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What the farming situation is like in northeastern West Virginia

G. E. Toben

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What the Farming Situation is Like In Northeastern West Virginia

Bulletin 397

April 1957

WEST VIRGINIA UNIVERSITY AGRICULTURAL EXPERIMENT STATION

THE AUTHOR

G. E. Toben is Associate Agricultural Economist in Farm Management in the West Virginia University Agricultural Experiment Station, and Associate Professor of Agricultural Economics.

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WEST VIRGINIA UNIVERSITY
AGRICULTURAL EXPERIMENT STATION
COLLEGE OF AGRICULTURE, FORESTRY, AND HOME ECONOMICS
H. R. VARNEY, DIRECTOR
MORGANTOWN

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Summary

THE study reported in this bulletin was made in the sandstone and shale area of northeastern West Virginia. Farming in this area is varied. (There are many kinds, types sizes, and organizations that prevail.) Agricultural production has been abandoned by 5 per cent of the rural families. Of those who were farming, 53 per cent spent full time on their farms, others did some work away, and 27 per cent worked away 200 days or more.

Full-time farmers averaged 58 years of age, whereas those that worked 200 days or more away from the farm averaged 12 years younger. One-third of the full-time farmers were 65 or older, one-third between 55 and 64, and the remaining third less than 55 years of age.

The days of productive work decreased with increased age of operator and with increases in days of work off farm. However, when days of work off the farm were added to days of productive farm work there were no differences in the amount of productive employment by full time and part-time farmers.

Many full-time farms were small, with 13 per cent having less than 50 days of productive work and 26 per cent less than 100. In contrast, 1 per cent of the farms had more than 1,000 days of productive work.

Similar crops were produced by the farmers regardless of the operator's age or the amount of work away from the farm. However, with increased work off farm, there was a general decrease in the proportion of farmers producing all crops except truck crops and pasture.

Similar kinds of livestock were produced by all farmers. However, a smaller proportion of farmers working away from the farm 200 days or more compared with full-time farmers kept the principal class of livestock. Approximately the same proportion of all ages of full-time farmers kept poultry. A smaller proportion of older farmers compared with younger farmers kept dairy, beef, hogs, and poultry other than hens. A larger proportion of the older farmers kept work stock, ewes and goats.

Three-fourths of the full-time farmers had a specialized type of production. This proportion of specialization was larger for those who worked away from the farm than for full-time farmers. Of the full-time farmers, about 20 per cent were dairy farmers, 17 per cent beef, 11 per cent poultry, 10 per cent grain, and 7 per cent fruit farmers.

Farm income was generally low. In 1954, 60 per cent of all farmers had farm sales that were less than \$1,200 per farm. On 73 per cent of the farms the sales were less than \$2,500. On the other hand, 3 per cent had sales of \$25,000 or more. In spite of these low sales, the income in the area is higher than the average for West Virginia.

What the Farming Situation is Like In Northeastern West Virginia

G. E. TOBEN

THIS bulletin was written to describe the farming situation on residual sandstone and shale soils in northeastern West Virginia. It presents the farming situation as it existed in 1955; and provides a basis for viewing the economic position of farmers in the area. It also provides a basis for anticipating some changes which may occur in the future.

Most of the data presented were obtained in connection with a research project on the economics of forage production. The forage study is a project conducted cooperatively with other states in the Northeast.¹ The area of West Virginia included in this study is part of a similar area that extends into Maryland and Pennsylvania. About 500 farmers were visited in order to select those who would provide information for the forage study. Those visited were selected by a method which provided each farmer in the area an equal chance to be visited.² Consequently, the description of the farms and the farmers visited is reasonably typical of the area.

Description of the Area

The interviews were made in an area which includes all of Hampshire and Morgan counties, most of Mineral County, and part of Berkeley County. This area is east of the Alleghany Front and west of the Great Limestone Valley. (See cover.)

In comparison with the entire State, about one-third of the area is reasonably level. Armentrout and Johnson reported that "34% of the land has a slope of less than 12% . . . The greatest amount of level land is found in Berkeley County along the edge of the Shenandoah Valley; in the South Branch and Cacapon River Valleys in Hampshire County; and in the Patterson Creek and New Creek Valleys in Mineral County . . . The best crop land is found in Hampshire County in the South Branch Valley."³

¹The regional project is entitled "Economics of Forage Production and Utilization." Its NE-18 project was supported by funds made possible by the Research and Marketing Act of 1946.

²The area method of sampling was used. It involved subdividing the entire area into 9 geographical segments having 4,000 acres each. Eighty sample segments were selected using a table of random numbers. All rural families living within each sample segment were interviewed.

³Armentrout, W. W. and Johnson, T. D., *Types of Farming in West Virginia*, W. Va. Agr. Exp. Sta. Bul. 292, 1939, p. 27.

Some of the area is steep . . . "9% has a slope of over 40% . . . The tops and sides of the ridges for the most part are forested. The cleared side slopes for the most part are poor crop land or average pasture land, with the valley land being average or below-average crop land. On the tops and sides of ridges, the soils and the air and water drainage in many sections are well suited to tree fruits, but this land is too steep or too rocky for fieldcrop production."⁴

The area covered by this survey is part of the Juniata-Potomac Section. "The total area is about 5,000,000 acres of which slightly over one-half is in farms.

"It has a cool, temperate humid climate with from 30 to 45 inches of rainfall. The frost-free growing season ranges from 140 to 170 days. Considerable local variation results from the mountainous terrain. The area is subject to severe flash floods."⁵

Abandoned Farms

There were 513 interviews in the preliminary stage of the study on the economics of forage production. Twenty-five of these visits were with rural families living on land formerly operated as farms. In 1951 no farming other than a home garden was done on any of these units. None of these families kept livestock or poultry.

These former farms varied from 13 to 334 acres and averaged 9 acres. Twenty-one were owner occupied. The other four were occupied by tenants.

In 60 per cent of these cases the head of the household had full-time employment away from the farm. Eight per cent had part-time employment, and in 12 per cent the head of the household was a widow. The other 20 per cent were retired men who varied from 60 to 9 years of age.

Days of Work off Farm

In West Virginia 57 per cent of the farmers had off-farm employment.⁶ However, in the area studied 53 per cent of the farmers did not work away from their farm (Table 1). Twenty per cent did some work off their farm. The remaining 27 per cent of the operators worked away from the farm 200 days or more.

⁴Armentrout and Johnson, *op. cit.*, pp. 27-28.

⁵Parlek, Austin L., *Problem Areas in Soil Conservation, Northeastern Region*, USI SCS, NE Reg. HDQ., Upper Darby, Pa., May 1951, p. 35.

⁶U. S. Department of Commerce, Bureau of Census, 1954, *Census of Agriculture Preliminary*.

TABLE 1. NUMBER OF FARMERS INCLUDED IN THE STUDY BY AGE AND DAYS OF WORK OFF FARM, IN THE SHALE AREA OF BERKELEY, MORGAN, HAMPSHIRE, AND MINERAL COUNTIES, 1955

AGE OF FARMERS	DAYS OF WORK OFF FARM					ALL FARMERS
	NONE	1-49	50-99	100-199	200 & OVER	
	No.	No.	No.	No.	No.	No.
24 & under	4	0	0	0	1	5
25-34	19	6	6	6	28	65
35-44	28	8	5	8	35	84
45-54	38	9	8	10	36	101
55-64	75	6	5	8	18	112
65-74	66	2	4	4	15	91
75 & over	28	1	0	0	1	30
All ages	258	32	28	36	134	488
Average age ..	58	44	48	48	46	53

Age of Operators

The youngest visited was 16 and the oldest was 91 years of age. Both were full-time farmers. The average age for full-time farmers was 58. Those who worked away from the farm 200 days or more averaged 46 years of age. Those who did some work away from the farm also were younger than full-time farmers.

