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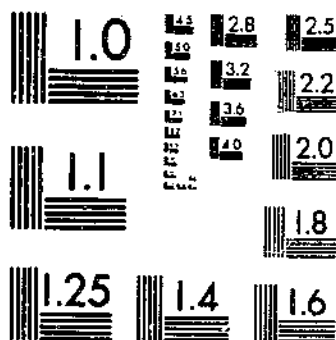
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LABOR USED TO PRODUCE LIVESTOCK ESTIMATES BY STATES 1959

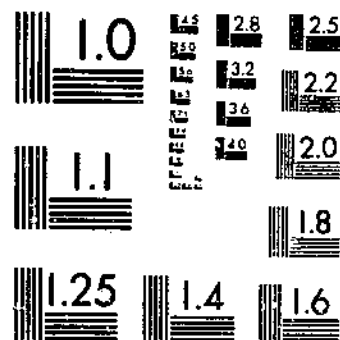
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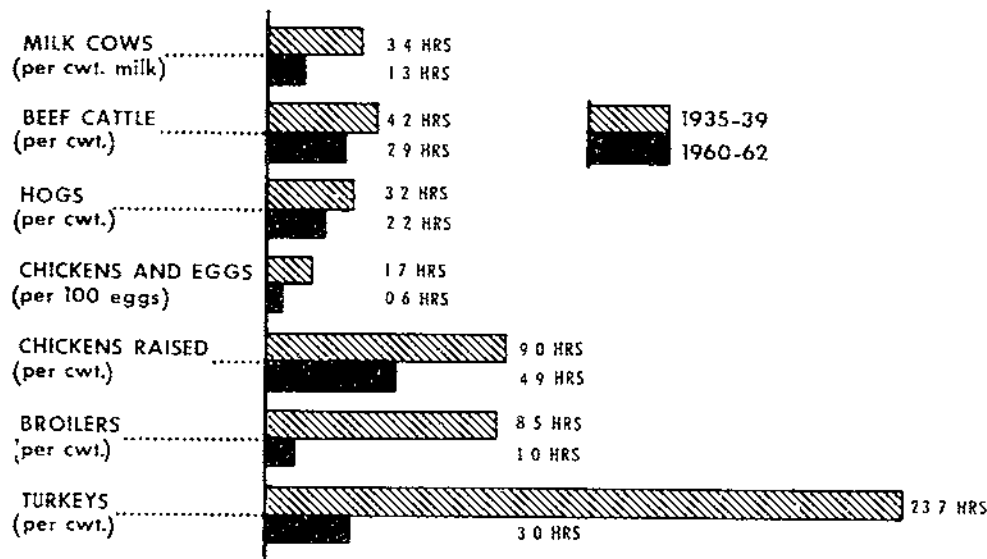
MICROCOPY RESOLUTION TEST CHART
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MICROCOPY RESOLUTION TEST CHART
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LABOR FOR LIVESTOCK PRODUCTION

Man-hours Per Unit of Production



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2335-62 (9) ECONOMIC RESEARCH SERVICE

LABOR USED TO PRODUCE LIVESTOCK ESTIMATES BY STATES, 1959

U. S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE
WASHINGTON, D.C. SEPTEMBER 1963

ACKNOWLEDGMENTS

The assistance of staff members of State agricultural experiment stations and of field personnel of the Farm Production Economics Division, Economic Research Service, who assisted in revising preliminary State estimates, is gratefully acknowledged. Their contributions were valuable in preparing the final estimates.

PREFACE

The estimates of farm labor requirements in this publication are part of a continuing nationwide research program centered on agricultural production. This program includes the development and maintenance of many kinds of farm efficiency measures.

This report contains State estimates of the man-hours of labor used in 1959 for producing the major kinds of livestock. Similar estimates are developed every fifth year after data from the agricultural census are available. The quinquennial State estimates are weighted into regional averages, which serve as benchmarks for annual series. Each year the regional averages (man-hours per head or unit of production of livestock, together with comparable data for crops) are applied to the estimates of acres, numbers, and production of crops and livestock, prepared by the State-Federal crop reporting system, Statistical Reporting Service, to arrive at total man-hours of labor used by enterprises, for regions, and for the country as a whole. The total man-hours are converted to indexes which, with comparable indexes of production, are used to compute indexes of production per man-hour. The aggregate man-hours are also used as the labor component in an index measure of total production inputs in farming. These aggregates and indexes are published annually in *Changes in Farm Production and Efficiency*, Statistical Bulletin No. 233.

Two additional publications containing State estimates of 1959 labor requirements for farm enterprises are in process:

Labor Used to Produce Field Crops, Estimates by States, 1959

Labor Used to Produce Vegetables, Estimates by States, 1959

CONTENTS

	<u>Page</u>
Introduction-----	1
Labor Used to Produce Livestock, United States, 1910-62-----	2
Labor Used to Produce Livestock, by States, 1959-----	4
Milk cows-----	4
Cattle and calves, except milk cows-----	5
Hogs-----	5
Sheep-----	6
Chickens - laying flocks-----	6
Chickens - broilers-----	7
Turkeys-----	7

LIST OF TABLES

<u>Table</u>		
1	Livestock-----	3
2	Milk cows-----	8
3	Cattle and calves, except milk cows-----	10
4	Hogs-----	12
5	Sheep-----	14
6	Chickens - laying flocks-----	16
7	Chickens - broilers-----	18
8	Turkeys-----	20

LABOR USED TO PRODUCE LIVESTOCK
Estimates by States, 1959

by

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INTRODUCTION

Man-hours used to care for livestock either per head or per unit of production vary greatly among States and regions. Significant reasons for the wide differences include variation in size of herd or flock, extent of mechanization, and the kind or form of the livestock product that is marketed.

The data presented in this publication are estimates of the average number of man-hours used in caring for the various classes of livestock in each State in 1959. Also included for most kinds of livestock are national averages by 5-year periods from 1910 to 1962.

The State estimates are in terms of man-hours per head, except for hogs, for which man-hours per 100 pounds of liveweight production were estimated. For most other kinds of livestock, the per-head data were converted to man-hours per unit of production, such as 100 pounds of milk or 100 eggs. These labor requirements per unit are shown along with information related to use of labor, such as size of herd or flock, milk production per cow, and rate of lay of hens and pullets. Estimates of man-hours for each kind of livestock are limited to States for which the Crop Reporting Board prepares estimates of numbers and production on farms.

For some kinds of livestock, man-hours per head are shown for two sizes of herds or flocks, or for different methods of production. This was not practical for all kinds of livestock, as data indicating the prevalence of herds or flocks of various sizes were lacking. Also, because of the scarcity of appropriate data, State estimates of labor used in 1959 for chickens raised for replacement in laying flocks and for meat were not developed.

The man-hours per head and per unit of livestock production in this publication are based chiefly on secondary data collected by State and Federal agencies and published in reports, such as State agricultural experiment station and extension service bulletins, and information from studies of farm practices and farm mechanization. 1/ Many data in these publications, however, apply to livestock in a particular part of a State or on specific kinds of farms. This necessitated considerable adjustment for a State-average situation.

