

## PART IV

## THE PATTERN OF AGRICULTURE

Farms: Number and Size

The number of farms in Stevens County has steadily decreased since 1910 when there were nearly 3,200 units. The latest Census of Agriculture (1959) counted 1,608 farms in the county. This was 307 less than enumerated in 1954. However, the Census definition of a farm in 1959 was more restrictive than in 1954. In Stevens County, the decrease in the number of farms which resulted from the change in farm definition was 75, accounting for 24.4 percent of the total 307 difference noted between the two Census years. In 1959, Stevens County ranked thirteenth in the state in the number of farms.

Although the number of farms has decreased since 1910, the trend in average size of farms and in number of acres devoted to farmland in the county has been upward. The trend toward larger farm units has been the result of several practices common among the modern farmers. Many smaller farms have been purchased or leased and consolidated with larger units. Successful livestock farmers have added former range and forest land to their holdings in order to increase the size of their herds. Increased use of machinery in grain and hay farming has enabled individual farmers to purchase, lease and manage more cropland.

Table 8. Farms, Number and Average Size, Land in Farms  
Stevens County, 1900-1959

Year	Total Farms in the County	Average size of farms in the County (acres)	Total County Area in Farms (acres)	Percent of County area in Farms
1900	1,132	190	215,041	19.0
1910	3,196	163	521,259	33.0
1920	2,727	173	472,490	30.0
1925	2,643	165	437,572	27.5
1930	2,633	172	467,414	29.5
1940	2,537	205	519,215	32.5
1945	2,284	283	645,818	40.5
1950	2,139	328	701,598	44.0
1954	1,915	415	795,902	50.0
1959	1,608	500	803,776	50.5

Source: U. S. Census of Agriculture.

A few farmers have purchased land for management as tree farms. Increased values of land have caused many small acreages to be offered for sale. Many family farms of small size have been sold by heirs in the final disposition of homesteads developed by their pioneer fathers. This trend towards larger farms has been common to all livestock and grain farming counties of eastern Washington.

Census of Agriculture data over the years show that the percent of Stevens County area in farms has increased almost steadily since the turn of the century. In 1900, there were 215,041 acres in farms compared with 803,776 acres in 1959--

over one-half of the county's total area. In 1959, Stevens County ranked sixteenth among the 39 counties of Washington in the amount of land in farms.

In 1959, about 23 percent of the farms in Stevens County were over 500 acres each. Only 2.2 percent were under 10 acres. The decrease in number of farms between 1954 and 1959 occurred at all levels of operations from those under 10 acres to farms over 500 acres. Farms under 10 acres numbered 80 in 1954, whereas only 36 were enumerated in 1959. This is indicative of the trend to consolidate the smaller, less efficient farms, particularly those under 10 acres, into larger units. It should also be noted that part of the decrease in the number of small farms resulted from the change in the 1959 Census definition of a farm.

