

Part-Time Farming in Oregon



Agricultural Experiment Station
Oregon State Agricultural College
CORVALLIS

TABLE OF CONTENTS

	Page
Summary	4
Introduction	5
Conditions Contributing to Development of Part-Time Farming....	5
Prevalence of Part-Time Farming in Oregon.....	5
Scope of the Study.....	6
Purpose and Method.....	6
Extent of the Survey.....	7
Part-Time Farmers and their Families.....	8
Ages of Part-Time Farmers.....	8
Size of Family.....	9
Farm Experience	10
Previous Ownership of Property.....	10
Occupations Other than Farming.....	11
Description of the Part-Time Farms.....	12
Location	12
Size and Type of Holding.....	12
Use of Land.....	13
Machinery	14
Kind and Amount of Livestock.....	14
Marketing Methods	15
The Farm Home	16
The Financial Aspects of Part-Time Farming.....	16
Capital Requirements	16
Methods of Financing.....	19
Income and Expenditures	19
Farm Income and Expense.....	21
Supplemental Employment	24
Miscellaneous Income	27
Factors Affecting Success	27
Amount of Supplemental Employment.....	27
Distance to Work.....	28
Size of Farm.....	28
Quality of Land.....	28
Amount of Livestock.....	29
Industries Employing Rural Labor.....	30
Types of Industries.....	30
Extent of Employment of Rural Labor.....	31
Employment of Rural Labor Is Seasonal.....	33
Possible Expansion of Employment for Part-Time Farmers.....	34
Is Rural Labor Satisfactory?.....	34
Adequacy of Present Labor Supply.....	35
Important Economic Factors and Problems.....	35
Reactions Expressed by Part-Time Farmers.....	36
Advantages and Disadvantages.....	37
Mistakes to be Avoided.....	38
The Klamath Falls Development.....	40
Appendix: Detailed and Supplementary Tables (Tables 22 to 51).....	41

SUMMARY

1. Part-time farming in Oregon is an established fact and not an experiment. More than 25 per cent of the farmers of Oregon are considered as part-time farmers in that their farms are too small to produce a living.

2. The part-time farm furnishes a rural residence and a part of the family food supply, but in most cases little to sell. The average family in this study received \$117 from the sale of farm products, \$597 from wages, and \$67 from miscellaneous sources, while the farm produce used was valued at \$173.

3. The average farm was ten acres, of which four acres were in cultivation. Half of the farms were located in suburban and half in rural communities.

4. Only 9 per cent of the houses were classed as poor. Seventy-seven per cent had electricity, 64 per cent had running water, and 46 per cent had bathrooms.

5. The farmers in this study had been on their farms an average of eight years. They averaged fifty years of age. Two-thirds of them had had previous farm experience. Eighty-six per cent owned their farms. Forty per cent of the owners had never owned a home before. Thirty per cent had owned a home in the city, 19 per cent had owned a farm, and 11 per cent had owned both farm and city property.

6. The average investment was \$2,784, including land \$1,288, buildings \$1,374, machinery and livestock \$122. Less than half of these operators were in debt. Twenty-seven per cent were tax delinquent. Eighteen per cent received some relief employment and 12 per cent received relief supplies. Twenty-two per cent had income from investments or pensions.

7. Part-time farmers engage in a variety of occupations but mostly in lumbering, common labor, building trades, mechanical and electrical trades. The wages paid averaged \$3.65 for part-time farmers and \$3.55 for city workers. Employers generally considered the labor of part-time farmers satisfactory but reported the supply adequate.

8. Chief advantages of part-time farming: country life and lower cost of living. Chief disadvantages: distance from city, work, or school, and lack of employment. Chief mistakes: paying too much for the farm or buying too small a tract.

9. Ninety-four per cent of the cooperators said they were satisfied, 2 per cent were undecided, and 4 per cent were dissatisfied.

Part-Time Farming in Oregon*

By

G. W. Kuhlman, T. J. Flippin, and E. J. Niederfrank†

INTRODUCTION

PART-TIME farming is not a new agricultural development. Some families in every industrial community have always been attracted by rural surroundings. But the recent expansion of industry, the building of better roads, and a desire of the city worker to attain more security during periods of "hard times" have led to a great increase in recent years in the number of families that now live on the land. There they have opportunity to raise a large portion of their family living while supplementing it with cash earnings from industrial or other occupations.

Conditions contributing to development of part-time farming. Conditions that have contributed to the development of part-time farming have been:

1. "Stranded" industrial population groups, particularly in the mining and lumbering regions where industry has exhausted the resources but many of the workers fail to or are unable to move onward.
2. Over-aged workers, discriminated against by employers who have a liberal supply of applicants from whom to select.
3. The shorter work day and work week, affording ample time for production of food supplies at home.
4. Cyclical unemployment, and the possibility of getting workers to help themselves over a depression period, at least in part, by home production of foods.
5. Seasonal industry, necessitating a complementary adjustment with other remunerative activities.
6. Decentralization of industry, accompanied by relocation of workers in suitable surroundings.

Prevalence of part-time farming in Oregon. The term "part-time farming" as used in this study means living on and utilizing a tract of land by a family in which the wage earner divides his time and energy between it and employment for wages or the operation of a small business, thus deriving a substantial part of his income from more or less regular employment off the place, and furnishing the family with some of its own

*Acknowledgments. The authors express appreciation to the state and county units of the Oregon Emergency Relief Administration for promoting the work, to the fine-spirited part-time farmers and men in industry who generously contributed the data; to L. R. Breithaupt, Extension Economist, for his work in formulating this project; to H. E. Selby, Acting Head, Department of Farm Management, for much constructive help in analysis of the data and in writing this report; and to John E. Cooter, who conducted a preliminary CWA study of part-time farming which contributed valuable experience to this work.

†G. W. Kuhlman, Associate Economist, Department of Farm Management, Oregon Agricultural Experiment Station, had charge of the project and supervised the part-time farming survey; T. J. Flippin, Supervisor, Rural Rehabilitation Department, Oregon Emergency Relief Administration, supervised the industries study; and E. J. Niederfrank, Field Assistant, Department of Farm Management, assisted in both phases of the project.

food requirement, fuel, and the home site, but only incidentally selling small surpluses.

Although part-time farming constitutes both a home and a source of income, the relative importance of the two aspects is given different weight by different individuals. In some cases the home and garden aspect predominates; in others the farming is, or is destined to become, the more important feature.

While the 1930 U. S. Census has no classification exactly corresponding with this concept, the comparative importance and distribution of this general type of farm is shown by the group listed as having a total farm production worth less than \$600 in 1929. This group contains 13,645 farms or 25 per cent of all the farms in Oregon (Table 1). As a considerable portion of this production was used by the family, it is evident that those families solely dependent on income from such farms would have a very limited purchasing power. The Census also shows that 45.6 per cent of all farmers in the state had supplemental employment, averaging 124 days each in 1929,* indicating that many farm operators depend upon some other income for part of the family living.

Table 1. NUMBER OF FARMS IN OREGON HAVING A TOTAL PRODUCTION WORTH LESS THAN \$600
By type of farm and by regions
Compiled from 1930 U. S. Census data

Kind of farm	Portland Region	Willamette Valley	Coast Region	Southern Oregon	Eastern Oregon	All regions
General farms	385	609	110	148	248	1,500
Cash grain farms.....	62	114	3	18	160	357
Crop specialty	101	121	31	108	179	540
Fruit farms	267	390	21	66	213	957
Truck farms	65	38	9	6	13	131
Dairy farms	127	175	84	39	100	525
Animal specialty	24	54	15	28	49	170
Stock farms	2	19	6	13	121	161
Poultry farms	127	132	15	37	64	375
Self-sufficing	583	984	425	334	533	2,859
Abnormal*	1,303	2,239	884	662	982	6,070
Total	3,046	4,875	1,603	1,459	2,662	13,645

*Includes part-time farms where the operator spent 150 days or more at a job off the farm.

Thus it is apparent that a considerable portion of the rural population is already following this part-time farming mode of life. That the movement to the country will continue and very likely increase in volume under the present industrial system is very probable. Holders of large tracts of farming lands, real estate dealers, and others are showing increasing interest in subdividing and disposing of lands in small farm units.

SCOPE OF THE STUDY

Purpose and method. A research project directed by the Oregon Agricultural Experiment Station under the auspices of the Oregon Emergency Relief Administration was begun in August, 1934, to investigate the status of a large number of part-time farmers with a view to discovering the possibilities on the small farm tracts, the actual problems involved, the mistakes to be avoided, and other basic information from this large and increasing part of the population.

*Does not include days worked at other occupations by self-employed operators.

Qualified enumerators acquainted with their respective communities, and previously instructed, were employed to obtain the desired information. The part-time farmers from whom the information was obtained were selected at random by the enumerators in their respective localities. In compiling the data, a few records taken of farms that furnished full-time work for one man were discarded, even though the head of the family held some job, as these were considered to be full-time farms.

The selection of the areas and the number of records to be taken in each area were determined largely by the relative importance of part-time farming over the state. According to the 1930 Census, there were 6,626 farms under ten acres each in the regions covered by the survey. As 78 per cent of the places visited in this study contained less than ten acres each, they represent about 25 per cent of all such farms in the counties included in this survey.

By using a carefully prepared schedule and daily checking of results during the field work, very satisfactory data were obtained.

The records were summarized and analyzed, and the results are presented in this report to serve as a guide to such persons as may be interested in rural rehabilitation, in promotion of part-time farm projects, or in settlement themselves on this type of tract.

Extent of the survey. The survey covered districts in 14 counties of the state, selected for their industrial as well as agricultural importance, in four principal regions or areas located as follows:

1. The Portland Region includes records taken in the Hillsboro and Beaverton districts bordering Portland in Washington County, in the area east of Portland toward Gresham in Multnomah County, and in Oregon City, Milwaukie, and Oswego districts of Clackamas County.
2. The Valley Region embraces the records taken around the Willamette Valley cities of Eugene, Albany, Lebanon, Salem, Silverton, Monmouth, Dallas, McMinnville, and Newberg. These centers are in Lane, Linn, Marion, Polk, and Yamhill counties.
3. The Coast Region includes records taken near St. Helens and Clatskanie in Columbia County, around Astoria in Clatsop County, and near Marshfield and Coquille in Coos County.
4. The Irrigated Region is represented by records taken near Ashland and Medford in Jackson County, Klamath Falls in Klamath County, and around Bend and Redmond in Deschutes County.

From the foregoing regions 2,110 records were completed (Figure 1). Of these, 1,810, or 86 per cent, were from owner-operated places, while 300, or 14 per cent, were from rented tracts (Table 2). The bulk of the data presented in this publication are confined to the records taken from the large group of owner-operators, excepting where special interest exists in the tenant classification.

A second phase of this study was a survey of industries in Oregon that employ rural labor. This phase of the study was designed for the purpose of throwing light on part-time farming in this state with particular reference to: (1) what kinds of industries in Oregon employ rural labor, (2) to what extent and how successfully these industries use rural labor, and (3) what fields of industry in Oregon appear to offer the most fertile

opportunities for the expansion of employment for part-time farmers. Records were obtained from 216 establishments employing 3,809 full-time and part-time employees who live on farms.

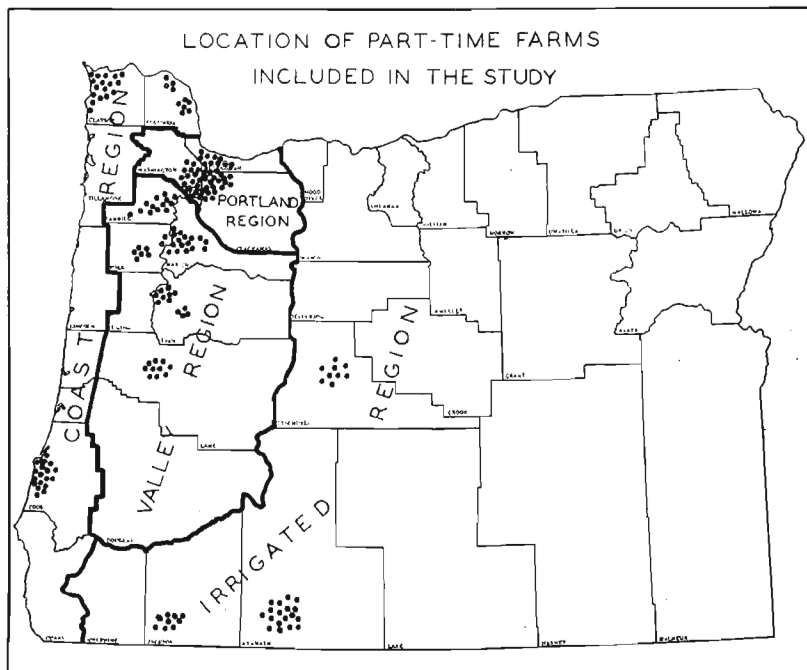


Figure 1. Each dot represents 10 part-time farms.

Table 2. NUMBER OF RECORDS TAKEN, BY TENURE AND BY REGIONS

Form of tenure	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Owners	441	571	432	366	1,810
Renters	73	128	50	49	300
Total	514	699	482	415	2,110

PART-TIME FARMERS AND THEIR FAMILIES

Attention is first directed to some of the personal aspects which bear upon the part-time farmers included in the survey, such as their age, size of families, length of time they have been on the place, previous farm experience, and previous ownership of farm or city home.

Ages of part-time farmers. Consideration of the possibility of expanding the part-time farming program, raises the question: To what age group does this manner of living seem to appeal? The average age of all part-time

farm owners in the Portland and Coast areas as well as for the survey as a whole was 50 years (Figure 2 and Appendix Table 22). The Valley group averaged 53 years. The Irrigated Region averaged only 46 years. The average for renters was slightly less, being 48 years in the Portland Region; 45 in the Valley and the Irrigated regions; and 43 on the Coast.

The large percentage of part-time farmers more than 55 years of age is significant, especially in the Willamette Valley, where it is practically half of the number interviewed. These men would probably have difficulty

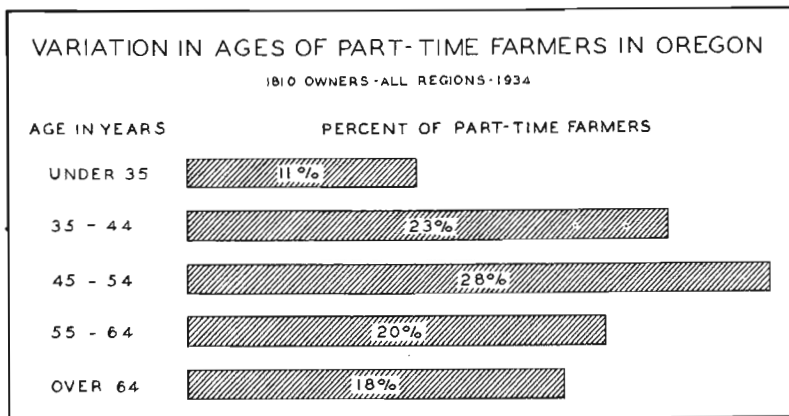


Figure 2. Two thirds of the part-time farmers interviewed were more than 45 years of age.

in finding steady employment even in normal times. Usually a limited amount of seasonal work is all they can expect unless they are particularly skilled.

On the other hand, it is interesting to note the large percentage of relatively young men in the Irrigated Region. In the Klamath Falls district 31 per cent were under 35 years of age. Many of these men purchased bare land, constructed low-cost buildings, largely with their own labor, and thus with a small cash outlay now possess a certain degree of security which assures them at least a living even with only a few months of outside employment during the year.

Size of family. The number of persons in the households of the owner group of families averaged $3\frac{1}{2}$ members. Families of 2, 3, and 4 persons predominated in the order listed (Figure 3). The Coast and Irrigated regions had a higher percentage of the larger families than the Willamette Valley.

It was not at all uncommon to find either the parents, brothers and sisters, and in some cases the married sons and daughters of the operator, who were temporarily without employment in the city, living on the farm until conditions improved in their particular field.

Living requirements vary with the size of the family. Larger families need larger houses, more land to produce food supplies, and more supplemental employment.