The labor rates represent the average quantity of labor used per head or per unit of production, rather than standards or goals to be achieved. On individual farms, or groups of farms, man-hours per head of the various kinds of livestock may be considerably above or below average, because of various methods used and conditions existing on these farms.

1/ For a list of part of these publications see: Publications Containing Recent Farm Enterprise Input-Output Data. U. S. Dept. Agr., Econ. Res. Serv., Farm Prod. Econ. Div., March 1963. Unnumbered.

Man-hours used for livestock include direct labor only for such operations as hauling feed if purchased or stored away from livestock, preparing feed, feeding, cleaning barns and pens, moving animals to and from pasture or range, general care, and disposing of the animals and their products. Time required to grow feed and maintain pastures is not included. Time spent on general overhead jobs or farm-maintenance work also is excluded. This kind of work includes such jobs as constructing and maintaining fences and buildings and irrigating, draining, and improving land; repairing machinery and farm power units; working on permanent pasture and farm woodlots; conducting the farm business; taking business trips; and other miscellaneous overhead tasks.

LABOR USED TO PRODUCE LIVESTOCK, UNITED STATES, 1910-62

A good deal less labor is now used per head or per unit of production of livestock than was used a half century ago (table 1). Changes in many aspects of work on livestock are responsible for the reduction per head. Additional but related facets of livestock management are involved in the underlying reasons for the drop in man-hours per unit of production. Most of the reduction in labor requirements for livestock since 1910-14 occurred in the last half of the period, or since 1935-39, and the following discussion is directed toward changes since then.

In 1935-39, almost 150 man-hours annually were spent in feeding, milking and caring for a milk cow and the milk she produced. In recent years, widespread use of equipment such as milking machines, automatic and self-feeders, feed and litter carriers, barn cleaners, convenient water supply, and labor-saving milking parlors and barns has reduced the labor needed to fewer than 100 hours per cow. Handling more milk in bulk and by pipeline has also helped drop time requirements per cow. The increased availability of electric power on farms made the installation of new equipment feasible. Without it, the drop in time required for dairy chores would have been considerably less.

Larger herds of milk cows have resulted from and are partly due to the new equipment and methods. In 1939, there were 5 milk cows per reporting farm; by 1959 there were 9. As certain dairy chores can be done for a large herd in almost the same time as for a small herd, the trend toward larger herds has helped reduce man-hours per cow.

Concurrently, improved breeding, better feeds and feeding, and superior management resulted in more milk per cow. Production rose from 4,400 pounds per cow in 1935-39 to almost 7,200 in 1960-62. This increase, coupled with the one-third drop in man-hours per cow, has meant a decrease of more than 60 percent in man-hours per hundredweight of milk produced. (See cover chart.)

The greatest proportional decrease in labor requirements, both per head and per unit of production, has occurred in the production of broilers. Man-hours per 100 pounds of turkeys produced has consistently been around 3 times as high as for broilers, but the reduction since 1935-39 has about matched that for the frying chickens. Both broilers and turkeys have grown from sideline enterprises to commercial status during the last quarter-century. Liveweight production of broilers is now more than 30 times as high as in 1935-39. During the same time turkey production has more than quadrupled. The average flock of turkeys raised in 1959 contained about 950 birds--more than 13 times as many as in 1939. In the earliest year for which national data on broilers per farm are available, 1954, broiler producers reported an average of about 16,000 birds sold per farm. Since then, the average size of the broiler enterprise has increased greatly. In 1959, broiler sales averaged almost 34,000 birds per producer. Wide adoption of mechanical and automated methods of brooding, feeding, and caring for broilers and turkeys has accompanied this increased production. Labor used per unit of production in 1960-62 averaged only about 12 percent as much as a quarter-century earlier.

Table 1.--Livestock: Man-hours per unit of production and related factors, United States, indicated periods, 1910-62

Kind of livestock and item	1910-14	1915-19	1920-24	1925-29	1930-34	1935-39	1940-44	1945-49	1950-54	1955-59	1960-62 1/
Milk cows:											
Man-hours per cow-----	146	141	142	145	147	148	142	129	121	109	96
Milk per cow--pounds-----	3,842	3,790	4,000	4,437	4,289	4,401	4,653	4,992	5,444	6,307	7,195
Man-hours per cwt. of milk-----	3.8	3.7	3.6	3.3	3.4	3.4	3.1	2.6	2.2	1.7	1.3
Cattle and calves:											
Man-hours per cwt. of beef produced 2/3/-----	4.6	4.5	4.5	4.3	4.3	4.2	4.0	4.0	3.6	3.2	2.9
Hogs:											
Man-hours per cwt. produced 3/-----	3.6	3.6	3.5	3.3	3.2	3.2	3.0	3.0	2.7	2.4	2.2
Chickens - laying flocks:											
Man-hours per 100 layers-----	172	172	172	172	172	172	173	189	190	147	112
Rate of lay 4/-----	86	87	91	92	93	100	110	127	149	168	179
Man-hours per 100 eggs produced-----	2.0	2.0	1.9	1.9	1.8	1.7	1.6	1.5	1.3	.9	.6
Chickens - farm raised:											
Man-hours per 100 birds-----	33	33	32	32	31	30	29	29	27	23	17
Man-hours per cwt. produced 3/-----	9.5	9.4	9.3	9.4	9.3	9.0	8.2	7.7	7.3	6.7	4.9
Chickens - broilers:											
Man-hours per 100 birds-----	---	---	---	---	---	24.6	22.7	15.6	7.5	4.2	3.3
Man-hours per cwt. produced 3/-----	---	---	---	---	---	8.5	7.7	5.1	2.4	1.3	1.0
Turkeys:											
Man-hours per cwt. produced 3/-----	31.4	31.1	30.0	28.5	26.7	23.7	19.6	13.1	6.8	4.4	3.0

1/ Preliminary.

2/ Production includes beef produced as a by-product of the milk cow enterprise.

3/ Liveweight production.

4/ Per layer on farms Jan. 1.

Time used for work on beef cattle and hogs has dropped less than on other kinds of livestock. Man-hours per unit of production has moved down only about 30 percent since 1935-39. Many producers are currently using such labor saving equipment as tractor-mounted forks and scoops for feeding and cleaning sheds and lots, but much hand work is still done. Modern feeding systems requiring little operating labor are available, including such components as self-fed and automatically-timed feed grinders and mixers and pneumatic feed distributors. Such systems, however, usually involve considerable investment in new or remodeled buildings, power units, and equipment, and have not been installed on a broad scale by average producers.

The labor story on laying and replacement flocks of chickens is similar to that of cattle and hogs. Progressively fewer farms maintain laying flocks, but the average size of flock has grown. Flocks averaged more than 160 birds in 1959 compared with 66 birds in 1939. Some mechanization has occurred but methods currently used in caring for birds vary all the way from exclusively handwork to completely automated systems. Since 1935-39, labor used per bird in laying flocks has dropped about 35 percent, but because of the tremendous increase in rate of lay, man-hours per 100 eggs has decreased about 65 percent. Time spent on chickens raised chiefly for replacement has decreased from 30 man-hours per 100 birds in 1935-39 to 17 hours in 1960-62.