Of all the farmers visited, only 1 per cent were less than 25 years of age. The proportion was the same for those who were farming on a full-time basis (no work off their farms) and those who had full-time employment away from the farm (worked 200 days or more away from their farms). Except for this youngest group, there was considerable difference in the age structure of those spending full time on the farm and those with full-time employment away from the farm. Many of the full-time farmers were well along in years. Eleven per cent were 75 years of age or older, more than one-third were 65 and over, nearly a third were between 55 and 64, and the other third were less than 55. This indicates that there were more farmers who were old enough to slow down or retire than young men who were beginning full-time farming. This is likely to bring about some changes. It may result in fewer full-time farmers, a combination of farms, part-time farmers, or idle farms. Any one of these or other changes may bring about a different system or type of farming.

Farmers with 200 days or more of work away from their farms were considerably younger than full-time farmers. One-third of these were under 41 years of age and two-thirds were under 51. In contrast, the farmer spending full time on the farm had less than half as large a proportion within these two age groups. Only 15 per cent of the full-time farmers were under 41 and 28 per cent under 51. Farmers who

had part-time employment away from the farm had age distributions that fell between those spending full time on the farm and those with full-time employment away from the farm.

A large part of the work off the farm by those who spent from 1 to 49 days off the farm was custom work. Their average age was 14 years less than the age for full-time farmers. It was also less than the age for farmers who did more work away from the farm.

Of those farmers 65 or older, a considerably larger proportion were spending full time on the farm than off the farm. To some extent the increased proportion of older farmers who were full-time farmers occurred because of a discontinuance of part-time work off the farm. Only to a very small extent was it caused by operators quitting a full-time job away from the farm and devoting their full employment on the farm.

Productive Work on Farms

One way to compare the size of business on different farms is to measure it in productive man work units. This expresses size in average labor needs under West Virginia conditions. A productive man work unit represents the amount of work usually done by a man in a ten-hour day on crops and livestock. The conversion unit for each crop and head of livestock is based on averages for West Virginia farmers (Table 2).

In general the amount of productive work declined as the amount of work off of the farm increased (Table 3). Farmers who spent full

TABLE 2. PRODUCTIVE MAN WORK UNIT FACTOR FOR SELECTED CROPS AND LIVESTOCK IN WEST VIRGINIA*

KIND OF CROP	WORK UNITS PER ACRE	KIND OF LIVESTOCK	WORK UNITS PER HEAD
Corn grain	5.0	Dairy cows	14.0
Corn silage	4.5	Beef cows	5.0
Small grain for grain ..	2.0	Other cattle raised	2.0
Small grain for silage ..	2.5	Ewes (including lambs)	0.6
Soybeans	3.0	Sows	4.0
Hay-1st cutting	1.0	Hogs fed out	1.0
Hay-later cuttings	0.8	Hens	0.3
Managed timber	3.0	Chicken replacements	0.08
Apple orchard	10.0	Chicken broilers	0.007
Peach orchard	11.0	Turkey poults	0.07
Cherry orchard	12.0	Turkey broilers	0.06
Potatoes	10.0	Goats	0.6
Tomatoes for canning ..	11.0		
Truck and small fruit	25.0		

*Toben, G. E., Business Analysis for West Virginia Farmers, Department of Agriculture, Economics and Rural Sociology, West Virginia University, Oct., 1953.

TABLE 3. PRODUCTIVE MAN WORK UNITS BY AGE OF FARMERS AND DAYS OF WORK OFF FARM, 1955

AGE OF FARMERS	DAYS OF WORK OFF FARM				
	NONE	1-49	50-99	100-199	200 & OVER
<i>Productive man work units</i>					
24 & under	393	----	----	----	135
25-34	1108	321	287	150	95
35-44	338	387	148	117	139
45-54	546	242	156	182	69
55-64	269	169	146	223	135
65-74	266	42	56	62	124
75 & over	157	29	----	----	34
All ages	369	260	167	158	108
Days off farm	0	34	76	151	270

time on their farms had a size of business that averaged 369 productive man work units. This means that under average management these farmers would have used 369 days of work on their crops and their productive livestock. Besides this they would have repair, maintenance and other work not directly related to income-producing enterprises.

Farmers who spent 200 or more days at work off the farm averaged 108 work units on their farms. This was 29 per cent of the size of business of full-time farmers.

After full-time farmers passed their middle fifties their amount of productive work decreased rapidly. Farmers between 55 and 64 years of age had about one-half as much productive work as those 45-54. Farmers past 75 had less than half as much productive work as all full-time farmers.

Farmers who did no work off the farm had a larger range in the amount of productive work than farmers who had full-time jobs away from their farms. Some of the farmers who did no work off the farm had businesses as small as the smallest sizes of those operators who worked 200 or more days off the farm. In contrast, 10 per cent of the farmers who did not work away from the farm had businesses larger than the largest operator with full-time work away from the farm.

Productive Work on the Farm and Off the Farm

When each day of work off the farm was added to the productive work units on the farm, little difference was found in the productive work of full-time farmers and farmers with full-time work off the farm (Table 4). One of the major differences between the two groups was that the amount of productive work did not change with age when the farmer had a full-time job off the farm. In contrast, the amount of productive work decreased with age when the operator spent full time

TABLE 4. PRODUCTIVE WORK ON AND OFF THE FARM BY AGE OF FARMERS AND DAYS OF WORK OFF FARM, 1955*

AGE OF FARMERS	DAYS OF WORK OFF FARM				
	NONE	1-49	50-99	100-199	200 & OVER
	<i>Productive work in days</i>				
21 & under	393	....	....	....	435
25-34	1108	347	367	306	354
35-44	338	413	226	269	405
45-54	546	291	238	327	343
55-64	269	195	215	375	410
65-74	266	64	118	212	411
75 & over	157	59	....	....	334
All ages	369	294	243	309	378

*Days of productive work on crops and livestock are added to the days worked off the farm.

on the farm. It also decreased with increased age when the operator spent some time, but less than 200 days, off the farm.

Range in Amount of Productive Work

When the productive work units on individual farms were arrayed from the smallest to the largest, 13 per cent of the full-time farmers had less than 50 days of productive work on their farms, and another 13 per cent had from 50 to 99 days of productive work (Table 5). Fifteen per cent had from 100 to 149 work units. These three groups represented 41 per cent of the full-time farmers. Even though the number of productive work units is small, these farmers probably were fully employed on their farms during the entire year. However, the entire labor force accomplished less productive work than could have been accomplished by one man working half time under typical West Virginia conditions.

Some of the farmers had enough work units to produce a good level of living with efficient management. Thirty-eight per cent of the full-time farmers had 300 or more work units on their farms. Seven per cent had 1,000 or more work units. These largest farmers were primarily apple or poultry producers.

The proportion of farmers with a small number of work units was greater for older men than for young men. None of the full-time farmers under 35 years of age had fewer than 50 work units whereas more than 20 per cent of those 65 or older had less than 50 work units. Table 6 brings together in a cumulative manner the relation between productive work and age of operator on small and medium size farms. It shows that with increases in the interval of size from very small through medium, there was only a small increase in the proportion of young farmers who were included. However, as the age increased there was an increase in the proportion of farmers within the

TABLE 5. PROPORTION OF FARMERS HAVING VARIOUS AMOUNTS OF PRODUCTIVE WORK BY AGE OF OPERATORS AND DAYS OF WORK OFF FARM, 1955

PRODUCTIVE MAN WORK UNITS	AGE OF OPERATORS						
	34 & UNDER	35-44	45-54	55-64	65-74*	75 & OVER	ALL AGES
	%	%	%	%	%	%	%
Farmers with no days off farm							
1-49		7	5	12	23	21	13
50-99	4	0	3	17	16	23	13
100-149	0	18	13	20	16	11	15
150-199	0	7	8	9	8	7	7
200-249	0	7	5	7	7	11	8
250-299	13	11	10	3	4	4	6
300-399	5	18	8	12	8	4	9
400-499	22	14	6	7	5	14	9
500-599	4	3	8	2	2		3
600-699	13	7	10	1	2		4
700-799	4	4	5	0	1		2
800-899				3			1
900-999	9		3	4	3		3
1000-1999	4	4	13	3	3		4
2000 & Over	22		3		2		3
Farmers working 200 days or more off farm							
1-49	38	23	31	33	38		31
50-99	28	28	42	28	31		32
100-149	10	14	22	17	19		17
150-199	10	20	5	6			10
200-249	10	6		6			4
250-299							0
300-399	4	6			6		1
400-499				5			1
500-599					6		1
600-699							1
700-799				5			1
800-899		3					1

*For farmers working off farm 200 days or more, the age group is 65 and over.

