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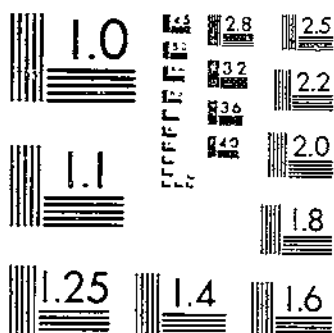
UPDATA

LIVESTOCK FEED RELATIONSHIPS, 1909-1963

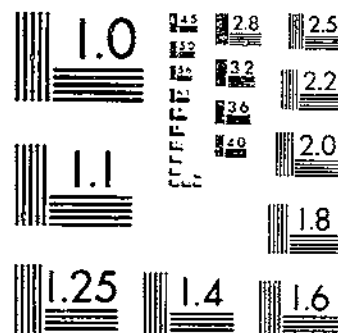
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# 337

DEFINITE  
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\* SEE SUPPLEMENT  
FILED ON SHELF  
NEXT TO THIS VOLUME

# LIVESTOCK - FEED RELATIONSHIPS 1909-1963

- Animal Units of Livestock Fed Annually, 1909-1962
- Livestock-Production Units, 1910-1962
- High-Protein Animal Units, 1940-1963
- Feed Consumption by Various Classes of Livestock, 1960-1963
- Surplus and Deficit Feed Grain States, 1960-1962

U. S. DEPARTMENT OF AGRICULTURE  
Economic Research Service

Statistical Bulletin No. 337

November 1963

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## LIVESTOCK-FEED RELATIONSHIPS 1909-1963

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### INTRODUCTION

This bulletin combines into a single publication animal unit numbers and livestock-production units formerly published separately. In addition, it presents the high-protein-consuming animal unit series; preliminary estimates of feed consumption by various classes of livestock 1960-63; and estimates of feed grain surpluses and deficits by States for the feeding years beginning October 1, 1960, 1961, and 1962. Thus, one publication, even though 1960-63 data are preliminary, makes available to economic and market researchers current data showing livestock-feed relationships at the national, regional, and State levels.

This publication supersedes and brings to date the series Animal Units of Livestock Fed Annually, Statistical Bulletin No. 324, and the series Livestock-Production Units, Statistical Bulletin No. 325.

Factors used in the Animal Unit Series to determine the number of animal units within each State were published in Statistical Bulletin No. 194, October 1956. Since the supply of that publication is exhausted, tables repeating those factors and those to determine the number of hogs raised in the feeding year are included in the appendix of this publication.

### PART I--ANIMAL UNITS OF LIVESTOCK FED ANNUALLY, 1909-1962

Livestock numbers, when converted into animal units (a measure of livestock numbers weighted by feed consumption), can be compared with the supply and consumption of feed at the State, regional, or national level to determine the relative abundance or scarcity of feed available per animal unit. Animal units are presented in 3 series: (1) grain-consuming; (2) roughage-consuming; and (3) grain-and-roughage-consuming (tables 1-10 and figures 1-3). These series are based on feed consumption in terms of (1) concentrates, (2) roughages, including pasture, and (3) all feed, including pasture.

Numbers of each kind of livestock, including poultry, are converted into animal units by weighting such numbers by a factor--the amount of feed consumed per head per year by this kind of livestock divided by the amount consumed by one

milk cow. The base period for the computation of the factors was 1940-45 for all classes of livestock except broilers, for which the base period was 1950-53. 1/ Animal units are computed for each State by multiplying livestock numbers in each State by a similar factor based on feed consumption within that State. 2/

Livestock numbers used to calculate animal units include all livestock and poultry fed on farms during the feeding year beginning October 1. 3/

Each type of animal unit is calculated separately. To determine grain-consuming animal units, livestock numbers are multiplied by a set of weights (or factors) that represent consumption of concentrate feeds. Similarly, to determine roughage-consuming animal units, the same numbers are multiplied by a set of weights that represent consumption of hay, pasture, and other forage. To determine grain-and-roughage-consuming animal units, the same numbers are multiplied by a third set of weights representing consumption of feed of all kinds, including pasture. 4/

### Grain-Consuming Animal Units

Grain-consuming animal units increased from 153 million in 1947 to 168 million in 1950. During the next 8 years the number ranged from a low of 157 million in 1953 to a high of 168 million in 1958, and remained at that general level through 1960 (table 1). In 1961 the units increased by 1.4 million and in 1962, by 4.3 million. The high reached in 1962 is still about 20 million less than maximum number of 193 million reached in 1943. During the past 10 years, the number of animal units increased about 10 percent. These changes reflect mainly the variations in animal units from hogs, cattle on feed, and poultry.

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1/ In this report, the term concentrates includes feed grains, corn hogged-off, oilseed meals, animal proteins, grain proteins, millfeeds, added fats, and miscellaneous low-fiber feeds. Roughages include harvested hay, silage, stover, fodder, and straw.

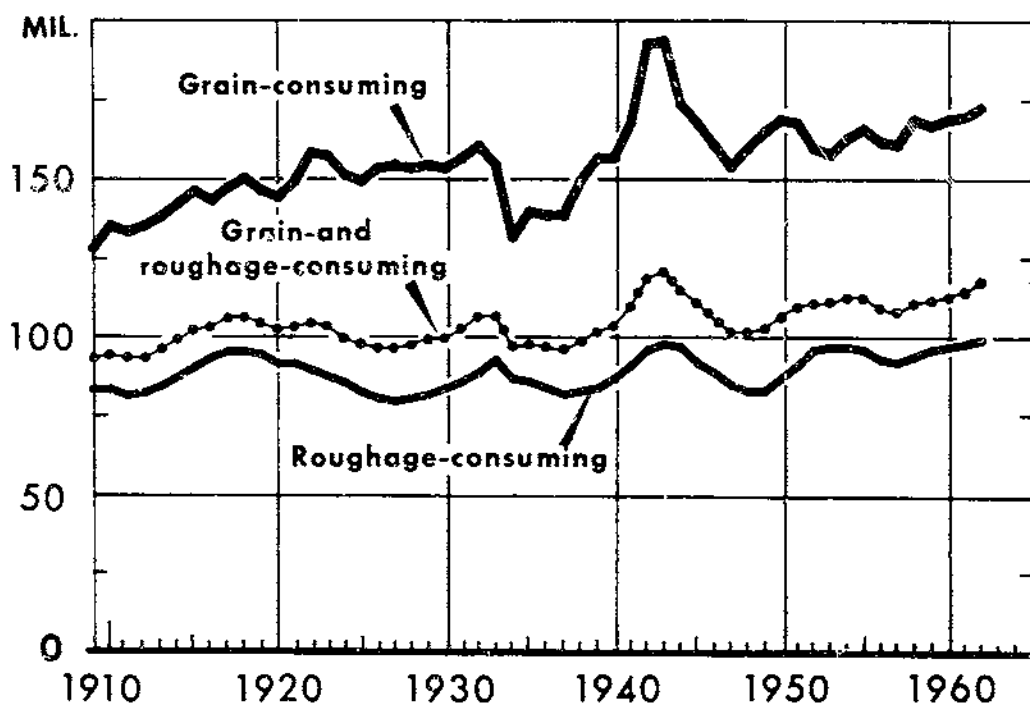
Feed consumption data at the national level for the various classes of livestock for the base periods are available in Consumption of Feed by Livestock, 1909-56, U. S. Dept. Agr. Prod. Res. Rpt. No. 21, Nov. 1958, by R. D. Jennings.

2/ See Appendix for factors used in each State.

3/ The feeding year, beginning Oct. 1 and extending to Sept. 30, is used throughout this report unless otherwise indicated. This is the period during which most of the crops produced during the growing season of a year are fed to livestock.

4/ In this report, the following terms are used interchangeably: Grain-consuming animal units and animal units based on concentrates; roughage-consuming animal units and animal units based on roughages, including pasture; grain-and-roughage-consuming animal units and animal units based on all feed, including pasture.

## ANIMAL UNITS OF LIVESTOCK, U. S.



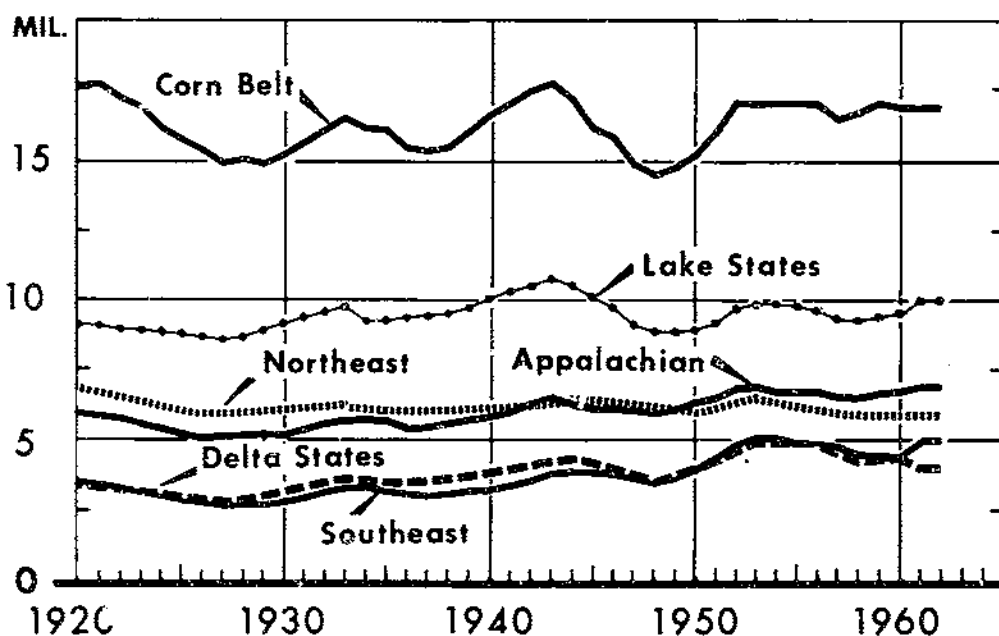
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Figure 1

## ROUGHAGE-CONSUMING ANIMAL UNITS

*Eastern Six Regions of U. S. A.*



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Figure 2



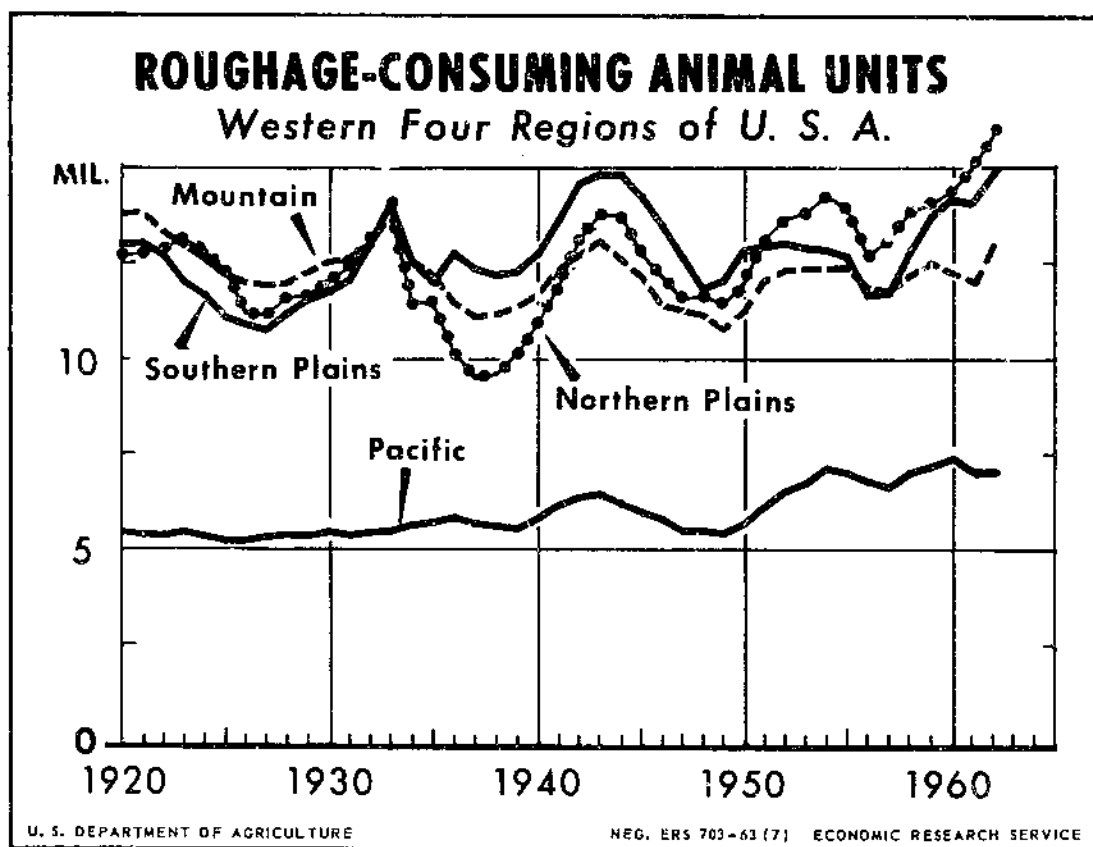


Figure 3

Animal units from beef cattle and poultry increased by about 48 and 13 percent, respectively, during the last decade (table 2). Units from hogs increased about 17 percent. Units from horses and mules declined from 5 to 10 percent a year from 1953 until 1958; in 1959 the decline was less than 5 percent. After 1960, official USDA estimates of numbers of horses and mules were discontinued. In this report the 1960 numbers have been assumed to prevail since then.

At 173.2 million, the number of grain-consuming animal units in the feeding year 1962-63 was about 4.3 million units, or 2 1/2 percent higher than in 1961-62, mainly because of an increase in units from beef cattle and hogs. The fall pig crop of 1962 was 5 percent larger than that of 1961, and the spring crop of 1963 was less than 1 percent larger than that of 1962 resulting in a net increase of about 1.5 million animal units, 2.2 percent, from hogs. Units from chickens raised in 1962 increased about 5 percent from 1961. Units from hens and pullets on hand on January 1, 1963, were down 1 percent from a year earlier. Nearly 7 percent more units came from broilers and about 2 percent more from turkeys in 1962 than in 1961.

During the 10 years, 1953 to 1962, the composition of the livestock population changed in many ways (table 2). Numbers of grain-consuming animal units declined or increased as follows:

| Animal units           | Increase | Decrease |
|------------------------|----------|----------|
|                        | Percent  | Percent  |
| Milk cows-----         | ---      | 21       |
| Hens and pullets-----  | ---      | 8        |
| Chickens raised-----   | ---      | 41       |
| Sheep-----             | ---      | 6        |
| Horses and mules-----  | ---      | 40       |
| Cattle on feed-----    | 67       | ---      |
| Other beef cattle----- | 24       | ---      |
| Broilers-----          | 106      | ---      |
| Turkeys-----           | 58       | ---      |
| Hogs-----              | 17       | ---      |
| All livestock-----     | 10       | ---      |

Fourteen percent of the animal units were fed in Iowa in 1962, and 36.5 percent (including Iowa's share) were fed in the 5 Corn Belt States (table 6). Iowa accounted for about the same percentage of the total a decade ago, but the 5 Corn Belt States accounted for about 1 percent less than in 1953. The Pacific States accounted for about 1 percent more of the total; the Southeastern States 1.7 percent more; and the Delta States nearly 1 percent more than in 1953. In the Mountain States, Appalachian, and Northern Plains, the share remained about the same as in 1953. Animal units in the Northeastern States and the Lake States accounted for about 2 and 1 percent less, respectively.

Compared to the total number of animal units (which number was also increasing), these changes appear to be small, but, within the regions, these changes have been very significant. For example, the number of units fed in the Southeast increased nearly 43 percent, and in the Delta States, increased about 35 percent from 1953 to 1962, primarily because of increases in the poultry industry.

The Pacific States show an increase in animal units of nearly 38 percent, influenced by increases in both poultry and cattle on feed. Animal units in the Mountain States increased about 26 percent, with most of the increase occurring in the cattle industry. The Northern Plains and the Appalachian States increased the number of units 13 percent, while in the Corn Belt and Southern Plains, the increase amounted to about 7 and 6 percent, respectively.

The Lake States had about the same number of animal units 10 years ago. In the Northeastern States, the only region showing a decline, the number decreased about 11 percent. Fewer milk cows contributed to this decline.

Nearly 27 percent (4.4 million units) of the total increase of animal units (16.3 million units) in the United States during the decade occurred in the Corn Belt.

#### Roughage-Consuming Animal Units

The total number of roughage-consuming animal units fed in the feeding year 1962 was about 3 percent higher than in 1961, mainly because of an increase of nearly 3.7 million units from beef cattle. The number from dairy cattle decreased slightly (table 3).

From a 10-year low of 82 million in 1948, numbers of roughage-consuming animal units increased steadily to 96.2 million in 1954. After declining in 1956 and 1957, they climbed to a record high of 100.3 million in 1962 (table 1). Previous high points were 97 million in 1943, 92 million in 1933, and 95 million in 1917. Low points before 1948 were 81 million in 1911 and 1937, and 79 million in 1927.

In the last decade, numbers of roughage-consuming animal units increased from 95.7 million in 1953 to 96.2 million in 1954, decreased to 90.5 million in 1957, and then increased very rapidly to the high in 1962. In many regions a similar pattern of decline and expansion occurred. In the Pacific States the decline was nearly 7 percent from the high in 1954 to the low in 1957 (table 8). The overall increase in this region was about 15 percent. In the Northeastern States, numbers decreased gradually from 1953 until 1958, increased slightly in 1959 and 1960, but have decreased the last 2 years. In the 10-year period, numbers in this region declined about 10 percent.

The Delta and the Southeastern States have experienced declines in animal unit numbers of 12 percent and 9 percent, respectively, during the 10-year period. The Lake States showed a decrease of less than 1 percent. Numbers of animal units based on roughages increased 2, 3, and 4 percent, respectively, in the Appalachian, Corn Belt, and Mountain States. In the Northern and Southern Plains States, numbers increased 15 percent and 17 percent.

#### Grain-and-Roughage-Consuming Animal Units

The number of grain-and-roughage-consuming animal units increased about 3 percent in the feeding year 1962 to 117.1 million units. The increase in units from hogs, the heavy grain consumers, was exceeded by the increase in units from beef cattle, the heavy roughage consumers (table 4). Units from hogs increased about 2 percent; from cattle on feed and other beef cattle about 11 percent and 6 percent, respectively; and from poultry, 2 percent. Units from milk cows and other dairy cattle decreased about 2 and 3 percent.

This series reached a high point in 1943, with more than 120 million animal units. Other high points or crests occurred in 1918, 1933, and 1962. The number of animal units in 1962 was about 3 percent less than the record number in 1943. During the 10-year period 1953-62, the total number increased about 6 percent.

In 1962, nearly one-fourth of these animal units were in the 5 Corn Belt States, most of which (three-fourths) were in Iowa, Illinois, and Missouri. Although numbers expanded in 8 of the 10 regions during the last 10 years, the greatest expansion, percentagewise, was in the Pacific States where an expansion of nearly 20 percent occurred (table 10). Animal units in the Northern and Southern Plains States increased about 14 percent, and in the Southeastern States about 11 percent. Moderate increases of 5 to 7 percent occurred in the Corn Belt, Appalachian, and Mountain States. The Delta States and the Lake States remained about the same. In the Northeastern States, the number of units decreased about 10 percent.

#### Concentrates Fed Per Grain-Consuming Animal Unit

The feeding rate of concentrates, including corn hogged-off and seeds fed, per animal unit increased from 0.68 ton in 1940-41 to 0.92 ton in 1961-62, an increase of about 35 percent. Most of the increase occurred from 1956-57 (0.77 ton) to 1961-62. A slight decrease in 1963-64 to 0.91 ton, because of changing price relationships, is projected (table 11). Several influences contributed to the increased feeding rate. High prices for feeder and slaughter livestock compared to feed prices made it more economical to feed livestock to heavier weights even though some feed conversion efficiency was sacrificed at the heavier weight levels. Slaughter steers (all grades) at Chicago averaged 36 pounds heavier in 1961 than in 1957. Barrows and gilts at 8 markets in 1962 averaged 7 pounds more than in 1957. 5/

The replacement of horses and mules in the livestock inventory by other classes of livestock up to the mid-1950's concealed much of the expansion of feed needed by beef cattle, dairy cattle, broilers, and turkeys. Since the decline in number of horses leveled off at that time, further increases in high grain-consuming livestock would increase the total grain consumption and the grain consumption per animal unit.

Larger livestock enterprises may also contribute to the increased feeding rate per animal unit. This is particularly true in dairying where herd sizes have increased markedly. Here, better management and a greater abundance of resources assure higher feeding rates for milk cows. (This expansion--in herd size and feeding rates--greatly increases the average amount fed per animal unit.) Other livestock enterprises are similarly affected as improved management gears feed use to the ability to consume and produce efficiently.

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5/ Livestock Division, U. S. Agr. Mktg. Serv., Market News, Livestock-Meat-Wool; Weekly Summary and Statistics: Vol. 30, No. 47, Nov. 20, 1962 p. 894, and Vol. 31, No. 12, March 10, 1963, p. 231.

More confinement feeding and raising of livestock is another important factor. This involves more harvested feeds and less feed coming from pasture. Feeding of commercial formula feeds has increased about 45 percent since the mid-1940's. Formula feed mixed commercially accounts for about one-third of all concentrates fed.

### Projecting Animal Unit Numbers for Future Years

Grain-consuming animal units constitute a basic part of the livestock-feed balance, and are used by USDA in estimating feed grain consumption and carry-over at the national level. In economic research at both the national and State levels, projections of grain-consuming animal units for one or more years are useful in discussing efficiency of livestock feeding. Estimates are most helpful when feed demand is high, such as occurred during World War II; during drought periods; or in other situations when feed supplies are short relative to feed demand. They are also useful in times of surplus to calculate surplus levels.

National estimates are calculated a year or more in advance, before data on livestock by States are available. In tables 12 and 13, the method of estimating is illustrated with calculations for the three series of animal units for the feeding years 1962 and 1963 on the basis of livestock numbers reported in 1963 and estimated for 1964. The animal units calculated this way for 1962 differ only slightly from the number determined by States for that year (tables 5, 7, and 9). The small difference indicates the dependability of the method for general projections.

Projections indicate that units of grain-consuming livestock may increase to about 174 million in the feeding year 1963; roughage-consuming animal units may total about 103 million; and grain-and-roughage-consuming animal units may total 118 million units.

Estimates of animal units for the current year and for a year ahead are revised as each livestock production report of the Statistical Reporting Service is released. Reports affecting the estimates are the Livestock and Poultry Inventory; the several Pig Crop Reports; Cattle on Feed; Intentions to Raise Turkeys; and Chickens and Eggs, Including Commercial Broilers. Preliminary calculations are made on the basis of estimates of livestock numbers furnished by a committee of USDA technicians.

### PART II--LIVESTOCK-PRODUCTION UNITS, 1910-1962

Livestock-production units are another effective means of measuring the balance between livestock and feed consumption. These units also provide a basis for estimating the approximate amount of feed that may be needed at any time. In this index series, the annual output of each of the principal livestock products is multiplied by a factor determined by dividing the feed consumed per unit of each type of livestock production by the feed consumed per year by one

milk cow, 6/ thus converting livestock products to a common denominator. Converted to these units, livestock production can be related statistically to feed supplies and requirements as needed in many types of economic research.

The livestock-production unit series has followed the trends in feed consumption more closely than has the animal unit series (figs. 4 and 5). The livestock-production series appear to reflect more closely the overall effect on feed consumption of changes in feed efficiency, substitution of feed for other farm resources, restricted feeding, and feeding of livestock to heavier or lighter weights.

Two series of livestock-production units have been developed--one based on concentrates consumed and the other on all feed consumed. Annual figures for the first series are computed by multiplying the total number of units of production by factors based on the amount of concentrates consumed. 7/ Annual figures for the second series are computed by multiplying the total number of units of production by factors based on the amount of all feed consumed, including roughage and pasture. The total number of units of production is the same for each series--the difference lies in the factors by which they are multiplied. Data upon which these series are based are available at the national level only.

#### Calculation of Livestock-Production Units

The preliminary step in calculating the livestock-production unit series was the calculation of factors to be applied to the annual production figures. These factors are the ratios between the feed consumed by each type of livestock per unit of production during the base period and the feed consumed per year by the average milk cow which produced 4,380 pounds of milk per year during the same period. 8/ The factors used for each kind of livestock and the feed-consumption data used in calculating the factors are given in table 14.

For example, here is how the factor for hogs based on concentrates was determined. During the period 1940-45, 478 pounds of concentrates were fed per hundredweight of hogs produced; 1,342 pounds of concentrates were fed annually to the average milk cow. Dividing 478 pounds by 1,342 pounds gives the factor 0.36. Multiply this by the total hundredweight of hogs produced in any year to obtain the number of livestock-production units from hogs for that year based on concentrates.

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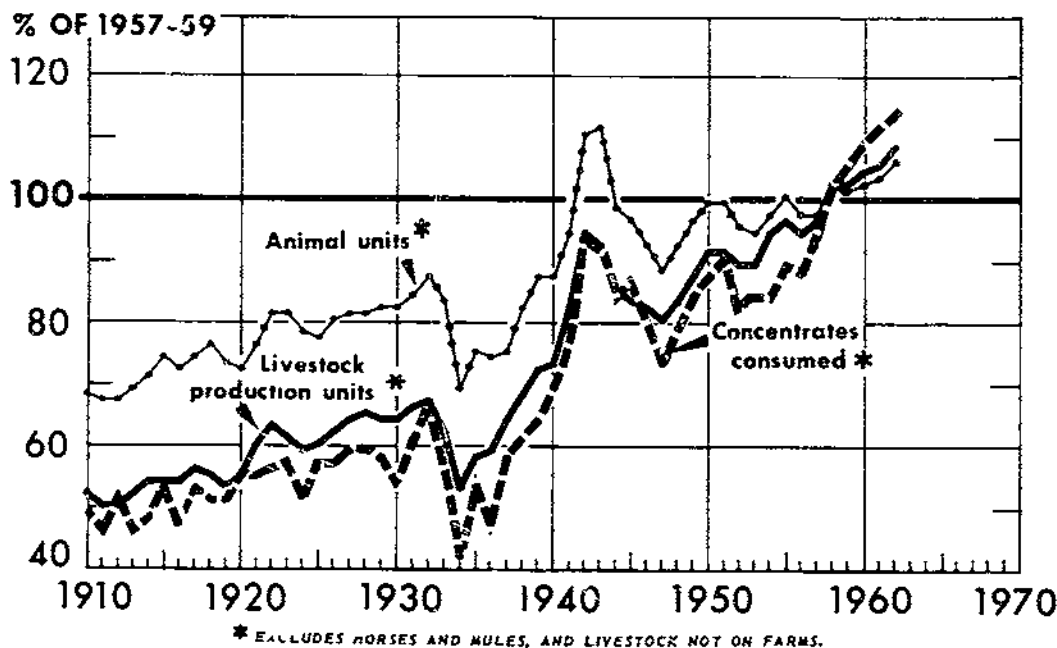
6/ Feed consumption during the base period 1940-45 was used for all livestock except broilers, for which the period 1950-53 was used.

7/ Units of production: 100 pounds live weight of meat-producing livestock or poultry; 1,000 pounds of milk; 1,000 eggs; 1 goat clipped; for horses and mules, 1 head.

8/ The same base period was used for the livestock-production unit series as for the animal unit series. See footnote 1.

# FEED AND LIVESTOCK UNITS

Based on Concentrates



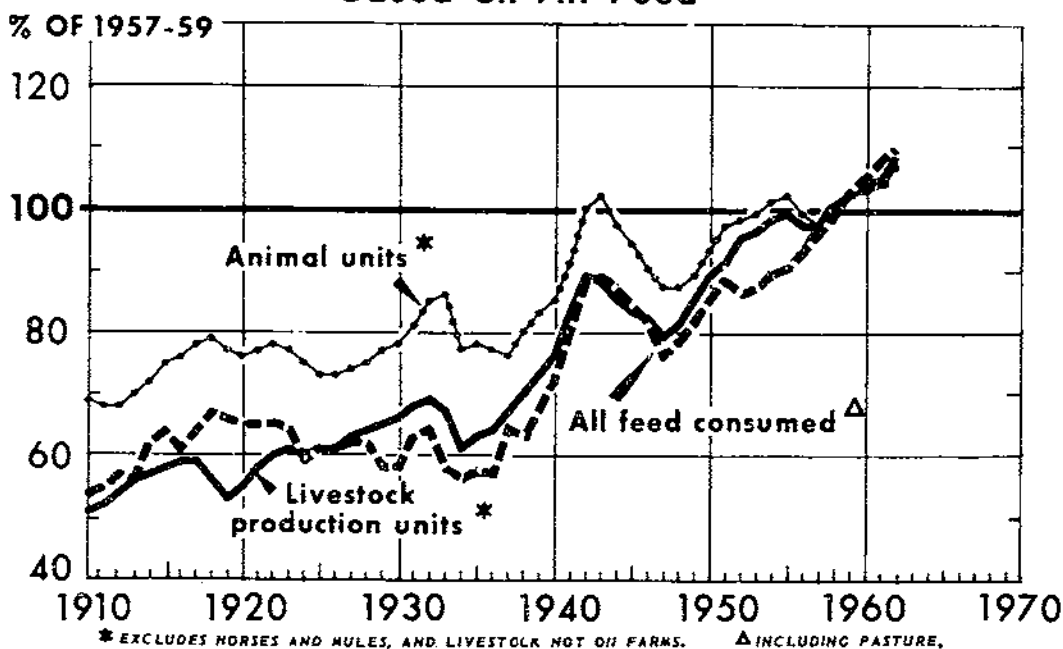
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Figure 4

# FEED AND LIVESTOCK UNITS

Based on All Feed



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Figure 5

To develop factors based on all feed, feed consumption is measured in feed units. 9/ During the base period 1940-45, hogs consumed an average of 546 feed units of all feed per hundredweight of production compared with an annual average of 4,981 feed units per head for milk cows. Dividing the 546 pounds by 4,981 pounds gives the factor 0.11. Multiply this factor by total hundredweight of hogs produced in a year to obtain the livestock-production units from hogs for that year based on all feed consumed.

The factor for milk production based on concentrates, is determined as follows: During the period 1940-45, the average milk cow consumed 1,342 pounds of concentrates and produced 4,380 pounds of milk annually. Thus, an average of 306 pounds of concentrates were consumed per unit (1,000 pounds) of milk production. Dividing 306 by 1,342 gives the factor 0.23. Multiplying the units of milk production in a particular year by the factor 0.23 gives the number of livestock-production units from milk based on concentrates for that year.