LABOR USED TO PRODUCE LIVESTOCK, BY STATES, 1959

Milk Cows

Estimated labor used per milk cow in 1959 varied by regions, from 90 man-hours in the Pacific States to 121 in the Appalachian region (table 2). The prevalence of labor-saving dairy buildings and equipment is undoubtedly the most significant reason for the wide difference. The level of mechanization of work on milk cows, however, is related to other aspects of dairying. States and areas where labor-efficient dairy barns and equipment are more common also have larger herds and higher-producing cows, market a greater proportion of the milk as whole milk, and tend to buy rather than perform certain operations--such as preparing and hauling feed and dairy products to market. Most of these factors have a lowering effect on man-hours per cow and per unit of milk produced.

Of the mechanical developments, the modern milking parlor (with pipeline milker, automatic feeder, operator pit, and bulk milk tank) is among the innovations that result in decreased man-hours per cow. The regular milking machine also saves considerable time over hand milking. In 1958 in the Pacific region, 87 percent of the cows were milked with machines - 41 percent with pipeline milkers and 46 percent with regular machines. 2/ The prevalence of machine use was about the same as this in the Northeast and Lake States, except for greater use of regular machines and less of pipeline installations. More than half of the cows were hand milked in the Appalachian, Southeast, and Delta regions.

Milk production per cow affects the time used per head, as more time is required to care for high-producing cows and handle their milk. However, per cow production more directly affects man-hours per 100 pounds of milk; labor used per unit of milk produced tends to vary inversely with production per cow. The Pacific States have the highest milk production per cow and the fewest man-hours per 100 pounds of milk produced.

2/ Dairy Cows: Housing and Methods of Milking. U. S. Dept. Agr., Econ. Res. Serv., ERS-15.

In 1959 in the Northern Plains region, only 38 percent of the milk was retailed by farmers or sold to plants or dealers as whole milk for manufacturing or fluid use. In other regions, 77 percent or more of the milk was marketed by these methods, and the proportion reached 95 percent in the Northeast. Strict sanitary practices, which take considerable time, are followed when milk is produced for fluid and related uses. Dairy barns are cleaned more frequently and more thoroughly, for example, by producers who sell milk for fluid use than by those who sell farm-separated cream.

Cattle and Calves, Except Milk Cows

Cattle and calves consist of a great variety of animals of both dairy and beef breeding. Time spent on them differs greatly among States and regions (table 3). Estimated time spent in feeding and caring for a beef cow averaged almost 20 hours in 3 regions, but was only 8 hours per cow in 4 of the Mountain States. Many cows in the latter States are in large ranch herds and are grazed a good part of the year. Other cattle in these areas are mainly young beef stock. They receive much the same kind of care as beef cows and require relatively little time. Other cattle take more time in areas like the Northeast and Lake States where a majority are young dairy heifers and heifer calves. Here, young stock are housed more frequently and for a greater part of the year, and more time is spent on them than in other areas.

In addition to the amount of labor used per beef cow and per head of other cattle, many other factors affect man-hours per 100 pounds of liveweight beef produced. Beef produced as a byproduct of the milk-cow enterprise--veal calves and the increase in weight of milk cows--affects man-hours per 100 pounds of beef produced. The labor used in caring for these animals is included under milk cows. Labor used per beef cow and per head of other cattle is greatly above average in the Northeast region, but man-hours per 100 pounds of beef produced is about the same as the national average because of the beef produced by milk cows and their veal calves. A similar but less pronounced situation exists in other dairy areas. Man-hours per 100 pounds of beef produced is relatively high in the 3 Southeast regions.

Hogs

Information on the prevalence of automatic feeding systems, self-feeders, self-waterers, and other labor-saving equipment and practices in hog production is not available on a national basis. However, use of efficient equipment is usually well correlated with size of enterprise. Hog producers in the Corn Belt on the average farrowed 11.5 sows in the spring of 1959 and sold 105 hogs and pigs during the year. Comparable national averages are 7.8 sows and 64 hogs and pigs. As these figures indicate, scale of hog production in the Corn Belt States is considerably above the national average, and labor used per 100 pounds of production is relatively low (table 4).

The one-litter system of hog production usually takes more labor per 100 pounds of hogs produced than the two-litter system. The ratio of fall-to-spring litters gives some indication of the prevalence of these systems. Farrowings from June to November are counted as fall litters; in many of the less important hog-producing States--particularly in the northern part of the country--there are a good many June and July litters. These fall litters increase the ratio but in many instances represent one-litter operations.

Large litters of pigs have a lowering effect on man-hours used per market hog and per unit of production. The regional average number of pigs per litter was highest in the Lake States and Corn Belt regions, where labor requirements also were low. Large litters add to the size of the hog enterprise and spread the care of the breeding animals over more market hogs and thus help reduce labor requirements per unit of hog production.

Sheep

There are 2 major systems of caring for stock sheep. These might be called the pasture system and the herding system. The latter is essentially limited to the range States (Texas plus Mountain and Pacific States) and particularly to grazing situations in these States where fences are impractical. As the name implies, the herding system involves use of herders at least part of the year and ties up considerable manpower. Not all sheep considered to be in range flocks (300 head or more per farm) are herded. Many large ranches have all their grazing land under fence. Care of sheep requires little time under such conditions (table 5).

The pasture system prevails in the East and on irrigated farms in the West. The sheep graze in fenced pastures or fields and need little care during the grazing season. Man-hours per head of stock sheep in farm flocks tend to vary inversely with the size of flock, and directly with the predominance of ewes that raise lambs. More time must be devoted to ewes that raise lambs than to other stock sheep. Lambs raised in 1959 equalled 75 percent of the number of stock sheep on farms and ranches at the beginning of the year. Because some lambs were twins or triplets the proportion of ewes that raised lambs was somewhat less than this percentage. Ewes that raise lambs make up a high proportion of stock sheep in States and regions where rigid culling of the breeding flock is practiced and where a high percentage of the lambs are marketed at an early age.

According to the Crop Reporting Board there were almost 4.5 million head of sheep and lambs on feed in 26 States on January 1, 1959. It was estimated that less than one hour of labor per head was required to care for these animals from the time they were put in the feedyard until marketing.

Chickens - Laying Flocks

The amount of labor absorbed by laying flocks of chickens tends to vary inversely with the size of flock. Man-hours per layer were estimated for two sizes of flocks, which are referred to as noncommercial (fewer than 400 birds) and commercial flocks (table 6). The dividing point between flocks represents the size at which specialized buildings, equipment, and management practices begin to be economical.

Labor used per layer varies considerably within each group of flocks. The smallest noncommercial flocks often are kept chiefly to provide products for home use. These flocks do not receive a great deal of care but are so small that labor per bird is high. The larger noncommercial flocks receive more care but flock size is still too small to achieve the labor efficiency associated with commercial flocks. According to the 1959 census, more than 12 percent of chickens 4 months old and over on farms were in flocks composed of 10,000 or more birds. Man-hours per hen in these flocks average substantially lower than for all commercial flocks.