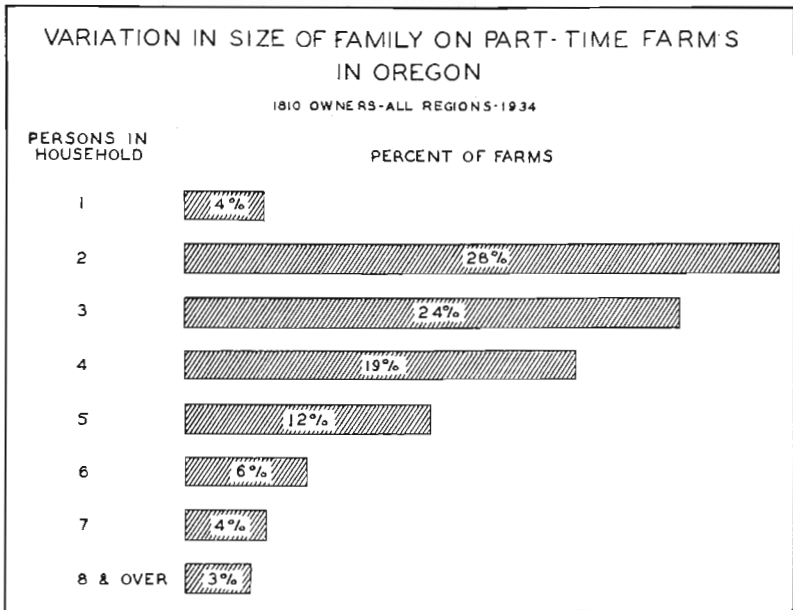


Figure 3. Housing and subsistence requirements necessarily vary with the number of persons in the household.

Farm experience. Special efforts were made in this survey to get dependable data regarding the farm background of the part-time farmers. The schedule asked for their actual period of residence on farms between the age of 10 years and the time of acquiring the present property. The average experience reported in the Willamette Valley was 16 years; in the Irrigated Region, 12 years; and in the Portland and Coast regions, 10 years. One third of the number reporting had had no previous farm experience, while 40 per cent had had more than 12 years each (Table 23, Appendix). Among the 300 tenants 83 per cent had had previous farm experience. The number of years of experience slightly exceeded that reported by the owners.

A large number of these families had moved out of cities shortly after the World War period, when rents and food prices were still high in the towns but work was beginning to be less plentiful. A similar exodus occurred during the past 5 years—the depression period of 1930-1934. In the Klamath Falls vicinity nearly 88 per cent of these families have been operating their rural holdings less than 6 years.

More than half of the 300 renters have been on their present location less than 2 years, and 84 per cent reported their present occupancy as less than 6 years. The greatest amount of moving was in the Irrigated Region, and the greatest stability in the Valley Region.

Previous ownership of property. About 40 per cent of the owners had never previously owned a home; 30 per cent had owned a home in the city; 19 per cent had owned a farm; and 11 per cent had at one time or another held title to both farm and city property (Table 24, Appendix).

While the tenants' previous tenure status was quite similar to that of the owners, it is significant that half of the renters had once been home owners but are now occupying leased property. To some people at least this condition indicates a backward step in economic life.

The fact that a large percentage of the owners in the Portland Region had previously owned city homes indicates some reality in the claim that there is a "movement of the city worker to the land." The records further show that in the Valley Region fewer part-time farmers have not owned a home before, more have owned farm homes, more have had over 12 years of farm experience, considerably more are over 55 years of age, and a large percentage have been on their places more than 10 years. Hence it is evident that this mode of life has been longer established in the Valley Region than in the other areas of the state.

Occupations other than farming. The list of occupations reported by the 1,810 part-time farm owners in the survey reflects a wide diversity of trades, professions, and services which furnished the bulk of the cash incomes (Table 3). Some, of course, have not been able to find work in their chosen trade or profession the past year or two, this being particularly true of the older men. They have had to accept whatever work was available.

Table 3. REGULAR OCCUPATIONS REPORTED BY PART-TIME FARMERS
1,810 owners

Occupation	Number reporting	Occupation	Number reporting
Timber and sawmill workers.....	314	Ministers	5
Common laborers	263	Skilled farm employees.....	5
Building tradesmen	198	Irrigation hands	4
Mechanics and electricians.....	151	Laundry workers	4
Railroad employees	81	Warehouse hands	4
Small factory hands	46	Elevator operators	3
Truck drivers	31	Well drillers	3
Highway workers	21	Miners	3
Dock and marine hands.....	26	Sign painters	2
Fishermen	29	Telegraph operators	2
Blacksmiths	13	Millers	2
Office clerks and accountants.....	41	Nurserymen	2
Salesmen	40	Florists	2
Store clerks	21	Transfermen	2
Teachers	21	Landscape gardener	1
Government employees	26	Photo engraver	1
Executives and managers.....	10	Creamery fieldmen	1
Professional men	10	Garbage collector	1
Barbers	9	Upholsterer	1
Butchers	9	Bill collector	1
Plumbers	7	Window decorator	1
Printers and pressmen.....	7	Dressmaker	1
Cheese and butter makers.....	6	Small business operators	56
Tailors	5	Retired farmers*	94
Bakers	5	Others retired*	143
Shoemakers	5	Widows without jobs.....	37
Chefs	5	Physically unfit for work.....	29
Total			1,810

*In this classification of occupations, the categories "retired farmers" and "others retired" were arbitrarily made to include unemployed persons over 60 years of age.

It is evident that this mode of life appeals to more men who are working for wages than it does to merchants or others who operate a business for themselves and are thereby occupied many hours a day and mostly the year around.

The lumber industry heads the list in the number of people to whom it affords employment, especially in the Coast and Irrigated sections of the state (Table 25, Appendix). This group includes workers from the lowest-paid helper up to the highest-paid of the sales and office forces and a few lumber contractors and sawmill operators.

The highest percentage of wage earners is found in the Klamath County group where the holdings are smallest, the average age of operators is lowest and the land development is of comparatively recent origin.

Retired farmers and others doing common labor predominate in Yamhill, Marion, Linn, and Lane counties. Conditions there have been favorable to make this system of retirement in the suburban and rural districts near favorite towns logical in the natural course of events, rather than as the result of a recent deliberate "movement to the land."

DESCRIPTION OF THE PART-TIME FARMS

Part-time farms are usually small acreages equipped with a modest house and perhaps a garage, a small barn, and a poultry house. In parts of Oregon, however, the type of land and the location of industries have led to wide variations in the type of the part-time farm.

Location. Of the 1,810 part-time farm owners, 53 per cent live in rural and 47 per cent in suburban surroundings (Table 26, Appendix). *Rural* as descriptive of these tracts refers to a state of isolation comparable to the average farm, while *suburban* applies to homes having several neighbors within speaking range, whether near a town or concentrated at a crossroads.

In each area studied graveled roads were the most common type on which the part-time farms were located (Table 26, Appendix). In the Irrigated Region fewer farms were on paved and graveled roads and more on earth roads than in the other areas.

Part-time farms in the Valley Region are considerably nearer to cities or business centers than are those in the other areas studied (Table 27, Appendix). Those in the Portland Region and on the Coast are the farthest from cities. Around Portland this is accounted for by the large size of the town, which results in the farms being farther from the city center. In the Coast Region much of the part-time farming is carried on in little valleys or in the vicinity of sawmills and other small factories outside of the towns.

Since about 65 per cent of these people go to work in their own automobiles, the annual cash cost of traveling to and from work may amount to a considerable item. Distance to school is seldom a problem in these districts, because school busses are almost universally available.

Size and type of holding. Records were taken on part-time farms ranging in size from $\frac{2}{5}$ acre up to 220 acres, averaging 9.7 acres each for the owners and 11 acres for the tenants. While 40 per cent of all the homes visited were on tracts of less than 3 acres, in the Coast Region almost half of the operators owned more than 10 acres each (Table 28, Appendix). Small tracts predominate in the regions adjacent to the larger cities and in the Irrigated Region, where nearly half of the holdings were under $1\frac{1}{2}$ acres. Real-estate firms in the vicinity of Klamath Falls have dominated

the situation there by actively engaging in recent years in the subdividing of farm lands into small garden homesteads and selling them at very attractive terms for settlement.

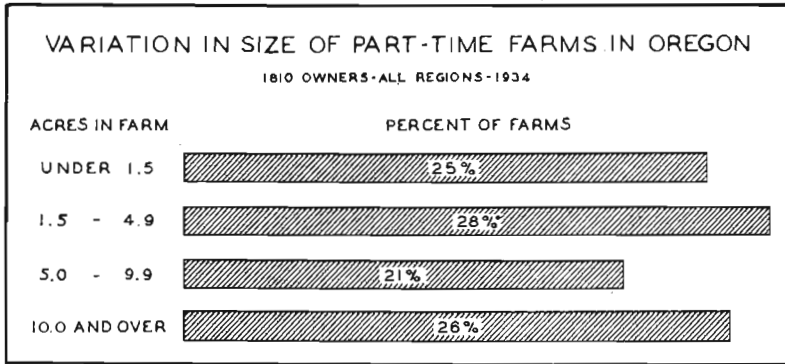


Figure 4. More than half of the part-time farms contain less than 5 acres; much of the acreage in the group of largest farms is unutilizable land.

The rented part-time farms contain practically the same acreages in the Willamette Valley as the owner-operated places, but in the Coast Region are considerably larger, with an average of 37 acres, and in the Irrigated Region, where they average 8 acres.

The average amount of cultivated land for all part-time units studied was 3.9 acres, varying from 2.6 acres in the Irrigated Region to 4.8 acres in the Valley Region (Table 29, Appendix). The non-cultivated acreage is negligible in the Willamette Valley and the Irrigated Region. In the Coast Region, however, much of the acreage is hilly, cut-over, and brush-land of extremely low agricultural value except as it provides a scant browse for livestock and a source of fuel and fence posts for the farm.

Although this "wild" land has no appreciable merit in the scheme of farm-furnished living, its presence can be explained by the fact that it cost very little and was accepted as part of the purchase with the hope that some day it might be improved and thus help constitute a full-time farm unit.

That it is a common practice in the wooded sections of Oregon to acquire stump land with the idea of clearing it gradually during periods of unemployment is shown by the fact that 35 per cent of the owners have cleared some land. The average amount cleared was 3.2 acres at a cash outlay of approximately \$40 an acre. In the Portland Region 35 per cent of the owners cleared an average of 1.9 acres each. The same average was reported on 10 per cent of the farms of the Irrigated Region. In the Valley Region, 9 per cent reported clearing an average of 2.8 acres each, while in the Coast Region 65 per cent of the owners cleared an average of 4 acres each.

Use of land. As has been shown, the average part-time farm in Oregon contains only about 4 acres of cultivated land. While the use made of the cultivated land varies from farm to farm and among the different regions of the state, the bulk of it is in garden, orchard, yards, hay crops, corn, and

potatoes. Most of the crops raised are either fed to livestock or eaten by the family, although some part-time farmers market quantities of cash crops including chiefly fruits, vegetables, and potatoes.

That crop production was of minor consideration to most of these men is indicated by the fact that only 36 of the 1,810 owner-operators rented additional land, averaging 5.7 acres each.

A small number of operators who had considerable spare time to devote to farming operations sold as high as \$600 to \$800 worth of products from their farms. A few operators in the Irrigated Region, for example, had large potato patches, and in the Coast Region a small number had 2 or 3 acres of garden peas which greatly increased their gross income.

Several operators specialized in flower bulbs and seeds. Others had strawberry, raspberry, and currant plantings that yielded good incomes in favorable crop years. Still others had small walnut or filbert groves; some had surplus apples from which they made cider to sell to local markets; one operator sold \$750 worth of canned grape juice from his small vineyard.

Of the 1,810 owners, 63 per cent classified their soil as good, 29 per cent as fair, and 8 per cent as poor (Table 30, Appendix).

Machinery. The average value of farm equipment, including an occasional plow, mowing machine, wagon, harness, dairy utensils, hand tools, and garden implements, was only \$35. This investment ranged from \$27 in the Irrigated Region to \$45 in the Coast Region, which is in direct proportion to the size of places found in these two regions.

In the Willamette Valley about 8 per cent of the owners included in the study had tractors, and in the Coast and Irrigated regions 5 per cent owned such equipment (Table 31, Appendix). These tractors varied all the way from standard farm models kept in connection with some other acreage or previous holding to typical garden varieties and home-made designs. The inventory value of the tractor seldom exceeded \$150, or the price of a work horse which it replaced. A common practice on these small acreages was to rent the implements or to hire some one to perform the field operations requiring power and machinery.

Kind and amount of livestock. Eleven per cent of the 1,810 owners had no livestock of any kind, while 89 per cent had an average of \$97 invested in animals and poultry stock (Table 4). In the Portland Region only

Table 4. KIND AND AMOUNT OF LIVESTOCK
1,810 owners—all regions
1,618 farms with livestock

Kind of livestock	Number of farms reporting	Percentage of farms reporting this item	Head per farm reporting this item	Average number of head per farm for all farms
		<i>Per cent</i>		
None	192	11	.....	.....
Horses	259	14	1.4	0.2
Cows	1,102	69	1.7	1.1
Hogs	462	26	1.9	0.5
Goats	68	4	2.8	0.1
Hens	1,414	78	42.0	33.0
Turkeys, ducks, geese	76	4	24.0	1.0
Rabbits	86	5	26.0	1.2

83 per cent of the places had livestock. On the Coast 97 per cent were so equipped.

Only 14 per cent of the farmers reported horses, averaging 1.4 head each. Presence of horses on part-time farms depends largely on the amount of land to be cultivated and on the opportunity to get additional work in the community for a team. To be used economically each horse should do the work on at least 20 crop acres, or a somewhat smaller acreage with intensive row crops. As it is impractical to use a single horse for some of the major field operations, most part-time farmers prefer to rent horses or hire their work done.

Cows were kept on 69 per cent of the farms studied, with an average of 1.7 head each. In the Coast Region 79 per cent of the places had cows with an average of 2.3 head each. Cows were least popular in the Portland Region, where only 44 per cent of the operators reported them, having an average of 1.4 head each.

Chickens were reported on 78 per cent of all farms. The average size of flock was 42 hens. More than 80 per cent of all farms keeping hens had flocks of less than 50 birds, and only 8 per cent had flocks of more than 100 birds. Apparently commercial poultry production has not been generally adopted on part-time farms.

Turkeys, ducks, and geese were reported by only 4 per cent of the operators, with an average flock of 24 birds.

Hogs, found on one fourth of the part-time farms, were most common in the rural districts and on the larger acreages, excepting in the Irrigated Region where 40 per cent of all places reported them. Hogs are adapted to relatively limited quarters and are very popular as a source of meat and lard for home consumption.

While milk goats were found on only 4 per cent of these places, they are prized for their economical production. Some goats were valued almost as much as were milk cows, the market price of which happened to be at a low point in 1934.

In addition to the ordinary domestic livestock, 86 farms raised rabbits, averaging 26 head of breeders; 5 reported foxes, averaging 16 head; 4 farms had mink, averaging 47 head; and 6 farms kept bees, averaging 8 stands.

Marketing methods. Selling direct to the consumer was mentioned most frequently as the method by which marketing was done (Table 32, Appendix). Other important methods are selling to dealers and to the local store.

It is interesting to note that 18 per cent of these small producers sold some products through cooperative organizations. The cooperatives patronized were handling chiefly poultry and eggs, cream, fruits, vegetables, and nuts. The least use of cooperatives was made in the Irrigated Region, where only 3 per cent of those selling surpluses used this method, while in the Valley Region 30 per cent of the part-time farmers used this agency.

The use of the roadside stand as a method of marketing by part-time farmers in Oregon is still negligible as compared to those states that are more densely populated.

The advisability of undertaking the raising of farm products for local markets seemed doubtful to some of these men. Such production generally played a more important part in the operation of unemployed and retired

persons than of those who had adequate and satisfactory outside work in their chosen occupations. During the survey many complaints and comments were heard concerning the difficulty of finding suitable markets and of selling small surpluses profitably.

The farm home. Since part-time farming is a mode of living as well as a source of family income, attention was given to data showing the general condition of the house and its major conveniences as they would reflect the family's standard of living.