TABLE 6. CUMULATIVE PROPORTION OF FULL-TIME FARMERS HAVING SELECTED AMOUNTS OF PRODUCTIVE WORK BY AGE OF OPERATOR, 1955

PRODUCTIVE MAN WORK UNITS	AGE OF OPERATORS						
	34 & UNDER	35-44	45-54	55-64	65-74	75 & OVER	ALL AGES
	%	%	%	%	%	%	%
-49	0	7	5	12	23	21	13
-99	4	7	8	29	39	49	26
-149	4	25	21	49	55	60	41
-199	4	32	29	58	63	67	48
-249	4	39	34	65	70	78	56
-299	17	50	44	68	74	82	62

various intervals. Farms of less than 300 work units included only 17 per cent of the farmers under 35 years of age; whereas farms with up to 100 work units included 50 per cent of the farmers aged 35 to 44, 74 per cent of those aged 65 to 74, and 82 per cent of those 75 or older.

Farmers with a small number of work units usually have a small quantity of products to sell. Therefore, it is quite likely that they will have low earnings.

The difference in size of business between farmers under 35 years of age and those older is so great that it suggests that younger farmers in the area are now operating larger businesses than were formerly operated by young farmers. If this is the case it indicates an improvement which may make it possible for farmers to earn a higher level of living in the future.

As might be expected, farmers with a full-time job away from the farm had a small size of farm business. Thirty-one per cent had less than 50 productive work units on their farms. Sixty-three per cent had less than 100 work units and 90 per cent had less than 200 work units. These operators and others with larger farm businesses did not necessarily operate the farms alone. There was help from other members of the family and some hired help. These operators, however, did assume the responsibility of management.

Partnerships

Sixteen per cent of the farms were operated with a partnership arrangement in which the partner was someone other than a wife. Fourteen per cent of the partnerships involved three or more managers. In all instances one partner was reported to have the major responsibility. In two-thirds of the cases this was the oldest partner.

The family relationship between partners was not determined. However, in 80 per cent of the 77 partnerships there was an age difference of 20 or more years between partners. In 89 per cent of the arrangements involving three or more partners, the range in age between the youngest and oldest was more than 20 years. This suggests that many of the partnerships could be between parents and children.

There was no consistent difference in the amount of productive work between farmers with and those without partnerships (Table 7). However, a comparison between full-time farms in the different age groups showed that the smallest farms with partnerships were not so small as the smallest farms without partnerships. Even with partnerships the number of work units on the farms began to decrease after the senior partner passed his middle fifties.

Farms Managed by Women

Other than the wives of farm operators, women were the managers or partners in the management on 6 per cent of the farms visited. This group included 27 women who managed their farms alone. Two ha

TABLE 7. WORK UNITS ON FARMS WITH ONE MANAGER AND ON FARMS WITH A PARTNER, BY AGE OF THE PRINCIPAL PARTNER AND DAYS OF WORK OFF FARMS, 1955

AGE OF MANAGER OR MAJOR PARTNER	FARMS WITH ONE MANAGER BY DAYS OF WORK OFF FARM				FARMS WITH A MALE PARTNER BY DAYS OF WORK OFF FARM			
	NONE	1-99	100-199	200 & OVER	NONE	1-99	100-199	200 & OVER
<i>Productive man work units</i>								
& Under	1402	337	90	95	478	238	180	110
44	342	260	85	144	371	488	170	100
54	491	180	133	69	723	371	295	
64	239	144	75	142	524	307	471	25
74	211	51	62	124	489			
& Over	141	29		34	295			
of ms	210	51	23	126	48	9	13	7

sons who were junior partners and four had sons who assumed major responsibility for the management.

Of the 27 women managers, four had part-time work away from the farm and four had full-time jobs away from the farm. The women who had part-time jobs away from the farm averaged 85 days of work away from the farm; their farm business averaged 57 productive man work units. The women with full-time jobs away from the farm averaged 22 days away; their farm business averaged 25 productive man work units.

The size of the farm business in which women were partners was large relative to that of other farms in the area. This was true whether the women assumed major responsibility for management or whether their sons assumed this role. The average size of business on farms with a woman partner was 733 work units.

Most of the women who did not have off-farm employment and who managed their farms without a partner had a small farm business. Seventy-six per cent of them had less than 100 productive man work units. Only one woman operated a business that was larger than the average of all farmers. She operated a farm that had 892 work units.

Land Use

The various uses of the land on farms where the operators worked full-time and uses on full-time farms were similar (Table 8.). The principal difference was in acreage. In general the acreage decreased as the amount of work away from the farm increased.

Farmers who spent full time on the farm had an average of 18 acres in cultivated and close grown crops. The operators with full-time employment away from the farm averaged eight acres. Corn and small grains were the principal cultivated and close grown crops. Part of

TABLE 8. AVERAGE LAND USE ON FARMS BY THE NUMBER OF DAYS OF WORK OFF FARM, 1955*

LAND USE	DAYS OF WORK OFF FARM				ALL FARMS
	NONE	1-99	100-199	200 & OVER	
	Acres	Acres	Acres	Acres	Acres
Corn Grain	6	8	4	4	5
Corn Silage	2	1	1	0	1
Small Grain for Grain ..	8	8	7	3	7
Small Grain for Forage ..	1	1	0	1	1
Soybeans	1	1	0	0	0
Potatoes and Tomatoes ..	0	0	—	0	0
Total Cultivated & Close Grown	18	19	12	8	14
Grass & Legumes Cut Once	18	14	9	8	15
Grass & Legumes Cut Twice	6	4	5	3	5
Grass & Legumes Cut 3 Times	2	1	2	0	1
Rotation Pasture	2	3	3	1	2
All Tillable Cropland	46	41	31	20	37
Permanent Pasture	75	47	51	33	58
Woodland Pasture	58	38	55	31	48
Apple Orchard	6	0	1	1	4
Peach & Cherry Orchard ..	1	0	1	0	0
Timber	164	84	150	48	122
Farmstead and Waste ..	6	6	3	4	5
Total	356	216	292	137	274
Work Units on Crops	166	94	79	52	119

*A zero designates less than one-half acre. A dash designates that none of the farmers reported the crop.

both of these crops was harvested as grain and a small part as silage as a hay crop. Regardless of the amount of work away from the farm the average acreage in corn was about the same as for small grains.

The acreage of tillable land used for hay and pasture exceeded the combined total in cultivated and in close grown crops. This would give a cropping system on the tillable land that approximated a rotation of corn, small grain, and three years of hay.

The majority of the hay land was cut only once. On the farms with 100 to 199 days of work off the farm, 56 per cent received only one cutting. On the other farms, from 69 to 74 per cent was cut just once. Only 8 per cent of the acreage of hay was cut three times on the farms where the operator spent full time on the farm.

Even though orcharding is economically important to the area, the acreage of orchards when averaged with all land in farms is small, being only four acres per farm.

Regardless of the amount of work off farms, the acreage in permanent pasture exceeded that in all grain and hay crops. Besides

he open permanent pasture a considerable acreage of woodland was pasture. This woodland pasture represented about 18 per cent of the land in farms.

Timber that was not pastured occupied 45 per cent of the land in farms. On the farms where the operator worked 200 days or more off the farm, timber accounted for 35 per cent of the farm land. On the other farms the proportion was larger. On those farms where the operator worked off the farm from 100 to 199 days the timber that was not pastured accounted for 51 per cent of the land. Timber produces a very small income for farmers in the area.

Wooded land, which includes the woodland pasture and timber land, accounts for more than 60 per cent of the farm land in the area. In contrast, tillable land and orchards represented only 15 per cent of the total land in farms.