Commercial flocks predominate in the Pacific and Northeast regions, with 93 and 86 percent of the birds, respectively, in flocks of 400 or more. Average man-hours per hen are lowest in these regions.

The rate of lay has some effect on man-hours per layer. A large number of eggs per hen means more time for gathering, handling, and marketing. However, as rate of lay goes up, man-hours per 100 eggs decreases. In 1959, the most eggs per hen or pullet on farms January 1 were produced in the Pacific region, and labor used per 100 eggs was lower there than in other regions.

Chickens - Broilers

Production of broilers is fairly well concentrated in the eastern and south-eastern parts of the country. In 1959, the Northeast and Southeast regions accounted for about half of national production. Another 30 percent came from the Appalachian and Delta States. Available studies of broiler production show a definite relationship between the amount of labor used per bird and size of lot. For this reason, broiler farms were divided into small and large units, based on numbers sold per producer. These units are, respectively, those with sales of fewer than 8,000 birds and 8,000 or more. As the average producer has about 4 lots per year, the dividing point between small and large lots was 2,000 birds. Computed this way, the average small lot in the United States in 1959 consisted of about 1,100 birds; the average large lot contained a few more than 10,000 birds (table 7).

The prevalence of small and large lots varied among States and regions, as did the average number of birds per lot. However, all lots of broilers contained the greatest number in the Pacific and Delta regions, and estimated man-hours per bird were lowest in these areas. Labor used per 100 pounds of broilers also was low in these areas, but the lowest rate per 100 pounds was in the Northeast region. This was because birds are sold at heavier weights in this area than in other parts of the country. They averaged 3.6 pounds in the Northeast compared with 3.3 pounds nationally.

Turkeys

Turkey raising is widely scattered over the United States but in 1959 more than two-fifths of the production was in 3 States--California, Minnesota, and Iowa. Production varies from sideline enterprises to large specialized turkey farms. Estimates of man-hours used per bird were made for breeder hens and turkeys raised in noncommercial and commercial flocks containing, respectively, fewer than 400 birds and 400 or more birds (table 8). Specialized housing and equipment and improved labor and management practices begins to be economical at about the 400-bird level.

In 1959 the average breeder flock contained 600 or more hens in California, Minnesota, and New Hampshire. Labor requirements per hen, including an allowance for toms, were lowest in these States. In some States, average breeder flocks contained only 4 or 5 hens. Flocks this size usually receive relatively little care, but they contain so few birds that the time used per bird is high.

Nearly all the turkeys raised in the Pacific and Lake States in 1959 were in commercial flocks. In these regions, such flocks averaged more than 15,000 and 12,000 birds, respectively. They receive intensive care but producers who raise such flocks usually have modern buildings and equipment and stress labor-saving practices. This means little time per bird. Man-hours for all turkeys raised varied by regions from 36 hours per 100 birds in the Pacific to 71 hours in the Southern Plains region.

Table 2.--Milk cows: Man-hours per head and related factors, 1959

State and region	Man-hours				Cows per herd 3/	Milk production per cow
	Per head			Per 100 pounds of milk pro- duced 2/		
	Machine milked	Hand milked	All 1/			
	Hours	Hours	Hours	Hours	Number	Pounds
Maine-----	93	128	103	1.4	10	7,380
New Hampshire-----	90	127	96	1.3	13	7,400
Vermont-----	87	123	87	1.2	26	7,200
Massachusetts-----	88	125	92	1.2	20	7,890
Rhode Island-----	88	125	90	1.1	24	8,450
Connecticut-----	83	125	90	1.1	20	8,220
New York-----	88	125	91	1.2	22	7,840
New Jersey-----	90	125	92	1.1	28	8,710
Pennsylvania-----	90	126	96	1.3	14	7,460
Delaware-----	90	127	95	1.4	14	6,950
Maryland-----	88	125	94	1.4	18	6,960
Northeast-----	89	126	93	1.2	18	7,641
Michigan-----	90	126	96	1.2	12	7,830
Wisconsin-----	90	125	94	1.1	20	8,240
Minnesota-----	90	121	95	1.2	13	7,850
Lake States-----	90	124	95	1.2	16	8,054
Ohio-----	94	131	105	1.4	10	7,390
Indiana-----	94	130	105	1.5	9	7,230
Illinois-----	94	131	105	1.5	10	7,180
Iowa-----	94	123	104	1.5	9	6,820
Missouri-----	96	129	111	2.0	7	5,470
Corn Belt-----	94	128	106	1.6	8	6,784
North Dakota-----	95	122	107	1.8	9	6,080
South Dakota-----	95	124	109	1.9	8	5,610
Nebraska-----	95	127	112	1.9	7	5,950
Kansas-----	97	127	110	2.0	7	5,560
Northern Plains-----	96	125	110	1.9	7	5,799
Virginia-----	99	130	117	2.0	5	5,880
West Virginia-----	120	140	133	2.7	4	4,980
North Carolina-----	108	144	131	2.3	3	5,640
Kentucky-----	99	130	119	2.4	5	4,900
Tennessee-----	98	131	117	2.7	5	4,400
Appalachian-----	101	133	121	2.4	5	5,069

Table 2.--Milk cows: Man-hours per head and related factors, 1959
--Continued

State and region	Man-hours				Cows per herd <u>3/</u>	Milk production per cow
	Per head			Per 100 pounds of milk pro- duced <u>2/</u>		
	Machine milked	Hand milked	All <u>1/</u>			
	Hours	Hours	Hours	Hours	Number	Pounds
South Carolina-----	103	136	126	2.7	4	4,750
Georgia-----	101	132	118	2.6	5	4,570
Florida-----	87	123	96	1.5	21	6,460
Alabama-----	104	136	126	3.2	4	3,900
Southeast-----	96	133	116	2.4	5	4,836
Mississippi-----	96	124	113	3.4	5	3,320
Arkansas-----	100	130	118	2.8	5	4,150
Louisiana-----	96	127	112	3.3	5	3,410
Delta States-----	97	126	114	3.2	5	3,569
Oklahoma-----	98	129	114	2.2	6	5,300
Texas-----	97	132	113	2.3	6	4,850
Southern Plains-----	97	131	113	2.3	6	4,989
Montana-----	96	132	113	2.0	5	5,600
Idaho-----	94	130	101	1.3	9	7,800
Wyoming-----	96	132	114	1.9	5	6,120
Colorado-----	96	126	110	1.7	8	6,650
New Mexico-----	90	130	107	1.9	7	5,620
Arizona-----	80	128	89	1.0	20	9,220
Utah-----	90	133	100	1.3	9	7,930
Nevada-----	92	126	106	1.4	12	7,330
Mountain-----	92	130	104	1.4	8	7,181
Washington-----	94	130	104	1.3	9	7,970
Oregon-----	96	129	105	1.6	8	6,770
California-----	80	125	83	.9	39	9,570
Pacific-----	84	128	90	1.0	18	8,891
United States-----	92	129	103	1.5	9	6,815

^{1/} Man-hours in 2 previous columns weighted by proportion handled by each method as adapted from Dairy Cows: Housing and Methods of Milking. U. S. Dept. Agr., Econ. Res. Serv., ERS-15.