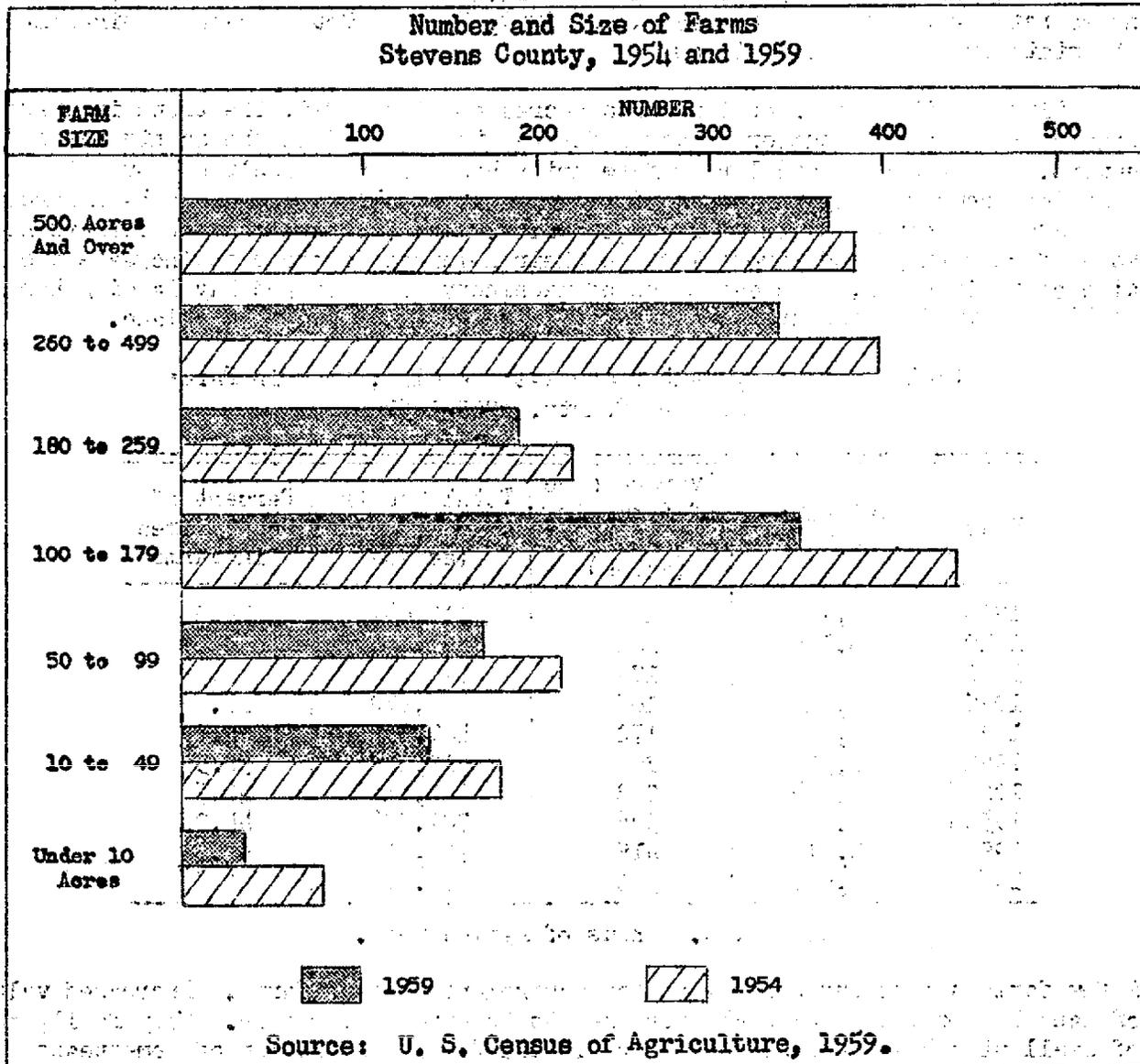


Figure 8. Number and Size of Stevens County Farms, 1954 and 1959.

Types of Farms

Livestock and general farms predominate in Stevens County agriculture. According to the Census of Agriculture, the most common type of operation in 1959 was livestock farms other than poultry and dairy. These numbered 393, accounting for over 24 percent of all Stevens County farms. Livestock farms were the only type to increase in numbers during the five years between 1954 and 1959. In 1954, they numbered 326. Next in numbers in 1959 were dairy farms which added up to 266 farm units or 16.5 percent of the total farm figure. General farms were third followed closely by farms specializing in field crops, the former numbering 125 and the latter 91. The general category included those growing field seed crops, hay and silage and farms which received cash income from three or more sources and did not meet the criteria for any one type. Poultry farms numbered 20 in 1959, ranking fifth. Over 40 percent of the farms in the county were classified as miscellaneous by the Census. This category included farms raising nursery and greenhouse products, forest products, mules, horses, colts and ponies. Also included were all institutional farms and Indian reservations. There were no farms specializing in fruit, berries or vegetables in the county in 1959.