To develop the factor for milk production based on all feed, the calculation is as follows: In the base period, an average dairy cow consumed 4,981 feed units of all feed including pasture per year, or 1,138 feed units per 1,000 pounds of milk. Dividing 1,138 by 4,981 gives the factor 0.23. Multiply the units of milk production in a year by this factor to obtain the number of livestock-production units from milk based on all feed for that year.

#### Adjustment of Calendar-Year Production Data to Feeding Year

To facilitate comparison with the national supply and consumption of feed, data for which are based on the feeding year, livestock-production units also are based on the feeding year. The USDA calendar year estimates of annual production of milk and eggs; annual live weight production of hogs, cattle, sheep, chickens, broilers, and turkeys; numbers of horses and mules on farms January 1; and number of goats clipped during the year are converted to a feeding-year basis as set forth below. Production data for the various kinds of livestock converted to a feeding-year basis are given for the years 1910-1962 in table 15.

#### Cattle

In computing livestock production units, cattle production (excluding milk cows) is divided into two groups--"grain-fattened" and "other." The number put on feed during the year multiplied by the gain per head (assumed to increase gradually from 325 pounds per head in 1930 to 450 pounds in each year following 1958) equals the total gain of grain-fattened cattle. The difference between the gain of grain-fattened cattle and live weight production of all cattle and calves is used for the production of "other" cattle. Calendar-year production data for these two groups of cattle are converted to the feeding year by adding 25 percent of the production in one calendar year to 75 percent of the production in the succeeding calendar year.

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9/ A feed unit is equivalent in feeding value to 1 pound (or ton) of corn.



## Hogs

Data on live weight production of hogs on a feed-year basis are calculated by first distributing production for the calendar years into quarters (as shown for 1963 in table 16), then totaling the production for the 4 quarters of the feeding year.

In estimating quarterly production, the number of hogs on farms January 1, the pig crop, and the death loss are used. Production from each group of hogs is distributed among the different quarters of the year, in accordance with the gain in weight during each quarter, by means of the percentages shown in table 17. The gain in weight made after January 1 by the spring pigs on hand on that date is credited to the first quarter of the calendar year, when these pigs are marketed. The gain in weight made after January 1 by the fall pigs on hand on that date is distributed among quarters; thus, 55 percent to the first, 35 percent to the second, and 10 percent to the third, in accordance with the estimated gain of these pigs during each quarter. Sows and gilts on farms on January 1 (two-thirds of which are assumed to be gilts) are assumed to gain 125 pounds each during the ensuing year. Gilts held over another year (listed as sows December 31) gain another 25 pounds after the other gilts go to market. The gain in weight is credited to the respective quarters in accordance with the estimated gains during the quarter.

In the same way, estimates are made of the gain in each quarter by the spring and fall pigs raised during the calendar year. More than half the calendar-year pig crop is still "on farms, December 31." The rest have been marketed. The percentages shown in table 17 have been used since 1952. From 1938 to 1952, production was concentrated more in the October to December quarter and a different set of percentages was used. Before 1938, concentration of production in the October to December quarter was even greater, and a still different set of percentages was used.

## Milk and Eggs

Monthly data for milk and egg production are published by USDA. Twelve months of production from October through the following September are used for the feeding-year production of milk and eggs.

## Poultry

Production data for the calendar year following October 1 of the feeding year are used for meat-producing poultry, without adjustment, for the feeding year. The number of chickens raised in the calendar year, multiplied by the average weight of all chickens sold, is used for production of chickens raised. (Chickens raised are mainly for replacements in laying flocks.)

## Sheep and Lambs

Calendar-year production of sheep and lambs is converted to a feeding-year basis by adding 25 percent of the production in 1 year to 75 percent of the production in the succeeding year. For each 100 pounds of live weight produced, about 19 pounds of wool are produced. No adjustment is made for feed required to produce the wool.

## Horses and Mules

Because no data are available with which to measure work done by horses and mules, the number of head on farms January 1 following the beginning of the feeding year was used for the production of this kind of livestock. Different factors were used to weight the number of colts and numbers of horses and mules 2 years old and over. Since USDA estimates of numbers of horses and mules were discontinued after 1960, numbers were assumed to have remained the same each year since 1960.

## Goats

Number of goats clipped is the number raised for production of mohair during the calendar year following the beginning of the feeding year. In 1960, nearly 96 percent of the number reported were in Texas. Because goats are raised almost entirely on pasture, their production is included only in the livestock-production units based on all feed including pasture. The number of goats clipped is used rather than the amount of mohair produced.

## Livestock-Production Units Based on Concentrates

Livestock-production units based on concentrates rose from 121.8 million in 1910 to 211.3 million in 1962, an increase of about 73 percent (table 18). The number of units excluding those from horses and mules increased 119 percent during that time.

Since 1950, hogs have accounted for approximately 37 percent of the livestock-production units based on concentrates, milk for 15 percent, eggs for 14 percent, cattle and calves for 18 percent, broilers for 6 percent, chickens raised for 4 percent, turkeys for 3 percent, and sheep and lambs for 1 percent (table 19). Poultry and eggs combined have accounted for about 27 percent of the total.

Several important changes have occurred in the composition of livestock population during the more than 50 years represented in this series. Most obvious change reflected in the series is the decrease in percentage of units that comes from horses and mules--from 22.1 percent in the decade 1910-19 to 1.8 percent in the 1960's. Most of this decrease has been offset by the increase to 14 percent in units from grain-fattened cattle and to 11.5 percent in units from broilers and turkeys. Broiler and turkey production developed on a large scale from the 1930's on. Grain-fattened cattle (cattle on feed) were first reported separately in 1929 (table 15). Since then, units from grain-fattened cattle have increased more than 5-fold. About 12 percent of all concentrates fed to livestock since 1960 was fed to this class of cattle. 10/

In proportion to other sources of livestock-production units based on concentrates, horses and mules and "other" cattle reached their peak before 1920, milk cows and sheep and lambs during the 1930's, hogs during the 1940's, and grain-fattened cattle and poultry in 1960-1962 (table 19).

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10/ See table 27.

### Livestock-Production Units Based on All Feed 11/

Livestock-production units based on all feed, including pasture, increased from 88.7 million in 1910 to 140.6 million in 1962, a rise of about 59 percent (table 20). The number of units, excluding those from horses and mules, more than doubled during that time. In the period 1960-62, approximate percentages of units from the different kinds of livestock were: cattle (other than milk cows), 43 percent; milk, 21 percent; hogs, 16 percent; eggs, 6 percent; sheep and goats, about 5 percent; horses and mules, 2 percent; broilers, 4 percent; chickens raised, 1 percent; and turkeys, 2 percent (table 21). About 21 percent of the units from cattle came from grain-fattened cattle.

Between 1910-19 and 1960-62, units from horses and mules decreased from 26.3 percent of the total units in the all-feed series to 2.3 percent (table 21). During this period, units from cattle other than milk cows increased from 30.4 percent of the total to 43.1 percent. The importance of meat production from cattle is further indicated by the fact that about 29 percent of all feed (excluding pasture) fed to livestock in 1962-63 was fed for cattle production (table 28).

### Comparison of Livestock-Production Unit Series With Other Livestock and Feed Series

Percentagewise, increase in number of livestock-production units from 1910 to 1962 greatly exceeded the increase in number of animal units and was about the same as the increase in quantity of all feed consumed (table 22). This indicates a greater response in total livestock production than in animal numbers to increases in feed consumption. 12/ Livestock-production units based on all feed increased 112 percent compared with a 55-percent increase in animal units and a 102-percent increase in all feed consumed by livestock. However, consumption of concentrates increased about 23 percent more than livestock-production units based on concentrates and 77 percent more than animal units based on concentrates. The percentage of concentrates in all feed including pasture fed to livestock increased 4 percent from the period 1909-19 to the period 1960-62. 13/

Because feed is only one of several production inputs in livestock raising, high efficiency of feed conversion into livestock products does not necessarily contribute to maximum profit in every operation. Therefore, maximum efficiency of feed conversion has not been sought consistently by livestock producers over an extended period of time. 14/

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11/ Measured in terms of feed units. See footnote 9.

12/ The animal-unit series are based on numbers of livestock rather than production.

13/ See U. S. Dept. Agr. Prod. Res. Rpt. 21, table 64, and table 28 of this report.

14/ Mighell, Ronald L, and Scoville, Orlin J. Economic Effects of Progress in Animal Feeding. U. S. Dept. Agr. Agr. Econ. Res., Vol. 8, October 1956.

Before World War II, concentrates fed per livestock-production unit varied from a high of 0.87 ton in 1912 to a low of 0.58 ton in 1936, mainly due to variations in supplies available. <sup>15/</sup> From 1940 to 1962, the amount fed averaged 0.70 ton, varying from 0.66 ton in 1947 to 0.76 ton in 1945 and 1961 (table 23). In general, the feeding rate per livestock-production unit was higher in the 10 years from 1910 to 1919 than in any decade since, even the 1950's.

The quantity of all feed consumed per livestock-production unit varied from a high of 3.10 tons in 1919 to a low of 2.19 tons in 1933 (table 24). During both World War I and World War II and during the last 4 years, the rate of feeding was high (fig. 6). In the drought period of the 1930's, the rate was much lower.

### PART III--HIGH-PROTEIN-CONSUMING ANIMAL UNITS, 1940-63

The high-protein-consuming animal unit series--a variation of the grain-consuming animal unit series--was developed to estimate or project consumption of high-protein feeds by livestock. As presently constructed, animal units based on concentrates are estimated using average feed relationships between classes of livestock during the period 1955-59, and are weighted by the amount of high-protein feeds consumed by the various classes of livestock divided by the amount consumed by dairy cattle. <sup>16/</sup>

The total number of animal units (high-protein), amounts of high-protein feeds available for feeding annually from 1940 to 1963, and the amounts fed per animal unit are given in table 25 and figure 7. A very rapid increase in numbers of these animal units occurred during the early years of World War II. By 1947 the number had declined to about the same as in 1940. From 1947 to 1963 the number increased at an average rate of about 1.4 million units per year. Over the entire period, the number of units increased about 18 percent.

The amount fed per unit has increased each year with few exceptions, and since the early 1940's has more than doubled, increasing from 110 pounds in 1940 to 229 pounds in 1962. This indicates that livestock and poultry feeders are adopting more balanced rations. The use of balanced rations has been more widespread in poultry and dairy rations, but the increasing adoption of such rations for hogs and cattle-on-feed appears to be an important factor in increased overall high-protein feed consumption in the years ahead.

The proportion of animal units (high-protein) coming from the various classes of livestock is given in table 26. The most significant changes are in percentages of units coming from beef and dairy cattle. The percentage of units from beef cattle increased from a low of 9.3 percent in 1943 to a high of 21.5

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<sup>15/</sup> See USDA Statis. Bul. 275, table 10.

<sup>16/</sup> This series is based on high-protein feeds consumed only (oilseed meals, animal proteins, and grain proteins). No consideration is given to protein contained in other by-product feeds, feed grains, harvested forages, or pasture. A more detailed description of the calculations involved in the high-protein-consuming animal unit series is given in USDA Statis. Bul. 301.

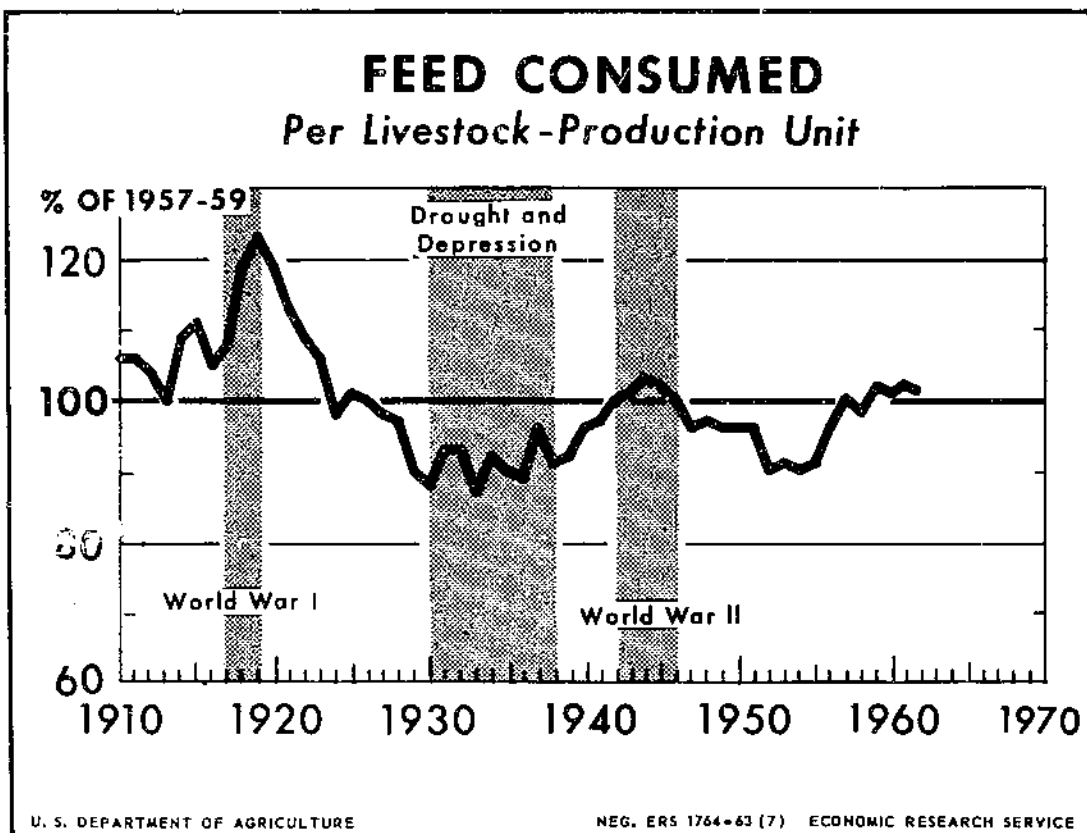


Figure 6

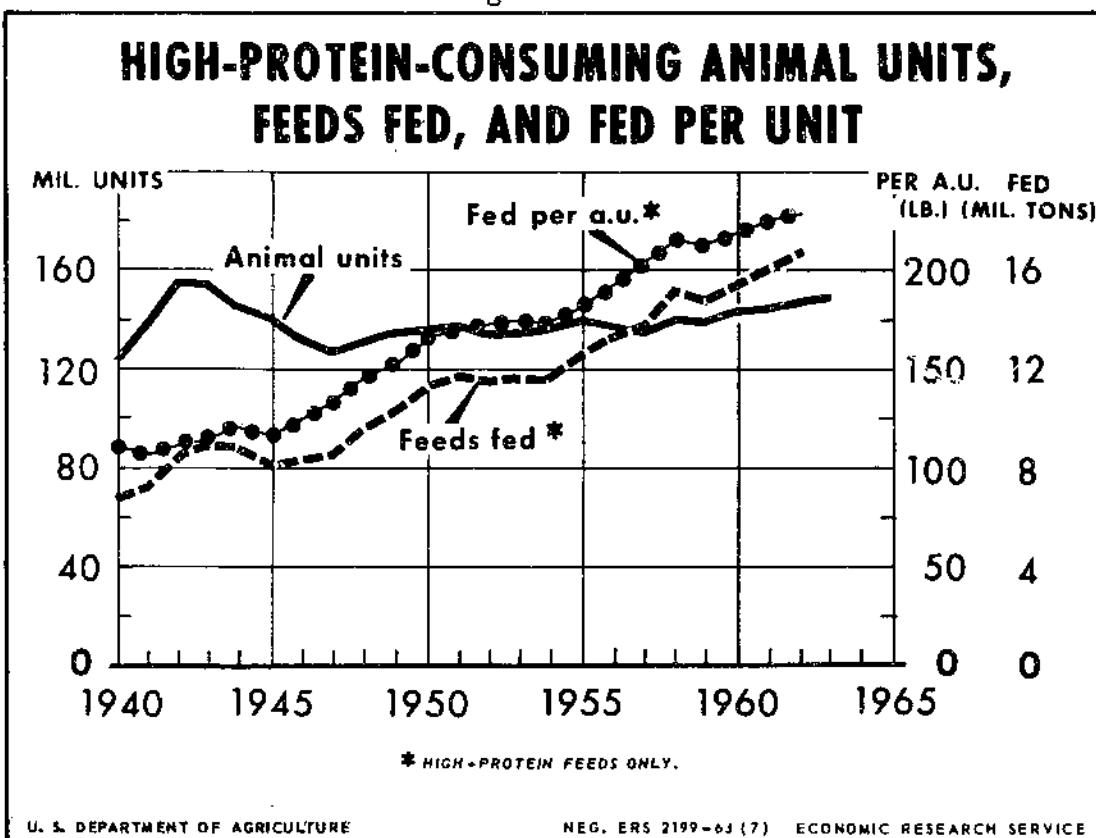


Figure 7

percent in 1963. This change places beef cattle ahead of hogs as a source of units in 1963. Units from dairy cattle have decreased from a high of 22.9 percent of the total in 1940 to a low of 14.1 percent in 1963.

The percentage of units coming from poultry has varied from 48.1 percent of the total in 1944 to 43.1 percent in 1954. However since 1950, the percentage has varied little from about 45 percent. The percentage of units coming from hogs has varied from 17.7 percent of the total in 1944 to 22.0 percent in 1950, but since 1955 this percentage has remained about 19-20 percent. The percentage of units coming from sheep has declined from 2.6 percent in 1940 to 1.2 percent in 1963. Most of this decrease occurred before 1950.

#### PART IV--FEED CONSUMPTION BY VARIOUS CLASSES OF LIVESTOCK, 1960-63 17/

So that data on feed consumption by livestock can be made available promptly to research scientists and other users, preliminary estimates have been made for feed consumption. They are shown in table 27, stated in tons, and in table 28, stated in feed units. The data for 1963 are based on conditions in July 1963. The data for 1960-1962 are subject to revision, as more data, primarily the Agricultural Census of 1965, become available.

The amount of concentrates consumed by livestock and poultry, including feed grains, high protein, and other by-product feeds, has continued to increase during this 4-year period, from 153.4 million tons in 1960 to 160.8 million tons in 1963, an increase of about 5 percent. This is about the same percentage increase as the increase in grain-consuming animal units. Corn consumption, including corn hogged-off, has increased about 6 percent in the 4-year period, sorghum grains 22 percent, and high protein feeds about 11 percent. Miscellaneous by-product feeds have remained about the same. Consumption of oats, barley, and wheat and rye used for feed have declined about 10 percent.

Estimates for 1963 indicate that about 34 percent of the total concentrates will be fed to hogs, and about 20 percent to each of the other major types of livestock (dairy cattle, beef cattle, and poultry).

Consumption of harvested roughages and of pasture have increased about 4 percent during the 3-year period 1960-1962 (data for 1963 for harvested roughage and pasture are not yet available). This increase in consumption is about the same percentage as the increase in roughage-consuming animal units.

#### PART V--SURPLUS AND DEFICIT FEED GRAIN STATES, 1960-62

Estimates of feed grain-livestock balances within States or regions are useful for legislators, policy officials, civil defense committees, research workers, and others seeking solutions to agricultural problems. Since adequate yearly

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17/ For feed consumption data 1909-1939, see USDA Prod. Res. Rpt. 21. For similar data 1940-1959, see USDA Prod. Res. Rpt. 79. (In process.)

**EXCESS OR DEFICIENCY OF FEED GRAINS**  
*Production Over or Under Quantity Fed,\* 1960-62*

YEAR BEGINNING OCT. 1.  
 PRELIMINARY ESTIMATES.  
 \* QUANTITY FED ESTIMATED  
 BY NUMBER OF GRAIN-  
 CONSUMING ANIMAL UNITS.

FIGURES IN STATES ARE  
 THOUSAND TONS  
 + = Net surplus  
 - = Net deficit

Top figure = 1960-61  
 Middle = 1961-62  
 Bottom = 1962-63

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data have not been developed to keep such estimates currently available, computations have been made on a State basis to indicate roughly the feed grain deficit or surplus condition in each State for each year from 1960-1962. The information is shown in map form in figure 8.

In this computation, the estimated feed grains fed to livestock in each State were deducted from the total production of the 4 feed grains in that State. The balance was the deficit or surplus for that State. 18/ This method is admittedly limited in its usefulness to general purposes. Because the amounts of feed used for food, industrial use, seed, and export have been ignored, the computation tends to overstate surpluses and understate deficits. At the national level, feed grains for seed, human food, and industry amounted to about 9 percent of the feed grain disappearance in each of the feeding years 1960-62.

In general, the feed grain deficit areas in the United States were the Northeastern States, Middle Atlantic States, Southeastern States, Delta States, and the West Coast States. In addition, Wyoming, Utah, and Nevada in the Mountain States were deficit States. In 2 of the 3 years, Missouri and Wisconsin were deficit States. The surplus feed grain areas were the Corn Belt States and the Northern and Southern Plains States. Michigan also was a feed grain surplus State.

<sup>18/</sup> See Appendix, table E, for calculation of deficit or surplus for each State.

Table 1.--Animal units of livestock fed annually, by kinds, United States, 1909-62 1/

| Year beginning<br>Oct. 1 | Grain-consuming | Roughage-consuming | Grain-and-roughage-<br>consuming |
|--------------------------|-----------------|--------------------|----------------------------------|
|                          | 1,000 units     | 1,000 units        | 1,000 units                      |
| 1909-----                | 127,779         | 83,377             | 92,582                           |
| 1910-----                | 134,910         | 82,688             | 94,091                           |
| 1911-----                | 133,315         | 81,362             | 92,810                           |
| 1912-----                | 134,913         | 81,697             | 93,452                           |
| 1913-----                | 137,661         | 83,982             | 95,738                           |
| 1914-----                | 142,222         | 87,242             | 99,107                           |
| 1915-----                | 146,483         | 90,128             | 102,204                          |
| 1916-----                | 143,431         | 92,885             | 103,152                          |
| 1917-----                | 147,355         | 94,962             | 105,573                          |
| 1918-----                | 150,305         | 94,750             | 106,157                          |
| 1919-----                | 145,859         | 93,638             | 104,194                          |
| 1920-----                | 144,001         | 91,208             | 102,112                          |
| 1921-----                | 149,472         | 90,970             | 102,993                          |
| 1922-----                | 158,170         | 89,078             | 104,191                          |
| 1923-----                | 157,379         | 87,281             | 102,587                          |
| 1924-----                | 151,201         | 84,610             | 99,126                           |
| 1925-----                | 149,439         | 81,951             | 96,890                           |
| 1926-----                | 153,071         | 79,634             | 96,409                           |
| 1927-----                | 153,691         | 78,856             | 96,194                           |
| 1928-----                | 153,159         | 80,251             | 96,897                           |
| 1929-----                | 154,070         | 81,199             | 98,570                           |
| 1930-----                | 152,753         | 82,776             | 99,496                           |
| 1931-----                | 156,436         | 84,795             | 101,912                          |
| 1932-----                | 159,736         | 88,206             | 105,614                          |
| 1933-----                | 153,946         | 91,932             | 106,142                          |
| 1934-----                | 131,194         | 86,082             | 96,225                           |
| 1935-----                | 138,656         | 84,604             | 97,097                           |
| 1936-----                | 137,827         | 82,741             | 95,835                           |
| 1937-----                | 137,812         | 81,145             | 94,694                           |
| 1938-----                | 148,777         | 81,603             | 98,006                           |
| 1939-----                | 156,143         | 83,472             | 101,051                          |
| 1940-----                | 155,753         | 86,414             | 102,919                          |
| 1941-----                | 167,119         | 90,350             | 109,285                          |
| 1942-----                | 192,227         | 94,512             | 118,232                          |
| 1943-----                | 193,054         | 97,209             | 120,160                          |
| 1944-----                | 172,559         | 95,631             | 113,914                          |
| 1945-----                | 167,259         | 91,385             | 109,557                          |
| 1946-----                | 159,615         | 88,077             | 105,234                          |
| 1947-----                | 153,098         | 83,977             | 100,661                          |
| 1948-----                | 158,603         | 82,096             | 100,661                          |
| 1949-----                | 163,840         | 82,381             | 102,290                          |
| 1950-----                | 168,104         | 85,592             | 105,631                          |
| 1951-----                | 167,331         | 90,175             | 108,595                          |
| 1952-----                | 158,936         | 94,567             | 109,627                          |
| 1953-----                | 156,853         | 95,664             | 110,024                          |
| 1954-----                | 161,595         | 96,157             | 111,678                          |
| 1955-----                | 165,264         | 95,232             | 111,888                          |
| 1956-----                | 160,927         | 91,944             | 108,446                          |
| 1957-----                | 159,905         | 90,537             | 107,050                          |
| 1958-----                | 167,728         | 92,516             | 110,478                          |
| 1959-----                | 165,704         | 94,750             | 111,283                          |
| 1960 2-----              | 167,557         | 95,578             | 112,361                          |
| 1961 2-----              | 168,944         | 97,417             | 113,959                          |
| 1962 2-----              | 173,199         | 100,329            | 117,053                          |

1. See Figure 1. Data not available for Alaska and Hawaii.

2. Revised.

3. Preliminary.



Table 2.—Grain-consuming animal units fed annually, by kind of livestock, United States, 1953-62 1/

| Year beginning Oct. 1 | Milk cows | Other dairy cattle | Cattle on feed | Other beef cattle | Sheep | Hogs   | Hens and pullets | Chickens raised | Broilers | Turkeys | Horses and mules | Total   |
|-----------------------|-----------|--------------------|----------------|-------------------|-------|--------|------------------|-----------------|----------|---------|------------------|---------|
|                       | units     | units              | units          | units             | units | units  | units            | units           | units    | units   | units            | units   |
| 1953                  | 24,738    | 4,228              | 10,868         | 8,634             | 1,122 | 57,819 | 21,389           | 9,831           | 8,381    | 4,086   | 6,157            | 156,853 |
| 1954                  | 23,913    | 4,093              | 11,547         | 8,392             | 1,159 | 64,095 | 21,264           | 8,363           | 8,732    | 4,041   | 5,511            | 161,595 |
| 1955                  | 23,387    | 3,899              | 11,546         | 9,009             | 1,110 | 66,133 | 20,858           | 8,558           | 10,750   | 4,962   | 5,052            | 165,264 |
| 1956                  | 22,828    | 3,799              | 11,976         | 8,805             | 1,114 | 62,481 | 21,337           | 7,098           | 11,581   | 5,323   | 4,585            | 160,927 |
| 1957                  | 21,775    | 3,711              | 11,673         | 8,716             | 1,105 | 62,078 | 20,502           | 7,588           | 13,280   | 5,226   | 4,251            | 159,905 |
| 1958                  | 20,671    | 3,677              | 12,836         | 9,129             | 1,176 | 69,095 | 21,086           | 6,872           | 13,896   | 5,419   | 3,871            | 167,728 |
| 1959                  | 20,088    | 3,712              | 15,009         | 9,586             | 1,155 | 66,364 | 20,171           | 5,891           | 14,360   | 5,677   | 3,691            | 165,704 |
| 1960 2                | 19,940    | 3,700              | 15,893         | 9,683             | 1,158 | 64,565 | 19,634           | 6,105           | 15,943   | 7,251   | 3,691            | 167,557 |
| 1961 2                | 19,726    | 3,630              | 16,609         | 10,105            | 1,112 | 66,062 | 19,937           | 5,567           | 16,199   | 6,306   | 3,691            | 168,944 |
| 1962 1                | 19,304    | 3,543              | 18,109         | 10,699            | 1,054 | 67,502 | 19,742           | 5,848           | 17,267   | 6,442   | 3,691            | 173,199 |

1/ Data not available for Alaska and Hawaii.

2/ Revised.

3/ Preliminary.

Table 3.—Roughage-consuming animal units fed annually, by kind of livestock, United States, 1953-62 1/

| Year beginning Oct. 1 | Milk cows | Other dairy cattle | Cattle on feed | Other beef cattle | Sheep and goats | Hogs and poultry | Horses and mules | Total   |
|-----------------------|-----------|--------------------|----------------|-------------------|-----------------|------------------|------------------|---------|
|                       | units     | units              | units          | units             | units           | units            | units            | units   |
| 1953                  | 21,637    | 9,596              | 2,535          | 49,025            | 6,186           | 1,090            | 3,595            | 95,664  |
| 1954                  | 21,628    | 9,289              | 2,809          | 50,168            | 6,280           | 1,130            | 3,233            | 96,157  |
| 1955                  | 22,748    | 8,834              | 2,883          | 50,336            | 6,258           | 1,194            | 2,974            | 95,232  |
| 1956                  | 22,187    | 8,574              | 2,971          | 48,131            | 6,163           | 1,179            | 2,739            | 91,944  |
| 1957                  | 21,165    | 8,372              | 2,850          | 48,051            | 6,352           | 1,153            | 2,594            | 90,537  |
| 1958                  | 20,089    | 8,280              | 3,226          | 50,600            | 6,632           | 1,242            | 2,447            | 92,516  |
| 1959                  | 19,528    | 8,343              | 3,599          | 52,863            | 6,797           | 1,234            | 2,386            | 94,750  |
| 1960 2                | 19,467    | 8,306              | 3,828          | 53,677            | 6,767           | 1,247            | 2,386            | 95,578  |
| 1961 2                | 19,154    | 8,134              | 3,969          | 56,015            | 6,501           | 1,228            | 2,386            | 97,417  |
| 1962 1                | 18,770    | 7,927              | 4,490          | 59,203            | 6,306           | 1,247            | 2,386            | 100,329 |

1/ Data not available for Alaska and Hawaii.

2/ Revised.

3/ Preliminary.

