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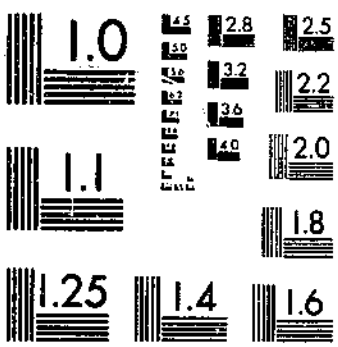
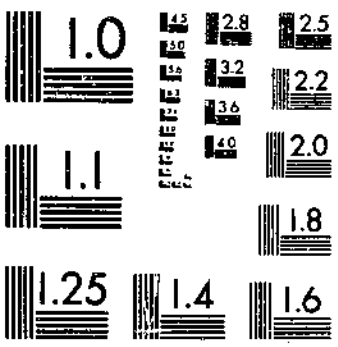


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



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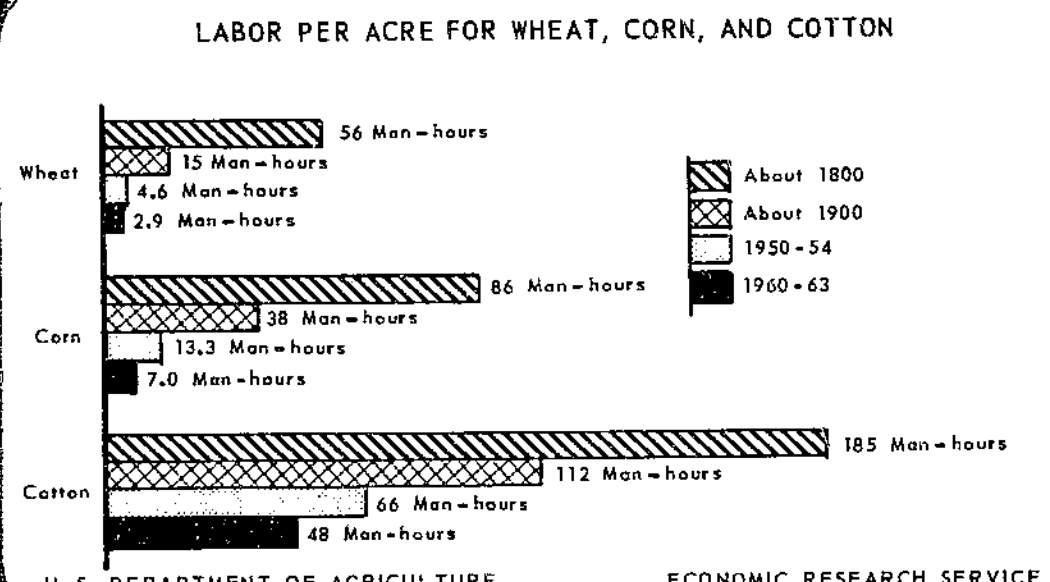
LABOR USED TO PRODUCE FIELD CROPS

Estimates by States



STATISTICAL BULLETIN NO. 346

U.S. DEPARTMENT OF AGRICULTURE
FARM PRODUCTION ECONOMICS DIVISION
ECONOMIC RESEARCH SERVICE

PREFACE

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

This report contains national estimates for selected periods, 1800 to 1963, of the man-hours of labor used per acre and per unit of production of the major field crops. Comparable State estimates, which are developed periodically after data from the agricultural censuses become available, are presented for 1959.

The periodic State estimates are weighted into regional averages which serve as benchmarks for annual series. Each year the regional averages of man-hours per acre of field crops, together with comparable data for fruit and other crops and per head or unit of production of livestock, are applied to the estimates of acres, numbers, and production of crops and livestock, prepared by the Federal-State crop reporting system, Statistical Reporting Service, U. S. Department of Agriculture, 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, together 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 by the Economic Research Service in Changes in Farm Production and Efficiency, Statistical Bulletin 233.

Two companion publications, Labor Used to Produce Livestock, Estimates by States, 1959, Statistical Bulletin 336, 1963, and Labor Used to Produce Vegetables, Estimates by States, 1959, Statistical Bulletin 341, 1964, are available.

Washington, D. C. May 1964

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ACKNOWLEDGMENTS

Staff members of State agricultural experiment stations and field personnel of the Farm Production Economics Division, Economic Research Service, assisted in revising preliminary estimates.

GUIDE TO TABLES

LABOR USED TO PRODUCE FIELD CROPS
Estimates by States

by

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INTRODUCTION

Man-hours of labor used per acre have declined for nearly all field crops. During the 1953-63 decade, the decrease in total labor for field crops was about 2.2 billion man-hours. Increasing mechanization and other technological factors accounted for most of the decline.

The earliest statistics available on labor used for field crops indicate that the current decline in man-hours per acre is the continuation of a longtime trend. Estimates of man-hours used per acre for cotton, corn, and wheat at various periods of the nineteenth century show that labor requirements decreased throughout the century. Annual data beginning in 1910 show that the decline has continued during the twentieth century for these three as well as for most other field crops.

In addition to averages for the United States, man-hours of labor used per acre of field crops in 1959 in each State are presented in this report. 1/ The estimates for 1959 show wide variations among States and regions in man-hours used per acre of the same crop. These differences may be attributed to several causes, such as size of fields, extent of irrigation, and harvesting methods.

METHODOLOGY

The estimates of labor requirements in this report are developed from data collected by State and Federal agencies and published by State agricultural experiment stations and the U. S. Department of Agriculture. 2/

The man-hours of labor are direct labor inputs. They do not include time for repairing machinery or buildings, mending fences, making business trips, keeping records, or any other type of overhead work.

1/ For the 48 contiguous States only; data for Alaska and Hawaii are not included.
2/ A partial listing of such reports is given in "Publications Containing Recent Farm Enterprise Input-Output Data," U.S. Dept. Agr., Econ. Res. Serv., Farm Prod. Econ. Div., March 1963; unnumbered.

Preharvest work includes all operations up to harvest, such as spreading fertilizer and manure, plowing and fitting the land, planting or seeding, cultivating, irrigating, spraying, and dusting. For perennial crops, preharvest man-hours include the annual share of establishing the stand in addition to time used in caring for the crop. When applicable, time used for preharvest work was estimated separately for irrigated and dry land conditions, then weighted by the proportion of acreage grown under each practice.

Harvest work includes the main harvesting operations and hauling the crop to storage and to local markets or processing plants. Man-hours required for harvesting were obtained by weighting the man-hours required per acre for each method by the proportion of acreage harvested by that method. Except where published sources are indicated by footnotes to tables, the proportions harvested by the various methods were estimated by the authors. These estimates are available upon request. Yields used are those published by the Department's Statistical Reporting Service.

CHANGES IN AMOUNT OF LABOR USED TO PRODUCE FIELD CROPS

Nineteenth Century Changes

Innovations in agriculture are not new. Although their development was painfully slow for centuries, they are as old as man and his fight to sustain himself. From the use of a forked stick for tilling the soil and the tramping hooves of sheep or oxen for threshing grain, man progressed to the use of oxen and horses for power. His rate of progress snowballed with the advent of the moldboard plow and grain reaper, and became revolutionary with adoption of the internal combustion engine, advances in chemistry, plant and animal breeding, animal nutrition, and rural electrification.

For the United States, the earliest available statistics indicating the magnitude of changes in labor requirements for field crops date back only to the nineteenth century. Estimates of average man-hours used per acre and per unit of cotton, corn, and wheat at various periods during the century are shown in table 1. They show that labor requirements for each of the crops declined sharply during the period. Around 1800, 56 man-hours, were used for producing an acre of wheat. By 1900, this had declined to 15 man-hours, a reduction of 41 man-hours per acre. During the same period, labor used for corn declined from 86 to 38, and labor for cotton from 185 to 112 man-hours per acre.

One man-hour of labor produced 3.5 times as much wheat in 1900 as in 1800, 2.3 times as much corn, and 2.1 times as much cotton. During the 100-year period, yields of corn and wheat changed only slightly--the increase in production per man-hour was due almost entirely to lower labor requirements per acre. While the reduction in labor requirements per acre of cotton was proportionally smaller, cotton yield increased 30 percent, thus contributing substantially to the increase in lint per man-hour.

The decline in labor requirements during the century resulted from many important innovations. "The man with the hoe," symbol of planting and cultivating for centuries, was largely replaced in field crop production by the cultivator or "horse hoe," the grain drill, and cotton and corn planters (6). 3/ Introduction of steel gang

3/ Underscored figures in parentheses refer to items in Literature Cited, p. 9.

Table 1.--Wheat, corn, and cotton: Man-hours per unit of production and related factors, United States, indicated periods, 1800 to 1900

Crop and item	Yearly average--			
	About 1800	About 1840	About 1880	About 1900
Wheat:				
Man-hours per acre	56	35	20	15
Yield per acre (bushels) 1/	15	15	13.2	13.9
Man-hours per 100 bushels	373	233	152	108
Corn:				
Man-hours per acre	86	69	46	38
Yield per acre (bushels) 1/	25	25	25.6	25.9
Man-hours per 100 bushels	344	276	180	147
Cotton:				
Man-hours per acre	185	135	119	112
Yield per acre (pounds) 1/	147	147	188	189
Man-hours per bale	601	438	303	284

1/ Yields for 1800 and 1840 are estimates, those for 1880 and 1900 are 5-year averages of published data centered on year shown.

Adapted from Progress of Farm Mechanization (4).

and sulky plows constituted important milestones of the century. On the harvest side, the mower, grain reaper, binder, and thresher were introduced.

Recent Changes

A total of about 3 billion man-hours of farmwork was used to produce field crops in the 48 contiguous States in 1963. This was more than 40 percent less than a decade earlier and almost three-fourths less than the 11 billion hours used for field crops in 1910.

Farm mechanization, the major labor-reducing factor, has continued to expand. Early in the 1900's, machine power commenced to replace animal power. From 1910 to 1920, tractors on farms increased from 1,000 to 246,000, motortrucks from none to 139,000, cornpickers from none to 10,000, and grain combines from 1,000 to 4,000 (5). Since then, numbers of these machines on farms have multiplied, and in 1963 the inventory of machines on farms included almost 4.7 million tractors, 2.9 million motortrucks, 820,000 cornpickers and picker-shellers, and more than 1 million grain combines. Other major labor-saving machines such as pickup balers, field forage harvesters, cotton pickers and strippers, power elevators, and many others began to be used a decade or two ago and numbers of them have expanded as have the proportion of crops on which they were used.

Increases in the size of farms and of enterprises on them, and the accompanying use of more and larger farm machines reduced the time required for many operations. Wider use of improved seeding and tillage equipment, herbicides, and flame cultivation; increased use of airplanes for spreading pesticides; and improvements in irrigation equipment and other technological innovations also contributed substantially to labor savings.

The effect of advances in mechanization on man-hours per acre has varied among the field crops (table 2). For example, during the last decade (1950-54 to 1960-63) the average time for producing rice declined 2 man-hours per acre, from 14.5 to 12.5 man-hours; and time for producing peanuts declined 14.1 man-hours per acre, from 36.4 to 22.3. The difference in rate of decline during this period results primarily from differences in the timing and rate of mechanizing the harvest. Eighty-six percent of the rice crop was combined in 1950; thus the major impact of the combine on labor for rice harvesting had already taken place. In contrast, only 20 percent of the peanut crop was combined in 1950, and the proportion had increased to 76 percent by 1959.

Labor used for hay and silage crops decreased rather slowly until the 1945-49 period, when it dropped sharply, reflecting the rapid adoption of the pickup baler and field forage harvester. The decline in labor used per acre of corn and small grains which began in the 1910-14 period was accelerated during World War II when manpower on farms declined and number of tractors, grain combines, and cornpickers increased substantially.

Along with the advances in mechanization, which reduced the amount of labor required per acre, there were improvements in and greater use of such yield increasing factors as fertilizers, pesticides, and high yielding and disease resistant crop varieties. The combined impact of declining labor requirements and increasing yields greatly increased the productivity of labor used. This is illustrated by the sharp gain from 1950-54 to 1960-63 in production of corn for grain per man-hour. Average yield rose by 57 percent, from 39.4 to 61.7 bushels per acre, while labor dropped about 47 percent, from 13.3 to 7.0 man-hours per acre. The combined effect was a reduction from 34 to 11 man-hours per 100 bushels of corn produced, an increase of more than 200 percent in labor productivity.

Only one crop, tobacco, ran counter to the downward trend in labor used per acre. Requirements per acre increased from 464 man-hours per acre in 1950-54 to 488 in 1960-63. Data for prior periods show that this is the continuation of a longtime trend, as labor used per acre of tobacco increased by 132 man-hours between 1910-14 and 1960-63, or from 356 to 488 hours. Even so, the time required to produce 100 pounds of tobaccoo decreased from 44 to 27 man-hours, as tobacco yield more than doubled and some labor-saving gains were made in preharvest operations.

Mechanical transplanters are now used for setting the major portion of tobacco plants into the field. Transplanting mechanically requires an average of about 8 man-hours per acre less than transplanting by hand. Maleic hydrazide, a chemical which inhibits cell division necessary for sucker development in tobacco, has gained widespread use in flue-cured areas. Its use requires about 14 man-hours per acre less than suckering by hand. Mechanization of the harvest operation still lags. It is receiving considerable research attention, however. Several mechanical harvesters are in the experimental stage, and more than 300 bulk-curing units were reported in operation throughout the tobacco producing States in 1962.