Farmers who worked off their farms had fewer acres in their farms than operators who did not work away. As the amount of work off the farm increased, the acreage tended to decrease. In addition, the amount of productive work on crops decreased as the work off the farm increased. Farmers who did not work off the farm averaged 166 work units on crops. The work units decreased to 52 on those farms where the operators worked away 200 days or more.

Proportion of Farmers Growing Various Crops

Some crops were usually grown on most farms (Table 9). Hay, for example, was produced by 85 per cent of the farmers, whereas less than 10 per cent produced soybeans, tomatoes, potatoes, peaches, or cherries. To some extent there were differences which were associated with the amount of work off the farm. As the amount of work off the farm increased, there was a decrease in the proportion of farmers producing all the crops except truck crops and pasture.

Corn is an important crop in this area. Two-thirds of the farmers produced corn. Nearly all harvested some of the corn as grain. Only 11 per cent of all farmers harvested some as silage. A smaller proportion raised small grains than raised corn. Small grains were harvested as grain crops by 53 per cent of the farmers. Ten per cent harvested some small grains as hay or silage crops. The proportion of farmers who produced corn and small grains was larger among those who did not work off the farm than among those who worked away 200 days or more.

More farmers produced hay than corn and small grains. As the amount of work off the farm increased, the proportion of farmers harvesting hay decreased. The amount of this decrease was comparable to the decrease which occurred with corn or small grain and the ratio of the acres of grain to hay remained the same.

TABLE 9. PERCENTAGE OF FARMERS GROWING SELECTED CROPS BY THE NUMBER OF DAYS OF WORK OFF FARM, 1955

LAND USE	DAYS OF WORK OFF FARM				ALL FARMS
	NONE	1-99	100-199	200 & OVER	
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Corn	71	75	64	54	67
Corn grain	65	75	61	54	63
Corn silage	17	7	11	3	11
Small grain for grain ..	59	62	61	36	53
Small grain for forage ..	10	15	2	7	10
Soybeans	4	5	2	1	3
Potatoes	1	2	0	1	1
Tomatoes	4	2	0	5	4
Grass and legume hay ..	90	88	78	75	85
All cut only once	41	47	44	39	42
Some cut twice	48	43	33	36	43
Some cut 3 times	16	12	14	8	13
Rotation pasture	11	13	11	7	10
Open permanent pasture ..	94	88	94	88	92
Woodland pasture	60	65	75	63	63
Apple orchard	10	3	11	4	8
Peach orchard	3	0	6	1	2
Cherry orchard	4	2	6	2	3
Timber	82	87	83	68	79
Farmstead	100	100	100	100	100

It was observed that about 42 per cent of all farmers cut all their hay only once. The proportion who had only one cutting was about the same for full-time farmers as it was for those working away from the farm 200 days or more. Only 16 per cent of the full-time farmers cut some—not all—of their hay a third time. This proportion was reduced to 8 per cent for those farmers who worked away 200 days or more.

Open permanent pasture is common in the area. Although this pasture is primarily bluegrass, much of it includes broom sedge. Ninety two per cent of all farmers had permanent pasture on their farms. Besides this permanent pasture, about two-thirds of the farmers also pastured land which had enough trees on it to be classed as woodland pasture. Only to a small extent were they using rotation-type crops for pasture.

From an income standpoint, fruit is important to the area. Fruit generally accounts for more than one-fourth of the value of all farm products sold. However, the proportion of farmers producing fruit is small. Only 10 per cent of the full-time farmers produced apples, 3 per cent produced peaches, and 4 per cent harvested cherries. Of the farmers working off the farm 200 days or more, only 4 per cent produced apple, 1 per cent had peaches, and 2 per cent had cherries.

Size of Crop Enterprises

The acreages of crops declined with increased amounts of work away from the farm for all crops except small grain silage and rotation pasture.

(Table 10). However, decreases did not occur with grain crops until the amount of work away from the farm exceeded 100 days.

From the standpoint of the economic use of large-scale machinery, the average acreage of grain crops was small. The average amount of corn on full-time farms was only 12 acres. If the corn was harvested as grain, the average was nine; if it was harvested as silage, the average was 13 acres. Acreages of small grains and soybeans were also small. Farmers who cut all their hay only once had smaller acreages than those who cut some of their hay more than once. Full-time farmers cutting all hay once averaged 24 acres. Those who cut some of the acreage more than once averaged 34 acres in hay, and 13 acres cut a second and a third time. However, as indicated previously, only a third as many farmers made a third cutting as made a second cutting. (See Table 9).

The apple orchards on full-time farms averaged 57 acres. Acreages in peach and cherry orchards were less. The orchards on full-time farms have a larger average acreage than found on farms where the operator works away. The acreage of apple orchards on farms where the operator worked away 200 days or more was larger than on farms where the operators did some work away from the farm but were gone less than 200 days. This average was influenced materially by one operator who had 14 acres of apple orchard. All other operators working 200 days or more away from the farm had 10 acres or less of apple orchard.

TABLE 10. AVERAGE NUMBER OF ACRES OF EACH CROP ON THE FARMS WHICH PRODUCED THE CROP BY THE NUMBER OF DAYS OF WORK OFF FARM, 1955

LAND USE	DAYS OF WORK OFF FARM				ALL FARMS
	NONE	1-99	100-199	200 & OVER	
	Acres	Acres	Acres	Acres	Acres
Corn	12	11	7	7	10
Corn grain	9	10	7	6	9
Corn silage	13	8	6	9	12
Small grain for grain ..	14	14	11	9	13
Small grain for silage ..	6	6	15	8	6
Soybeans	9	14	5	6	9
Potatoes	2	7	....	1	2
Tomatoes	7	1	....	2	4
Grass & legume hay ..	29	22	20	16	25
All cut once	24	20	16	14	20
Some cut more than once	34	24	26	18	28
Cut 2 times	13	8	14	9	12
Cut 3 times	13	7	11	6	11
Rotation pasture	16	22	29	14	17
Open permanent pasture	80	53	54	38	64
Woodland pasture	97	59	74	49	77
Apple orchard	57	10	11	21	45
Peach orchard	14	....	10	3	12
Cherry orchard	12	12	2	3	9
Timber	198	97	179	71	153

The farmers who had the largest acreages of selected crops raised 140 acres of corn, 100 of corn silage, 85 of corn grain, 30 of soybeans, 75 of all small grains harvested for grain, 200 of small grains harvested as forage, 250 of hay, 75 of hay which was cut three times, 80 of tall grass rotation pasture, 800 of open permanent pasture, 8,585 of timber, 20 of tomatoes, 7 of other truck crops, 320 of apples, 30 of peaches, and 25 acres of cherries.

From these numbers the acreages declined rapidly. The average acreage of all crops on the 10 per cent of farms growing the largest acreages of crops was less than 100 acres for all crops except permanent pasture and timber (Table 11). The 10 per cent of the farmers who grew specific crops and had the largest acreages averaged 326 acres of open permanent pasture, 1,021 of timber, 45 of corn, and 96 acres of hay.

The 10 per cent of the farmers who produced the various crops but had the smallest acreage, really had small acreages. These farmers had an average of one acre of corn, two of small grain for grain, three of hay, seven of open permanent pasture, and nine acres of timber.

Relation of Crops Produced to Age of Operators

The proportion of full-time farmers growing certain crops was associated with age. A smaller proportion of the older farmers were producing corn for grain, corn silage, and small grains harvested for grain (Table 12). There was a noticeable decline in the proportion growing tree fruits and tomatoes as the age increased. Thirteen per cent of those under 35 years of age produced tomatoes for market, but none of the farmers over 75 produced tomatoes for market.