The frame type of construction is almost universally found in Oregon. The average number of rooms reported ranged from 4 in the Irrigated Region to 5.5 in the Willamette Valley. In other words 4-room and 5-room houses predominated. Fifty-eight per cent of the houses were classified as being in good condition. Only 9 per cent were poor (Table 33, Appendix).

Electricity, although in a few cases temporarily discontinued as an economy measure, is the major equipment most frequently found in these homes. This insures good light as well as other comforts that depend upon its presence.

More of the homes had radios than either running water, bath, or furnaces (Table 5). Lack of running water was most serious in the Irrigated Region, where only 34 per cent of the dwellings were so equipped. Some of the families in that area obtained their water from irrigation ditches; others carried it from neighbors; still others hauled water from town several miles away.

Table 5. PERCENTAGE OF FARMS REPORTING INDICATED HOUSEHOLD CONVENIENCES
1,810 owners

Kind of convenience reported	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Electricity	88	86	39	52	77
Radio	80	71	37	44	68
Running water in house.....	75	66	46	34	64
Bath	54	52	31	21	46
Basement	42	21	23	10	27
Furnace	21	12	6	2	11

Probably the absence of conveniences in the houses of the Coast and Irrigated regions had something to do with the lower value of the houses in these areas.

THE FINANCIAL ASPECTS OF PART-TIME FARMING

Capital requirements. The present capital investment per farm varied from an average of \$2,031 in the Irrigated Region to \$3,202 in the Portland Region, averaging \$2,784 for owners in all regions studied (Figure 5 and Table 6). For renters the capital investment per farm was less, averaging \$2,255, of which only \$113 was the renter's operating capital (Table 34, Appendix).

Land constitutes about half of the total real estate investment of \$2,662, and the house forms the bulk of the buildings inventory. Although the rented places were valued about 20 per cent less than the owner-operated ones, they contained slightly more acreage.

While the study shows wide variations in value of real estate in the different sections of Oregon, it is interesting to note that the investment in total land when divided by the number of cultivated acres only, gives an investment of approximately \$450 an acre in the Portland Region and \$300 an acre in each of the other three regions. This indicates in a general

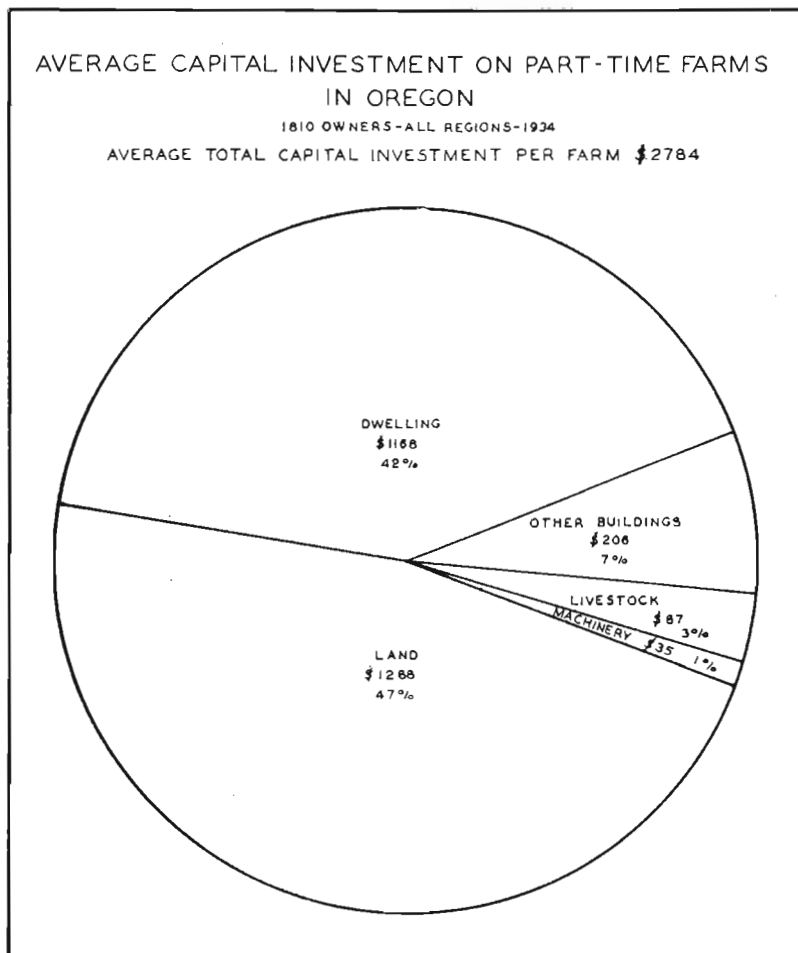


Figure 5. The items of real estate and production capital on part-time farms in Oregon.

way that outside of the Portland metropolitan area, cultivated land in small tracts tends to be valued quite uniformly over the state. Furthermore, this estimate of present value of land is almost identical with the average of prices actually paid by those owners who originally purchased only a tract of bare land for their home site (Table 36, Appendix).

Table 6. AVERAGE CAPITAL INVESTMENT IN PART-TIME FARMS
1,810 owners

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Land	\$1,546	\$1,423	\$1,253	\$809	\$1,288
Dwelling house	1,344	1,349	945	937	1,168
Other buildings	208	219	215	173	206
TOTAL REAL ESTATE.....	\$3,098	\$2,991	\$2,413	\$1,919	\$2,662
Livestock	\$ 69	\$ 82	\$ 113	\$ 85	\$ 87
Machinery	35	34	45	27	35
TOTAL CAPITAL INVESTMENT.....	\$3,202	\$3,107	\$2,571	\$2,031	\$2,784

The prices paid for these places averaged \$1,841 (Table 35, Appendix), ranging from practically nothing for the bare land in the case of a government homestead up to \$10,000 for a choice combination of land planted to orchard and equipped with modern buildings. In addition to this amount \$783 was spent for construction or remodeling of buildings and \$41 was used for other improvements like clearing and draining of land, a total cash outlay of \$2,665. This figure is almost the same as the present value of the real estate mentioned above.

Ninety-four per cent of the owners paid down some cash on the property at the time of purchase, averaging \$763 or 41 per cent of the total price. Thirty-six per cent of them paid cash in full settlement, but of these owners 10 per cent had since gone into debt. While circumstances have made it necessary for a number of families to borrow money on which to live during the depression, some of those who paid cash for their property did so with the intention of mortgaging it in order to put up adequate buildings, and then paying off the indebtedness in regular installments from earnings of supplemental employment.

For the state as a whole, 46 per cent of the owners still have indebtedness on their property, averaging \$1,032 for those in debt, and \$478 for all farms. The Portland Region, with a \$1,252 average for 59 per cent of the farms, has the most debt and the highest proportion of places in debt. This is in line, however, with the higher investment values prevailing in that area. The average indebtedness ranges from 24 per cent of the property valuation near Portland, down to 11 per cent on the Coast. The part-time farmers of the Irrigated and Coast regions are less in debt, but their places did not cost as much nor are they valued as highly at present as those in the longer-established Willamette Valley areas.

About 27 per cent of all owners reported delinquent taxes, and 16 per cent of those in debt reported they were delinquent in paying the interest on their mortgages. The average tax delinquency was \$81, or about 2½ years, and the average interest delinquency was \$113, or about 2 years on the average debt of \$1,032 reported. Apparently, for the typical part-time farmer, with a reasonable capital investment and a substantial portion of it paid, the items of property tax and interest are not serious burdens as long as he has employment during a major part of the year.

Many families, especially in the Coast and Irrigated regions, purchased bare land at a fairly low price and then constructed buildings and other improvements largely with their own labor (Table 36, Appendix). Some buildings were constructed by men who worked in sawmills and were thus

able to obtain building materials for only a small cash expenditure, doing most of the construction work themselves. Men in the building trades were able to utilize old buildings or materials and their own skill to good advantage in equipping their homes.

The total cost of units developed in this manner was from 5 to 13 per cent lower than their present value, and in addition their owners have had the use of them for an average of 9 years. The establishment and occupancy of such places in new communities tends to enhance property values more, proportionally, than in older neighborhoods.

The comparatively large amount of \$92 cash spent for improvements other than buildings in the Coast Region (Table 35, Appendix) may be accounted for by the need for clearing land, building fences, and diking on the comparatively large acreages held in this area. Forty-five per cent of these owners reported such expenditures at an average of \$204 a farm.

Methods of financing. A majority of the part-time farm owners depended on their wage-earning ability to acquire a home and pay off the mortgage (Table 37, Appendix). After saving to make the down payment they were depending thereafter on their current wages to meet the installments.

In connection with the indebtedness of part-time farmers, it is of interest to note the credit agencies involved. A large part of the mortgages are held by private individuals, who in most instances probably were sellers of the property (Table 38, Appendix). It is significant that local banks have only a minor part in financing these places, except in the Klamath Falls district, where they made 15 per cent of the loans.

The government loans are about equally divided among the Federal Land Bank, Home Owners' Loan Corporation, and state agencies. The state agencies include the State Land Board and the World War Veterans' State Aid Commission. In the Portland Region more than half the government loans are from the Home Owners' Loan Corporation, and fewer from the Federal Land Bank, while the opposite is true in the Coast Region. This is due to the more or less suburban type of part-time farming in the Portland Region, where the units are small, and to the fact that since the Home Owners' Loan Corporation was merely beginning to function, it naturally served the metropolitan districts first.

The government agencies held the larger mortgages on the larger places, and offered a lower rate of interest to borrowers. Two thirds of the contracts were of the installment type, indicating that the monthly-payment plan is most popular among wage earners.

Income and expenditures. The importance of supplemental employment is emphasized by the fact that more than half of the \$958 combined cash income and farm production enjoyed by families of part-time farm owners was contributed by the outside earnings of the family head (Figure 6 and Table 7). Another 10 per cent came from wages of other members of the family and from relief supplies, while only 30 per cent was contributed by the farm. In addition, however, the value of the place as a home must be recognized, and on the commonly used basis of computing at 10 per cent of the investment, this would amount to \$10 a month, or about the same as the amount received from the sale of farm products.

The cash expended for operation and maintenance of the part-time farm in all regions averaged \$155. In addition to this outlay there was

expense for traveling to work, board while away from home, labor-union dues, and the like, totaling \$52 for the year.

The difference between the family gross cash income and these expenses is here designated as family net cash income. This \$574 is the money available for groceries, clothing, other household expenses, education, recreation, and interest and principal payments on indebtedness.

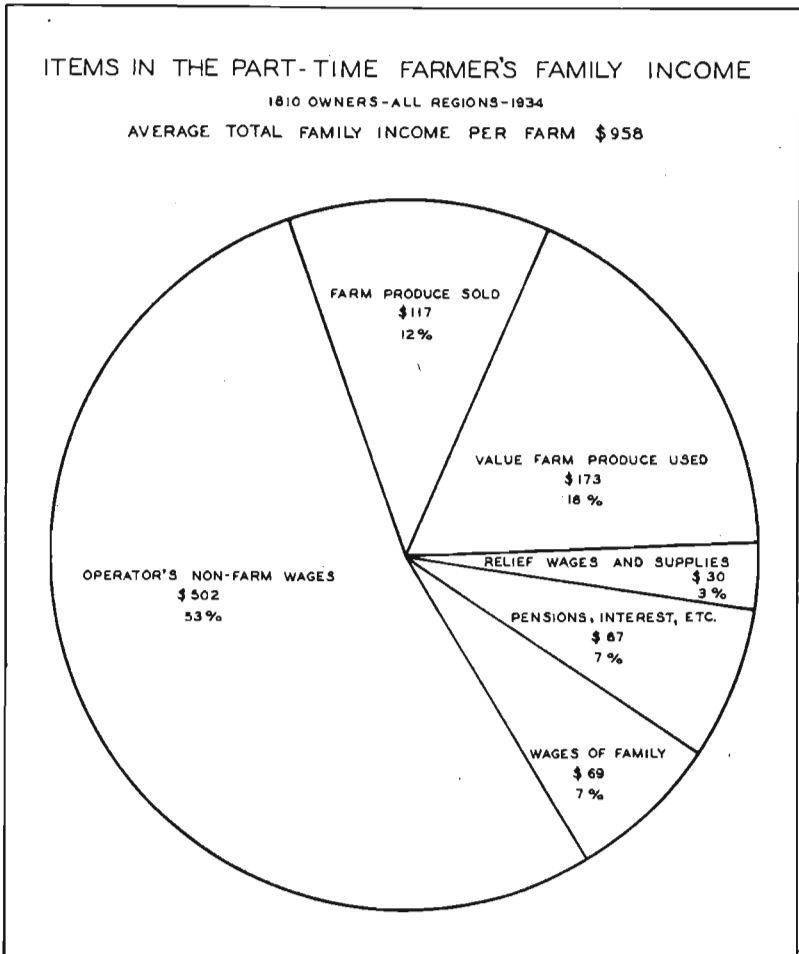


Figure 6. The items contributing to the family income of part-time farmers in Oregon.

As some of the families failed to receive an adequate amount of supplemental employment during the year, it was necessary for relief agencies to donate supplies to about 12 per cent of all families interviewed. The

Table 7. AVERAGE INCOME AND EXPENSE CONNECTED WITH PART-TIME FARMS IN OREGON, 1934
1,810 owners

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Receipts from farm products.....	\$109	\$121	\$127	\$105	\$117
Receipts from wages of the family	597	518	575	747	597
Receipts from miscellaneous sources	64	96	53	40	67
TOTAL CASH INCOME OF FAMILY....	\$770	\$735	\$755	\$892	\$781
Cash farm expense	\$165	\$166	\$150	\$127	\$155
Employment expense	46	29	82	60	52
FAMILY NET CASH INCOME.....	\$559	\$540	\$523	\$705	\$574
Value of farm produce used.....	\$140	\$157	\$224	\$179	\$173
Value of relief supplies used.....	9	2	3	3	4

total value of these supplies was estimated at \$7,594, or an average of about \$4 for all families in the study.

While it is apparent that the family's cash needs would be considerably greater without the assistance of the farm production, it is usually the amount of outside employment that determines the purchasing power and standard of living of these families.

The family net cash income of renters amounted to only \$420 per family, as compared with the \$574 for owners (Table 39, Appendix). All tenants paid cash rent except 5 who were share renting, 11 who obtained free use of their places, and 6 who worked out their rent by improving the property. The average rent paid for the year was \$117. Practically all items of cash expense, excluding rent, were somewhat smaller for the tenant than for the owner-operator.

Farm income and expense. The volume of commercial production achieved on part-time farms in Oregon is almost negligible (Figure 7). In all regions more than half of the produce was used at home. The average value of farm products in the Coast Region was considerably larger than in any of the other areas, while the Portland Region had the least. Despite the smaller production, however, this latter area had the heaviest expense, largely owing to the purchase of much of the livestock feed used.

The fact that the actual sale of products scarcely exceeded the cash expended for farm operation should be reassuring to the people who fear that the increasing number of such small holdings is adding greatly to the surplus of farm production. As a matter of fact the part-time farmer is often a customer of his commercial farmer neighbors. Much of his expense is for livestock feed, fertilizer, and machine or man labor in planting and harvesting his small acreage of crops.

Dairy products constitute nearly 40 per cent of the total value of farm products used by the family, while the orchard and garden, including home-canned foods, contributed another 40 per cent (Table 8). The farms of the Coast Region produced more dairy and vegetable products for home use than those of other areas, averaging \$84 and \$59, respectively. They also sold more dairy products but fewer vegetables.

Cash receipts from eggs, which amounted to \$38 a farm, when combined with cash receipts from sale of cull hens exceeded those from all other enterprises. Fruits and vegetables combined ranked second with an

average of \$38. Farms of the Valley and Irrigated regions had receipts of \$50 and \$41, respectively, from these crops, while an average of only \$22 worth was sold from farms of the Coast Region.