^{2/} Hours per head divided by 100 pounds of milk produced per cow.

^{3/} Milk cows, including heifers that have calved, per farm reporting, from 1959. U. S. Census.

Table 3.--Cattle and calves, except milk cows: Man-hours per head and related factors, 1959

State and region	Man-hours			Dairy heifers - percentage of all other cattle
	Per head		Per 100 pounds of beef produced	
	Beef cows	All other cattle 1/	2/	3/
	Hours	Hours	Hours	Percent
Maine-----	20	17	4.3	78
New Hampshire-----	20	18	2.9	84
Vermont-----	20	16	3.7	89
Massachusetts-----	20	18	3.0	83
Rhode Island-----	20	18	2.9	80
Connecticut-----	20	18	3.0	84
New York-----	20	17	3.2	86
New Jersey-----	19	16	2.2	80
Pennsylvania-----	19	14	3.2	64
Delaware-----	18	15	3.1	67
Maryland-----	18	14	2.9	51
Northeast-----	19	16	3.2	74
Michigan-----	19	14	3.2	52
Wisconsin-----	19	14	2.7	79
Minnesota-----	18	12	2.3	40
Lake States-----	18	13	2.6	56
Ohio-----	18	13	3.5	33
Indiana-----	17	13	3.3	23
Illinois-----	16	11	2.8	17
Iowa-----	16	10	2.4	12
Missouri-----	15	12	3.3	19
Corn Belt-----	16	11	2.8	17
North Dakota-----	13	11	3.0	18
South Dakota-----	11	9	2.6	8
Nebraska-----	12	8	2.4	6
Kansas-----	13	9	2.6	8
Northern Plains-----	12	9	2.6	8
Virginia-----	17	14	4.1	31
West Virginia-----	23	20	6.4	29
North Carolina-----	18	16	5.1	47
Kentucky-----	17	14	4.1	32
Tennessee-----	17	15	4.0	32
Appalachian-----	18	15	4.3	33

Table 3.--Cattle and calves, except milk cows: Man-hours per head and related factors, 1959 --Continued

State and region	Man-hours			Dairy heifers - percentage of all other cattle 3/
	Per head		Per 100 pounds: of beef produced 2/	
	Beef cows	All other cattle 1/		
	Hours	Hours	Hours	Percent
South Carolina-----	17	15	5.1	26
Georgia-----	16	14	5.1	22
Florida-----	10	10	4.2	19
Alabama-----	16	14	4.3	25
Southeast-----	14	13	4.5	22
Mississippi-----	15	14	4.5	29
Arkansas-----	16	14	4.7	23
Louisiana-----	14	14	5.1	23
Delta States-----	15	14	4.7	26
Oklahoma-----	13	11	3.3	11
Texas-----	12	11	3.6	10
Southern Plains-----	12	11	3.5	10
Montana-----	8	7	2.1	5
Idaho-----	14	10	3.0	20
Wyoming-----	8	7	2.2	3
Colorado-----	11	7	2.1	7
New Mexico-----	9	8	2.5	5
Arizona-----	8	7	2.6	5
Utah-----	13	10	3.4	18
Nevada-----	8	7	2.6	6
Mountain-----	10	8	2.4	8
Washington-----	15	12	3.2	25
Oregon-----	13	11	3.4	16
California-----	12	7	2.0	23
Pacific-----	13	9	2.5	22
United States-----	13	11	3.0	22

1/ All cattle and calves, except cows 2 years old and over.

2/ Total man-hours of labor for all cattle and calves except milk cows divided by pounds of beef produced (liveweight). Total hours derived by applying data in 2 previous columns to the appropriate number of head on farms January 1.

3/ Heifers 1-2 years and heifer calves kept for milk divided by the number of all cattle and calves except cows.

Table 4.--Hogs: Man-hours per 100 pounds produced and related factors, 1959

State and region	Man-hours per 100 pounds produced (liveweight)	Sows per herd 1/	Pigs per litter 2/	Fall litters - percentage of spring litters 3/
	Hours	Number	Number	Percent
Maine-----	3.2	5.4	6.6	67
New Hampshire-----	2.6	8.6	6.5	100
Vermont-----	3.0	5.4	7.2	100
Massachusetts-----	2.5	27.6	6.1	100
Rhode Island-----	2.6	20.3	6.0	100
Connecticut-----	2.2	16.1	6.7	100
New York-----	3.3	4.5	7.4	88
New Jersey-----	2.5	18.6	6.2	86
Pennsylvania-----	3.6	3.8	7.2	97
Delaware-----	3.3	4.3	6.9	100
Maryland-----	3.3	4.6	7.0	91
Northeast-----	3.3	5.0	6.9	93
Michigan-----	2.4	5.6	7.0	101
Wisconsin-----	2.0	7.3	7.2	75
Minnesota-----	2.1	9.1	7.1	65
Lake States-----	2.1	8.0	7.1	71
Ohio-----	2.1	7.9	7.0	93
Indiana-----	1.9	10.6	7.1	94
Illinois-----	1.9	12.5	7.1	83
Iowa-----	1.8	15.1	7.1	67
Missouri-----	2.3	7.2	7.1	92
Corn Belt-----	1.9	11.5	7.1	80
North Dakota-----	3.4	5.2	7.0	27
South Dakota-----	2.1	10.4	7.1	35
Nebraska-----	2.0	9.6	7.0	57
Kansas-----	2.3	6.3	7.0	78
Northern Plains-----	2.2	8.5	7.0	50
Virginia-----	3.6	3.6	7.0	95
West Virginia-----	3.9	2.5	7.3	109
North Carolina-----	3.6	3.2	7.1	73
Kentucky-----	3.3	4.2	7.1	96
Tennessee-----	3.6	3.4	6.9	90
Appalachian-----	3.5	3.5	7.0	87

Table 4.--Hogs: Man-hours per 100 pounds produced and related factors, 1959
--Continued

State and region	Man-hours per 100 pounds produced (liveweight)	Sows per herd 1/	Pigs per litter 2/	Fall litters - percentage of spring litters 3/
	Hours	Number	Number	Percent
South Carolina-----	3.5	2.9	6.4	80
Georgia-----	3.4	4.7	6.8	81
Florida-----	3.4	4.8	6.9	75
Alabama-----	3.0	3.6	7.0	86
Southeast-----	3.3	4.0	6.8	82
Mississippi-----	4.1	2.7	6.4	97
Arkansas-----	3.6	3.0	6.8	94
Louisiana-----	4.3	2.4	6.1	92
Delta States-----	4.0	2.8	6.5	95
Oklahoma-----	3.6	3.6	6.9	98
Texas-----	3.3	4.0	6.9	84
Southern Plains-----	3.4	3.9	6.9	88
Montana-----	3.3	4.9	7.3	75
Idaho-----	3.3	4.4	7.3	89
Wyoming-----	3.3	4.5	6.9	80
Colorado-----	2.9	5.3	6.8	89
New Mexico-----	3.3	4.8	6.7	100
Arizona-----	2.6	7.7	7.2	100
Utah-----	3.7	3.7	6.8	114
Nevada-----	3.1	5.6	6.7	100
Mountain-----	3.2	4.8	7.0	89
Washington-----	3.0	5.5	7.7	88
Oregon-----	3.0	5.4	7.6	86
California-----	2.0	13.7	6.2	83
Pacific-----	2.6	7.8	6.9	85
United States-----	2.3	7.8	7.0	77

1/ Spring farrowings per farm reporting, from 1959 U. S. Census.