Table 2.--Field crops: Man-hours per unit of production of specified crops, and related factors, United States, indicated periods, 1910-63 1/2/

Crop and item	1910-14	1915-19	1920-24	1925-29	1930-34	1935-39	1940-44	1945-49	1950-54	1955-59	1960-63 3/
Corn for grain:											
Man-hours per acre	35.2	34.2	32.7	30.3	28.2	28.1	25.5	19.2	13.3	9.9	7.0
Yield per acre (bushels)	26.0	25.9	26.8	26.3	23.0	26.1	32.2	36.1	39.4	48.7	61.7
Man-hours per 100 bushels	135	132	122	115	123	108	79	53	34	20	11
Oats:											
Man-hours per acre	15.7	15.1	13.2	11.9	10.7	10.1	9.5	8.0	6.2	5.1	4.1
Yield per acre (bushels)	29.4	32.5	29.8	29.5	26.3	29.2	31.8	34.3	33.9	38.6	43.8
Man-hours per 100 bushels	53	46	44	40	41	35	30	23	18	13	9
Barley:											
Man-hours per acre	16.9	16.3	14.1	13.1	12.3	11.1	9.6	7.5	5.7	4.3	3.5
Yield per acre (bushels)	21.6	23.1	22.1	23.3	20.1	22.1	23.6	25.5	27.8	29.5	32.7
Man-hours per 100 bushels	78	71	64	56	61	50	41	29	21	15	11
Sorghums for grain:											
Man-hours per acre	---	---	18.2	17.5	13.6	13.1	12.9	8.8	6.4	5.9	4.6
Yield per acre (bushels)	---	---	17.6	16.8	13.1	12.8	17.4	17.8	19.9	29.2	42.5
Man-hours per 100 bushels	---	---	103	104	104	102	74	49	32	20	11
Wheat:											
Man-hours per acre	15.2	13.6	12.4	10.5	9.4	8.8	7.5	5.7	4.6	3.8	2.9
Yield per acre (bushels)	14.4	13.9	13.8	14.1	13.5	13.2	17.1	16.9	17.3	22.3	25.1
Man-hours per 100 bushels	106	98	90	74	70	67	44	34	27	17	12
Buckwheat:											
Man-hours per acre	34.0	32.0	29.4	25.6	23.4	21.4	17.6	11.3	8.3	7.0	6.0
Yield per acre (bushels)	16.8	15.1	17.0	15.8	16.0	16.1	17.2	16.7	17.8	17.5	19.1
Man-hours per 100 bushels	202	212	173	162	146	133	102	68	47	40	31
Rice:											
Man-hours per acre	55.0	51.7	46.9	37.2	33.0	31.8	28.6	20.6	14.5	13.2	12.5
Yield per acre (bushels)	35.8	38.8	39.3	42.9	47.1	49.7	45.5	46.7	53.8	70.9	80.9
Man-hours per 100 bushels	154	133	119	87	70	64	63	44	27	19	15
Hay:											
Man-hours per acre	11.9	13.0	12.5	12.0	10.3	11.3	11.0	8.4	6.3	6.0	5.5
Yield per acre (tons)	1.15	1.25	1.22	1.22	1.08	1.24	1.35	1.35	1.43	1.61	1.76
Man-hours per ton	10.3	10.4	10.2	9.8	9.5	9.1	8.1	6.2	4.4	3.7	3.1
Corn for silage:											
Man-hours per acre	---	---	38.8	36.1	33.1	32.3	30.4	23.8	16.7	13.7	12.2
Yield per acre (tons)	---	---	7.38	7.34	6.29	6.25	8.02	8.14	7.89	8.41	10.21
Man-hours per ton	---	---	5.3	4.9	5.3	5.2	3.8	2.9	2.1	1.6	1.2
Sorghums for forage:											
Man-hours per acre	---	---	---	---	17.0	15.9	14.4	11.0	8.7	8.6	8.5
Yield per acre (tons)	---	---	---	---	1.19	1.25	1.51	1.36	1.18	1.26	1.88
Man-hours per ton	---	---	---	---	14.3	12.7	9.5	8.1	7.4	6.8	4.5
Sorghums for silage:											
Man-hours per acre	---	---	---	---	18.3	18.8	18.0	13.6	10.8	10.4	9.8
Yield per acre (tons)	---	---	---	---	4.04	4.91	6.06	6.03	6.12	7.54	9.79
Man-hours per ton	---	---	---	---	4.5	3.8	3.0	2.3	1.8	1.4	1.0

See footnotes at end of table.

Continued

Table 2.--Field crops: Man-hours per unit of production of specified crops, and related factors, United States, indicated periods, 1910-63 1/2/--Continued

Crop and item	1910-14	1915-19	1920-24	1925-29	1930-34	1935-39	1940-44	1945-49	1950-54	1955-59	1960-63 3/
Potatoes:											
Man-hours per acre	76.0	73.8	75.2	73.1	67.9	69.7	68.5	68.5	63.1	53.1	48.7
Yield per acre (cwt.)	59.8	56.9	64.6	68.4	64.6	70.3	82.1	117.8	151.2	178.1	194.1
Man-hours per ton	25	26	23	21	21	20	17	12	8	6	5
Sweetpotatoes:											
Man-hours per acre	132	128	122	122	116	116	119	122	114	100	90
Yield per acre (cwt.)	51.9	53.5	51.0	51.6	44.6	46.8	48.1	51.9	53.1	66.5	80.7
Man-hours per ton	51	48	48	47	52	50	50	47	43	30	22
Dry beans:											
Man-hours per acre	47.2	42.0	33.1	29.8	28.3	27.5	25.2	21.3	18.4	14.9	12.4
Yield per acre (pounds-cleaned basis)	712	585	620	602	672	799	832	938	1,201	1,190	1,342
Man-hours per 100 pounds	6.6	7.2	5.3	5.0	4.2	3.4	3.0	2.3	1.5	1.3	.9
Dry field peas:											
Man-hours per acre	---	---	---	---	11.4	9.9	7.9	6.7	5.9	4.5	3.5
Yield per acre (pounds-cleaned basis)	---	---	---	---	879	1,046	1,189	1,078	1,298	1,237	1,280
Man-hours per 100 pounds	---	---	---	---	1.30	.94	.66	.62	.45	.36	.27
Cotton:											
Man-hours per acre	116	105	96	96	97	99	99	83	66	66	48
Yield per acre (pounds)	201	168	155	171	184	226	260	273	296	428	466
Man-hours per bale	276	299	296	268	252	209	182	146	107	74	49
Tobacco:											
Man-hours per acre 4/	356	353	353	370	370	415	442	460	464	475	488
Yield per acre (pounds)	816	803	773	772	784	886	1,026	1,176	1,292	1,541	1,821
Man-hours per 100 pounds	44	44	46	48	47	47	43	39	36	31	27
Soybeans:											
Man-hours per acre 4/	---	---	---	15.9	12.9	11.8	10.4	8.0	5.7	5.2	5.0
Yield per acre (bushels)	---	---	---	12.6	14.3	18.5	18.3	19.6	20.2	22.7	24.4
Man-hours per 100 bushels	---	---	---	126	90	64	57	41	28	23	20
Peanuts:											
Man-hours per acre 4/	69.1	68.0	66.8	67.1	65.6	66.4	58.6	44.4	36.4	27.6	22.3
Yield per acre (pounds)	796	741	680	733	671	741	699	685	889	1,065	1,292
Man-hours per 100 pounds	8.7	9.2	9.8	9.2	9.8	9.0	8.4	6.5	4.1	2.6	1.7
Flaxseed:											
Man-hours per acre	15.1	13.1	13.0	10.3	8.6	9.1	7.6	5.7	4.1	3.1	2.4
Yield per acre (bushels)	7.6	6.9	8.2	7.1	5.5	7.6	9.2	9.6	8.5	7.9	9.8
Man-hours per 100 bushels	199	190	159	145	156	120	83	59	48	39	24

1/ Data for early periods chiefly from Labor Used for Field Crops (7).
2/ Man-hours per acre are based on acreage harvested, but include an allowance for preharvest work on acreage abandoned or turned under.
3/ Preliminary.
4/ Per acre planted and harvested.

LABOR USED TO PRODUCE FIELD CROPS, 1959

State averages of preharvest, harvest, and total man-hours used per acre for most field crops in 1959 are presented in tables 3 through 29, pages 9 to 42. Averages for the 10 farm production regions and for the United States, weighted by crop acreages, are also shown. Where applicable, averages for both irrigated and nonirrigated acreages are presented. For a number of crops, man-hours per acre by method of harvest are also included.

These estimates show considerable variation among States and regions in the amount of labor used for the same crop. Some of the causes of variation also operate among areas within States and among farms or groups of farms within an area. Thus, any given farm, group of farms, or area may be above or below the State average. This should be considered in making comparisons.

Major causes contributing to differences among States are (1) the proportion of the crop irrigated, (2) methods of harvest, (3) topography and scale of operation, and (4) yield, particularly when a portion of the crop is hand harvested. Other causal factors include degree of preharvest mechanization, native vegetation, and rainfall.

Irrigation

The average amount of preharvest labor used per acre is greatly influenced by the proportion of a crop irrigated. A comparison of estimates for oats in Utah and Oregon illustrates this. In both States, preharvest labor requirements for irrigated oats were 7.5 man-hours per acre. Nonirrigated oats required 1.9 man-hours in Utah and 2.1 in Oregon. However, 91 percent of the Utah crop was irrigated compared with only 24 percent of the Oregon crop. Consequently, the State average of preharvest man-hours used was 7.0 in Utah and 3.4 in Oregon (table 4).

In addition to labor required for the usual preharvest operations, a considerable amount is used for applying water on irrigated acreage. Also, irrigated row crops are usually cultivated more times than nonirrigated crops in the same area, thus further increasing the amount of labor used.

The amount of time used to apply irrigation water is influenced by a number of widely varying factors. Important among these are the type and size of the irrigation system, source and volume of the water supply, and number of applications. The number of applications, in turn, is influenced by water requirements of the crop being irrigated, water holding capacity of the soil, and climate as it affects the amount of rainfall and rate of evaporation. Consequently, the amount of labor used in irrigating an acre varies among crops in the same State and among States for the same crop.

Method of Harvest

The rate of adoption of new labor-saving machinery is affected by such economic factors as cost of labor and of the new machinery, capital invested in existing machinery, and availability of labor and capital. Thus, significant portions of many crops are harvested by different methods, varying widely in the amount of labor used. In Idaho, for example, part of the 1959 potato crop was harvested by hand, requiring 38 man-hours per acre, and part by machine, requiring 11 man-hours per acre

(table 21). In Ohio, corn was harvested by four different methods: picker-sheller; mechanical picker; pulling from stalk by hand; and cutting, shocking, and husking. These methods required, respectively, 1.7, 2.3, 10.0, and 20.7 man-hours per acre (table 3).

The extent of mechanization affects the average amount of labor per acre, as may be seen by comparing the man-hours for cotton harvest in New Mexico and Tennessee (table 25). In New Mexico, handpicking required 98 man-hours per acre and machine picking 3.1. The pattern was about the same in Tennessee, with 94 man-hours required for handpicking and 4.1 for machine picking. But the statewide average was 84 man-hours per acre for Tennessee, where only 8 percent of the crop was machine picked, compared with 49 man-hours in New Mexico, where 50 percent was machine picked (1).

Topography and Scale of Operation

Topography and scale of farming affect the amount of time required for given farming practices. For example, in the Northern Plains where wheat is a major enterprise, acreages are large and fields relatively level and free from obstructions. Therefore, large combines are operated at sustained high rates of speed. An average of only 0.8 man-hour per acre was required for combining wheat as standing grain in each of the 4 States making up this relatively homogeneous region (table 17). By comparison, in the Appalachian Region an average of 1.7 man-hours per acre was used with this method, because the prevalence of small and irregularly shaped fields and uneven topography resulted in the use of relatively small combines. Small combines harvest less acreage per hour than their larger counterparts in the Plains and in addition, considerable time is used in the numerous starting, stopping, and turning operations necessary in small fields.

Topography and scale of operation also influence labor requirements for preharvest operations--tillage, seeding, cultivating. For example, 4.3 preharvest man-hours per acre were required for nonirrigated oats in Maine, compared with 1.5 in Texas (table 4).

Yield

The amount of labor required for hand harvesting an acre changes almost proportionately with a change in yield. For crops harvested mechanically, however, a change in yield appears to have little effect on the amount of labor required. Table 25 shows that cotton yield per acre in Arizona was more than double that in South Carolina in 1959, and consequently man-hours for handpicking an acre in Arizona were almost twice that in South Carolina. However, time required for machine harvesting an acre was about the same in both States.

