I awa Ponting

S 61 .18 C45 1947

State of Iowa
1947

# A GRAPHIC SUMMARY OF IOWA LIVESTOCK and POULTRY

BY COUNTIES

Bulletin No. 92.6

IOWA DEPARTMENT OF AGRICULTURE

Division of Agricultural Statistics

Cooperating with

U. S. DEPARTMENT OF AGRICULTURE
Bureau Agricultural Economics

Published by THE STATE OF IOWA Des Moines

## A GRAPHIC SUMMARY OF IOWA LIVESTOCK and POULTRY

ISSUED BY

#### IOWA DEPARTMENT OF AGRICULTURE

Harry D. Linn, Secretary

Cooperating With

### U. S. DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL ECONOMICS

Compiled By

#### IOWA CROP AND LIVESTOCK REPORTING SERVICE

Leslie M. Carl, Agricultural Statistician in Charge

C. A. Reseland, Agricultural Statistician

W. B. Hampton, Agricultural Statistician

R. S. Overton, Agricultural Statistician

1019 High Street
DES MOINES, IOWA

#### A GRAPHIC SUMMARY OF IOWA LIVESTOCK AND POULTRY

#### Introduction

Livestock, poultry and their products are the principal end result derived from the cumulative effort of Iowa Agriculture. Most of the plowing, planting, cultivating and harvesting incidental to farming are all part of the struggle to procure the raw materials that go into the production of meat, milk, poultry, eggs and wool. The proof of this lies in the relative importance of the farm income from the sale of various agricultural commodities. During the period 1941 through 1945, 81 per cent of the total Iowa cash farm income was attributed to receipts from the sale of livestock, poultry, and kindred products; crop sales amounted to 16 per cent with government payments comprising the balance of 3 per cent. In short, livestock and poultry are the backbone of our farm economy, and a sound knowledge of the livestock and poultry business is a basic prerequisite to a complete understanding of Iowa Agriculture.

Recently there has come about a belated recognition of the fact that agricultural research has too long neglected the marketing of agricultural products. In this instance marketing is used as a rather loose and inclusive term intended to cover all phases of the vast operations that give time, place and form utility to agricultural products. Governments from the local to the national level have devoted millions of dollars to reseach and extension teaching, designed to improve production techniques. The investment has paid handsome dividends in making available an increased quantity of food and

fiber. On the other hand, relatively little has been done by government in market research that would promote a more efficient movement of agricultural products from the farm into consumptive channels. Fortunately, attention is now shifting toward marketing to a degree that reflects the relative importance of this phase of agriculture in our State and National economy.

This bulletin presents the pattern and scope of the Iowa livestock and poultry enterprise in a manner that will be of value to all groups who have reason to be interested in the field of marketing. The form adopted shows both the relative and absolute production figures by counties for each species. The several degrees of shading indicate the comparative position of the county; while the numerical figure gives the actual production level on a land-in-farms basis. The publication covers all of the important segments of the livestock and poultry field except sheep feeding. At the present time reliable information on the number of sheep fed by counties is not available. A further degree of refinement lies in providing county production data on milk and egg output. Inventory number of dairy herds and laying flocks as shown in figures 6 and 10 respectively are quite reliable indicators of milk and egg production. However, adequate statistical information on rate of lay and milk flow is not available except on a state wide basis. Until such time as county or area averages have been established for milk flow and rate of lay, there is

nothing to be gained by applying a flat state wide production figure to herd or flock inventories. In addition to the detailed data on the individual classes, table 12 combines all elements to give an over-all livestock and poultry production index. This productivity index is discussed in greater detail in the following pages.

#### **Period Covered**

Data presented are averages for the five years 1941 through 1945 except that inventory numbers are January 1 figures for the period 1942 through 1946. There are a number of reasons for selecting this particular time interval—among the more important are; 1. When work was started on the publication, these years were the most recent for which data were available; 2. In general the years are all similar in that they represent a war period with definite pressure for all-out production. The similarity also extends further in that crops were uniformly good in all sections of the State throughout the five years; 3. The absolute volume of production is probably at a maximum due to the rather unusual combination of favorable feeding ratios, large supplies of grain and guaranteed support prices for the finished product.