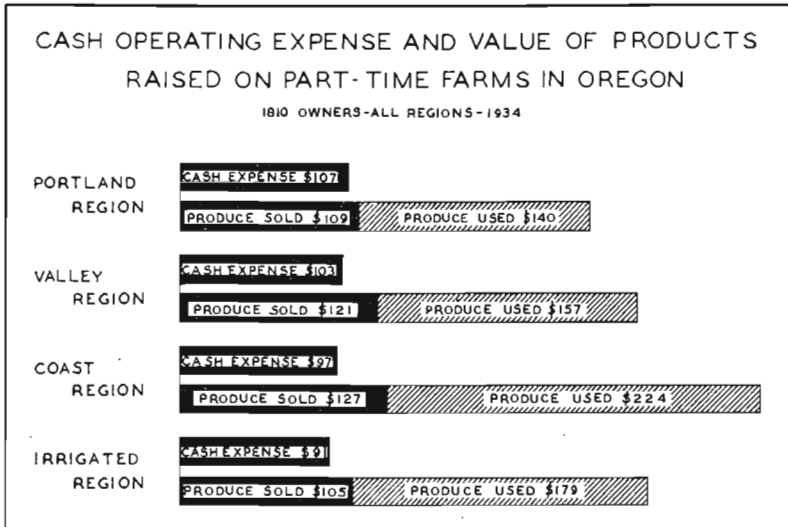


Figure 7. The value of use of house by the family (estimated at an average of \$10 a month) is not included under farm production, nor does cash operating expense include property taxes, insurance, and repairs. These items of expense, amounting to \$53, are largely against the home, and are therefore comparable to similar items on city property of equal value.

Table 8. AVERAGE VALUE OF FARM PRODUCTS USED AT HOME AND SOLD
1,810 owners

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
<i>Products used at home</i>					
Milk,* butter, and cheese.....	\$52	\$67	\$84	\$71	\$68
Vegetables and fruits.....	35	37	59	50	45
Eggs.....	18	18	25	22	20
Home produce canned.....	23	25	24	18	23
Meat products.....	8	9	14	16	11
Fuel.....	4	1	18	2	6
TOTAL VALUE PRODUCTS USED.....	\$140	\$157	\$224	\$179	\$173
<i>Products sold</i>					
Milk, butter, and cheese.....	\$ 17	\$ 23	\$ 48	\$ 18	\$ 27
Vegetables and fruits.....	34	50	22	41	38
Eggs.....	44	40	38	29	38
Meat products.....	8	4	5	6	6
Fuel.....	1	1	4	0	1
Field crops.....	3	3	2	8	4
Other farm produce.....	2	0	8	3	3
TOTAL VALUE PRODUCTS SOLD.....	\$109	\$121	\$127	\$105	\$117
VALUE OF ALL FARM PRODUCTS.....	\$249	\$278	\$351	\$284	\$290

*Farm prices were applied to all produce raised, excepting the whole milk consumed, which was generally valued at a bottled milk price ranging from 5 to 10 cents a quart, averaging about 7½ cents. The people interviewed with the exception of the Coast group, felt that they were justified in assuming this value, for if they were not keeping a cow they would be buying milk at a retail price.

Practically every part-time farmer produced some products for home use. More than one fourth of them, however, had nothing to sell and another 48 per cent sold less than \$150 worth. Only 26 per cent sold more than \$150 worth during the year (Figure 8).

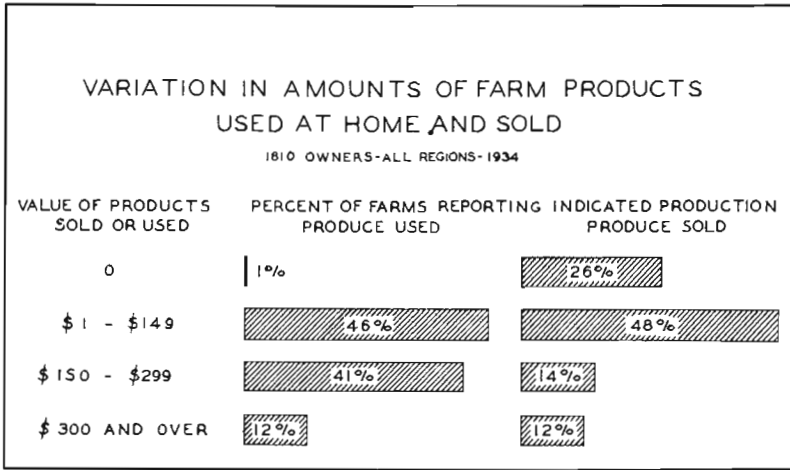


Figure 8. More than one fourth of the part-time farmers had no cash receipts from the place. An equal proportion sold more than \$150 worth of farm products during the year.

Of the \$155 total cash farm expense, \$69 or 45 per cent was for feed and other livestock expense (Table 9). Among the 1,618 part-time farm owners who kept livestock 91 per cent reported some cash expenditures for it, while 9 per cent had none. The average amount spent for livestock and feeds by those who kept livestock was \$84; in the Portland Region, \$97; in the Valley Region, \$80; in the Coast Region, \$84; and in the Irrigated Region, \$73. Besides the purchase of feeds for poultry and other livestock this item of farm expense includes the purchase of baby chicks, payment of breeding fees, veterinary services, and medicines.

Table 9. AVERAGE CASH FARM EXPENSES
1,810 owners

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Taxes on part-time farm.....	\$37	\$32	\$38	\$21	\$33
Seeds and plants.....	6	6	9	7	7
Livestock and feed.....	76	69	70	56	69
Insurance on buildings.....	8	7	5	5	7
Machine and labor hire.....	16	17	9	12	14
Repairs.....	13	24	10	10	15
Water for farm use*.....	1	1	1	9	2
Fertilizer.....	2	2	2	1	2
Marketing expense.....	4	5	4	3	4
Electricity for farm use*.....	1	2	1	2	1
Other expense.....	1	1	1	1	1
TOTAL CASH FARM EXPENSE.....	\$165	\$166	\$150	\$127	\$155

*Does not include city water and electricity used in the home.

Practically all field and garden seed is purchased each year, and fruit trees and berry plantings for replacements are included here as expense. Setting out of an entire orchard, however, was considered as a new investment and not an operating expense.

Water expense for the farm is almost entirely for irrigation purposes, and the charge for electricity is for pumping water and lighting the poultry house and the barn. Marketing expense includes cost for containers, trucking, and inspection or license fees. The items of property taxes, insurance, and repairs on buildings are comparable to housing costs prevailing in cities for like investments. Taxes were lowest in the Irrigated Region, where they averaged only \$21, and were highest in the Coast and Portland regions, where they were \$38 and \$37, respectively.

An average cash farm operating expense of \$94 was reported by tenants, as compared with the \$102 average of the owner-operators. In addition to this amount the tenants paid an average of \$117 rent, or a total cash expenditure of \$211 as compared to the \$155 paid by the owner-operators for both operation and maintenance. The latter, however, have also to consider the value of their investment, some of which is still costing them cash outlay for interest.

Supplemental employment. The average amount received for the year from supplemental employment by the part-time farm owners was \$502. Twenty-one per cent of these men, however, had no supplemental employment whatever during the year, 32 per cent earned less than \$500, and 47 per cent earned more than \$500 each while working off the place (Figure 9).

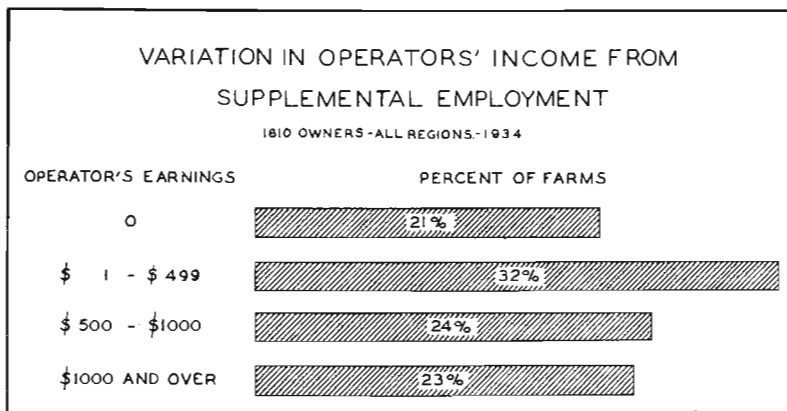


Figure 9. As wide variations occur in the amount of supplemental employment obtainable by different persons, their part-time farm requirements necessarily vary accordingly.

The average income from supplemental employment of those operators who worked was \$637 for the year or \$21 a week. The Portland Region with \$23 had the highest average wage, and the Valley Region with \$19 had the lowest.

Among the 1,425 owner-operators who reported outside employment, 571 were occupied 40 weeks or more during the year, or practically full

time. The part-time employment occurred chiefly in the summer and was lowest in the winter season (Figure 10).

The Portland Region, with 73 per cent of the cooperators employed, had the lowest proportion of employment, while the Irrigated Region with 85 per cent had the highest (Table 40, Appendix). The latter also exceeded all other regions in the number of weeks of employment reported for the year, having an average of 35 for those having work, whereas in the Coast Region the average was only 27 weeks. The part-time farmers of the Irrigated Region, leading all groups in the amount of employment and annual earnings received, were considerably younger than those in the other regions and more concerned with their jobs than with farm production for the market.

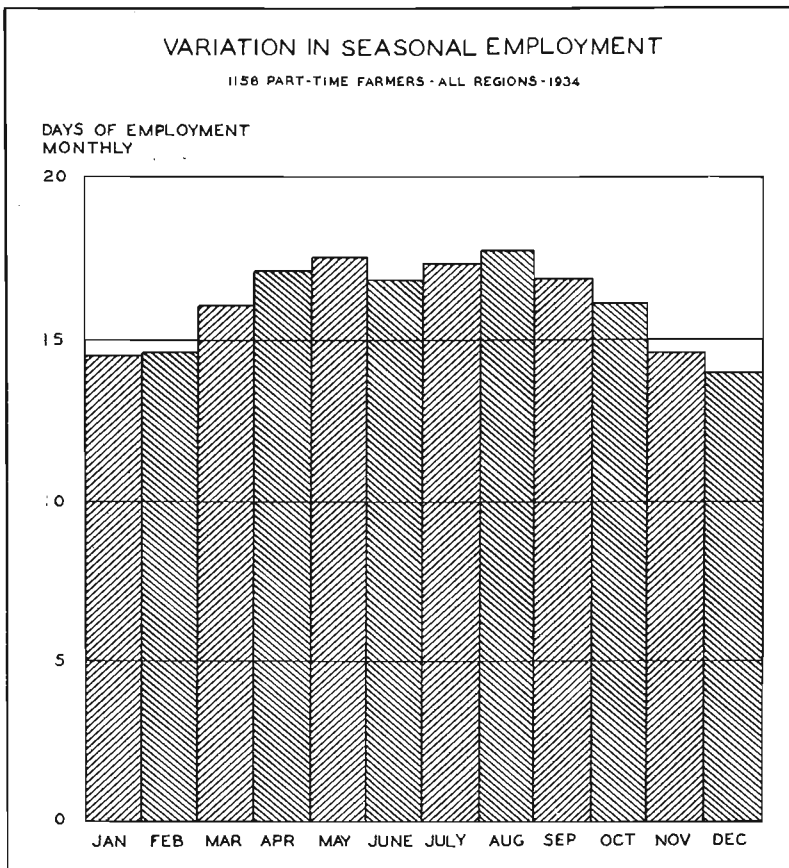


Figure 10. Part-time employment for persons living in rural communities is most common in the summer months. Eighty-one per cent of the owners who had employment gave an approximate seasonal distribution of it.

The annual income received from the supplemental employment of members of the family other than the operator averaged \$69 for all farms in the survey; \$57 for the Portland Region; \$64 for the Valley Region; \$88 for the Coast Region; and \$68 for the Irrigated Region. Employment obtained by the wife of the operator usually consisted of teaching school, office work, domestic service, and sometimes harvesting jobs. The children generally engaged in picking hops and berries, cannery work, and similar employment. It was not uncommon to find that where the son or daughter of the operator had practically a full-time position he or she was interested in eventually taking charge of the property and accepting this mode of living.

In addition to the regular employment of the operator and members of his family 18 per cent of the cooperators or members of their families obtained relief employment, averaging 11 weeks. Nearly 5 per cent of all the families had only such employment.

About 12 per cent of the families visited received relief supplies averaging \$34 in value for the year for those reporting. The usual allotment was about \$2 worth a week. Families in the Portland Region apparently had the most need for such supplies, 19 per cent obtaining an average of \$50 worth each. In Multnomah county alone only 22 families or 18 per cent of the total number reported getting supplies, but they received an average of \$100 worth each. In the Valley and Irrigated regions 7 per cent of the families received supplies, averaging \$23 and \$26 worth, respectively, while in the Coast Region 17 per cent received an average of \$19 worth. Lane county apparently did not offer this type of relief help.

These figures, representing a considerable group of people who were on a very low annual-income basis, are worthy of careful study. While it is true that the function of relief projects was not entirely confined to providing employment for needy people, as indicated by the presence of this item in the higher income groups, it may be assumed that much of the 3,647 weeks of relief employment obtained among these 326 families was essential to maintenance of a minimum standard of living during the year 1934.

Sorting the records of the Portland Region, where relief demands were largest, according to amount of relief obtained, indicates that the families receiving the minimum of relief work and supplies had a total income in cash and relief supplies of only \$313 a year or \$26 a month (Table 41, Appendix). This amount provided for paying of farm and travel expense and presumably furnished a living, but there is no specific information as to the amount of financial delinquency incurred for personal or living expenditures. As a careful check on the status of all these families, however, indicates virtually universal satisfaction with conditions when compared with those of city residents, presumably the situation generally was satisfactory.

The group of people getting the largest amount of relief included families of large size, those having excessive amounts of illness, and those where the wage-earner was steadily employed, as in the C.C.C. service, or as foreman of a relief crew. It is quite obvious that the contributions of the farm to the living were of tremendous significance to many of these families and a real help to the relief agencies in meeting the emergency in their respective communities.

Expenditures connected with supplemental employment include the travel cost of the operator in going to and from his work, the travel cost of other members of the family in going to their work, cost of board while working away from home, and fees such as accident and health insurance assessments, labor-union and other organization fees, and licenses of various kinds. On the basis of all part-time farm owners in the study, the amount expended for travel to work averaged \$29, travel cost of the other members of the family \$3, and the average for other items connected with the supplemental employment, \$20, or a total of \$52 (Table 42, Appendix).

Miscellaneous income. Cash income obtained from other sources than the land, supplementary employment, or relief agencies, was reported by 412 families or more than 22 per cent of the total number. It averaged \$293 per farm reporting such income, or \$67 each for all records taken (Table 43, Appendix). In the Valley Region 30 per cent of the cooperators reported miscellaneous income averaging \$320 each; in the Portland Region 21 per cent had an average of \$296; in the Coast Region 22 per cent reported \$233; and in the Irrigated Region 13 per cent reported an average of \$311.

While a fairly large proportion of these families had apparently accumulated some capital besides that represented in their homes, particular attention should be drawn to the fact that the 78 per cent having no miscellaneous sources of income were entirely dependent upon income from a job and from the farm for their livelihood and for the means of safeguarding their property. Only 10 admitted using from reserves for living purposes. Sales of hand-made goods were reported by only 14 persons, but in a few instances these amounted to as much as \$100. Articles made at home for market included bed quilts, hand-painted pictures, home-made bread, fish nets, and furniture.

FACTORS AFFECTING SUCCESS

Amount of supplemental employment. Those operators with little or no regular supplemental employment reported no more farm production than those who were employed for a larger portion of the year (Table 10).

Table 10. CASH INCOME DEPENDS ON SUPPLEMENTAL EMPLOYMENT
1,810 owners

Items	No supplementary employment	Operator employed 1 week to 29 weeks	Operator employed 30 weeks and over
Number of farms.....	386	699	725
Average number of weeks operator was employed.....	0	13	46
Average number of persons in family.....	3.1	3.5	3.8
Operator's average earnings.....	0	\$271	\$993
Earnings of other members in family.....	\$ 73	63	73
Sales of farm products.....	142	127	94
Miscellaneous income.....	166	49	31
Cash relief.....	56	32	4
TOTAL CASH RECEIPTS.....	\$437	\$542	\$1,195
Cash farm expense.....	\$158	\$151	\$156
Cash employment expense.....	9	37	89
FAMILY NET CASH INCOME.....	\$270	\$354	\$950

This is an indication of the primary dependence of the part-time farmers upon supplementary employment for their cash income. Even when the employment fails, the farms are too small to produce much cash return.

