



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

FB 227 (1963)

USDA STATISTICAL BULLETINS

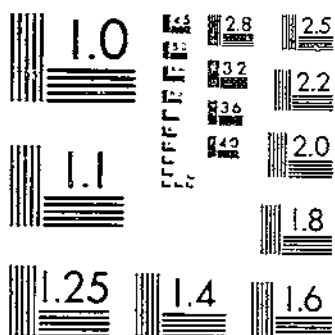
UPDATA

LIVESTOCK FEED RELATIONSHIPS, 1909-1963

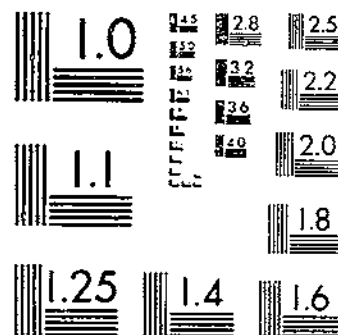
HODGES, E. F.

1 OF 1

START



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



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

DEFINITE

EDITION

337

* 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

CONTENTS

	<u>Page</u>
INTRODUCTION-----	1
PART I--ANIMAL UNITS OF LIVESTOCK FED ANNUALLY, 1909-1962-----	1
Grain-Consuming Animal Units-----	2
Roughage-Consuming Animal Units-----	6
Grain-and-Roughage-Consuming Animal Units-----	6
Concentrates Fed Per Grain-Consuming Animal Unit-----	7
Projecting Animal Unit Numbers for Future Years-----	8
PART II--LIVESTOCK-PRODUCTION UNITS, 1910-1962-----	8
Calculation of Livestock-Production Units-----	9
Adjustment of Calendar-Year Production Data to Feeding Year-----	11
Cattle-----	11
Hogs-----	12
Milk and Eggs-----	12
Poultry-----	12
Sheep and Lambs-----	12
Horses and Mules-----	13
Goats-----	13
Livestock-Production Units Based on Concentrates-----	13
Livestock-Production Units Based on All Feed-----	14
Comparison of Livestock-Production Unit Series With Other Livestock and Feed Series-----	14
PART III--HIGH-PROTEIN-CONSUMING ANIMAL UNITS, 1940-63-----	15
PART IV--FEED CONSUMPTION BY VARIOUS CLASSES OF LIVESTOCK, 1960-63-----	17
PART V--SURPLUS AND DEFICIT FEED GRAIN STATES, 1960-62-----	17
APPENDIX-----	45

LIVESTOCK-FEED RELATIONSHIPS
1909-1963

By Earl F. Hodges, Agricultural Economist
Farm Production Economics Division
Economic Research Service

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.

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.

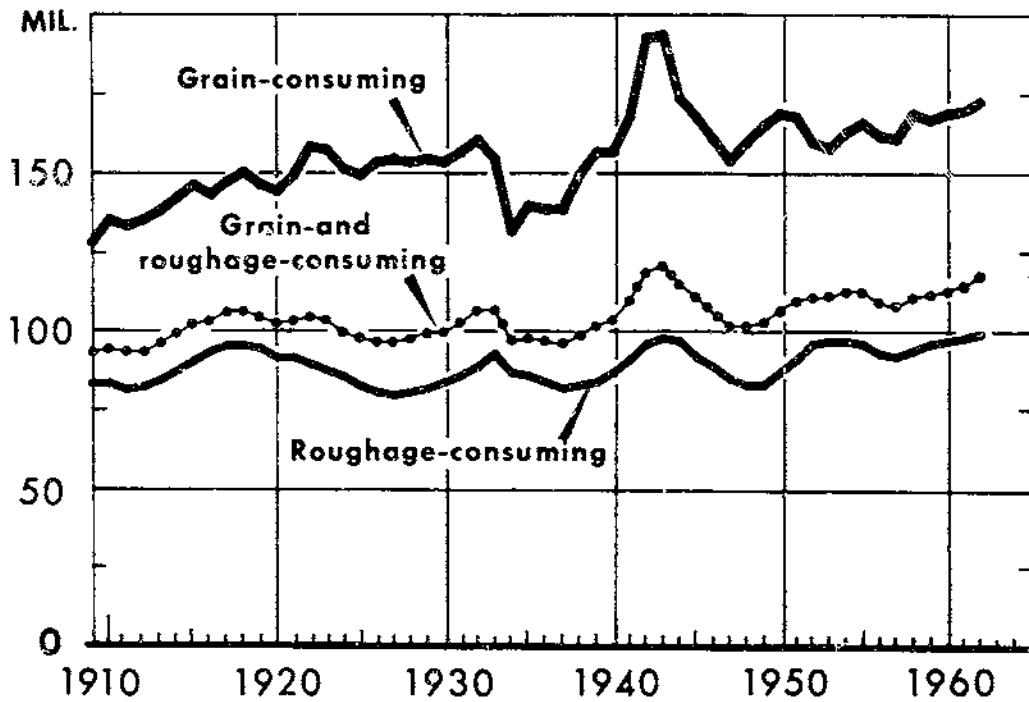
Feed consumption data at the national level for the various classes of livestock for the base periods are available in Consumption of Feed by Livestock, 1909-56, U. S. Dept. Agr. Prod. Res. Rpt. No. 21, Nov. 1958, by R. D. Jennings.

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.