#### **Computation of Data**

The figures as published are averages based on the acreage of land in farms. This may seem odd at first thought since the production of livestock and poultry is strictly a farming unit operation. However, upon investigation, it was determined that the variations in

average size of farms were so large that they would tend to inject considerable bias into the relative position of the various counties and areas if the data had been computed on a per farm basis. The averages are presented as units per 100 acres of land in farms. Those who may be interested in per farm data may convert to this denominator by multiplying the averages as listed by the size of farms as shown in figure 11 and then dividing by 100.

The State totals of the various items are official State and Federal estimates as published by the U. S. and Iowa Departments of Agriculture. The county breakdown was made on the basis of the distribution between counties as shown by the Annual State Farm Census. Figures for each county are simple averages of the five annual totals. The acreage of land in farms was a simple average of the five years as reported by the State Farm Census. The published figures for each county were then obtained by dividing the average production or inventory numbers by the average acreage of all land in farms.

#### **Productivity Index**

The productivity index as shown in figure 12 gives an over-all picture of the relative livestock and poultry producing capacity of the various counties. The index was computed by using total land in farms as the denominator between counties, the same as for the several individual items that go to make up the index. The problem was to add pounds of pork, beef, lamb and wool with gallons of milk and dozens of eggs. Some

effort was made to put these together on nutritive value basis, but this approach proved impractical and was abandoned. It did not seem desirable to weight the various components on a price basis since regional differentials in average prices for any single item would tend to modify the true production volume. It was finally decided to weight the several items on the basis of the State value of production. The Bureau of Agricultural Economics has a standing series of estimates at the State level on the annual value of production of the various livestock and poultry items. The mechanics were fairly simple. To illustrate—hog, beef and sheep production was converted from head numbers to pounds making due allowance for inshipments and regional weight differentials. After the pounds of hogs, for example, were obtained for each county these 99 totals were factored to the 1941-1945 State average value of production of hogs. The same procedure was followed down the line on cattle, sheep, poultry, eggs, milk and wool. This procedure does not change the between county relationship on any item. It simply converts the pounds of meat, gallons of milk and dozens of eggs to a dollar basis in order that they may be added together. When added together, the State average value of all production was computed on a per acre basis and the average for each individual county was expressed as a percentage of the State. The State annual average value of production of all livestock, poultry and kindred products for the 1941-45 period was \$29.55 per acre. The value for the counties ranges from a low of \$15.17 in Appanoose to a high of \$43.60 in Scott. The monetary value of any county can be computed from figure 12 by multipling the percentage figure for a given county by the State average of \$29.55.



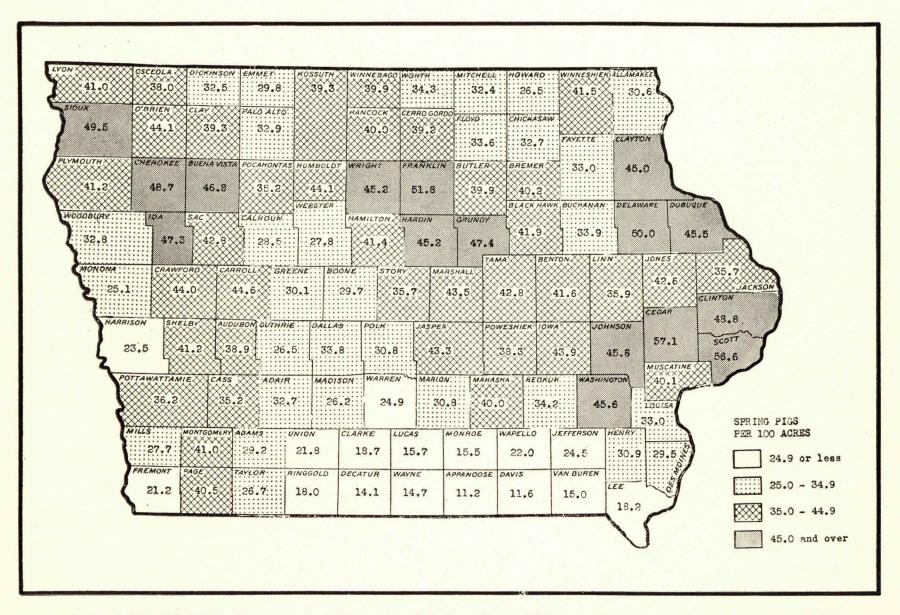


Figure 1. IOWA SPRING PIGS: Number raised (December 1 to June 1) per 100 acres of land in farms, by counties, 1941-45 average.

Data from annual state farm census and Bureau of Agricultural Economics.