Table 3.--Corn for grain: Labor used and yield per acre, 1959

State and region	Labor per acre									Yield per acre
	Preharvest			Harvest					Total	
	Non-irrigated	Irrigated 1/	All	From standing stalk: Picker-sheller	From standing stalk: Mechanical picker	From standing stalk: By hand	Cut, shock, and husk or shred	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
Vermont	8.5	---	8.5	2.0	2.9	10.1	21.3	4.3	12.8	63.0
Massachusetts	8.0	---	8.0	2.0	2.9	10.1	20.8	5.1	13.1	63.0
Connecticut	7.0	---	7.0	2.0	3.0	9.9	20.5	5.1	12.1	66.0
New York	5.5	---	5.5	1.9	2.7	9.4	20.4	3.6	9.1	55.5
New Jersey	5.2	---	5.2	2.1	3.0	10.5	22.2	3.8	9.0	70.0
Pennsylvania	6.5	---	6.5	1.9	2.7	10.1	21.6	3.7	10.2	59.5
Delaware	5.2	---	5.2	1.8	2.4	9.0	18.9	2.9	8.1	50.0
Maryland	6.0	---	6.0	1.9	2.5	9.8	20.6	3.5	9.5	54.5
Northeast	6.1	---	6.1	1.9	2.6	9.9	21.1	3.6	9.7	57.8
Michigan	5.0	---	5.0	1.8	2.4	9.7	19.6	3.0	8.0	57.0
Wisconsin	4.7	---	4.7	2.0	2.8	10.6	20.9	3.6	8.3	71.0
Minnesota	4.5	---	4.5	1.7	2.1	9.1	18.5	2.5	7.0	50.5
Lake States	4.6	---	4.6	1.7	2.3	9.6	19.7	2.8	7.4	55.8
Ohio	4.7	---	4.7	1.7	2.3	10.0	20.7	3.0	7.7	62.5
Indiana	4.0	---	4.0	1.7	2.3	10.0	---	2.4	6.4	62.5
Illinois	4.0	---	4.0	1.8	2.3	10.0	---	2.4	6.4	67.0
Iowa	4.0	---	4.0	1.7	2.3	9.8	---	2.4	6.4	65.0
Missouri	6.2	---	6.2	1.6	2.1	9.5	19.5	2.8	9.0	53.0
Corn Belt	4.3	---	4.3	1.7	2.3	9.8	20.2	2.5	6.8	63.5
North Dakota	2.4	---	2.4	1.2	1.4	6.0	12.1	1.8	4.2	26.0
South Dakota	2.7	---	2.7	1.2	1.4	5.8	---	1.5	4.2	25.0
Nebraska	2.7	8.0	4.5	1.5	1.9	9.2	---	2.1	6.6	48.5
Kansas	3.4	8.0	3.6	1.4	1.8	8.4	---	2.0	5.6	42.0
Northern Plains	2.8	8.0	3.5	1.5	1.8	8.1	12.1	1.9	5.4	41.6
Virginia	11.5	---	11.5	1.8	2.5	8.7	22.4	7.4	18.9	46.0
West Virginia	17.0	---	17.0	1.8	2.6	9.3	21.7	10.3	27.3	49.0
North Carolina	11.5	---	11.5	1.7	2.4	8.4	19.8	5.0	16.5	42.0
Kentucky	9.8	---	9.8	1.8	2.5	8.6	20.6	4.5	14.3	45.0
Tennessee	10.8	---	10.8	1.7	2.3	8.2	19.8	5.5	16.3	39.0
Appalachian	10.0	---	10.9	1.8	2.4	8.4	21.0	5.4	16.3	42.7

See footnote at end of table.

Continued

Table 3.--Corn for grain: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre									Yield per acre
	Preharvest			Harvest						
				From standing stalk			Cut, shock, and husk or shred	All methods	Total	
	Non-irrigated	Irrigated 1/	All	Picker-sheller	Mechanical picker	By hand				
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
South Carolina	8.0	---	8.0	1.4	1.8	6.0	---	4.0	12.0	26.0
Georgia	8.0	---	8.0	1.5	1.9	6.2	---	3.6	11.6	27.0
Florida	7.5	---	7.5	1.4	1.9	6.0	---	3.3	10.8	26.0
Alabama	8.0	---	8.0	1.4	1.9	6.0	---	3.9	11.9	26.0
Southeast	8.0	---	8.0	1.4	1.9	6.1	---	3.7	11.7	26.4
Mississippi	9.6	---	9.6	1.5	2.0	6.8	---	5.2	14.8	31.0
Arkansas	10.2	---	10.2	1.5	1.9	7.0	---	5.1	15.3	32.0
Louisiana	10.2	---	10.2	1.5	1.8	6.8	---	5.1	15.3	31.0
Delta States	9.8	---	9.8	1.5	1.9	6.9	---	5.1	14.9	31.2
Oklahoma	5.7	11.2	5.8	1.4	1.9	7.0	---	3.8	9.6	32.0
Texas	4.4	12.0	4.6	1.4	1.7	6.4	---	3.3	7.9	28.0
Southern Plains	4.6	12.0	4.8	1.4	1.7	6.5	---	3.4	8.2	28.5
Montana	3.1	9.2	7.7	1.6	2.1	9.1	17.6	5.1	12.8	48.0
Idaho	4.0	12.8	12.8	1.9	2.7	11.3	23.5	6.9	19.7	75.5
Wyoming	3.2	10.3	9.7	1.7	2.3	9.6	18.3	5.4	15.1	56.5
Colorado	2.8	12.0	8.6	1.6	2.1	9.2	17.9	3.7	12.3	51.0
New Mexico	4.0	11.0	8.5	1.3	1.6	6.6	13.3	4.9	13.4	30.0
Arizona	5.0	23.6	24.6	1.2	1.4	4.2	---	2.1	26.7	17.5
Utah	4.2	10.8	10.8	1.8	2.5	9.8	19.5	6.7	17.5	65.5
Mountain	5.3	12.1	9.8	1.6	2.1	8.6	18.7	4.0	13.8	50.0
Washington	5.0	14.0	13.9	2.2	3.0	12.4	---	5.1	19.0	83.0
Oregon	5.0	14.0	10.8	1.9	2.6	9.8	---	3.7	14.5	65.5
California	5.0	15.0	14.5	2.0	2.7	10.6	---	2.7	17.2	71.0
Pacific	5.0	14.7	13.9	2.0	2.8	11.4	---	3.4	17.3	73.2
United States	5.2	9.4	5.3	1.6	2.2	7.5	20.4	2.9	8.2	53.1

1/ Percent of acreage irrigated (10):

Nebraska-----22	Texas------- 3	Wyoming-------91	Arizona------22	Oregon-------63
Kansas------- 4	Montana-----83	Colorado------63	Utah---------98	California---95
Oklahoma----- 1	Idaho-------99	New Mexico----63	Washington---98	

Table 4.--Oats: Labor used and yield per acre, 1959

State and region	Labor per acre								Yield per acre
	Preharvest			Harvest					
				Combined					
	Non-irrigated	Irrigated 1/	All	As standing grain	From windrow	Threshed from shock, stack, etc.	All methods	Total	
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
Maine	4.3	---	4.3	1.8	---	9.3	2.8	7.1	46.0
New Hampshire	4.2	---	4.2	1.8	---	8.2	2.3	6.5	37.0
Vermont	4.2	---	4.2	1.8	---	10.3	3.0	7.2	48.0
Massachusetts	3.6	---	3.6	1.8	---	8.9	2.8	6.4	40.0
Connecticut	3.4	---	3.4	1.8	---	8.8	2.7	6.1	39.0
New York	3.4	---	3.4	1.6	---	10.6	2.4	5.8	53.0
New Jersey	3.0	---	3.0	1.5	---	9.2	2.1	5.1	42.5
Pennsylvania	3.6	---	3.6	1.4	---	9.6	2.3	5.9	45.0
Delaware	3.9	---	3.9	1.3	---	8.4	1.9	5.8	33.5
Maryland	4.1	---	4.1	1.2	---	9.4	1.9	6.0	41.0
Northeast	3.6	---	3.6	1.5	---	10.0	2.4	6.0	48.3
Michigan	2.9	---	2.9	1.2	---	8.1	1.6	4.5	42.5
Wisconsin	2.5	---	2.5	1.2	1.8	8.8	1.9	4.4	51.0
Minnesota	2.0	---	2.0	.9	1.4	8.4	2.1	4.1	45.0
Lake States	2.3	---	2.3	1.2	1.4	8.5	2.0	4.3	46.8
Ohio	2.2	---	2.2	1.2	1.7	8.5	1.4	3.6	45.0
Indiana	1.7	---	1.7	1.1	1.6	7.6	1.1	2.8	36.5
Illinois	1.7	---	1.7	1.1	1.6	7.7	1.4	3.1	41.0
Iowa	1.5	---	1.5	1.1	1.6	8.0	1.7	3.2	43.5
Missouri	2.4	---	2.4	1.2	1.7	6.0	1.7	4.1	26.5
Corn Belt	1.7	---	1.7	1.1	1.6	7.7	1.5	3.2	41.4
North Dakota	1.0	---	1.0	.9	1.2	5.0	1.3	2.3	24.5
South Dakota	1.0	---	1.0	.8	1.2	4.5	1.4	2.4	20.0
Nebraska	1.5	4.0	1.5	.9	1.3	5.2	1.2	2.7	25.0
Kansas	1.5	---	1.5	.9	1.2	5.3	1.0	2.5	24.0
Northern Plains	1.2	4.0	1.2	.9	1.2	4.7	1.3	2.5	22.9
Virginia	3.6	---	3.6	1.8	---	9.0	2.4	6.0	38.0
West Virginia	9.1	---	9.1	2.3	---	13.4	7.5	12.6	41.0
North Carolina	3.7	---	3.7	1.7	---	8.9	2.6	6.3	36.0
Kentucky	2.2	---	2.2	1.8	---	9.0	3.1	5.3	33.5
Tennessee	2.6	---	2.6	1.7	---	8.5	2.5	5.1	33.0
Appalachian	3.3	---	3.3	1.7	---	9.5	2.8	6.1	35.7

See footnote at end of table.

Continued

Table 4.--Oats: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre: Preharvest: Non-irrigated	Preharvest: Irrigated 1/	Preharvest: All	Harvest: Combined: As standing grain	Harvest: Combined: From windrow	Harvest: Threshed from shock, stack, etc.	Harvest: All methods	Total	Yield per acre
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
South Carolina	3.5	---	3.5	2.0	---	8.2	2.4	5.9	31.5
Georgia	3.7	---	3.7	1.8	---	8.6	2.8	6.5	34.0
Florida	3.7	---	3.7	1.7	---	8.5	1.9	5.6	28.0
Alabama	4.2	---	4.2	1.4	---	8.9	2.1	6.3	34.5
Southeast	3.7	---	3.7	1.8	---	8.5	2.5	6.2	32.7
Mississippi	2.6	---	2.6	1.7	---	9.9	1.9	4.5	40.0
Arkansas	2.6	---	2.6	1.7	---	9.4	1.9	4.5	38.5
Louisiana	2.2	---	2.2	1.7	---	8.8	1.9	4.1	32.5
Delta States	2.5	---	2.5	1.7	---	9.5	1.9	4.4	38.3
Oklahoma	1.5	---	1.5	.9	1.3	5.9	1.4	2.9	24.5
Texas	1.5	3.5	1.5	.9	1.3	5.2	1.0	2.5	22.5
Southern Plains	1.5	3.5	1.5	.9	1.3	5.6	1.2	2.7	23.2
Montana	1.4	8.0	3.3	.7	1.0	7.2	1.2	4.5	31.5
Idaho	1.7	7.5	4.4	.8	1.2	9.3	1.1	5.5	48.0
Wyoming	1.8	7.5	4.9	.9	1.5	7.6	1.3	6.2	33.0
Colorado	1.6	7.5	5.5	.9	1.3	8.4	1.6	7.1	36.0
New Mexico	1.6	8.0	6.2	.8	---	---	.8	7.0	34.0
Arizona	1.9	7.5	5.9	.8	---	---	.8	6.7	44.0
Utah	1.9	7.5	7.0	1.0	1.5	9.3	2.3	9.3	48.5
Nevada	1.9	8.0	7.3	.8	---	9.8	3.2	10.5	44.0
Mountain	1.5	7.7	4.3	.8	1.2	8.0	1.3	5.6	37.4
Washington	2.0	7.5	2.5	.8	1.2	8.5	2.1	4.6	44.0
Oregon	2.1	7.5	3.4	.8	1.1	8.7	.9	4.3	36.5
California	1.4	6.5	2.2	.7	1.1	8.0	.8	3.0	35.0
Pacific	1.7	7.1	2.7	.8	1.1	8.5	1.2	3.9	38.1
United States	2.0	7.3	2.1	1.2	1.4	7.9	1.7	3.8	37.9

1/ Percent of acreage irrigated (10):

Nebraska ------ 1
Texas --------- 1
Montana ------- 28
Idaho -------- 46
Wyoming ------ 54
Colorado ----- 66
New Mexico----73
Arizona-------73
Utah----------91
Nevada---------94
Washington-----10
Oregon---------24
California-----16