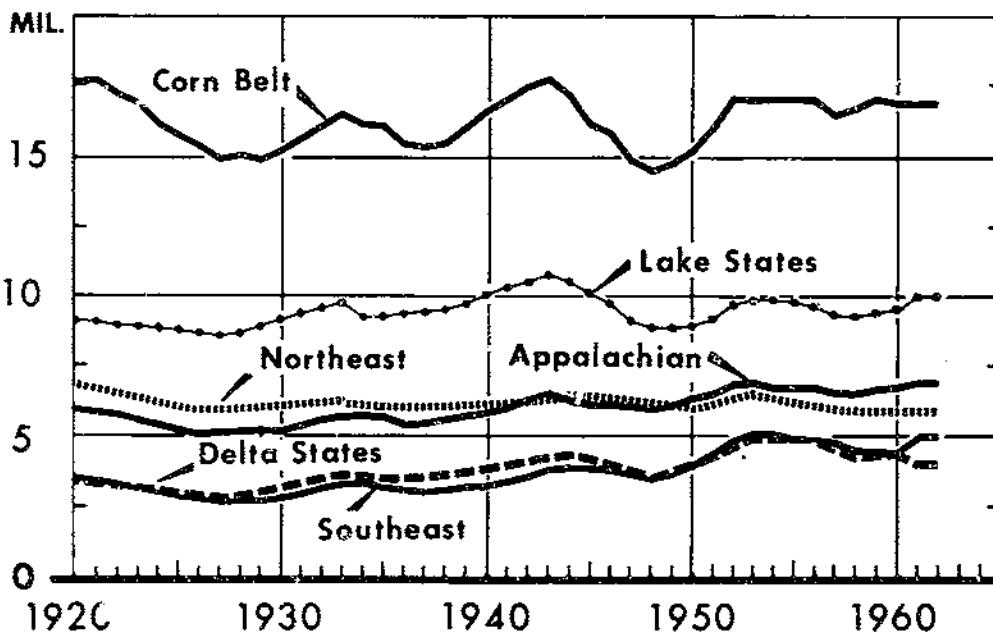
U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 701-63 (7) ECONOMIC RESEARCH SERVICE

Figure 1

ROUGHAGE-CONSUMING ANIMAL UNITS

Eastern Six Regions of U. S. A.



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 702-63 (7) ECONOMIC RESEARCH SERVICE

Figure 2

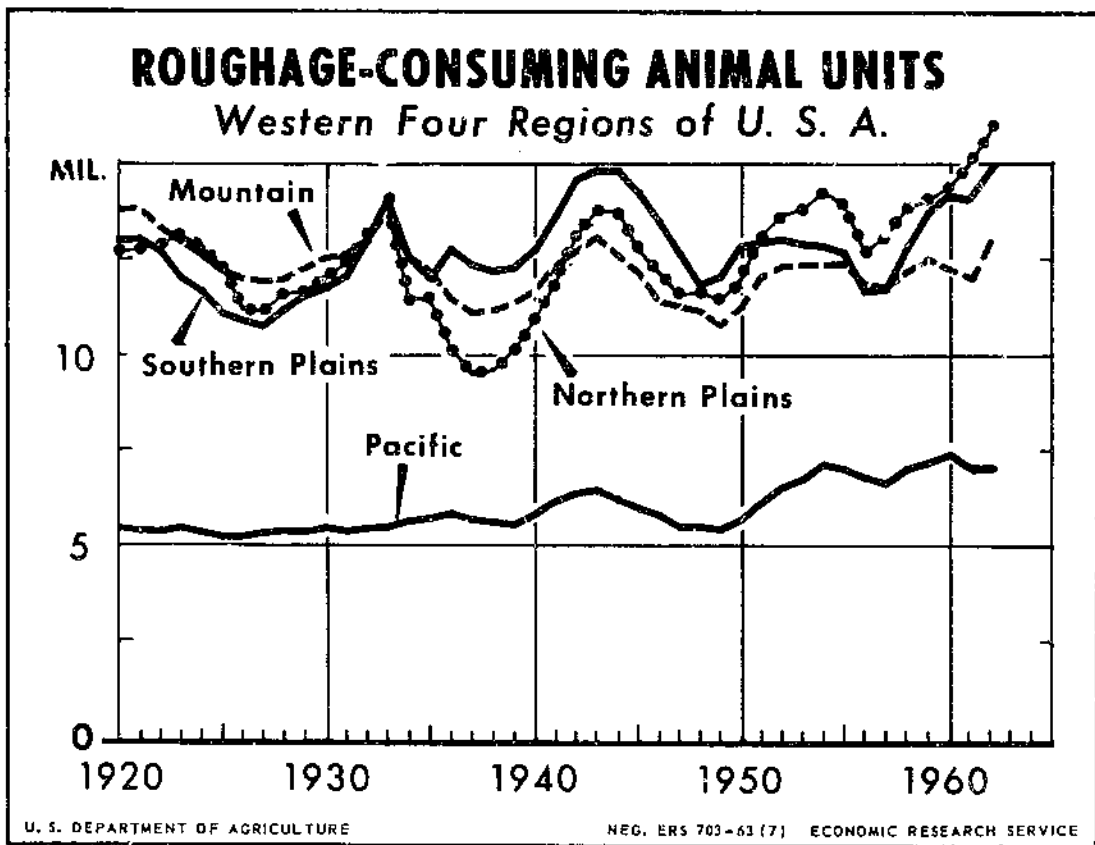


Figure 3

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.