The age of the operator had no effect on the proportion of farmers producing pasture, small grain silage and hay. However, there was :

TABLE 11. RANGE IN SIZE OF SELECTED CROPS IN ACRES BY THOSE FARMERS WHO DID NOT WORK OFF THE FARM AND WHO RAISED THE CROPS, 1955

SIZE GROUPINGS FROM LARGEST TO SMALLEST	CORN FOR GRAIN OR SILAGE	SMALL GRAIN FOR GRAIN	ALL BIENNIAL & PEREN- NIAL HAY	ALL HAY CUT 3 TIMES	OPEN PERMANENT PASTURE	TIMBER
Per Cent	Acres	Acres	Acres	Acres	Acres	Acres
91-100	45	38	96	51	326	1021
81-90	21	25	48	22	148	350
71-80	14	18	36	16	92	222
61-70	11	15	30	11	68	125
51-60	8	12	25	10	51	94
41-50	6	10	19	6	40	70
31-40	5	8	16	5	32	57
21-30	4	6	11	4	24	39
11-20	2	5	6	3	17	22
1-10	1	2	3	2	7	9

TABLE 12. PERCENTAGE OF FARMERS NOT WORKING OFF THE FARM WHO GREW SELECTED CROPS, ACCORDING TO THE AGE OF THE FARMERS, 1955

LAND USE	AGE OF FARMERS					
	34 & UNDER	35-44	45-54	55-64	65-74	75 & OVER
	%	%	%	%	%	%
Corn	87	79	74	71	62	71
Corn grain	78	75	68	65	55	64
Corn silage	39	14	16	16	12	14
Small grain for grain	65	64	74	59	53	50
Small grain for forage	4	14	11	12	9	11
Soybeans	4	7	11	3	2	4
Potatoes	0	0	0	0	2	0
Tomatoes	13	14	5	1	3	0
Grass & legume hay	96	89	87	88	89	93
All cut once	22	39	34	41	50	50
Some cut twice	74	50	53	47	39	43
Some cut 3 times	22	14	18	17	14	11
Rotation Pasture	9	7	11	19	3	11
Open permanent pasture	100	88	95	95	92	96
Woodland pasture	43	79	58	6	58	61
Apple orchard	30	7	13	5	12	4
Peach orchard	13	0	0	1	5	0
Cherry orchard	13	0	8	1	5	4
Timber	100	79	87	83	79	71

definite relation between age and the number of cuttings of hay. Twenty-two per cent of farmers under 35 years of age cut all their hay once. The proportion getting only one cutting increased to 50 per cent for those farmers who were 65 years of age or older. Third cuttings of hay from some of the land were made on only half as many farms where the operator was 75 or older when compared with those under 35 years of age.

Amount of Livestock

Livestock on farms decreased as the amount of work off the farm increased (Table 13). This decrease occurred with all classes of livestock with the exception of sows. In this case an average of only one sow was kept on all farms in the various work-off-farm classes.

Besides expressing livestock in numbers, they were also measured in productive man work units. This provided a common measure so that all classes of livestock other than work stock could be added. Using this measure, it was determined that the full-time farmers had enough livestock to account for 203 productive man work units. Those who worked away from the farm from one to 99 days had 60 per cent as much livestock or 123 work units. Farmers who worked away from the farm for 100 to 199 days had only 79 work units or 39 per cent as much stock as full-time farmers. Farm operators who worked away 200 or more days had 56 work units of productive livestock. This was 28 per cent as many as on farms where there was no work done away from the farm.

TABLE 13. AMOUNT OF LIVESTOCK ON FARMS BY THE NUMBER OF DAYS OF WORK OFF FARM, 1955

KIND OF LIVESTOCK	DAYS OF WORK OFF FARM				ALL FARMS
	NONE	1-99	100-199	200 & OVER	
	Head	Head	Head	Head	Head
Dairy cows	4	3	1	1	3
Beef cows	8	6	6	2	6
Other cattle	7	3	3	2	5
Ewes	12	8	6	6	9
Sows	1	1	1	1	1
Hogs raised	7	9	3	3	6
Chicken broilers	1931	480	1092	264	1235
Hens	86	53	30	25	61
Other chickens	45	44	15	14	30
Turkey poults and broilers	520	96	....	27	294
Work units of livestock	203	123	79	56	144

Proportion of Farmers Producing Various Livestock

Not all farmers kept each class of livestock (Table 14). Seventy-seven per cent kept hens. Dairy cows were next in frequency of importance. They were kept by 60 per cent of the farmers. Some of the farmers did not keep their calves beyond weaning age. Consequently, the proportion reporting other cattle was somewhat smaller. Beef cows were kept by about half of the farmers. Forty-three per cent of all farmers raised some hogs. Many of these were raising purchased feeder pigs; only 28 per cent kept sows. About a third kept ewes. Nine per cent of the farmers were raising chicken broilers. One per cent sold turkey broilers and 4 per cent sold them at heavier weights.

A comparison of farmers who did not work away from the farm with those who worked away up to 99 days showed little difference in

TABLE 14. PERCENTAGE OF FARMERS PRODUCING SELECTED CLASSES OF LIVESTOCK BY THE NUMBER OF DAYS OF WORK OFF FARM, 1955

KIND OF LIVESTOCK	DAYS OF WORK OFF FARM				ALL FARMS
	NONE	1-99	100-199	200 & OVER	
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Dairy cows	64	70	50	51	60
Beef cows	54	55	56	33	49
Other cattle	61	45	50	37	52
Ewes	36	37	25	23	32
Sows	29	33	33	23	28
Hogs raised	43	75	44	29	43
Chicken broilers	11	8	8	5	9
Hens	82	87	72	63	77
Other chickens	29	28	19	22	26
Turkey poults	5	5	0	1	4
Turkey broilers	1	0	0	1	1
Ducks	4	2	0	0	0
Goats	1	0	6	1	1

he proportions keeping each class of livestock and poultry. Similar proportions of those who worked away from 100 to 199 days kept beef cows and hogs. For other classes of livestock, except goats, there was some decrease in the proportion of farmers who kept them. As work off farm increased beyond 200 days there were further decreases in the percentage of farmers keeping individual classes of livestock. Exceptions to this occurred with those classes that are relatively uncommon, namely ponies and draft stock not worked and turkey broilers.

Differences occurred between farmers who did no work and those who did 200 days or more of work off their farm in the percentage of operators who kept each class of livestock or poultry. About 80 per cent as many of those with 200 days or more work off farm compared with full-time farmers kept dairy cows, hens, other chickens for hen replacement, and sows. Approximately two-thirds as many raised beef cows, cattle other than cows, ewes, and feeder hogs. Less than half as many working away 200 days compared with those doing no work away from the farm kept chicken broilers.

Size of Livestock Enterprises

Full-time farmers who kept various kinds of livestock averaged six dairy cows, 15 beef cows, 32 ewes, and three sows. Regardless of whether farmers fed pigs born on the farm or whether they purchased their pigs, they averaged 17 pigs fed to market weight. (Table 15).

Laying flocks were generally small. The average number of hens in the flock on farms where the operator spent full time on the farm was 15. Those who raised their replacements raised an average of 156 birds go into the laying house or to sell at fryer weights. Those producing

TABLE 15. AVERAGE NUMBER OF EACH KIND OF LIVESTOCK ON THE FARMS WHICH PRODUCED THE LIVESTOCK, BY THE NUMBER OF DAYS OF WORK OFF FARM, 1955

KIND OF LIVESTOCK	DAYS OF WORK OFF FARM				ALL FARMS
	NONE	1-99	100-199	200 & OVER	
	Head	Head	Head	Head	Head
Dairy cows	6	4	3	3	5
Beef cows	15	10	10	7	12
Other cattle	12	7	6	5	9
Ewes	32	23	26	26	29
Sows	3	2	2	3	3
Pigs raised	17	12	8	10	14
Chicken broilers	17,183	5,760	13,100	5,057	13,393
Goats	105	61	42	40	79
Other chickens	156	154	79	63	115
Turkey poults	6,733	192	....	4	5,557
Turkey broilers	20,000	....	....	3,600	10,900
Ducks	11	8	....	....	7
Cats	54	....	10	22	32

chicken broilers averaged about 17,000 per year. Turkey broiler producers averaged 20,000 per year. When the turkeys were kept to heavier weights the average number was 6,733 per farm.

With the exception of work stock and sows, the average number of other livestock kept per farm that had these animals decreased as the work off farm increased. Decreases occurred irregularly.

