

PART V

Crops

Major Crops

Because dairying and general livestock farming predominate in Cowlitz County the major part of the cropland is used for growing feed crops. About 82 percent of cropland in 1954 was harvested as hay and grass silage. Another 7 percent was in oats, barley and field corn. Most of the feed crops are consumed directly on farms or are marketed in immediate localities to dairy, beef and poultry producers. In 1954 there were 13,956 acres of harvested cropland in the following specified crops listed in order of importance: clover and timothy hay, oat and other grain hay, grass silage, wild hay, mint, tree fruits and nuts, truck crops (cabbage, carrots, cucumbers, green beans) and strawberries.

Crop Trends

The crop history of any farming region reflects changes in marketing conditions and methods of farming. Largely as a result of the trend toward

Total Acres of Land Harvested, 1954
13,956 Acres

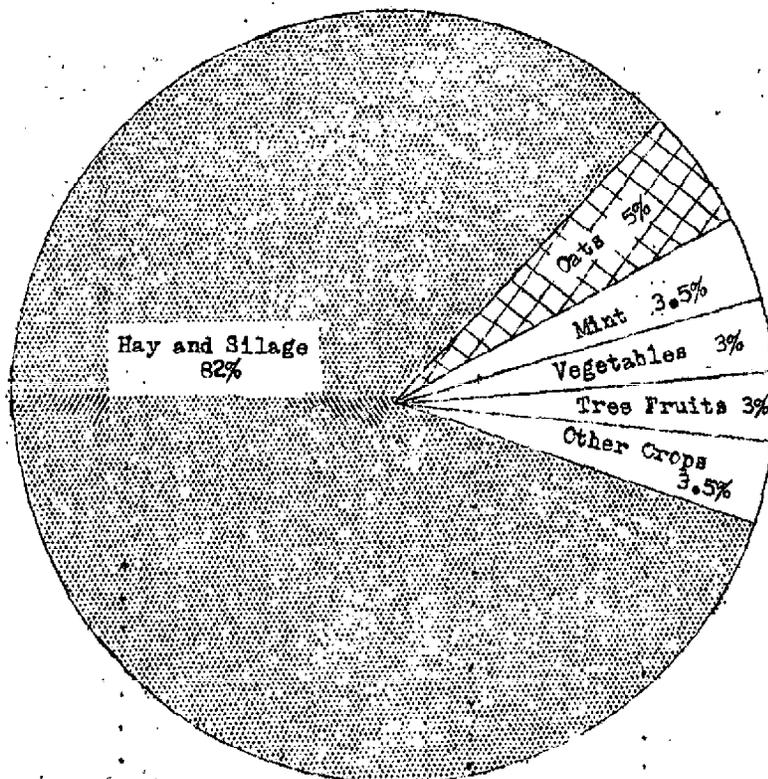


Figure 10.- Percent of Total Cropland in Leading Crops
Cowlitz County, 1954.
(Based on U.S. Census of Agriculture, 1954)

livestock farming and the growing of cash crops for nearby city consumers, feed crops, vegetables and berries have increased in Cowlitz County in recent years. Since 1939 less cropland has been farmed. Cropland in 1954 was about 2,350 acres less than in 1949. Major crop trends show recent decreases in mint, oats, potatoes, corn and tree fruits. Crops which have increased have been clover and timothy hay, grass silage, barley and commercial vegetables. Some cropland has been seeded to permanent grassland.

Hay and Silage Crops

The most important crop for local use has been hay. This was true even in early settlement days. All types of hay and silage have ranged between 11,000 and 14,600 acres per year since 1939.

Clover and timothy is most common type of hay, generally grown in mixture or mixed with other grasses. Over 345 farms (one-fourth of all the farms in Cowlitz County) harvested clover and timothy hay in 1954 and Cowlitz ranked eleventh among Washington counties in clover and timothy acreage. About 40 farms had a surplus for sale in 1954 and over 730 tons were marketed locally. Clover and timothy hay acreage reached a peak in 1955, with 5,000 acres yielding a total of 9,500 tons. Soil conservation practices in recent years and the use of rotations of clover and grain have been factors in the increase of clover hay.