Table 9. Types of Farms, Stevens County, 1959

Types of Farms	Estimated Number of Farms	Percent of all farms in the County	
		1954	1959
Total farms in county .....	1,552	100.0	100.0
Field crop farms .....	91	11.8	5.6
Cash-grain .....	91	11.8	5.6
Other field-crop.....	--	--	--
Vegetable farms .....	--	--	--
Fruit-and-nut farms .....	--	0.3	--
Poultry farms .....	20	1.3	1.2
Dairy farms .....	266	18.4	16.5
Livestock farms other than poultry and dairy	393	17.0	24.4
General farms .....	125	12.5	7.8
Miscellaneous and unclassified farms .....	657	38.7	40.8

Source: U. S. Census of Agriculture.

Farm Residence and Operation

Stevens County agriculture is characterized by a large proportion of operators residing on farms and dividing their labor between agriculture and off-farm work. In a forested and mining region such as Stevens County, farmers have seasonal opportunities to work in nearby mills, logging operations, quarries and mineral processing plants. County, state and federal government work in highway maintenance, forest protection and resource conservation also provide seasonal employment. In 1959, nearly 59 percent of the farm operators reported having worked off their farms. Almost 43 percent worked off their farms more than 100 days. On an income basis, 50 percent of the farm operators and their families gained more cash income from off-farm work than they received from farm products marketed from their own farms during the year.

The majority of Stevens County farmers live on the farms they operate. Farmers living on the farms under their operation numbered 1,507 in 1959. Only 67 farmers reported not residing on farm operated.

### Farmland Utilization

Over half of the 803,776 acres of farmland in Stevens County was in woodland pasture in 1959. The hilly and mountainous pine forest uplands with their undergrowth of bunchgrass and other plants is used for grazing. Farm woodland was the second-largest farm acreage amounting to nearly 18 percent of the total land in farms. Over 1,000 farms reported having woodland pasture while those with farm woodland not pastured numbered 705. Cropland harvested amounted to 98,939 acres in 1959 which represented 12.3 percent of the total county farmlands. Nearly 48,000 acres of pasture land were in use during the same year. These included noncrop open or brush pasture and cut-over or deforested land that was improved and used for pasture. Over 22,000 acres of cropland were also used for pasture. All county farm pasture and grazing land totaled 516,012 acres in 1959. Summer fallow or idle cropland amounted to 31,476 acres. Finally, 9,864 farm acres were in house lots, roads, wasteland, etc.