Table 5.--Barley: Labor used and yield per acre, 1959

State and region	Labor per acre								Yield per acre
	Preharvest			Harvest					
				Combined					
	Non-irrigated	Irrigated 1/	All	As standing grain	From windrow	Threshed from shock, stack, etc.	All methods	Total	
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
Maine	4.3	---	4.3	1.8	---	9.7	2.2	6.5	34.0
New York	3.4	---	3.4	1.6	---	---	1.6	5.0	30.0
New Jersey	3.3	---	3.3	1.5	---	11.3	1.7	5.0	38.0
Pennsylvania	3.3	---	3.3	1.4	---	10.0	1.7	5.0	30.0
Delaware	3.4	---	3.4	1.3	---	13.3	1.9	5.3	39.0
Maryland	3.5	---	3.3	1.2	---	9.6	1.4	4.7	36.5
Northeast	3.3	---	3.3	1.4	---	10.3	1.6	4.9	32.8
Michigan	2.9	---	2.9	1.2	---	9.1	1.5	4.4	33.5
Wisconsin	2.8	---	2.8	1.2	1.8	10.0	1.5	4.3	41.0
Minnesota	1.9	---	1.9	.9	1.4	8.1	1.5	3.4	29.0
Lake States	2.0	---	2.0	1.1	1.4	8.3	1.5	3.5	29.8
Ohio	2.6	---	2.6	1.2	---	8.5	1.4	4.0	31.0
Indiana	1.8	---	1.8	1.1	---	---	1.1	2.9	27.0
Illinois	1.8	---	1.8	1.1	---	7.0	1.2	3.0	26.0
Iowa	1.4	---	1.4	1.1	1.6	9.3	1.5	2.9	37.0
Missouri	2.4	---	2.4	1.2	1.7	8.2	1.5	3.9	28.5
Corn Belt	2.2	---	2.2	1.2	1.7	8.2	1.4	3.6	28.8
North Dakota	1.2	---	1.2	.8	1.1	5.8	1.1	2.3	19.5
South Dakota	1.2	---	1.2	.8	1.2	4.0	1.2	2.4	13.5
Nebraska	1.3	4.5	1.4	.8	1.2	5.9	1.0	2.4	21.5
Kansas	1.3	4.5	1.3	.8	1.1	7.3	.9	2.2	26.0
Northern Plains	1.2	4.5	1.2	.8	1.1	5.6	1.1	2.3	20.2
Virginia	3.5	---	3.5	1.8	---	12.9	2.6	6.1	39.0
West Virginia	5.1	---	5.1	2.3	---	12.3	3.2	8.3	34.0
North Carolina	3.5	---	3.5	1.7	---	12.2	2.5	6.0	36.0
Kentucky	2.2	---	2.2	1.8	---	11.5	2.5	4.7	29.5
Tennessee	2.5	---	2.5	1.7	---	8.8	2.0	4.5	24.5
Appalachian	3.0	---	3.0	1.8	---	12.0	2.5	5.5	33.8
South Carolina	3.5	---	3.5	2.0	---	10.0	2.2	5.7	29.0
Georgia	3.7	---	3.7	1.8	---	10.8	2.3	6.0	31.0
Southeast	3.5	---	3.5	2.0	---	10.4	2.2	5.7	29.5

See footnote at end of table.

Continued

Table 5.--Barley: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre: Preharvest: Non-irrigated	Preharvest: Irrigated 1/	Preharvest: All	Harvest: Combined: As standing grain	Harvest: Combined: From windrow	Harvest: Threshed from shock, stack, etc.	Harvest: All methods	Total	Yield per acre
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
Mississippi	2.6	---	2.6	1.7	---	---	1.7	4.3	32.0
Arkansas	2.6	---	2.6	1.7	---	---	1.7	4.3	26.0
Delta States	2.6	---	2.6	1.7	---	---	1.7	4.3	26.5
Oklahoma	1.5	---	1.5	.9	1.3	7.3	1.2	2.7	22.0
Texas	1.5	3.5	2.0	.9	---	---	.9	2.9	21.0
Southern Plains	1.5	3.5	1.7	.9	1.3	7.3	1.1	2.8	21.7
Montana	1.4	8.0	1.8	.7	1.0	---	.7	2.5	27.5
Idaho	1.7	7.5	3.0	.8	1.2	---	.8	3.8	32.0
Wyoming	1.8	7.5	4.4	.9	1.5	---	1.0	5.4	31.0
Colorado	1.6	7.5	3.4	.9	1.3	9.8	1.1	4.5	29.0
New Mexico	1.6	8.0	7.1	.8	1.2	---	.8	7.9	36.0
Arizona	---	7.5	7.5	.8	---	---	.8	8.3	62.0
Utah	1.9	7.5	6.0	1.0	1.5	12.7	1.4	7.4	47.0
Nevada	---	8.0	8.0	.8	---	---	.8	8.8	43.5
Mountain	1.5	7.6	2.9	.8	1.2	11.2	.8	3.7	31.1
Washington	1.5	7.5	1.7	.8	1.2	10.2	.9	2.6	40.0
Oregon	1.5	7.5	2.5	.8	---	13.5	.9	3.4	36.5
California	1.4	6.5	3.9	.7	1.1	---	.7	4.6	43.0
Pacific	1.5	6.6	3.2	.7	1.1	11.6	.8	4.0	41.0
United States	1.5	6.8	2.2	.9	1.2	8.2	1.1	3.3	28.3

1/ Percent of acreage irrigated (10):

Nebraska---- 3	Montana---- 6	Colorado---- 31	Utah-------- 73	Oregon------16
Kansas------ 1	Idaho------ 22	New Mexico-- 86	Nevada------ 100	California--50
Texas------- 27	Wyoming---- 46	Arizona----- 100	Washington-- 3	

Table 6.--Sorghum for grain: Labor used and yield per acre, 1959

State and region	Labor per acre							Yield per acre
	Preharvest			Harvest			Total	
	Non-irrigated	Irrigated 1/	All	Combined as standing grain	Threshed from shock, stack, etc.	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
Indiana	3.2	---	3.2	1.5	13.7	2.1	5.3	56.0
Illinois	3.2	---	3.2	1.5	12.9	2.1	5.3	48.0
Iowa	3.2	---	3.2	1.5	13.4	2.0	5.2	54.0
Missouri	4.5	---	4.5	1.6	12.6	2.7	7.2	45.0
Corn Belt	4.3	---	4.3	1.6	12.7	2.6	6.9	46.3
South Dakota	2.5	---	2.5	1.1	---	1.1	3.6	23.0
Nebraska	2.2	5.5	2.5	1.1	9.4	1.3	3.8	43.5
Kansas	2.1	5.5	2.4	.9	---	.9	3.3	34.0
Northern Plains	2.1	5.5	2.4	1.0	9.4	1.0	3.4	36.1
Virginia	7.0	---	7.0	1.8	8.0	2.0	9.0	32.5
North Carolina	7.0	---	7.0	1.7	---	1.7	8.7	31.0
Kentucky	6.5	---	6.5	1.8	11.1	2.8	9.3	45.0
Tennessee	7.0	---	7.0	1.7	8.4	2.7	9.7	34.0
Appalachian	6.9	---	6.9	1.7	9.2	2.1	9.0	34.0
South Carolina	7.0	---	7.0	2.0	---	2.0	9.0	22.5
Georgia	6.5	---	6.5	1.8	8.6	2.3	8.8	25.0
Alabama	6.5	---	6.5	1.4	10.0	2.7	9.2	26.0
Southeast	6.6	---	6.6	1.7	9.5	2.4	9.0	24.9
Mississippi	4.5	---	4.5	1.8	9.5	3.0	7.5	33.0
Arkansas	5.0	---	5.0	1.8	10.7	3.0	8.0	27.5
Louisiana	4.5	---	4.5	1.7	7.5	2.7	7.2	27.0
Delta States	4.8	---	4.8	1.8	9.7	2.9	7.7	29.3
Oklahoma	3.0	8.5	3.2	.9	---	.9	4.1	25.0
Texas	3.0	8.6	4.5	.9	---	.9	5.4	36.0
Southern Plains	3.0	8.6	4.3	.9	---	.9	5.2	35.0
Colorado	3.2	8.5	4.4	.9	---	.9	5.3	22.5
New Mexico	3.5	9.5	6.0	.8	---	.8	6.8	35.0
Arizona	---	11.0	11.0	.8	---	.8	11.8	57.5
Mountain	3.3	9.7	5.8	.9	---	.9	6.7	31.3
California	4.8	11.0	10.6	.7	---	.7	11.3	63.5
United States	2.8	8.4	3.8	1.0	11.1	1.0	4.8	36.0

1/ Percent of acreage irrigated (10):

Nebraska 8	Oklahoma 4	Colorado 23	Arizona 100
Kansas 8	Texas 26	New Mexico 41	California 94

Table 7.--Alfalfa hay: Labor used and yield per acre, 1959

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest 2/	Total	
	Nonirrigated	Irrigated 1/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
Maine	1.0	---	1.0	4.6	5.6	1.80
New Hampshire	1.0	---	1.0	5.2	6.2	2.00
Vermont	1.0	---	1.0	5.1	6.1	1.90
Massachusetts	1.0	---	1.0	5.4	6.4	2.20
Rhode Island	1.2	---	1.2	6.1	7.3	2.40
Connecticut	1.2	---	1.2	5.8	7.0	2.40
New York	1.2	---	1.2	5.4	6.6	2.20
New Jersey	1.0	---	1.0	6.8	7.8	2.75
Pennsylvania	1.0	---	1.0	6.5	7.5	2.30
Delaware	1.3	---	1.3	8.1	9.4	2.90
Maryland	1.3	---	1.3	7.9	9.2	2.75
Northeast	1.1	---	1.1	6.0	7.1	2.28
Michigan	1.3	---	1.3	5.0	6.3	2.00
Wisconsin	1.4	---	1.4	5.8	7.2	2.60
Minnesota	1.5	---	1.5	5.7	7.2	2.25
Lake States	1.4	---	1.4	5.6	7.0	2.35
Ohio	.5	---	.5	5.4	5.9	2.00
Indiana	.5	---	.5	4.5	5.0	2.10
Illinois	.7	---	.7	5.5	6.2	2.50
Iowa	.7	---	.7	5.3	6.0	2.55
Missouri	1.1	---	1.1	6.3	7.4	2.65
Corn Belt	.7	---	.7	5.4	6.1	2.43
North Dakota	.2	6.5	.3	2.6	2.9	.95
South Dakota	.2	6.5	.3	2.5	2.8	.90
Nebraska	.5	6.5	1.1	4.9	6.0	2.20
Kansas	.8	6.5	1.0	5.7	6.7	2.30
Northern Plains	.4	6.5	.7	3.8	4.5	1.53
Virginia	2.4	---	2.4	7.8	10.2	2.45
West Virginia	2.6	---	2.6	9.5	12.1	1.90
North Carolina	2.6	---	2.6	7.6	10.2	2.20
Kentucky	2.2	---	2.2	6.5	8.7	2.20
Tennessee	2.4	---	2.4	8.4	10.8	2.10
Appalachian	2.4	---	2.4	7.7	10.1	2.21

See footnotes at end of table.

Continued

Table 7.--Alfalfa hay: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest 2/	Total	
	Nonirrigated	Irrigated 1/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
Georgia	2.6	---	2.6	10.9	13.5	2.05
Alabama	2.4	---	2.4	10.5	12.9	2.10
Southeast	2.5	---	2.5	10.7	13.2	2.07
Mississippi	2.0	---	2.0	10.5	12.5	2.20
Arkansas	2.0	---	2.0	10.5	12.5	2.40
Louisiana	2.0	---	2.0	10.8	12.8	2.30
Delta States	2.0	---	2.0	10.5	12.5	2.34
Oklahoma	1.5	9.5	1.9	9.9	11.8	2.25
Texas	1.7	9.5	4.3	9.0	13.3	2.30
Southern Plains	1.6	9.5	2.7	9.6	12.3	2.27
Montana	1.1	8.5	5.2	5.1	10.3	1.80
Idaho	1.1	7.5	6.0	7.4	13.4	2.80
Wyoming	1.0	9.8	7.6	4.2	11.8	1.70
Colorado	1.3	5.0	4.5	5.7	10.2	2.30
New Mexico	1.3	9.3	9.0	8.5	17.5	3.60
Arizona	---	8.6	8.6	11.9	20.5	4.70
Utah	1.7	7.0	6.4	7.4	13.8	2.70
Nevada	1.7	8.5	8.4	6.0	14.4	2.90
Mountain	1.1	7.5	6.0	6.4	12.4	2.45
Washington	.3	11.8	5.6	6.4	12.0	2.45
Oregon	1.0	12.0	9.5	7.1	16.6	2.80
California	2.0	14.2	13.5	11.4	24.9	5.20
Pacific	.8	13.5	11.1	9.6	20.7	4.19
United States	1.0	9.3	2.5	5.7	8.2	2.31

1/ Percent of acreage irrigated (10):

North Dakota-- 1	Oklahoma--- 5	Wyoming----- 75	Arizona--100	Washington--46
South Dakota-- 2	Texas------ 33	Colorado---- 86	Utah----- 88	Oregon------77
Nebraska------10	Montana---- 55	New Mexico-- 97	Nevada--- 99	California--94
Kansas-------- 4	Idaho------ 77			

2/ Labor for mowing and raking once over, multiplied by number of cuttings, as shown in Harvesting the Hay Crop (2), and labor for moving hay from windrow to storage by each method, weighted by the proportion put up each way as adapted from Methods of Harvesting Hay and Silage Crops (8).