Distance to work. The distance from home to place of employment did not seem to affect the amount of work obtained (Table 11). Those

Table 11. THE PART-TIME FARMERS WHO RECEIVED THE BEST WAGES LIVED FARTHEST FROM THEIR PLACE OF EMPLOYMENT
1,810 owners

Items	Work near home	Work less than 3 miles from home	Work 3 miles to 9 miles from home	Work more than 9 miles from home
Number of farms	631	471	531	177
Average number of miles to work.....	0	1.4	4.9	14.4
Percentage of operators satisfied with location	92%	96%	94%	95%
Operator's average employment (weeks)	10	31	30	31
Operator's average earnings	\$220	\$598	\$670	\$789
Travel expense to work.....	0	\$ 22	\$ 46	\$ 91

with the better wages apparently were willing to reside farther from the site of their employment. The operators who traveled more than 9 miles to work estimated their cost of travel for the year at \$91, or about 12 per cent of the wages received. More than half of this group was in the Portland Region.

Size of farm. While the larger farms had an advantage in the volume of sales reported, the net difference was not great enough to provide satisfactorily for the family without some earnings from other sources (Table 12).

Table 12. PART-TIME FARMS ARE TOO SMALL TO PERMIT MUCH PRODUCTION FOR MARKET
1,810 owners

Items	Under 25 weeks employment		25 weeks employment and over	
	Under 5 acres in farm	5 acres and over in farm	Under 5 acres in farm	5 acres and over in farm
Number of farms.....	479	507	484	340
Number of weeks operator was employed	8	8	43	40
Number of acres in farm.....	2	20	2	17
Number of persons in family.....	3.3	3.3	4.6	3.9
Sales of farm products.....	\$ 89	\$179	\$ 57	\$151
Operator's earnings from employment	131	161	953	879
Earnings of others in family.....	71	61	72	66
Miscellaneous income	98	96	24	39
TOTAL CASH INCOME *.....	\$389	\$497	\$1,106	\$1,135
Cash farm expense	122	183	121	208
Employment expense	19	31	77	93
FAMILY NET CASH INCOME*.....	\$248	\$283	\$ 908	\$ 834

* Excludes relief receipts.

Quality of land. The good soils appear to have an investment advantage over the lower-grade soils. While the farms with good soil are worth

\$14 an acre more at present than the combined cash outlay made for the land and its development, the lowest-grade lands are considered worth \$48 less than the cost to their owners (Table 13). In buying a part-time farm it is important to know that good soil is being obtained.

Table 13. GOOD SOIL IS THE BEST INVESTMENT
1,810 owners

Items	Grade of soil reported		
	Good	Fair	Poor
Number of part-time farms.....	1,153	518	139
Acres of land in cultivation per farm.....	4.0	4.1	2.7
Cost of land per acre when acquired.....	\$324	\$303	\$363
Cash cost per acre for land improvement.....	10	12	15
TOTAL CASH COST PER ACRE FOR THE LAND.....	\$334	\$315	\$378
Estimated value of land at present.....	\$348	\$291	\$330
NET GAIN IN VALUE OF LAND SINCE PURCHASE.....	\$ 14	—\$ 24	—\$ 48

Amount of livestock. On the part-time farms where more livestock was kept, the farm contribution to the family living was greater and more cash income was received from sale of farm products (Table 14). Livestock, however, usually requires more acreage and equipment and some cash expenditures for feed. The farms having no livestock had an average area of 4 acres, while those with the most livestock had an average area of 19 acres.

Table 14. RELATION OF VALUE OF LIVESTOCK KEPT TO THE AMOUNT OF FARM PRODUCTION AND SIZE OF PART-TIME FARMS
1,810 owners

Items	Value of the livestock inventory				
	None	\$1-\$50	\$51-\$100	\$101-\$150	Over \$150
Number of part-time farms.....	193	627	475	218	297
Average value of livestock kept....	0	\$ 26	\$ 73	\$123	\$268
Size of part-time farms (acres).....	4	5	10	16	19
Value of products used.....	\$ 51	\$132	\$193	\$228	\$243
Value of products sold.....	47	94	80	157	320
TOTAL FARM PRODUCTION.....	\$ 98	\$226	\$273	\$385	\$563
Cash farm expense.....	69	102	146	195	303
NET VALUE OF FARM PRODUCTION	\$ 29	\$124	\$127	\$190	\$260

Although many part-time farmers have sufficient experience and patience to handle considerable livestock successfully on an intensive basis, the survey indicates that much of the dissatisfaction or disappointment expressed by occupants of these small farms may be traced to their failure in handling poultry or dairy enterprises successfully on a commercial scale.

It is significant that the value of farm products used at home changed very little as the average livestock inventory increased beyond \$73. Apparently any substantial increase in value of livestock inventory over this amount does not materially increase the contribution to family living, but merely increases volume of sales.

Chickens were the most common type of livestock, being found on 78 per cent of the farms. Of the farms with chickens, however, only 8 per cent

had more than 100 hens (Table 44, Appendix). When the poultry unit exceeds 100 hens it approaches the point where feed costs are a major consideration and experience and systematic care are essential if serious losses are to be avoided.*

INDUSTRIES EMPLOYING RURAL LABOR

As explained in the first part of this bulletin, a second phase of the study was devoted to a survey of industries that employ rural labor, or part-time farmers. Reports were obtained from 216 industrial establishments that employed during 1934 a total of 3,809 workers who lived on small farms or subsistence homesteads. These reports were obtained in personal interviews with the officials of the various industries.

The industries were selected at random by the survey enumerators in the various localities, effort being made to obtain reports from all industries in the locality that used rural labor. The number of each type of industry that was obtained in each region, and a comparison with the total number of each kind of industry in the state, according to the 1930 Census, are shown in Table 15. Some additional reports were obtained from industries that did not employ rural labor, but these have not been included in the tabulations.

Table 15. TOTAL NUMBER OF INDUSTRIES IN OREGON, NUMBER AND PERCENTAGE INCLUDED IN THE SURVEY, AND THEIR LOCATION

Industry	All Oregon industries*	Industries included in the survey					
		Total number	Per-centage of all in Oregon	Number in region indicated			
				Portland Region	Valley Region	Coast Region	Irrigated Region
			<i>Per cent</i>				
Sawmills, woodworking..	749	108	14	26	46	31	5
Fruit canneries, packers....	77	18	23	2	11	3	2
Fish canneries, packers....	19	10	53	.....	.....	10	.....
Paper and pulp mills	13	4	31	2	2	.....	.....
Creameries, dairies	142	24	17	5	8	6	5
Feed, seed	67	16	24	6	7	.....	3
Meat packing	43	4	9	.....	4	.....	.....
Sand, gravel, brick, tile..	29	6	21	.....	5	.....	1
Textile mills	51	4	8	.....	4	.....	.....
Machine shops, foundries	206	15	7	4	5	5	1
Leather goods factories..	19	3	16	2	1	.....	.....
Printing houses	293	4	1	.....	4	.....	.....
All others	755	.....	.....	.....	.....	.....	.....
All industries	2,463	216	9	47	97	55	17

* 1930 Census of Manufacturers, Vol. III, pages 433-440.

The industries included in the survey comprise 13 per cent of similar industries in the state, and 9 per cent of all industries. From the data obtained from part-time farmers as to their sources of employment, it is estimated that the industries included in the survey furnish between one third and one half of all industrial employment of part-time farmers in Oregon.

Types of industries. Fifty per cent of the industries that were found to be employing rural labor were sawmills, planing mills, box factories, and

*For further details see Station Bulletin 287, *Cost and Efficiency in Commercial Egg Production in Oregon*, Oregon Agricultural Experiment Station.

similar establishments. The next most numerous groups were creameries and dairies, fruit canneries and packing plants, and fish canneries and packing plants.

The corporation was the form of business organization most frequently found among the industries studied, 57 per cent being of this type. About 23 per cent were individually owned and operated, 15 per cent were partnerships, and 5 per cent were cooperatives and mutual corporations (Table 45, Appendix). More corporations were found among the special manufacturing industries, such as machine shops and iron foundries, printing houses, paper and pulp plants, and textile mills, while fewer corporations and more individually owned industries were found among the sawmills and woodworking factories.

Capitalization of the industries that were studied varied from an average of \$16,000 each for the gravel and clay products industries to more than \$2,000,000 each for the paper and pulp mills (Table 45, Appendix).

The average number of employees and average annual value of production for the industries studied are not strictly comparable with similar data for all industries from the 1930 Census, because the data were compiled by different methods and are for different years. Such a comparison indicates, however, that although some are larger than average and some smaller, the industries studied are on the whole reasonably representative of Oregon industry (Table 46, Appendix).

Extent of employment of rural labor. The 216 industries included in the study employed a total of 3,809 workers who lived on small farms or subsistence homesteads. Of these workers, 2,071, or 54 per cent, were employed in sawmills and other establishments in the lumber industry, and 970, or 25 per cent, were employed in fruit canneries and packing plants (Figure 11 and Table 16).

Only 16 per cent of the industries employed part-time farmers entirely, 84 per cent employing workers of both farm and city residence. A larger proportion of sawmills than of any other group of establishments depended on rural labor entirely. Nearly four fifths of the concerns using all rural labor were in the lumber and fruit-canning industries.

In this connection it is significant to note the variation in the proportion of employees of farm and non-farm residence found in different kinds of industries. The lumber, fruit-canning, feed and seed, and gravel and clay products industries used the largest proportions of rural labor, while paper and pulp mills, textile mills, machine shops, and printing houses used the smallest (Table 47, Appendix).

The fact that such industries as sawmills, canneries, and clay products plants use larger proportions of rural labor than machine shops, paper and pulp mills, and textile plants is probably owing to two general reasons: (1) machine shops, paper and pulp mills, and textile plants are usually larger establishments and are concentrated in or near larger cities, while sawmills, planing factories, and canneries are more local in character and in Oregon are often found in small villages or even in the open country; (2) machine shops, paper pulp plants, and printing houses require more highly skilled labor, which is less plentiful in rural areas than the more common types of labor used in sawmills, planing factories, and canneries. The more skilled types of labor receive higher wages and therefore have less economic necessity to engage in part-time farming.

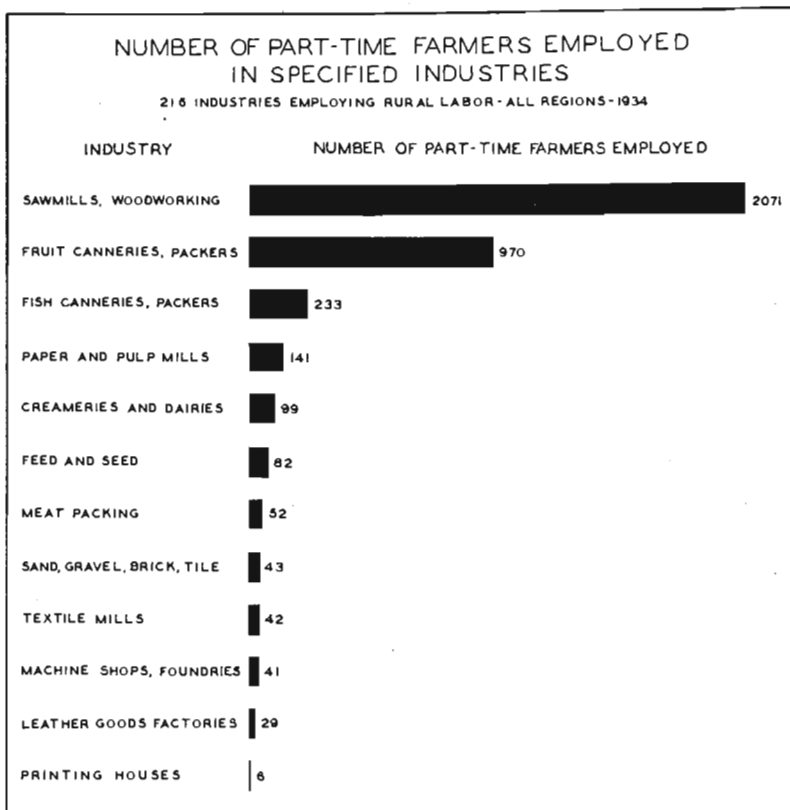


Figure 11. Sawmills, woodworking plants, fruit canneries, and packing houses furnish by far the most employment for Oregon part-time farmers.

Table 16. CLASSIFICATION OF EMPLOYEES IN 216 INDUSTRIES EMPLOYING RURAL LABOR

Industry	Number of industries employing rural labor	Number of industries in the survey	Employees living on farms			Employees living in cities		
			Total number	Per-centage part-time	Per-centage of women	Total number	Per-centage part-time	Per-centage of women
Sawmills, woodworking..	21	108	2,071	27	....	5,605	17	2
Fruit canneries, packers	6	18	970	90	53	2,032	93	62
Fish canneries, packers..	1	10	233	99	7	781	97	20
Paper, pulp mills .....	....	4	141	....	....	1,239	....	1
Creameries, dairies	1	24	99	37	6	352	31	7
Feed, seed	2	16	82	70	....	98	31	1
Meat packing .....	....	4	52	80	54	309	90	65
Sand, gravel, brick, tile..	1	6	43	72	....	54	57	....
Textile mills .....	....	4	42	....	38	262	21	30
Machine shops, foundries	1	15	41	20	....	277	9	....
Leather goods factories..	1	3	29	....	....	54	16	2
Printing houses .....	....	4	6	....	....	55	....	16
All industries	34	216	3,809	45	15	11,118	37	16

Of all rural labor employed in the industries studied 15 per cent were women (Table 16). More than 85 per cent of the female employees were in fruit and fish canneries and packing houses. This is a characteristic type of employment for women and girls in Oregon during summer months, particularly in the Willamette Valley, where many local fruit and vegetable canneries and packing houses operate.

Employment of rural labor is seasonal. In the industries studied 45 per cent of the employees living on farms were employed only part-time (Table 16). This is a difficultly part-time farmers may expect in seeking sufficient supplemental employment in Oregon's industries to meet cash-income requirements of their families. The fruit and fish cannery, meat packing, and clay products industries in particular offer chiefly part-time employment.

Employment in fruit canneries in the summer and fall is ten to twenty times that during the winter and spring seasons. In the case of fish canneries and packing houses, spring, summer, and fall employment is from two to four times that of the winter season (Table 17). Sawmills and

Table 17. SEASONAL NATURE OF EMPLOYMENT IN INDUSTRIES USING RURAL LABOR

Industry	Number of industries reporting	Number of employees in each season expressed as percentage of number in winter season			
		Spring	Summer	Fall	Winter
		<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Sawmills, woodworking.....	105	120	122	122	100
Fruit canneries, packers.....	18	246	995	1993	100
Fish canneries, packers.....	10	267	393	243	100
Paper, pulp mills.....	4	105	93	100	100
Creameries, dairies.....	22	115	120	110	100
Feed, seed.....	15	79	84	122	100
Meat packing.....	4	100	100	100	100
Sand, gravel, brick, tile.....	6	245	260	245	100
Textile mills.....	4	100	107	107	100
Machine shops, foundries.....	15	108	117	108	100
Leather goods factories.....	3	100	100	100	100
Printing houses.....	4	100	100	100	100
All industries.....	210	123	141	157	100

woodworking plants, clay-products industries, creameries, and dairies are less seasonal in character, and their employment during the spring, summer, and fall seasons is only from one to two times that of the winter season. Industries such as machine shops, paper and pulp plants, and textile mills vary only slightly in continuity of employment throughout the year. It is significant to note that the industries using the most rural labor are those most seasonal in character.

Not only are summer and fall the busy seasons for industries employing rural labor, but these seasons are also the time of year when part-time farmers are most needed at home to carry on farming operations. This conflict between outside employment and farming, however, is not as important as it first might seem. Since nearly half the part-time farms studied are less than 3 acres in size and few are more than 10 acres, farming operations do not demand the full time of the operator for very long in any season unless large amounts of highly intensive crops are grown. Besides raising a large garden the most important farm work is usually chores connected with a cow and a few hens, and in many instances all of this work is done by members of the family other than the principal wage earner.