Table 4.—Grain-and-roughage-consuming animal units fed annually, by kind of livestock, United States, 1953-62 1/

| Year beginning Oct. 1 | Milk cows | Other dairy cattle | Cattle on feed | Other beef cattle | Sheep and goats | Hogs   | Poultry | Horses and mules | Total   |
|-----------------------|-----------|--------------------|----------------|-------------------|-----------------|--------|---------|------------------|---------|
|                       | units     | units              | units          | units             | units           | units  | units   | units            | units   |
| 1953                  | 24,738    | 7,754              | 4,609          | 36,718            | 4,780           | 15,833 | 11,815  | 4,162            | 110,024 |
| 1954                  | 23,913    | 7,510              | 4,991          | 37,595            | 4,860           | 17,558 | 11,476  | 3,734            | 111,678 |
| 1955                  | 23,387    | 7,139              | 5,073          | 37,708            | 4,929           | 18,146 | 12,117  | 3,430            | 111,888 |
| 1956                  | 22,828    | 6,931              | 5,244          | 36,103            | 4,756           | 17,174 | 12,220  | 3,139            | 108,446 |
| 1957                  | 21,775    | 6,762              | 5,070          | 36,005            | 4,890           | 17,042 | 12,491  | 2,953            | 107,050 |
| 1958                  | 20,671    | 6,692              | 5,647          | 37,853            | 5,111           | 18,950 | 12,746  | 2,745            | 110,478 |
| 1959                  | 20,088    | 6,738              | 6,347          | 39,544            | 5,228           | 18,218 | 12,392  | 2,655            | 111,283 |
| 1960 2                | 20,027    | 6,713              | 6,737          | 40,165            | 5,214           | 17,715 | 13,155  | 2,655            | 112,361 |
| 1961 2                | 19,813    | 6,567              | 7,007          | 41,914            | 5,007           | 18,115 | 12,882  | 2,655            | 113,539 |
| 1962 1                | 19,393    | 6,396              | 7,765          | 44,288            | 4,855           | 18,502 | 13,199  | 2,655            | 117,053 |

1/ Data not available for Alaska and Hawaii.

2/ Revised.

3/ Preliminary.

Table 5.—Grain-consuming animal units fed annually, by States, 1953-62

| State                   | Year beginning Oct. 1 |                |                |                |                |                |                |                |                |                |
|-------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                         | 1953                  | 1954           | 1955           | 1956           | 1957           | 1958           | 1959           | 1960 1/        | 1961 1/        | 1962 2/        |
|                         | units                 | units          | units          | units          | units          | units          | units          | units          | units          | units          |
| <b>Northeast:</b>       |                       |                |                |                |                |                |                |                |                |                |
| Maine-----              | 892                   | 967            | 961            | 1,021          | 1,074          | 1,089          | 1,050          | 1,082          | 1,118          | 1,161          |
| New Hampshire-----      | 481                   | 456            | 442            | 406            | 384            | 358            | 333            | 328            | 325            | 318            |
| Vermont-----            | 587                   | 577            | 566            | 538            | 502            | 489            | 476            | 477            | 476            | 474            |
| Massachusetts-----      | 902                   | 885            | 864            | 807            | 785            | 733            | 665            | 637            | 593            | 600            |
| Rhode Island-----       | 77                    | 74             | 94             | 89             | 83             | 85             | 82             | 79             | 78             | 80             |
| Connecticut-----        | 820                   | 815            | 828            | 789            | 779            | 748            | 683            | 665            | 628            | 647            |
| New York-----           | 3,743                 | 3,728          | 3,714          | 3,583          | 3,460          | 3,346          | 3,216          | 3,184          | 3,135          | 3,087          |
| New Jersey-----         | 1,732                 | 1,746          | 1,805          | 1,725          | 1,634          | 1,545          | 1,378          | 1,287          | 1,226          | 1,206          |
| Pennsylvania-----       | 5,134                 | 5,030          | 5,115          | 4,970          | 4,809          | 4,741          | 4,663          | 4,609          | 4,501          | 4,481          |
| Delaware-----           | 787                   | 764            | 832            | 925            | 932            | 848            | 891            | 879            | 891            | 944            |
| Maryland-----           | 1,412                 | 1,385          | 1,426          | 1,439          | 1,513          | 1,538          | 1,560          | 1,566          | 1,717          | 1,776          |
| <b>Lake States:</b>     |                       |                |                |                |                |                |                |                |                |                |
| Michigan-----           | 3,489                 | 3,435          | 3,439          | 3,244          | 2,990          | 3,066          | 2,979          | 2,874          | 2,869          | 2,902          |
| Wisconsin-----          | 7,226                 | 7,456          | 7,369          | 7,167          | 7,281          | 7,502          | 7,195          | 7,307          | 7,146          | 7,177          |
| Minnesota-----          | 9,434                 | 9,325          | 9,310          | 9,474          | 9,529          | 10,321         | 9,998          | 10,310         | 9,962          | 10,142         |
| <b>Farm Belt:</b>       |                       |                |                |                |                |                |                |                |                |                |
| Ohio-----               | 6,966                 | 7,130          | 7,337          | 7,616          | 6,673          | 6,770          | 6,586          | 6,528          | 6,395          | 6,471          |
| Indiana-----            | 6,689                 | 6,878          | 6,998          | 6,167          | 6,824          | 9,102          | 8,754          | 8,833          | 8,809          | 9,057          |
| Illinois-----           | 12,802                | 13,393         | 13,891         | 13,893         | 13,622         | 14,299         | 13,856         | 13,895         | 14,178         | 14,687         |
| Iowa-----               | 22,353                | 23,784         | 23,663         | 22,674         | 22,755         | 24,709         | 23,940         | 23,658         | 23,868         | 24,392         |
| Missouri-----           | 7,924                 | 8,060          | 8,657          | 8,751          | 8,080          | 8,557          | 8,265          | 8,392          | 8,291          | 8,525          |
| <b>Northern Plains:</b> |                       |                |                |                |                |                |                |                |                |                |
| North Dakota-----       | 1,586                 | 1,657          | 1,727          | 1,590          | 1,583          | 1,658          | 1,530          | 1,549          | 1,471          | 1,511          |
| South Dakota-----       | 3,631                 | 4,031          | 3,981          | 3,675          | 3,911          | 4,373          | 4,009          | 3,997          | 4,233          | 4,365          |
| Nebraska-----           | 7,342                 | 7,843          | 7,300          | 6,699          | 6,812          | 7,704          | 7,480          | 7,670          | 8,258          | 8,393          |
| Kansas-----             | 3,436                 | 3,461          | 3,376          | 3,050          | 3,130          | 3,436          | 3,407          | 3,613          | 3,748          | 3,879          |
| <b>Appalachian:</b>     |                       |                |                |                |                |                |                |                |                |                |
| Virginia-----           | 2,633                 | 2,561          | 2,665          | 2,667          | 2,585          | 2,524          | 2,507          | 2,476          | 2,452          | 2,513          |
| West Virginia-----      | 770                   | 923            | 941            | 864            | 817            | 796            | 754            | 710            | 675            | 669            |
| North Carolina-----     | 3,590                 | 3,775          | 3,886          | 4,080          | 4,370          | 4,420          | 4,599          | 4,739          | 4,887          | 5,052          |
| Kentucky-----           | 2,822                 | 2,917          | 3,107          | 3,138          | 3,056          | 3,091          | 3,158          | 3,166          | 3,174          | 3,192          |
| Tennessee-----          | 2,841                 | 2,917          | 3,050          | 3,064          | 3,001          | 3,081          | 3,154          | 3,054          | 3,072          | 3,107          |
| <b>Southeast:</b>       |                       |                |                |                |                |                |                |                |                |                |
| South Carolina-----     | 1,395                 | 1,345          | 1,398          | 1,415          | 1,367          | 1,368          | 1,385          | 1,368          | 1,329          | 1,353          |
| Georgia-----            | 3,932                 | 4,205          | 4,595          | 4,920          | 5,178          | 5,411          | 5,615          | 5,737          | 5,878          | 6,150          |
| Florida-----            | 1,183                 | 1,154          | 1,202          | 1,252          | 1,246          | 1,292          | 1,333          | 1,382          | 1,405          | 1,426          |
| Alabama-----            | 2,652                 | 2,764          | 2,971          | 3,031          | 3,224          | 3,509          | 3,683          | 3,765          | 3,995          | 4,145          |
| <b>Delta States:</b>    |                       |                |                |                |                |                |                |                |                |                |
| Mississippi-----        | 2,312                 | 2,275          | 2,459          | 2,491          | 2,541          | 2,673          | 2,810          | 2,893          | 2,934          | 3,071          |
| Arkansas-----           | 2,111                 | 2,032          | 2,298          | 2,354          | 2,433          | 2,668          | 2,862          | 3,322          | 3,450          | 3,561          |
| Louisiana-----          | 1,215                 | 1,200          | 1,264          | 1,248          | 1,132          | 1,073          | 1,093          | 1,070          | 1,032          | 1,014          |
| <b>Southern Plains:</b> |                       |                |                |                |                |                |                |                |                |                |
| Oklahoma-----           | 1,904                 | 1,882          | 1,888          | 1,725          | 1,559          | 1,685          | 1,636          | 1,611          | 1,609          | 1,595          |
| Texas-----              | 5,045                 | 5,172          | 5,453          | 5,183          | 5,075          | 5,450          | 5,406          | 5,484          | 5,576          | 5,786          |
| <b>Mountain:</b>        |                       |                |                |                |                |                |                |                |                |                |
| Montana-----            | 651                   | 664            | 680            | 620            | 620            | 644            | 641            | 650            | 631            | 657            |
| Idaho-----              | 635                   | 660            | 671            | 641            | 636            | 691            | 737            | 727            | 702            | 738            |
| Wyoming-----            | 298                   | 280            | 275            | 276            | 278            | 293            | 304            | 284            | 275            | 277            |
| Utah-----               | 1,086                 | 1,104          | 1,111          | 1,091          | 1,082          | 1,170          | 1,406          | 1,410          | 1,387          | 1,574          |
| New Mexico-----         | 246                   | 243            | 265            | 251            | 239            | 261            | 280            | 274            | 287            | 305            |
| Arizona-----            | 215                   | 254            | 286            | 236            | 280            | 305            | 425            | 452            | 475            | 555            |
| Nevada-----             | 572                   | 567            | 570            | 568            | 570            | 546            | 577            | 651            | 630            | 600            |
| Alaska-----             | 67                    | 68             | 64             | 64             | 63             | 66             | 70             | 70             | 62             | 55             |
| <b>Pacific:</b>         |                       |                |                |                |                |                |                |                |                |                |
| Washington-----         | 1,074                 | 1,112          | 1,121          | 1,079          | 1,124          | 1,178          | 1,205          | 1,214          | 1,228          | 1,264          |
| Oregon-----             | 954                   | 1,032          | 1,042          | 995            | 1,005          | 1,032          | 1,042          | 1,059          | 1,005          | 988            |
| California-----         | 4,879                 | 5,043          | 5,257          | 5,321          | 5,274          | 5,424          | 6,026          | 6,570          | 6,878          | 7,287          |
| <b>U.S. States 1</b>    | <b>119,858</b>        | <b>121,596</b> | <b>125,264</b> | <b>120,927</b> | <b>119,705</b> | <b>127,728</b> | <b>125,704</b> | <b>127,557</b> | <b>128,944</b> | <b>133,199</b> |

1. Revised.

2. Preliminary.

3. Data not available for Alaska and Hawaii.

Table 6.--Grain-consuming animal units: Number and percentage fed annually, by regions, 1953-62

| Year       | North-<br>east                       | Lake<br>States | Corn<br>Belt   | Northern<br>Plains | Appalachian    | Southeast      | Delta          | Southern<br>Plains | Mountain       | Pacific        | Total          |
|------------|--------------------------------------|----------------|----------------|--------------------|----------------|----------------|----------------|--------------------|----------------|----------------|----------------|
|            | 1,000<br>units                       | 1,000<br>units | 1,000<br>units | 1,000<br>units     | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units     | 1,000<br>units | 1,000<br>units | 1,000<br>units |
| 1953-----  | 16,587                               | 20,149         | 58,740         | 16,055             | 12,856         | 9,162          | 5,648          | 6,949              | 3,770          | 6,937          | 156,853        |
| 1954-----  | 16,387                               | 20,836         | 61,245         | 16,992             | 13,095         | 9,468          | 5,507          | 7,054              | 3,846          | 7,165          | 161,595        |
| 1955-----  | 16,697                               | 20,718         | 62,946         | 16,384             | 13,649         | 10,166         | 6,021          | 7,341              | 3,922          | 7,420          | 165,264        |
| 1956-----  | 16,292                               | 19,885         | 61,101         | 15,014             | 13,813         | 10,618         | 6,093          | 6,909              | 3,807          | 7,395          | 160,927        |
| 1957-----  | 15,960                               | 19,800         | 59,954         | 15,436             | 13,829         | 11,015         | 6,106          | 6,634              | 3,768          | 7,403          | 159,905        |
| 1958-----  | 15,520                               | 20,889         | 63,437         | 17,171             | 13,972         | 11,580         | 6,414          | 7,135              | 3,976          | 7,634          | 167,728        |
| 1959-----  | 14,997                               | 20,172         | 61,401         | 16,426             | 14,172         | 12,016         | 6,765          | 7,042              | 4,440          | 8,273          | 165,704        |
| 1960-----  | 14,793                               | 20,491         | 61,306         | 16,829             | 14,145         | 12,252         | 7,285          | 7,095              | 4,518          | 8,843          | 167,557        |
| 1961-----  | 14,688                               | 19,977         | 61,541         | 17,710             | 14,260         | 12,607         | 7,416          | 7,185              | 4,449          | 9,111          | 168,944        |
| 1962-----  | 14,774                               | 20,221         | 63,132         | 18,148             | 14,533         | 13,064         | 7,646          | 7,381              | 4,761          | 9,539          | 173,199        |
|            | Percent of total                     |                |                |                    |                |                |                |                    |                |                |                |
| 1953-----  | 10.6                                 | 12.8           | 37.6           | 10.2               | 8.2            | 5.8            | 3.6            | 4.4                | 2.4            | 4.4            | 100.0          |
| 1954-----  | 10.1                                 | 12.9           | 37.9           | 10.5               | 8.1            | 5.9            | 3.4            | 4.4                | 2.4            | 4.4            | 100.0          |
| 1955-----  | 10.1                                 | 12.5           | 38.1           | 9.9                | 8.3            | 6.2            | 3.6            | 4.4                | 2.4            | 4.5            | 100.0          |
| 1956-----  | 10.1                                 | 12.3           | 38.0           | 9.3                | 8.6            | 6.6            | 3.8            | 4.3                | 2.4            | 4.6            | 100.0          |
| 1957-----  | 10.0                                 | 12.4           | 37.5           | 9.7                | 8.6            | 6.9            | 3.8            | 4.1                | 2.4            | 4.6            | 100.0          |
| 1958-----  | 9.3                                  | 12.5           | 37.7           | 10.2               | 8.3            | 6.9            | 3.8            | 4.3                | 2.4            | 4.6            | 100.0          |
| 1959-----  | 9.0                                  | 12.2           | 37.0           | 9.9                | 8.6            | 7.3            | 4.1            | 4.2                | 2.7            | 5.0            | 100.0          |
| 1960-----  | 8.8                                  | 12.2           | 36.8           | 10.0               | 8.4            | 7.3            | 4.3            | 4.2                | 2.7            | 5.3            | 100.0          |
| 1961-----  | 8.7                                  | 11.8           | 36.4           | 10.5               | 8.4            | 7.5            | 4.4            | 4.3                | 2.6            | 5.4            | 100.0          |
| 1962-----  | 8.5                                  | 11.7           | 36.5           | 10.5               | 8.4            | 7.5            | 4.4            | 4.3                | 2.7            | 5.5            | 100.0          |
|            | Percentage change in number of units |                |                |                    |                |                |                |                    |                |                |                |
| 1953-62--- | -10.9                                | 1/             | +7.5           | +13.0              | +13.0          | +42.6          | +35.4          | +6.2               | +26.3          | +37.5          | +10.4          |

1/ Increase less than half of 1 percent.

Table 7.—Roughage-consuming animal units fed annually, by States, 1953-62 1/

| State                   | Year beginning Oct. 1 |               |               |               |               |               |               |               |               |                |
|-------------------------|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|                         | 1953                  | 1954          | 1955          | 1956          | 1957          | 1958          | 1959          | 1960 2/       | 1961 2/       | 1962 3/        |
|                         | units                 | units         | units         | units         | units         | units         | units         | units         | units         | units          |
| <b>Northeast:</b>       |                       |               |               |               |               |               |               |               |               |                |
| Maine-----              | 260                   | 247           | 239           | 228           | 214           | 207           | 207           | 212           | 211           | 206            |
| New Hampshire-----      | 130                   | 124           | 124           | 118           | 109           | 105           | 103           | 103           | 104           | 104            |
| Vermont-----            | 438                   | 430           | 430           | 469           | 445           | 436           | 437           | 445           | 446           | 438            |
| Massachusetts-----      | 210                   | 205           | 196           | 187           | 179           | 164           | 163           | 168           | 165           | 163            |
| Rhode Island-----       | 30                    | 29            | 28            | 27            | 26            | 25            | 24            | 22            | 22            | 21             |
| Connecticut-----        | 193                   | 192           | 187           | 179           | 170           | 163           | 160           | 162           | 155           | 150            |
| New York-----           | 2,422                 | 2,400         | 2,362         | 2,313         | 2,240         | 2,190         | 2,199         | 2,220         | 2,234         | 2,195          |
| New Jersey-----         | 264                   | 262           | 261           | 254           | 243           | 236           | 228           | 225           | 222           | 215            |
| Pennsylvania-----       | 1,870                 | 1,863         | 1,831         | 1,821         | 1,771         | 1,767         | 1,818         | 1,846         | 1,858         | 1,839          |
| Delaware-----           | 71                    | 67            | 64            | 60            | 58            | 54            | 53            | 50            | 50            | 49             |
| Maryland-----           | 569                   | 488           | 467           | 458           | 449           | 447           | 441           | 451           | 435           | 427            |
| <b>Lake States:</b>     |                       |               |               |               |               |               |               |               |               |                |
| Michigan-----           | 1,840                 | 1,807         | 1,751         | 1,673         | 1,572         | 1,557         | 1,559         | 1,564         | 1,587         | 1,576          |
| Wisconsin-----          | 4,318                 | 4,365         | 4,352         | 4,295         | 4,200         | 4,158         | 4,206         | 4,243         | 4,272         | 4,313          |
| Minnesota-----          | 3,618                 | 3,635         | 3,644         | 3,589         | 3,478         | 3,497         | 3,577         | 3,672         | 3,793         | 3,858          |
| <b>Corn Belt:</b>       |                       |               |               |               |               |               |               |               |               |                |
| Ohio-----               | 2,442                 | 2,402         | 2,401         | 2,353         | 2,271         | 2,226         | 2,232         | 2,229         | 2,206         | 2,176          |
| Indiana-----            | 2,366                 | 2,363         | 2,366         | 2,306         | 2,199         | 2,190         | 1,948         | 1,979         | 1,977         | 1,995          |
| Illinois-----           | 3,488                 | 3,459         | 3,498         | 3,600         | 3,440         | 3,405         | 3,449         | 3,365         | 3,337         | 3,465          |
| Iowa-----               | 5,121                 | 5,308         | 5,251         | 5,207         | 5,217         | 5,437         | 5,621         | 5,445         | 5,574         | 5,828          |
| Missouri-----           | 3,851                 | 3,775         | 3,777         | 3,767         | 3,562         | 3,687         | 3,751         | 3,830         | 3,980         | 4,006          |
| <b>Northern Plains:</b> |                       |               |               |               |               |               |               |               |               |                |
| North Dakota-----       | 1,938                 | 1,998         | 2,071         | 1,966         | 1,864         | 1,826         | 1,783         | 1,875         | 1,881         | 1,993          |
| South Dakota-----       | 3,225                 | 3,325         | 3,361         | 3,201         | 3,246         | 3,362         | 3,345         | 3,397         | 3,509         | 3,745          |
| Nebraska-----           | 4,413                 | 4,690         | 4,412         | 4,123         | 4,203         | 4,500         | 4,665         | 4,712         | 4,918         | 5,222          |
| Kansas-----             | 4,169                 | 4,185         | 4,025         | 3,368         | 3,739         | 4,121         | 4,216         | 4,324         | 4,736         | 4,915          |
| <b>Appalachian:</b>     |                       |               |               |               |               |               |               |               |               |                |
| Virginia-----           | 1,535                 | 1,500         | 1,496         | 1,472         | 1,430         | 1,433         | 1,461         | 1,477         | 1,494         | 1,504          |
| West Virginia-----      | 699                   | 680           | 673           | 648           | 611           | 594           | 604           | 598           | 590           | 572            |
| North Carolina-----     | 981                   | 961           | 929           | 897           | 871           | 843           | 839           | 833           | 838           | 839            |
| Kentucky-----           | 1,949                 | 1,901         | 1,978         | 2,040         | 2,017         | 2,037         | 2,094         | 2,138         | 2,240         | 2,329          |
| Tennessee-----          | 1,692                 | 1,624         | 1,608         | 1,611         | 1,575         | 1,556         | 1,623         | 1,658         | 1,713         | 1,753          |
| <b>Southeast:</b>       |                       |               |               |               |               |               |               |               |               |                |
| South Carolina-----     | 557                   | 561           | 550           | 539           | 504           | 467           | 455           | 456           | 456           | 467            |
| Georgia-----            | 1,304                 | 1,346         | 1,282         | 1,252         | 1,220         | 1,140         | 1,139         | 1,146         | 1,171         | 1,192          |
| Florida-----            | 1,527                 | 1,525         | 1,491         | 1,540         | 1,556         | 1,426         | 1,400         | 1,367         | 1,398         | 1,471          |
| Alabama-----            | 1,652                 | 1,587         | 1,511         | 1,483         | 1,444         | 1,397         | 1,390         | 1,388         | 1,414         | 1,441          |
| <b>Delta States:</b>    |                       |               |               |               |               |               |               |               |               |                |
| Mississippi-----        | 1,885                 | 1,987         | 1,998         | 1,997         | 1,893         | 1,704         | 1,714         | 1,708         | 1,708         | 1,694          |
| Arkansas-----           | 1,386                 | 1,299         | 1,304         | 1,310         | 1,218         | 1,140         | 1,120         | 1,135         | 1,122         | 1,143          |
| Louisiana-----          | 4,594                 | 4,560         | 4,570         | 4,575         | 4,481         | 4,375         | 4,413         | 4,456         | 4,452         | 4,439          |
| <b>Southern Plains:</b> |                       |               |               |               |               |               |               |               |               |                |
| Oklahoma-----           | 3,146                 | 3,084         | 2,972         | 2,799         | 2,759         | 3,057         | 3,209         | 3,342         | 3,470         | 3,581          |
| Texas-----              | 9,707                 | 9,713         | 9,661         | 8,830         | 8,921         | 9,706         | 10,446        | 10,774        | 10,981        | 11,450         |
| <b>Mountain:</b>        |                       |               |               |               |               |               |               |               |               |                |
| Montana-----            | 2,672                 | 2,758         | 2,794         | 2,568         | 2,542         | 2,585         | 2,640         | 2,538         | 2,480         | 2,655          |
| Idaho-----              | 1,533                 | 1,611         | 1,619         | 1,585         | 1,578         | 1,641         | 1,658         | 1,637         | 1,660         | 1,724          |
| Wyoming-----            | 1,603                 | 1,504         | 1,527         | 1,550         | 1,565         | 1,602         | 1,633         | 1,547         | 1,551         | 1,585          |
| Colorado-----           | 2,335                 | 2,267         | 2,227         | 2,173         | 2,226         | 2,370         | 2,470         | 2,485         | 2,578         | 2,706          |
| New Mexico-----         | 1,414                 | 1,389         | 1,421         | 1,305         | 1,255         | 1,330         | 1,384         | 1,371         | 1,416         | 1,398          |
| Arizona-----            | 1,007                 | 1,038         | 1,055         | 999           | 972           | 992           | 1,055         | 1,078         | 1,091         | 1,156          |
| Utah-----               | 1,056                 | 1,064         | 1,024         | 998           | 983           | 995           | 1,001         | 974           | 978           | 973            |
| Nevada-----             | 689                   | 691           | 675           | 656           | 623           | 624           | 620           | 595           | 586           | 595            |
| <b>Pacific:</b>         |                       |               |               |               |               |               |               |               |               |                |
| Washington-----         | 1,209                 | 1,256         | 1,246         | 1,128         | 1,127         | 1,180         | 1,224         | 1,274         | 1,349         | 1,432          |
| Oregon-----             | 1,618                 | 1,558         | 1,602         | 1,508         | 1,507         | 1,577         | 1,597         | 1,606         | 1,594         | 1,580          |
| California-----         | 3,732                 | 4,244         | 4,179         | 4,179         | 4,030         | 4,275         | 4,376         | 4,458         | 4,445         | 4,751          |
| <b>U.S. States 4/</b>   | <b>95,664</b>         | <b>96,157</b> | <b>95,232</b> | <b>91,944</b> | <b>90,537</b> | <b>92,516</b> | <b>94,750</b> | <b>95,578</b> | <b>97,417</b> | <b>100,329</b> |

1/ See Figures 2 and 4.

2/ Revised.

3/ Preliminary.

4/ Data not available for Alaska and Hawaii.

Table 8.--Roughage-consuming animal units: Number and percentage fed annually, by regions, 1953-62

| Year       | North-<br>east                                     | Lake<br>States | Corn<br>Belt   | Northern<br>Plains | Appalachian    | Southeast      | Delta          | Southern<br>Plains | Mountain       | Pacific        | Total          |
|------------|--|----------------|----------------|--------------------|----------------|----------------|----------------|--------------------|----------------|----------------|----------------|
|            | 1,000<br>units                                     | 1,000<br>units | 1,000<br>units | 1,000<br>units     | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units     | 1,000<br>units | 1,000<br>units | 1,000<br>units |
| 1953-----  | 6,457  | 9,806          | 16,968         | 13,751             | 6,856          | 5,040          | 4,865          | 12,853             | 12,309         | 6,759          | 95,664         |
| 1954-----  | 6,367  | 9,807          | 16,987         | 14,198             | 6,666          | 5,019          | 4,846          | 12,797             | 12,322         | 7,148          | 96,157         |
| 1955-----  | 6,249  | 9,717          | 16,996         | 13,875             | 6,684          | 4,837          | 4,872          | 12,633             | 12,342         | 7,027          | 95,232         |
| 1956-----  | 6,114  | 9,557          | 16,973         | 12,658             | 6,668          | 4,814          | 4,882          | 11,629             | 11,834         | 6,815          | 91,944         |
| 1957-----  | 5,898  | 9,250          | 16,429         | 13,052             | 6,504          | 4,724          | 4,592          | 11,680             | 11,744         | 6,664          | 90,537         |
| 1958-----  | 5,794  | 9,212          | 16,655         | 13,809             | 6,463          | 4,430          | 4,219          | 12,763             | 12,139         | 7,032          | 92,516         |
| 1959-----  | 5,833  | 9,342          | 17,001         | 14,009             | 6,621          | 4,384          | 4,247          | 13,655             | 12,461         | 7,197          | 94,750         |
| 1960-----  | 5,904  | 9,479          | 16,848         | 14,308             | 6,704          | 4,357          | 4,299          | 14,116             | 12,225         | 7,338          | 95,578         |
| 1961-----  | 5,902  | 9,652          | 17,074         | 15,014             | 6,875          | 4,439          | 4,282          | 14,451             | 12,340         | 7,388          | 97,417         |
| 1962-----  | 5,807  | 9,747          | 17,470         | 15,875             | 6,997          | 4,571          | 4,276          | 15,031             | 12,792         | 7,763          | 100,329        |
|            | Percentage of total                                |                |                |                    |                |                |                |                    |                |                |                |
| 1953-----  | 6.7  | 10.3           | 17.6           | 14.4               | 7.2            | 5.3            | 5.1            | 13.4               | 12.9           | 7.1            | 100.0          |
| 1954-----  | 6.6  | 10.2           | 17.7           | 14.8               | 6.9            | 5.2            | 5.0            | 13.3               | 12.9           | 7.4            | 100.0          |
| 1955-----  | 6.6  | 10.2           | 17.8           | 14.6               | 7.0            | 5.0            | 5.1            | 13.3               | 13.0           | 7.4            | 100.0          |
| 1956-----  | 6.6  | 10.4           | 18.5           | 13.8               | 7.2            | 5.2            | 5.3            | 12.7               | 12.9           | 7.4            | 100.0          |
| 1957-----  | 6.5  | 10.2           | 18.1           | 14.4               | 7.2            | 5.2            | 5.1            | 12.9               | 13.0           | 7.4            | 100.0          |
| 1958-----  | 6.3  | 10.0           | 18.0           | 14.8               | 7.0            | 4.8            | 4.6            | 13.8               | 13.1           | 7.6            | 100.0          |
| 1959-----  | 6.2  | 9.9            | 17.9           | 14.8               | 7.0            | 4.6            | 4.5            | 14.4               | 13.1           | 7.6            | 100.0          |
| 1960-----  | 6.1  | 10.0           | 17.6           | 14.9               | 7.0            | 4.6            | 4.5            | 14.8               | 12.8           | 7.7            | 100.0          |
| 1961-----  | 6.1  | 10.0           | 17.5           | 15.4               | 7.0            | 4.6            | 4.3            | 14.8               | 12.7           | 7.6            | 100.0          |
| 1962-----  | 5.8  | 9.8            | 17.4           | 15.8               | 7.0            | 4.6            | 4.2            | 15.0               | 12.7           | 7.7            | 100.0          |
|            | Percentage increase or decrease in number of units |                |                |                    |                |                |                |                    |                |                |                |
| 1953-62--- | -10.1  | -0.6           | +3.0           | +15.4              | +2.1           | -9.3           | -12.1          | +16.9              | +3.9           | +14.8          | +4.9           |