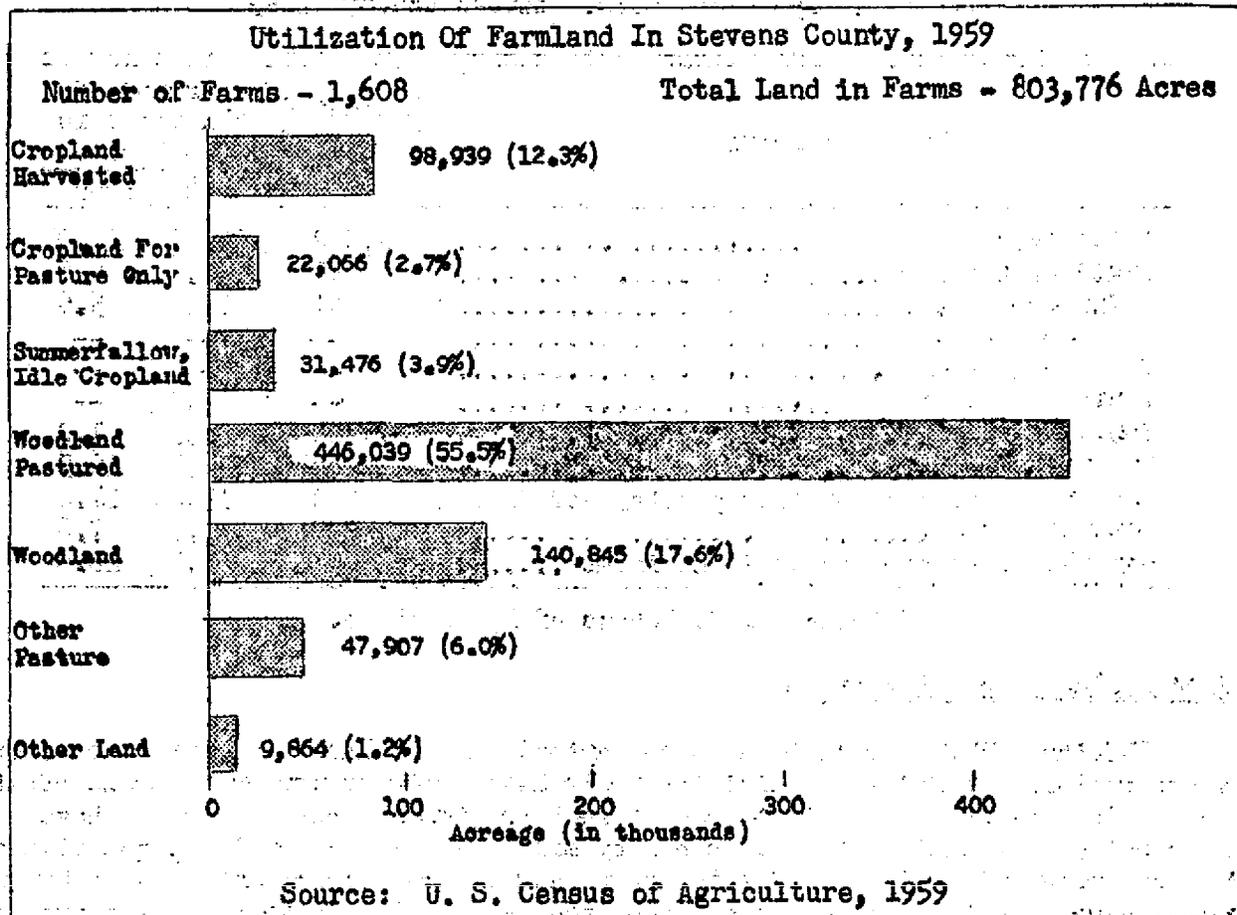


Figure 9. Utilization of Farmland in Stevens County, 1959.

### Farm Values

The value of farmlands and buildings in Stevens County has greatly increased since 1920. After reaching a high point around 1920, valuations of farms decrease.

during the depression years of the 1930's. Since 1940, the total value of farm property in the county has increased more than three and one-half times, going from about \$11,500,000 to over \$42,000,000. The increase has resulted from the general rise of real estate values in Washington accompanied by investments in new buildings, land clearing and farm improvements. According to the Census of Agriculture, the average value of land and buildings per farm increased from a low of \$4,533 in 1940 to \$26,226 in 1959. Value of land per farm acre during the same period rose from \$22 to about \$49.

Table 10. Value of Farm Land and Buildings  
Stevens County, 1900-1959

Year	County Average Values	
	Per Farm	Per Acre
1900	\$ 2,600	\$25
1910	6,200	35
1920	6,939	40
1930	5,844	33
1940	4,533	22
1950	12,670	43
1954	17,721	52
1959	26,226	49

Source: U. S. Census of Agriculture.

### Farm Ownership and Tenure

A large proportion of the farmers in Stevens County own the farm they operate. In 1959, the Census of Agriculture enumerated 1,136 full owners which accounted for about 70 percent of all farm operators in the county. Individuals who owned farms operated nearly 41 percent of the total land in farms of Stevens County in 1959. The high percentage of farm ownership indicates that many farms have remained in the families of the pioneers who established them and that many have preferred to buy land rather than rent it. This is reaffirmed by the Census which counted only 99 persons, about 6 percent of the farm operators, who leased entire farms in 1959. Leased farm acreage amounted to 27,042 during that year which constituted 3.4 percent of the county's total land in farms.