Table 17.- Clover-Timothy Hay and Alfalfa Hay
Acreage, Yield and Production
Cowlitz County-1939-1955.

Year	Clover and Timothy Hay			Alfalfa Hay		
	Acreage (acres)	Yield (tons per acre)	Production (tons)	Acreage (acres)	Yield (tons per acre)	Production (tons)
1939	2,900	1.8	5,200	200	2.9	580
1940	3,200	2.3	7,500	220	2.0	440
1941	4,100	1.6	6,600	270	3.0	810
1942	4,000	2.0	8,200	260	3.0	780
1943	4,000	2.0	8,100	380	2.0	760
1944	3,630	1.9	6,800	410	3.2	1,300
1945	3,610	1.7	6,200	400	2.5	1,000
1946	3,540	1.9	6,600	410	2.6	1,050
1947	3,300	2.0	6,600	300	2.6	780
1948	3,350	2.1	7,000	320	3.0	960
1949	3,400	1.5	5,100	200	2.3	460
1950	3,300	2.0	6,600	200	2.6	520
1951	3,600	1.4	5,000	210	3.0	630
1952	4,500	1.9	8,600	220	3.5	770
1953	4,300	2.1	9,000	290	3.0	870
1954	5,000	1.9	9,500	280	2.5	700
1955	4,700	1.7	8,000	290	3.0	870

Source: U.S. Dept. of Agric., AMS, Estimates
Division, State of Washington, 1939-1955.

Oats and other grains cut green for hay rank second in acreage. Grain hay has ranged from 2,600 acres in 1939 to 1,150 acres in 1954. In recent years less grain hay has been cut and more oats are being combined for grain and the straw plowed under. Very little grain hay is sold.

Alfalfa hay is a minor forage crop now less generally grown than in the mid-1940's. The acreage is down to about 290 acres compared to 410 in 1945. Only about 30 farms had alfalfa in 1954 and only about 500 tons were sold commercially. Climatic and soil conditions are not ideal for alfalfa which thrives best in drier regions with non-acid soils. Wild hay acreage has been decreasing too. Only 1,350 acres were cut in 1954 compared with 2,600 in 1949. Many former wild hay meadows are now regularly cultivated for higher-yielding clovers and tame grasses.

A marked change in recent years has been the harvesting and storing of silage made from clover, grass and grain. This practice provides better utilization of forage crops and grains and lessens losses in hay quality from damp weather at harvest time. Numerous Cowlitz, Lewis and Columbia River Valley dairy and livestock farmers have added silage cutters and installed silage pits and silos in recent years. About 70 farms were putting up silage in 1954 compared with only 25 in 1949. Over 1,500 acres of grass and grain were cut for silage in 1954 compared with 370 in 1949. In the same period, silage storage was increased from 2,000 tons to over 12,000 tons per year.

Oats, Other Small Grains and Corn

Hay and silage from grass, legumes and grain are supplemented in Cowlitz County by feed grains such as oats, barley, wheat, rye and corn. Combining grain, however, has decreased as a farm practice since the 1940's.

Oats are the most important feed grain. In 1954 about 40 livestock and dairy farms grew oats to feed their own cattle, horses and sheep. A few farm places have surpluses which are sold locally. Oat production reached a peak in 1949, when 2,070 acres were harvested with a production of 113,850 bushels. In 1955 only 700 acres were cut and the production was only 30,000 bushels. While oats have decreased, there has been an increase in the production of barley. About 10 farms were growing barley in the mid-1950's. Acreage increased from 60 acres in 1939 to 190 in 1954. Barley has increased in popularity as a dairy and beef animal feed.