Table 8.--Clover and timothy hay: Labor used and yield per acre, 1959

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest 2/	Total	
	Nonirrigated	Irrigated 1/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
Maine	0.2	---	0.2	3.0	3.2	1.30
New Hampshire	.5	---	.5	3.4	3.9	1.45
Vermont	.5	---	.5	3.8	4.3	1.60
Massachusetts	.6	---	.6	4.0	4.6	1.70
Rhode Island	.6	---	.6	4.0	4.6	1.80
Connecticut	.6	---	.6	3.9	4.5	1.75
New York	.6	---	.6	4.0	4.6	1.65
New Jersey	.5	---	.5	4.1	4.6	1.80
Pennsylvania	.5	---	.5	4.0	4.5	1.60
Delaware	.6	---	.6	4.2	4.8	1.65
Maryland	.6	---	.6	4.3	4.9	1.60
Northeast	.5	---	.5	3.9	4.4	1.60
Michigan	.6	---	.6	3.4	4.0	1.50
Wisconsin	.6	---	.6	4.1	4.7	1.95
Minnesota	.6	---	.6	3.3	3.9	1.40
Lake States	.6	---	.6	3.8	4.4	1.70
Ohio	.6	---	.6	3.4	4.0	1.60
Indiana	.6	---	.6	2.8	3.4	1.60
Illinois	.6	---	.6	3.3	3.9	1.70
Iowa	.6	---	.6	3.3	3.9	1.80
Missouri	.6	---	.6	2.8	3.4	1.35
Corn Belt	.6	---	.6	3.1	3.7	1.61
Nebraska	1.0	5.0	1.0	2.5	3.5	1.30
Kansas	1.0	---	1.0	3.1	4.1	1.50
Northern Plains	1.0	5.0	1.0	2.8	3.8	1.41
Virginia	.9	---	.9	3.5	4.4	1.30
West Virginia	1.2	---	1.2	5.5	6.7	1.30
North Carolina	1.0	---	1.0	3.7	4.7	1.25
Kentucky	.7	---	.7	3.3	4.0	1.40
Tennessee	.7	---	.7	4.0	4.7	1.25
Appalachian	.9	---	.9	4.0	4.9	1.32
Alabama	1.0	---	1.0	5.1	6.1	1.15

See footnotes at end of table.

Continued

Table 8.—Clover and timothy hay: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest 2/	Total	
	Nonirrigated	Irrigated 1/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
Mississippi	1.0	---	1.0	5.2	6.2	1.30
Arkansas	.9	---	.9	5.0	5.9	1.30
Louisiana	1.0	---	1.0	5.5	6.5	1.45
Delta States	1.0	---	1.0	5.2	6.2	1.34
Montana	.7	7.5	5.6	3.6	9.2	1.30
Idaho	.7	5.7	3.8	4.0	7.8	1.45
Wyoming	.7	8.7	8.0	2.6	10.6	1.05
Colorado	.9	5.0	4.7	3.2	7.9	1.40
New Mexico	1.0	8.2	6.9	3.8	10.7	1.30
Utah	1.0	5.7	5.4	4.2	9.6	1.60
Nevada	1.0	7.2	6.3	2.7	9.0	1.05
Mountain	.7	6.6	5.5	3.4	8.9	1.31
Washington	1.2	8.1	2.3	5.3	7.6	1.95
Oregon	1.3	8.3	4.6	5.1	9.7	1.85
Pacific	1.2	8.2	3.4	5.2	8.6	1.91
United States	.6	6.9	1.0	3.6	4.6	1.57

1/ Percent of acreage irrigated (10):

Nebraska------ 1	Idaho------61	Colorado-----92	Utah--------93	Washington---16
Montana-------72	Wyoming----91	New Mexico---79	Nevada------85	Oregon-------48

2/ Labor for mowing and raking once over multiplied by estimated number of cuttings, and labor for moving hay from windrow to storage by each method, weighted by the proportion put up each way as adapted from Methods of Harvesting Hay and Silage Crops (8).

Table 9.--Cowpea hay: Labor used and yield per acre, 1959

State and region	Labor per acre			Yield per acre
	Preharvest	Harvest 1/	Total	
	Man-hours	Man-hours	Man-hours	Tons
Illinois	2.7	2.6	5.3	1.10
North Carolina	3.5	3.3	6.8	.90
Tennessee	3.7	4.6	8.3	1.15
Appalachian	3.6	3.6	7.2	1.00
South Carolina	3.7	4.1	7.8	.85
Georgia	3.7	4.4	8.1	.80
Alabama	3.7	5.1	8.8	.95
Southeast	3.7	4.2	7.9	.86
Mississippi	3.5	6.6	10.1	1.20
Arkansas	3.5	5.0	8.5	1.00
Delta States	3.5	5.7	9.2	1.14
Oklahoma	3.0	3.8	6.8	.90
Texas	3.0	2.6	5.6	.80
Southern Plains	3.0	3.5	6.5	.88
United States	3.5	4.1	7.6	.90

1/ Labor for mowing and raking and for moving hay from windrow to storage by each method, weighted by the proportion put up each way as adapted from Methods of Harvesting Hay and Silage Crops (8).

Table 10.--Lespedeza hay: Labor used and yield per acre, 1959

State and region	Labor per acre			Yield per acre
	Preharvest	Harvest 1/	Total	
	Man-hours	Man-hours	Man-hours	Tons
Delaware	0.8	3.6	4.4	1.45
Maryland	.8	3.8	4.6	1.45
Northeast	.8	3.7	4.5	1.45
Indiana	.6	2.5	3.1	1.25
Illinois	.6	2.1	2.7	1.20
Missouri	.7	2.3	3.0	1.10
Corn Belt	.7	2.3	3.0	1.12
Kansas	.7	2.6	3.3	1.30
Virginia	.8	3.0	3.8	1.10
West Virginia	.8	4.8	5.6	1.05
North Carolina	.8	3.4	4.2	1.15
Kentucky	.8	3.0	3.8	1.30
Tennessee	.8	3.8	4.6	1.25
Appalachian	.8	3.4	4.2	1.23
South Carolina	.8	4.6	5.4	1.05
Georgia	.9	5.1	6.0	1.10
Alabama	.9	4.9	5.8	1.10
Southeast	.9	4.9	5.8	1.08
Mississippi	.8	5.4	6.2	1.40
Arkansas	.8	4.9	5.7	1.30
Louisiana	.8	5.7	6.5	1.55
Delta States	.8	5.2	6.0	1.37
Oklahoma	.7	4.8	5.5	1.30
United States	.8	3.6	4.4	1.22

1/ Labor for mowing and raking and for moving hay from windrow to storage by each method, weighted by the proportion put up each way as adapted from Methods of Harvesting Hay and Silage Crops (8).

Table 11.--Peanut hay: Labor used and yield per acre, 1959

State and region	Labor per acre for harvest 1/	Yield per acre
	Man-hours	Tons
Virginia	1.4	0.75
North Carolina	1.4	.80
Tennessee	2.0	1.00
Appalachian	1.4	.79
South Carolina	1.9	.60
Georgia	2.2	.62
Florida	2.5	.80
Alabama	2.1	.60
Southeast	2.2	.63
Mississippi	2.1	.80
Arkansas	3.2	1.00
Delta States	2.6	.80
Oklahoma	.9	.50
Texas	.8	.50
Southern Plains	.8	.50
New Mexico	1.6	.90
United States	1.5	.64

1/ Labor used in caring for peanut vines or tops saved for hay after the nuts are picked or threshed. See table 28 for labor used for growing and harvesting peanuts.

Table 12.--Soybean hay: Labor used and yield per acre, 1959

State and region	Labor per acre			Yield per acre
	Preharvest	Harvest 1/	Total	
	Man-hours	Man-hours	Man-hours	Tons
New Jersey	3.5	5.2	8.7	1.60
Pennsylvania	3.5	4.7	8.2	1.60
Delaware	3.5	4.1	7.6	1.50
Maryland	3.7	5.2	8.9	1.70
Northeast	3.6	4.7	8.3	1.64
Wisconsin	3.3	4.5	7.8	1.65
Ohio	3.2	3.8	7.0	1.50
Indiana	3.0	3.8	6.8	1.50
Illinois	3.0	3.6	6.6	1.40
Iowa	2.9	4.2	7.1	1.70
Missouri	3.7	3.5	7.2	1.35
Corn Belt	3.2	3.7	6.9	1.47
Kansas	2.8	3.8	6.6	1.50
Virginia	3.7	4.4	8.1	1.40
West Virginia	5.5	7.0	12.5	1.65
North Carolina	3.5	3.9	7.4	1.20
Kentucky	3.7	5.1	8.8	1.70
Tennessee	3.7	5.5	9.2	1.60
Appalachian	3.7	4.8	8.5	1.48
South Carolina	3.7	4.9	8.6	1.10
Georgia	3.7	5.7	9.4	1.15
Alabama	3.7	5.5	9.2	1.10
Southeast	3.7	5.3	9.0	1.12
Mississippi	3.5	6.7	10.2	1.40
Arkansas	3.5	6.4	9.9	1.35
Louisiana	3.5	7.1	10.6	1.50
Delta States	3.5	6.7	10.2	1.40
Oklahoma	3.0	4.6	7.6	1.25
Texas	3.0	2.8	5.8	1.20
Southern Plains	3.0	4.0	7.0	1.17
United States	3.5	5.1	8.6	1.41

1/ Labor for mowing and raking and for moving hay from windrow to storage by each method, weighted by the proportion put up each way as adapted from Methods of Harvesting Hay and Silage Crops (8).

Table 13.--Wild hay: Labor used and yield per acre, 1959

State and region	Labor per acre			Yield per acre
	Preharvest 1/	Harvest 2/	Total	
	Man-hours	Man-hours	Man-hours	Tons
Wisconsin	---	3.1	3.1	1.40
Minnesota	---	2.6	2.6	1.15
Lake States	---	2.6	2.6	1.16
Missouri	---	2.3	2.3	1.10
North Dakota	---	1.6	1.6	.70
South Dakota	---	1.2	1.2	.55
Nebraska	---	1.6	1.6	.75
Kansas	---	2.4	2.4	1.25
Northern Plains	---	1.6	1.6	.72
Arkansas	---	4.5	4.5	1.10
Oklahoma	---	4.0	4.0	1.30
Texas	---	3.6	3.6	1.25
Southern Plains	---	3.8	3.8	1.28
Montana	1.5	2.1	3.6	.85
Idaho	2.1	2.7	4.8	1.20
Wyoming	2.4	1.9	4.3	.85
Colorado	2.1	2.0	4.1	.95
New Mexico	1.1	1.9	3.0	.90
Utah	2.4	2.6	5.0	1.20
Nevada	2.2	1.8	4.0	.85
Mountain	2.0	2.1	4.1	.91
Washington	.3	2.9	3.2	1.30
Oregon	1.9	2.4	4.3	1.10
California	.8	2.6	3.4	1.10
Pacific	1.4	2.5	3.9	1.12
United States	.3	1.9	2.2	.83

1/ The time for irrigating mulitplied by the percentage irrigated. Percent of acreage irrigated (10):

Montana---56	Wyoming----86	New Mexico--39	Nevada------79	Oregon------81
Idaho-----74	Colorado---76	Utah--------85	Washington--11	California--43

2/ Labor for mowing and raking and for moving hay from windrow to storage by each method, weighted by the proportion put up each way as adapted from Methods of Harvesting Hay and Silage Crops (8).

Table 14.--Corn for silage: Labor used and yield per acre, 1959

State and region	Labor per acre							Yield per acre
	Preharvest			Harvest 2/			Total	
	Non-irrigated	Irrigated 1/	All	Field forage harvester	Stationary cutter	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
Maine	10.0	---	10.0	8.0	17.3	9.0	19.0	11.2
New Hampshire	10.0	---	10.0	8.3	18.0	9.2	19.2	11.7
Vermont	8.5	---	8.5	8.1	16.1	9.1	17.6	10.2
Massachusetts	8.0	---	8.0	8.3	17.9	9.5	17.5	11.7
Rhode Island	8.0	---	8.0	8.1	16.1	9.7	17.7	10.2
Connecticut	7.0	---	7.0	8.5	18.9	9.8	16.8	12.5
New York	5.5	---	5.5	8.0	16.4	8.9	14.4	10.5
New Jersey	5.2	---	5.2	8.0	17.1	8.4	13.6	11.0
Pennsylvania	6.5	---	6.5	8.0	17.1	9.3	15.8	11.0
Delaware	5.2	---	5.2	8.0	16.6	9.4	14.6	10.5
Maryland	6.0	---	6.0	8.3	17.7	8.9	14.9	11.5
Northeast	6.2	---	6.2	8.1	16.8	9.1	15.3	10.8
Michigan	5.0	---	5.0	7.5	14.0	7.8	12.8	9.9
Wisconsin	4.7	---	4.7	8.1	15.4	8.7	13.4	11.1
Minnesota	4.5	---	4.5	7.0	12.6	7.4	11.9	8.5
Lake States	4.7	---	4.7	7.5	14.0	8.0	12.7	9.8
Ohio	4.7	---	4.7	8.0	15.2	8.4	13.1	11.1
Indiana	4.0	---	4.0	8.4	16.3	8.5	12.5	12.0
Illinois	4.0	---	4.0	8.4	16.2	8.5	12.5	12.0
Iowa	4.0	---	4.0	8.2	15.6	8.3	12.3	11.6
Missouri	6.2	---	6.2	7.3	13.1	7.5	13.7	9.0
Corn Belt	4.5	---	4.5	8.1	15.0	8.3	12.8	11.3
North Dakota	2.2	---	2.2	3.4	4.5	3.4	5.6	2.6
South Dakota	2.7	---	2.7	3.9	5.5	3.9	6.6	3.5
Nebraska	2.7	8.0	4.1	5.9	10.8	6.0	10.1	8.5
Kansas	3.4	8.0	3.9	5.7	10.3	6.0	9.9	8.0
Northern Plains	2.6	8.0	2.7	4.0	6.7	4.1	6.8	3.9
Virginia	11.5	---	11.5	9.6	21.8	11.1	22.6	11.0
West Virginia	17.0	---	17.0	9.4	21.1	12.0	29.0	10.5
North Carolina	11.5	---	11.5	9.4	20.9	11.7	23.2	10.5
Kentucky	9.8	---	9.8	9.6	22.1	10.9	20.7	11.0
Tennessee	10.8	---	10.8	9.2	20.5	11.2	22.0	10.0
Appalachian	11.3	---	11.3	9.5	21.3	11.3	22.6	10.7

See footnotes at end of table.