Since 1925 there has been a gradual increase in the number of farms which are part-owned within the county. In the part-owner system, a portion of a farm and some of its buildings are rented on a share-crop or share-profit basis. Many elderly people live in retirement on farms and contract part of their land to others. The consolidation of farms into larger units for more efficiency is a trend which is slowly decreasing full ownerships of farm units and expanding part-ownerships. Part-owners operated almost 44 percent of Stevens County's total agricultural acreage in 1959.

Only 0.7 percent of all farms were operated by individuals who managed land for others and were paid a wage or salary for their services in 1959. Eleven managers operated 97,227 acres or 12.1 percent of Stevens County's total farmland.

Table 11. Farm Operators, Number and Percent of Farms by Tenure of Operator, Stevens County, 1925-1959

Year	Number of Farms	Full Owners		Part Owners		Managers		Tenants	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1925	2,643	2,041	77.2	180	6.8	12	.4	410	15.5
1930	2,633	1,952	77.1	235	8.9	14	.5	432	16.4
1935	2,829	1,926	68.1	275	9.7	21	.7	607	21.4
1940	2,537	1,763	69.5	265	10.4	10	.4	499	19.7
1945	2,284	1,721	75.3	334	14.6	8	.3	221	9.7
1950	2,090	1,609	77.0	363	17.4	2	.1	165	7.9
1954	1,918	1,415	75.5	373	19.9	4	.2	126	6.7
1959	1,608	1,136	70.6	362	22.5	11	.7	99	6.2

Source: U. S. Census of Agriculture.

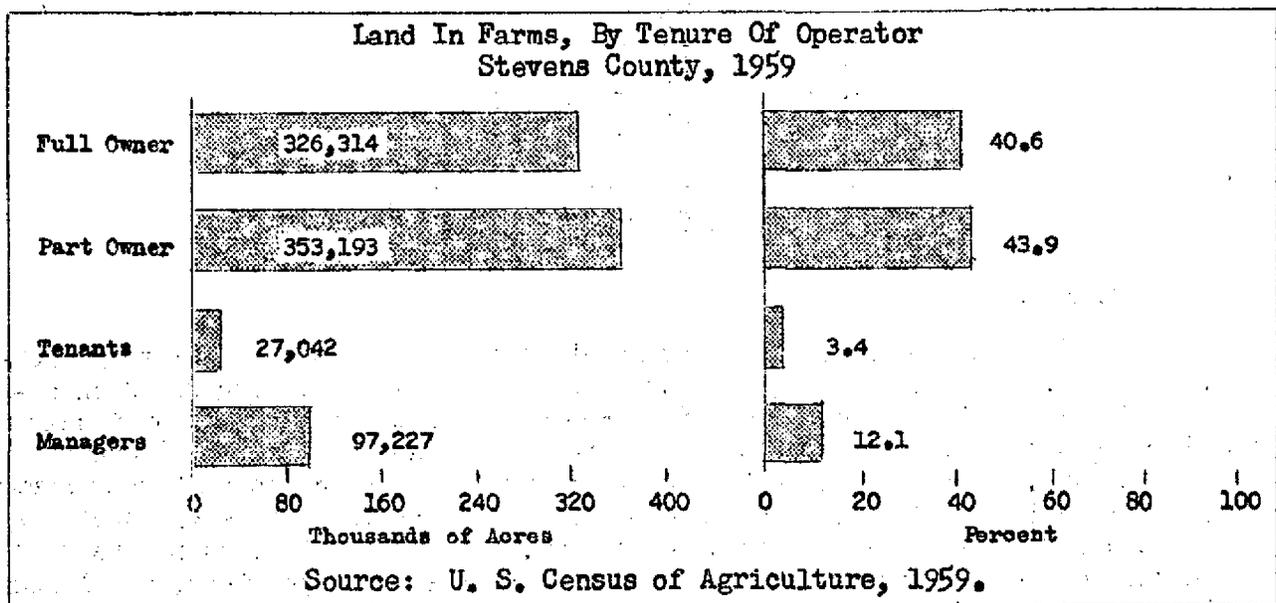


Figure 10. Land in Farms, By Tenure of Operator, Stevens County, 1959.