A comparison between farmers spending full time on the farm and those working 200 days or more away from the farm showed little difference in the number of sows. Those farmers who worked away for 200 or more days averaged 59 per cent as many hogs as those who did not work away. Ewe flocks were 81 per cent as large. For all other classes of livestock and poultry the number on farms where the operator worked away 200 days or more was not over half as large as the number on full-time farms. The greatest differences occurred with poultry. Farmers working away 200 days or more who kept hens averaged 40 birds per farm. This was 38 per cent as many hens as kept by full-time farmers. Those farmers with 200 days of work off farm produced 40 per cent as many replacement birds, 29 per cent as many chicken broilers, and 18 per cent as many turkey broilers as did those full-time farmers who raised such birds.

The largest numbers of livestock that were reported by any farmer were 102 beef cows, 54 dairy cows, 136 head of other cattle, 350 ewes, 41 sows, 500 hogs raised, 4 work animals, 3,000 hens, 212,000 chicken broilers, 41,000 turkey poults, and 28,000 turkey broilers. From these number the sizes of enterprises decline very rapidly (Table 16). The average number of head in each class of livestock and poultry in the 10 per cent largest herds or flocks is more than twice as large as the average number in the next 10 per cent. Many farmers who kept different kind

TABLE 16. RANGE IN NUMBERS OF LIVESTOCK FOR THOSE FARMERS WHO DID NO WORK OFF THE FARM AND WHO RAISED THE CLASS OF LIVESTOCK, 1955

SIZE GROUP- INGS FROM LARGEST TO SMALLEST	BEEF COWS	DAIRY COWS	CATTLE OTHER THAN COWS	EWES	SOWS	MARKET HOGS	HENS	CHICKEN BROILERS	TURKEY POULT
<i>Percentile</i>									
91-100	58	28	58	123	15	103	586	123,667	41,000
81-90	27	12	20	44	4	25	138	13,500	14,500
71-80	17	6	14	34	3	14	87	7,833	12,000
61-70	14	4	8	29	2	7	64	6,533	5,000
51-60	11	3	6	25	2	5	49	5,333	4,000
41-50	8	2	4	22	1	4	37	4,767	1,800
31-40	6	2	3	18	1	3	29	3,500	1,000
21-30	4	1	2	14	1	2	23	1,333	500
11-20	3	1	1	10	1	2	18	967	300
1-10	2	1	1	6	1	1	10	167	100

TABLE 17. PERCENTAGE OF FARMERS NOT WORKING OFF THE FARM WHO PRODUCE SELECTED CLASSES OF LIVESTOCK BY THE AGE OF OPERATORS, 1955

KIND OF LIVESTOCK	AGE OF FARMERS					
	34 & UNDER	35-44	45-54	55-64	65-74	75 & OVER
dairy cows	83	71	61	71	52	57
beef cows	61	61	71	52	48	36
other cattle	61	68	63	60	64	50
ewes	17	32	34	40	39	43
sows	26	36	34	35	26	14
hogs raised	48	50	39	40	42	43
broilers	9	32	16	5	12	0
hens	83	89	76	77	88	79
other chickens	30	25	32	27	29	32
turkey poults	4	14	13	3	3	0
turkey broilers	9	0	3	0	0	0
ducks	0	0	0	1	0	0
geese	0	0	0	3	0	4

Livestock kept small numbers of them. The 10 per cent of farmers who kept the smallest numbers averaged only one dairy cow, head of other cattle, sow or market hogs. In the case of sows, nearly 50 per cent of all farmers who kept them had only one.

Relation of Livestock Production to Age of Operators

The age of the operator had little relation to the proportion of full-time farmers who kept hens (Table 17). Some variations did occur between age groups but there was no significant change. Consequently it would be expected and did occur that there was no trend in the proportion of farmers keeping replacement birds as the age of operators changed.

A variation in the proportion of full-time farmers reporting most other classes of livestock was associated with age. Variations were irregular, but upward or downward trends occurred with changes in age.

There was an increase in the proportion of the older farmers who kept ewes and goats. Ewes were kept by 17 per cent of the younger farmers. Two and a half times as many, or 43 per cent of all farmers 75 or older, kept ewes. All the goats were kept by farmers that were 55 years of age or older.

For all other classes of livestock, there was a general decrease in the proportion of older farmers who kept them. This includes dairy cows, beef cows, other cattle, sows, hogs fed out, broilers, and turkeys. Dairy cows were kept by 83 per cent of the youngest farmers but only by 57 per cent of the oldest. The proportion for beef cows decreased from 61 per cent to 36 per cent. The decline for other cattle was less than for cows, falling from 61 per cent to 50 per cent. The trend for hogs was relatively

small. The largest proportion of farmers reporting chicken and turkey broilers was those aged 35 to 44. None of the full-time farmers 75 or older kept broilers or turkeys.

Not only did the amount of most classes of livestock decrease with increased age for full-time farmers, but it also decreased for farmers who worked away from their farm (Table 18). Those farmers who did not work away from the farm or had less than 100 days away had the largest decrease in work units on livestock with increased age. The smallest decrease in work on livestock with increased age occurred with those farmers who spend 200 days or more away from the farm. On these farms the men under 35 years of age averaged 61 work units per farm, whereas those past 75 had reduced their livestock business to 34 work units.

Some livestock was kept by most farmers. Eighty-two per cent of those who do not work away from the farm had some productive livestock. Ninety per cent of those with full-time work away kept productive livestock.

Amount of Work on Livestock Compared with Work on Crops

A little more than 50 per cent of the productive work was on livestock (Table 19). There appears to be very little variation in the proportion of total work on crops or productive livestock that is due to either age of the operator or amount of work off the farm.

Work Stock and Farm Power

Twenty-four per cent of the farmers who worked off the farm 200 days or more kept work horses or mules (Table 20). The proportion keeping draft animals increased to 42 per cent for those farmers who did not work off the farm. As the age of these full-time farmers increased there was an increase in the proportion keeping work stock. Only 20

TABLE 18. SIZE OF LIVESTOCK BUSINESS IN PRODUCTIVE MAN WORK UNIT BY AGE OF FARMERS AND DAYS OF WORK OFF FARM, 1955

AGE OF FARMERS	DAYS OF WORK OFF FARM				
	NONE	1-49	50-99	100-199	200 & OVER
<i>Productive man work units</i>					
35 & under	496	216	155	84	61
35-44	236	233	87	62	69
45-54	288	125	100	108	32
55-64	162	65	68	78	72
65-74	131	27	32	36	56
75 & over	86	29	....	....	34
All ages	203	149	93	79	56
Per cent with livestock	82	97	100	94	90

TABLE 19. PERCENTAGE OF PRODUCTIVE MAN WORK ON FARMS THAT WAS ON PRODUCTIVE LIVESTOCK BY AGE OF FARMERS AND DAYS OF WORK OFF FARM, 1955

AGE OF FARMERS	DAYS OF WORK OFF FARM				
	NONE	1-49	50-99	100-199	200 & OVER
	Per cent	Per cent	Per cent	Per cent	Per cent
& under	50	67	54	56	63
44	70	60	59	53	50
54	53	52	64	59	46
64	60	38	43	35	53
74	49	64	57	58	45
& over	55	100	....	....	100
ages	55	57	56	50	52

TABLE 20. WORK STOCK ON FARMS BY THE FARM OPERATOR, DAYS OF WORK OFF FARM AND AGE, 1955

DAYS OF WORK OFF FARM AND AGE OF OPERATORS	WORK HORSES AND MULES		OTHER HORSES, MULES AND PONIES	
	PER CENT REPORTING	NUMBER PER FARM REPORTING	PER CENT REPORTING	NUMBER PER FARM REPORTING
DAYS OF WORK OFF FARM				
None	42	2	6	2
-99	47	2	10	2
00-199	33	2	6	2
00 & over	24	1	8	1
All farms	38	2	7	2
AGE OF OPERATORS NOT WORKING OFF FARM				
4 & under	26	2	4	1
5-44	29	2	11	2
5-54	34	1	8	2
5-64	55	2	8	2
5-74	42	2	3	1
5 & over	46	2	7	2

percent of the farmers under 35 kept work stock, whereas 46 per cent of those who were 75 and older kept them.

Those who kept work stock averaged two head per farm. The average number did not vary with age nor with the amount of work off farm.