Table 9.—Grain-and-roughage-consuming animal units fed annually, by States, 1953-62

| State                   | Year beginning Oct. |                |                |                |                |                |                |                |                |                |
|-------------------------|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                         | 1953                | 1954           | 1955           | 1956           | 1957           | 1958           | 1959           | 1960 1/        | 1961 1/        | 1962 2/        |
|                         | units               | units          | units          | units          | units          | units          | units          | units          | units          | units          |
| <b>Northeast:</b>       |                     |                |                |                |                |                |                |                |                |                |
| Maine-----              | 420                 | 412            | 420            | 427            | 430            | 427            | 419            | 430            | 439            | 447            |
| New Hampshire-----      | 218                 | 210            | 206            | 193            | 179            | 169            | 161            | 163            | 167            | 158            |
| Vermont-----            | 517                 | 507            | 505            | 483            | 455            | 445            | 443            | 449            | 450            | 442            |
| Massachusetts-----      | 394                 | 385            | 374            | 353            | 337            | 316            | 298            | 295            | 281            | 280            |
| Rhode Island-----       | 49                  | 48             | 46             | 45             | 42             | 42             | 39             | 38             | 39             | 38             |
| Connecticut-----        | 357                 | 356            | 355            | 340            | 330            | 316            | 297            | 296            | 279            | 279            |
| New York-----           | 2,796               | 2,778          | 2,747          | 2,678          | 2,594          | 2,524          | 2,496          | 2,506          | 2,504          | 2,461          |
| New Jersey-----         | 638                 | 644            | 655            | 630            | 599            | 572            | 524            | 499            | 481            | 471            |
| Pennsylvania-----       | 2,743               | 2,716          | 2,713          | 2,672          | 2,591          | 2,569          | 2,593          | 2,599          | 2,581          | 2,561          |
| Delaware-----           | 264                 | 252            | 281            | 286            | 285            | 258            | 267            | 262            | 264            | 276            |
| Maryland-----           | 753                 | 731            | 722            | 720            | 729            | 734            | 733            | 742            | 762            | 772            |
| <b>Lake States:</b>     |                     |                |                |                |                |                |                |                |                |                |
| Michigan-----           | 2,308               | 2,274          | 2,234          | 2,124          | 1,977          | 1,981          | 1,961          | 1,937          | 1,952          | 1,953          |
| Wisconsin-----          | 5,098               | 5,187          | 5,150          | 5,055          | 5,015          | 5,049          | 5,001          | 5,057          | 5,041          | 5,078          |
| Minnesota-----          | 5,139               | 5,281          | 5,245          | 5,118          | 5,050          | 5,270          | 5,248          | 5,405          | 5,400          | 5,501          |
| <b>Corn Belt:</b>       |                     |                |                |                |                |                |                |                |                |                |
| Ohio-----               | 3,613               | 3,633          | 3,669          | 3,548          | 3,397          | 3,392          | 3,345          | 3,325          | 3,267          | 3,266          |
| Indiana-----            | 3,787               | 3,820          | 3,968          | 3,885          | 3,718          | 3,772          | 3,694          | 3,732          | 3,723          | 3,796          |
| Illinois-----           | 5,686               | 5,811          | 5,953          | 6,008          | 5,828          | 5,973          | 5,867          | 5,828          | 5,880          | 6,082          |
| Iowa-----               | 9,247               | 9,730          | 9,653          | 9,371          | 9,390          | 10,044         | 9,945          | 9,765          | 9,895          | 10,179         |
| Missouri-----           | 4,774               | 4,764          | 4,918          | 4,832          | 4,620          | 4,843          | 4,805          | 4,889          | 4,959          | 5,043          |
| <b>Northern Plains:</b> |                     |                |                |                |                |                |                |                |                |                |
| North Dakota-----       | 1,785               | 1,847          | 1,921          | 1,810          | 1,741          | 1,734          | 1,673          | 1,745          | 1,726          | 1,820          |
| South Dakota-----       | 3,246               | 3,402          | 3,422          | 3,230          | 3,316          | 3,514          | 3,415          | 3,451          | 3,591          | 3,788          |
| Nebraska-----           | 4,925               | 5,234          | 4,905          | 4,561          | 4,633          | 5,055          | 5,108          | 5,188          | 5,474          | 5,705          |
| Kansas-----             | 3,895               | 3,916          | 3,776          | 3,225          | 3,494          | 3,840          | 3,899          | 4,032          | 4,342          | 4,524          |
| <b>Appalachian:</b>     |                     |                |                |                |                |                |                |                |                |                |
| Virginia-----           | 1,789               | 1,753          | 1,778          | 1,770          | 1,720          | 1,714          | 1,709          | 1,716          | 1,708          | 1,737          |
| West Virginia-----      | 755                 | 731            | 730            | 689            | 651            | 632            | 626            | 612            | 598            | 585            |
| North Carolina-----     | 1,703               | 1,746          | 1,746          | 1,775          | 1,831          | 1,844          | 1,865          | 1,888          | 1,933          | 1,973          |
| Kentucky-----           | 2,177               | 2,171          | 2,279          | 2,331          | 2,292          | 2,325          | 2,377          | 2,415          | 2,492          | 2,561          |
| Tennessee-----          | 2,032               | 2,012          | 2,040          | 2,050          | 2,008          | 2,026          | 2,091          | 2,094          | 2,140          | 2,182          |
| <b>Southeast:</b>       |                     |                |                |                |                |                |                |                |                |                |
| South Carolina-----     | 810                 | 798            | 801            | 798            | 759            | 731            | 724            | 719            | 712            | 723            |
| Georgia-----            | 2,063               | 2,171          | 2,219          | 2,278          | 2,318          | 2,319          | 2,366          | 2,397          | 2,451          | 2,542          |
| Florida-----            | 1,371               | 1,361          | 1,354          | 1,400          | 1,406          | 1,334          | 1,324          | 1,308          | 1,337          | 1,392          |
| Alabama-----            | 1,906               | 1,897          | 1,894          | 1,891          | 1,911          | 1,952          | 1,989          | 2,007          | 2,085          | 2,145          |
| <b>Delta States:</b>    |                     |                |                |                |                |                |                |                |                |                |
| Mississippi-----        | 2,038               | 2,112          | 2,164          | 2,174          | 2,109          | 2,002          | 2,048          | 2,063          | 2,075          | 2,107          |
| Arkansas-----           | 1,609               | 1,522          | 1,598          | 1,610          | 1,566          | 1,565          | 1,599          | 1,728          | 1,756          | 1,800          |
| Louisiana-----          | 1,597               | 1,568          | 1,596          | 1,591          | 1,488          | 1,391          | 1,420          | 1,448          | 1,437          | 1,420          |
| <b>Southern Plains:</b> |                     |                |                |                |                |                |                |                |                |                |
| Oklahoma-----           | 2,676               | 2,625          | 2,549          | 2,386          | 2,310          | 2,541          | 2,629          | 2,709          | 2,794          | 2,863          |
| Texas-----              | 8,061               | 8,108          | 8,143          | 7,504          | 7,532          | 8,177          | 8,668          | 8,901          | 9,067          | 9,435          |
| <b>Mountain:</b>        |                     |                |                |                |                |                |                |                |                |                |
| Montana-----            | 2,091               | 2,155          | 2,186          | 2,013          | 1,993          | 2,032          | 2,064          | 1,996          | 1,949          | 2,080          |
| Idaho-----              | 1,285               | 1,349          | 1,354          | 1,312          | 1,300          | 1,366          | 1,378          | 1,362          | 1,370          | 1,426          |
| Wyoming-----            | 1,240               | 1,166          | 1,177          | 1,197          | 1,207          | 1,240          | 1,263          | 1,197          | 1,197          | 1,222          |
| Colorado-----           | 1,979               | 1,936          | 1,907          | 1,862          | 1,898          | 2,026          | 2,118          | 2,131          | 2,188          | 2,323          |
| New Mexico-----         | 1,089               | 1,072          | 1,102          | 1,014          | 975            | 1,035          | 1,074          | 1,064          | 1,100          | 1,091          |
| Arizona-----            | 815                 | 856            | 879            | 847            | 817            | 844            | 907            | 933            | 949            | 1,020          |
| Utah-----               | 942                 | 948            | 917            | 897            | 886            | 886            | 893            | 896            | 892            | 880            |
| Nevada-----             | 526                 | 530            | 514            | 500            | 474            | 477            | 472            | 455            | 449            | 452            |
| <b>Pacific:</b>         |                     |                |                |                |                |                |                |                |                |                |
| Washington-----         | 1,164               | 1,203          | 1,199          | 1,105          | 1,115          | 1,167          | 1,204          | 1,244          | 1,300          | 1,369          |
| Oregon-----             | 1,422               | 1,462          | 1,421          | 1,342          | 1,344          | 1,403          | 1,417          | 1,430          | 1,406          | 1,394          |
| California-----         | 4,232               | 4,488          | 4,503          | 4,516          | 4,390          | 4,609          | 4,827          | 5,015          | 5,083          | 5,411          |
| <b>48 States 3/</b>     | <b>110,024</b>      | <b>111,678</b> | <b>111,888</b> | <b>108,446</b> | <b>107,050</b> | <b>110,478</b> | <b>111,283</b> | <b>112,361</b> | <b>113,959</b> | <b>117,053</b> |

1/ Revised.

2/ Preliminary.

3/ Data not available for Alaska and Hawaii.

Table 10.--Grain-and-roughage-consuming animal units: Number and percentage fed annually, by regions, 1953-62

| Year        | North-<br>east                                     | Lake<br>States        | Corn<br>Belt          | Northern<br>Plains    | Appalachian           | Southeast             | Delta                 | Southern<br>Plains    | Mountain              | Pacific               | Total                 |
|-------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|             | 1,000<br><u>units</u>                              | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> | 1,000<br><u>units</u> |
| 1953-----   | 9,149  | 12,545                | 27,107                | 13,851                | 8,456                 | 6,150                 | 5,244                 | 10,737                | 9,967                 | 6,818                 | 110,024               |
| 1954-----   | 9,039  | 12,742                | 27,758                | 14,399                | 8,413                 | 6,227                 | 5,202                 | 10,733                | 10,012                | 7,153                 | 111,678               |
| 1955-----   | 9,024  | 12,629                | 28,161                | 14,024                | 8,573                 | 6,268                 | 5,358                 | 10,692                | 10,036                | 7,123                 | 111,888               |
| 1956-----   | 8,827  | 12,297                | 27,644                | 12,826                | 8,615                 | 6,367                 | 5,375                 | 9,890                 | 9,642                 | 6,963                 | 108,446               |
| 1957-----   | 8,571  | 12,042                | 26,953                | 13,184                | 8,502                 | 6,394                 | 5,163                 | 9,842                 | 9,550                 | 6,849                 | 107,050               |
| 1958-----   | 8,372  | 12,300                | 28,024                | 14,143                | 8,541                 | 6,336                 | 4,959                 | 10,718                | 9,906                 | 7,179                 | 110,478               |
| 1959-----   | 8,270  | 12,210                | 27,656                | 14,095                | 8,668                 | 6,403                 | 5,067                 | 11,297                | 10,169                | 7,448                 | 111,283               |
| 1960-----   | 8,279  | 12,399                | 27,539                | 14,416                | 8,725                 | 6,431                 | 5,239                 | 11,610                | 10,034                | 7,689                 | 112,361               |
| 1961-----   | 8,241  | 12,393                | 27,724                | 15,133                | 8,871                 | 6,585                 | 5,268                 | 11,861                | 10,094                | 7,789                 | 113,959               |
| 1962-----   | 8,185  | 12,532                | 28,366                | 15,837                | 9,038                 | 6,802                 | 5,327                 | 12,298                | 10,494                | 8,174                 | 117,053               |
|             | Percentage of total                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1953-----   | 8.3  | 11.4                  | 24.5                  | 12.6                  | 7.7                   | 5.6                   | 4.8                   | 9.8                   | 9.1                   | 6.2                   | 100.0                 |
| 1954-----   | 8.1  | 11.4                  | 24.9                  | 12.9                  | 7.5                   | 5.6                   | 4.5                   | 9.6                   | 9.1                   | 6.4                   | 100.0                 |
| 1955-----   | 8.1  | 11.3                  | 25.1                  | 12.5                  | 7.7                   | 5.6                   | 4.8                   | 9.5                   | 9.0                   | 6.4                   | 100.0                 |
| 1956-----   | 8.1  | 11.3                  | 25.5                  | 11.9                  | 7.9                   | 5.9                   | 5.0                   | 9.1                   | 8.9                   | 6.4                   | 100.0                 |
| 1957-----   | 8.0  | 11.2                  | 25.2                  | 12.3                  | 7.9                   | 6.0                   | 4.9                   | 9.2                   | 8.9                   | 6.4                   | 100.0                 |
| 1958-----   | 7.6  | 11.1                  | 25.4                  | 12.8                  | 7.7                   | 5.7                   | 4.5                   | 9.8                   | 8.9                   | 6.5                   | 100.0                 |
| 1959-----   | 7.4  | 11.0                  | 24.9                  | 12.6                  | 7.8                   | 5.8                   | 4.6                   | 10.1                  | 9.1                   | 6.7                   | 100.0                 |
| 1960-----   | 7.4  | 11.0                  | 24.5                  | 12.8                  | 7.8                   | 5.8                   | 4.7                   | 10.3                  | 8.9                   | 6.8                   | 100.0                 |
| 1961-----   | 7.2  | 10.9                  | 24.3                  | 13.3                  | 7.8                   | 5.8                   | 4.6                   | 10.4                  | 8.9                   | 6.8                   | 100.0                 |
| 1962-----   | 7.0  | 10.7                  | 24.2                  | 13.5                  | 7.7                   | 5.8                   | 4.6                   | 10.5                  | 9.0                   | 7.0                   | 100.0                 |
|             | Percentage increase or decrease in number of units |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1953-62---- | -10.5  | 1/                    | +4.6                  | +14.3                 | +6.9                  | +10.6                 | +1.6                  | +14.5                 | +5.3                  | +19.9                 | +6.4                  |

1/ Decrease less than half of 1 percent.

Table 11.--Feed fed per animal unit, United States, 1940-1963 <sup>1/</sup>

| Year beginning Oct. 1    | Concentrates <sup>2/</sup> | Hay           |
|--------------------------|----------------------------|---------------|
|                          | <u>Tons</u>                | <u>Tons</u>   |
| 1940-----                | 0.68                       | 1.08          |
| 1941-----                | .70                        | 1.07          |
| 1942-----                | .73                        | 1.11          |
| 1943-----                | .71                        | 1.09          |
| 1944-----                | .73                        | 1.05          |
| 1945-----                | .78                        | 1.13          |
| 1946-----                | .75                        | 1.18          |
| 1947-----                | .70                        | 1.21          |
| 1948-----                | .73                        | 1.17          |
| 1949-----                | .75                        | 1.18          |
| 1950-----                | .75                        | 1.21          |
| 1951-----                | .77                        | 1.22          |
| 1952-----                | .74                        | 1.13          |
| 1953-----                | .76                        | 1.12          |
| 1954-----                | .74                        | 1.12          |
| 1955-----                | .76                        | 1.17          |
| 1956-----                | .77                        | 1.16          |
| 1957-----                | .83                        | 1.23          |
| 1958-----                | .85                        | 1.30          |
| 1959-----                | .90                        | 1.26          |
| 1960-----                | .91                        | 1.17          |
| 1961-----                | .92                        | 1.25          |
| 1962 <sup>3/</sup> ----- | .92                        | 1.16          |
| 1963 <sup>3/</sup> ----- | .91                        | <sup>4/</sup> |

<sup>1/</sup> Concentrates per grain-consuming animal unit and hay per roughage-consuming animal unit. 48 States only.

<sup>2/</sup> Includes seeds, skim milk, and corn hogged-off, but excludes corn in silage.

<sup>3/</sup> Preliminary estimates.

<sup>4/</sup> Data not available.



Table 12.--Calculation of animal units, for year beginning October 1, 1962-64 1/

| Livestock                           | Number<br>of<br>head | Animal units      |           |                         |           |                            |           |
|-------------------------------------|----------------------|-------------------|-----------|-------------------------|-----------|----------------------------|-----------|
|                                     |                      | Based on          |           | Based on                |           | Based on                   |           |
|                                     |                      | grain consumption |           | roughage consumption 2/ |           | consumption of all feed 2/ |           |
|                                     |                      | Factor            | Number    | Factor                  | Number    | Factor                     | Number    |
|                                     | Thousands            |                   | Thousands |                         | Thousands |                            | Thousands |
| On farms January 1, 1963:           |                      |                   |           |                         |           |                            |           |
| Cattle:                             |                      |                   |           |                         |           |                            |           |
| Milk cows-----                      | 18,711               | 1.0200            | 19,085    | 0.9900                  | 18,524    | 1.0000                     | 18,711    |
| Milk heifers and heifer calves----- | 10,109               | .3440             | 3,477     | .7820                   | 7,905     | .6300                      | 6,369     |
| Beef cows-----                      | 29,883               | .1670             | 4,990     | .9750                   | 29,136    | .7600                      | 22,711    |
| Cattle on feed-----                 | 9,293                | 2.0000            | 18,586    | .4830                   | 4,489     | .8600                      | 7,992     |
| Other cattle-----                   | 35,534               | .1540             | 5,472     | .8440                   | 29,991    | .6100                      | 21,676    |
| Stock sheep-----                    | 26,114               | .0220             | 575       | .2000                   | 5,223     | .1500                      | 3,917     |
| Sheep and lambs on feed-----        | 4,041                | .1200             | 485       | .0580                   | 234       | .0740                      | 299       |
| Horses and mules:                   |                      |                   |           |                         |           |                            |           |
| 2 years old and over-----           | 2,883                | 1.3400            | 3,863     | .7370                   | 2,125     | .8800                      | 2,537     |
| Colts-----                          | 206                  | .1500             | 31        | 1.0000                  | 206       | .6000                      | 124       |
| Hens and pullets-----               | 346,187              | .0577             | 19,975    | .0012                   | 415       | .0154                      | 5,331     |
| Hogs-----                           | 58,636               | ---               | ---       | .0100                   | 586       | ---                        | ---       |
| Raised or fed during 1963:          |                      |                   |           |                         |           |                            |           |
| Broilers-----                       | 2,158,577            | .0080             | 17,269    | ---                     | ---       | .0020                      | 4,317     |
| Chickens raised-----                | 315,000              | .0180             | 5,670     | ---                     | ---       | .0043                      | 1,354     |
| Turkeys, large-----                 | 84,300               | .0700             | 5,901     | .0024                   | 202       | .0200                      | 1,686     |
| Turkeys, small-----                 | 9,200                | .0300             | 276       | .0024                   | 22        | .0200                      | 184       |
| Goats clipped-----                  | 4,250                | ---               | ---       | .2000                   | 850       | .1500                      | 638       |
| Hogs fed in year 3/-----            | 94,487               | .7120             | 67,275    | ---                     | ---       | .1950                      | 18,425    |
| 48 States-----                      | ---                  | ---               | 172,930   | ---                     | 99,908    | ---                        | 116,271   |

1/ Factors in this table should be applied to numbers of livestock at the national level only.

2/ Includes pasture.

3/ Calculated as follows:

Spring pigs 1962 (20 percent 49,692)----- 9,938

Fall pigs 1962 (100 percent 44,535)----- 44,535

Spring pigs 1963 (80 percent 50,018)----- 40,014

Hogs fed in year beginning October 1----- 94,487

Percentages of the spring pig crops used in this calculation should be adjusted periodically in accordance with variations in times of farrowing and consequently in times of marketing.

Table 13.--Calculation of animal units, for year beginning October 1, 1963-64 1/

| Livestock                           | Number<br>of<br>head | Animal units      |           |                         |           |                            |           |
|-------------------------------------|----------------------|-------------------|-----------|-------------------------|-----------|----------------------------|-----------|
|                                     |                      | Based on          |           | Based on                |           | Based on                   |           |
|                                     |                      | grain consumption |           | roughage consumption 2/ |           | consumption of all feed 2/ |           |
|                                     |                      | Factor            | Number    | Factor                  | Number    | Factor                     | Number    |
|                                     | Thousands            |                   | Thousands |                         | Thousands |                            | Thousands |
| On farms January 1, 1964:           |                      |                   |           |                         |           |                            |           |
| Cattle:                             |                      |                   |           |                         |           |                            |           |
| Milk cows-----                      | 18,200               | 1.0200            | 18,564    | 0.9900                  | 18,018    | 1.0000                     | 18,200    |
| Milk heifers and heifer calves----- | 9,800                | .3440             | 3,371     | .7820                   | 7,664     | .6300                      | 6,174     |
| Beef cows-----                      | 31,400               | .1670             | 5,244     | .9750                   | 30,615    | .7600                      | 23,864    |
| Cattle on feed-----                 | 9,900                | 2.0000            | 19,800    | .4830                   | 4,782     | .8600                      | 8,514     |
| Other cattle-----                   | 37,500               | .1540             | 5,775     | .8440                   | 31,650    | .6100                      | 22,875    |
| Stock sheep-----                    | 25,900               | .0220             | 570       | .2000                   | 5,180     | .1500                      | 3,885     |
| Sheep and lambs on feed-----        | 3,900                | .1200             | 468       | .0580                   | 226       | .0740                      | 289       |
| Horses and mules:                   |                      |                   |           |                         |           |                            |           |
| 2 years old and over-----           | 3,000                | 1.3400            | 4,020     | .7370                   | 2,211     | .8800                      | 2,640     |
| Colts-----                          | 200                  | .1500             | 30        | 1.0000                  | 200       | .6000                      | 120       |
| Hens and pullets-----               | 352,000              | .0577             | 20,310    | .0012                   | 422       | .0154                      | 5,421     |
| Hogs-----                           | 58,000               | ---               | ---       | .0100                   | 580       | ---                        | ---       |
| Raised or fed during 1964:          |                      |                   |           |                         |           |                            |           |
| Broilers-----                       | 2,160,000            | .0080             | 17,280    | ---                     | ---       | .0020                      | 4,320     |
| Chickens raised-----                | 310,000              | .0180             | 5,580     | ---                     | ---       | .0043                      | 1,333     |
| Turkeys, large-----                 | 85,000               | .0700             | 5,950     | .0024                   | 204       | .0200                      | 1,700     |
| Turkeys, small-----                 | 8,500                | .0300             | 255       | .0024                   | 20        | .0200                      | 170       |
| Goats clipped-----                  | 4,250                | ---               | ---       | .2000                   | 850       | .1500                      | 638       |
| Hogs fed in year 3/-----            | 93,604               | .7120             | 66,646    | ---                     | ---       | .1950                      | 18,253    |
| 48 States-----                      | ---                  | ---               | 173,863   | ---                     | 102,622   | ---                        | 118,396   |

1/ Factors in this table should be applied to numbers of livestock at the national level only.

2/ Includes pasture.

3/ Calculated as follows:

Spring pigs 1963 (20 percent 50,018)----- 10,004

Fall pigs 1963 (100 percent, 44,000)----- 44,000

Spring pigs 1964 (80 percent 49,500)----- 39,600

Hogs fed in year beginning Oct. 1----- 93,604

Percentages of the spring pig crops used in this calculation should be adjusted periodically in accordance with variations in times of farrowing and consequently in times of marketing.

Table 14.--Factors for computing livestock-production units

| Item  | Unit<br>of<br>production | Concentrates:<br>fed per<br>unit of<br>production | Factor<br>based on<br>concentrates | All feed<br>consumed<br>per unit of<br>production | Factor<br>based<br>on all<br>feed |
|---|--------------------------|---|------------------------------------|---|-----------------------------------|
|   |                          | Pounds 1/   |                                    | Feed units 1/                                     |                                   |
| On farms Jan. 1:                                  |                          |   |                                    |   |                                   |
| Milk cows (4,380 pounds of milk<br>produced)----- | Head                     | 1,342   | ---                                | 4,981   | ---                               |
| Horses and mules 2 years old and over--           | do.                      | 1,707   | 1.27                               | 5,130   | 1.03                              |
| Colts-----  | do.                      | 345   | .26                                | 3,449   | .69                               |
| Goats clipped-----                                | do.                      | ---   | ---                                | 770   | .15                               |
| Live weight produced:                             |                          |   |                                    |   |                                   |
| Grain-fattened cattle-----                        | Cwt.                     | 567   | .42                                | 914   | .18                               |
| Other cattle-----                                 | do.                      | 73  | 2/ .054                            | 1,020   | .20                               |
| Sheep and lambs-----                              | do.                      | 113   | .80                                | 1,969   | .39                               |
| Hogs-----   | do.                      | 478   | .36                                | 546   | .11                               |
| Chickens raised-----                              | do.                      | 519   | .39                                | 568   | .11                               |
| Broilers-----                                     | do.                      | 316   | .23                                | 362   | .07                               |
| Turkeys-----                                      | do.                      | 579   | .43                                | 677   | .13                               |
| Milk-----   | 1,000 lbs.               | 306   | .23                                | 1,138   | .23                               |
| Eggs-----   | 1,000 eggs               | 599   | .45                                | 632   | .13                               |

1/ The average feed consumption in the years 1940-45, except 1950-53 was used for broilers. These are the same periods used in Animal Unit Series.

2/ Prior to 1929, data for grain-fattened cattle were not published. Therefore, one factor, 0.098, based on concentrates, was used for all cattle and calves for that period.