2/ Total number of pigs saved divided by number of sows farrowing in spring, plus number farrowing in fall.

3/ Number of sows farrowing in fall divided by number farrowing in spring.

Table 5.--Sheep: Man-hours per head and related factors, 1959

State and region	Man-hours per head 1/ Stock-sheep				Sheep per 3/--		Lambs saved -- percentage of stock sheep 4/
	Stock-sheep			Sheep			
	Farm flocks	Range flocks	All	on feed 2/	Farm flock	Range flock	
	Hours	Hours	Hours	Hours	Number	Number	Percent
Maine-----	4.2	---	4.2	---	19	---	77
New Hampshire-----	4.8	---	4.8	---	11	---	62
Vermont-----	4.1	---	4.1	---	18	---	67
Massachusetts-----	4.9	---	4.9	---	11	---	67
Rhode Island-----	5.5	---	5.5	---	12	---	100
Connecticut-----	5.2	---	5.2	---	10	---	71
New York-----	4.1	---	4.1	1.2	29	---	85
New Jersey-----	4.7	---	4.7	---	13	---	69
Pennsylvania-----	3.7	---	3.7	---	24	---	65
Delaware-----	4.0	---	4.0	---	28	---	80
Maryland-----	4.1	---	4.1	---	23	---	82
Northeast-----	4.0	---	4.0	1.2	22	---	73
Michigan-----	4.0	---	4.0	1.1	37	---	85
Wisconsin-----	4.3	---	4.3	1.1	21	---	88
Minnesota-----	4.1	---	4.1	1.0	32	---	93
Lake States-----	4.1	---	4.1	1.0	30	---	90
Ohio-----	4.0	---	4.0	1.1	28	---	81
Indiana-----	4.3	---	4.3	.9	19	---	83
Illinois-----	4.4	---	4.4	.9	18	---	81
Iowa-----	4.1	---	4.1	.8	29	---	86
Missouri-----	4.3	---	4.3	1.0	31	---	98
Corn Belt-----	4.2	---	4.2	.9	25	---	83
North Dakota-----	3.5	---	3.5	1.0	66	---	88
South Dakota-----	3.3	---	3.3	.8	91	---	83
Nebraska-----	3.7	---	3.7	.7	45	---	81
Kansas-----	3.5	---	3.5	.7	56	---	80
Northern Plains-----	3.4	---	3.4	.7	69	---	83
Virginia-----	4.1	---	4.1	---	30	---	89
West Virginia-----	6.0	---	6.0	---	27	---	85
North Carolina-----	4.4	---	4.4	---	17	---	76
Kentucky-----	3.8	---	3.8	---	45	---	89
Tennessee-----	3.9	---	3.9	---	31	---	79
Appalachian-----	4.3	---	4.3	---	32	---	86

Table 5.--Sheep: Man-hours per head and related factors, 1959 --Continued

State and region	Man-hours per head 1/				Sheep per 3/--		Lambs saved -- percentage of stock sheep 4/
	Stock-sheep		: Sheep				
	Farm flocks	Range flocks	All	on feed 2/	Farm flock	Range flock	
	Hours	Hours	Hours	Hours	Number	Number	Percent
South Carolina-----	3.7	---	3.7	---	23	---	62
Georgia-----	3.4	---	3.4	---	29	---	58
Florida-----	3.4	---	3.4	---	32	---	62
Alabama-----	3.2	---	3.2	---	35	---	59
Southeast-----	3.4	---	3.4	---	30	---	59
Mississippi-----	3.2	---	3.2	---	41	---	55
Arkansas-----	3.6	---	3.6	---	28	---	69
Louisiana-----	3.2	---	3.2	---	26	---	48
Delta States-----	3.3	---	3.3	---	30	---	55
Oklahoma-----	3.4	---	3.4	.7	42	---	72
Texas-----	2.9	2.6	2.7	.7	56	761	59
Southern Plains--	3.0	2.6	2.7	.7	53	761	60
Montana-----	3.5	3.4	3.4	1.2	68	891	70
Idaho-----	3.8	3.8	3.8	1.2	52	1,227	93
Wyoming-----	3.5	4.0	3.9	1.2	79	1,361	66
Colorado-----	3.7	4.0	4.0	.9	50	888	85
New Mexico-----	3.4	3.4	3.4	.9	53	1,141	66
Arizona-----	3.7	10.0	9.9	.8	23	7,086 5/	64
Utah-----	3.5	4.2	4.1	1.2	42	1,238	75
Nevada-----	3.6	3.8	3.8	1.1	34	3,498	73
Mountain-----	3.6	4.1	4.1	1.0	54	1,182	74
Washington-----	4.0	3.9	3.9	1.0	32	885	88
Oregon-----	4.0	3.5	3.8	.9	49	705	82
California-----	3.9	3.5	3.6	.8	34	1,142	76
Pacific-----	4.0	3.5	3.7	.8	40	1,003	79
United States--	3.8	3.6	3.7	.9	36	999	75

1/ Per head on farms January 1.

2/ Estimates were made only for those States in which numbers on feed were reported by the Crop Reporting Board.

3/ Sheep 1 year old and over, from the 1959 U.S. Census. In all except the range States, sheep are considered to be in farm flocks. In range States, farm flocks are those on farms reporting fewer than 300 per farm. The average size of range flocks (those on ranches reporting 300 or more) should not be confused with size of bands into which sheep are divided for herding.

4/ Based on data from the Crop Reporting Board. Indicates the relative importance of ewes that raise lambs. These ewes take more time than other stock sheep.

5/ The large size of flock results partly from counting sheep on an Indian reservation as one flock.