Continued

Table 14.--Corn for silage: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre							Yield per acre
	Preharvest			Harvest 2/			Total	
	Non-irrigated	Irrigated 1/	All	Field forage harvester	Stationary cutter	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
South Carolina	8.0	---	8.0	8.0	18.6	9.5	17.5	8.2
Georgia	8.0	---	8.0	7.5	17.3	8.1	16.1	7.5
Florida	7.5	---	7.5	8.8	20.3	9.7	17.2	8.8
Alabama	8.0	---	8.0	7.5	---	7.5	15.5	7.5
Southeast	7.9	---	7.9	7.8	18.4	8.6	16.5	7.9
Mississippi	9.6	---	9.6	9.0	20.8	9.6	19.2	9.5
Arkansas	10.2	---	10.2	7.8	18.0	9.1	19.3	8.0
Louisiana	10.2	---	10.2	8.4	---	8.4	18.6	8.7
Delta States	9.9	---	9.9	8.6	19.4	9.2	19.1	9.0
Oklahoma	5.7	11.2	6.0	5.7	---	5.7	11.7	7.4
Texas	4.4	12.0	6.7	6.7	---	6.7	13.4	9.5
Southern Plains	4.7	12.0	6.6	6.5	---	6.5	13.1	9.0
Montana	3.1	9.2	4.4	5.4	9.5	5.5	9.9	7.0
Idaho	4.0	12.8	12.5	8.4	17.7	8.8	21.3	15.7
Wyoming	3.2	10.3	6.8	6.4	12.1	6.9	13.7	9.7
Colorado	2.8	12.0	9.9	7.1	14.3	7.2	17.1	12.0
New Mexico	4.0	11.0	10.2	7.5	---	7.5	17.7	12.0
Arizona	---	11.0	11.0	7.3	---	7.3	18.3	12.5
Utah	4.2	10.8	10.6	8.2	17.2	8.4	19.0	15.2
Nevada	5.7	16.0	16.0	7.6	---	7.6	23.6	13.5
Mountain	3.1	11.6	8.7	7.1	13.9	7.3	16.0	12.0
Washington	5.0	14.0	12.1	8.2	17.0	8.6	20.7	15.0
Oregon	5.0	14.0	11.2	7.5	15.2	7.8	19.0	13.0
California	5.0	15.0	14.7	8.0	16.6	8.3	23.0	14.5
Pacific	5.0	14.7	13.6	8.0	16.4	8.3	21.9	14.4
United States	4.8	11.8	4.9	6.6	14.7	7.1	12.0	8.5

1/ Percent of acreage irrigated (10):

Nebraska----26	Texas----31	Wyoming----51	Arizona----100	Washington----80
Kansas------11	Montana--21	Colorado---77	Utah------- 98	Oregon--------70
Oklahoma---- 4	Idaho----97	New Mexico-88	Nevada----- 97	California----97

2/ Proportion harvested by each method from Methods of Harvesting Hay and Silage Crops (8).

Table 15.--Sorghum for silage: Labor used and yield per acre, 1959

State and region	Labor per acre							Yield per acre
	Preharvest			Harvest 2/			Total	
	Non-irrigated	Irrigated 1/	All	Field forage harvester	Stationary cutter	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
Indiana	3.2	---	3.2	8.3	---	8.3	11.5	12.0
Illinois	3.2	---	3.2	8.3	---	8.3	11.5	12.0
Iowa	3.2	---	3.2	8.7	---	8.7	11.9	13.0
Missouri	4.5	---	4.5	7.5	---	7.5	12.0	10.0
Corn Belt	4.0	---	4.0	7.9	---	7.9	11.9	10.9
North Dakota	2.5	---	2.5	4.0	---	4.0	6.5	3.0
South Dakota	2.5	---	2.5	4.5	---	4.5	7.0	5.0
Nebraska	2.2	5.5	2.4	6.5	---	6.5	8.9	9.5
Kansas	2.1	5.5	2.2	6.0	---	6.0	8.2	8.5
Northern Plains	2.1	5.5	2.2	5.9	---	5.9	8.1	8.3
Virginia	7.0	---	7.0	8.9	16.0	9.7	16.7	9.5
North Carolina	7.0	---	7.0	8.5	15.5	9.0	16.0	9.0
Kentucky	6.5	---	6.5	8.9	16.0	8.9	15.4	9.5
Tennessee	7.0	---	7.0	8.5	15.5	8.8	15.8	9.0
Appalachian	6.9	---	6.9	8.6	15.7	9.0	15.9	9.2
South Carolina	7.0	---	7.0	7.5	---	7.5	14.5	7.5
Georgia	6.5	---	6.5	8.2	---	8.2	14.7	8.5
Alabama	6.5	---	6.5	8.5	---	8.5	15.0	9.0
Southeast	6.7	---	6.7	8.1	---	8.1	14.8	8.3
Mississippi	4.5	---	4.5	9.3	---	9.3	13.8	10.0
Arkansas	5.0	---	5.0	8.9	---	8.9	13.9	9.5
Louisiana	4.5	---	4.5	8.9	---	8.9	13.4	10.0
Delta States	4.7	---	4.7	9.1	---	9.1	13.8	9.8
Oklahoma	3.0	8.5	3.1	5.5	---	5.5	8.6	7.5
Texas	3.0	8.6	3.5	5.5	---	5.5	9.0	7.3
Southern Plains	3.0	8.6	3.4	5.5	---	5.5	8.9	7.4
Colorado	3.2	8.5	3.6	5.0	---	5.0	8.6	5.5
New Mexico	3.5	9.5	5.9	9.3	---	9.3	15.2	11.0
Arizona	4.5	11.0	9.7	9.5	---	9.5	19.2	14.5
Mountain	3.5	10.6	6.6	8.0	---	8.0	14.6	10.6
California	4.8	11.0	10.6	7.5	---	7.5	18.1	14.0
United States	3.1	9.1	3.5	6.5	15.7	6.5	10.0	8.6

1/ Percent of acreage irrigated (10):

Nebraska---- 7	Oklahoma---- 2	Colorado------ 7	Arizona------- 80
Kansas------ 3	Texas------- 9	New Mexico---- 40	California---- 93

2/ Proportion harvested by each method from Methods of Harvesting Hay and Silage Crops (8).

Table 16.--Sorghum for forage: Labor used and yield per acre, 1959

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest	Total	
	Nonirrigated	Irrigated 1/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Tons
Iowa	3.2	---	3.2	6.2	9.4	3.00
Missouri	4.5	---	4.5	8.2	12.7	3.00
Corn Belt	4.4	---	4.4	8.1	12.5	3.00
North Dakota	2.5	---	2.5	3.2	5.7	1.25
South Dakota	2.5	---	2.5	3.5	6.0	1.30
Nebraska	2.2	5.5	2.4	4.7	7.1	2.00
Kansas	2.1	5.5	2.2	6.1	8.3	2.20
Northern Plains	2.2	5.5	2.3	5.5	7.8	2.03
Virginia	7.0	---	7.0	7.5	14.5	2.00
North Carolina	7.0	---	7.0	4.8	11.8	1.20
Kentucky	6.5	---	6.5	9.0	15.5	2.80
Tennessee	7.0	---	7.0	7.6	14.6	2.35
Appalachian	6.8	---	6.8	7.4	14.2	2.19
South Carolina	7.0	---	7.0	4.8	11.8	1.40
Georgia	6.5	---	6.5	4.9	11.4	1.55
Alabama	6.5	---	6.5	5.9	12.4	1.55
Southeast	6.7	---	6.7	5.2	11.9	1.50
Mississippi	4.5	---	4.5	7.9	12.4	2.50
Arkansas	5.0	---	5.0	7.5	12.5	2.40
Louisiana	4.5	---	4.5	5.4	9.9	1.45
Delta States	4.8	---	4.8	7.4	12.2	2.32
Oklahoma	3.0	8.5	3.1	5.3	8.4	1.70
Texas	3.0	8.6	3.5	4.6	8.1	1.45
Southern Plains	3.0	8.6	3.4	4.8	8.2	1.53
Wyoming	3.2	---	3.2	2.8	6.0	.80
Colorado	3.2	8.5	3.6	3.8	7.4	1.00
New Mexico	3.5	9.5	5.9	3.9	9.8	1.50
Arizona	4.5	11.0	9.6	4.1	13.7	2.00
Mountain	3.3	9.4	4.2	3.8	8.0	1.14
California	4.8	11.0	10.4	6.7	17.1	3.50
United States	3.0	8.6	3.3	5.1	8.4	1.69

1/ Percent of acreage irrigated (10):

Nebraska--- 7	Oklahoma--- 2	Colorado--- 7	Arizona--- 80
Kansas--- 3	Texas--- 9	New Mexico--- 40	California--- 93

Table 17.--Wheat: Labor used and yield per acre, 1959

State and region	Labor per acre								Yield per acre
	Preharvest			Harvest				Total	
	Non-irrigated	Irrigated 1/	All	Combined: As standing grain	Combined: From windrow	Threshed from shock, stack, etc.	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
New York	3.5	---	3.5	1.6	2.4	13.0	1.8	5.3	30.0
New Jersey	3.3	---	3.3	1.5	---	13.3	1.6	4.9	31.5
Pennsylvania	3.5	---	3.5	1.4	---	11.9	3.0	6.5	26.5
Delaware	3.3	---	3.3	1.3	---	13.0	1.9	5.2	26.0
Maryland	3.3	---	3.3	1.2	---	11.7	2.8	6.1	25.0
Northeast	3.5	---	3.5	1.4	2.4	11.9	2.6	6.1	27.4
Michigan	2.9	---	2.9	1.2	1.9	12.2	1.5	4.4	32.0
Wisconsin	2.8	---	2.8	1.2	1.8	10.6	2.4	5.2	30.8
Minnesota	2.1	---	2.1	.9	1.4	8.7	1.4	3.5	22.9
Lake States	2.5	---	2.5	1.2	1.4	11.3	1.5	4.0	27.9
Ohio	2.6	---	2.6	1.2	---	10.1	1.4	4.0	24.5
Indiana	2.2	---	2.2	1.1	1.6	---	1.1	3.3	26.0
Illinois	2.2	---	2.2	1.1	---	---	1.1	3.3	26.0
Iowa	2.0	---	2.0	1.1	1.6	---	1.2	3.2	20.1
Missouri	2.6	---	2.6	1.2	---	10.6	1.5	4.1	25.0
Corn Belt	2.4	---	2.4	1.1	1.6	10.4	1.3	3.7	25.2
North Dakota	1.4	---	1.4	.8	1.1	6.2	1.1	2.5	15.0
South Dakota	1.4	---	1.4	.8	1.2	---	1.0	2.4	9.3
Nebraska	1.4	4.5	1.4	.8	1.2	9.9	.9	2.3	22.0
Kansas	1.4	4.5	1.5	.8	---	---	.8	2.3	20.5
Northern Plains	1.4	4.5	1.4	.8	1.1	7.4	.9	2.3	18.1
Virginia	3.6	---	3.6	1.8	---	11.5	3.3	6.9	23.5
West Virginia	5.1	---	5.1	2.3	---	12.9	7.6	12.7	23.0
North Carolina	3.7	---	3.7	1.7	---	11.6	2.2	5.9	23.5
Kentucky	2.2	---	2.2	1.8	---	13.6	3.6	5.8	24.5
Tennessee	2.6	---	2.6	1.7	---	11.3	3.1	5.7	22.0
Appalachian	3.2	---	3.2	1.7	---	12.0	3.0	6.2	23.4
South Carolina	3.5	---	3.5	2.0	2.7	10.3	2.3	5.8	20.0
Georgia	3.7	---	3.7	1.8	---	10.7	1.9	5.6	21.5
Alabama	4.2	---	4.2	1.4	2.1	12.1	1.8	6.0	23.0
Southeast	3.7	---	3.7	1.8	2.5	10.7	2.1	5.8	21.0
Mississippi	2.6	---	2.6	1.7	---	14.0	1.8	4.4	25.5
Arkansas	2.2	---	2.2	1.7	---	12.3	3.3	5.5	25.5
Louisiana	2.2	---	2.2	1.3	---	12.5	3.0	5.2	22.0
Delta States	2.3	---	2.3	1.6	---	12.4	3.0	5.3	24.9

See footnote at end of table.