^{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.

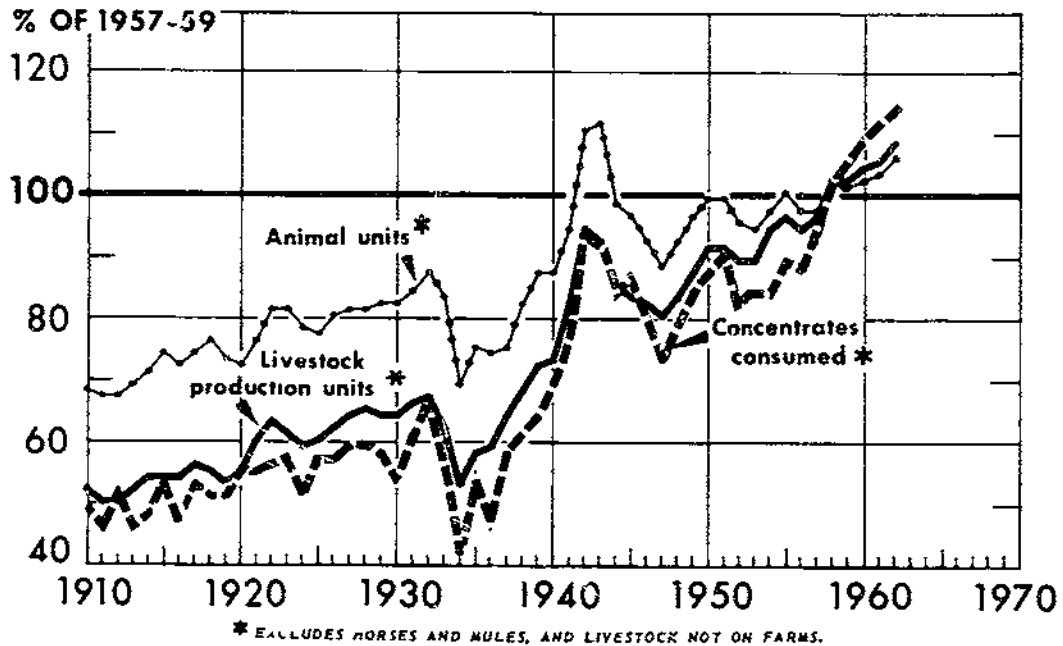
6/ Feed consumption during the base period 1940-45 was used for all livestock except broilers, for which the period 1950-53 was used.

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



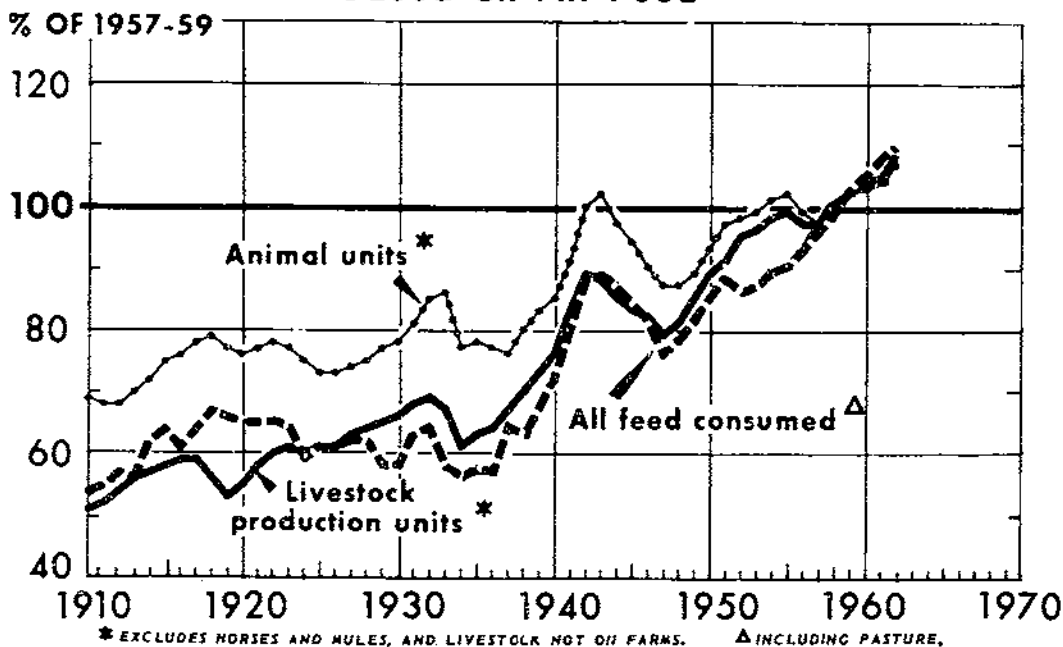
U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 1762-63 (7) ECONOMIC RESEARCH SERVICE

Figure 4

FEED AND LIVESTOCK UNITS

Based on All Feed



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 1763-63 (7) ECONOMIC RESEARCH SERVICE

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.

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).

^{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/

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. ^{15/} 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. ^{16/}

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

^{15/} See USDA Statis. Bul. 275, table 10.

^{16/} 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.