### Irrigation

In 1959, Stevens County's irrigated farmland amounted to 9,864 acres, according to the Census of Agriculture. The irrigated acreage represented 1.2 percent of the county's total farmland. The county's irrigated farm acreage more than doubled during the period from 1950 to 1954. The irrigated land in 1954, 9,900 acres, was comparable in extent to the 1959 acreage figure. With a summer dry period in the area, irrigation becomes a valuable asset to feed crop growers and livestockmen.

Farms which reported having at least some irrigated land in 1959 numbered 283, about 17.6 percent of all farms in Stevens County. Crops were harvested from 7,129 acres of irrigated land on 234 farms during the year. The largest irrigated acreage in 1959 was devoted to alfalfa hay which amounted to 2,266. Small acreages

of other hays and small grain crops made up most of the irrigated croplands other than those in alfalfa.

Most of the county's irrigation is accomplished by sprinkler systems with the water coming from surface sources located on the farms. Others utilize water from wells on the farm or from irrigation organization facilities.

Table 12. Irrigated Farms: Number and Acreage  
Stevens County, 1950, 1954 and 1959

Item	1959	1954	1950
Number of irrigated farms .....	283	311	206
Land irrigated (acres) .....	9,864	9,900	4,786
Irrigated land in farms according to use:			
Farms irrigating crops .....	234	255	177
Acres of crops irrigated .....	7,129	7,396	3,259
Acres of other land irrigated .....	2,735	2,504	1,527

Source: U. S. Census of Agriculture.

### Farm Facilities

The capacity of the farmer to produce is significantly related to the items of farm equipment and facilities at his disposal. The 1,608 farms of Stevens County in 1959 were above state averages in many items of farm equipment by which observers judge standards of farm operation. In terms of home conveniences such as telephones and home freezers, however, the farms in the county fell short of the state average figures. About 66 percent of the farms had telephone service in 1959 while 57 percent enjoyed the convenience of a home freezer.

Tractors and automobiles are found on majority of Stevens County farms. In 1959, nearly 90 percent of the farms reported a total of 2,472 tractors. The number of farms with automobiles was 1,286 which represented 82.7 percent of the total farms. Over three-fourths of the farms also had motor trucks in 1959.

The importance of livestock, hay and silage crops is indicated by the relatively high frequency of hay harvesting machinery among Stevens County farms. The county ranked second in the state in the number of farms (630) with hay balers in 1959. Nearly 30 percent of the farms had milking machines while over 18 percent had electric milk coolers.

### Farm Roads

In recent years much progress has been made in providing all-weather roads for farm families in the county. About 28 percent of the farms were located on hard-surfaced roads in 1959. The largest number of the farmsteads, 41 percent, were situated on improved roads of gravel, shell or shale. The remaining 31 percent of the farms required traveling over dirt roads in order to reach them. About 85 percent of the farms on dirt roads, however, were located within 5 miles to a hard-surfaced road.

Table 13. Specified Equipment and Facilities on Farms  
Stevens County, 1959

Facility or Equipment Item	Number of Farms Using	Percent of All Farms in County Equipped	
		1959	1954
Telephone .....	1,035	66.5	52.4
Home freezer .....	887	57.0	24.7
Milking machine .....	463	29.8	23.4
Electric milk cooler ..	286	18.4	--
Crop drier (for grain, forage or other crops)	19	1.2	--
Power operated elevator, conveyor or blower ..	463	29.8	--
Grain combines .....	345	22.2	19.8
Corn pickers .....	--	--	.3
Pick-up baler .....	630	40.5	18.9
Field forage harvester	162	10.4	5.0
Motortrucks .....	1,216	78.2	61.3
Tractors .....	1,395	89.7	79.2
Crawler tractors ....	343	22.1	--
Automobiles .....	1,286	82.7	79.7

Source: U. S. Census of Agriculture, 1959.