Wheat was an important pioneer crop for human food as well as livestock feed. It has greatly declined, however, since 1920. Climatic factors are not reliable and soil conditions not suitable for wheat farming. In recent years wheat has been limited to less than a dozen farms. Although in some years it was grown on over 100 acres of Cowlitz County cropland, since 1951 it has dropped to 30 acres or less. Production has been largely for local livestock and poultry feed.

Corn and rye are other minor feed crops which have declined in importance from the pioneer period of Cowlitz County agriculture. Corn for shelled-out grain has been grown on less than 20 acres per year in recent time. Field corn grown for silage fodder, however, has been reported on 200 acres or more per year in recent times. A small amount of rye is grown in some crop years as a forage crop. Rye production has been of no commercial significance since the early decades of settlement.

Table 18.-- Oats and Barley: Acreage, Yield and Production
Cowlitz County, 1939-1955

Year	Oats (for grain)			Barley (for grain)		
	Acreage (acres)	Yield (bushels per acre)	Production (bushels)	Acreage (acres)	Yield (bushels per acre)	Production (bushels)
1939	510	38.0	19,380	60	26.0	1,560
1940	700	43.0	30,100	60	30.0	1,800
1941	670	48.0	32,160	60	35.0	2,100
1942	820	52.0	42,640	90	40.0	3,600
1943	1,050	58.0	60,900	90	38.0	3,420
1944	1,200	56.0	67,200	80	48.0	3,840
1945	1,150	49.0	56,350	70	46.0	3,220
1946	1,080	55.0	59,400	60	51.0	3,060
1947	1,660	56.0	92,960	70	48.0	3,360
1948	2,140	48.0	102,720	80	48.0	3,840
1949	2,070	55.0	113,900	90	54.0	4,860
1950	1,150	50.0	57,500	110	47.0	5,170
1951	1,300	47.5	61,750	110	43.0	4,730
1952	600	54.5	32,700	110	40.0	4,400
1953	580	50.0	29,000	140	30.0	4,200
1954	710	41.0	29,110	180	27.0	4,860
1955	680	50.0	34,000	190	40.0	7,600

Source: U.S.D.A., AMS, Agric. Estimates Division
State of Washington

Table 19.-- Wheat and Corn: Acreage, Yield and Production
Cowlitz County, 1939-1955

Year	All Wheat			Corn (for grain)		
	Acreage (acres)	Yield (bushels per acre)	Production (bushels)	Acreage (acres)	Yield (bushels per acre)	Production (bushels)
1939	110	19.5	2,150	20	25.0	500
1940	50	20.0	1,000	20	26.0	520
1941	100	25.0	2,500	10	39.0	390
1942	40	30.0	1,200	10	25.0	250
1943	10	30.0	300	1/	--	--
1944	30	28.3	850	--	--	--
1945	30	27.7	830	--	--	--
1946	40	30.0	1,200	--	--	--
1947	100	21.0	2,100	--	--	--
1948	60	23.7	1,420	--	--	--
1949	40	14.0	560	--	--	--
1950	140	29.2	4,090	--	--	--
1951	100	18.0	1,800	--	--	--
1952	70	32.0	2,240	--	--	--
1953	50	23.6	1,180	--	--	--
1954	30	23.0	690	--	--	--
1955	30	34.0	1,020	--	--	--

1/ No significant production after 1942.

Source: U.S.D.A., AMS, Agric. Estimates Division
State of Washington

Mint

In the 1930's mint farming was started as a successful and profitable practice on the valley bottom lands of Cowlitz County. Cowlitz was part of the state's early mint farming belt along the lower Columbia River. In the Census of 1939, Cowlitz County ranked first in the state with 580 acres yielding over 28,000 pounds of peppermint oil. In that year Cowlitz produced 62 percent of the Washington output. This production was a specialty localized to three farms in 1939. By 1949 production of mint had increased to 677 acres, but the center of state-wide production had shifted to the Yakima Valley and Cowlitz ranked third behind Yakima and Benton Counties. The decline in Cowlitz County started in the 1950's as a result of horticultural problems and disease infestations which caused lower yields. Production continued to shift to irrigated lands in east central Washington. By 1956 there were 600 acres of mint in Cowlitz County and although its production of 23,400 pounds of oil was third in the state, it was down to less than 5 percent of state total. Mint production continues as a highly valuable specialty crop in Cowlitz County.