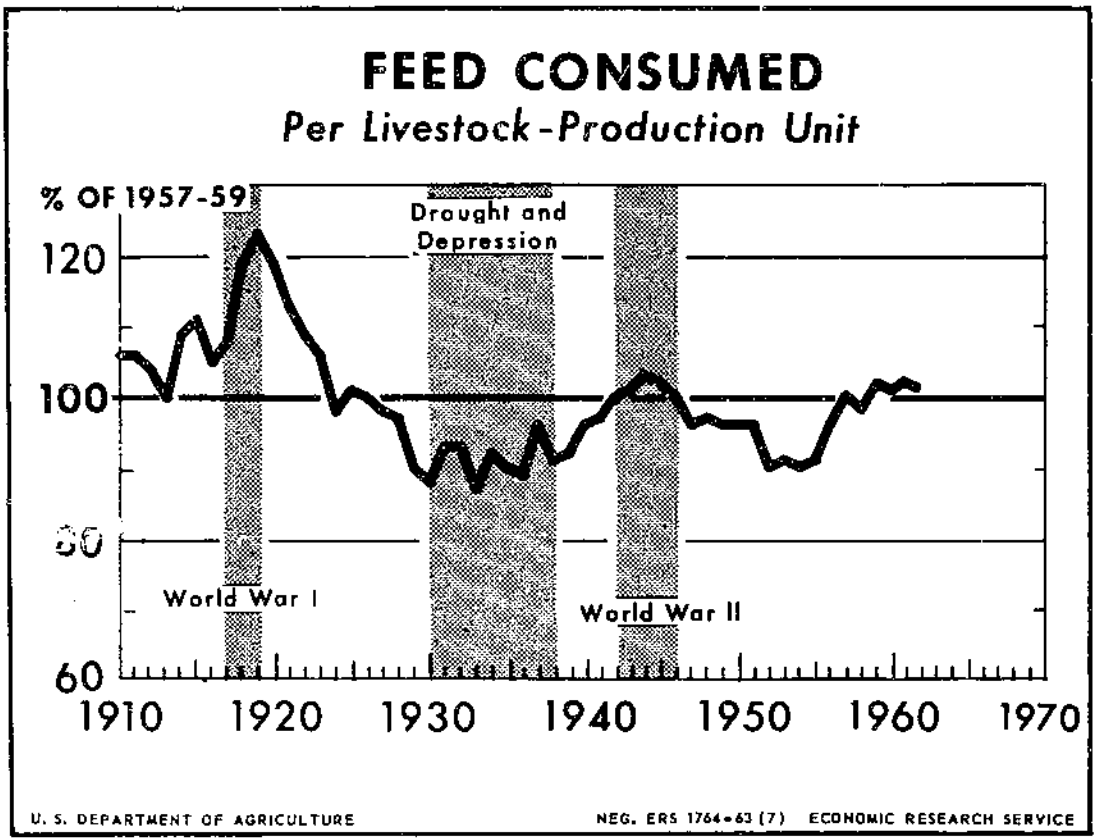


Figure 6

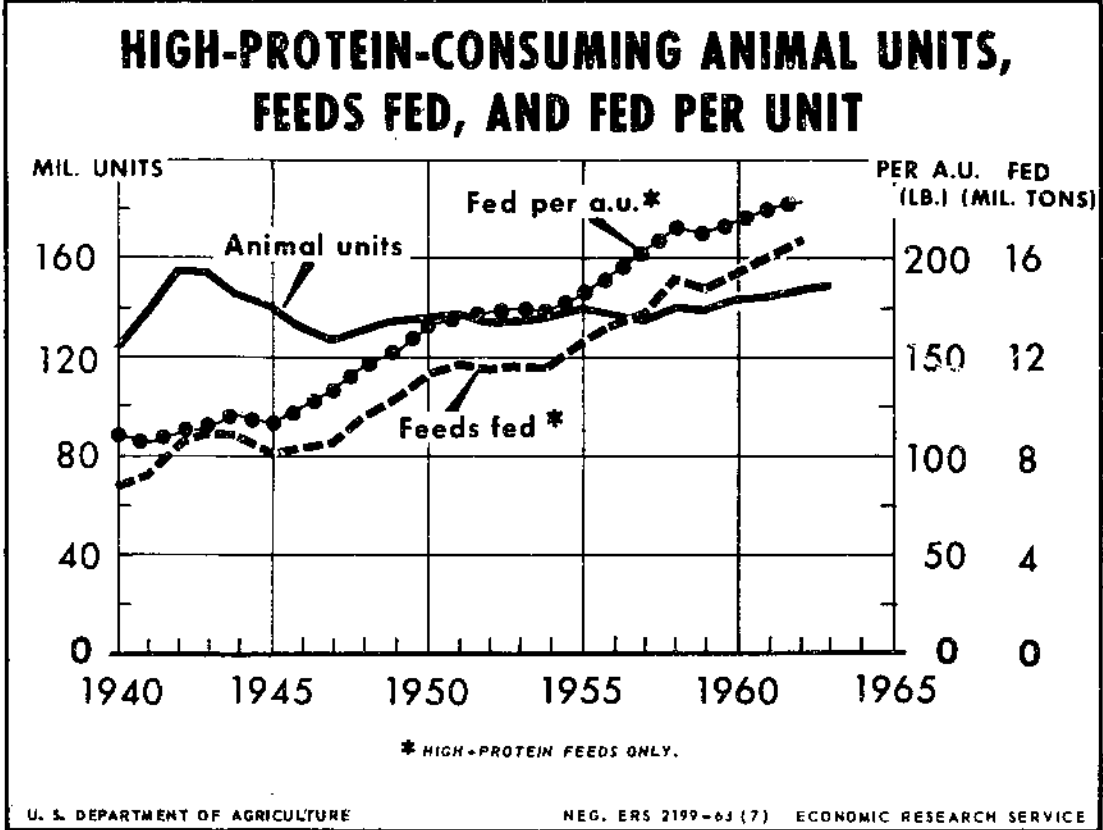


Figure 7

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

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.)