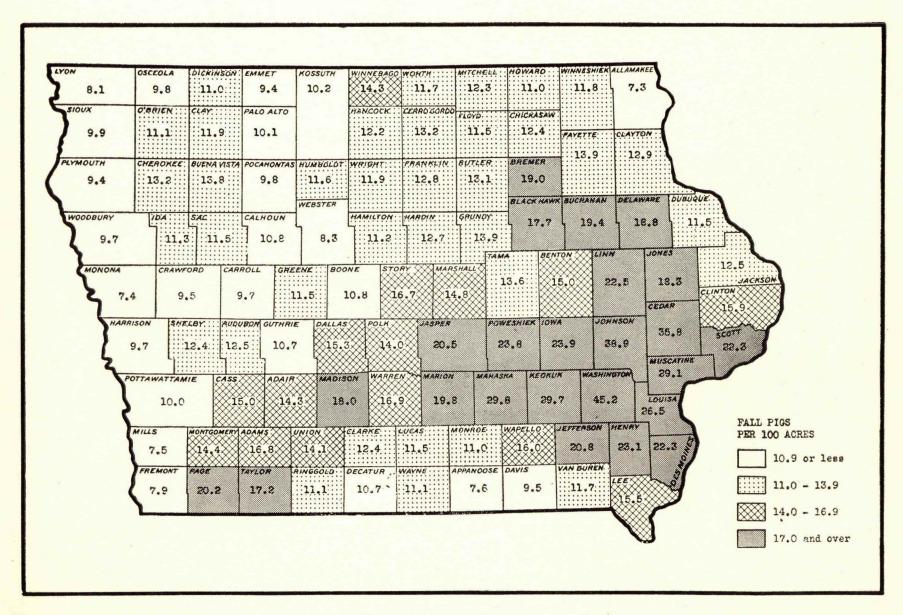


Figure 2. IOWA FALL PIGS: Number raised (June 1 to December 1) per 100 acres of land in farms, by counties, 1941-45 average.

Data from annual state farm census and Bureau of Agricultural Economics.

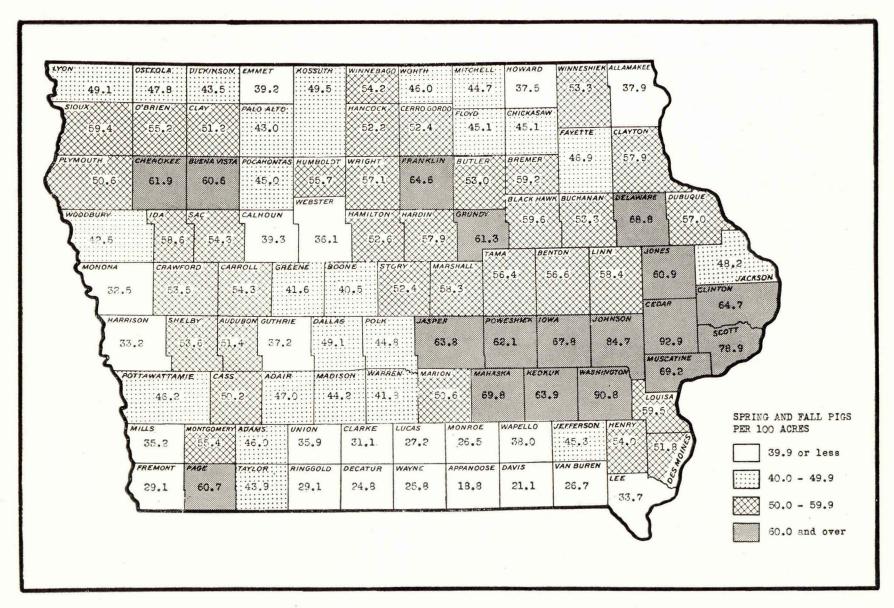


Figure 3. IOWA SPRING AND FALL PIGS: Number raised (December 1 to December 1) per 100 acres of land in farms, by counties, 1941-45 average. Data from annual state farm census and Bureau of Agricultural Economics.