Table 20.- Mint: Acreage and Production
Cowlitz County, 1939-1956

Year	Acres Harvested	Mint Oil Produced (pounds)
1939 1/	580	28,600
1949 1/	677	33,290
1951 2/	1,000	49,000
1952 2/	1,115	50,300
1953 2/	1,000	45,120
1954 2/	640	27,520
1955 2/	600	16,000
1956 2/	600	23,400

Sources: 1/ U.S. Censuses of Agriculture, 1939, 1949.
2/ USDA, AMS, Agricultural Estimates Division
and Washington State Department of Agriculture,
Division of Horticulture.

Berries

Cowlitz County is one of Washington's important berry growing areas. A variety of cultivated and wild berries have been grown and harvested commercially since 1940. Freezing and canning markets in the Vancouver and Portland areas brought an increased commercial acreage during the 1940's. In recent years there has been some decline as competing sources of processor berries in other counties and Coast States have created larger supplies with consequent weakening of prices.

Strawberries are most important berry crop followed by red and black raspberries and blackberries. Other commercial species include Loganberries, Boysenberries and Youngberries. Most production is from small fields managed on family farms. Berry growing is an important sideline on general livestock farms in the upland areas.

Table 21.- Berry Crops: Strawberries, Red Raspberries and Black Raspberries
Cowlitz County, 1940-1956.

Year	Strawberries		Red Raspberries		Black Raspberries	
	Acres	Tons	Acres	Tons	Acres	Tons
1940	250	295	10	20	1/	1/
1941	225	450	15	30	---	---
1942	190	290	25	50	---	---
1943	100	150	20	30	---	---
1944	75	80	20	10	---	---
1945	80	150	30	50	---	---
1946	80	160	30	45	---	---
1947	90	180	25	50	---	---
1948	120	250	25	55	25	55
1949	100	110	25	45	25	50
1950	100	125	20	40	25	25
1951	75	90	40	60	25	40
1952	55	110	30	40	15	25
1953	100	150	10	20	15	20
1954	100	160	10	15	10	10
1955	75	150	12	25	10	17
1956	90	140	15	30	5	3

1/ No date available prior to 1948.

Source: U.S. Dept. of Agriculture, AMS, Agric. Estimates Division, State of Washington.

Table 22.- Potatoes: Acreage, Yield and Production
Cowlitz County, 1939-1956

Year	Acres Harvested	Yield (Tons per acre)	Production (tons)
1939 1/	170	5	850
1945 1/	130	5	750
1948	100	5	500
1949	75	6	450
1950	170	3	720
1951	275	4	1,100
1952	200	5	1,000
1953	20	6	120
1954	25	7	175
1955	20	5	100
1956	20	5	100

1/ 1939 and 1945 are Census of Agriculture data.

Sources: USDA, AMS, Agric. Est. Div. and Wash. State Dept. of Agric. cooperating. Wash. Vegetable Crops, data for 1939-1956.

U.S. Censuses of Agriculture, 1939, 1945.

Potatoes

Potatoes were a common pioneer crop for home use and local trade on the lower Columbia River. In recent years commercial potato growing in the Cowlitz area has declined in importance compared to commercial production in irrigated areas of eastern Washington. In 1954 about 280 farms were growing potatoes mainly for local use. Commercial production has varied considerably from year to year and has been on a downward trend since 1952.

Tree Fruits, Filberts

Fruit growing and the culture of filbert nuts are of secondary importance in Cowlitz County. Orchard land, both home-use and commercial, has been decreased in recent years. Orchard tracts with more than 20 trees are located on 300 farms. Most of these are small, general orchards growing fruit for home and local use. Only 600 acres of fruit and nut trees were reported in 1949 and the 1954 Census showed only 435 acres. Orchards were at their peak in the 1900-1910 period. As the commercial tree fruit industry began to concentrate in the irrigated valleys of eastern Washington, commercial production in Cowlitz County declined. Filberts were a more recent nut crop which were planted after 1920. They reached a peak of commercial production about 1950. By 1954 filbert growing was declining slightly.