Young work stock and ponies were less common. Fewer than 10 per cent of the farmers had them. Those who did averaged two per farm.

Numbers of tractors on these farms were not recorded. However, the preliminary data in the 1954 *Census of Agriculture* showed that many of the farmers had no tractors. Those without tractors were not necessarily those who had work stock. Census data showed that 31 per cent of the farmers had tractors and no work stock. Another 20 per cent had tractors and one or more work animals. Twelve per cent had two or

more work stock but no tractor, and 8 per cent had only one work animal. The other 29 per cent had neither a tractor nor work stock.

Many of the farmers had small acreages in the various crops (see Table 11) and many had a small amount of work on all crops (see Table 8). These small acreages are associated with the low degree of mechanization and the high labor requirements for crops in West Virginia. Farmers with small acreages cannot economically justify large-scale equipment. As a result, more labor is used per acre than would be needed on acreages large enough to justify a higher degree of mechanization. Compared with the rest of the nation the labor used on most feed and forage crops is high.⁷ In West Virginia the labor used per acre on corn and small grain crops is three times more than it is for the average of all states. For hay crops it is about twice as much.

Types of Farming

Farms may be classified according to type by several methods. In this instance the classification was based on the productive man work units. An enterprise type was established for each farm that had 40 per cent or more of the total work units on a specific enterprise. With this procedure a farm could have and few did have two major types. Farms that did not have 40 per cent of the productive work on any one major class of production were classified as general farms.

Most of the farmers were carrying on a specialized type of agriculture. This was true for full-time farms and for part-time farms. Three-fourths of the full-time farmers were specializing in the production of one major product (Table 21). As the amount of work away from the farm increased, the amount of specialization increased. Of the farmers working away from the farm for 200 days or more, 86 per cent were specialized.

Approximately half of all the farmers specialized in the production of a class of livestock or poultry. In terms of all classes of livestock there was little change in the proportion specializing in livestock with changes in work off farm. However, within classes of livestock there were some differences. A larger portion of farmers working 200 days or more off farm were specializing in dairy and sheep. A large proportion of the full-time farmers were raising the combination of beef and dairy cattle. About the same proportion of full-time farmers and farmers working away from their farm 200 days or more were raising poultry. However, there was more specialization in broilers and turkeys among the full-time farmers. Farmers working 200 days or more away from the farm were more specialized in hens.

⁷Hecht, Reuben W., and Vice, Helth R., *Labor Used for Field Crops*, USDA, ARS. So. Bul. 144, 1954.

TABLE 21. TYPE OF FARMING BY THE AMOUNT OF WORK OFF THE FARM, 1955*

TYPE OF FARMING	DAYS OF WORK OFF FARM			
	NONE	1-99	100-199	200 & OVER
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Grain	10	22	20	17
Hay	4	2	8	10
Potato, tomato & truck	0	3	—	4
Tree fruits	7	3	8	4
Apple	(5)	(2)	(8)	(3)
Peach	(1)	(1)	(0)	(0)
Dairy	20	22	11	26
Cattle	17	12	22	13
Mixed cattle	6	5	6	3
Sheep	1	—	—	5
Hogs & hogs	1	1	—	1
Pigs	—	—	3	1
All poultry	11	12	8	10
Hens & replacements	(5)	(11)	(3)	(9)
Chicken broilers	(2)	—	(6)	(1)
Turkeys	(3)	(2)	(—)	(1)
General Farm†	26	20	22	14
Total	103	102	108	108
Proportion with two major types	3	2	8	8

*Type is classed on the basis of productive man work units. For any one type class, 10 per cent or more of the total work units on the farm had to be on the particular enterprise.

†None of the above enterprises accounted for 40 per cent of the work units.

About one-fifth of the full-time farmers were specializing in a crop. A larger proportion of those doing some work away from the farm had a specialty crop. As the shift toward more crop specialty occurred there was a shift away from general farming.

About 10 per cent of all full-time farmers specialized in grain production. This included the production of corn, oats, wheat, and barley, all of which were harvested either for grain or roughage. Another 4 per cent specialized in hay and 7 per cent in tree fruits. Most of the latter farms had sufficient apples to be classified as apple farms. The other had a combination of apples, peaches, and cherries. None of the farmers had a specialty in cherries. A smaller proportion of farmers with 200 days or more work away from the farm had a specialty in fruit. However, a larger portion of this same group had specialized production in grain and in hay.

About 5 per cent of the farms were classified as having two specialties. This was possible because the classification was based on having 10 per cent of the work units on a particular enterprise. Two-thirds of those who had two specialized classes had one specialty in either grain or hay and the other in a roughage-consuming class of livestock.

Although many farmers had a specialty production, very few had all their productive work on one enterprise. Yet many specialty enterprises were utilizing well over half of the productive efforts on the farm.

TABLE 22. PERCENTAGE OF THE TOTAL FARM WORK UNITS ON THE ENTERPRISE WHICH DETERMINED THE TYPE OF FARM, 1955

TYPE OF FARM	DAYS OF WORK OFF FARM			
	NONE	1-99	100-199	200 & OVER
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Grain	54	53	59	57
Hay	73	43	42	67
Potato, tomato & truck ..	45	66	—	67
Tree fruit	81	51	83	62
Dairy	59	51	62	54
Beef	51	47	50	51
Mixed cattle	53	49	58	62
Sheep	48	—	—	64
Sows & hogs	78	43	—	42
Oats	—	—	49	44
All poultry	74	69	64	73

(Table 22). Full-time farmers who were concentrating on fruit production averaged 81 per cent of all productive work on tree fruits. Only one in the entire group had all the productive work on the orchard crop. On those full-time farms classified as poultry, the productive work on poultry accounted for 74 per cent of all productive work. On the farms where the operator worked away 200 days or more, 73 per cent of all productive work on poultry farms was on poultry.

Comparison of Major Types of Farms

Even though the majority of the farmers specialized in one major enterprise or a closely related enterprise, there was considerable diversification among other enterprises for the balance of the productive work. This situation occurred with all types of farms (Table 23). Some of all types of farms had corn, hay and pasture. All except the hay farms averaged one or more acres of small grain. Orchards, however, were generally not found on farms that did not specialize in orchards. Some of all the types of farms kept livestock and hens. Turkeys usually were restricted to farms that specialized in poultry.

Farms classified as grain farms were generally small, averaging 17 work units per farm, with half of this total on corn and small grain. Each of the other enterprises accounted for less than 10 per cent of the total work units on the farm.

Hay farms were very small. They averaged 43 work units per farm; none had more than 80 work units. These farms were operated by older men. In fact, the average age of 71 was older than it was for any other type of farming group.

Orchardists had the largest farms, were the youngest operators, and the most specialized. Farms operated by orchardists averaged 1,151 work units, and 97 acres of producing orchard. Of this amount, 85 acres were

TABLE 23. CROPS AND LIVESTOCK RAISED ON FARMS WHERE THE OPERATORS DID NOT WORK AWAY FROM THE FARM, CLASSIFIED BY TYPE OF FARM, 1955*

	TYPE OF FARM							
	GRAIN	HAY	FRUIT	DAIRY	BEEF	MIXED CATTLE	POULTRY	GENERAL
No. farms	24	9	17	52	44	14	26	66
Age of farmer	66	71	49	58	56	60	53	57
Work units	175	39	1151	345	283	444	640	252
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Grain	13	1	5	11	6	13	4	9
Small grain	12	—	3	9	11	15	5	9
Soybeans	—	—	—	—	0	1	—	0
Grain crops	0	—	1	0	0	—	1	1
Hay	16	29	13	33	35	46	11	26
Open pasture	40	34	34	82	144	141	51	53
Woodland pasture	46	35	24	72	63	163	25	43
Orchard	0	—	97	—	0	—	—	1
	No.	No.	No.	No.	No.	No.	No.	No.
Dairy cows	1	0	1	13	1	6	1	2
Beef cows	3	0	3	2	21	21	5	7
Other cattle	6	1	1	9	12	24	4	4
Pigs	4	2	7	8	15	29	7	11
Cows	1	0	1	0	1	1	0	1
Pigs fed out	5	0	2	2	5	9	3	10
Chicken broilers	43	—	529	127	159	143	17,350	327
Poultry	51	7	211	52	44	62	193	101
Other chlx	16	0	3	50	23	88	86	61
Turkey poultz	—	—	1	31	—	4	3,558	1
Turkey broilers	—	—	—	—	—	—	1,538	—

*Only one type classification was used for each farm. The seven farms that had 40 per cent or more work units on two enterprises were classed according to the one with highest percentage. This table does not include three sheep farms, two hog farms, and one tomato farm.

apples, eight in peaches, and four in cherries. Of the total productive work on the farm, 74 per cent was on apples and a total of 85 per cent on all tree fruits. The average age of these operators was 49—the only group that averaged less than fifty years of age.