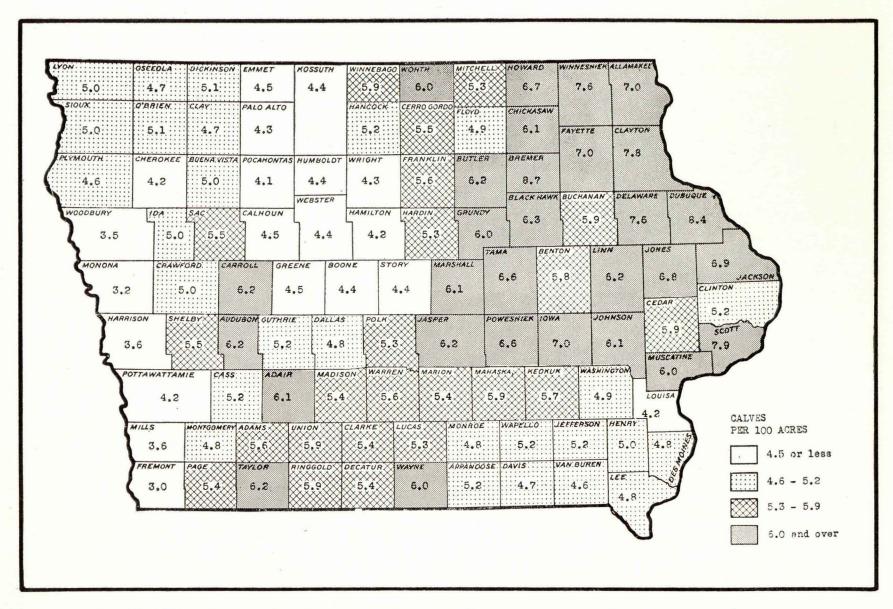


Figure 4. IOWA CALVES: Number raised per 100 acres of land in farms, by counties, 1941-45 average. Data from annual state farm census and Bureau of Agricultural Economics.

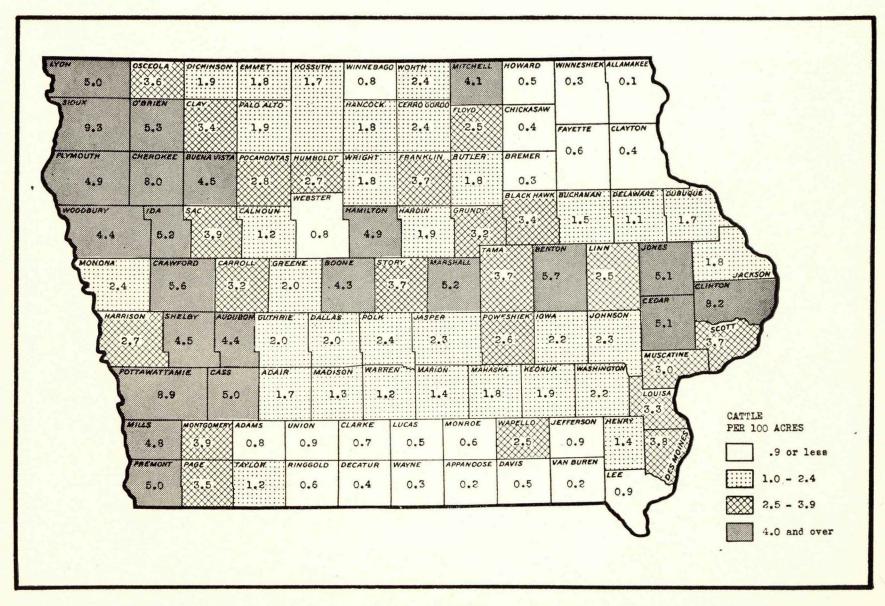


Figure 5. IOWA FEEDER CATTLE: Number on feed January 1 per 100 acres of land in farms, by counties, 1942-46 average. Data from annual state farm assessment and Bureau of Agricultural Economics.