Table 6.--Chickens - laying flocks: Man-hours per bird and related factors, 1959

State and region	Man-hours per 100 hens or pullets on farms Jan. 1 1/			Man-hours per 100 eggs produced 2/	Rate of lay 3/	Size of flock 1/	
	Noncommercial flocks	Commercial flocks	All flocks			Noncommercial	Commercial
	Hours	Hours	Hours	Hours	Eggs	Birds	Birds
Maine-----	176	95	99	.57	174	46	3,590
New Hampshire-----	170	98	102	.60	170	57	3,264
Vermont-----	175	100	117	.65	181	46	2,385
Massachusetts-----	164	99	102	.57	180	74	2,369
Rhode Island-----	167	98	101	.56	179	77	2,804
Connecticut-----	168	95	98	.55	178	66	3,518
New York-----	167	102	114	.65	176	64	2,043
New Jersey-----	161	95	96	.56	172	84	3,435
Pennsylvania-----	158	108	119	.67	177	88	1,364
Delaware-----	170	98	113	.68	167	57	2,230
Maryland-----	166	109	135	.92	147	66	1,169
Northeast-----	163	101	110	.63	174	73	2,087
Michigan-----	162	110	134	.77	174	81	1,066
Wisconsin-----	155	115	141	.79	179	103	866
Minnesota-----	142	117	130	.72	180	154	702
Lake States-----	150	115	134	.75	178	117	795
Ohio-----	159	110	133	.73	181	91	1,167
Indiana-----	158	108	128	.71	181	96	1,221
Illinois-----	154	116	141	.81	174	104	819
Iowa-----	143	118	133	.73	182	158	644
Missouri-----	165	117	155	1.04	149	72	933
Corn Belt-----	154	114	137	.78	175	106	883
North Dakota-----	161	122	156	1.06	147	81	698
South Dakota-----	144	118	133	.77	172	152	612
Nebraska-----	150	118	141	.81	175	128	652
Kansas-----	157	118	148	.88	168	94	796
Northern Plains-----	152	118	143	.85	169	114	666
Virginia-----	200	101	124	.74	168	44	1,538
West Virginia-----	186	126	167	1.07	156	44	1,219
North Carolina-----	186	102	130	.82	158	34	2,027
Kentucky-----	178	109	167	1.18	142	41	1,537
Tennessee-----	182	103	153	1.08	142	37	1,853
Appalachian-----	184	103	142	.92	154	39	1,779

Table 6.--Chickens - laying flocks: Man-hours per bird and related factors, 1959
--Continued

State and region	Man-hours per 100 hens or pullets on farms Jan. 1 ^{1/}			Man-hours per 100 eggs produced ^{2/}	Rate of lay ^{3/}	Size of flock ^{1/}	
	Noncommercial flocks	Commercial flocks	All flocks			Noncommercial	Commercial
	Hours	Hours	Hours	Hours	Eggs	Birds	Birds
South Carolina-----	191	100	131	.80	164	30	2,270
Georgia-----	190	94	109	.63	173	29	3,676
Florida-----	189	95	104	.57	182	31	3,205
Alabama-----	190	98	126	.80	157	29	2,733
Southeast-----	190	96	116	.69	169	29	3,084
Mississippi-----	193	96	130	.73	179	28	2,877
Arkansas-----	189	98	129	.78	166	29	2,579
Louisiana-----	188	98	140	.97	144	32	2,722
Delta States-----	190	97	132	.80	166	29	2,732
Oklahoma-----	174	110	156	1.02	153	48	1,281
Texas-----	173	93	126	.82	153	51	1,972
Southern Plains-----	173	95	133	.87	153	50	1,843
Montana-----	171	113	157	.94	167	56	998
Idaho-----	176	106	143	.76	189	46	1,607
Wyoming-----	173	114	163	1.11	147	55	849
Colorado-----	170	108	144	.86	168	57	1,423
New Mexico-----	178	100	132	.80	164	41	2,507
Arizona-----	179	94	102	.58	177	39	3,796
Utah-----	172	102	115	.62	184	50	2,418
Nevada-----	176	120	164	1.26	130	43	1,150
Mountain-----	173	103	135	.78	174	51	1,931
Washington-----	179	100	113	.58	195	37	2,482
Oregon-----	178	104	124	.69	179	39	1,843
California-----	184	90	93	.46	200	33	5,129
Pacific-----	180	92	99	.50	197	36	4,073
United States	162	103	127	.73	173	67	1,550

^{1/} Man-hours do not include time for raising replacements. Chickens raised for replacement and for meat take from 10 to 30 man-hours per 100 birds. Noncommercial flocks and commercial flocks of chickens for egg production are those on farms reporting fewer than 400, and 400 or more chickens per farm, respectively, from the 1959 U. S. Census.

^{2/} Hours per layer divided by rate of lay.

^{3/} Number of eggs produced during the year divided by number of hens and pullets on hand January 1.

Table 7.--Chickens-broilers: Man-hours per bird and related factors, 1959

State and region	Man-hours per 1,000 broilers 1/			Man-hours per 100 pounds produced 2/	Birds sold from 1/--	
	Small flocks	Large flocks	All flocks		Small flocks	Large flocks
	Hours	Hours	Hours	Hours	1,000	1,000
Maine-----	70	33	33	.88	4.5	47.3
New Hampshire-----	70	39	40	1.09	3.9	28.4
Vermont-----	90	34	35	1.03	2.4	43.5
Massachusetts-----	83	32	34	.90	3.0	56.8
Rhode Island-----	72	33	35	.99	3.3	47.0
Connecticut-----	73	33	34	1.00	2.9	46.0
New York-----	83	36	38	.92	3.2	39.0
New Jersey-----	72	39	42	.83	2.9	31.6
Pennsylvania-----	71	34	37	1.01	3.8	43.8
Delaware-----	70	32	32	.92	5.9	51.3
Maryland-----	70	32	32	.92	4.6	51.1
Northeast-----	73	33	34	.93	3.8	48.1
Michigan-----	71	59	62	1.30	4.2	21.6
Wisconsin-----	72	32	33	.97	3.1	53.9
Minnesota-----	100	34	37	1.12	2.0	37.8
Lake States-----	75	35	38	1.05	3.3	43.9
Ohio-----	72	39	41	1.22	3.7	34.1
Indiana-----	72	36	37	1.10	3.5	35.6
Illinois-----	75	36	39	1.21	4.2	40.0
Iowa-----	75	39	44	1.00	3.0	32.9
Missouri-----	71	34	35	1.09	4.2	40.9
Corn Belt-----	73	36	37	1.12	3.7	37.2
Nebraska-----	90	32	34	1.01	3/	3/
Kansas-----	83	33	37	1.20	3/	3/
Northern Plains---	87	32	36	1.09	3.0	96.8
Virginia-----	71	36	38	1.23	4.1	38.3
West Virginia-----	75	50	52	1.55	4.3	29.4
North Carolina-----	70	36	37	1.12	4.4	37.2
Kentucky-----	70	43	44	1.32	4.0	28.3
Tennessee-----	70	39	40	1.24	4.8	31.9
Appalachian-----	72	38	40	1.21	4.3	34.9

Table 7.--Chickens-broilers: Man-hours per bird and related factors, 1959
--Continued

State and region	Man-hours per 1,000 broilers ^{1/}			Man-hours per 100 pounds produced ^{2/}	Birds sold from ^{1/} --	
	Small flocks	Large flocks	All flocks		Small flocks	Large flocks
	Hours	Hours	Hours	Hours	1,000	1,000
South Carolina-----	72	34	35	1.08	4.0	41.8
Georgia-----	70	39	40	1.21	5.1	31.6
Florida-----	73	32	33	1.02	3.4	55.5
Alabama-----	70	36	36	1.10	4.4	39.2
Southeast-----	70	38	38	1.17	4.9	34.7
Mississippi-----	70	31	31	1.01	4.8	62.8
Arkansas-----	70	34	35	1.12	4.8	41.4
Louisiana-----	70	34	35	1.08	5.0	40.2
Delta States-----	70	33	33	1.07	4.8	47.0
Oklahoma-----	71	39	40	1.24	3.1	36.0
Texas-----	70	34	35	1.12	5.0	41.6
Southern Plains---	70	34	35	1.13	4.8	41.1
Idaho-----	71	36	37	1.15	3/	3/
Colorado-----	75	43	45	1.32	3/	3/
Arizona-----	83	30	31	1.08	3/	3/
Utah-----	71	43	46	1.36	3/	3/
Mountain-----	72	38	40	1.24	2.8	35.5
Washington-----	71	32	33	.96	4.3	53.5
Oregon-----	71	32	33	.99	4.4	57.1
California-----	72	32	33	.96	3.8	54.8
Pacific-----	71	32	33	.97	4.0	54.9
United States---	71	35	36	1.09	4.3	40.4

^{1/} Small and large flocks are those produced on farms reporting fewer than 8,000, and 8,000 or more broilers sold per farm, respectively, from the 1959 U. S. Census.