Table 15.--Data for computing annual livestock-production units, 1910-62

| Year<br>beginning<br>Oct. 1 | Live weight production |                    |                   |                   |                       |                    |                   |                   |                   | Horses and<br>mules Jan. 1 2/ |                            |               |               | Goats<br>clipped<br>1/ |
|-----------------------------|------------------------|--------------------|-------------------|-------------------|-----------------------|--------------------|-------------------|-------------------|-------------------|-------------------------------|----------------------------|---------------|---------------|------------------------|
|                             | Hogs                   | Cattle             |                   |                   | Sheep<br>and<br>lambs | Poultry 1/         |                   |                   | Milk              | Eggs                          | 2 years<br>old and<br>over | Colts         |               |                        |
|                             |                        | Grain-<br>fattened | Other             | Total             |                       | Chickens<br>raised | Broilers          | Turkeys           |                   |                               |                            |               |               |                        |
|                             | Million<br>pounds      | Million<br>pounds  | Million<br>pounds | Million<br>pounds | Million<br>pounds     | Million<br>pounds  | Million<br>pounds | Million<br>pounds | Million<br>pounds | Million<br>eggs               | 1,000<br>head              | 1,000<br>head | 1,000<br>head |                        |
| 1910-----                   | 12,400                 | ---                | ---               | 12,608            | 1,134                 | 2,240              | ---               | ---               | 65,700            | 29,100                        | 20,301                     | 4,546         | ---           |                        |
| 1911-----                   | 12,100                 | ---                | ---               | 13,502            | 1,238                 | 2,220              | ---               | ---               | 66,400            | 28,400                        | 20,569                     | 4,708         | ---           |                        |
| 1912-----                   | 12,200                 | ---                | ---               | 14,601            | 1,209                 | 2,230              | ---               | ---               | 67,500            | 28,100                        | 20,846                     | 4,845         | ---           |                        |
| 1913-----                   | 12,500                 | ---                | ---               | 15,388            | 1,250                 | 2,300              | ---               | ---               | 69,200            | 27,900                        | 21,247                     | 4,931         | ---           |                        |
| 1914-----                   | 13,600                 | ---                | ---               | 15,242            | 1,258                 | 2,230              | ---               | ---               | 70,700            | 29,700                        | 21,562                     | 4,931         | ---           |                        |
| 1915-----                   | 13,700                 | ---                | ---               | 15,734            | 1,152                 | 2,170              | ---               | ---               | 72,000            | 28,900                        | 21,694                     | 4,840         | ---           |                        |
| 1916-----                   | 13,100                 | ---                | ---               | 16,556            | 1,124                 | 2,200              | ---               | ---               | 73,200            | 27,800                        | 22,003                     | 4,656         | ---           |                        |
| 1917-----                   | 14,300                 | ---                | ---               | 15,934            | 1,210                 | 2,350              | ---               | ---               | 73,800            | 28,000                        | 22,370                     | 4,353         | ---           |                        |
| 1918-----                   | 14,200                 | ---                | ---               | 13,955            | 1,167                 | 2,280              | ---               | ---               | 73,800            | 30,200                        | 22,576                     | 3,914         | ---           |                        |
| 1919-----                   | 13,600                 | ---                | ---               | 12,649            | 980                   | 2,230              | ---               | ---               | 75,400            | 29,800                        | 22,386                     | 3,356         | 2,367         |                        |
| 1920-----                   | 14,000                 | ---                | ---               | 12,714            | 1,091                 | 2,400              | ---               | ---               | 77,600            | 30,700                        | 22,348                     | 2,789         | 2,528         |                        |
| 1921-----                   | 15,900                 | ---                | ---               | 17,393            | 1,096                 | 2,530              | ---               | ---               | 80,600            | 32,700                        | 22,271                     | 2,317         | 2,254         |                        |
| 1922-----                   | 16,900                 | ---                | ---               | 14,177            | 1,210                 | 2,640              | ---               | ---               | 83,300            | 32,050                        | 22,050                     | 1,968         | 2,307         |                        |
| 1923-----                   | 15,800                 | ---                | ---               | 15,345            | 1,408                 | 2,516              | ---               | ---               | 88,200            | 34,600                        | 21,578                     | 1,707         | 2,548         |                        |
| 1924-----                   | 14,600                 | ---                | ---               | 13,065            | 1,496                 | 2,579              | ---               | ---               | 90,400            | 34,900                        | 21,038                     | 1,531         | 2,565         |                        |
| 1925-----                   | 14,600                 | ---                | ---               | 12,692            | 1,584                 | 2,729              | ---               | ---               | 92,700            | 36,984                        | 20,491                     | 1,495         | 3,124         |                        |
| 1926-----                   | 15,400                 | ---                | ---               | 12,205            | 1,650                 | 2,852              | ---               | ---               | 94,710            | 38,475                        | 19,765                     | 1,427         | 3,265         |                        |
| 1927-----                   | 16,500                 | ---                | ---               | 12,263            | 1,746                 | 2,660              | ---               | ---               | 95,675            | 38,339                        | 19,120                     | 1,328         | 3,716         |                        |
| 1928-----                   | 16,000                 | ---                | ---               | 12,647            | 1,810                 | 2,854              | ---               | 239               | 98,201            | 38,148                        | 18,514                     | 1,230         | 3,873         |                        |
| 1929-----                   | 15,300                 | 1,416              | 11,720            | 13,136            | 1,930                 | 2,875              | ---               | 228               | 99,463            | 38,818                        | 17,981                     | 1,143         | 4,241         |                        |
| 1930-----                   | 15,600                 | 1,376              | 11,979            | 13,355            | 2,030                 | 2,696              | ---               | 244               | 102,097           | 38,209                        | 17,375                     | 1,093         | 4,457         |                        |
| 1931-----                   | 16,500                 | 1,350              | 12,671            | 14,021            | 1,885                 | 2,868              | ---               | 303               | 103,789           | 37,101                        | 16,822                     | 990           | 4,201         |                        |
| 1932-----                   | 16,800                 | 1,445              | 13,667            | 15,112            | 1,852                 | 2,850              | ---               | 319               | 104,657           | 35,516                        | 16,404                     | 933           | 4,092         |                        |
| 1933-----                   | 15,000                 | 1,396              | 13,359            | 14,755            | 1,898                 | 2,449              | 97                | 300               | 102,453           | 34,450                        | 15,982                     | 1,013         | 3,916         |                        |
| 1934-----                   | 13,600                 | 1,070              | 12,802            | 13,872            | 1,854                 | 2,568              | 123               | 298               | 101,468           | 33,190                        | 15,473                     | 1,210         | 3,565         |                        |
| 1935-----                   | 12,000                 | 1,591              | 12,650            | 14,241            | 1,848                 | 2,789              | 152               | 405               | 101,505           | 34,343                        | 14,839                     | 1,387         | 3,715         |                        |
| 1936-----                   | 12,800                 | 1,371              | 12,548            | 13,919            | 1,912                 | 2,405              | 196               | 376               | 102,711           | 37,202                        | 14,330                     | 1,472         | 3,774         |                        |
| 1937-----                   | 15,100                 | 1,705              | 12,267            | 13,972            | 2,012                 | 2,538              | 239               | 395               | 104,781           | 36,970                        | 13,690                     | 1,555         | 3,918         |                        |
| 1938-----                   | 15,300                 | 1,808              | 13,087            | 14,895            | 2,031                 | 2,717              | 306               | 494               | 106,764           | 38,441                        | 13,273                     | 1,519         | 4,068         |                        |
| 1939-----                   | 17,600                 | 2,044              | 13,527            | 15,571            | 2,083                 | 2,598              | 413               | 502               | 109,081           | 39,494                        | 13,000                     | 1,478         | 4,297         |                        |
| 1940-----                   | 16,900                 | 2,134              | 14,564            | 16,698            | 2,214                 | 3,054              | 559               | 512               | 113,888           | 40,951                        | 12,651                     | 1,453         | 4,542         |                        |
| 1941-----                   | 19,400                 | 2,256              | 15,927            | 18,183            | 2,298                 | 3,546              | 674               | 522               | 118,565           | 47,498                        | 12,346                     | 1,309         | 4,322         |                        |
| 1942-----                   | 24,100                 | 2,225              | 16,787            | 19,012            | 2,159                 | 4,206              | 833               | 509               | 117,754           | 53,880                        | 12,117                     | 1,114         | 4,276         |                        |
| 1943-----                   | 23,600                 | 2,062              | 17,509            | 19,571            | 1,980                 | 3,578              | 818               | 584               | 116,233           | 57,850                        | 11,668                     | 945           | 4,109         |                        |
| 1944-----                   | 18,800                 | 2,265              | 17,300            | 19,565            | 1,918                 | 3,829              | 1,107             | 740               | 120,141           | 56,276                        | 11,116                     | 834           | 4,291         |                        |
| 1945-----                   | 18,900                 | 2,387              | 16,741            | 19,128            | 1,800                 | 3,246              | 884               | 714               | 117,661           | 55,468                        | 10,434                     | 674           | 3,939         |                        |
| 1946-----                   | 18,300                 | 2,451              | 16,646            | 19,097            | 1,616                 | 3,165              | 936               | 611               | 117,785           | 55,085                        | 9,578                      | 551           | 3,672         |                        |
| 1947-----                   | 18,400                 | 2,179              | 16,205            | 18,584            | 1,429                 | 2,768              | 1,127             | 574               | 112,593           | 54,281                        | 8,800                      | 479           | 3,164         |                        |
| 1948-----                   | 18,600                 | 2,638              | 16,418            | 19,056            | 1,304                 | 3,102              | 1,570             | 769               | 115,025           | 54,803                        | 8,074                      | 424           | 2,558         |                        |
| 1949-----                   | 19,800                 | 2,766              | 17,942            | 20,708            | 1,322                 | 2,789              | 1,945             | 817               | 116,694           | 58,720                        | 7,415                      | 366           | 2,530         |                        |
| 1950-----                   | 21,100                 | 2,890              | 19,549            | 22,539            | 1,363                 | 2,803              | 2,415             | 950               | 115,476           | 57,721                        | 6,732                      | 304           | 2,472         |                        |
| 1951-----                   | 23,600                 | 3,413              | 21,034            | 24,447            | 1,446                 | 2,524              | 2,624             | 1,049             | 113,507           | 57,809                        | 5,887                      | 263           | 2,287         |                        |
| 1952-----                   | 18,600                 | 1,509              | 23,278            | 26,787            | 1,521                 | 2,573              | 2,904             | 1,008             | 118,987           | 57,436                        | 5,166                      | 237           | 2,337         |                        |
| 1953-----                   | 17,400                 | 3,780              | 23,756            | 27,536            | 1,590                 | 2,430              | 3,236             | 1,161             | 122,018           | 58,382                        | 4,572                      | 219           | 2,618         |                        |
| 1954-----                   | 19,500                 | 4,335              | 23,635            | 27,970            | 1,615                 | 2,144              | 3,350             | 1,091             | 122,222           | 59,635                        | 4,101                      | 208           | 2,984         |                        |
| 1955-----                   | 17,700                 | 4,435              | 23,238            | 27,673            | 1,581                 | 2,145              | 4,270             | 1,274             | 124,419           | 60,427                        | 3,757                      | 201           | 3,151         |                        |
| 1956-----                   | 18,600                 | 4,579              | 22,220            | 26,799            | 1,542                 | 1,875              | 4,683             | 1,356             | 124,662           | 61,516                        | 3,436                      | 196           | 3,231         |                        |
| 1957-----                   | 18,800                 | 5,724              | 21,988            | 26,712            | 1,626                 | 1,976              | 5,431             | 1,356             | 122,875           | 60,779                        | 3,220                      | 195           | 3,417         |                        |
| 1958-----                   | 20,800                 | 5,434              | 22,467            | 27,901            | 1,699                 | 1,803              | 5,763             | 1,433             | 122,180           | 63,546                        | 2,988                      | 201           | 3,755         |                        |
| 1959-----                   | 20,300                 | 6,273              | 22,338            | 28,611            | 1,668                 | 1,584              | 6,017             | 1,491             | 122,423           | 62,069                        | 2,883                      | 206           | 3,889         |                        |
| 1960-----                   | 19,700                 | 6,666              | 22,748            | 29,414            | 1,676                 | 1,656              | 6,836             | 1,878             | 124,363           | 61,227                        | 2,883                      | 206           | 4,022         |                        |
| 1961-----                   | 20,300                 | 6,626              | 23,499            | 30,125            | 1,574                 | 1,523              | 6,913             | 1,630             | 125,881           | 62,864                        | 2,883                      | 206           | 4,240         |                        |
| 1962-----                   | 20,600                 | 7,527              | 24,143            | 31,670            | 1,515                 | 1,603              | 7,370             | 1,665             | 126,494           | 62,475                        | 2,883                      | 206           | 4,250         |                        |

1. Production for calendar year following Oct. 1.

2. On Jan. 1 following Oct. 1.

Table 16.--Estimating the live weight production of hogs by quarters, 1963

| Item  | Number<br>of<br>hogs | Weight per head         |                          |                   |                      | Total live weight produced |                        |                     |                         |                           |
|---|----------------------|-------------------------|--------------------------|-------------------|----------------------|----------------------------|------------------------|---------------------|-------------------------|---------------------------|
|   |                      | Beginning<br>of<br>year | When<br>slaugh-<br>tered | End<br>of<br>year | Gain<br>in<br>weight | Calendar<br>year           | January<br>to<br>March | April<br>to<br>June | July<br>to<br>September | October<br>to<br>December |
|   | Million<br>head      | Pounds                  | Pounds                   | Pounds            | Pounds               | Million<br>pounds          | Million<br>pounds      | Million<br>pounds   | Million<br>pounds       | Million<br>pounds         |
| Hogs on farms Jan. 1, 1963:                                     |                      |                         |                          |                   |                      |                            |                        |                     |                         |                           |
| Spring pigs-----  | 10.8                 | 200                     | 1/ 232                   | ---               | 32                   | 346                        | 346                    | ---                 | ---                     | ---                       |
| Fall pigs-----  | 39.9                 | 65                      | 2/ 227                   | ---               | 162                  | 6,464                      | 3,555                  | 2,262               | 647                     | ---                       |
| Sows-----   | 2.6                  | ---                     | ---                      | ---               | 125                  | 325                        | 146                    | 114                 | 49                      | 16                        |
| Gilts 3/-----   | 5.4                  | ---                     | ---                      | ---               | 125                  | 675                        | 304                    | 236                 | 101                     | 34                        |
| Hogs on farms Dec. 31, 1963,<br>from current pig crop:          |                      |                         |                          |                   |                      |                            |                        |                     |                         |                           |
| Spring pigs-----  | 10.8                 | ---                     | ---                      | 200               | 200                  | 2,160                      | ---                    | 216                 | 756                     | 1,188                     |
| Fall pigs-----  | 39.8                 | ---                     | ---                      | 65                | 65                   | 2,587                      | ---                    | 129                 | 518                     | 1,940                     |
| Gilts 2/-----   | 5.3                  | ---                     | ---                      | 200               | 200                  | 1,060                      | ---                    | 106                 | 371                     | 583                       |
| Deaths in year-----   | 9.3                  | ---                     | ---                      | ---               | ---                  | ---                        | ---                    | ---                 | ---                     | ---                       |
| Hogs sold-----  | 29.1                 | ---                     | 4/ 228                   | ---               | ---                  | 6,635                      | 332                    | 1,327               | 2,322                   | 2,654                     |
| Sows on farms Dec. 31, 1963-----                                | 2.6                  | ---                     | ---                      | 25                | 25                   | 65                         | ---                    | 6                   | 23                      | 36                        |
| Live weight produced as calculated-----                         |                      |                         |                          |                   |                      | 20,317                     | 4,683                  | 4,396               | 4,787                   | 6,451                     |
| Live weight produced as reported by USDA-----                   |                      |                         |                          |                   |                      | 20,562                     | ---                    | ---                 | ---                     | ---                       |
| Live weight produced by quarters adjusted to USDA estimate----- |                      |                         |                          |                   |                      | 20,562                     | 4,739                  | 4,449               | 4,845                   | 6,529                     |

1/ Average weight of barrows and gilts at 8 markets, January through March.

2/ Average weight of barrows and gilts at 8 markets, April through September.

3/ 2/3 of sows and gilts were assumed to be gilts.

4/ Average weight of barrows and gilts at 8 markets, October through December.

Table 17.--Estimated quarterly distribution of annual production of hogs

| Item                               | January<br>to<br>March | April<br>to<br>June | July<br>to<br>September | October<br>to<br>December |
|------------------------------------|------------------------|---------------------|-------------------------|---------------------------|
|                                    | <u>Percent</u>         | <u>Percent</u>      | <u>Percent</u>          | <u>Percent</u>            |
| Hogs on farms Jan. 1:              |                        |                     |                         |                           |
| Spring pigs-----                   | 100                    | ---                 | ---                     | ---                       |
| Fall pigs-----                     | 55                     | 35                  | 10                      | ---                       |
| Sows and gilts-----                | 45                     | 35                  | 15                      | 5                         |
| Current pig crop on farms Dec. 31: |                        |                     |                         |                           |
| Spring pigs-----                   | ---                    | 10                  | 35                      | 55                        |
| Fall pigs-----                     | ---                    | 5                   | 20                      | 75                        |
| Gilts-----                         | ---                    | 10                  | 35                      | 55                        |
| Sows on farms Dec. 31-----         | ---                    | 10                  | 35                      | 55                        |
| Hogs sold-----                     | 5                      | 20                  | 35                      | 40                        |

Table 18.--Livestock-production units based on concentrates, 1910-62

| Year<br>beginning<br>Oct. 1 | Live weight production |                    |                |                       |                    |                |                |                | Eggs           | Horses and mules           |                | Total            |                                     |
|-----------------------------|------------------------|--------------------|----------------|-----------------------|--------------------|----------------|----------------|----------------|----------------|----------------------------|----------------|------------------|-------------------------------------|
|                             | Cattle                 |                    |                | Sheep<br>and<br>lambs | Poultry            |                |                | Milk           |                | 2 years<br>old and<br>over | Colts          | All<br>livestock | Excluding<br>horses<br>and<br>mules |
|                             | Hogs                   | Grain-<br>fattened | Other<br>1/    |                       | Chickens<br>raised | Broilers       | Turkeys        |                |                |                            |                |                  |                                     |
|                             | 1,000<br>units         | 1,000<br>units     | 1,000<br>units | 1,000<br>units        | 1,000<br>units     | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units             | 1,000<br>units | 1,000<br>units   | 1,000<br>units                      |
| 1910-----                   | 44,640                 | ---                | 12,356         | 907                   | 8,736              | ---            | ---            | 15,111         | 13,095         | 25,782                     | 1,182          | 121,809          | 94,845                              |
| 1911-----                   | 43,560                 | ---                | 13,232         | 990                   | 8,658              | ---            | ---            | 15,272         | 12,780         | 26,123                     | 1,224          | 121,839          | 94,492                              |
| 1912-----                   | 43,920                 | ---                | 12,309         | 967                   | 8,697              | ---            | ---            | 15,525         | 12,645         | 26,474                     | 1,260          | 123,797          | 96,063                              |
| 1913-----                   | 45,000                 | ---                | 15,080         | 1,000                 | 8,970              | ---            | ---            | 15,916         | 12,555         | 26,984                     | 1,282          | 126,787          | 98,521                              |
| 1914-----                   | 48,960                 | ---                | 14,937         | 1,006                 | 8,697              | ---            | ---            | 16,261         | 13,365         | 27,384                     | 1,282          | 131,892          | 103,226                             |
| 1915-----                   | 47,320                 | ---                | 15,413         | 922                   | 8,463              | ---            | ---            | 16,560         | 13,005         | 27,551                     | 1,258          | 132,498          | 103,689                             |
| 1916-----                   | 47,160                 | ---                | 16,225         | 899                   | 8,580              | ---            | ---            | 16,836         | 12,510         | 27,944                     | 1,211          | 131,365          | 102,210                             |
| 1917-----                   | 51,580                 | ---                | 15,615         | 968                   | 9,165              | ---            | ---            | 16,974         | 12,600         | 28,410                     | 1,132          | 136,324          | 106,802                             |
| 1918-----                   | 51,120                 | ---                | 13,676         | 932                   | 8,892              | ---            | ---            | 16,974         | 13,590         | 28,672                     | 1,018          | 134,876          | 105,186                             |
| 1919-----                   | 48,960                 | ---                | 12,396         | 784                   | 8,697              | ---            | ---            | 17,342         | 13,410         | 28,430                     | 873            | 130,892          | 101,589                             |
| 1920-----                   | 50,400                 | ---                | 12,460         | 873                   | 9,460              | ---            | ---            | 17,828         | 13,815         | 28,382                     | 725            | 133,863          | 104,756                             |
| 1921-----                   | 57,240                 | ---                | 12,831         | 877                   | 9,867              | ---            | ---            | 18,538         | 14,715         | 28,284                     | 602            | 142,954          | 114,068                             |
| 1922-----                   | 60,940                 | ---                | 12,413         | 968                   | 10,296             | ---            | ---            | 19,159         | 15,660         | 28,004                     | 512            | 148,352          | 119,836                             |
| 1923-----                   | 60,880                 | ---                | 13,078         | 1,126                 | 9,812              | ---            | ---            | 20,286         | 15,570         | 27,404                     | 444            | 144,600          | 116,752                             |
| 1924-----                   | 62,560                 | ---                | 12,804         | 1,197                 | 10,358             | ---            | ---            | 20,792         | 15,705         | 26,718                     | 398            | 140,232          | 113,116                             |
| 1925-----                   | 54,560                 | ---                | 12,438         | 1,267                 | 10,643             | ---            | ---            | 21,321         | 16,643         | 26,024                     | 389            | 141,285          | 114,872                             |
| 1926-----                   | 55,440                 | ---                | 11,961         | 1,202                 | 11,123             | ---            | ---            | 21,783         | 17,314         | 25,102                     | 371            | 144,414          | 118,921                             |
| 1927-----                   | 53,400                 | ---                | 12,048         | 1,397                 | 10,374             | ---            | ---            | 22,005         | 17,253         | 24,282                     | 345            | 147,074          | 122,447                             |
| 1928-----                   | 59,600                 | ---                | 12,394         | 1,448                 | 11,131             | ---            | 1,028          | 22,586         | 17,167         | 23,513                     | 320            | 147,187          | 123,354                             |
| 1929-----                   | 55,080                 | 5,927              | 6,229          | 1,544                 | 11,212             | ---            | 980            | 22,876         | 17,468         | 22,836                     | 297            | 144,569          | 121,436                             |
| 1930-----                   | 56,160                 | 5,779              | 6,469          | 1,624                 | 10,514             | ---            | 1,049          | 23,482         | 17,194         | 22,066                     | 284            | 144,621          | 122,271                             |
| 1931-----                   | 54,200                 | 5,670              | 6,382          | 1,508                 | 11,185             | ---            | 1,303          | 23,871         | 16,695         | 21,364                     | 257            | 148,095          | 126,474                             |
| 1932-----                   | 60,480                 | 6,069              | 7,380          | 1,482                 | 12,115             | ---            | 1,372          | 24,071         | 15,982         | 20,831                     | 243            | 149,027          | 127,951                             |
| 1933-----                   | 62,000                 | 5,863              | 7,224          | 1,513                 | 9,551              | 221            | 1,290          | 23,564         | 15,502         | 20,300                     | 263            | 139,288          | 118,725                             |
| 1934-----                   | 61,160                 | 4,934              | 6,914          | 1,487                 | 10,015             | 281            | 1,281          | 23,338         | 14,936         | 19,651                     | 315            | 120,869          | 100,903                             |
| 1935-----                   | 41,200                 | 6,682              | 6,831          | 1,478                 | 10,877             | 350            | 1,742          | 23,346         | 15,454         | 18,846                     | 361            | 129,167          | 109,960                             |
| 1936-----                   | 46,680                 | 5,768              | 7,776          | 1,530                 | 9,380              | 451            | 1,617          | 23,624         | 15,741         | 17,199                     | 383            | 130,539          | 111,957                             |
| 1937-----                   | 52,360                 | 7,161              | 6,624          | 1,610                 | 9,898              | 550            | 1,698          | 24,100         | 16,636         | 17,386                     | 404            | 140,427          | 122,637                             |
| 1938-----                   | 57,240                 | 7,574              | 7,067          | 1,625                 | 10,536             | 704            | 2,124          | 24,556         | 17,298         | 16,857                     | 395            | 146,056          | 128,804                             |
| 1939-----                   | 61,360                 | 8,585              | 7,305          | 1,666                 | 10,132             | 950            | 2,159          | 25,089         | 17,772         | 16,510                     | 384            | 153,912          | 137,018                             |
| 1940-----                   | 60,840                 | 8,961              | 7,866          | 1,771                 | 11,911             | 1,286          | 2,202          | 26,194         | 18,428         | 16,067                     | 378            | 155,905          | 139,460                             |
| 1941-----                   | 69,240                 | 9,475              | 8,601          | 1,838                 | 13,829             | 1,550          | 2,245          | 27,270         | 21,374         | 15,679                     | 340            | 172,041          | 156,022                             |
| 1942-----                   | 86,760                 | 3,345              | 9,065          | 1,727                 | 16,423             | 1,916          | 2,189          | 27,083         | 24,246         | 15,389                     | 290            | 194,413          | 178,734                             |
| 1943-----                   | 84,960                 | 8,660              | 9,475          | 1,584                 | 13,954             | 1,881          | 2,511          | 26,735         | 26,032         | 14,818                     | 246            | 190,836          | 175,772                             |
| 1944-----                   | 67,680                 | 9,513              | 9,322          | 1,534                 | 14,933             | 2,546          | 3,182          | 27,632         | 25,324         | 14,117                     | 217            | 176,020          | 161,686                             |
| 1945-----                   | 68,040                 | 10,025             | 9,040          | 1,440                 | 12,659             | 2,033          | 3,070          | 27,062         | 24,961         | 13,251                     | 175            | 171,756          | 158,330                             |
| 1946-----                   | 65,830                 | 10,794             | 8,989          | 1,293                 | 12,344             | 2,253          | 2,627          | 27,091         | 24,788         | 12,164                     | 143            | 167,766          | 155,459                             |
| 1947-----                   | 66,240                 | 9,992              | 8,751          | 1,143                 | 10,795             | 2,592          | 2,468          | 25,896         | 24,426         | 11,176                     | 125            | 163,604          | 152,303                             |
| 1948-----                   | 66,960                 | 11,080             | 8,866          | 1,043                 | 12,098             | 3,611          | 3,307          | 26,456         | 24,661         | 10,254                     | 110            | 168,446          | 158,082                             |
| 1949-----                   | 71,280                 | 11,617             | 9,689          | 1,058                 | 10,877             | 4,474          | 3,513          | 26,820         | 26,422         | 9,417                      | 95             | 175,282          | 165,772                             |
| 1950-----                   | 75,360                 | 12,138             | 10,610         | 1,090                 | 10,732             | 5,552          | 4,085          | 26,559         | 25,974         | 8,550                      | 79             | 181,531          | 172,902                             |
| 1951-----                   | 71,160                 | 14,315             | 11,358         | 1,157                 | 9,844              | 6,035          | 4,511          | 26,107         | 26,014         | 7,476                      | 68             | 181,065          | 173,521                             |
| 1952-----                   | 66,760                 | 14,738             | 12,570         | 1,217                 | 10,035             | 6,679          | 4,334          | 27,367         | 25,846         | 6,561                      | 62             | 176,369          | 169,746                             |
| 1953-----                   | 62,540                 | 15,876             | 12,828         | 1,272                 | 9,477              | 7,423          | 4,992          | 28,064         | 26,272         | 5,806                      | 57             | 174,727          | 168,864                             |
| 1954-----                   | 70,200                 | 18,207             | 12,773         | 1,292                 | 8,362              | 7,705          | 4,691          | 28,111         | 26,836         | 5,208                      | 54             | 183,429          | 178,167                             |
| 1955-----                   | 70,920                 | 18,627             | 12,549         | 1,265                 | 8,366              | 9,821          | 5,478          | 28,616         | 27,192         | 4,771                      | 52             | 187,657          | 182,834                             |
| 1956-----                   | 66,760                 | 19,232             | 11,999         | 1,234                 | 7,312              | 10,771         | 5,831          | 28,672         | 27,682         | 4,364                      | 51             | 184,108          | 179,693                             |
| 1957-----                   | 67,480                 | 19,841             | 11,874         | 1,301                 | 7,706              | 12,491         | 5,831          | 28,261         | 27,351         | 4,089                      | 51             | 186,476          | 182,336                             |
| 1958-----                   | 71,880                 | 22,843             | 12,132         | 1,359                 | 7,032              | 13,255         | 6,162          | 28,101         | 28,596         | 3,795                      | 52             | 198,187          | 194,340                             |
| 1959-----                   | 72,720                 | 26,347             | 12,061         | 1,314                 | 6,178              | 13,839         | 6,411          | 28,157         | 27,931         | 3,661                      | 54             | 198,695          | 194,980                             |
| 1960-----                   | 70,420                 | 27,997             | 12,284         | 1,341                 | 6,458              | 15,723         | 8,075          | 28,603         | 27,552         | 3,661                      | 54             | 202,668          | 198,953                             |
| 1961-----                   | 73,280                 | 27,829             | 12,689         | 1,259                 | 5,940              | 15,900         | 7,009          | 28,953         | 28,289         | 3,661                      | 54             | 204,663          | 200,948                             |
| 1962-----                   | 74,160                 | 31,017             | 13,037         | 1,212                 | 6,252              | 16,951         | 7,160          | 29,094         | 28,114         | 3,661                      | 54             | 211,308          | 207,993                             |

1/ Includes grain-fattened cattle, 1910-28.

Table 19.--Percentage of livestock-production units based on concentrates, various types of livestock production, specified periods, 1910-62 1/

| Period       | Live weight production |                    |         |                       |                    |          |         | Milk    | Eggs    | Horses<br>and<br>mules | Total |
|--------------|------------------------|--------------------|---------|-----------------------|--------------------|----------|---------|---------|---------|------------------------|-------|
|              | Cattle                 |                    |         | Sheep<br>and<br>lambs | Poultry            |          |         |         |         |                        |       |
|              | Hogs                   | Grain-<br>fattened | Other   |                       | Chickens<br>raised | Broilers | Turkeys |         |         |                        |       |
|              |                        |                    |         |                       |                    |          |         |         |         |                        |       |
| Percent      | Percent                | Percent            | Percent | Percent               | Percent            | Percent  | Percent | Percent | Percent | Percent                |       |
| 1920-19----- | 16.7                   | ---                | 11.1    | 0.7                   | 6.5                | ---      | ---     | 12.6    | 10.0    | 22.1                   | 100   |
| 1920-29----- | 18.3                   | 0.5                | 8.3     | .8                    | 7.2                | ---      | 0.1     | 14.4    | 11.2    | 18.6                   | 100   |
| 1930-39----- | 18.0                   | 4.5                | 5.0     | 1.1                   | 7.4                | 0.3      | 1.1     | 17.0    | 11.7    | 13.9                   | 100   |
| 1940-49----- | 20.8                   | 5.7                | 5.2     | .8                    | 7.5                | 1.4      | 1.6     | 15.4    | 13.9    | 7.7                    | 100   |
| 1950-59----- | 18.0                   | 9.8                | 6.5     | .7                    | 4.6                | 5.0      | 2.8     | 15.0    | 14.6    | 3.0                    | 100   |
| 1960-62----- | 15.3                   | 14.1               | 6.1     | .6                    | 3.0                | 7.9      | 3.6     | 14.0    | 13.6    | 1.8                    | 100   |

1/ Computed from table 18.

