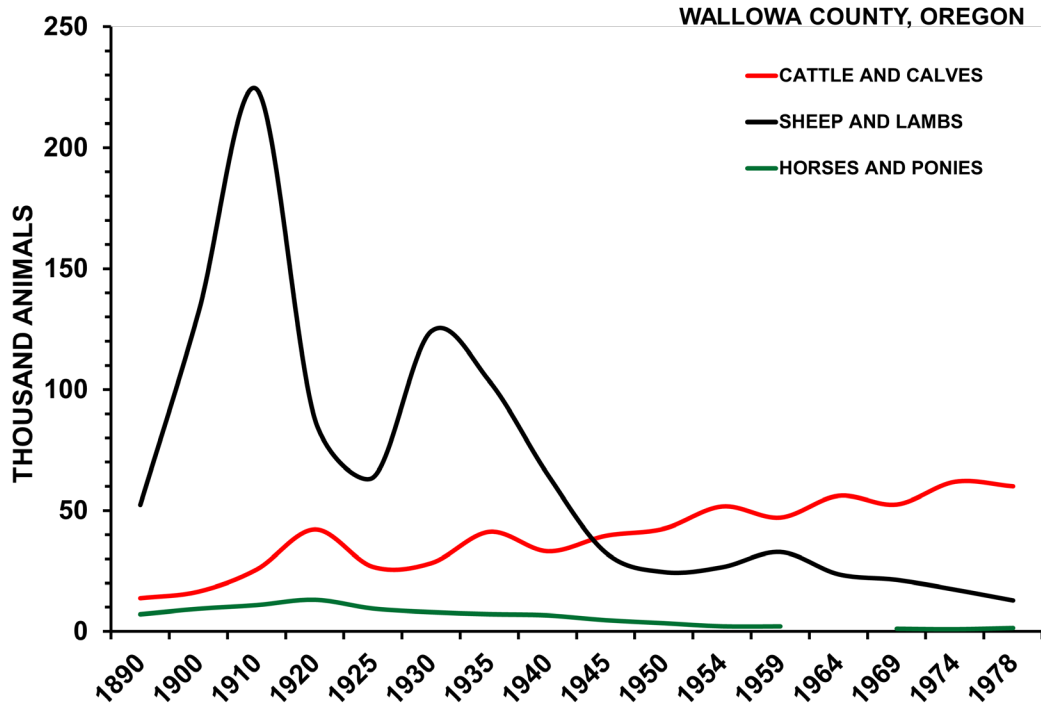


Figure 12—Number of domestic grazing animals for Wallowa County, Oregon. Note that no census data was available for 1964 for horses and ponies. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 12: Cattle, sheep, and horse data used for figure 12 (Wallowa County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890	13749	52326	7076
1900	16475	131890	9359
1910	25597	224161	10874
1920	42232	87782	13103
1925	26673	63653	9461
1930	28223	124109	7982
1935	41265	103486	7102
1940	33171	64954	6632
1945	39579	32548	4682
1950	42496	24522	3430
1954	51714	26540	2129
1959	47051	32875	2108
1964	56102	23600	-
1969	52495	21316	1126
1974	61910	17303	929
1978	60022	12809	1425

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 agricultural census.

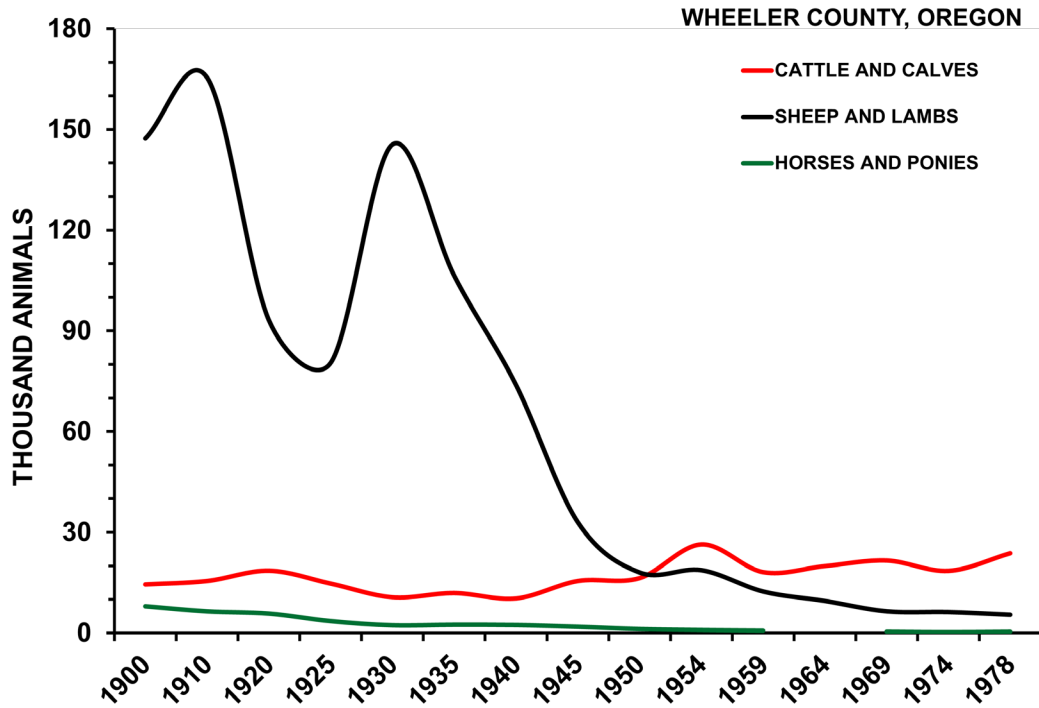


Figure 13—Number of domestic grazing animals for Wheeler County, Oregon. Note that no census data was available for 1964 for horses and ponies, and data for 1890 was not available. Data from Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981).

Table 13: Cattle, sheep, and horse data used for figure 13 (Wheeler County).

Year	CATTLE AND CALVES	SHEEP AND LAMBS	HORSES AND PONIES
1890			
1900	14450	147311	7997
1910	15471	165446	6496
1920	18525	93156	5828
1925	14700	80446	3583
1930	10630	145537	2357
1935	11890	106413	2512
1940	10286	73892	2428
1945	15464	32996	1920
1950	16330	18009	1241
1954	26343	18695	949
1959	18106	12332	747
1964	19908	9531	
1969	21573	6448	453
1974	18476	6229	291
1978	23708	5427	440

Source: Bureau of Census agricultural censuses (Bureau of Census 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, 1961, 1967, 1972, 1977, 1981). Horses and ponies were not reported for the 1964 census, and no 1890 census data was available.