POSSIBLE EXPANSION OF EMPLOYMENT FOR PART-TIME FARMERS

Considerable attention is being given at present to possibilities of establishing part-time farming communities, work centers, rural industrial communities, and similar projects. An essential requirement for most communities of this type is a source of employment for the residents that will provide sufficient cash income. In this connection the findings of this study in regard to the industries that are employing rural labor and the possibilities of expanding such employment are of interest.

Is rural labor satisfactory? In considering possible expansion of use of rural labor in industries, one of the first questions might well be whether such labor has proved satisfactory to the industries that have used it.

If daily wage rates can be used as an indication of the relative success in industry, part-time farmers are as successful and as satisfactory to their employers as workmen living in cities and towns. For all industries included in the survey the average daily wage paid workmen living on farms was \$3.68, while that paid employees of city residence was \$3.55 (Table

Table 18. COMPARATIVE WAGES OF FULL-TIME MALE EMPLOYEES LIVING ON FARMS AND IN CITIES OR TOWNS

Industry	Employees living on farms		Employees living in cities	
	Number of industries reporting	Average daily wages	Number of industries reporting	Average daily wages
Sawmills, woodworking	102	\$3.60	70	\$3.55
Fruit canneries, packers.....	14	2.70	13	2.65
Fish canneries, packers.....	10	4.30	9	3.81
Paper, pulp mills	4	3.29	4	3.29
Creameries, dairies	24	3.28	20	3.27
Feed, seed	16	3.76	14	3.55
Meat packing	4	3.50	4	2.75
Sand, gravel, brick, tile.....	3	3.55	6	3.52
Textile mills	4	3.56	4	3.50
Machine shops, foundries	15	4.80	15	4.52
Leather goods factories.....	3	3.28	2	3.00
Printing houses	4	4.94	4	4.63
All industries	208	\$3.65	165	\$3.55

18). The differences in wage rates paid the two groups of workmen are so slight in nearly all cases that they cannot be taken as representing differences in ability. Wages paid part-time employees were similar to those paid full-time workmen, and there was little difference in the wages paid to women employees of farm and non-farm residence.

Employees of machine shops and printing houses were paid considerably more a day than workmen in industries of less skilled character. Sawmills, box factories, canneries, and the like, which in earlier paragraphs were shown to use large amounts of rural labor, appear to be the industries paying the lowest wages. Especially is this true in case of fruit canneries, which apparently have the lowest wage scale of all the industries studied. Men and women workers of farm residence in canneries were paid \$2.70 and \$2.52 a day, respectively, while those of non-farm residence received wages of \$2.65 and \$2.35, respectively.

Not only was little or no wage discrimination found between the workers of farm and non-farm residence, but officials of the industries studied largely reported that there was no difference between the two groups of workmen in the degree of skill and satisfaction with which they were doing their work. Only 8 per cent reported that employees living on farms were less skillful and less satisfactory than those living in cities, while 17 per cent believed they were more skillful and 25 per cent believed they were more satisfactory in general than workmen of non-farm residence (Table 48, Appendix).

Among the executives interviewed who believed that employees living on farms were more generally satisfactory than those living in cities, some stated that rural workmen were more steady or stable, more dependable, and not so "rough." Several of the executives who reported no difference between workmen of farm and non-farm residence added that they would prefer rural labor. Others reported they would like to see their employees set up with their own homes on small tracts of land.

Adequacy of present labor supply. In answer to the question, "Is the local labor supply sufficient for your needs for skilled and unskilled labor?" not one negative answer was reported in the case of unskilled labor. In the case of skilled labor, executives of 26 industries, or 12 per cent of those who reported, stated that the local supply was sometimes inadequate to meet their needs (Table 19).

Table 19. NUMBER OF INDUSTRIES REPLYING AS INDICATED TO THE QUESTION, "IS LOCAL SUPPLY OF *Skilled* AND *Unskilled* LABOR SUFFICIENT TO MEET YOUR NEEDS?"

Industry	Unskilled		Skilled	
	Yes	No	Yes	No
Sawmills, woodworking	105	.....	92	13
Fruit canneries, packers	15	.....	14	1
Fish canneries, packers	10	.....	9	1
Paper, pulp mills	4	.....	3	1
Creameries, dairies	23	.....	21	2
Feed, seed	16	.....	15	1
Meat packing	4	.....	4	.....
Sand, gravel, brick, tile	6	.....	5	1
Textile mills	4	.....	4	.....
Machine shops, foundries	15	.....	12	3
Leather goods factories	3	.....	3	.....
Printing houses	4	.....	1	3
All industries	209	.....	183	26

Important economic factors and problems. Sixty-five per cent of the rural industries studied reported that competition in their fields of industry was severe, and an additional 23 per cent reported moderate competition (Table 49, Appendix). An especially large proportion of sawmills and woodworking factories, fruit canneries, paper and pulp mills, and manufacturers of dairy products reported that competition was keen or severe in their fields. This is significant when it is considered that these are the very types of industry in Oregon which use exceptionally large amounts of rural labor. Competition is a factor that should not be overlooked when artificial expansion of industries is being considered.

In reply to the question, "What are the principal problems of your industry or establishment?", by far the most frequently mentioned were low prices and lack of markets (Table 50, Appendix). Other difficulties

encountered were lack of capital, high overhead costs, and high shipping costs. Only 10 establishments reported poor labor supply as one of their principal problems, and 7 of these plants were machine shops and iron foundries which require skilled labor.

In answer to the question, "What are the most important factors to consider in choosing a new location for your industry or establishment?", adequate labor supply was not considered highly important, for only 43 officials reported this factor, while 110 mentioned nearness to raw materials, 58 reported low overhead costs, and 53 considered proximity to markets of first importance in choosing a new location for an industrial establishment (Table 51, Appendix).

Economic problems of industrial establishments must be given consideration when the fostering and artificial expansion of industries are contemplated. The fact that labor supply appears to be a very minor problem of industries in Oregon is significant in this connection.

If industries are to be fostered by rehabilitation agencies with the hope of furnishing more employment for relocated workers, it would seem desirable that they be new or undeveloped industries, with a promising future. In Oregon a good example is fiber flax. Part-time farmers could grow the crop as well as find employment in the processing plants and mills associated with this enterprise.

REACTIONS EXPRESSED BY PART-TIME FARMERS

This portion of the report conveys the chief comments and reactions of the part-time farmers interviewed toward their situation including the reasons they felt were responsible for their deciding to acquire the property; a comparison of living costs in town and country; the advantages and disadvantages of rural residence over city residence; mistakes made that could have been avoided; and their general satisfaction with prevailing conditions.

About half of the cooperators were emphatic in their assertion that the main consideration which prompted them to leave town or stay out of the city was a preference for rural life (Table 20). Next in importance

Table 20. PERCENTAGE OF FARMS REPORTING INDICATED REASONS FOR ACQUIRING A PART-TIME FARM
1,810 owners

Reasons given by the operator	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Preference for country life.....	50	55	44	40	48
Cheaper to live.....	21	23	45	48	33
Poor health.....	15	15	5	7	11
No job in city.....	11	4	5	3	6
Old age.....	3	3	1	2	2
	100	100	100	100	100

and closely linked with preference for country life is the belief that living costs are lower in the country. While health was given as the reason by 11 per cent of the families reporting, this answer in some instances referred to the concept of healthful surroundings rather than to a necessity for moving from the city on account of ill health or confinement. Lack of a job

seemed to carry most weight with people around Portland. Finally, the desire to get the children into the country where they could have opportunity for constructive work and play was frequently the basis for preference.

Since many part-time farmers included in this study had previously lived in cities they were somewhat familiar with the costs of living in both city and rural districts. They were asked to compare the amounts expended for the principal items of living with what they thought these items would have cost them in towns or cities of the same neighborhood. The majority of these families were convinced that the costs of groceries and clothing in the city were generally higher than in the country (Table 21). Living in the city apparently calls for better and more expensive clothing, especially for school children, and expenditures for food are higher because a larger portion of this item must be purchased.

Table 21. OPINIONS OF PART-TIME FARMERS AS TO COMPARATIVE LIVING COSTS ON THE FARM AND IN TOWN
1,810 owners

Items	Number of farmers reporting	Percentage of farms reporting			
		Higher cost on farm	Same cost	Lower cost on farm	Total
		<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Groceries	1,388	*	8	92	100
Clothing	1,324	*	28	72	100
Electricity	1,120	17	68	15	100
Water	760	28	30	42	100
Schooling	1,246	3	86	11	100
Recreation	1,244	*	52	48	100
Fuel	1,304	*	56	44	100

*Negligible.

Quite a number of cooperators, however, especially around Portland, felt that prices of groceries at small neighborhood stores were usually so much higher than prices in the downtown stores and public markets that the difference largely offset the advantages gained by producing part of the food supply at home. Many instances also were enumerated where the cost of electricity and city water were higher outside of towns than in the cities.

Advantages and disadvantages. It is of some interest at this point to consider the advantages of residing on small rural tracts of land. The advantages most frequently stated are as follows:

<i>Advantages of part-time farming</i>	<i>Number of families reporting the item</i>
Cheaper to live in country.....	1,273
More freedom and independence.....	393
Better for children.....	322
Healthier surroundings.....	319
Better selection of food.....	220
More security for later life.....	187
Something to do when not employed.....	129

Advantages and disadvantages stated naturally vary with the individual and with the individual property involved. What to one family appeals as an advantage compared to its previous status, may be nothing extraordinary at all to the neighbor, while a so-called disadvantage stated by the latter may be of no consequence in the standard of living desired by the former. Many of the disadvantages were mentioned by persons who, al-

though satisfied on the whole with their situation, were offering these frank remarks for the possible benefit they might render to prospective settlers. The disadvantages most frequently stated are as follows:

<i>Disadvantages of part-time farming</i>	<i>Number of families reporting the item</i>
Too far to city, work and school.....	351
Lack of city conveniences.....	122
Cannot sell surplus farm products.....	75
Lack of sufficient employment to make a living.....	70
Lack of cultural atmosphere, good schools, etc.....	53
Too hard work on farm or lack of time to operate.....	31

Some of the disadvantages are more or less regional in nature. In the Portland Region, for example, about 20 per cent of the families stated as the chief disadvantage the distance of the home from town or work. This complaint was not always actually a matter of distance or cost, frequently being the lack of travel facilities or the inconvenience to the housewife during the day because the employed member of the household had the family car in his possession. Some objection was voiced about the nuisance of getting to bus stations, the cost of bus fare, and the lack of electric train service since existing lines had discontinued operation. Only a few of these operators lived more than 4 miles from a store, although many of them traveled much longer distances to work (Table 11).

Because of the larger acreages and the scarcity of regular employment, the disposal of farm products was of real concern to the workers of the Coast Region. In the Irrigated Region, as in the Portland Region, very few of the part-time farmers lived more than 4 miles from a town. Many of them remarked that 4 miles was about the maximum distance they considered as a satisfactory location.

Some of the cooperators in the Irrigated and Coast regions mentioned the unpleasantness of traveling during bad weather and over muddy roads. A few were without some of the modern home conveniences, often because the individual could not yet afford the installation, though there were instances where the service was not available in the community. A comment frequently made in Central Oregon was that land not under an irrigation ditch was actually a liability to the owner.

In addition to the disadvantages listed above, a few mentioned crop failures, high cost of production, lack of interest by the wife or children in developing the place, absence of recreational facilities or leisure to enjoy such facilities, and inability to make contact with prospective employers.

Mistakes to be avoided. In discussing the matter of mistakes made in connection with acquiring and developing a part-time farm unit, less than 15 per cent of the owners acknowledged committing any at all. The ones mentioned are grouped as follows:

<i>Mistakes made</i>	<i>Number of operators reporting the item</i>
Paid too much for the property.....	95
Did not buy sufficient land.....	83
Bought poor land or poorly drained land.....	45
Working capital insufficient to develop place.....	45
Bought too much land.....	24

The supposition that owning a greater acreage would be desirable, invariably referred to shifting entirely from dependence on some employment to a full-time-farming basis on a relatively small acreage with intensive production methods. The desire for smaller acreages, mentioned by a

number of part-time farmers, was attributed to lack of time to operate the place satisfactorily in addition to holding a full-time job, or in a few instances to illness or death of the operator, leaving no one capable of properly managing the place for productive purposes.

In order to give a still better picture of experiences encountered, some of the individual mistakes mentioned are listed in detail as follows:

1. Buying the property instead of first renting for a few years to determine suitability both of the family and the property for this way of living.
2. Buying logged-off land.
3. Buying along a poor road or lane.
4. Buying too close to town where taxes are prohibitive.
5. Locating too far from town or employment, making transportation costly.
6. Failure to get a clear title to property.
7. Incurring a debt, and neglecting to pay it off when money was available.
8. Assuming too-high monthly installments, and too-high interest rate.
9. Remodeling old buildings, when modern structures should have been built.
10. Building too expensively before paying off the mortgage.
11. Delaying development of the place when money was available.
12. Buying a place with poor or no drinking water, or no irrigation water.
13. Should have planted fruit trees.
14. Should not have planted fruit trees.
15. Should have planted trees deeper.
16. Should have had gardening experience.
17. Should have had cows and a few hens instead of summer garden.
18. Should have had less livestock on the small acreage.
19. Should not have bought a team of horses.
20. Should have had a definite management plan.
21. Failure to fertilize the land.
22. Selecting enterprises for whose products there was no market.
23. Trying to raise deer and fancy hogs.
24. Locating permanently without regard for assured employment.
25. Beginning this project when too old; being too lazy; listening to poor advice.

That the part-time farm families are quite universally satisfied with their present location is shown in the preceding paragraphs, but further and even more conclusive evidence is contained in the summary of answers to the direct question of whether they are or are not content with the idea of living outside of the city:

	<i>Per cent</i>
Proportion of owners who are satisfied.....	94
Proportion of owners who are not satisfied.....	4
Proportion of owners who are still undecided.....	2
All owners	100

Of those who were not satisfied, some were poorly located as to soil or distance from town and work; some had good positions in town and did not need the help afforded by a part-time farm in reducing living costs; others were dissatisfied for personal reasons not connected with the place, while a few were apparently of the type that would be dissatisfied anywhere.

Among those who were undecided about the desirability of living on an acreage, the most common situation was that the husband liked it, but the wife considered it was for her either too lonely, involved too much drudgery, or offered too little recreation.

This mode of life, however, with which 94 per cent of the people concerned are satisfied, is deserving of more than passing attention. Consi-

tuted authorities have opportunity to render a real service by education of both settlers and sellers of rural property for "part-time farming" purposes; by careful investigation of locations for settlement from the standpoint of successful agricultural production, and the even more indispensable industrial possibilities of furnishing employment part of each year; and by offering or encouraging private capital to offer reasonable terms of down payment, amortization, interest, and extensions in connection with the acquisition of property designed almost entirely for habitation purposes.

The Klamath Falls development. According to the facts gathered in the Willamette Valley and Coast regions of Oregon the conclusion might be reached either that the part-time farming idea does not appeal to the younger persons or that they are not financially in a position to undertake the purchase of such property. The picture presented by the Irrigated Region, however, and Klamath County in particular, is quite different. Around Klamath Falls in recent years a veritable exodus has occurred of young and middle-aged people onto small garden tracts where many have even worked on "street improvement" in lieu of a down payment, acquired building materials cheaply from the sawmill which employed them, and then constructed their homes themselves during slack periods of the year.

As this large group of 180 families is typical of the most recent development among part-time farmers or decentralized industrial workers, averaging only $3\frac{1}{2}$ years on the present property, a resume of facts pertaining to this particular group is given here in the nature of a guide or standard of very recent accomplishment.

The average size of tracts acquired was 1.5 acres of which 1.2 acres was in cultivation. The value of this land when purchased was \$543, value of buildings was \$275, and cash spent subsequently on improvements amounted to \$543, or a total of \$1,361 cash investment in real estate. The down payment averaged \$205, and the indebtedness after $3\frac{1}{2}$ years of ownership is down to \$334 on a present valuation of \$1,569.

Of these 180 rural homes located an average distance of 3.4 miles from town and 4.6 miles from work, 163 had electricity, 134 had radios, 118 had running water, and 52 had bathroom facilities.