Table 20.—Livestock-production units based on all feed, 1910-62

| Year<br>beginning<br>Oct. 1 | Live weight production |                    |                |                       |                    |                |                |                |                |                | Horses and<br>mules        |                | Total            |                                  |
|-----------------------------|------------------------|--------------------|----------------|-----------------------|--------------------|----------------|----------------|----------------|----------------|----------------|----------------------------|----------------|------------------|----------------------------------|
|                             | Cattle                 |                    |                | Sheep<br>and<br>lambs | Poultry            |                |                | Milk           | Eggs           | Goats          | 2 years<br>old and<br>over | Colts          | All<br>livestock | Excluding<br>horses and<br>mules |
|                             | Hogs                   | Grain-<br>fattened | Other<br>1/    |                       | Chickens<br>raised | Broilers       | Turkeys        |                |                |                |                            |                |                  |                                  |
|                             | 1,000<br>units         | 1,000<br>units     | 1,000<br>units | 1,000<br>units        | 1,000<br>units     | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units             | 1,000<br>units | 1,000<br>units   | 1,000<br>units                   |
| 1910                        | 13,660                 | ---                | 25,216         | 4,423                 | 2,464              | ---            | ---            | 15,111         | 3,783          | ---            | 20,910                     | 3,137          | 88,684           | 64,637                           |
| 1911                        | 13,310                 | ---                | 27,004         | 4,828                 | 2,442              | ---            | ---            | 15,272         | 3,692          | ---            | 21,186                     | 3,249          | 90,983           | 66,548                           |
| 1912                        | 13,420                 | ---                | 29,202         | 4,715                 | 2,453              | ---            | ---            | 15,525         | 3,653          | ---            | 21,471                     | 3,343          | 93,782           | 68,968                           |
| 1913                        | 13,750                 | ---                | 30,776         | 4,875                 | 2,530              | ---            | ---            | 15,916         | 3,627          | ---            | 21,884                     | 3,402          | 96,760           | 71,474                           |
| 1914                        | 14,960                 | ---                | 30,484         | 4,906                 | 2,453              | ---            | ---            | 16,261         | 3,861          | ---            | 22,209                     | 3,402          | 98,536           | 72,925                           |
| 1915                        | 15,070                 | ---                | 31,468         | 4,493                 | 2,387              | ---            | ---            | 16,560         | 3,757          | ---            | 22,345                     | 3,340          | 99,420           | 73,735                           |
| 1916                        | 16,410                 | ---                | 33,112         | 4,384                 | 2,420              | ---            | ---            | 16,836         | 3,614          | ---            | 22,663                     | 3,213          | 100,652          | 74,776                           |
| 1917                        | 15,730                 | ---                | 31,868         | 4,729                 | 2,585              | ---            | ---            | 16,974         | 3,640          | ---            | 23,041                     | 3,004          | 101,561          | 75,516                           |
| 1918                        | 15,620                 | ---                | 27,910         | 4,551                 | 2,508              | ---            | ---            | 16,974         | 3,926          | ---            | 23,253                     | 2,701          | 97,443           | 71,489                           |
| 1919                        | 14,960                 | ---                | 25,298         | 3,822                 | 2,453              | ---            | ---            | 17,322         | 3,874          | 355            | 23,058                     | 2,316          | 93,478           | 68,104                           |
| 1920                        | 15,400                 | ---                | 25,428         | 4,255                 | 2,640              | ---            | ---            | 17,848         | 3,991          | 379            | 23,018                     | 1,924          | 94,883           | 69,941                           |
| 1921                        | 17,490                 | ---                | 26,186         | 4,274                 | 2,783              | ---            | ---            | 18,538         | 4,251          | 338            | 23,939                     | 1,599          | 98,398           | 73,650                           |
| 1922                        | 18,590                 | ---                | 26,354         | 4,719                 | 2,904              | ---            | ---            | 19,159         | 4,524          | 346            | 23,712                     | 1,358          | 100,666          | 76,596                           |
| 1923                        | 17,380                 | ---                | 26,690         | 5,491                 | 2,768              | ---            | ---            | 20,286         | 4,498          | 382            | 22,225                     | 1,178          | 100,898          | 77,495                           |
| 1924                        | 16,060                 | ---                | 26,130         | 5,834                 | 2,837              | ---            | ---            | 20,792         | 4,537          | 385            | 21,669                     | 1,056          | 99,300           | 76,575                           |
| 1925                        | 16,060                 | ---                | 25,384         | 6,178                 | 3,002              | ---            | ---            | 21,321         | 4,808          | 469            | 21,106                     | 1,032          | 99,360           | 77,222                           |
| 1926                        | 16,940                 | ---                | 24,440         | 6,435                 | 3,137              | ---            | ---            | 21,783         | 5,002          | 490            | 20,358                     | 985            | 99,540           | 78,197                           |
| 1927                        | 18,150                 | ---                | 24,526         | 6,809                 | 2,926              | ---            | ---            | 22,005         | 4,984          | 557            | 19,694                     | 916            | 100,567          | 79,957                           |
| 1928                        | 17,600                 | ---                | 25,294         | 7,059                 | 3,139              | ---            | ---            | 22,586         | 4,959          | 581            | 19,069                     | 849            | 101,447          | 81,529                           |
| 1929                        | 16,830                 | 2,549              | 23,440         | 7,527                 | 3,162              | ---            | ---            | 22,876         | 5,046          | 636            | 18,520                     | 789            | 101,671          | 82,362                           |
| 1930                        | 17,160                 | 2,477              | 23,958         | 7,917                 | 2,966              | ---            | ---            | 23,482         | 4,967          | 669            | 17,896                     | 754            | 102,563          | 83,913                           |
| 1931                        | 18,150                 | 2,430              | 25,342         | 7,352                 | 3,155              | ---            | ---            | 23,871         | 4,823          | 630            | 17,327                     | 683            | 104,157          | 86,147                           |
| 1932                        | 18,480                 | 2,601              | 27,334         | 7,223                 | 3,135              | ---            | ---            | 24,071         | 4,617          | 614            | 16,896                     | 644            | 106,030          | 88,490                           |
| 1933                        | 16,500                 | 2,513              | 26,718         | 7,402                 | 2,694              | 68             | ---            | 23,564         | 4,478          | 587            | 16,464                     | 699            | 102,077          | 84,914                           |
| 1934                        | 17,660                 | 1,926              | 25,604         | 7,231                 | 2,825              | 86             | ---            | 23,338         | 4,315          | 535            | 15,937                     | 835            | 94,679           | 77,907                           |
| 1935                        | 13,200                 | 2,864              | 25,300         | 7,207                 | 3,068              | 106            | ---            | 23,346         | 4,465          | 557            | 15,284                     | 957            | 96,880           | 80,639                           |
| 1936                        | 14,080                 | 2,468              | 25,096         | 7,457                 | 2,646              | 137            | ---            | 23,624         | 4,836          | 566            | 14,760                     | 1,016          | 97,175           | 81,399                           |
| 1937                        | 16,610                 | 3,069              | 24,534         | 7,847                 | 2,792              | 167            | ---            | 24,100         | 4,806          | 588            | 14,701                     | 1,073          | 100,201          | 85,027                           |
| 1938                        | 17,490                 | 3,254              | 26,174         | 7,921                 | 2,989              | 214            | ---            | 24,556         | 4,997          | 610            | 13,671                     | 1,048          | 103,566          | 88,847                           |
| 1939                        | 17,360                 | 3,679              | 27,054         | 8,124                 | 2,858              | 289            | ---            | 25,089         | 5,134          | 645            | 13,390                     | 1,030          | 107,295          | 92,885                           |
| 1940                        | 18,590                 | 3,841              | 29,128         | 8,635                 | 3,359              | 391            | ---            | 26,194         | 5,324          | 681            | 13,031                     | 1,003          | 110,843          | 96,809                           |
| 1941                        | 21,340                 | 4,061              | 31,854         | 8,962                 | 3,901              | 472            | ---            | 27,270         | 6,175          | 648            | 12,716                     | 903            | 118,981          | 105,362                          |
| 1942                        | 26,510                 | 4,005              | 33,574         | 8,420                 | 4,627              | 583            | ---            | 27,083         | 7,004          | 641            | 12,481                     | 769            | 126,359          | 113,109                          |
| 1943                        | 25,960                 | 3,712              | 35,018         | 7,722                 | 3,936              | 573            | ---            | 26,735         | 7,520          | 616            | 12,018                     | 652            | 125,221          | 112,551                          |
| 1944                        | 20,680                 | 4,077              | 34,600         | 7,480                 | 4,212              | 775            | ---            | 27,632         | 7,316          | 644            | 11,449                     | 575            | 120,402          | 108,378                          |
| 1945                        | 20,790                 | 4,297              | 33,482         | 7,020                 | 3,571              | 619            | ---            | 27,062         | 7,211          | 591            | 10,747                     | 465            | 116,783          | 105,571                          |
| 1946                        | 20,110                 | 4,412              | 31,292         | 6,302                 | 3,482              | 655            | ---            | 27,091         | 7,161          | 551            | 9,865                      | 380            | 114,115          | 103,870                          |
| 1947                        | 20,240                 | 4,282              | 32,410         | 5,573                 | 3,045              | 789            | ---            | 25,896         | 7,057          | 475            | 9,064                      | 331            | 109,908          | 100,513                          |
| 1948                        | 20,460                 | 4,464              | 32,836         | 5,086                 | 3,412              | 1,099          | ---            | 26,456         | 7,124          | 384            | 8,316                      | 293            | 111,214          | 102,605                          |
| 1949                        | 21,780                 | 4,779              | 35,884         | 5,156                 | 3,068              | 1,362          | ---            | 26,840         | 7,634          | 380            | 7,637                      | 253            | 116,035          | 108,145                          |
| 1950                        | 23,210                 | 5,202              | 39,298         | 5,316                 | 3,083              | 1,690          | ---            | 26,559         | 7,804          | 371            | 6,934                      | 210            | 120,612          | 113,468                          |
| 1951                        | 22,660                 | 6,143              | 42,068         | 5,639                 | 2,776              | 1,837          | ---            | 26,107         | 7,515          | 343            | 6,064                      | 181            | 122,697          | 116,452                          |
| 1952                        | 20,460                 | 6,316              | 46,556         | 5,932                 | 2,830              | 2,033          | ---            | 27,367         | 7,467          | 351            | 5,321                      | 164            | 126,107          | 120,622                          |
| 1953                        | 19,120                 | 6,804              | 47,512         | 6,201                 | 2,673              | 2,265          | ---            | 28,064         | 7,590          | 393            | 4,709                      | 151            | 127,011          | 122,551                          |
| 1954                        | 21,450                 | 7,803              | 47,270         | 6,298                 | 2,358              | 2,345          | ---            | 28,111         | 7,753          | 428            | 4,224                      | 144            | 129,622          | 125,254                          |
| 1955                        | 21,670                 | 7,983              | 46,476         | 6,166                 | 2,360              | 2,989          | ---            | 28,616         | 7,856          | 473            | 3,870                      | 139            | 130,254          | 126,245                          |
| 1956                        | 20,460                 | 8,262              | 44,440         | 6,314                 | 2,062              | 3,278          | ---            | 28,672         | 7,997          | 485            | 3,539                      | 135            | 127,087          | 123,413                          |
| 1957                        | 20,680                 | 8,503              | 43,976         | 6,341                 | 2,174              | 3,802          | ---            | 28,261         | 7,901          | 516            | 3,317                      | 135            | 127,369          | 123,917                          |
| 1958                        | 22,380                 | 9,781              | 44,934         | 6,626                 | 1,983              | 4,034          | ---            | 28,101         | 8,261          | 563            | 3,078                      | 139            | 132,243          | 129,026                          |
| 1959                        | 22,220                 | 11,291             | 44,676         | 6,505                 | 1,742              | 4,212          | ---            | 28,157         | 8,069          | 583            | 2,969                      | 142            | 132,504          | 129,393                          |
| 1960                        | 21,670                 | 11,799             | 45,496         | 6,536                 | 1,922              | 4,785          | ---            | 28,603         | 7,960          | 603            | 2,969                      | 142            | 135,026          | 131,915                          |
| 1961                        | 22,110                 | 11,927             | 46,998         | 6,139                 | 1,675              | 4,839          | ---            | 28,953         | 8,172          | 636            | 2,969                      | 142            | 136,899          | 133,788                          |
| 1962                        | 22,660                 | 11,549             | 48,286         | 5,908                 | 1,763              | 5,159          | ---            | 29,094         | 8,255          | 638            | 2,969                      | 142            | 140,587          | 137,476                          |

1/ Includes grain-fattened cattle 1910 to 1928.

Table 21.—Percentage of livestock-production units based on all feed, various types of livestock production, specified periods, 1910-62 1/

| Period    | Live weight production |                    |         |                       |                    |          |         | Milk    | Eggs    | Goats   | Horses<br>and<br>mules | Total   |
|-----------|------------------------|--------------------|---------|-----------------------|--------------------|----------|---------|---------|---------|---------|------------------------|---------|
|           | Cattle                 |                    |         | Sheep<br>and<br>lambs | Poultry            |          |         |         |         |         |                        |         |
|           | Hogs                   | Grain-<br>fattened | Other   |                       | Chickens<br>raised | Broilers | Turkeys |         |         |         |                        |         |
|           | Percent                | Percent            | Percent | Percent               | Percent            | Percent  | Percent | Percent | Percent | Percent | Percent                | Percent |
| 1910-1914 | 10.1                   | ---                | 30.4    | 4.8                   | 2.6                | ---      | ---     | 16.9    | 3.9     | ---     | 26.3                   | 100     |
| 1915-1919 | 10.1                   | 9.2                | 29.4    | 5.9                   | 2.9                | ---      | 0.1     | 20.8    | 4.7     | 0.5     | 22.4                   | 100     |
| 1920-1924 | 10.0                   | 2.7                | 29.3    | 7.5                   | 2.4                | ---      | .5      | 23.5    | 4.7     | .6      | 16.2                   | 100     |
| 1925-1929 | 10.5                   | 3.6                | 28.4    | 6.0                   | 3.1                | .6       | .7      | 22.9    | 6.0     | .5      | 9.7                    | 100     |
| 1930-1934 | 10.8                   | 6.1                | 35.1    | 4.8                   | 1.9                | 2.2      | 1.2     | 21.8    | 6.1     | .4      | 3.6                    | 100     |
| 1935-1939 | 10.2                   | 9.1                | 34.1    | 6.5                   | 1.3                | 3.6      | 1.6     | 21.0    | 5.9     | .4      | 2.3                    | 100     |

1/ Computed from table 20.



Table 22.--Index numbers of livestock-production units, all livestock and livestock products, animal units fed, and feed consumed by livestock, 1910-62 <sup>1/</sup>

| Year<br>beginning<br>Oct. 1                   | Livestock-production units<br>1957-59=100 |                                       | All<br>livestock<br>and<br>livestock<br>products <sup>4/</sup><br>1957-59=100 | Animal units fed<br>1957-59=100 |                      | Feed consumed<br>1957-59=100       |                                  |
|---|---|---------------------------------------|---|---------------------------------|----------------------|------------------------------------|----------------------------------|
|   | Based on<br>concentrates<br><sup>2/</sup> | Based on<br>all feed<br><sup>3/</sup> |   | Based on<br>concentrates        | Based on<br>all feed | Grain and<br>other<br>concentrates | All feed<br>including<br>pasture |
|   |   |                                       |   |                                 |                      |                                    |                                  |
| 1910-----                                     | 52  | 51                                    | 50  | 68                              | 69                   | 49                                 | 54                               |
| 1911-----                                     | 50  | 52                                    | 50  | 67                              | 68                   | 46                                 | 55                               |
| 1912-----                                     | 50  | 54                                    | 52  | 67                              | 68                   | 51                                 | 57                               |
| 1913-----                                     | 52  | 56                                    | 53  | 69                              | 70                   | 46                                 | 56                               |
| 1914-----                                     | 54  | 57                                    | 55  | 71                              | 72                   | 48                                 | 62                               |
| 1915-----                                     | 54  | 58                                    | 54  | 74                              | 75                   | 53                                 | 64                               |
| 1916-----                                     | 54  | 59                                    | 54  | 72                              | 76                   | 47                                 | 61                               |
| 1917-----                                     | 56  | 59                                    | 56  | 74                              | 78                   | 53                                 | 64                               |
| 1918-----                                     | 55  | 56                                    | 54  | 76                              | 79                   | 51                                 | 67                               |
| 1919-----                                     | 53  | 53                                    | 52  | 73                              | 77                   | 51                                 | 66                               |
| 1920-----                                     | 55  | 55                                    | 54  | 72                              | 76                   | 55                                 | 65                               |
| 1921-----                                     | 60  | 58                                    | 58  | 76                              | 77                   | 55                                 | 65                               |
| 1922-----                                     | 63  | 60                                    | 60  | 81                              | 78                   | 56                                 | 65                               |
| 1923-----                                     | 61  | 61                                    | 59  | 81                              | 77                   | 57                                 | 64                               |
| 1924-----                                     | 59  | 60                                    | 58  | 78                              | 75                   | 51                                 | 59                               |
| 1925-----                                     | 60  | 61                                    | 60  | 77                              | 73                   | 57                                 | 61                               |
| 1926-----                                     | 62  | 61                                    | 62  | 80                              | 73                   | 57                                 | 61                               |
| 1927-----                                     | 64  | 63                                    | 62  | 81                              | 74                   | 59                                 | 62                               |
| 1928-----                                     | 65  | 64                                    | 63  | 81                              | 75                   | 59                                 | 62                               |
| 1929-----                                     | 64  | 65                                    | 64  | 82                              | 77                   | 58                                 | 58                               |
| 1930-----                                     | 64  | 66                                    | 65  | 82                              | 78                   | 54                                 | 58                               |
| 1931-----                                     | 66  | 68                                    | 66  | 84                              | 81                   | 61                                 | 63                               |
| 1932-----                                     | 67  | 69                                    | 67  | 87                              | 85                   | 65                                 | 64                               |
| 1933-----                                     | 62  | 67                                    | 61  | 83                              | 86                   | 56                                 | 58                               |
| 1934-----                                     | 53  | 61                                    | 59  | 69                              | 77                   | 42                                 | 56                               |
| 1935-----                                     | 58  | 63                                    | 63  | 75                              | 78                   | 53                                 | 57                               |
| 1936-----                                     | 59  | 64                                    | 62  | 74                              | 77                   | 47                                 | 57                               |
| 1937-----                                     | 64  | 67                                    | 65  | 75                              | 76                   | 58                                 | 64                               |
| 1938-----                                     | 68  | 70                                    | 70  | 82                              | 80                   | 61                                 | 63                               |
| 1939-----                                     | 72  | 73                                    | 71  | 87                              | 83                   | 64                                 | 67                               |
| 1940-----                                     | 73  | 76                                    | 75  | 87                              | 85                   | 69                                 | 72                               |
| 1941-----                                     | 82  | 83                                    | 84  | 94                              | 91                   | 76                                 | 80                               |
| 1942-----                                     | 94  | 89                                    | 91  | 110                             | 100                  | 93                                 | 88                               |
| 1943-----                                     | 92  | 88                                    | 86  | 111                             | 102                  | 92                                 | 89                               |
| 1944-----                                     | 85  | 85                                    | 86  | 98                              | 97                   | 84                                 | 87                               |
| 1945-----                                     | 83  | 83                                    | 83  | 96                              | 94                   | 86                                 | 84                               |
| 1946-----                                     | 82  | 82                                    | 82  | 92                              | 90                   | 80                                 | 81                               |
| 1947-----                                     | 80  | 79                                    | 80  | 88                              | 87                   | 73                                 | 76                               |
| 1948-----                                     | 83  | 81                                    | 85  | 92                              | 87                   | 79                                 | 78                               |
| 1949-----                                     | 87  | 85                                    | 88  | 96                              | 89                   | 84                                 | 81                               |
| 1950-----                                     | 91  | 89                                    | 92  | 99                              | 93                   | 88                                 | 85                               |
| 1951-----                                     | 91  | 91                                    | 92  | 99                              | 97                   | 90                                 | 88                               |
| 1952-----                                     | 89  | 95                                    | 93  | 95                              | 98                   | 82                                 | 86                               |
| 1953-----                                     | 89  | 96                                    | 96  | 94                              | 99                   | 84                                 | 87                               |
| 1954-----                                     | 94  | 98                                    | 99  | 97                              | 101                  | 84                                 | 89                               |
| 1955-----                                     | 96  | 99                                    | 99  | 100                             | 102                  | 89                                 | 90                               |
| 1956-----                                     | 94  | 97                                    | 97  | 97                              | 99                   | 88                                 | 93                               |
| 1957-----                                     | 96  | 97                                    | 99  | 97                              | 97                   | 93                                 | 97                               |
| 1958-----                                     | 102                                       | 101                                   | 104   | 102                             | 101                  | 102                                | 100                              |
| 1959-----                                     | 102                                       | 102                                   | 102   | 101                             | 102                  | 105                                | 103                              |
| 1960-----                                     | 104                                       | 104                                   | 106   | 102                             | 103                  | 109                                | 105                              |
| 1961-----                                     | 105                                       | 105                                   | 107   | 103                             | 104                  | 111                                | 107                              |
| 1962-----                                     | 109                                       | 108                                   | <sup>5/</sup>   | 106                             | 107                  | 114                                | 109                              |
|   | <u>Percent</u>                            | <u>Percent</u>                        | <u>Percent</u>  | <u>Percent</u>                  | <u>Percent</u>       | <u>Percent</u>                     | <u>Percent</u>                   |
| Percentage in-<br>crease 1910 to<br>1962----- | 110                                       | 112                                   | <sup>5/</sup>   | 56                              | 55                   | 133                                | 102                              |

<sup>1/</sup> Excludes horses and mules and livestock not on farms.

<sup>2/</sup> Weighted by grain and other concentrates consumed.

<sup>3/</sup> Weighted by all feed consumed.

<sup>4/</sup> Weighted by the value of production. For calendar year beginning Jan. 1 after year indicated in stub. See Changes in Farm Production and Efficiency, U. S. Dept. Agr. Statis. Bul. 233, table 1.

<sup>5/</sup> Data not yet available.

Table 23.--Supply of concentrates, concentrates fed, livestock-production units, and amount fed per livestock-production unit, 1940-62

| Year<br>beginning<br>Oct. 1 | Supply of<br>concentrates<br>available <u>1/</u> | Total<br>concentrates<br>fed <u>1/</u> | Livestock-production<br>units based on<br>concentrates | Concentrates<br>fed per<br>unit |
|-----------------------------|--|--|--|---------------------------------|
|                             | Million<br>tons                                  | Million<br>tons                        | Million<br>units                                       | Tons                            |
| 1940-----                   | 139.1  | 106.7                                  | 155.9  | 0.68                            |
| 1941-----                   | 149.0  | 116.9                                  | 172.0  | .68                             |
| 1942-----                   | 171.1  | 140.8                                  | 194.4  | .72                             |
| 1943-----                   | 163.7  | 137.9                                  | 190.8  | .72                             |
| 1944-----                   | 155.9  | 126.7                                  | 176.0  | .72                             |
| 1945-----                   | 152.1  | 130.2                                  | 171.8  | .76                             |
| 1946-----                   | 154.3  | 119.3                                  | 167.8  | .71                             |
| 1947-----                   | 130.0  | 107.7                                  | 163.6  | .66                             |
| 1948-----                   | 162.9  | 115.9                                  | 168.4  | .69                             |
| 1949-----                   | 171.5  | 122.5                                  | 175.3  | .70                             |
| 1950-----                   | 174.4  | 126.1                                  | 181.5  | .69                             |
| 1951-----                   | 165.5  | 128.6                                  | 181.1  | .71                             |
| 1952-----                   | 162.7  | 117.6                                  | 176.4  | .67                             |
| 1953-----                   | 166.5  | 119.9                                  | 174.7  | .69                             |
| 1954-----                   | 175.4  | 119.8                                  | 183.4  | .65                             |
| 1955-----                   | 190.5  | 125.6                                  | 187.7  | .67                             |
| 1956-----                   | 193.5  | 123.6                                  | 184.1  | .67                             |
| 1957-----                   | 212.6  | 132.1                                  | 186.5  | .71                             |
| 1958-----                   | 235.2  | 143.1                                  | 198.2  | .72                             |
| 1959-----                   | 249.7  | 148.4                                  | 198.7  | .75                             |
| 1960-----                   | 263.2  | 153.0                                  | 202.7  | .75                             |
| 1961-----                   | 258.5  | 155.2                                  | 204.7  | .76                             |
| 1962 <u>2/</u> -----        | 248.5  | 158.9                                  | 211.3  | .75                             |

1/ Includes seeds, skim milk, and corn hogged-off, but excludes corn in silage.

2/ Preliminary.

Table 24.--Feed consumed per livestock-production unit, 1910-62

| Year<br>beginning<br>Oct. 1 | All feed<br>consumed<br>1/ | Livestock-<br>production<br>units | Feed per livestock-production unit |                            |
|-----------------------------|----------------------------|-----------------------------------|------------------------------------|----------------------------|
|                             |                            |                                   | Quantity                           | Index no.<br>(1957-59=100) |
|                             | Mil. tons                  | Mil. units                        | Tons                               |                            |
| 1910-----                   | 173.7                      | 64.6                              | 2.69                               | 106                        |
| 1911-----                   | 178.9                      | 66.5                              | 2.69                               | 106                        |
| 1912-----                   | 182.4                      | 69.0                              | 2.64                               | 104                        |
| 1913-----                   | 181.1                      | 71.5                              | 2.53                               | 100                        |
| 1914-----                   | 201.0                      | 72.9                              | 2.76                               | 109                        |
| 1915-----                   | 206.2                      | 73.7                              | 2.80                               | 111                        |
| 1916-----                   | 198.0                      | 74.8                              | 2.65                               | 105                        |
| 1917-----                   | 207.2                      | 75.5                              | 2.74                               | 108                        |
| 1918-----                   | 215.8                      | 71.5                              | 3.02                               | 119                        |
| 1919-----                   | 211.3                      | 68.1                              | 3.10                               | 123                        |
| 1920-----                   | 211.3                      | 69.9                              | 3.02                               | 119                        |
| 1921-----                   | 210.4                      | 73.9                              | 2.85                               | 113                        |
| 1922-----                   | 211.0                      | 76.6                              | 2.75                               | 109                        |
| 1923-----                   | 207.5                      | 77.5                              | 2.68                               | 106                        |
| 1924-----                   | 190.0                      | 76.6                              | 2.48                               | 98                         |
| 1925-----                   | 197.4                      | 77.2                              | 2.56                               | 101                        |
| 1926-----                   | 198.1                      | 78.2                              | 2.53                               | 100                        |
| 1927-----                   | 198.8                      | 80.0                              | 2.48                               | 98                         |
| 1928-----                   | 200.7                      | 81.5                              | 2.46                               | 97                         |
| 1929-----                   | 188.2                      | 82.4                              | 2.28                               | 90                         |
| 1930-----                   | 186.2                      | 83.9                              | 2.22                               | 88                         |
| 1931-----                   | 203.5                      | 86.1                              | 2.36                               | 93                         |
| 1932-----                   | 207.9                      | 88.5                              | 2.35                               | 93                         |
| 1933-----                   | 185.9                      | 84.9                              | 2.19                               | 87                         |
| 1934-----                   | 182.2                      | 77.9                              | 2.34                               | 92                         |
| 1935-----                   | 183.5                      | 80.6                              | 2.28                               | 90                         |
| 1936-----                   | 183.0                      | 81.4                              | 2.25                               | 89                         |
| 1937-----                   | 205.5                      | 85.0                              | 2.42                               | 96                         |
| 1938-----                   | 204.2                      | 88.8                              | 2.30                               | 91                         |
| 1939-----                   | 217.0                      | 92.9                              | 2.34                               | 92                         |
| 1940-----                   | 233.8                      | 96.8                              | 2.42                               | 96                         |
| 1941-----                   | 259.2                      | 105.4                             | 2.46                               | 97                         |
| 1942-----                   | 285.0                      | 113.1                             | 2.52                               | 100                        |
| 1943-----                   | 286.7                      | 112.6                             | 2.55                               | 101                        |
| 1944-----                   | 282.2                      | 108.4                             | 2.60                               | 103                        |
| 1945-----                   | 272.3                      | 105.6                             | 2.58                               | 102                        |
| 1946-----                   | 261.5                      | 103.9                             | 2.52                               | 100                        |
| 1947-----                   | 243.8                      | 100.5                             | 2.43                               | 96                         |
| 1948-----                   | 252.6                      | 102.6                             | 2.46                               | 97                         |
| 1949-----                   | 261.9                      | 108.1                             | 2.42                               | 96                         |
| 1950-----                   | 275.2                      | 113.5                             | 2.42                               | 96                         |
| 1951-----                   | 283.0                      | 116.5                             | 2.43                               | 96                         |
| 1952-----                   | 276.4                      | 120.6                             | 2.29                               | 90                         |
| 1953-----                   | 280.9                      | 122.2                             | 2.30                               | 91                         |
| 1954-----                   | 286.2                      | 125.3                             | 2.28                               | 90                         |
| 1955-----                   | 290.0                      | 126.2                             | 2.30                               | 91                         |
| 1956-----                   | 298.8                      | 123.4                             | 2.42                               | 96                         |
| 1957-----                   | 312.9                      | 123.9                             | 2.53                               | 100                        |
| 1958-----                   | 321.8                      | 129.0                             | 2.49                               | 98                         |
| 1959-----                   | 332.9                      | 129.4                             | 2.57                               | 102                        |
| 1960-----                   | 337.4                      | 131.9                             | 2.56                               | 101                        |
| 1961-----                   | 344.1                      | 133.8                             | 2.57                               | 102                        |
| 1962-----                   | 351.7                      | 137.5                             | 2.56                               | 101                        |

1/ Excludes feed consumed by horses and mules and livestock not on farms. Includes concentrates, harvested roughages, and pasture.

Table 25.--High-protein-consuming animal units, high-protein feeds fed, and amount fed per animal unit, 1940-63 1/

| Year<br>beginning<br>Oct. 1 | Dairy<br>cattle<br>2/ | Beef<br>cattle | Sheep          | Poultry        | Hogs           | Total<br>animal<br>units | High-<br>protein<br>feeds<br>available<br>for feed 3/ | Quantity<br>available<br>per<br>animal<br>unit |
|-----------------------------|-----------------------|----------------|----------------|----------------|----------------|--------------------------|---|--|
|                             | 1,000<br>units        | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units | 1,000<br>units           | 1,000<br>tons   | Pounds   |
| 1940-----                   | 28,833                | 13,243         | 3,276          | 56,170         | 24,175         | 125,697                  | 6,930   | 110  |
| 1941-----                   | 29,848                | 13,896         | 3,425          | 63,042         | 27,422         | 137,633                  | 7,296   | 106  |
| 1942-----                   | 30,831                | 14,975         | 3,382          | 72,732         | 33,637         | 155,557                  | 8,584   | 110  |
| 1943-----                   | 31,526                | 14,513         | 3,125          | 71,924         | 34,217         | 155,305                  | 8,777   | 113  |
| 1944-----                   | 31,476                | 15,430         | 2,954          | 70,256         | 25,787         | 145,903                  | 8,728   | 120  |
| 1945-----                   | 29,924                | 14,881         | 2,743          | 65,644         | 26,305         | 139,497                  | 8,083   | 116  |
| 1946-----                   | 29,186                | 15,002         | 2,393          | 61,196         | 25,064         | 132,841                  | 8,279   | 125  |
| 1947-----                   | 27,870                | 13,697         | 2,158          | 57,796         | 24,983         | 126,504                  | 8,481   | 134  |
| 1948-----                   | 27,065                | 15,287         | 1,908          | 60,310         | 26,372         | 130,942                  | 9,605   | 147  |
| 1949-----                   | 27,097                | 15,114         | 1,817          | 61,722         | 28,405         | 134,155                  | 10,203  | 152  |
| 1950-----                   | 26,864                | 16,017         | 1,831          | 61,656         | 30,001         | 136,369                  | 11,337  | 166  |
| 1951-----                   | 26,441                | 17,790         | 1,961          | 61,294         | 29,540         | 137,026                  | 11,678  | 170  |
| 1952-----                   | 26,988                | 20,245         | 1,985          | 59,048         | 25,504         | 133,770                  | 11,509  | 172  |
| 1953-----                   | 27,299                | 19,601         | 1,954          | 60,092         | 24,596         | 133,542                  | 11,636  | 174  |
| 1954-----                   | 26,753                | 20,744         | 1,982          | 58,278         | 27,252         | 135,009                  | 11,593  | 172  |
| 1955-----                   | 26,042                | 21,094         | 1,944          | 61,168         | 28,200         | 138,448                  | 12,601  | 182  |
| 1956-----                   | 25,365                | 21,195         | 1,922          | 61,410         | 26,701         | 136,593                  | 13,212  | 193  |
| 1957-----                   | 24,220                | 20,684         | 1,925          | 62,554         | 26,453         | 135,836                  | 13,813  | 203  |
| 1958-----                   | 23,045                | 22,647         | 2,035          | 63,640         | 29,388         | 140,755                  | 15,102  | 215  |
| 1959-----                   | 22,384                | 25,133         | 2,047          | 61,780         | 28,282         | 139,626                  | 14,730  | 211  |
| 1960-----                   | 22,209                | 26,334         | 2,047          | 64,920         | 27,445         | 142,955                  | 15,486  | 217  |
| 1961 4/-----                | 21,956                | 27,400         | 1,949          | 64,012         | 28,037         | 143,354                  | 16,143  | 225  |
| 1962 4/-----                | 21,453                | 30,072         | 1,872          | 64,318         | 28,603         | 146,318                  | 16,750  | 229  |
| 1963 5/-----                | 20,841                | 31,896         | 1,841          | 65,304         | 28,362         | 148,244                  | 6/  | 6/   |

1/ The following factors were applied to grain-consuming animal units (base period 1955-59) to calculate the high-protein-consuming animal units: Dairy cattle, 1.0; beef cattle, 1.3; sheep, 2.4; poultry, 2.0; and hogs, 0.6.

2/ Includes dairy bulls. 3/ In terms of 44 percent protein soybean meal equivalent. 4/ Preliminary.

5/ Estimated, based on conditions in Oct. 1963. 6/ Not yet available.