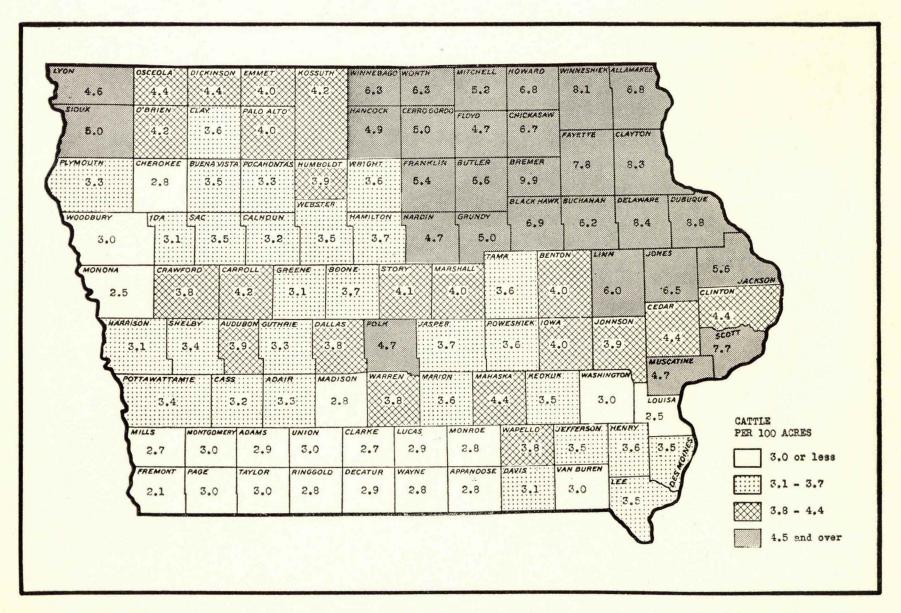


Figure 6. IOWA DAIRY CATTLE: Number of cows and heifers 2 years old and over, kept for milk, on hand January 1 per 100 acres of land in farms, by counties, 1942-46 average. Data from annual state farm census and Bureau of Agricultural Economics.

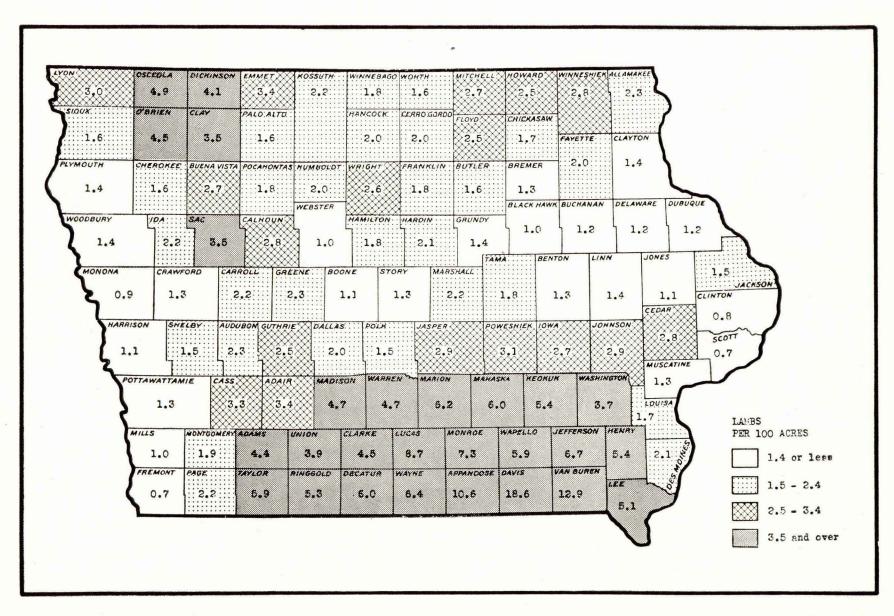


Figure 7. IOWA LAMBS: Number raised per 100 acres of land in farms, by counties, 1941-45 average. Data from annual state farm census and Bureau of Agricultural Economics.