The livestock inventory amounted to \$65, and the farm tools were valued at only \$19. The total livestock found on these 180 part-time farms included 3 horses, 72 cows, 175 hogs, 5 goats, 5,066 hens, 37 other fowls, and 531 rabbits.

The average farm production was valued at \$218 for the year, \$147 of which was used at home and \$71 worth was sold. Garden, poultry, dairy, and swine contributed 99 per cent of the production. Cash expended for operation and maintenance of the place amounted to \$103.

Supplemental income of the family included \$756 earned by the operator from 33 weeks of employment, \$70 by other members of the family from 5 weeks of work, \$28 from 2 weeks of relief work, \$15 from investments, and \$4 worth of relief supplies. The balance left after deducting both the \$103 of cash farm expense and the \$64 of employment expense was \$924 in terms of money and produce used, in addition to the use of the house.

All but two of these 180 part-time farm owners were satisfied with their situation, enthusiastic about their economic status, and proud of their modest homes and their ability to produce a substantial part of the family living from the land they owned.

Appendix

DETAILED AND SUPPLEMENTARY TABLES (TABLES 22-51)

Table 22. PERCENTAGE OF PART-TIME FARMERS WITH SPECIFIC AGES
1,810 owners, 300 renters

Age group	Owners					Renters
	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Under 35	8	9	8	21	11	20
35-44	24	20	20	30	23	30
45-54	35	22	34	22	28	29
55-64	20	22	20	17	20	12
Over 64	13	27	18	10	18	9
	100	100	100	100	100	100

Table 23. PERCENTAGE OF PART-TIME FARMERS WITH INDICATED FARM EXPERIENCE BEFORE
ACQUIRING THEIR PRESENT PROPERTY
1,810 owners, 300 renters

Number of years previous farm experience	Owners					Renters
	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
None	39	27	36	24	31	17
1-6	10	6	8	13	9	12
6-12	15	16	24	25	19	20
12-18	9	10	11	13	11	23
Over 18	27	41	21	25	30	28
	100	100	100	100	100	100

Table 24. PERCENTAGE OF PART-TIME FARMERS WITH PREVIOUS HOME OWNERSHIP AS INDICATED
1,810 owners, 300 renters

Previous home ownership	Owners					Renters
	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
None	35	34	50	45	40	48
Farm home	13	25	20	17	19	19
City home	42	26	23	30	30	26
Both city and farm homes	10	15	7	8	11	7
	100	100	100	100	100	100

Table 25. NUMBER OF PART-TIME FARMERS IN CERTAIN OCCUPATIONS

Occupation	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Timber and sawmill workers.....	27	42	138	107	314
Fishermen	2	1	26	0	29
Building tradesmen	63	54	49	32	198
Common laborers	49	119	54	41	263
Mechanics and electricians.....	56	48	19	28	151
Retired farmers	6	66	6	16	94
Others retired	34	53	39	17	143

Table 26. PERCENTAGE OF FARMS REPORTING FARM LOCATION AND TYPE OF ROAD AS INDICATED
1,810 owners

Location	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
In rural surroundings.....	45	37	75	59	53
In suburban surroundings.....	55	63	25	41	47
	100	100	100	100	100
On paved road.....	38	39	27	19	31
On graveled road.....	55	56	62	44	55
On earth road.....	6	4	10	34	12
On private lane.....	1	1	1	3	2
	100	100	100	100	100

Table 27. AVERAGE DISTANCE TO TOWN OR WORK

1,810 owners

Distance	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>
To post office or store.....	3.5	2.0	3.7	2.9	3.0
To place of employment.....	7.9	3.2	6.3	4.2	5.2

Table 28. PERCENTAGE OF FARMS REPORTING INDICATED SIZE

1,810 owners

Size of farm	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Under 1½ acres.....	29	19	12	42	25
1½ acres to 3 acres.....	25	24	13	30	17
3 acres to 5 acres.....	22	21	9	14	11
5 acres to 10 acres.....	16	22	17	8	21
Over 10 acres.....	8	14	49	6	26
	100	100	100	100	100

Table 29. AVERAGE ACREAGE OF CULTIVATED LAND AND NON-CULTIVATED LAND,
AND TOTAL ACREAGE

1,810 owners, 300 renters

Use of land	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
<i>Owners</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Cultivated land.....	3.4	4.8	4.2	2.6	3.9
Non-cultivated land.....	1.2	0.8	20.7	1.5	5.8
TOTAL ACRES IN TRACT.....	4.6	5.6	24.9	4.1	9.7
<i>Renters</i>					
Cultivated land.....	3.3	4.5	5.2	4.1	4.2
Non-cultivated land.....	1.6	1.0	31.7	3.9	6.8
TOTAL ACRES IN TRACT.....	4.9	5.5	36.9	8.0	11.0

Table 30. PERCENTAGE OF FARMS REPORTING INDICATED QUALITY OF SOIL
1,810 owners

Quality of soil	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Good	69	70	41	75	63
Fair	24	24	45	23	29
Poor	7	6	14	2	8
	100	100	100	100	100

Table 31. NUMBER AND TYPE OF TRACTORS USED BY 112 OPERATORS WHO OWNED
SUCH EQUIPMENT

Type of tractor	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Garden tractors	21	17	3	8	49
Field tractors	11	22	8	4	45
Home-made tractors	5	2	9	2	18
Total	37	41	20	14	112

Table 32. SELLING METHODS USED BY 1,368 PART-TIME FARMERS REPORTING THIS ITEM*

Method of selling	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Number of farmers reporting.....	310	469	314	275	1,368
<i>Percentage of farmers reporting following methods of selling</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Direct to consumer.....	44	33	35	62	41
To dealers	27	32	51	23	33
To local stores	21	31	24	42	29
To cooperatives	12	30	20	3	18
Own roadside stands.....	3	2	2	3	2
Other methods	13	16	2	3	10

*Some part-time farmers used more than one method of marketing.

Table 33. PERCENTAGE OF FARMS REPORTING INDICATED CONDITION OF DWELLING
1,810 owners

Condition of dwelling reported	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Good	58	59	48	62	58
Fair	29	32	39	32	33
Poor	13	9	13	6	9
	100	100	100	100	100

Table 34. AVERAGE CAPITAL INVESTMENT IN PART-TIME FARMS
300 renters

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Land	\$1,301	\$1,200	\$1,072	\$1,004	\$1,171
Dwelling house	989	862	589	746	828
Other buildings	157	130	171	124	143
TOTAL REAL ESTATE.....	\$2,447	\$2,192	\$1,832	\$1,874	\$2,142
Livestock	\$ 75	\$ 75	\$ 110	\$ 94	\$ 84
Machinery	29	23	35	39	29
TOTAL CAPITAL INVESTMENT.....	\$2,551	\$2,290	\$1,977	\$2,007	\$2,255

Table 35. AVERAGE PRICES PAID FOR PART-TIME FARMS, AMOUNT OF DOWN PAYMENTS, SUBSEQUENT CASH OUTLAYS MADE FOR IMPROVEMENTS, AND PRESENT FINANCIAL STATUS REPORTED
1,810 owners

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Price paid for place.....	\$2,274	\$2,317	\$1,379	\$1,123	\$1,841
Cash spent on new buildings.....	907	744	825	646	783
Cash spent for other improvements.....	37	20	92	17	41
Total money cost of real estate....	\$3,218	\$3,081	\$2,296	\$1,786	\$2,665
Proportion of owners making a down payment.....	94%	94%	87%	98%	94%
Percentage of price paid down.....	35%	70%	65%	45%	41%
Average amount paid down.....	\$ 791	\$1,609	\$ 900	\$ 505	\$ 763
Percentage of places having debt	59%	43%	35%	40%	46%
Indebtedness of those reporting debt.....	\$1,252	\$1,197	\$796	\$679	\$1,032
Average present indebtedness, all farms.....	744	518	280	329	478
Average present equity.....	2,354	2,473	2,133	1,590	2,184
Present value of the real estate....	\$3,098	\$2,991	\$2,413	\$1,919	\$2,662
Percentage of owners reporting delinquent taxes.....	33%	15%	34%	29%	27%
Amount of delinquent taxes.....	\$ 78	\$ 58	\$ 116	\$ 54	\$ 81
Percentage of debtors delinquent in interest.....	14%	14%	20%	15%	16%
Amount of delinquent interest....	\$ 183	\$ 93	\$ 93	\$ 74	\$ 113

Table 36. EXPENDITURES OF 718 OWNER-OPERATORS WHO ACQUIRED BARE LAND, AND THE FINANCES INVOLVED IN DEVELOPING THEIR PROPERTIES

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Proportion of owners acquiring bare land.....	37%	28%	49%	53%	40%
Number of acres in tract.....	4.3	5.2	25.9	3.6	10.7
Down payment required.....	\$ 640	\$1,004	\$ 541	\$ 285	\$ 590
Price paid for the land.....	1,392	1,414	1,009	614	1,070
Cash cost of new buildings.....	1,553	1,680	1,156	933*	1,294
Cash cost of other improvements.....	68	52	143	25	75
TOTAL CASH OUTLAY FOR REAL ESTATE.....	\$3,013	\$3,146	\$2,308	\$1,572	\$2,439
Present value of property.....	\$3,140	\$3,180	\$2,465	\$1,821	\$2,590
Present debt on property.....	556	324	190	154	290

* In the Klamath Falls community 62 per cent of the part-time farmers interviewed had purchased bare land, averaging $1\frac{1}{2}$ acres each, at \$344 an acre, and spent only \$759 additional cash on new buildings, a total cash outlay of \$1,275 on the real estate.

Table 37. PERCENTAGE OF FARMERS REPORTING INDICATED SOURCES OF MONEY FOR PURCHASE OF PART-TIME FARMS
1,497 owners

Source of payment	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Savings.....	36	29	45	43	37
Current earnings.....	35	36	38	44	38
Sale of other property.....	21	23	7	9	16
Inheritance.....	4	7	3	1	4
Pension or bonus.....	3	2	2	2	2
Other sources.....	1	3	5	1	3
	100	100	100	100	100

Table 38. CREDIT AGENCIES USED, AVERAGE AMOUNT OF DEBT, MONTHLY INSTALLMENT, AND RATE OF INTEREST PAID
816 owners

Items	Local banks	Building and loan associations	Private individuals	Government agencies	All agencies
<i>Number of mortgagors using credit agency indicated:</i>					
Portland Region	10	39	155	51	255
Valley Region	11	15	168	49	243
Coast Region	4	23	89	27	143
Irrigated Region	15	33	111	16	175
All regions	40	110	523	143	816
Amount of debt.....	\$936	\$882	\$1,000	\$1,383	\$1,032
Rate of interest	7.0%	6.7%	6.0%	5.0%	6.1%
Number paying monthly	31	90	324	96	541
Average monthly payment*	\$ 16	\$ 17	\$ 17	\$ 14	\$ 16

* This monthly payment refers generally to payment on principal, but a few contracts either did not differentiate interest from principal, or stipulated no interest charges.

Table 39. AVERAGE INCOME AND EXPENSE ON RENTED PART-TIME FARMS IN OREGON, 1934
300 renters

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
Receipts from farm products.....	\$ 82	\$ 69	\$100	\$ 95	\$ 82
Receipts from wages of the family	473	587	507	602	548
Receipts from miscellaneous sources	49	32	46	47	41
TOTAL CASH INCOME OF FAMILY....	\$604	\$688	\$653	\$744	\$671
Cash farm expense.....	\$ 88	\$102	\$ 88	\$ 86	\$ 94
Rent	122	114	104	135	117
Employment expense	40	32	53	44	40
FAMILY NET CASH INCOME.....	\$354	\$440	\$408	\$479	\$420
Value of farm produce used.....	\$159	\$166	\$233	\$201	\$181
Value of relief supplies used.....	30	2	1	10	10

Table 40. SUPPLEMENTAL EMPLOYMENT OF PART-TIME FARM OPERATORS AND MEMBERS OF THEIR FAMILIES
1,810 owners

Items	Portland Region	Valley Region	Coast Region	Irrigated Region	All regions
<i>Operators employed</i>					
Number of operators employed	324	445	343	313	1,425
Number of weeks employed.....	30	29	27	35	30
Average annual earnings.....	\$693	\$562	\$567	\$765	\$637
<i>Other members of family employed</i>					
Number of families with other members employed	80	160	93	71	404
Number of weeks employed.....	26	20	26	24	23
Average annual earnings.....	\$311	\$226	\$408	\$154	\$309
<i>Families obtaining relief employment</i>					
Number of families obtaining relief work*.....	94	76	107	49	326
Weeks employed by relief agency	10	10	12	13	11
Average annual earnings from relief work	\$142	\$120	\$150	\$178	\$145

* "Relief" work refers to work offered by CWA, SERA, and CCC.

Table 41. COMPARISON OF SELF-SUSTAINING PART-TIME FARMERS WITH THOSE OBTAINING RELIEF
441 owners, Portland Region

Items	No relief obtained	Relief of \$1 to \$149	Relief of \$150 and over
Number of families.....	332	63	46
Average number of persons in family.....	3.2	3.5	3.8
Employment earnings of head of family.....	\$632	\$156	\$110
Employment earnings of others in family.....	67	21	38
Miscellaneous income	81	12	6
Sale of farm products	126	58	61
TOTAL CASH INCOME FROM REGULAR SOURCES.....	\$906	\$247	\$215
Cash received for relief employment.....	0	44	231
Value of relief supplies obtained.....	0	22	60
TOTAL CASH AND RELIEF RECEIPTS.....	\$906	\$313	\$506
Total cash farm and employment expense.....	239	119	137
NET CASH FAMILY INCOME*.....	\$667	\$194	\$369
Value of farm products used at home.....	143	145	113

*Includes the value of relief supplies received.

Table 42. TRAVEL COSTS AND OTHER EMPLOYMENT EXPENSES
1,425 employed operators, 404 families having other members employed

Items	Number of farms reporting item indicated	Number of farms which had cash employment expense	Average expense per farm reporting this item	Average employment expense for all farms
Travel to work by owner.....	1,157	976	\$53	\$29
Travel of others in family.....	181	136	39	3
Other employment expense	451	451	81	20

Table 43. MISCELLANEOUS INCOME REPORTED BY PART-TIME FARMERS
1,810 owners

Sources of income	Number of farms having the item	Amount per farm for farms having the item	Average per farm for all farms
Pensions	108	\$428	\$25
Rent from other property.....	124	188	13
Interest from savings.....	100	187	10
Roomers and boarders.....	57	242	8
Compensation insurance	14	400	3
Used from reserves.....	10	335	2
Hand-made goods	14	67	1
Other sources	22	238	5
TOTAL.....	412	\$293	\$67

Table 44. VARIATION IN SIZE OF FLOCKS ON 1,414 FARMS THAT KEPT CHICKENS
All regions

Number of hens in flock	Number of flocks	Per-centage of flocks	Average number of hens in flock
		<i>Per cent</i>	
1 to 25	811	57	18
26 to 50	364	25	39
51 to 100	136	10	78
100 to 200	67	5	158
200 to 300	24	2	275
Over 300	12	1	423
TOTAL.....	1,414	100	42

Table 45. BUSINESS ORGANIZATION AND CAPITALIZATION OF INDUSTRIES EMPLOYING
RURAL LABOR

Industry	Number of industries reporting CORPORATION form of organization	Number of industries reporting PART-NERSHIP form of organization	Number of industries reporting INDIVIDUAL form of organization	Total	Capitalization	
					Number of industries reporting	Average capitalization
Sawmills, wood-working	58	18	32	108	81	\$ 93,000
Fruit canneries, packers	10*	3	5	18	16	92,000
Fish canneries, packers	7*	1	2	10	10	251,000
Paper, pulp mills	4	.....	.....	4	2	2,439,000
Creameries, dairies	19*	2	3	24	17	35,000
Feed, seed	12*	4	.....	16	15	38,000
Meat packing	2	.....	2	4	4	38,000
Sand, gravel, brick, tile	4	1	1	6	6	16,000
Textile mills	3	1	.....	4	4	157,000
Machine shops, foundries	11	2	2	15	14	55,000
Leather goods factories	1	.....	2	3	3	28,000
Printing houses	3	.....	1	4	4	52,000
All industries	134	32	50	216	176	\$ 110,733

*Of the creameries and dairies, 3 were cooperatives, and 5 were mutual cooperatives. Of other industries, 1 fruit cannery, 1 fish cannery, and 1 feed and seed house were cooperatives.