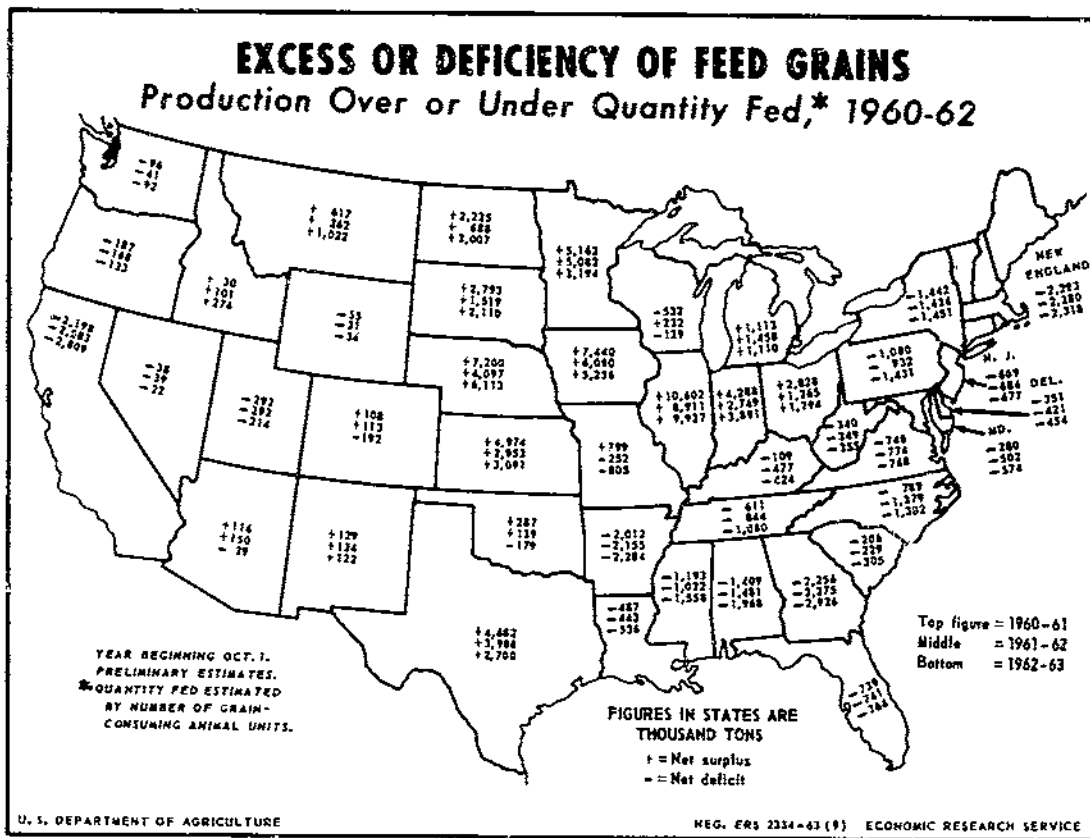


Figure 8

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 North-eastern 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.

^{18/} 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 Oct. 1	Grain-consuming	Roughage-consuming	Grain-and-roughage- 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 ¹	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	12,673	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	9,127	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	19,946	3,700	15,893	9,683	1,158	64,565	19,634	6,105	15,941	7,251	3,691	167,557
1961 2	19,226	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	24,453	7,754	4,609	36,718	4,780	15,833	11,815	4,162	110,024
1954	23,941	7,510	4,991	37,595	4,860	17,558	11,476	3,734	111,678
1955	23,625	7,139	5,073	37,708	4,929	18,146	12,117	3,430	111,888
1956	22,379	6,931	5,244	36,103	4,756	17,174	12,220	3,139	108,446
1957	21,837	6,762	5,070	36,005	4,890	17,042	12,491	2,953	107,050
1958	20,734	6,692	5,647	37,853	5,111	18,950	12,746	2,745	110,478
1959	20,161	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	19,493	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
Northeast:										
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	882	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
Lake States:										
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
Corn Belt:										
Ohio-----	6,966	7,130	7,337	7,616	6,673	6,770	6,586	6,528	6,395	6,471
Indiana-----	8,689	8,878	9,398	9,167	8,824	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	8,351	8,080	8,557	8,265	8,392	8,291	8,525
Northern Plains:										
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	7,847	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
Appalachian:										
Virginia-----	2,633	2,561	2,665	2,667	2,585	2,524	2,507	2,476	2,452	2,513
West Virginia-----	970	923	941	864	817	796	754	710	675	669
North Carolina-----	3,590	3,775	3,886	4,080	4,370	4,480	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	2,919	3,050	3,064	3,001	3,081	3,154	3,054	3,072	3,107
Southeast:										
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
Delta States:										
Mississippi-----	2,312	2,275	2,459	2,491	2,541	2,673	2,810	2,893	2,934	3,071
Arkansas-----	2,121	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
Southern Plains:										
Oklahoma-----	1,904	1,882	1,888	1,728	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
Mountain:										
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
Utah-----	572	567	570	568	570	546	577	651	630	600
Nevada-----	67	68	64	64	63	66	70	70	62	55
Pacific:										
Washington-----	1,074	1,112	1,121	1,079	1,124	1,178	1,205	1,214	1,228	1,264
Oregon-----	984	1,032	1,042	995	1,005	1,032	1,042	1,059	1,005	988
California-----	4,879	5,029	5,257	5,321	5,274	5,424	6,026	6,570	6,878	7,287
U.S. States ^{1/}	119,858	121,596	125,264	126,927	129,705	129,728	125,704	127,557	128,944	133,199