^{2/} Total man-hours of labor for broilers divided by pounds produced (liveweight). Total hours derived by applying data in the previous columns to appropriate numbers of birds.

^{3/} Not reported for small and large flocks separately because of small number of producers. Numbers sold per farm for all farms reporting were (1,000 broilers) 30.9 in Nebraska, 23.3 in Kansas, 32.6 in Idaho, 17.7 in Colorado, 100.0 in Arizona, and 18.3 in Utah.

Table 8.--Turkeys: Man-hours per bird and related factors, 1959

State and region	Man-hours					Turkeys per--		
	Per breeder hen	Per 100 Noncommercial flocks	Per 100 Commercial flocks	Per 100 All flocks	Per 100 pounds of turkeys produced 2/	Breeder flock 3/	Flock raised 1/ Noncommercial	Flock raised 1/ Commercial
	Hours	Hours	Hours	Hours	Hours	Birds	Birds	Birds
Maine-----	2.9	217	54	67	4.6	41	50	2,842
New Hampshire----	2.1	212	53	62	4.6	618	62	3,215
Vermont-----	2.9	223	57	79	5.3	48	44	2,510
Massachusetts----	2.2	198	53	58	3.8	540	92	3,302
Rhode Island----	2.7	208	59	95	5.8	79	71	2,049
Connecticut-----	2.2	210	54	60	4.2	450	66	3,001
New York-----	2.6	218	48	56	3.6	120	51	5,146
New Jersey-----	2.4	211	59	68	4.2	228	64	2,005
Pennsylvania-----	2.7	210	54	66	3.9	86	67	3,024
Delaware-----	3.2	210	38	41	3.2	28	61	9,890
Maryland-----	3.0	224	55	74	5.3	35	42	2,607
Northeast-----	2.5	213	51	61	3.9	127	59	3,477
Michigan-----	2.5	225	45	49	3.5	178	41	6,656
Wisconsin-----	2.4	226	44	45	3.2	266	38	6,637
Minnesota-----	2.1	206	37	38	2.8	623	73	12,517
Lake States-----	2.2	214	39	40	3.0	428	54	12,510
Ohio-----	2.4	220	44	46	3.7	214	46	6,672
Indiana-----	2.7	222	42	44	2.7	74	44	7,773
Illinois-----	2.9	226	46	53	3.3	47	40	6,190
Iowa-----	2.3	224	41	42	2.7	412	42	9,068
Missouri-----	2.8	226	46	51	3.4	65	40	6,321
Corn Belt-----	2.5	224	43	45	3.0	120	42	7,589
North Dakota-----	2.9	230	50	64	3.9	47	36	4,144
South Dakota-----	3.5	234	39	54	4.0	10	29	9,596
Nebraska-----	2.8	221	44	52	3.2	61	47	7,096
Kansas-----	2.9	224	51	64	4.2	48	43	3,909
Northern Plains--	2.9	228	46	58	3.8	32	37	5,432
Virginia-----	2.6	233	47	49	5.8	116	28	4,169
West Virginia-----	3.6	236	51	54	5.2	42	26	8,036
North Carolina----	3.0	244	40	46	3.1	34	20	10,261
Kentucky-----	3.2	243	46	66	5.2	29	22	6,188
Tennessee-----	4.0	245	54	153	11.1	5	16	3,041
Appalachian-----	2.9	241	46	51	5.1	34	21	11,404

Table B.--Turkeys: Man-hours per bird and related factors, 1959 --Continued

State and region	Man-hours					Turkeys per--		
	Per breeder hen	Per 100 noncommercial flocks	Per 100 commercial flocks	Per 100 all flocks	Per 100 pounds of turkeys produced 2/	Breeder flock 3/	Noncommercial	Commercial
	Hours	Hours	Hours	Hours	Hours	Birds	Birds	Birds
South Carolina----	3.2	245	40	46	3.3	22	13	9,598
Georgia-----	4.0	246	44	72	4.7	6	12	7,327
Florida-----	3.2	242	34	50	4.4	28	20	15,825
Alabama-----	4.0	244	46	86	6.7	5	12	5,492
Southeast-----	3.5	245	40	58	4.3	10	13	8,748
Mississippi-----	5.0	244	53	131	10.9	4	9	3,153
Arkansas-----	3.2	245	44	47	3.2	26	14	7,198
Louisiana-----	5.0	246	56	194	16.5	4	10	2,706
Delta States----	3.8	245	45	59	4.2	9	10	6,822
Oklahoma-----	3.2	229	46	51	4.4	27	37	5,654
Texas-----	3.0	219	46	74	6.2	35	47	5,739
Southern Plains--	3.0	220	46	71	5.8	34	45	5,715
Montana-----	5.0	245	62	179	12.9	4	16	1,476
Idaho-----	3.2	236	33	47	3.1	29	28	22,058
Wyoming-----	4.0	244	60	208	15.9	5	17	1,879
Colorado-----	3.5	239	41	47	2.5	17	27	9,952
New Mexico-----	3.5	245	52	113	7.0	12	20	3,574
Arizona-----	2.8	244	45	58	4.0	53	21	6,656
Utah-----	2.6	242	37	38	2.1	131	23	14,053
Nevada-----	5.0	246	---	246	12.5	4	11	---
Mountain-----	3.0	241	38	45	2.6	26	22	11,856
Washington-----	2.6	241	43	51	3.4	103	25	8,533
Oregon-----	2.2	238	43	46	4.1	461	27	7,493
California-----	2.1	241	34	35	2.5	886	24	17,609
Pacific-----	2.1	240	35	36	2.7	625	25	15,164
United States--	2.5	228	41	47	3.4	57	28	8,949

1/ Noncommercial and commercial flocks are those raised on farms reporting fewer than 400, and 400 or more turkeys raised per farm, respectively, as estimated from data in the U. S. Census.

2/ Total man-hours of labor for turkeys divided by pounds produced (liveweight). Total hours derived by applying data in the previous columns to appropriate numbers of birds.

3/ Number of hens kept for breeding per farm reporting, from the 1959 U. S. Census.

END