Twenty per cent of all the farmers in the area were specializing in dairying. Fifty-two per cent of their total productive work was on cows and 57 per cent on all dairy cattle. Some of the other productive work was on other livestock. However, most of it was on the production of feed crops. These dairy farmers had an average size of business of 345 work units, slightly smaller than the average of all farms. The age of dairy farmers was the same as for all full-time farmers.

Seventeen per cent of all farmers were classified as beef farmers. They had nearly the same total acreage of grain and hay as dairy farmers but had more pasture. They carried 10 more head of cattle than dairy farmers. However, the extra numbers were not sufficient to offset the smaller amount of production work needed for a beef cow contrasted to a dairy cow. As a result, beef farmers total size of business expressed in work units was less, averaging 283 work units per farm. Of this amount, 52 per cent was on cattle.

Some farms had neither enough beef nor dairy to be classified as a beef farm or a dairy farm. However, they had sufficient number of both to justify a separate classification of mixed cattle. These farmers had an average size of 144 work units, which was larger than the average size of either dairy or beef farms. On these farms 24 per cent of the productive work was on beef cows, 19 per cent on dairy cows, and a total of 54 per cent on all cattle. Not only did these farmers have a larger total business than either the dairy specialty or beef specialty farm, but they also had more corn, small grain, hay, pasture, sheep, and hogs.

Poultry farmers were nearly as specialized in their production as fruit farmers. On farms classified as poultry farms, 83 per cent of all productive work was on poultry. Within this group 85 per cent specialized in a particular class of poultry. Nine farmers specialized in turkeys, eight in laying hens, and five in chicken broilers. Those who specialized in one of the three classes of poultry had from 72 to 76 per cent of all work units on the class of poultry in which they specialized.

Farmers specializing in poultry also raised some crops and kept some roughage-consuming livestock. Their crops and livestock other than fruits and poultry were similar to those produced by farmers specializing in fruit. In size and age they were closer to the fruit farmers than were the farmers classified into other types of farms. They were the second largest in size and were next youngest in average age.

Besides the special types just described, there were six other farmers who had more than 40 per cent of their productive work on a specialized enterprise. Three were in sheep production, two in hogs, and one in tomatoes.

One-fourth of the farmers who did not work away from their farms did not have 40 per cent of their work on any one of the major enterprises or closely related enterprises. These farms were classified as general farms. Ninety-two per cent of these were sufficiently diversified so that none of them had 75 per cent of all the farm work units on either crop or livestock.

The average size of business on the general farms was 32 per cent smaller than the average for full-time farms in the area. This work was fairly evenly distributed between crops and livestock, with 52 per cent on livestock and 48 on crops. The average of these farms showed little more productive work for corn (20 per cent of the productive work units) than for the other major enterprises. Beef cows were second importance with 14 per cent, followed in order of decreasing size by hay, hens, and dairy cows; any one of which accounted for more than 1 per cent of the productive work.

Value of Products Sold

With the farm businesses as small as they were it is not surprising that the farm income was low. According to the *Census of Agriculture*, the total value of farm products sold in 1954 was less than \$1,200 on 73 per cent of all the farms in the four-county area (Table 24). On 73 per cent of the farms the sales were less than \$2,500 and only 15 per cent had sales of \$5,000 or more. On some farms the gross sales were substantial. Three per cent of all farmers in the area had sales of \$25,000 or more in 1954.

On 47 per cent of the farms, the non-farm income exceeded the value of farm products sold. Even at that the total income from all sources was probably not large because 66 per cent of the farmers surveyed worked away from their farms less than 100 days.

Four-County Area Compared with the State^a

The average farm income in this four-county area was larger than the average for the rest of the State. In the entire State, the total value of farm products sold in 1954 was less than \$1,200 on 81 per cent of the farms. On 89 per cent of the farms it was less than \$2,500. Only 8 per cent of all farms in the State had sales of \$5,000 or more.

A comparison of selected items on farms in the four-county area with the same items for the entire State shows that farms in the area were generally larger. The number of acres in farms and the cropland harvested was more than 50 per cent larger. There were 30 per cent more milk cows and ewes per farm and a still larger proportion of beef cows. The farmers had twice as many sows, hens, and broilers.

^aData were taken from: U.S. Department of Commerce, Bureau of Census, 1954, *Census of Agriculture—Preliminary*.

TABLE 24. PROPORTION OF FARMS, IN BERKELEY, MORGAN, HAMPSHIRE, AND MINERAL COUNTIES AND IN THE STATE BY ECONOMIC CLASSES, 1954*

ECONOMIC CLASSES	VALUE OF FARM PRODUCTS SOLD	PER CENT OF ALL FARMS	
		4 CO. AREA**	STATE
I	\$25,000 or more	3	1
II	\$10,000 - \$24,999	4	2
III	\$5,000 - \$9,999	8	3
IV	\$2,500 - \$4,999	12	5
V	\$1,200 - \$2,499	13	8
VI†	\$250 - \$1,199	11	13
1 commercial		51	32
2-time†	\$250 - \$1,199	16	17
3-dential	Less than \$250	34	51

*U. S. Department of Commerce, Bureau of Census, 1954. *Census of Agriculture—Preliminary*.

**This includes all farms in the five counties. The other tables do not include farms in the area with sandstone and shale soils.

†Farms were classified as commercial Class VI provided the farm operator worked on the farm less than 100 days and provided the family income from nonfarm sources was less than the value of all farm products sold. The others were classified as part-time.

Farmers in the area were better equipped with power than other farmers in West Virginia. Fifty-one per cent of the farmers in the area had tractors, whereas only 22 per cent of the farmers in West Virginia had them. In the area, 20 per cent of the farmers had no tractors, but they had one or more work animals. For the State, 38 per cent of the farmers without tractors had one or more head of work stock. The other 29 per cent of the farmers in the area and 39 per cent in the State own no tractor or work stock.

A larger portion of the farmers in the area spent their time on the farm. In the area, 47 per cent did some work off the farm; the State average was 57 per cent. In the area, 34 per cent of the operators of Census-defined farms worked away from the farm 100 days or more; the State average was 43 per cent. When non-farm family income was compared with farm sales, 47 per cent of the farm families in the area had other income exceeding farm sales. For the State, 51 per cent of the farmers had non-farm income exceeding farm sales.

Conclusions

This report shows that the economic position of the average farm in the area leaves much to be desired. Even more important, however, is the position of the many farmers who are below the average.

The majority of the farmers in the area do not work off the farm. Even though they are probably fully employed on their farms, the amount of work at income-producing jobs is so small that the farm sales are very low. The large amount of work at non-income jobs is influenced by the physical farm condition. Farms have large acreages with a considerable portion that is either not producing a salable product or has inherently low capacity to produce.

Labor used on most feed and forage crops is high in comparison with the rest of the nation. In West Virginia the labor used per acre on corn and small grain crops is three times more than it is for the average of all states. For hay crops it is about twice as much.

The age structure of the farmers suggests that the number of young men beginning to farm is not so large as the number who are likely to retire. This may lead to further abandonment of farms or to a combination of farming units. The situation that is occurring in the area is not known from this study. However, the data show that full-time farmers aged from 25 to 34 have a size of business that is several times larger than for any other age group.

Many full-time farmers 55 years of age or older had a size of business so small that it is unlikely that they could have sufficient income for much, if any, social security coverage.