^{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- east	Lake States	Corn Belt	Northern Plains	Appalachian	Southeast	Delta	Southern Plains	Mountain	Pacific	Total
	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 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
Northeast:										
Maine-----	260	247	249	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	173	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-----	469	488	467	458	449	447	441	451	435	427
Lake States:										
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
Corn Belt:										
Ohio-----	2,442	2,402	2,401	2,353	2,271	2,226	2,232	2,229	2,206	2,176
Indiana-----	2,066	2,063	2,066	2,066	1,939	1,900	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
Northern Plains:										
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	3,367	3,201	3,246	3,362	3,345	3,397	3,509	3,745
Nebraska-----	4,413	4,690	4,442	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
Appalachian:										
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
Southeast:										
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	1,494	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
Delta States:										
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
Southern Plains:										
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
Mountain:										
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
Pacific:										
Washington-----	1,209	1,256	1,246	1,128	1,127	1,180	1,224	1,274	1,349	1,432
Oregon-----	4,618	4,558	4,602	4,508	4,507	4,577	4,597	4,606	4,594	4,580
California-----	3,732	4,274	4,179	4,179	4,030	4,275	4,376	4,458	4,445	4,751
U.S. States 4	35,664	36,157	35,232	34,944	30,537	32,516	34,750	35,578	37,417	40,329

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- east	Lake States	Corn Belt	Northern Plains	Appalachian	Southeast	Delta	Southern Plains	Mountain	Pacific	Total
	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>	1,000 <u>units</u>
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/
	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units
Northeast:										
Maine-----	420	412	420	427	430	427	419	430	439	447
New Hampshire-----	218	210	206	193	179	169	161	163	162	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
Lake States:										
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
Corn Belt:										
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
Northern Plains:										
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
Appalachian:										
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
Southeast:										
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
Delta States:										
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
Southern Plains:										
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
Mountain:										
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
Pacific:										
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
48 States 3/	110,024	111,678	111,888	108,446	107,050	110,478	111,283	112,361	113,959	117,053

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-east	Lake States	Corn Belt	Northern Plains	Appalachian	Southeast	Delta	Southern Plains	Mountain	Pacific	Total
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	<u>units</u>	<u>units</u>	<u>units</u>	<u>units</u>	<u>units</u>	<u>units</u>	<u>units</u>	<u>units</u>	<u>units</u>	<u>units</u>	<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	<u>1/</u>	+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 ^{1/}

Year beginning Oct. 1	Concentrates ^{2/}	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 ^{3/} -----	.92	1.16
1963 ^{3/} -----	.91	^{4/}

^{1/} Concentrates per grain-consuming animal unit and hay per roughage-consuming animal unit. 48 States only.

^{2/} Includes seeds, skim milk, and corn hogged-off, but excludes corn in silage.

^{3/} Preliminary estimates.

^{4/} Data not available.