Table 23.- Bearing Fruit Trees and Filbert Trees
Cowlitz County, 1890-1954

Year	Apples	Cherries	Pears	Prunes & Plums	Peaches	Filberts
1890	13,578	1,575	1,118	4,088	225	---
1900	63,642	6,542	8,790	36,358	742	---
1910	45,523	6,435	7,336	15,490	657	---
1920	37,144	6,566	6,375	10,891	1,151	---
1930	20,390	4,618	4,667	7,434	561	481
1940	13,129	3,630	3,055	5,948	255	6,092
1950	10,042	2,654	2,177	3,149	985	8,140
1954 ^{1/}	4,746	1,438	1,270	1,453	537	5,082

^{1/} 1954 figures are for trees in orchards of 20 trees or more.

Sources: Washington Tree Fruits, Washington Crop and Livestock Reporting Service, U.S.D.A. and Washington State Dept. of Agriculture, Cooperating 1952.
U.S. Censuses of Agriculture 1890-1954.

Vegetables

With improved transportation and expanded city markets locally available, economic conditions have encouraged an expansion of commercial vegetable farming on the valley lowlands of Cowlitz County. Vegetables harvested for sale to fresh markets and processors went up from 230 acres in 1939 to over 1,600 acres in 1954. Truck crop farming has recently specialized in the following vegetables: cabbage, carrots, green peas, cucumbers, snap beans and

sweet corn. Acreages have varied year to year depending on contracts with processors and fresh market buyers. About 20 farms were growing commercial vegetables in 1954.

In addition to commercial truck farming, there is the popular practice of vegetable gardening by part-time farmers. The 1954 Census found over 850 farms growing home gardens. Some of this home produce enters local fresh markets.

Table 24.- Vegetable Crops: Sweet Corn, Snap Beans
Spinach and Cucumbers
Cowlitz County, 1948-1956 1/

Year	Sweet Corn		Snap Beans		Spinach		Cucumbers	
	Acres	Prod. (tons)	Acres	Prod. (tons)	Acres	Prod. (tons)	Acres	Prod. (tons)
1948	--	--	20	40	55	195	25	90
1949	--	--	20	40	60	320	25	125
1950	40	80	25	50	5	25	35	170
1951	15	30	35	200	5	25	25	100
1952	20	40	35	210	--	--	20	85
1953	60	120	40	230	--	--	75	300
1954	75	200	40	240	4	16	100	350
1955	18	35	46	230	5	25	60	240
1956	110	435	45	250	--	--	200	1,300

1/ Not available prior to 1948.

Source: U.S.D.A., AMS, Agric. Estimates Division
State of Washington

Table 25.- Vegetable Crops: Cabbage, Carrots and Green Peas
Cowlitz County, 1939-1956

Year	Cabbage		Carrots		Green Peas	
	Acres	Prod. (tons)	Acres	Prod. (tons)	Acres	Prod. (tons)
1939 1/	7	NA	6	NA	145	NA
1945 1/	14	NA	--	--	8	NA
1948	--	--	10	90	--	--
1949	4	NA	10	90	--	--
1950	--	--	15	175	--	--
1951	5	20	15	100	450	900
1952	--	--	--	--	1,000	1,800
1953	5	54	4	24	1,000	1,800
1954	100	1,060	70	420	580	870
1955 2/	2/	2/	100	600	100	200
1956	--	--	115	700	290	350

1/ U.S. Census of Agriculture data.

2/ Crop lost by freezing weather.

NA - Not available.

Sources: U.S.D.A., AMS, Agric. Estimates Division and
Wash. State Dept. of Agric., Cooperating.
U.S. Census of Agriculture.