Table 46. AVERAGE NUMBER OF EMPLOYEES AND ANNUAL VALUE OF PRODUCTION FOR ALL OREGON INDUSTRIES AND INDUSTRIES EMPLOYING RURAL LABOR

Industry	All Oregon industries*			Industries employing rural labor			
	Total number	Average number of employees	Average annual value of production	Number of employees		Annual production	
				Number of industries reporting	Average number of employees	Number of industries reporting	Average annual production
Sawmills, woodworking	749	54	\$ 213,000	105	59	75	\$ 145,000
Fruit canneries	77	57	319,000	18	75	15	442,000
Fish canneries	19	20	267,000	10	74	10	310,000
Paper, pulp mills.....	13	161	1,769,000	4	367	2	1,367,000
Creameries, dairies	142	7	123,000	22	15	16	137,000
Feed, seed	67	14	420,000	15	9	12	135,000
Meat packing	43	22	483,000	4	16	4	99,000
Sand, gravel, brick, tile.....	29	12	43,000	6	8	6	15,000
Textile mills	51	63	296,000	4	74	4	197,000
Machine shops	206	17	88,000	15	21	14	61,000
Leather goods factories.....	19	10	54,000	3	29	2	95,000
Printing houses	293	11	52,000	4	5	4	54,000
All others	755	.....	.....	.....	.....	.....	.....
All industries.....	2,463	30	\$ 132,251	210	54	164	\$ 178,500

* 1930 Census of Manufacturers, Vol. III, pages 433-440.

Table 47. PROPORTION OF FULL-TIME AND PART-TIME EMPLOYEES WHO LIVE ON FARMS

Industry	Percentage of full-time employees who live on farms	Percentage of part-time employees who live on farms
	<i>Per cent</i>	<i>Per cent</i>
Sawmills, woodworking	26	32
Fruit canneries, packers.....	34	31
Fish canneries, packers.....	17	24
Paper, pulp mills.....	11	.....
Creameries, dairies	21	25
Feed, seed	27	65
Meat packing	22	13
Sand, gravel, brick, tile.....	33	50
Textile mills	17	.....
Machine shops, foundries.....	11	.....
Leather goods factories.....	40	.....
Printing houses	10	.....
All industries	23	30

Table 48. NUMBER OF INDUSTRIES REPLYING AS INDICATED TO THE QUESTIONS, "IS FARM LABOR MORE OF LESS SKILLFUL THAN LABOR FROM CITIES?" AND "IS FARM LABOR MORE OR LESS SATISFACTORY THAN LABOR FROM CITIES?"

Industry	Degree of skillfulness			Satisfaction		
	More skillful	Less skillful	No difference	More satisfactory	Less satisfactory	No difference
Sawmills, woodworking	11	12	82	19	9	77
Fruit canneries, packers.....	4	.....	9	6	.....	7
Fish canneries, packers.....	1	.....	10	1	.....	10
Paper, pulp mills.....	.....	.....	4	1	.....	3
Creameries, dairies	8	2	14	8	1	15
Feed, seed	4	1	12	8	.....	9
Meat packing plants .....	.....	1	3	1	1	2
Sand, gravel, brick, tile.....	2	.....	4	2	.....	4
Textile mills .....	.....	1	3	.....	1	3
Machine shops, foundries.....	4	1	11	3	1	12
Leather goods factories.....	1	.....	2	1	.....	2
Printing houses	1	.....	3	2	.....	2
All industries	36	18	157	52	13	146

Table 49. NUMBER OF INDUSTRIES REPORTING DEGREE AND SOURCE OF COMPETITION AS INDICATED

Industry	Degree of competition					Source of competition					
	Se-vere	Moder-ate	Light	In-creas-ing	De-creas-ing	Local	With-in state	Other re-gions	For-ign im-portations	With-in same in-dustry	Pro-ducts of other in-dustry
Sawmills, woodworking..	63	21	7	36	22	24	49	33	7	44	18
Fruit canneries, packers	11	2	4	8	1	5	10	8	2	7	...
Fish canneries, packers	6	3	2	6	1	5	2	3	1	7	1
Paper, pulp mills.....	4	.....	.....	3	.....	.....	1	1	3	1	.....
Creameries, dairies	10	8	3	8	7	6	11	3	3	8	1
Feed, seed	8	6	1	10	12	5	10	.....	1	6	1
Meat packing .....	.....	.....	4	3	.....	.....	.....	.....	.....	2	1
Sand, gravel, brick, tile	6	.....	.....	5	.....	4	3	3	.....	8	2
Textile mills	3	1	1	1	.....	1	1	.....	1	.....	1
Machine shops, foundries	8	6	.....	10	1	4	1	3	.....	6	.....
Leather goods factories	3	.....	.....	2	.....	.....	1	1	.....	1	.....
Printing houses	5	1	2	4	.....	1	.....	.....	.....	2	.....
All industries	127	48	24	96	44	55	89	55	18	92	25

Table 50. NUMBER OF INDUSTRIES REPLYING AS INDICATED TO THE QUESTION: "WHAT ARE THE PRINCIPAL PROBLEMS OF YOUR INDUSTRY OR ESTABLISHMENT?"

Industry	Low prices	Lack of mar-kets	Lack of cap-ital	High over-head costs	High ship-ping costs	High power costs	Poor credit facilities	Poor labor supply
Sawmills, woodworking..	72	58	33	19	25	6	9	2
Fruit canneries, packers	5	4	8	3	3	.....	.....	1
Fish canneries, packers..	4	2	6	4	.....	.....	1	.....
Paper, pulp mills.....	2	2	1	1	.....	.....	1	.....
Creameries, dairies	19	10	1	3	1	4	.....	.....
Feed, seed	5	1	4	2	4	4	1	.....
Meat packing	2	.....	1	3	1	2	.....	.....
Sand, gravel, brick, tile..	4	6	4	1	3	3	.....	.....
Textile mills	1	1	2	.....	1	.....	1	.....
Machine shops, foundries	7	8	.....	5	1	1	6	7
Leather goods factories..	1	1	1	.....	.....	.....	.....	.....
Printing houses .....	.....	1	.....	1	.....	.....	.....	.....
All industries	122	94	61	42	39	20	19	10

Table 51. NUMBER OF INDUSTRIES REPLYING AS INDICATED TO THE QUESTION: "WHAT ARE THE MOST IMPORTANT FACTORS TO CONSIDER IN CHOOSING A NEW LOCATION?"

Industry	Near-ness to raw mater-ials	Low over-head costs	Prox-imity to mar-kets	Good labor sup-ply	Cheap power	Favor-able trans-portion rates	Good bank-ing facilities	Free-dom from com-petition
Sawmills, woodworking..	69	30	28	26	17	17	12	1
Fruit canneries, packers	7	1	3	4	1	2	2	1
Fish canneries, packers..	3	3	.....	1	.....	.....	.....	.....
Paper, pulp mills.....	4	3	.....	2	2	2	1	.....
Creameries, dairies	11	6	5	2	2	2	2	1
Feed, seed	9	7	8	3	3	2	4	1
Meat packing	1	1	1	1	.....	.....	1	.....
Sand, gravel, brick, tile..	3	2	2	.....	2	2	1	.....
Textile mills	1	1	.....	1	1	.....	.....	.....
Machine shops, foundries	1	2	3	2	4	3	1	1
Leather goods factories..	1	2	1	1	3	2	1	.....
Printing houses .....	.....	.....	2	.....	1	.....	.....	.....
All industries	110	58	53	43	36	32	25	5

OREGON STATE BOARD OF HIGHER EDUCATION

Lief S. Finseth.....	Dallas
B. F. Irvine.....	Portland
Willard L. Marks.....	Albany
Herman Oliver.....	John Day
Edward C. Pease.....	The Dalles
F. E. Callister.....	Albany
Beatrice Walton Sackett.....	Salem
C. A. Brand.....	Roseburg
E. C. Sammons.....	Portland
W. J. Kerr, D.Sc., LL.D.....	Chancellor of Higher Education

STAFF OF AGRICULTURAL EXPERIMENT STATION

*Staff members marked * are United States Department of Agriculture
investigators stationed in Oregon*

Geo. W. Peavy, M.S.F.....	President of the State College
Wm. A. Schoenfeld, B.S.A., M.B.A.....	Director
R. S. Besse, M.S.....	Vice Director
Esther McKinney.....	Accountant

Division of Agricultural Economics

E. L. Potter, M.S. Agricultural Economist; in Charge, Division of Agri. Economics

Agricultural Economics

W. H. Dreesen, Ph.D. Agricultural Economist

Farm Management

H. D. Scudder, B.S.....	Economist (Farm Management)
H. E. Selby, M.S.....	Associate Economist (Farm Management)
G. W. Kuhlman, M.S.....	Associate Economist (Farm Management)
A. S. Burrier, M.S.....	Associate Economist (Farm Management)
E. B. Hurd, M.S.....	Assoc. Economist, Div. of Farm Mgt., Bur. of Agric. Economics*

Division of Animal Industries

P. M. Brandt, A.M. Dairy Husbandman; in Charge, Division of Animal Industries

Animal Husbandry

O. M. Nelson, M.S.....	Animal Husbandman
A. W. Oliver, M.S.....	Assistant Animal Husbandman

Dairy Husbandry

Gustav Wilster, Ph.D.....	Dairy Husbandman (Dairy Manufacturing)
I. R. Jones, Ph.D.....	Associate Dairy Husbandman

Fish, Game, and Fur Animal Management

R. E. Dimick, M.S. Assistant in Charge

Poultry Husbandry

A. G. Lunn, B.S.....	Poultry Husbandman
F. L. Knowlton, M.S.....	Poultry Husbandman
F. E. Fox, M.S.....	Associate Poultry Husbandman

Veterinary Medicine

B. T. Simms, D.V.M.....	Veterinarian
W. T. Johnson, B.S., D.V.M.....	Poultry Pathologist
J. N. Shaw, B.S., D.V.M.....	Associate Veterinarian
E. M. Dickinson, D.V.M., M.S.....	Assistant Poultry Pathologist
F. M. Bolin, D.V.M.....	Assistant Veterinarian*
O. H. Muth, D.V.M., M.S.....	Assistant Veterinarian
O. L. Searcy, B.S.....	Technician

Division of Plant Industries

G. R. Hyslop, B.S. Agronomist; in Charge, Division of Plant Industries

Farm Crops

H. A. Schoth, M.S.....	Associate Agronomist; Forage Crops and Disease Investigation*
D. D. Hill, M.S.....	Associate Agronomist
D. C. Smith, Ph.D.....	Assistant Agronomist*
B. B. Robinson, Ph.D.....	Assistant Plant Breeder, Fiber Flax Investigations*
Grace Cole Fleischman, A.B.....	Assistant Botanist, Division of Seed Investigations*
A. E. Gross, M.S.....	Research Fellow in Farm Crops

Horticulture

W. S. Brown, M.S., D.Sc.....	Horticulturist
A. G. B. Bouquet, M.S.....	Horticulturist (Vegetable Crops)
E. H. Wiegand, B.S.A.....	Horticulturist (Horticultural Products)
H. Hartman, M.S.....	Horticulturist (Pomology)
C. E. Schuster, M.S.....	Horticulturist (Nut Culture)*
W. P. Duruz, Ph.D.....	Horticulturist (Plant Propagation)
G. F. Waldo, M.S.....	Assistant Pomologist (Small Fruit Investigations)*
T. Onsdorff, M.S.....	Assistant Horticulturist (Horticultural Products)

STATION STAFF—(Continued)

Soil Science

W. L. Powers, Ph.D. Soil Scientist
 C. V. Ruzek, M.S. Soil Scientist (Fertility)
 M. R. Lewis, C.E. Irrigation and Drainage Engineer, Bur. of Agric. Engineering*
 R. E. Stephenson, Ph.D. Associate Soil Scientist
 E. F. Torgerson, B.S. Assistant Soil Scientist (Soil Survey)

Other Departments

Agricultural Chemistry

J. S. Jones, M.S.A. Chemist in Charge
 R. H. Robinson, M.S. Chemist (Insecticides and Fungicides)
 J. R. Haag, Ph.D. Chemist (Animal Nutrition)
 D. E. Bullis, M.S. Associate Chemist (Horticultural Products)
 M. B. Hatch, M.S. Assistant Chemist

Agricultural Engineering

F. E. Price, B.S. Agricultural Engineer
 C. Ivan Branton, B.S. Assistant Agricultural Engineer

Bacteriology

G. V. Copson, M.S. Bacteriologist in Charge
 J. E. Simmons, M.S. Associate Bacteriologist
 W. B. Bollen, Ph.D. Associate Bacteriologist

Entomology

D. C. Mote, Ph.D. Entomologist in Charge
 A. O. Larson, M.S. Entomologist (Stored Products Insects)*
 H. A. Scullen, Ph.D. Associate Entomologist
 B. G. Thompson, M.S. Assistant Entomologist
 S. C. Jones, M.S. Assistant Entomologist
 K. W. Gray, M.S. Field Assistant (Entomology)
 W. D. Edwards, B.S. Field Assistant (Entomology)

Home Economics

Maud M. Wilson, A.M. Home Economist

Plant Pathology

C. E. Owens, Ph.D. Plant Pathologist
 S. M. Zeller, Ph.D. Plant Pathologist
 B. F. Dana, M.S. Plant Pathologist, Division Fruits and Vegetable Crops Diseases*
 F. D. Bailey, M.S. Associate Plant Pathologist (Insecticide Control Division)*
 F. P. McWhorter, Ph.D. Plant Pathologist
 P. W. Miller, Ph.D. Assoc. Pathologist (Div. Fruits and Veg. Crops and Dis.)*
 G. R. Hoerner, M.S. Agent (Hop Disease Investigations)*
 T. Dykstra, M.S. Asst. Plant Pathologist (Div. Fruits and Veg. Crops and Dis.)*
 Roderick Sprague, Jr., Ph.D. Assistant Pathologist (Cereal Diseases)*
 H. H. Millsap, Agent (Division of Fruits and Vegetable Crops and Diseases)*

Publications and News Service

C. D. Byrne, M.S. Director of Information
 E. T. Reed, B.S., A.B. Editor of Publications
 D. M. Goode, B.A. Editor of Publications
 J. C. Burtner, B.S. Associate in News Service

Branch Stations

D. E. Stephens, B.S. Supt., Sherman Br. Expt. Sta., Moro; Sr. Agronomist*
 L. Childs, A.B. Superintendent, Hood River Br. Expt. Station, Hood River
 F. C. Reimer, M.S. Superintendent, Southern Oregon Br. Expt. Station, Talent
 D. E. Richards, B.S. Supt. Eastern Oregon Livestock Br. Expt. Sta, Union
 H. K. Deau, B.S. Superintendent, Umatilla Br. Expt. Station, Hermiston*
 O. Shattuck, M.S. Superintendent, Harney Valley Br. Expt. Station, Burns
 H. B. Howell, B.S. Superintendent, John Jacob Astor Br. Expt. Sta., Astoria
 G. A. Mitchell, B.S. Act. Supt. Pendleton Br. Expt. Sta., Pendleton; Asst. Agron.*
 G. G. Brown, A.B., B.S. Horticulturist, Hood River Br. Expt. Station, Hood River
 Arch Work, B.S. Associate Irrigation Engineer, Medford
 W. W. Aldrich, Ph.D. Assistant Horticulturist, Bureau of Plant Industry, Medford*
 L. G. Gantner, M.S. Associate Entomologist, Sou. Or. Br. Expt. Sta., Talent
 J. F. Martin, M.S. Junior Agronomist, Div. Cereal Crops and Diseases, Pendleton*
 M. M. Oveson, M.S. Assistant to Supt., Sherman Br. Experiment Station, Moro*
 R. B. Webb, M.S. Jr. Agronomist, Sherman Branch Experiment Station, Moro
 R. E. Hutchison, B.S. Asst. to Supt., Harney Branch Expt. Station, Burns