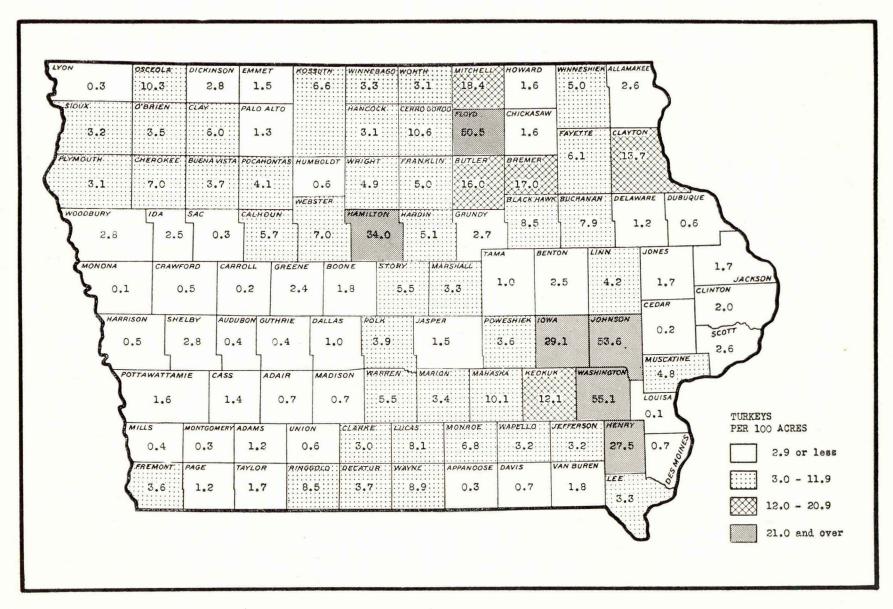


Figure 8. IOWA TURKEYS: Number raised per 100 acres of land in farms, by counties, 1941-45 average. Data from annual state farm census and Bureau of Agricultural Economics.

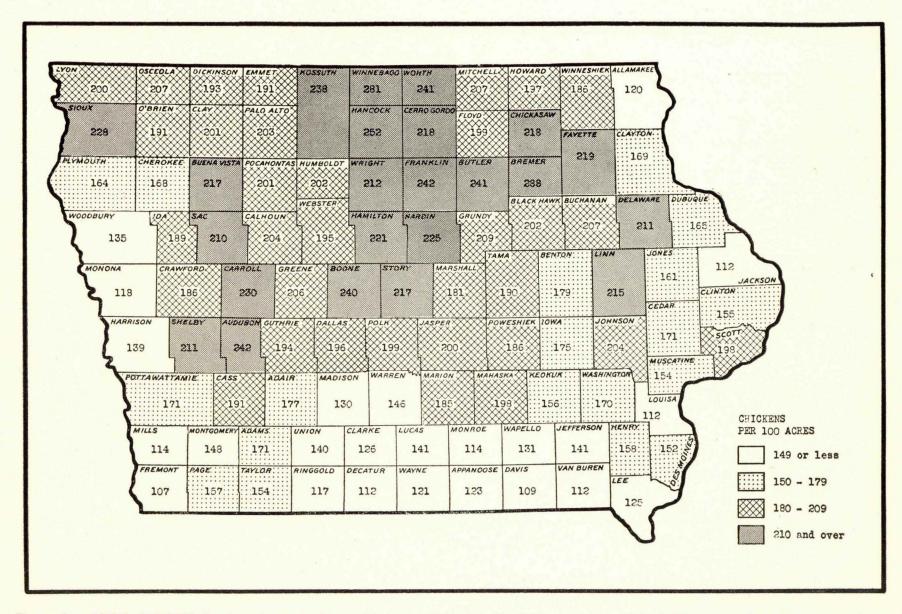


Figure 9. IOWA CHICKENS: Number raised per 100 acres of land in farms, by counties, 1941-45 average. Data from annual state farm census and Bureau of Agricultural Economics.

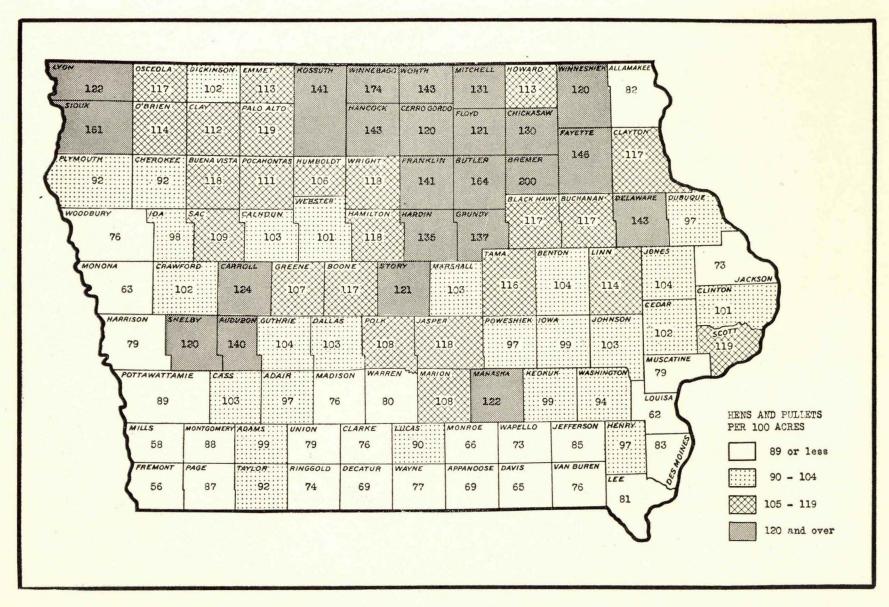


Figure 10. IOWA HENS AND PULLETS: Number on hand January 1 per 100 acres of land in farms, by counties, 1942-46 average.