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

Livestock	Number of head	Animal units					
		Based on grain consumption		Based on roughage consumption 2/		Based on 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 of head	Animal units					
		Based on grain consumption		Based on roughage consumption ^{2/}		Based on 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 of production	Concentrates fed per unit of production	Factor based on concentrates	All feed consumed per unit of production	Factor based on all feed
		Pounds 1/		Feed units 1/	
On farms Jan. 1:					
Milk cows (4,380 pounds of milk 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 beginning Oct. 1	Live weight production									Milk	Eggs	Horses and mules Jan. 1 2/		Goats clipped 1/
	Cattle			Sheep and lambs	Poultry 1/			2 years old and over	Colts					
	Hogs	Grain- fattened	Other		Chickens raised	Broilers	Turkeys							
Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million eggs	1,000 head	1,000 head	1,000 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	---	---	12,724	1,091	2,400	---	---	77,600	30,700	22,348	2,789	2,528	
1921	15,900	---	---	17,093	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	34,800	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	15,984	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	3,509	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	23,988	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 of hogs	Weight per head				Total live weight produced				
		Beginning of year	When slaugh- tered	End of year	Gain in weight	Calendar year	January to March	April to June	July to September	October to December
	Million head	Pounds	Pounds	Pounds	Pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million 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, 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 to March	April to June	July to September	October to December
	Percent	Percent	Percent	Percent
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 beginning Oct. 1	Live weight production							Milk	Eggs	Horses and mules		Total	Excluding horses and mules	
	Hogs	Cattle		Sheep and lambs	Poultry					2 years and over	Colts			All livestock
		Grain-fattened	Other ^{1/}		Chickens raised	Broilers	Turkeys							
	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 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	---	11,309	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-----	51,480	---	15,615	968	9,165	---	16,974	12,600	28,410	1,132	136,344	106,802		
1918-----	51,120	---	13,676	934	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	---	17,848	13,815	28,382	725	133,863	104,756		
1921-----	57,240	---	12,831	879	9,867	---	18,538	14,715	28,284	602	142,954	114,068		
1922-----	60,840	---	12,413	768	10,296	---	19,159	15,660	28,004	512	148,352	119,836		
1923-----	60,880	---	13,078	1,426	9,812	---	20,286	15,570	27,404	444	144,600	116,572		
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	1,320	11,123	---	21,783	17,314	25,302	371	144,414	118,910		
1927-----	53,600	---	12,048	1,397	10,374	---	22,005	17,253	24,282	345	147,074	122,447		
1928-----	59,600	---	14,394	1,448	11,131	---	1,028	22,586	17,167	23,513	320	147,187	123,354	
1929-----	55,080	5,927	6,329	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-----	55,400	5,670	6,832	1,508	11,185	---	1,303	23,871	16,695	23,364	257	148,095	126,474	
1932-----	60,480	6,069	7,380	1,482	12,115	---	1,372	24,071	15,982	20,833	243	149,027	127,951	
1933-----	54,300	5,863	7,224	1,513	9,551	223	1,290	23,564	15,502	20,300	263	139,288	118,752	
1934-----	54,160	4,974	6,914	1,487	10,015	287	1,281	23,338	14,936	19,651	315	130,869	100,903	
1935-----	43,200	6,682	6,931	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-----	50,360	7,121	6,624	1,610	9,898	550	1,698	24,100	16,616	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-----	63,360	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	7,865	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-----	80,760	3,345	9,045	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	190,816	175,772	
1944-----	67,680	9,323	9,322	1,534	14,933	2,546	3,182	27,632	25,324	14,117	217	176,020	161,686	
1945-----	68,240	10,025	9,040	1,440	12,659	2,033	3,070	27,062	24,961	13,251	175	171,756	158,330	
1946-----	65,880	10,794	8,989	1,293	12,344	2,153	2,627	27,091	24,788	12,164	143	157,766	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	11,677	9,689	1,058	10,877	4,274	3,513	26,840	26,424	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-----	62,560	15,876	12,828	1,272	9,477	7,443	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	19,843	11,874	1,301	7,706	12,491	5,831	28,261	27,351	4,089	51	186,476	182,336	
1958-----	74,880	22,823	12,132	1,359	7,032	13,255	6,162	28,101	28,596	3,795	52	198,187	194,340	
1959-----	72,720	26,367	12,063	1,334	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	31,073	13,037	1,212	6,252	16,951	7,160	29,094	28,114	3,661	54	211,308	207,593	

^{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 and mules	Total
	Hogs	Cattle		Sheep and lambs	Poultry						
		Grain-fattened	Other		Chickens raised	Broilers	Turkeys				
1910-17-----	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1920-29-----	16.7	---	11.1	0.7	6.8	---	---	12.6	10.0	22.1	100
1930-39-----	38.3	0.5	8.3	.8	7.2	---	0.1	14.4	11.2	18.6	100
1940-47-----	34.0	4.5	5.0	1.1	7.4	0.3	1.1	17.0	11.7	13.9	100
1948-57-----	40.8	5.7	5.2	.8	7.5	1.4	1.6	15.4	13.9	7.7	100
1950-57-----	38.0	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 beginning Oct. 1	Live weight production										Horses and mules		Total	
	Cattle			Sheep and lambs	Poultry			Milk	Eggs	Goats	2 years old and over	Colts	All livestock	Excluding horses and mules
	Hogs	Grain-fattened	Other 1/		Chickens raised	Broilers	Turkeys							
	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 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	4,719	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	17,430	---	26,186	4,274	2,783	---	18,538	4,251	338	23,939	1,599	98,398	73,650	
1922	15,590	---	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	77,455	
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	16,920	---	24,410	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	85,147	
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	136	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	14,101	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	17,160	3,679	27,054	8,124	2,858	284	25,089	5,134	645	13,290	1,020	107,295	93,885	
1940	18,990	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	12,681	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	33,292	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	4,748	32,836	5,086	3,412	1,099	26,456	7,124	384	8,316	293	111,214	102,605	
1949	21,720	4,979	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	46,956	5,932	2,830	2,033	27,367	7,467	351	5,321	164	126,107	120,622	
1953	19,120	6,804	47,914	6,201	2,673	2,265	28,064	7,590	393	4,709	151	127,011	122,151	
1954	21,450	7,803	47,270	6,298	2,358	2,345	28,111	7,753	448	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	22,880	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	45,676	6,505	1,742	4,212	28,157	8,069	583	2,969	142	132,504	129,393	
1960	21,670	11,999	45,496	6,536	1,822	4,785	28,603	7,960	603	2,969	142	135,026	131,915	
1961	22,130	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										Horses and mules	Total
	Cattle			Sheep and lambs	Poultry			Milk	Eggs	Goats		
	Hogs	Grain-fattened	Other		Chickens raised	Broilers	Turkeys					
1910-1914	16.9	3.9	---	26.3	2.6	---	16.9	3.9	---	26.3	100	
1915-1919	17.1	4.2	---	25.4	2.9	---	18.8	4.7	0.5	22.4	100	
1920-1924	16.0	4.1	---	25.3	2.9	0.1	18.5	4.7	0.6	16.2	100	
1925-1929	16.5	4.0	---	28.4	3.1	0.6	22.9	6.0	0.5	9.7	100	
1930-1934	16.8	4.1	---	35.1	4.8	1.9	21.8	6.1	0.4	3.6	100	
1935-1939	16.2	4.1	---	34.1	6.5	1.3	21.0	5.9	0.4	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 ^{1/}

Year beginning Oct. 1	Livestock-production units 1957-59=100		All livestock and livestock products ^{4/} 1957-59=100	Animal units fed 1957-59=100		Feed consumed 1957-59=100	
	Based on concentrates ^{2/}	Based on all feed ^{3/}		Based on concentrates	Based on all feed	Grain and other concentrates	All feed including 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	^{5/}	106	107	114	109
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Percentage Increase 1910 to 1962	110	112	^{5/}	56	55	133	102

^{1/} Excludes horses and mules and livestock not on farms.