Table 26.--High-protein-consuming animal units: Percentage from various kinds of livestock, 1940-1963

| Year<br>beginning<br>Oct. 1 | Dairy<br>cattle | Beef<br>cattle | Sheep   | Poultry | Hogs    | Total   |
|-----------------------------|-----------------|----------------|---------|---------|---------|---------|
|                             | Percent         | Percent        | Percent | Percent | Percent | Percent |
| 1940-----                   | 22.9            | 10.5           | 2.6     | 44.8    | 19.2    | 100.0   |
| 1941-----                   | 21.7            | 10.1           | 2.5     | 45.8    | 19.9    | 100.0   |
| 1942-----                   | 19.8            | 9.6            | 2.2     | 46.8    | 21.6    | 100.0   |
| 1943-----                   | 20.3            | 9.3            | 2.0     | 46.4    | 22.0    | 100.0   |
| 1944-----                   | 21.6            | 10.6           | 2.0     | 48.1    | 17.7    | 100.0   |
| 1945-----                   | 21.5            | 10.7           | 2.0     | 46.9    | 18.9    | 100.0   |
| 1946-----                   | 22.0            | 11.3           | 1.8     | 46.0    | 18.9    | 100.0   |
| 1947-----                   | 22.0            | 10.8           | 1.7     | 45.8    | 19.7    | 100.0   |
| 1948-----                   | 20.7            | 11.7           | 1.5     | 46.0    | 20.1    | 100.0   |
| 1949-----                   | 20.2            | 11.3           | 1.4     | 46.0    | 21.1    | 100.0   |
| 1950-----                   | 19.7            | 11.7           | 1.3     | 45.3    | 22.0    | 100.0   |
| 1951-----                   | 19.3            | 13.0           | 1.4     | 44.7    | 21.6    | 100.0   |
| 1952-----                   | 20.2            | 15.1           | 1.5     | 44.1    | 19.1    | 100.0   |
| 1953-----                   | 20.4            | 14.7           | 1.5     | 45.0    | 18.4    | 100.0   |
| 1954-----                   | 19.7            | 15.4           | 1.6     | 43.1    | 20.2    | 100.0   |
| 1955-----                   | 18.8            | 15.2           | 1.4     | 44.2    | 20.4    | 100.0   |
| 1956-----                   | 18.6            | 15.5           | 1.4     | 45.0    | 19.5    | 100.0   |
| 1957-----                   | 17.8            | 15.2           | 1.4     | 46.1    | 19.5    | 100.0   |
| 1958-----                   | 16.4            | 16.1           | 1.4     | 45.2    | 20.9    | 100.0   |
| 1959-----                   | 16.0            | 18.0           | 1.5     | 44.2    | 20.3    | 100.0   |
| 1960-----                   | 15.5            | 18.4           | 1.4     | 45.5    | 19.2    | 100.0   |
| 1961-----                   | 15.3            | 19.1           | 1.4     | 44.6    | 19.6    | 100.0   |
| 1962-----                   | 14.7            | 20.6           | 1.3     | 44.0    | 19.4    | 100.0   |
| 1963-----                   | 14.1            | 21.5           | 1.2     | 44.1    | 19.1    | 100.0   |

Table 27.--Consumption of feed, by kinds of livestock, 1960-63

| Year<br>beginning<br>Oct. 1 | Concentrates       |                                 |                               |                               |  |               | Roughages     |                               | All<br>feed<br>6/<br>tons |
|-----------------------------|--------------------|---------------------------------|-------------------------------|-------------------------------|--|---------------|---------------|-------------------------------|---------------------------|
|                             | Corn<br>1/<br>tons | Sorghum<br>grains<br>2/<br>tons | Other<br>grains<br>2/<br>tons | High<br>protein<br>3/<br>tons | Other<br>byproduct<br>feeds 4/<br>tons | Total<br>tons | Hay<br>tons   | Other<br>forage<br>5/<br>tons |                           |
|                             | 1,000<br>tons      | 1,000<br>tons                   | 1,000<br>tons                 | 1,000<br>tons                 | 1,000<br>tons                          | 1,000<br>tons | 1,000<br>tons | 1,000<br>tons                 | 1,000<br>tons             |
| ALL LIVESTOCK               |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 90,024             | 11,629                          | 23,632                        | 16,056                        | 12,104                                 | 153,445       | 112,063       | 109,540                       | 375,048                   |
| 1961                        | 93,866             | 11,500                          | 21,657                        | 16,786                        | 12,074                                 | 155,883       | 122,079       | 102,745                       | 380,707                   |
| 1962                        | 95,531             | 12,200                          | 22,000                        | 17,325                        | 12,002                                 | 159,058       | 116,074       | 114,258                       | 389,390                   |
| 1963                        | 95,624             | 14,200                          | 21,100                        | 17,900                        | 12,002                                 | 160,826       | 7/            | 7/                            | 7/                        |
| MILK COWS                   |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 11,024             | 802                             | 6,034                         | 2,623                         | 2,865                                  | 23,348        | 48,228        | 52,251                        | 123,827                   |
| 1961                        | 11,490             | 875                             | 5,866                         | 2,407                         | 2,956                                  | 23,594        | 49,158        | 55,398                        | 128,150                   |
| 1962                        | 12,532             | 1,154                           | 6,198                         | 2,801                         | 3,045                                  | 25,730        | 54,261        | 59,999                        | 139,990                   |
| 1963                        | 12,870             | 1,185                           | 6,365                         | 2,877                         | 3,125                                  | 26,423        | 7/            | 7/                            | 7/                        |
| OTHER DAIRY CATTLE          |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 1,200              | 220                             | 1,004                         | 500                           | 593                                    | 3,517         | 16,688        | 8,330                         | 28,535                    |
| 1961                        | 1,293              | 240                             | 963                           | 463                           | 645                                    | 3,604         | 18,856        | 8,023                         | 30,483                    |
| 1962                        | 1,276              | 332                             | 855                           | 456                           | 647                                    | 3,566         | 17,923        | 8,947                         | 30,436                    |
| 1963                        | 1,276              | 333                             | 857                           | 404                           | 624                                    | 3,494         | 7/            | 7/                            | 7/                        |
| CATTLE ON FEED              |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 8,983              | 2,254                           | 2,049                         | 1,330                         | 1,090                                  | 15,706        | 9,235         | 10,415                        | 35,356                    |
| 1961                        | 11,680             | 2,757                           | 1,968                         | 1,748                         | 1,202                                  | 19,355        | 10,251        | 11,789                        | 41,395                    |
| 1962                        | 12,452             | 2,736                           | 2,191                         | 1,863                         | 1,339                                  | 20,581        | 8,363         | 13,531                        | 42,475                    |
| 1963                        | 11,938             | 3,842                           | 2,277                         | 2,103                         | 1,224                                  | 21,384        | 7/            | 7/                            | 7/                        |
| OTHER BEEF CATTLE           |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 3,065              | 637                             | 1,285                         | 1,204                         | 1,395                                  | 7,586         | 32,032        | 33,229                        | 72,847                    |
| 1961                        | 2,833              | 693                             | 1,233                         | 1,561                         | 1,480                                  | 7,800         | 37,536        | 23,499                        | 68,835                    |
| 1962                        | 2,795              | 984                             | 1,016                         | 1,439                         | 1,471                                  | 7,705         | 29,242        | 27,591                        | 64,538                    |
| 1963                        | 2,834              | 998                             | 1,030                         | 1,460                         | 1,490                                  | 7,812         | 7/            | 7/                            | 7/                        |
| SHEEP                       |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 400                | 102                             | 215                           | 235                           | ---                                    | 952           | 1,680         | 2,365                         | 4,997                     |
| 1961                        | 404                | 112                             | 206                           | 222                           | ---                                    | 944           | 1,722         | 2,011                         | 4,677                     |
| 1962                        | 454                | 117                             | 220                           | 255                           | ---                                    | 1,046         | 1,559         | 1,950                         | 4,555                     |
| 1963                        | 536                | 131                             | 252                           | 306                           | ---                                    | 1,225         | 7/            | 7/                            | 7/                        |
| HENS AND PULLETS            |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 5,044              | 1,803                           | 3,430                         | 2,282                         | 2,470                                  | 15,029        | ---           | ---                           | 15,029                    |
| 1961                        | 5,597              | 1,966                           | 3,312                         | 2,210                         | 2,449                                  | 15,534        | ---           | ---                           | 15,534                    |
| 1962                        | 5,428              | 2,105                           | 3,108                         | 2,192                         | 2,215                                  | 15,048        | ---           | ---                           | 15,048                    |
| 1963                        | 5,511              | 2,137                           | 3,156                         | 2,191                         | 2,213                                  | 15,208        | ---           | ---                           | 15,208                    |
| CHICKENS RAISED             |                    |                                 |                               |                               |  |               |               |                               |                           |
| 1960                        | 1,160              | 900                             | 1,185                         | 707                           | 275                                    | 4,227         | ---           | ---                           | 4,227                     |
| 1961                        | 1,012              | 982                             | 1,145                         | 694                           | 272                                    | 4,105         | ---           | ---                           | 4,105                     |
| 1962                        | 983                | 953                             | 1,111                         | 673                           | 260                                    | 3,980         | ---           | ---                           | 3,980                     |
| 1963                        | 928                | 899                             | 1,049                         | 635                           | 247                                    | 3,758         | ---           | ---                           | 3,758                     |

See footnote at end of table.

Table 27.—Consumption of feed, by kinds of livestock, 1960-63--Continued

| Year<br>beginning<br>Oct. 1 | Concentrates  |                   |                       |                       |                                |               | Roughages     |                       | All<br>feed<br>6/ |
|-----------------------------|---------------|-------------------|-----------------------|-----------------------|--------------------------------|---------------|---------------|-----------------------|-------------------|
|                             | Corn<br>1/    | Sorghum<br>grains | Other<br>grains<br>2/ | High<br>protein<br>3/ | Other<br>byproduct<br>feeds 4/ | Total         | Hay           | Other<br>forage<br>5/ |                   |
|                             | 1,000<br>tons | 1,000<br>tons     | 1,000<br>tons         | 1,000<br>tons         | 1,000<br>tons                  | 1,000<br>tons | 1,000<br>tons | 1,000<br>tons         |                   |
| BROILERS 8/                 |               |                   |                       |                       |                                |               |               |                       |                   |
| 1960-----                   | 4,819         | 532               | 69                    | 2,635                 | 453                            | 8,508         | ---           | ---                   | 8,508             |
| 1961-----                   | 5,278         | 580               | 69                    | 2,649                 | 455                            | 9,031         | ---           | ---                   | 9,031             |
| 1962-----                   | 5,481         | 604               | 70                    | 2,762                 | 474                            | 9,391         | ---           | ---                   | 9,391             |
| 1963-----                   | 5,618         | 620               | 72                    | 3,001                 | 515                            | 9,826         | ---           | ---                   | 9,826             |
| TURKEYS                     |               |                   |                       |                       |                                |               |               |                       |                   |
| 1960-----                   | 2,177         | 478               | 249                   | 1,062                 | 134                            | 4,100         | ---           | ---                   | 4,100             |
| 1961-----                   | 1,843         | 521               | 244                   | 908                   | 120                            | 3,636         | ---           | ---                   | 3,636             |
| 1962-----                   | 1,862         | 526               | 246                   | 917                   | 121                            | 3,672         | ---           | ---                   | 3,672             |
| 1963-----                   | 1,885         | 532               | 249                   | 928                   | 123                            | 3,717         | ---           | ---                   | 3,717             |
| HOGS                        |               |                   |                       |                       |                                |               |               |                       |                   |
| 1960-----                   | 39,619        | 1,211             | 5,455                 | 3,027                 | 1,493                          | 50,805        | ---           | ---                   | 50,805            |
| 1961-----                   | 44,468        | 1,432             | 4,421                 | 3,449                 | 1,155                          | 54,925        | ---           | ---                   | 54,925            |
| 1962-----                   | 44,582        | 2,064             | 4,323                 | 3,455                 | 997                            | 55,421        | ---           | ---                   | 55,421            |
| 1963-----                   | 44,379        | 2,794             | 3,115                 | 3,441                 | 901                            | 54,630        | ---           | ---                   | 54,630            |
| HORSES AND MULES            |               |                   |                       |                       |                                |               |               |                       |                   |
| 1960-----                   | 908           | 20                | 635                   | ---                   | 132                            | 1,695         | 3,200         | 2,950                 | 7,845             |
| 1961-----                   | 935           | 21                | 609                   | ---                   | 130                            | 1,695         | 3,456         | 2,025                 | 7,176             |
| 1962-----                   | 935           | 21                | 609                   | ---                   | 130                            | 1,695         | 3,456         | 2,240                 | 7,391             |
| 1963-----                   | 935           | 21                | 609                   | ---                   | 130                            | 1,695         | 7/            | 7/                    | 7/                |
| OTHER LIVESTOCK 8/          |               |                   |                       |                       |                                |               |               |                       |                   |
| 1960-----                   | 3,320         | 200               | 1,395                 | 451                   | 1,204                          | 6,570         | 1,000         | ---                   | 7,570             |
| 1961-----                   | 3,326         | 218               | 1,341                 | 475                   | 1,210                          | 6,570         | 1,100         | ---                   | 7,670             |
| 1962-----                   | 3,705         | 235               | 1,335                 | 512                   | 1,303                          | 7,090         | 1,270         | ---                   | 8,360             |
| 1963-----                   | 3,882         | 253               | 1,396                 | 554                   | 1,410                          | 7,495         | 7/            | ---                   | 7/                |
| UNALLOCATED 9/              |               |                   |                       |                       |                                |               |               |                       |                   |
| 1960-----                   | 8,305         | 2,470             | 627                   | ---                   | ---                            | 11,402        | ---           | ---                   | 11,402            |
| 1961-----                   | 3,707         | 1,103             | 280                   | ---                   | ---                            | 5,090         | ---           | ---                   | 5,090             |
| 1962-----                   | 3,046         | 369               | 718                   | ---                   | ---                            | 4,133         | ---           | ---                   | 4,133             |
| 1963-----                   | 3,032         | 455               | 672                   | ---                   | ---                            | 4,159         | ---           | ---                   | 4,159             |

1 Corn hulled-off was added to corn fed as grain in these amounts: 1960, 2,357,000 tons; 1961, 1,965,000 tons; 1962, 1,907,000 tons; 1963, 1,900,000 tons.

2 Includes oats, barley, wheat and rye.

3 Includes oilseed meals, animal proteins, and grain proteins.

4 Includes wheat and rice millfeeds, seeds, skim milk, hominy, and other byproduct feeds.

5 Includes straw, silage, and beet pulp.

6 Excluding pasture.

7 Data not available.

8 Data fed to trailers and other livestock were converted to corn equivalents and added to corn.

9 Probably includes some waste and other losses.

Table 28.--Consumption of feed in feed units, by kinds of livestock, 1960-63 1/

| Year<br>beginning<br>Oct. 1 | Concentrates  |                   |                 |                 |                             |               | Roughages     |                 |               | All<br>feed   |
|-----------------------------|---------------|-------------------|-----------------|-----------------|-----------------------------|---------------|---------------|-----------------|---------------|---------------|
|                             | Corn          | Sorghum<br>grains | Other<br>grains | High<br>protein | Other<br>byproduct<br>feeds | Total         | Hay           | Other<br>forage | Pasture       |               |
|                             | 1,000<br>tons | 1,000<br>tons     | 1,000<br>tons   | 1,000<br>tons   | 1,000<br>tons               | 1,000<br>tons | 1,000<br>tons | 1,000<br>tons   | 1,000<br>tons | 1,000<br>tons |
| ALL LIVESTOCK               |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 90,024        | 11,007            | 21,529          | 28,205          | 11,482                      | 162,247       | 45,811        | 20,909          | 122,627       | 351,594       |
| 1961-----                   | 93,866        | 10,867            | 19,763          | 29,876          | 11,372                      | 165,744       | 49,931        | 18,686          | 123,113       | 357,474       |
| 1962-----                   | 95,531        | 11,535            | 20,040          | 30,895          | 11,344                      | 169,345       | 47,394        | 21,105          | 127,314       | 365,158       |
| 1963-----                   | 95,624        | 13,367            | 19,225          | 32,042          | 11,330                      | 171,588       | 2/            | 2/              | 2/            | 2/            |
| MILK COWS                   |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 11,024        | 802               | 5,536           | 3,874           | 2,546                       | 23,782        | 19,532        | 8,503           | 15,376        | 67,193        |
| 1961-----                   | 11,490        | 875               | 5,388           | 3,564           | 2,636                       | 23,953        | 19,909        | 9,002           | 14,648        | 67,512        |
| 1962-----                   | 12,532        | 1,154             | 5,697           | 4,168           | 2,699                       | 26,250        | 21,976        | 9,739           | 14,594        | 72,559        |
| 1963-----                   | 12,870        | 1,185             | 5,851           | 4,281           | 2,769                       | 26,956        | 2/            | 2/              | 2/            | 2/            |
| OTHER DAIRY CATTLE          |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 1,200         | 220               | 919             | 750             | 933                         | 4,022         | 6,759         | 1,365           | 12,621        | 24,777        |
| 1961-----                   | 1,293         | 240               | 881             | 697             | 1,035                       | 4,146         | 7,637         | 1,308           | 11,897        | 24,988        |
| 1962-----                   | 1,276         | 332               | 784             | 686             | 1,042                       | 4,120         | 7,259         | 1,453           | 11,845        | 24,677        |
| 1963-----                   | 1,276         | 333               | 786             | 608             | 1,023                       | 4,026         | 2/            | 2/              | 2/            | 2/            |
| CATTLE ON FEED              |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 8,983         | 2,074             | 1,801           | 3,290           | 933                         | 17,081        | 3,833         | 1,677           | 2,588         | 25,179        |
| 1961-----                   | 11,680        | 2,536             | 1,730           | 4,280           | 1,029                       | 21,255        | 4,254         | 1,900           | 2,662         | 30,071        |
| 1962-----                   | 12,452        | 2,517             | 1,926           | 4,557           | 1,148                       | 22,600        | 3,471         | 2,183           | 2,974         | 31,228        |
| 1963-----                   | 11,938        | 3,535             | 2,002           | 5,154           | 1,050                       | 23,679        | 2/            | 2/              | 2/            | 2/            |
| OTHER BEEF CATTLE           |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 3,065         | 637               | 1,285           | 1,793           | 1,168                       | 7,948         | 13,293        | 7,832           | 73,815        | 102,888       |
| 1961-----                   | 2,833         | 693               | 1,233           | 2,328           | 1,207                       | 8,294         | 15,577        | 5,322           | 76,286        | 105,479       |
| 1962-----                   | 2,795         | 984               | 1,016           | 2,146           | 1,205                       | 8,146         | 12,135        | 6,513           | 80,576        | 107,370       |
| 1963-----                   | 2,834         | 998               | 1,030           | 2,177           | 1,220                       | 8,259         | 2/            | 2/              | 2/            | 2/            |
| SHEEP AND GOATS             |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 400           | 102               | 179             | 493             | ---                         | 1,174         | 714           | 462             | 11,625        | 13,975        |
| 1961-----                   | 404           | 112               | 172             | 466             | ---                         | 1,154         | 732           | 408             | 11,086        | 13,380        |
| 1962-----                   | 454           | 117               | 182             | 535             | ---                         | 1,288         | 663           | 396             | 10,739        | 13,086        |
| 1963-----                   | 536           | 131               | 209             | 642             | ---                         | 1,518         | 2/            | 2/              | 2/            | 2/            |
| HENS AND PULETS             |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 5,044         | 1,713             | 3,109           | 3,698           | 2,244                       | 15,808        | ---           | ---             | 260           | 16,068        |
| 1961-----                   | 5,537         | 1,868             | 3,005           | 3,595           | 2,223                       | 16,288        | ---           | ---             | 262           | 16,550        |
| 1962-----                   | 5,428         | 2,000             | 2,821           | 3,558           | 2,002                       | 15,809        | ---           | ---             | 260           | 16,069        |
| 1963-----                   | 5,511         | 2,030             | 2,864           | 3,557           | 2,000                       | 15,962        | ---           | ---             | 2/            | 2/            |
| CHICKENS RAISED             |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 4,160         | 855               | 1,086           | 1,199           | 271                         | 4,571         | ---           | ---             | 211           | 4,782         |
| 1961-----                   | 4,614         | 931               | 1,050           | 1,177           | 269                         | 4,441         | ---           | ---             | 192           | 4,633         |
| 1962-----                   | 4,983         | 905               | 1,020           | 1,142           | 252                         | 4,302         | ---           | ---             | 190           | 4,492         |
| 1963-----                   | 4,928         | 854               | 963             | 1,078           | 241                         | 4,064         | ---           | ---             | 2/            | 2/            |

See footnotes at end of table.



Table 28.--Consumption of feed in feed units, by kinds of livestock, 1960-63 1/--Continued

| Year<br>beginning<br>Oct. 1 | Concentrates  |                   |                 |                 |                             |               | Roughages     |                 |               | All<br>feed   |
|-----------------------------|---------------|-------------------|-----------------|-----------------|-----------------------------|---------------|---------------|-----------------|---------------|---------------|
|                             | Corn          | Sorghum<br>grains | Other<br>grains | High<br>protein | Other<br>byproduct<br>feeds | Total         | Hay           | Other<br>forage | Pasture       |               |
|                             | 1,000<br>tons | 1,000<br>tons     | 1,000<br>tons   | 1,000<br>tons   | 1,000<br>tons               | 1,000<br>tons | 1,000<br>tons | 1,000<br>tons   | 1,000<br>tons | 1,000<br>tons |
| BROILERS 3/                 |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 4,819         | 505               | 72              | 4,081           | 385                         | 9,862         | ---           | ---             | ---           | 9,862         |
| 1961-----                   | 5,278         | 551               | 72              | 4,103           | 387                         | 10,391        | ---           | ---             | ---           | 10,391        |
| 1962-----                   | 5,481         | 574               | 74              | 4,294           | 403                         | 10,826        | ---           | ---             | ---           | 10,826        |
| 1963-----                   | 5,618         | 589               | 76              | 4,665           | 438                         | 11,386        | ---           | ---             | ---           | 11,386        |
| TURKEYS                     |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 2,177         | 454               | 233             | 1,718           | 114                         | 4,696         | ---           | ---             | 246           | 4,942         |
| 1961-----                   | 1,843         | 495               | 229             | 1,471           | 102                         | 4,140         | ---           | ---             | 208           | 4,348         |
| 1962-----                   | 1,862         | 500               | 231             | 1,486           | 103                         | 4,182         | ---           | ---             | 212           | 4,394         |
| 1963-----                   | 1,885         | 505               | 234             | 1,504           | 105                         | 4,233         | ---           | ---             | 2/            | 2/            |
| HOGS                        |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 39,619        | 1,090             | 4,964           | 6,597           | 1,719                       | 53,989        | ---           | ---             | 2,561         | 56,550        |
| 1961-----                   | 44,468        | 1,289             | 4,047           | 7,445           | 1,312                       | 58,561        | ---           | ---             | 2,591         | 61,152        |
| 1962-----                   | 44,582        | 1,858             | 3,939           | 7,515           | 1,235                       | 59,129        | ---           | ---             | 2,643         | 61,772        |
| 1963-----                   | 44,379        | 2,515             | 2,850           | 7,501           | 1,135                       | 58,380        | ---           | ---             | 2/            | 2/            |
| HORSES AND MULES            |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 908           | 19                | 572             | ---             | 116                         | 1,615         | 1,280         | 1,070           | 3,314         | 7,279         |
| 1961-----                   | 935           | 20                | 549             | ---             | 114                         | 1,618         | 1,382         | 746             | 3,281         | 7,027         |
| 1962-----                   | 935           | 20                | 549             | ---             | 114                         | 1,618         | 1,382         | 821             | 3,281         | 7,102         |
| 1963-----                   | 935           | 20                | 549             | ---             | 114                         | 1,618         | 2/            | 2/              | 2/            | 2/            |
| OTHER LIVESTOCK 3/          |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 3,320         | 190               | 1,196           | 712             | 1,053                       | 6,471         | 400           | ---             | ---           | 6,871         |
| 1961-----                   | 3,326         | 207               | 1,150           | 750             | 1,058                       | 6,491         | 440           | ---             | ---           | 6,931         |
| 1962-----                   | 3,705         | 223               | 1,149           | 808             | 1,141                       | 7,026         | 508           | ---             | ---           | 7,534         |
| 1963-----                   | 3,882         | 240               | 1,201           | 875             | 1,235                       | 7,433         | 2/            | ---             | ---           | 2/            |
| UNALLOCATED 4/              |               |                   |                 |                 |                             |               |               |                 |               |               |
| 1960-----                   | 8,305         | 2,346             | 577             | ---             | ---                         | 11,228        | ---           | ---             | ---           | 11,228        |
| 1961-----                   | 8,707         | 1,048             | 257             | ---             | ---                         | 5,012         | ---           | ---             | ---           | 5,012         |
| 1962-----                   | 8,046         | 351               | 652             | ---             | ---                         | 4,049         | ---           | ---             | ---           | 4,049         |
| 1963-----                   | 8,032         | 432               | 610             | ---             | ---                         | 4,074         | ---           | ---             | ---           | 4,074         |

1/ See table 27 for feeds included.

2/ Data not available.

3/ See footnote 8, table 27.

4/ See footnote 9, table 27.

For data before 1940, see U. S. Dept. Agr. Prod. Res. Rpt. 21. For data 1940 to 1959 see U. S. Dept. Agr. Prod. Res. Rpt. 29. (In process.)

## APPENDIX

Table A.--Factors for grain-consuming animal units, by States 1/

| State          | Cattle on farms Jan. 1 2/ |                        |         |              |           | Horses and mules on farms Jan. 1 |               | Hogs             |           | Hens                |                     | Chick-ens           |                     | Turkeys             |                     |
|----------------|---------------------------|------------------------|---------|--------------|-----------|----------------------------------|---------------|------------------|-----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                | Milk cows and heifers:    | Beef cows and heifers: | Cattle: | Stock sheep: | on Jan. 1 | 2 years:                         | old and over: | fed during year: | on Jan. 1 | raised during year: | raised during year: | raised during year: | raised during year: | raised during year: | raised during year: |
| Maine          | 1.1                       | 0.4                    | 0.30    | ---          | 0.10      | 0.030                            | 1.5           | 0.2              | 0.70      | 0.070               | 0.020               | 0.07                |                     |                     |                     |
| New Hampshire  | 1.0                       | .4                     | .30     | ---          | .10       | .030                             | 1.3           | .2               | .70       | .070                | .020                | .07                 |                     |                     |                     |
| Vermont        | 1.1                       | .4                     | .30     | ---          | .10       | .030                             | 1.7           | .2               | .70       | .065                | .020                | .07                 |                     |                     |                     |
| Massachusetts  | 1.2                       | .4                     | .30     | ---          | .10       | .030                             | 1.6           | .2               | .50       | .075                | .020                | .07                 |                     |                     |                     |
| Rhode Island   | 1.2                       | .4                     | .30     | ---          | .10       | .030                             | 1.3           | .2               | .70       | .065                | .020                | .07                 |                     |                     |                     |
| Connecticut    | 1.2                       | .4                     | .30     | ---          | .10       | .030                             | 1.3           | .2               | .70       | .070                | .020                | .07                 |                     |                     |                     |
| New York       | 1.3                       | .4                     | .30     | 2.0          | .10       | .040                             | 1.3           | .2               | .70       | .065                | .020                | .07                 |                     |                     |                     |
| New Jersey     | 1.5                       | .4                     | .30     | ---          | .10       | .030                             | 1.9           | .2               | .50       | .070                | .020                | .07                 |                     |                     |                     |
| Pennsylvania   | 1.5                       | .4                     | .30     | 2.2          | .10       | .040                             | 1.9           | .2               | .70       | .065                | .020                | .07                 |                     |                     |                     |
| Delaware       | 1.1                       | .4                     | .30     | ---          | .10       | .040                             | 1.5           | .2               | .70       | .060                | .020                | .07                 |                     |                     |                     |
| Maryland       | 1.2                       | .4                     | .30     | 2.0          | .10       | .040                             | 1.5           | .2               | .70       | .060                | .020                | .07                 |                     |                     |                     |
| Michigan       | 1.0                       | .4                     | .30     | 2.0          | .30       | .050                             | 1.1           | .2               | .70       | .060                | .020                | .07                 |                     |                     |                     |
| Wisconsin      | 1.0                       | .4                     | .30     | 1.9          | .10       | .050                             | 1.1           | .2               | .70       | .060                | .020                | .07                 |                     |                     |                     |
| Minnesota      | .8                        | .4                     | .40     | 1.8          | .20       | .050                             | 1.2           | .2               | .75       | .055                | .020                | .07                 |                     |                     |                     |
| Ohio           | 1.2                       | .5                     | .40     | 2.3          | .30       | .050                             | 1.2           | .2               | .70       | .065                | .020                | .07                 |                     |                     |                     |
| Indiana        | 1.2                       | .4                     | .5      | 2.5          | .40       | .050                             | 1.3           | .2               | .70       | .060                | .020                | .07                 |                     |                     |                     |
| Illinois       | 1.3                       | .4                     | .5      | 2.6          | .40       | .050                             | 1.4           | .2               | .75       | .055                | .020                | .07                 |                     |                     |                     |
| Iowa           | 1.2                       | .5                     | .40     | 2.5          | .30       | .050                             | 1.4           | .2               | .75       | .055                | .020                | .07                 |                     |                     |                     |
| Missouri       | .9                        | .4                     | .30     | 2.1          | .30       | .040                             | 1.2           | .2               | .70       | .050                | .020                | .07                 |                     |                     |                     |
| North Dakota   | .7                        | .3                     | .20     | 1.5          | .10       | .030                             | 1.0           | .2               | .75       | .055                | .020                | .07                 |                     |                     |                     |
| South Dakota   | .6                        | .3                     | .20     | 1.9          | .10       | .020                             | .8            | .2               | .80       | .055                | .020                | .07                 |                     |                     |                     |
| Nebraska       | .9                        | .3                     | .20     | 3.1          | .20       | .030                             | 1.1           | .2               | .80       | .055                | .020                | .07                 |                     |                     |                     |
| Kansas         | .9                        | .3                     | .10     | 2.1          | .10       | .030                             | 1.1           | .2               | .70       | .055                | .020                | .07                 |                     |                     |                     |
| Virginia       | .9                        | .4                     | .20     | 2.0          | .10       | .030                             | 1.4           | .2               | .65       | .060                | .015                | .07                 |                     |                     |                     |
| West Virginia  | .8                        | .4                     | .20     | 2.0          | .10       | .030                             | 1.2           | .2               | .65       | .060                | .015                | .07                 |                     |                     |                     |
| North Carolina | 1.1                       | .3                     | .2      | 2.0          | .20       | .030                             | 1.8           | .2               | .65       | .060                | .015                | .07                 |                     |                     |                     |
| Kentucky       | .9                        | .4                     | .10     | 2.0          | .10       | .030                             | 1.3           | .2               | .65       | .060                | .015                | .07                 |                     |                     |                     |
| Tennessee      | .9                        | .4                     | .2      | 2.0          | .10       | .030                             | 1.6           | .2               | .65       | .050                | .015                | .07                 |                     |                     |                     |
| South Carolina | .9                        | .2                     | .2      | 2.0          | .1        | ---                              | 2.3           | .2               | .60       | .050                | .015                | .07                 |                     |                     |                     |
| Georgia        | .9                        | .2                     | .2      | 2.0          | .1        | ---                              | 2.0           | .2               | .60       | .050                | .015                | .07                 |                     |                     |                     |
| Florida        | 1.5                       | .2                     | .10     | 2.0          | .1        | ---                              | 2.0           | .2               | .50       | .050                | .015                | .07                 |                     |                     |                     |
| Alabama        | .9                        | .2                     | .2      | 2.0          | .1        | ---                              | 2.1           | .2               | .60       | .050                | .015                | .07                 |                     |                     |                     |
| Mississippi    | .8                        | .2                     | .2      | 2.0          | .1        | ---                              | 1.9           | .2               | .55       | .045                | .015                | .07                 |                     |                     |                     |
| Arkansas       | .8                        | .2                     | .2      | 2.0          | .2        | ---                              | 1.5           | .2               | .50       | .045                | .015                | .07                 |                     |                     |                     |
| Louisiana      | .6                        | .2                     | .10     | 2.0          | .10       | ---                              | 1.6           | .2               | .50       | .045                | .015                | .07                 |                     |                     |                     |
| Oklahoma       | .8                        | .2                     | .10     | 1.2          | .10       | .010                             | 1.1           | .2               | .70       | .050                | .015                | .07                 |                     |                     |                     |
| Texas          | .9                        | .2                     | .10     | 1.4          | .10       | .015                             | 1.4           | .2               | .65       | .050                | .015                | .07                 |                     |                     |                     |
| Montana        | .6                        | .2                     | .10     | 1.0          | .10       | .015                             | .4            | ---              | .65       | .050                | .015                | .07                 |                     |                     |                     |
| Idaho          | .7                        | .2                     | .10     | 1.0          | .10       | .015                             | .2            | ---              | .60       | .050                | .015                | .07                 |                     |                     |                     |
| Wyoming        | .6                        | .2                     | .10     | 1.0          | .10       | .015                             | .3            | ---              | .60       | .050                | .015                | .07                 |                     |                     |                     |
| Colorado       | .9                        | .2                     | .10     | 1.3          | .10       | .015                             | .5            | ---              | .70       | .055                | .015                | .07                 |                     |                     |                     |
| New Mexico     | .7                        | .2                     | .01     | 1.0          | .06       | .010                             | .7            | ---              | .60       | .050                | .015                | .07                 |                     |                     |                     |
| Arizona        | .6                        | .2                     | .01     | ---          | .02       | .005                             | .2            | ---              | .55       | .050                | .015                | .08                 |                     |                     |                     |
| Utah           | .7                        | .2                     | .01     | ---          | .03       | .010                             | .3            | ---              | .60       | .06                 | .015                | .07                 |                     |                     |                     |
| Nevada         | .6                        | .2                     | .01     | ---          | .01       | .010                             | .1            | ---              | .60       | .050                | .015                | .07                 |                     |                     |                     |
| Washington     | 1.1                       | .2                     | .10     | ---          | .06       | .015                             | .3            | ---              | .70       | .06                 | .015                | .08                 |                     |                     |                     |
| Oregon         | 1.1                       | .2                     | .10     | ---          | .06       | .015                             | .3            | ---              | .70       | .060                | .015                | .08                 |                     |                     |                     |
| California     | 1.1                       | .2                     | .10     | ---          | .04       | .015                             | .2            | ---              | .65       | .06                 | .015                | .08                 |                     |                     |                     |

1/ The same factor for the factors in this table is the average quantity of grain and other concentrates consumed annually by the average milk cow in the United States during the period 1940-1945. The factors for sheep and lambs in feed, January 1, 1946, and for commercial broilers produced during the year, 0.008 are the same in all states in which these livestock are reported.