Data from annual state farm census and Bureau of Agricultural Economics.

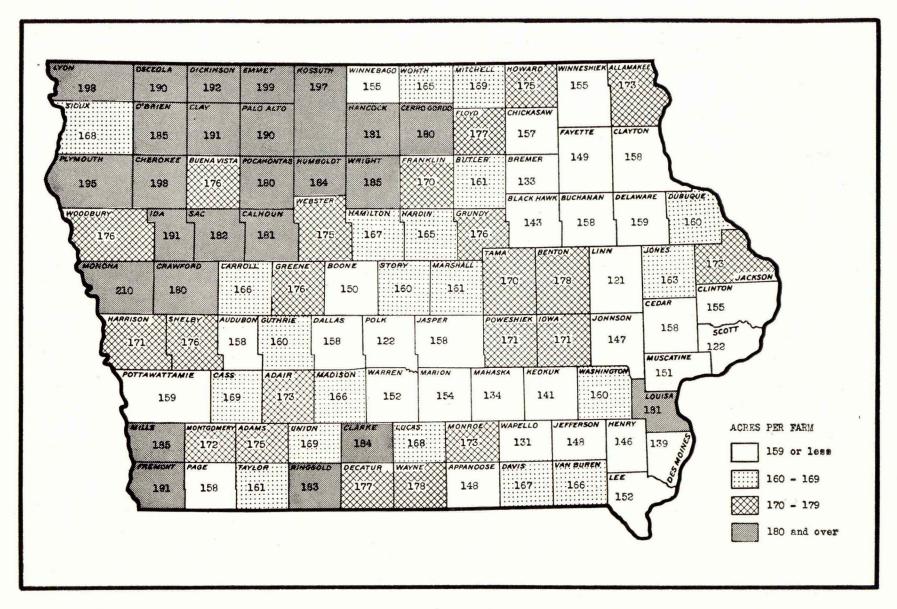


Figure 11. IOWA FARM SIZE: Number of acres per farm, by counties, 1941-45 average. Data from annual state farm census.

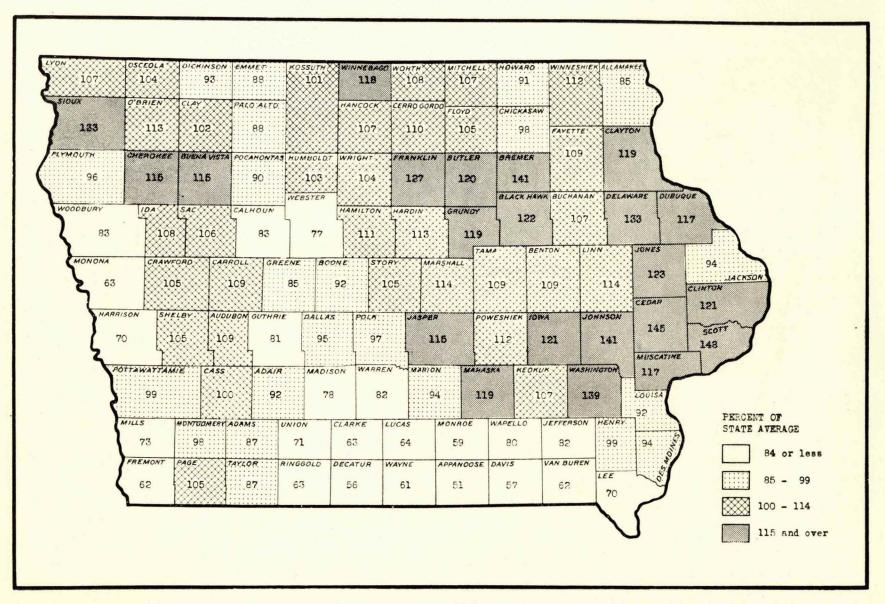


Figure 12. IOWA LIVESTOCK AND POULTRY PRODUCTION INDEX: Relative value of production of all livestock, poultry and kindred products per acre of land in farms, by counties, 1941-45 average. State average equals 100. Data from annual state farm census and Bureau of Agricultural Economics.