^{2/} Weighted by grain and other concentrates consumed.

^{3/} Weighted by all feed consumed.

^{4/} 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.

^{5/} Data not yet available.

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

Year beginning Oct. 1	Supply of concentrates available ^{1/}	Total concentrates fed ^{1/}	Livestock-production units based on concentrates	Concentrates fed per unit
	Million tons	Million tons	Million 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 ^{2/} -----	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 beginning Oct. 1	All feed consumed 1/	Livestock- production units	Feed per livestock-production unit	
			Quantity	Index no. (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 beginning Oct. 1	Dairy cattle ^{2/}	Beef cattle	Sheep	Poultry	Hogs	Total animal units	High-protein feeds available for feed ^{3/}	Quantity available per animal unit
	units	units	units	units	units	units	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 beginning Oct. 1	Dairy cattle	Beef cattle	Sheep	Poultry	Hogs	Total
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
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 beginning Oct. 1	Concentrates					Total	Roughages		All feed 6/ tons
	Corn 1/ tons	Sorghum grains 2/ tons	Other grains 2/ tons	High protein 3/ tons	Other byproduct feeds 4/ tons		Hay tons	Other forage 5/ 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	933	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 beginning Oct. 1	Concentrates					Total	Roughages		All feed 6/
	Corn	Sorghum	Other	High	Other		Hay	Other forage	
	1/ 1,000 tons	grains 2/ 1,000 tons	grains 2/ 1,000 tons	protein 3/ 1,000 tons	byproduct feeds 4/ 1,000 tons				
BROILERS 5/									
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 silage 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 Fats 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 beginning Oct. 1	Concentrates					Total	Roughages			All feed
	Corn	Sorghum grains	Other grains	High protein	Other byproduct feeds		Hay	Other forage	Pasture	
	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
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 PULLETS										
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-----	4,014	931	1,050	1,177	269	4,441	---	---	192	4,633
1962-----	383	905	1,020	1,142	252	4,302	---	---	190	4,492
1963-----	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 beginning Oct. 1	Concentrates					Roughages			All feed	
	Corn	Sorghum grains	Other grains	High protein	Other byproduct feeds	Total	Hay	Other forage		Pasture
	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
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-----	3,707	1,048	257	---	---	5,012	---	---	---	5,012
1962-----	3,046	351	652	---	---	4,049	---	---	---	4,049
1963-----	3,032	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/					Stock sheep on farms Jan.1	Horses and mules on farms Jan. 1	Hogs fed during year	Hens and pullets on farms Jan. 1	Chick- ens raised during year	Turkeys raised during year	
	Milk cows and heifers	Heifers and cows 2	Beef cows and calves	Cattle on feed	All other cattle							
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 level 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, 1945, 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 1940-41 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 1945-46, 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						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/	All other cattle		
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 mules		Hogs fed during feeding year	Hens and pullets on farms Jan. 1	Chickens raised during year
	Milk cows and heifers: old and over	Helpers and heifer calves: kept for milk	Beef cows: 2 years old and over	Cattle on feed	All other cattle	2 years old and over on farms 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	.018	.0045
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	1.3	.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 on 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 percentage			State	Estimated 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	48 States-----	55	35	20
Kansas-----	50	25	24				
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
Northeast:												
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	---
Lake States:												
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
Corn Belt:												
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	---
Northern Plains:												
North Dakota-----	3,340	1,115	---	2,225	1,754	1,056	---	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
Appalachian:												
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-----	2,423	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	---
Southeast:												
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	---
Delta States:												
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	536	---
Southern Plains:												
Oklahoma-----	1,427	1,160	---	287	1,306	1,167	---	139	976	1,455	179	---
Texas-----	3,620	3,948	---	4,682	8,029	4,043	---	3,986	6,889	4,189	---	2,700
Mountains:												
Montana-----	1,089	468	---	621	719	457	---	262	1,498	476	---	1,022
Idaho-----	543	523	---	20	610	509	---	101	810	534	---	276
Wyoming-----	149	294	55	---	168	199	31	---	167	201	34	---
Utah-----	1,124	1,515	---	391	2,116	1,093	---	113	948	1,140	192	---
New Mexico-----	128	197	---	69	332	238	---	124	343	221	---	122
Arizona-----	141	324	---	183	494	311	---	150	373	407	29	---
Nevada-----	10	50	38	---	6	45	39	---	18	40	22	---
Pacific:												
Washington-----	293	874	96	---	849	890	41	---	823	945	122	---
Oregon-----	479	792	187	---	561	729	168	---	582	745	163	---
California-----	1,544	4,730	2,198	---	2,468	5,051	2,583	---	2,467	5,200	2,733	---
Total-----	125,420	128,837	---	---	125,629	122,538	---	---	143,127	126,787	---	---

1/ Ass't. na. 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/ Figures 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