Continued

Table 17.--Wheat: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre								Yield per acre
	Preharvest			Harvest				Total	
				Combined					
	Non-irrigated	Irrigated 1/	All	As standing grain	From windrow	Threshed from shock, stack, etc.	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
Oklahoma	1.4	3.2	1.4	0.9	---	---	0.9	2.3	20.0
Texas	1.4	3.5	1.8	.9	1.3	---	.9	2.7	17.0
Southern Plains	1.4	3.5	1.6	.9	1.3	---	.9	2.5	18.8
Montana	1.4	8.0	1.6	.7	1.0	---	.7	2.3	19.7
Idaho	1.4	7.5	3.2	.8	1.2	---	.8	4.0	36.4
Wyoming	1.6	7.5	1.9	.9	---	10.1	1.0	2.9	21.6
Colorado	1.8	7.5	2.0	.9	---	11.2	1.0	3.0	22.0
New Mexico	1.7	8.0	3.0	.8	---	8.2	.9	3.9	17.0
Arizona	1.7	7.5	7.4	.8	---	---	.8	8.2	42.0
Utah	1.8	7.5	3.3	.8	---	9.2	1.1	4.4	23.7
Nevada	1.6	8.0	7.4	.8	---	14.6	.9	8.3	36.0
Mountain	1.5	7.6	2.1	.8	1.0	10.6	.8	2.9	23.1
Washington	1.4	7.5	1.6	.8	---	---	.8	2.4	38.4
Oregon	1.4	7.5	1.8	.8	1.1	---	.8	2.6	35.8
California	1.4	6.5	2.6	.7	---	---	.7	3.3	24.9
Pacific	1.4	7.1	1.8	.8	1.1	---	.8	2.6	36.2
United States	1.7	5.6	1.8	.9	1.2	10.8	1.0	2.8	21.7

1/ Percent of acreage irrigated (10):

Nebraska--------- 1
Kansas----------- 2
Oklahoma--------- 1
Texas-----------19
Montana---------- 3
Idaho-----------29
Wyoming---------- 5
Colorado--------- 4
New Mexico-------21
Arizona----------99
Utah------------26
Nevada----------93
Washington------- 4
Oregon----------- 7
California-------23

Table 18.--Rye: Labor used and yield per acre, 1959

State and region	Labor per acre								Yield per acre
	Preharvest			Harvest				Total	
				Combined					
	Non-irrigated	Irrigated 1/	All	As standing grain	From windrow	Threshed from shock, stack, etc.	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
New York	3.5	---	3.5	1.6	---	10.4	1.7	5.2	23.5
New Jersey	3.3	---	3.3	1.5	---	10.0	1.6	4.9	22.0
Pennsylvania	3.5	---	3.5	1.4	---	9.8	1.5	5.0	22.0
Delaware	3.3	---	3.3	1.3	---	10.4	1.4	4.7	19.5
Maryland	3.3	---	3.3	1.2	---	9.5	1.3	4.6	19.5
Northeast	3.4	---	3.4	1.4	---	10.0	1.5	4.9	21.2
Michigan	2.9	---	2.9	1.2	1.9	7.8	1.5	4.4	20.5
Wisconsin	2.8	---	2.8	1.2	1.8	5.6	1.7	4.5	16.0
Minnesota	2.1	---	2.1	.9	1.4	7.5	1.3	3.4	18.5
Lake States	2.7	---	2.7	1.1	1.5	6.6	1.4	4.1	18.7
Ohio	2.6	---	2.6	1.2	1.7	8.4	1.4	4.0	20.0
Indiana	2.2	---	2.2	1.1	1.6	7.9	1.2	3.4	19.5
Illinois	2.2	---	2.2	1.1	1.6	---	1.1	3.3	19.0
Iowa	2.0	---	2.0	1.1	1.6	7.2	1.2	3.2	18.0
Missouri	2.6	---	2.6	1.2	1.7	7.3	1.3	3.9	17.0
Corn Belt	2.3	---	2.3	1.1	1.6	7.7	1.2	3.5	18.8
North Dakota	1.5	---	1.5	.8	1.1	---	1.1	2.6	13.5
South Dakota	1.4	---	1.4	.8	1.2	5.7	1.2	2.6	12.5
Nebraska	1.4	---	1.4	.8	1.2	6.0	1.0	2.4	13.5
Kansas	1.4	---	1.4	.8	1.1	---	.8	2.2	15.0
Northern Plains	1.4	---	1.4	.8	1.1	5.9	1.0	2.4	13.7
Virginia	3.5	---	3.5	1.8	---	9.8	2.6	6.1	19.5
North Carolina	3.5	---	3.5	1.7	---	9.2	2.4	5.9	16.0
Kentucky	2.2	---	2.2	1.8	---	10.0	2.6	4.8	17.0
Tennessee	2.5	---	2.5	1.7	---	8.2	2.4	4.9	14.5
Appalachian	3.1	---	3.1	1.8	---	9.4	2.5	5.6	17.0
South Carolina	3.5	---	3.5	2.0	---	8.1	2.1	5.6	15.5
Georgia	3.6	---	3.6	1.8	---	7.8	1.9	5.5	14.5
Southeast	3.6	---	3.6	1.9	---	8.0	1.9	5.5	14.9
Oklahoma	1.4	---	1.4	.9	1.3	---	.9	2.3	11.0
Texas	1.4	---	1.4	.9	1.3	---	.9	2.3	13.0
Southern Plains	1.4	---	1.4	.9	1.3	---	.9	2.3	11.5
Montana	1.4	---	1.4	.7	1.0	8.2	1.0	2.4	19.0
Idaho	1.4	---	1.4	.8	1.2	10.3	1.2	2.6	28.0
Wyoming	1.6	---	1.6	.9	1.5	7.3	1.2	2.8	15.5
Colorado	1.8	7.5	2.0	.9	1.3	7.0	1.2	3.2	13.5
New Mexico	1.8	8.0	4.1	.8	1.2	10.5	1.2	5.3	17.0
Utah	1.8	7.5	2.8	.9	1.4	4.5	1.1	3.9	10.0
Mountain	1.7	7.8	2.1	.9	1.2	7.6	1.1	3.2	15.6
Washington	1.4	---	1.4	.8	1.2	6.8	.9	2.3	18.5
Oregon	1.4	---	1.4	.8	1.1	9.8	.9	2.3	18.5
California	1.4	---	1.4	.7	1.1	5.9	.7	2.1	12.0
Pacific	1.4	---	1.4	.8	1.2	7.2	.9	2.3	18.2
United States	2.2	7.8	2.2	1.0	1.2	7.7	1.2	3.4	15.8

1/ Percent of acreage irrigated (10):

Colorado----------3 New Mexico----------36 Utah----------19

Table 19.--Buckwheat: Labor used and yield per acre, 1959

State and region	Labor per acre						Yield per acre
	Preharvest	Harvest				Total	
		Combined		Threshed from shock, stack, etc.	All methods		
		As standing grain	From windrow				
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
New York	3.9	1.6	---	5.7	1.7	5.6	16.5
Pennsylvania	3.9	1.4	---	6.8	1.5	5.4	20.0
Northeast	3.9	1.5	---	6.2	1.6	5.5	18.1
Michigan	3.5	1.2	1.9	4.9	1.4	4.9	14.0
Wisconsin	3.4	1.2	1.8	4.3	1.6	5.0	13.5
Minnesota	2.6	.9	1.4	6.2	1.4	4.0	14.0
Lake States	3.3	1.2	1.6	4.6	1.5	4.8	13.8
Ohio	3.0	1.2	1.7	5.6	1.3	4.3	18.0
West Virginia	5.1	2.3	---	11.8	3.7	8.8	22.5
Tennessee	3.5	1.7	---	7.8	2.6	6.1	18.5
Appalachian	4.3	2.0	---	9.7	3.2	7.5	20.5
United States	3.6	1.4	1.6	6.2	1.7	5.3	16.9

Table 20.--Rice: Labor used and yield per acre, 1959

State and region	Labor per acre			Yield per acre
	Preharvest	Harvest 1/	Total	
	Man-hours	Man-hours	Man-hours	Pounds
Missouri	10.5	1.8	12.3	3,400
Mississippi	14.0	3.0	17.0	2,700
Arkansas	11.0	1.9	12.9	3,400
Louisiana	13.5	1.8	15.3	2,850
Delta States	12.4	1.9	14.3	3,082
Texas	10.5	1.8	12.3	3,150
California	6.8	2.0	8.8	4,650
United States	10.9	1.9	12.8	3,382

1/ All combined as standing grain.

Table 21.--Potatoes: Labor used and yield per acre, 1959

State and region	Labor per acre							Yield per acre	Acreage irrigated 2/
	Preharvest			Harvest 1/			Total		
	Non-irrigated	Irrigated	All	Hand	Machine	All methods			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Cwt.	Percent
Maine	23	---	23	44	20	43	66	243	0
New Hampshire	23	28	24	35	17	33	57	180	10
Vermont	23	28	23	34	16	32	55	170	10
Massachusetts	22	26	22	37	16	19	41	197	5
Rhode Island	22	25	22	40	16	33	55	215	5
Connecticut	22	26	22	42	17	31	53	225	12
New York	23	27	24	39	15	26	50	207	32
New Jersey	23	27	26	41	11	28	54	720	70
Pennsylvania	22	26	22	36	16	35	57	186	4
Delaware	20	24	22	40	20	39	61	205	61
Maryland	20	25	20	37	---	37	57	122	9
Northeast	23	27	23	41	15	35	58	219	16
Michigan	21	26	22	36	17	32	54	149	14
Wisconsin	22	27	23	35	16	22	45	165	26
Minnesota	20	25	20	38	15	17	37	127	5
Lake States	21	26	21	36	15	22	43	142	13
Ohio	25	28	25	43	10	38	63	180	11
Indiana	25	28	26	44	11	40	66	194	29
Illinois	26	---	26	38	9	35	61	90	0
Iowa	25	---	25	43	10	39	64	130	0
Missouri	24	---	24	38	9	36	60	90	0
Corn Belt	25	28	25	42	10	38	63	157	12
North Dakota	11	---	11	37	9	11	22	122	0
South Dakota	12	19	12	28	9	13	25	60	6
Nebraska	12	19	17	42	10	36	53	170	75
Kansas	12	19	13	29	9	27	40	95	21
Northern Plains	11	19	12	38	9	14	26	124	10
Virginia	22	25	22	43	18	43	65	107	11
West Virginia	28	---	28	34	---	34	62	70	0
North Carolina	26	29	26	43	18	43	69	107	5
Kentucky	25	28	25	34	---	34	59	71	2
Tennessee	25	---	25	37	---	37	62	83	0
Appalachian	25	26	25	40	18	40	65	96	6
South Carolina	26	29	26	37	---	37	63	83	3
Georgia	30	---	30	31	---	31	61	59	0
Florida	20	24	22	36	11	28	50	133	56
Alabama	22	26	22	35	10	35	57	107	2
Southeast	22	24	23	36	11	31	54	118	34

See footnotes at end of table.

Continued

Table 21.--Potatoes: Labor used and yield per acre, 1959--Continued

State and region	Labor per acre							Yield per acre	Acreage irrigated 2/
	Preharvest			Harvest 1/			Total		
	Non-irrigated	Irrigated	All	Hand	Machine	All methods			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Cwt.	Percent
Mississippi	25	---	25	31	16	31	56	59	0
Arkansas	26	---	26	33	17	33	59	65	0
Louisiana	25	---	25	28	16	28	53	46	0
Delta States	25	---	25	31	16	31	56	57	0
Oklahoma	18	22	18	32	17	31	49	65	2
Texas	16	20	19	40	9	36	55	137	80
Southern Plains	17	20	19	39	9	36	55	131	71
Montana	14	21	20	33	9	21	41	150	88
Idaho	12	20	20	38	11	24	44	201	98
Wyoming	13	19	18	35	9	30	48	157	83
Colorado	13	20	20	39	11	33	53	206	99
New Mexico	12	22	21	34	10	31	52	170	87
Arizona	12	23	23	44	12	38	61	250	99
Utah	14	23	23	35	10	32	55	175	98
Nevada	---	23	23	40	11	38	61	215	100
Mountain	13	20	20	38	11	27	47	201	98
Washington	10	19	18	44	13	18	36	276	87
Oregon	11	18	17	43	12	25	42	245	92
California	---	18	18	44	15	39	57	283	100
Pacific	10	18	18	44	13	32	50	274	96
United States	21	21	21	40	13	29	50	184	44

1/ Percentage harvested by each method estimated chiefly by interpolation of data in Potato Harvest Mechanization (3).

2/ For the 17 Western States, based on the 1959 Census of Agriculture (10). For the remaining States, based on the 1960 survey of irrigation in humid areas (9). For States in humid areas it was assumed that the same percentage was irrigated in 1959 as in 1960.

Table 22.--Sweetpotatoes: Labor used and yield per acre, 1959

State and region	Labor per acre			Yield per acre	Acreage irrigated 1/
	Preharvest	Harvest	Total		
	Man-hours	Man-hours	Man-hours	Cwt.	Percent
New Jersey	42	42	84	84	15
Maryland	44	40	84	132	6
Northeast	43	42	85	95	13
Missouri	40	42	82	95	0
Kansas	35	40	75	80	0
Virginia	60	45	105	100	0
North Carolina	65	43	108	80	2
Kentucky	55	49	104	67	0
Tennessee	55	46	101	85	0
Appalachian	62	44	106	87	1
South Carolina	65	43	108	57	3
Georgia	65	43	108	66	8
Florida	46	39	85	52	15
Alabama	46	44	90	58	3
Southeast	59	43	102	60	5
Mississippi	46	44	90	67	0
Arkansas	46	40	86	72	15
Louisiana	50	42	92	65	0
Delta States	49	42	91	66	1
Oklahoma	35	42	77	65	8
Texas	33	32	65	73	5
Southern Plains	33	33	66	72	5
New Mexico	55	43	98	105	100
California	55	42	97	75	100
United States	52	42	94	74	8

1/ For Kansas, Oklahoma, Texas, New Mexico, and California based on the 1959 Census of Agriculture (10). For the remaining States, based on the 1960 survey of irrigation in humid areas (9). For States in humid areas it was assumed that the same percentage was irrigated in 1959 as in 1960.