2/ The factors for heifers and heifer calves kept for milk include an allowance for dairy bulls. The factors for "all other cattle" include an allowance for beef bulls.

3/ In 1946 the factors used for "cattle on feed" in the Mountain and West Coast States were changed from 0.7 to 1.0 except in Colorado where the factor of 0.9 was changed to 1.3.

4/ See Appendix Table B for the percentages of feed fed to spring pigs after October 1 in each State. Nearly all of the feed for the fall crop of pigs is fed within the feeding year beginning October 1.

5/ Beginning in 1946-47, the factors given in this table were used for heavy turkeys only, and the factor 0.03 was used for light turkeys.

Table B.--Factors for roughage-consuming animal units, by States 1/

| State               | Cattle on farms Jan. 1         |   |                                |                   |  | All other cattle | Horses and mules 2 years old and over |
|---------------------|--------------------------------|---|--------------------------------|-------------------|--|------------------|---------------------------------------|
|                     | Milk cows 2 years old and over | Heifers and heifer calves kept for milk | Beef cows 2 years old and over | Cattle on feed 2/ |  |                  |                                       |
| Maine-----          | 1.1                            | 0.8                                     | 1.0                            | ---               |  | 0.7              | 0.9                                   |
| New Hampshire-----  | 1.1                            | .8                                      | 1.0                            | ---               |  | .7               | .8                                    |
| Vermont-----        | 1.1                            | .8                                      | 1.0                            | ---               |  | .7               | .8                                    |
| Massachusetts-----  | 1.1                            | .8                                      | 1.0                            | ---               |  | .7               | .7                                    |
| Rhode Island-----   | 1.1                            | .8                                      | 1.0                            | ---               |  | .7               | .8                                    |
| Connecticut-----    | 1.1                            | .8                                      | 1.0                            | ---               |  | .7               | .9                                    |
| New York-----       | 1.1                            | .8                                      | 1.0                            | ---               |  | .7               | .8                                    |
| New Jersey-----     | 1.1                            | .8                                      | 1.0                            | ---               |  | .7               | .7                                    |
| Pennsylvania-----   | 1.0                            | .8                                      | 1.0                            | 0.4               |  | .7               | .8                                    |
| Delaware-----       | .9                             | .8                                      | 1.0                            | ---               |  | .7               | .8                                    |
| Maryland-----       | .9                             | .8                                      | 1.0                            | ---               |  | .7               | .7                                    |
| Michigan-----       | 1.0                            | .8                                      | 1.0                            | .4                |  | .7               | .7                                    |
| Wisconsin-----      | 1.1                            | .8                                      | 1.0                            | .4                |  | .7               | .8                                    |
| Minnesota-----      | 1.0                            | .8                                      | 1.0                            | .4                |  | .7               | .8                                    |
| Ohio-----           | 1.0                            | .8                                      | 1.0                            | .4                |  | .8               | .8                                    |
| Indiana-----        | 1.0                            | .8                                      | 1.0                            | .4                |  | .8               | .8                                    |
| Illinois-----       | 1.0                            | .8                                      | 1.0                            | .4                |  | .8               | .8                                    |
| Iowa-----           | 1.0                            | .8                                      | 1.0                            | .4                |  | .8               | .8                                    |
| Missouri-----       | 1.0                            | .8                                      | 1.0                            | .4                |  | .8               | .8                                    |
| North Dakota-----   | 1.0                            | .8                                      | 1.0                            | .4                |  | .9               | .8                                    |
| South Dakota-----   | 1.0                            | .8                                      | 1.0                            | .4                |  | .9               | .8                                    |
| Nebraska-----       | 1.0                            | .8                                      | 1.0                            | .5                |  | .9               | .8                                    |
| Kansas-----         | 1.0                            | .8                                      | 1.0                            | .5                |  | .9               | .9                                    |
| Virginia-----       | 1.0                            | .8                                      | 1.0                            | .4                |  | .9               | .8                                    |
| West Virginia-----  | 1.0                            | .8                                      | 1.0                            | .4                |  | .9               | .8                                    |
| North Carolina----- | .8                             | .7                                      | .8                             | .4                |  | .8               | .6                                    |
| Kentucky-----       | .9                             | .8                                      | 1.0                            | .4                |  | .9               | .7                                    |
| Tennessee-----      | .8                             | .7                                      | .8                             | .4                |  | .8               | .7                                    |
| South Carolina----- | .8                             | .7                                      | .8                             | .4                |  | .7               | .5                                    |
| Georgia-----        | .8                             | .7                                      | .8                             | .4                |  | .7               | .6                                    |
| Florida-----        | .7                             | .7                                      | .9                             | .4                |  | .9               | .4                                    |
| Alabama-----        | .8                             | .8                                      | .8                             | .4                |  | .8               | .5                                    |
| Mississippi-----    | .8                             | .7                                      | .8                             | .4                |  | .7               | .6                                    |
| Arkansas-----       | .8                             | .7                                      | .8                             | .4                |  | .7               | .7                                    |
| Louisiana-----      | .8                             | .7                                      | .8                             | .4                |  | .7               | .5                                    |
| Oklahoma-----       | .8                             | .7                                      | 1.0                            | .30               |  | .9               | .8                                    |
| Texas-----          | .8                             | .7                                      | 1.0                            | .30               |  | .9               | .7                                    |
| Montana-----        | 1.1                            | .8                                      | 1.05                           | .7                |  | .9               | 1.0                                   |
| Idaho-----          | 1.3                            | .8                                      | 1.05                           | .7                |  | .9               | 1.1                                   |
| Wyoming-----        | 1.0                            | .8                                      | 1.05                           | .7                |  | .9               | .9                                    |
| Colorado-----       | 1.0                            | .8                                      | 1.05                           | .7                |  | .9               | .9                                    |
| New Mexico-----     | 1.0                            | .8                                      | 1.0                            | .8                |  | .8               | .9                                    |
| Arizona-----        | 1.1                            | .8                                      | 1.0                            | .8                |  | .8               | .9                                    |
| Utah-----           | 1.2                            | .8                                      | 1.05                           | .7                |  | .9               | 1.1                                   |
| Nevada-----         | 1.2                            | .8                                      | 1.05                           | .7                |  | .9               | 1.1                                   |
| Washington-----     | 1.2                            | .8                                      | 1.05                           | .6                |  | .9               | 1.0                                   |
| Oregon-----         | 1.1                            | .8                                      | 1.05                           | .6                |  | .9               | .9                                    |
| California-----     | 1.2                            | .8                                      | 1.05                           | .6                |  | .9               | 1.0                                   |

1/ The base (1.0) for the factors in this table is the quantity of hay, silage, stover, and pasture, expressed in feed units, consumed annually by the average milk cow in the U. S. during the period 1940-45. For the following kinds of livestock the same factors were used in all the States: Goats clipped, per head 0.2; hogs, per head, January 1, 0.01; hens and pullets, per head, January 1, 0.0012; turkeys, per head raised during year, 0.0024; stock sheep, per head January 1, 0.2; sheep and lambs on feed, per head January 1, 0.058; colts, per head January 1, 1.0.

2/ In 1959-60, the factor for "cattle on feed" was changed from 0.7 to 0.6 in the 3 Pacific Coast States.

Table C.--Factors for grain-and-roughage-consuming animal units, by States 1/

| State               | Cattle on farms Jan. 1 |                       |                |                 |                   | Horses and:                          |                              | Hens and:               |        | Chickens raised during year |
|---------------------|------------------------|-----------------------|----------------|-----------------|-------------------|--------------------------------------|------------------------------|-------------------------|--------|-----------------------------|
|                     | Milk cows and:         | Heifers and:          | Beef cows and: | Cattle on feed: | All other cattle: | 2 years old and over on farms Jan. 1 | Hogs fed during feeding year | pullets on farms Jan. 1 |        |                             |
|                     | 2 years old and over:  | calves kept for milk: | old and over:  | feed:           | cattle:           | over on farms Jan. 1                 | year                         | Jan. 1                  |        |                             |
|                     | over:                  | milk:                 | over:          | :               | :                 | Jan. 1                               | :                            | :                       |        |                             |
| Maine-----          | 1.1                    | 0.64                  | 0.8            | ---             | 0.64              | 1.2                                  | 0.17                         | 0.019                   | 0.0050 |                             |
| New Hampshire-----  | 1.1                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .019                    | .0050  |                             |
| Vermont-----        | 1.1                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .019                    | .0050  |                             |
| Massachusetts-----  | 1.2                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .019                    | .0050  |                             |
| Rhode Island-----   | 1.2                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .019                    | .0050  |                             |
| Connecticut-----    | 1.2                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .019                    | .0050  |                             |
| New York-----       | 1.2                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .018                    | .0045  |                             |
| New Jersey-----     | 1.3                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .018                    | .0045  |                             |
| Pennsylvania-----   | 1.2                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .018                    | .0045  |                             |
| Delaware-----       | 1.0                    | .64                   | .8             | ---             | .64               | 1.0                                  | .17                          | .018                    | .0045  |                             |
| Maryland-----       | 1.0                    | .64                   | .8             | ---             | .64               | 1.0                                  | .18                          | .018                    | .0045  |                             |
| Michigan-----       | 1.1                    | .64                   | .8             | .8              | .57               | .8                                   | .20                          | .015                    | .0045  |                             |
| Wisconsin-----      | 1.1                    | .64                   | .8             | .8              | .57               | .9                                   | .20                          | .015                    | .0040  |                             |
| Minnesota-----      | 1.0                    | .64                   | .8             | .8              | .57               | .9                                   | .20                          | .014                    | .0045  |                             |
| Ohio-----           | 1.1                    | .64                   | .8             | .9              | .57               | .9                                   | .20                          | .017                    | .0050  |                             |
| Indiana-----        | 1.1                    | .64                   | .8             | .9              | .57               | .9                                   | .20                          | .017                    | .0050  |                             |
| Illinois-----       | 1.1                    | .64                   | .8             | .9              | .57               | .9                                   | .20                          | .017                    | .0050  |                             |
| Iowa-----           | 1.0                    | .64                   | .8             | .9              | .57               | .9                                   | .20                          | .017                    | .0050  |                             |
| Missouri-----       | .9                     | .64                   | .8             | .9              | .57               | .9                                   | .20                          | .017                    | .0040  |                             |
| North Dakota-----   | .9                     | .64                   | .8             | .7              | .64               | .8                                   | .20                          | .014                    | .0045  |                             |
| South Dakota-----   | .9                     | .64                   | .8             | .8              | .64               | .8                                   | .20                          | .015                    | .0045  |                             |
| Nebraska-----       | 1.0                    | .64                   | .8             | 1.1             | .64               | .8                                   | .20                          | .015                    | .0045  |                             |
| Kansas-----         | 1.0                    | .64                   | .8             | .8              | .64               | .9                                   | .20                          | .015                    | .0040  |                             |
| Virginia-----       | .9                     | .62                   | .8             | .7              | .63               | .9                                   | .20                          | .016                    | .0040  |                             |
| West Virginia-----  | .9                     | .62                   | .8             | .7              | .63               | .9                                   | .20                          | .016                    | .0040  |                             |
| North Carolina----- | .9                     | .60                   | .7             | .7              | .63               | .9                                   | .20                          | .016                    | .0040  |                             |
| Kentucky-----       | .9                     | .62                   | .8             | .7              | .63               | .9                                   | .20                          | .016                    | .0040  |                             |
| Tennessee-----      | .8                     | .60                   | .7             | .7              | .63               | .9                                   | .20                          | .016                    | .0040  |                             |
| South Carolina----- | .9                     | .60                   | .7             | .7              | .58               | .9                                   | .17                          | .015                    | .0035  |                             |
| Georgia-----        | .9                     | .60                   | .7             | .7              | .58               | .9                                   | .17                          | .015                    | .0035  |                             |
| Florida-----        | .9                     | .60                   | .7             | .7              | .58               | .8                                   | .12                          | .015                    | .0035  |                             |
| Alabama-----        | .8                     | .60                   | .7             | .7              | .58               | .9                                   | .17                          | .015                    | .0035  |                             |
| Mississippi-----    | .8                     | .60                   | .7             | .7              | .54               | .9                                   | .15                          | .015                    | .0035  |                             |
| Arkansas-----       | .8                     | .60                   | .7             | .7              | .54               | .9                                   | .15                          | .015                    | .0035  |                             |
| Louisiana-----      | .8                     | .60                   | .7             | .7              | .54               | .8                                   | .15                          | .015                    | .0035  |                             |
| Oklahoma-----       | .8                     | .62                   | .7             | .6              | .63               | .8                                   | .19                          | .015                    | .0035  |                             |
| Texas-----          | .8                     | .62                   | .7             | .6              | .63               | .9                                   | .19                          | .015                    | .0035  |                             |
| Montana-----        | 1.0                    | .64                   | .8             | .8              | .64               | .8                                   | .16                          | .016                    | .0040  |                             |
| Idaho-----          | 1.1                    | .64                   | .8             | .8              | .64               | .8                                   | .15                          | .016                    | .0040  |                             |
| Wyoming-----        | 1.0                    | .64                   | .8             | .8              | .64               | .8                                   | .15                          | .016                    | .0040  |                             |
| Colorado-----       | 1.0                    | .64                   | .8             | .8              | .64               | .8                                   | .17                          | .016                    | .0040  |                             |
| New Mexico-----     | 1.0                    | .62                   | .7             | .9              | .60               | .9                                   | .15                          | .016                    | .0035  |                             |
| Arizona-----        | 1.2                    | .62                   | .7             | .9              | .60               | .8                                   | .15                          | .016                    | .0035  |                             |
| Utah-----           | 1.2                    | .64                   | .8             | .7              | .64               | .9                                   | .15                          | .016                    | .0040  |                             |
| Nevada-----         | 1.1                    | .64                   | .8             | .7              | .64               | .8                                   | .15                          | .016                    | .0035  |                             |
| Washington-----     | 1.1                    | .64                   | .8             | .7              | .64               | .9                                   | .17                          | .016                    | .0045  |                             |
| Oregon-----         | 1.1                    | .64                   | .8             | .7              | .64               | .8                                   | .17                          | .016                    | .0035  |                             |
| California-----     | 1.1                    | .64                   | .8             | .7              | .64               | .8                                   | .17                          | .016                    | .0045  |                             |

1/ The base (1.0) for the factors used in this table is the quantity of all feed including pasture, expressed in feed units, consumed annually by the average milk cow in the U. S. during the period 1940-45. For the following kinds of livestock the factors were the same in each state: Stock sheep, per head January 1, 0.15; sheep and lambs in feed, per head January 1, 0.074; colts, per head January 1, 0.6; commercial broilers, per head produced during year, 0.024; turkeys, per head raised during year, 0.02; and goats clipped, per head 0.15.

Table D.--Estimated percentage of feed fed after October 1 to spring pig crop, by States,  
1919-51, 1952-59 and 1960-62

| State               | Estimated<br>percentage |         |         | State               | Estimated<br>percentage |         |         |
|---------------------|-------------------------|---------|---------|---------------------|-------------------------|---------|---------|
|                     | 1919-51                 | 1952-59 | 1960-62 |                     | 1919-51                 | 1952-59 | 1960-62 |
|                     | Percent                 | Percent | Percent |                     | Percent                 | Percent | Percent |
| Maine-----          | 60                      | 55      | 36      | South Carolina----- | 65                      | 55      | 18      |
| New Hampshire-----  | 60                      | 50      | 36      | Georgia-----        | 65                      | 40      | 18      |
| Vermont-----        | 60                      | 40      | 36      | Florida-----        | 65                      | 45      | 15      |
| Massachusetts-----  | 60                      | 50      | 36      | Alabama-----        | 65                      | 40      | 15      |
| Rhode Island-----   | 60                      | 50      | 36      | Mississippi-----    | 65                      | 55      | 19      |
| Connecticut-----    | 60                      | 50      | 36      | Arkansas-----       | 65                      | 55      | 18      |
| New York-----       | 60                      | 30      | 30      | Louisiana-----      | 65                      | 50      | 16      |
| New Jersey-----     | 60                      | 50      | 36      | Oklahoma-----       | 60                      | 20      | 18      |
| Pennsylvania-----   | 60                      | 35      | 23      | Texas-----          | 60                      | 40      | 19      |
| Delaware-----       | 60                      | 40      | 18      | Montana-----        | 50                      | 35      | 31      |
| Maryland-----       | 60                      | 25      | 18      | Idaho-----          | 50                      | 35      | 31      |
| Michigan-----       | 45                      | 20      | 30      | Wyoming-----        | 50                      | 50      | 31      |
| Wisconsin-----      | 45                      | 20      | 28      | Colorado-----       | 50                      | 50      | 25      |
| Minnesota-----      | 50                      | 40      | 34      | New Mexico-----     | 50                      | 40      | 31      |
| Ohio-----           | 45                      | 20      | 21      | Arizona-----        | 50                      | 50      | 31      |
| Indiana-----        | 45                      | 20      | 16      | Utah-----           | 50                      | 50      | 31      |
| Illinois-----       | 50                      | 25      | 24      | Nevada-----         | 50                      | 50      | 31      |
| Iowa-----           | 50                      | 40      | 32      | Washington-----     | 50                      | 20      | 20      |
| Missouri-----       | 45                      | 25      | 23      | Oregon-----         | 50                      | 25      | 18      |
| North Dakota-----   | 55                      | 55      | 46      | California-----     | 50                      | 50      | 20      |
| South Dakota-----   | 55                      | 50      | 44      |                     |                         |         |         |
| Nebraska-----       | 55                      | 40      | 34      |                     |                         |         |         |
| Kansas-----         | 50                      | 25      | 24      | 48 States-----      | 55                      | 35      | 20      |
| Virginia-----       | 60                      | 40      | 17      |                     |                         |         |         |
| West Virginia-----  | 60                      | 40      | 26      |                     |                         |         |         |
| North Carolina----- | 65                      | 45      | 18      |                     |                         |         |         |
| Kentucky-----       | 50                      | 30      | 17      |                     |                         |         |         |
| Tennessee-----      | 65                      | 35      | 18      |                     |                         |         |         |

Table E.--Feed grains: Production, consumption as feed, deficit or surplus, by States, for feeding years 1960-61, 1961-62 and 1962-63 1/

| State and region        | 1960-61              |                    |            |            | 1961-62              |                    |            |            | 1962-63              |                    |            |            |
|-------------------------|----------------------|--------------------|------------|------------|----------------------|--------------------|------------|------------|----------------------|--------------------|------------|------------|
|                         | Feed grains produced | Feed grains fed 2/ | Deficit    | Surplus    | Feed grains produced | Feed grains fed 2/ | Deficit    | Surplus    | Feed grains produced | Feed grains fed 2/ | Deficit    | Surplus    |
|                         | 1,000 tons           | 1,000 tons         | 1,000 tons | 1,000 tons | 1,000 tons           | 1,000 tons         | 1,000 tons | 1,000 tons | 1,000 tons           | 1,000 tons         | 1,000 tons | 1,000 tons |
| <b>Northeast:</b>       |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| New England-----        | 60                   | 2,353              | 2,293      | ---        | 55                   | 2,335              | 2,280      | ---        | 56                   | 2,374              | 2,318      | ---        |
| New York-----           | 850                  | 2,292              | 1,442      | ---        | 838                  | 2,272              | 1,434      | ---        | 784                  | 2,235              | 1,451      | ---        |
| New Jersey-----         | 258                  | 927                | 669        | ---        | 205                  | 889                | 684        | ---        | 196                  | 873                | 677        | ---        |
| Pennsylvania-----       | 2,238                | 3,318              | 1,080      | ---        | 2,331                | 3,263              | 932        | ---        | 1,813                | 3,244              | 1,431      | ---        |
| Delaware-----           | 282                  | 633                | 351        | ---        | 225                  | 646                | 421        | ---        | 229                  | 683                | 454        | ---        |
| Maryland-----           | 848                  | 1,128              | 280        | ---        | 743                  | 1,245              | 502        | ---        | 712                  | 1,286              | 574        | ---        |
| <b>Lake States:</b>     |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| Michigan-----           | 3,162                | 2,069              | ---        | 1,113      | 3,538                | 2,080              | ---        | 1,458      | 3,211                | 2,101              | ---        | 1,110      |
| Wisconsin-----          | 4,729                | 5,261              | 532        | ---        | 5,413                | 5,181              | ---        | 232        | 5,067                | 5,196              | 129        | ---        |
| Minnesota-----          | 12,585               | 7,423              | ---        | 5,162      | 12,294               | 7,212              | ---        | 5,082      | 10,537               | 7,343              | ---        | 3,194      |
| <b>Corn Belt:</b>       |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| Ohio-----               | 7,528                | 4,700              | ---        | 2,828      | 5,901                | 4,636              | ---        | 1,265      | 6,479                | 4,685              | ---        | 1,794      |
| Indiana-----            | 10,648               | 6,360              | ---        | 4,288      | 9,136                | 6,387              | ---        | 2,749      | 10,448               | 6,557              | ---        | 3,891      |
| Illinois-----           | 20,606               | 10,004             | ---        | 10,602     | 19,190               | 10,279             | ---        | 8,911      | 20,560               | 10,633             | ---        | 9,927      |
| Iowa-----               | 24,474               | 17,034             | ---        | 7,440      | 23,394               | 17,304             | ---        | 6,090      | 22,916               | 17,660             | ---        | 5,256      |
| Missouri-----           | 6,841                | 6,042              | ---        | 799        | 5,759                | 6,011              | 252        | ---        | 5,367                | 6,172              | 805        | ---        |
| <b>Northern Plains:</b> |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| North Dakota-----       | 3,340                | 1,115              | ---        | 2,225      | 1,754                | 1,066              | ---        | 688        | 4,101                | 1,094              | ---        | 3,007      |
| South Dakota-----       | 5,671                | 2,878              | ---        | 2,793      | 4,588                | 3,069              | ---        | 1,519      | 5,263                | 3,153              | ---        | 2,110      |
| Nebraska-----           | 12,722               | 5,522              | ---        | 7,200      | 10,084               | 5,987              | ---        | 4,097      | 12,190               | 6,077              | ---        | 6,113      |
| Kansas-----             | 7,575                | 2,601              | ---        | 4,974      | 5,670                | 2,717              | ---        | 2,953      | 5,899                | 2,808              | ---        | 3,091      |
| <b>Appalachian:</b>     |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| Virginia-----           | 1,037                | 1,783              | 746        | ---        | 1,004                | 1,778              | 774        | ---        | 1,051                | 1,819              | 768        | ---        |
| West Virginia-----      | 171                  | 511                | 340        | ---        | 142                  | 491                | 349        | ---        | 129                  | 484                | 355        | ---        |
| North Carolina-----     | 2,023                | 3,412              | 789        | ---        | 2,164                | 3,543              | 1,379      | ---        | 2,276                | 3,658              | 1,382      | ---        |
| Kentucky-----           | 2,171                | 2,380              | 109        | ---        | 1,824                | 2,301              | 477        | ---        | 1,887                | 2,311              | 424        | ---        |
| Tennessee-----          | 1,588                | 2,199              | 611        | ---        | 1,383                | 2,227              | 844        | ---        | 1,189                | 2,249              | 1,060      | ---        |
| <b>Southeast:</b>       |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| South Carolina-----     | 779                  | 985                | 206        | ---        | 735                  | 964                | 229        | ---        | 675                  | 980                | 305        | ---        |
| Georgia-----            | 1,875                | 4,131              | 2,256      | ---        | 1,987                | 4,262              | 2,275      | ---        | 1,527                | 4,453              | 2,926      | ---        |
| Florida-----            | 256                  | 995                | 739        | ---        | 278                  | 1,019              | 741        | ---        | 261                  | 1,025              | 764        | ---        |
| Alabama-----            | 1,302                | 2,711              | 1,409      | ---        | 1,415                | 2,896              | 1,481      | ---        | 1,033                | 3,001              | 1,968      | ---        |
| <b>Delta States:</b>    |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| Mississippi-----        | 890                  | 2,083              | 1,193      | ---        | 1,105                | 2,127              | 1,022      | ---        | 665                  | 2,223              | 1,558      | ---        |
| Arkansas-----           | 380                  | 2,392              | 2,012      | ---        | 346                  | 2,501              | 2,155      | ---        | 294                  | 2,578              | 2,284      | ---        |
| Louisiana-----          | 283                  | 770                | 487        | ---        | 305                  | 748                | 443        | ---        | 178                  | 734                | 556        | ---        |
| <b>Southern Plains:</b> |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| Oklahoma-----           | 1,440                | 1,160              | ---        | 280        | 1,306                | 1,167              | ---        | 139        | 976                  | 1,435              | 479        | ---        |
| Texas-----              | 8,610                | 3,948              | ---        | 4,662      | 8,029                | 4,043              | ---        | 3,986      | 6,889                | 4,189              | ---        | 2,700      |
| <b>Mountains:</b>       |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| Montana-----            | 1,089                | 468                | ---        | 621        | 719                  | 457                | ---        | 262        | 1,498                | 476                | ---        | 1,022      |
| Idaho-----              | 543                  | 523                | ---        | 20         | 610                  | 509                | ---        | 101        | 810                  | 574                | ---        | 276        |
| Wyoming-----            | 129                  | 204                | 55         | ---        | 168                  | 199                | 31         | ---        | 167                  | 201                | 34         | ---        |
| Utah-----               | 1,124                | 1,515              | ---        | 391        | 1,116                | 1,093              | ---        | 113        | 948                  | 1,140              | 192        | ---        |
| New Mexico-----         | 126                  | 197                | ---        | 77         | 332                  | 238                | ---        | 124        | 343                  | 221                | ---        | 122        |
| Arizona-----            | 441                  | 324                | ---        | 117        | 494                  | 344                | ---        | 150        | 373                  | 402                | 29         | ---        |
| Nevada-----             | 100                  | 169                | 292        | ---        | 165                  | 457                | 292        | ---        | 220                  | 434                | 214        | ---        |
| Nevada-----             | 10                   | 50                 | 38         | ---        | 6                    | 45                 | 39         | ---        | 18                   | 40                 | 22         | ---        |
| <b>Pacific:</b>         |                      |                    |            |            |                      |                    |            |            |                      |                    |            |            |
| Washington-----         | 203                  | 874                | 96         | ---        | 849                  | 890                | 41         | ---        | 823                  | 945                | 122        | ---        |
| Oregon-----             | 479                  | 702                | 187        | ---        | 561                  | 729                | 168        | ---        | 582                  | 745                | 163        | ---        |
| California-----         | 4,514                | 4,730              | 2,198      | ---        | 2,468                | 5,051              | 2,583      | ---        | 2,467                | 5,270              | 2,803      | ---        |
| <b>U.S. Total-----</b>  | <b>143,629</b>       | <b>122,538</b>     | <b>---</b> | <b>---</b> | <b>143,629</b>       | <b>122,538</b>     | <b>---</b> | <b>---</b> | <b>143,127</b>       | <b>125,787</b>     | <b>---</b> | <b>---</b> |

1/ Assumed disappearance not included in this computation: Feed grains for seed, human food, and industry as well as for export. Thus this table slightly overstates surpluses and understates deficits within each of the States.

2/ Computed for each State by multiplying the grain-consuming animal units in that State by .722 ton in 1960-61, .775 ton in 1961-62, and .740 ton in 1962-63. These feeding rates were the average rates of feed grains disappearance per grain-consuming animal unit at the National level.

**END**