Table 23.--Dry beans: Labor used and yield per acre, 1959

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest	Total	
	Nonirrigated	Irrigated 1/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Pounds
Maine	11.0	---	11.0	5.4	16.4	900
New York	7.0	---	7.0	4.7	11.7	940
Northeast	7.1	---	7.1	4.7	11.8	940
Michigan	5.0	---	5.0	3.0	8.0	1,260
Nebraska	3.5	17.2	16.7	3.2	19.9	1,650
Montana	---	15.0	15.0	2.9	17.9	1,540
Idaho	4.0	16.5	16.2	3.0	19.2	1,800
Wyoming	4.0	16.0	15.7	2.9	18.6	1,500
Colorado	2.8	15.0	7.6	2.5	10.1	780
New Mexico	2.0	16.5	10.2	2.5	12.7	590
Arizona	3.0	16.2	6.3	2.1	8.4	325
Utah	3.2	---	3.2	2.0	5.2	200
Mountain	2.8	16.0	11.7	2.7	14.4	1,213
Washington	3.8	16.9	16.7	3.0	19.7	1,750
California	3.2	16.0	14.6	2.9	17.5	1,441
Pacific	3.2	16.2	15.0	2.9	17.9	1,498
United States	4.8	16.2	9.9	3.0	12.9	1,297

1/ Percent of acreage irrigated (10):

Nebraska------- 96
Montana--------100
Idaho--------98
Wyoming-----97
Colorado-------39
New Mexico-----54
Arizona----------25
Washington------99
California------89

Table 24.--Dry field peas: Labor used and yield per acre, 1959

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest	Total	
	Nonirrigated	Irrigated 1/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Pounds
Minnesota	1.7	---	1.7	1.0	2.7	1,170
North Dakota	1.6	---	1.6	1.1	2.7	1,250
Idaho	1.9	6.2	2.6	1.1	3.7	1,350
Colorado	---	6.2	6.2	1.0	7.2	930
Mountain	1.9	6.2	2.9	1.1	4.0	1,329
Washington	1.9	6.2	2.3	1.1	3.4	1,530
Oregon	1.9	---	1.9	1.0	2.9	1,400
California	---	6.2	6.2	1.2	7.4	1,750
Pacific	1.9	6.2	2.3	1.1	3.4	1,523
United States	2.0	6.2	2.5	1.1	3.6	1,436

1/ Percent of acreage irrigated (10):

Idaho-------16
Colorado-------100
Washington-------9
California-------100

Table 25.--Cotton: Labor used and yield per acre, 1959

State and region	Labor per acre									Yield per acre
	Preharvest			Harvest 2/					Total	
	Non-irrigated	Irrigated 1/	All	Hand picked	Hand snapped	Machine picked	Machine stripped	All methods		
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Lbs.
Illinois	25	---	25	64	---	---	---	64	89	359
Missouri	23	---	23	87	64	3.5	---	46	69	607
Corn Belt	23.0	---	23.0	86.9	63.6	3.5	---	45.8	68.8	609
Virginia	35	---	35	62	---	---	---	62	97	378
North Carolina	32	---	32	62	44	3.6	---	57	89	395
Kentucky	37	---	37	94	75	---	---	92	129	631
Tennessee	35	---	35	94	75	4.1	---	84	119	620
Appalachian	33.8	---	33.8	78.9	66.0	3.9	---	72.3	106.1	522
South Carolina	27	---	27	55	41	3.2	---	54	81	353
Georgia	25	---	25	60	46	3.5	---	55	80	381
Florida	25	---	25	43	33	3.0	---	33	58	244
Alabama	28	---	28	64	50	3.3	---	58	86	412
Southeast	26.7	---	26.7	59.9	47.2	3.3	---	55.7	82.4	385
Mississippi	27	33	27	83	---	3.7	---	53	80	509
Arkansas	25	31	26	89	65	4.4	---	67	93	566
Louisiana	30	---	30	79	57	3.5	---	40	70	476
Delta States	26.7	31.5	27.1	84.6	63.1	3.9	---	52.4	79.5	528
Oklahoma	10	24	12	47	27	3.4	2.2	14	26	292
Texas	13	25	17	52	30	3.5	2.1	21	38	334
Southern Plains	12.7	25.0	16.4	52.0	29.5	3.5	2.1	20.3	36.7	330
New Mexico	10	27	26	98	71	3.1	2.4	49	75	782
Arizona	---	23	23	102	74	3.1	---	38	61	893
Nevada	---	25	25	---	---	3.0	---	3	28	848
Mountain	10.0	24.4	24.2	100.3	73.1	3.1	2.4	41.7	65.9	858
California	---	32	32	99	75	3.3	---	19	51	1,055
United States	21.0	26.8	22.5	72.4	34.3	3.6	2.1	36.7	59.2	461

1/ Percent of acreage irrigated (9, 10):

1960: Mississippi -- 4; Arkansas ----- 12; Oklahoma ----- 11; Texas -------- 32; New Mexico --- 97; Arizona ------ 100; Nevada -------- 100; California ---- 100

2/ Proportion harvested by each method from Charges for Ginning Cotton, Costs of Selected Services Incident to Marketing, and Related Information, Season 1959-60 (1).

Table 26.--Tobacco: Labor used and yield per acre, by class, 1959

State and region	Labor per acre			Yield per acre
	Preharvest	Harvest	Total	
	Man-hours	Man-hours	Man-hours	Pounds
Flue-cured				
Virginia	150	390	540	1,560
North Carolina	125	385	510	1,533
South Carolina	130	390	520	1,765
Georgia	130	381	511	1,520
Florida	125	378	503	1,395
Alabama	140	376	516	1,250
Total flue-cured	129	386	515	1,559
Fire-cured				
Virginia	185	193	378	1,320
Kentucky	170	197	367	1,485
Tennessee	170	204	374	1,619
Total fire-cured	173	199	372	1,508
Air-cured (light)				
Maryland	105	165	270	780
Ohio	155	250	405	1,625
Indiana	155	262	417	1,750
Missouri	165	243	408	1,560
Virginia	190	274	464	2,075
West Virginia	195	334	529	1,615
North Carolina	163	272	435	2,060
Kentucky	158	245	403	1,620
Tennessee	168	250	418	1,700
Total air-cured (light)	155	239	394	1,565
Air-cured (dark)				
Virginia	140	150	290	1,040
Kentucky	130	205	335	1,442
Tennessee	120	220	340	1,590
Total air-cured (dark)	130	200	330	1,407
Cigar filler				
Pennsylvania	100	170	270	1,725
Ohio	100	175	275	1,770
Total cigar filler	100	171	271	1,730
Cigar binder				
Massachusetts	100	180	280	1,900
Connecticut	110	160	270	1,716
Wisconsin	90	119	209	1,448
Total cigar binder	94	130	224	1,511

Continued

Table 26.--Tobacco: Labor used and yield per acre, by class, 1959--Continued

State and region	Labor per acre			Yield per acre
	Preharvest	Harvest	Total	
	Man-hours	Man-hours	Man-hours	Pounds
		Cigar wrapper		
Massachusetts	455	840	1,295	1,330
Connecticut	455	815	1,270	1,300
Georgia	310	775	1,085	1,430
Florida	310	710	1,020	1,330
Total cigar wrapper	395	780	1,175	1,325
		Perique		
Louisiana	125	230	355	575
		All classes		
Massachusetts	304	560	864	1,572
Connecticut	341	599	940	1,408
Pennsylvania	100	170	270	1,725
Maryland	105	165	270	780
Northeast	138	231	369	1,232
Wisconsin	90	119	209	1,449
Ohio	139	228	367	1,668
Indiana	155	262	417	1,750
Missouri	165	243	408	1,560
Corn Belt	147	240	387	1,679
Virginia	157	354	511	1,588
West Virginia	195	334	529	1,615
North Carolina	126	383	509	1,544
Kentucky	157	240	397	1,604
Tennessee	167	240	407	1,681
Appalachian	141	330	471	1,577
South Carolina	130	390	520	1,765
Georgia	133	388	521	1,518
Florida	171	461	632	1,379
Alabama	140	376	516	1,250
Southeast	136	397	533	1,619
Louisiana	125	230	355	575
United States	140	328	468	1,558

Table 27.--Soybeans: Labor used and yield per acre, 1959

State and region	Labor per acre					Yield per acre
	Preharvest 1/	Harvest: Combined: As standing grain	Harvest: Combined: From windrow	Harvest: All methods	Total	
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Bushels
New York	5.0	1.6	2.4	1.6	6.6	18.0
New Jersey	5.0	1.5	2.3	1.5	6.5	25.0
Pennsylvania	5.0	1.4	2.2	1.4	6.4	23.5
Delaware	5.2	1.3	---	1.3	6.5	23.0
Maryland	5.5	1.2	---	1.2	6.7	24.5
Northeast	5.3	1.3	2.3	1.3	6.6	23.9
Michigan	4.9	1.2	---	1.2	6.1	24.5
Wisconsin	4.9	1.2	1.8	1.2	6.1	19.5
Minnesota	3.2	.9	1.4	1.0	4.2	19.0
Lake States	3.4	.9	1.4	1.0	4.4	19.5
Ohio	4.0	1.5	---	1.5	5.5	25.0
Indiana	3.4	1.1	---	1.1	4.5	26.0
Illinois	3.4	.9	1.4	.9	4.3	26.0
Iowa	3.3	.9	1.4	.9	4.2	26.5
Missouri	4.0	1.2	1.7	1.2	5.2	22.0
Corn Belt	3.6	1.1	1.4	1.1	4.7	25.3
North Dakota	2.2	.8	1.1	.9	3.1	12.0
South Dakota	2.3	.8	1.2	.9	3.2	12.0
Nebraska	2.3	.9	1.3	.9	3.2	24.0
Kansas	3.1	1.0	---	1.0	4.1	21.0
Northern Plains	2.7	.9	1.2	.9	3.6	18.1
Virginia	5.7	1.8	---	1.8	7.5	20.5
North Carolina	5.7	1.7	---	1.7	7.4	21.5
Kentucky	4.9	1.8	2.6	1.8	6.7	22.5
Tennessee	5.5	1.7	---	1.7	7.2	23.0
Appalachian	5.5	1.7	2.6	1.7	7.2	21.8
South Carolina	5.3	2.0	2.7	2.0	7.3	17.5
Georgia	5.4	1.8	2.5	1.8	7.2	17.0
Florida	5.0	1.7	2.5	1.7	6.7	24.0
Alabama	5.2	1.4	---	1.4	6.6	22.0
Southeast	5.3	1.8	2.6	1.8	7.1	18.7
Mississippi	4.4	1.5	---	1.5	5.9	22.5
Arkansas	4.2	1.5	2.0	1.5	5.7	23.0
Louisiana	5.1	1.0	---	1.0	6.1	23.5
Delta States	4.3	1.5	2.0	1.5	5.8	22.9
Oklahoma	3.4	.9	1.3	.9	4.3	18.0
Texas	4.9	.9	1.3	.9	5.8	27.0
Southern Plains	4.1	.9	1.3	.9	5.0	22.2
United States	3.8	1.2	1.4	1.2	5.0	23.5

1/ According to the 1959 Census of Agriculture (10), 96 percent of the acreage in Texas was irrigated. Irrigated soybeans required 5.0 man-hours and nonirrigated soybeans 3.4 man-hours per acre.

Table 28.--Peanuts: Labor used and yield per acre, 1959 1/

State and region	Labor per acre					Yield per acre
	Preharvest			Harvest	Total	
	Non-irrigated	Irrigated 2/	All			
	Man-hours	Man-hours	Man-hours	Man-hours	Man-hours	Pounds
Virginia	20.0	---	20.0	21.3	41.3	1,910
North Carolina	18.0	---	18.0	16.8	34.8	1,580
Tennessee	18.0	---	18.0	15.8	33.8	925
Appalachian	18.7	---	18.7	18.4	37.1	1,696
South Carolina	19.0	---	19.0	6.1	25.1	800
Georgia	18.0	---	18.0	5.5	23.5	1,100
Florida	20.0	---	20.0	5.4	25.4	920
Alabama	18.0	---	18.0	5.0	23.0	800
Southeast	18.3	---	18.3	5.4	23.7	1,004
Mississippi	18.0	---	18.0	6.2	24.2	400
Arkansas	18.0	---	18.0	6.2	24.2	450
Delta States	18.0	---	18.0	6.2	24.2	419
Oklahoma	10.0	16.0	11.1	4.2	15.3	1,125
Texas	8.0	14.0	8.4	3.6	12.0	720
Southern Plains	8.5	15.1	9.1	3.8	12.9	835
New Mexico	---	23.0	23.0	4.1	27.1	1,810
United States	16.0	16.2	16.0	7.5	23.5	1,092

1/ For peanuts harvested for nuts. See table 11 for labor used for putting up peanut hay.

2/ Percent of acreage irrigated (10):

Oklahoma--------19 Texas--------6 New Mexico--------100

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